**Lockheed Martin Corporation**
**6801 Rockledge Drive MP: CCT-246**
**Bethesda, MD 20817**
**Telephone 301-548-2209**

February 8, 2016 **VIA PRIVATE CARRIER**

Mr. James R. Carroll
Program Administrator
Land Restoration Program
Land Management Administration
Maryland Department of the Environment
1800 Washington Boulevard, Suite 625
Baltimore, Maryland 21230

Subject: Transmittal of the Construction Completion Report and Request for No Further Action
Block H Soil Remedial Action
Lockheed Martin Corporation; Middle River Complex
2323 Eastern Boulevard, Middle River, Baltimore County, Maryland

Dear Mr. Carroll:

Please find enclosed two hard copies with a CD of the above-referenced document. This document presents the results of the soil remediation activities completed in Block H at the Lockheed Martin Corporation Middle River Complex in Middle River, Maryland. As presented in Section 4.4 of the referenced report, the soil remediation has satisfied the Remedial Action Objective (RAO) of the Block H Soil Remedial Action Plan (RAP), as amended. In accordance with Section VI of Administrative Consent Order and Settlement Agreement ACO-SAR-MDE0746-2015-1-01, Lockheed Martin requests a No Further Action letter or equivalent determination with respect to the Block H Soil RAP and associated RAO.

We respectfully request a response by March 25, 2016.

Please let me know if you have any questions. My office phone is (301) 548-2209.

Sincerely,

Thomas D. Blackman
Project Lead, Environmental Remediation

*cc: (via email without enclosure)*
Gary Schold, MDE
Mark Mank, MDE
Christine Kline, Lockheed Martin
Norman Varney, Lockheed Martin
Lynnette Drake, Lockheed Martin
John Morgan, LMCPI
Dave Brown, MRAS
Michael Martin, Tetra Tech
Cannon Silver, CDM Smith
*cc: (via mail with CD enclosure)*
Jann Richardson, Lockheed Martin
*cc: (via mail with enclosure)*
Tom Green, LMCPI
Mike Musheno, LMCPI
Justin Tetlow, MRAS
Doug Mettee, Lockheed Martin MST
Carol Henry Emery, Emagin/HSW

# Construction Completion Report: Block H Soil Remedial Action Lockheed Martin Middle River Complex 2323 Eastern Boulevard Middle River, Maryland

Prepared for:

Lockheed Martin Corporation

Prepared by:

Tetra Tech, Inc.

February 2016



Michael Martin, PG
Regional Manager

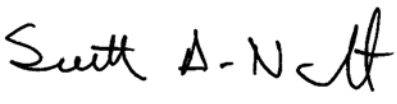

Scott Nesbit, PE
Project Manager

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# ACRONYMS

| | |
|---|---|
| BaPEq | benzo[a]pyrene equivalent |
| CFR | *Code of Federal Regulations* |
| CGP | (Maryland State) “Construction General Permit” |
| COPC | chemical(s) of potential concern |
| DEPS | Department of Environmental Protection and Sustainability |
| E&SC | erosion and sediment control |
| HASP | health and safety plan |
| HAZWOPER | hazardous waste operations and emergency response |
| LMCPI | LMC Properties, Inc. |
| Lockheed Martin | Lockheed Martin Corporation |
| MDE | Maryland Department of the Environment |
| MDSHA | Maryland State Highway Administration |
| µg/kg | microgram(s) per kilogram |
| MHT | Maryland Historical Trust |
| MRC | Middle River Complex |
| PAHs | polycyclic aromatic hydrocarbons |
| RAO | remedial action objective |
| RAP | remedial action plan |
| RG | remedial goal |
| RRA | residual-risk analysis |
| RSL | regional screening level |
| RTD | real-time dust |
| SCD | Soil Conservation District |
| Tetra Tech | Tetra Tech, Inc. |
| UCL | upper confidence-limit |
| USEPA | United States Environmental Protection Agency |

# Section 1
# Introduction

Tetra Tech, Inc. (Tetra Tech) has prepared this *Construction Completion Report* on behalf of Lockheed Martin Corporation (Lockheed Martin) to document completion of the Block H soil remedial action in May 2015 at the Lockheed Martin Corporation Middle River Complex (MRC) in Middle River, Maryland (Figure 1-1). The location of Block H within the Middle River Complex is shown on Figure 1-2.

## 1.1 BACKGROUND

Block H consists of 7.88 acres in the northwestern portion of the Middle River Complex. It is bounded to the north by Eastern Boulevard (Route 150), to the east by the industrial portion of the Middle River Complex (Block I), to the south by Parking Lot No. 3 (Block G), and to the west by Cow Pen Creek. Block H consists of Parking Lot No. 2, which is currently and has historically been used as an employee automobile parking lot. The parking lot is paved with asphalt, and a paved access road and a grass covered strip of land lie between the parking lot and Cow Pen Creek. Access to the parking lot is from Chesapeake Park Plaza. Historical aerial photographs suggest that Parking Lot No. 2 was constructed before 1954; it remains in use today for employee parking. No structures are known to have ever stood on Block H.

Numerous environmental studies, including soil sampling, have chemically characterized Block H soil. A soil remedial action plan (RAP) was prepared to outline the alternatives and objectives for remediating Block H soil (Tetra Tech, Inc., 2013). The remedial action plan was subsequently amended twice. The first addendum presented the results of additional sampling to support the soil-remediation design (Tetra Tech, Inc., 2014). The second addendum included a revision to the remedial action objective (RAO) and presented an updated implementation schedule (Tetra Tech, Inc., 2015a). The remedial action objective developed in the Block H soil remedial action plan (and amended in the second addendum) to mitigate risks associated with potential exposure pathways identified in the conceptual site model for industrial workers is as follows:

*Soil remedial action objective—* *Reduce site-related chemicals of concern in Block H soil to not exceed a cumulative human health cancer-risk limit of $1\times10^{-5}$ for industrial workers via ingestion, dermal contact, and inhalation.*

The remedial action objective and previous soil sampling results were incorporated into the *100% Soil Remedial Action Design for Blocks D, D Panhandle, F, G, and H* (Tetra Tech, Inc., 2015b) prepared by Tetra Tech, Inc. in January 2015 and approved by the Maryland Department of the Environment (MDE) on January 18, 2015.

These documents form the basis for the Block H soil remedial action, which removed and disposed of 396 tons of benzo[a]pyrene-equivalent (BaPEq)-impacted soil. This report documents the successful execution and completion of the soil remedial action in Block H in May 2015. Daily reports that were completed during field activities are in Appendix A.

## 1.2 ORGANIZATION

This report is organized as follows:

Section 1—Introduction: Presents the background and organization of the construction completion report.

Section 2—Permitting and Site Setup: Describes the remedial action design, permits obtained before construction, and site setup.

Section 3—Health, Safety, and the Environment: Describes the procedures used to ensure the health and safety of personnel.

Section 4—Remedial Action Implementation: Describes the soil removal activities and the achievement of the remedial action objective.

Section 5—Transportation and Disposal: Presents waste transportation and disposal details.

Section 6—Decontamination, Site Restoration, and Demobilization: Presents details of decontamination, site restoration, and demobilization.

Section 7—References: Lists references and citations used in compiling this report.

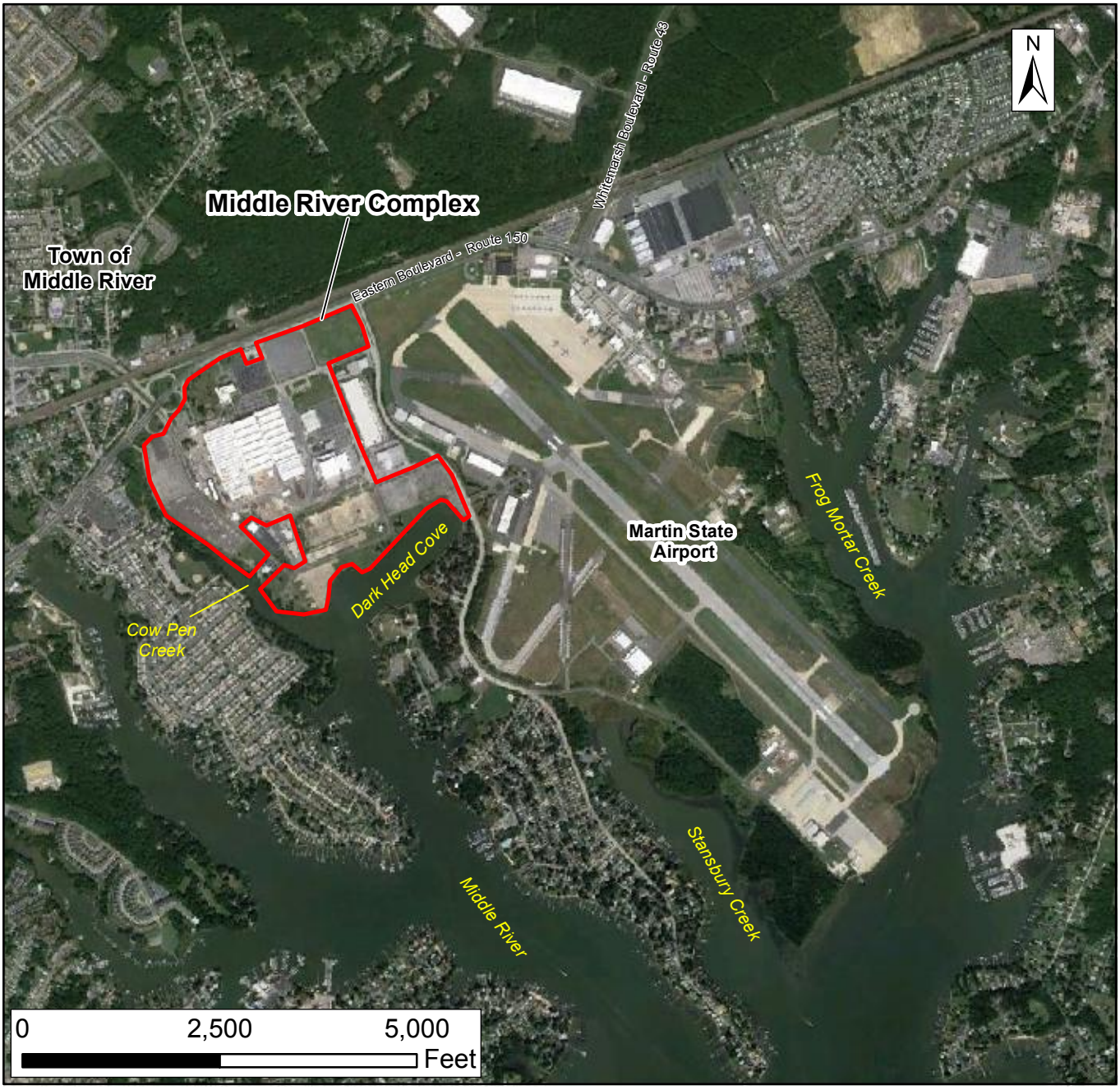


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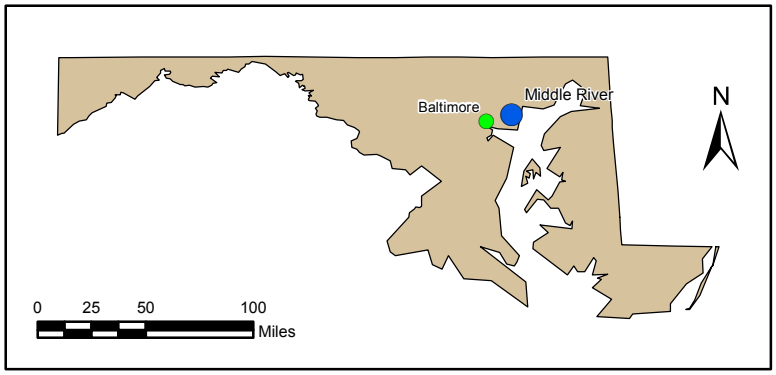


**FIGURE 1-1**

**MIDDLE RIVER COMPLEX LOCATION MAP**

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

| DATE MODIFIED: | CREATED BY: |
|---|---|
| 5/1/13 | MP |

TETRA TECH

Map Document: (K:\GProject\middle_river\Maps\MiddleRiver_MRC_Location Map_Fig 1-1_revised050113.mxd) 5/1/2013 -- 11:18:55 AM

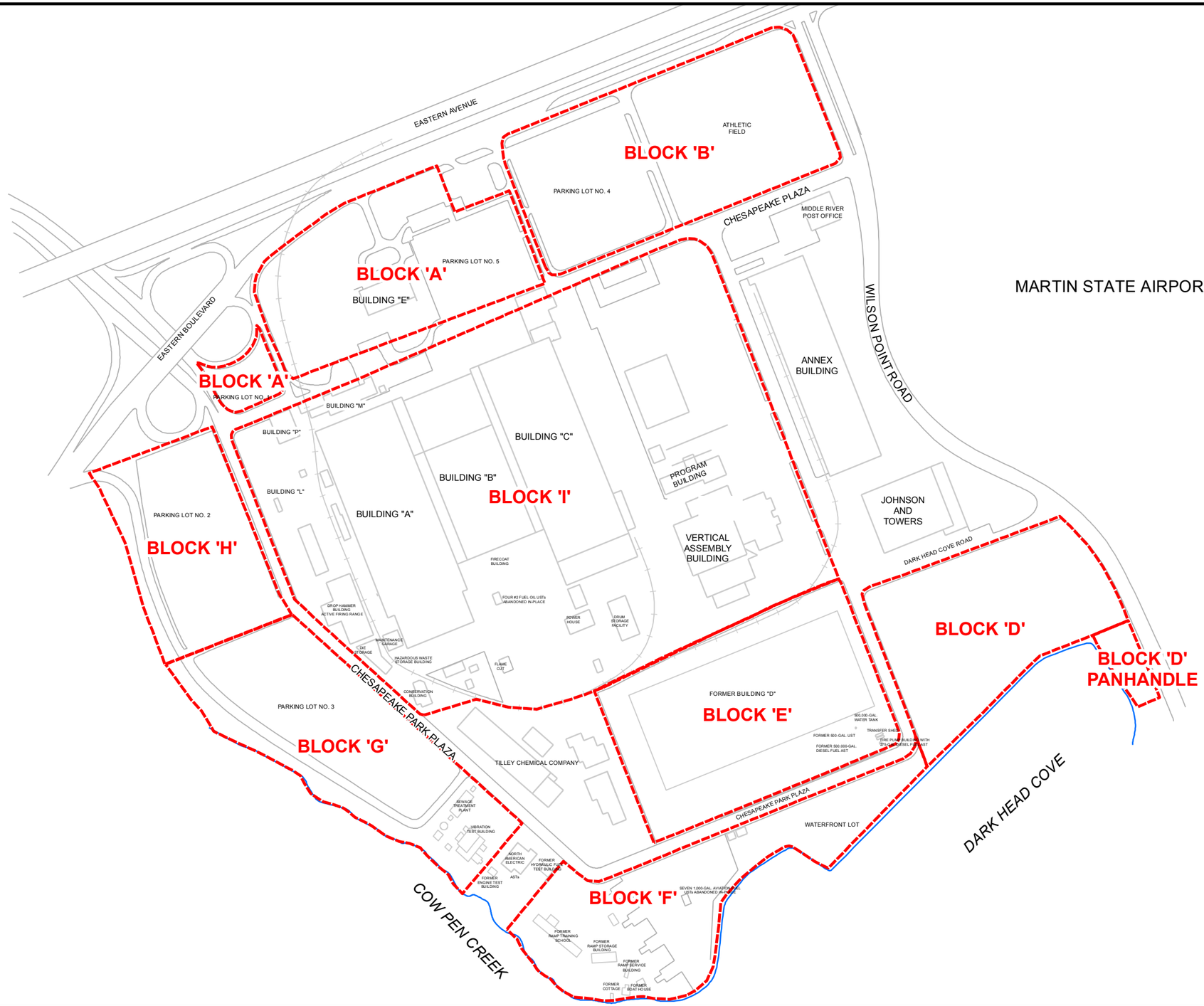


MARTIN STATE AIRPORT

**FIGURE 1-2**

**LOCKHEED MARTIN**
**MIDDLE RIVER COMPLEX**
**TAX BLOCKS**

**LEGEND**

- TAX BLOCK
- STRUCTURE
- RAILROAD TRACKS

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

0 200 400 Feet

N

DATE MODIFIED: 6/20/13

CREATED BY: MP

TETRA TECH

Map Document: (K:\GProject\middle_river\Maps\MRC Tax Blocks_091911.mxd)

# Section 2
# Design, Permitting, and Site Setup

Permitting and site setup to implement the remedial action for Block H soil included:

- completing the remedy design
- obtaining necessary permits and approvals
- clearing utilities
- installing temporary facilities

## 2.1 DESIGN AND PERMITS

Tetra Tech Inc. (Tetra Tech) completed and submitted the *100% Soil Remedial Action Design for Blocks D, D Panhandle, F, G, and H* (Tetra Tech, 2015b) to state regulators in January 2015. The design was approved by the Maryland Department of the Environment (MDE) on January 18, 2015. Tetra Tech has secured all necessary permits, approvals, and authorizations from state, federal, and local agencies for activities in Block H. Copies of the permits and authorization letters are in Appendix B. Note that work authorization for Block H is part of the work authorizations issued for Blocks D, F, G, and H, and that certain provisions therein do not apply to the specific activities performed in Block H. Permits/approvals secured specifically for the work in Block H include:

- Baltimore County grading permit
- Baltimore County Soil Conservation District erosion and sediment-control plan approval
- Baltimore County critical area and natural-resource variance
- Baltimore County stormwater-management variance
- Maryland Historical Trust determination
- Maryland Department of Natural Resources review
- MDE “Construction General Permit”

- Lockheed Martin Corporation Middle River Complex digging permit

Baltimore County approved a standard grading permit for ground disturbance (in the upland areas of Block H) on April 23, 2015 as part of the grading application submittal for Blocks D, F, G, and H. The erosion and sediment-control (E&SC) plans for controlling stormwater runoff during construction were likewise approved by the Baltimore County Soil Conservation District (SCD) on April 23, 2015. MDE required approval of E&SC plans by SCD for final authorization of the Maryland State "Construction General Permit" (CGP) that MDE approved on May 6, 2015.

This project qualified for a stormwater-management variance because final site grades remained unchanged and the project involved no post-construction stormwater-management features. This variance was approved on July 23, 2014 by the stormwater management office of the Baltimore County Department of Environmental Protection and Sustainability (DEPS). The project also qualified for a variance (approved on February 22, 2014) from the DEPS Environmental Impact Review office, because the project remedied previously developed/industrial areas that lack any wetlands, forest, or other natural habitats.

The Maryland Historical Trust (MHT) and the Maryland Department of Natural Resources (DNR) were consulted to determine if historical or special-status species/habitats would be affected by the proposed action. The MHT indicated in a letter dated December 9, 2013 that the project would have no effect on historical resources. The DNR stated in a letter dated December 18, 2013 that no listed species or habitats are known to occur in the project area, but cautioned that this letter should not be interpreted as meaning that rare, threatened, or endangered species are not present, and if appropriate habitats are available, certain species could be present without documentation since adequate surveys have not been conducted.

## 2.2 UTILITY CLEARANCE

A pre-construction utility-locating survey was conducted before any activities requiring ground disturbance began. Enviroscan, Inc. of Lancaster, Pennsylvania was contracted to perform a geophysical survey of the work area to identify possible underground utilities. This survey was completed on April 15, 2015 and identified utilities were marked on the ground using spray paint. These marks were refreshed as required throughout the project. The project team also inspected the area for overhead utilities, noting where utilities might interfere with operations.

Maryland's "Miss Utility" clearinghouse was notified of project activities and approved the ticket request on April 15, 2015. The Miss Utility ticket was updated as required throughout the project. Tetra Tech followed Lockheed Martin Corporation (Lockheed Martin) *Enterprise Operations-28* (EO-28) and Lockheed Martin *Minimum Requirements for Intrusive Fieldwork Work Plans*, in addition to completing the LMC Properties, Inc. (LMCPI) digging authorization form and obtaining required signatures before conducting any intrusive activities. The completed digging authorization form and utility clearance report are in Appendix B.

## 2.3 INSTALLATION OF TEMPORARY FACILITIES AND SITE CONTROL

One project trailer for site personnel was placed in Block G in April 2015; this trailer will be used for the duration of the soil remedial actions in all tax blocks. Power was connected to the trailer through the existing power-supply lines in Block G. Portable toilets and a storage container for tools were also provided. Temporary fences were installed around the Block H excavation areas in May 2015 to limit access to the work area (in accordance with discussions with LMCPI). Signs installed at the entrance to the construction site provided emergency contact information for the project. Erosion and sediment-control (E&SC) measures were not required per the MDE-approved E&SC plan, as the site was stabilized at the end of each workday.

# Section 3
# Health, Safety, and the Environment

A dust control plan and a health and safety plan (HASP) were prepared before starting soil remedial-action activities to specify the measures taken to control airborne dust and ensure personnel safety. The following sections describe how these plans were implemented during construction in Tax Block (Block) H.

## 3.1 AIR MONITORING

Real-time dust (RTD) monitoring and visual observations were conducted to determine (quantitatively and qualitatively) if measures were needed to control airborne dust levels and avoid dispersion or inhalation of contaminated dusts or particulate during excavation, stockpiling, load-out, backfilling, and compaction. RTD equipment (Dust Trak II air-monitoring stations) was deployed during these operations and recorded dust concentrations from one upwind and two downwind positions on the perimeter of the Block H work areas. RTD equipment was calibrated each morning before use.

Data were continuously downloaded to data analysis software that was programed in the device to alert field personnel via (email and text message) of 15-minute average dust concentrations. All dust readings recorded during construction were well below the Block H-specific dust action-level (five milligrams per cubic meter) specified in the dust control plan; dust suppression measures were therefore not needed. Air monitoring data are in Appendix C.

## 3.2 HEALTH AND SAFETY MONITORING

All employees complied with the requirements of the federal Occupational Safety and Health Administration (29 *Code of Federal Regulations* [CFR] 1910 and 29 CFR 1926). All employees involved in intrusive fieldwork were 40-hour hazardous waste operations and emergency response (HAZWOPER)-certified, eight-hour annual-refresher certified, and had current medical clearance.

Safety meetings were held before the start of each workday. All field personnel reviewed and signed a site-safety briefing form before beginning any work on site. Hazard-analysis worksheets were prepared as part of the site-specific HASP and were reviewed by all personnel before each new task.

# Section 4
# Remedial Action Implementation

This section details the soil remedial activities that were completed in Block H of the Middle River Complex in May 2015.

## 4.1 ASPHALT REMOVAL

Soil excavation area limits were surveyed by a licensed Maryland land surveyor, as described in the *100% Soil Remedial Action Design for Blocks D, D Panhandle, F, G, and H* (Tetra Tech Inc. [Tetra Tech], 2015b). Asphalt within excavation areas A and B was saw-cut and removed using a backhoe. Asphalt was moved from Block H with a front-end loader and stockpiled in Block G to await recycling at an off-site Lockheed Martin Corporation (Lockheed Martin)-approved facility.

## 4.2 IMPACTED SOIL EXCAVATION

Impacted soil was excavated from excavation areas A and B to a depth of two feet below ground surface using a hydraulic excavator. On May 20–21, the impacted soil was directly loaded into 17 tri-axle dump trucks for transport to and recycling at the Soil Safe, Inc. facility in Brandywine, Maryland. Excavated soil was visually inspected to ensure it was similar to the previously identified conditions. Shipping documentation accompanied each truckload (see Appendix D). Approximately 396 tons of Block H soil was transported to the recycling facility.

## 4.3 VERIFICATION SAMPLING

Once excavation had been completed in an area, verification sidewall-samples were collected at a minimum frequency of one sample per 100-feet of sidewall. These samples were collected to determine if additional lateral excavation would be required. Four composite verification sidewall-samples were collected around each excavation area in Block H.

Verification samples at the base of the excavations were also collected, at a minimum frequency of one sample per 625-square feet of excavation bottom. Three verification base-samples were collected from excavation area A, and two verification base-samples were collected from excavation area B (Figure 4-1). Verification base-samples were collected for informational purposes only, and were not used to determine whether additional vertical excavation would be required. Verification samples were analyzed for polycyclic aromatic hydrocarbons (PAHs) by United States Environmental Protection Agency (USEPA) Method 8270D.

Each verification sidewall-sample result was directly compared to the benzo[a]pyrene equivalent (BaPEq) remedial goal (RG) of 2,900 micrograms per kilogram. The following criteria were used to determine if additional excavation would be required:

- if the maximum detected confirmation sidewall-sample concentration in an excavation area exceeded twice the block-specific RG
- if two or more sampling results per excavation area exceeded the block-specific RG (only one sampling result per excavation area could exceed the block-specific RG, but must be less than twice the block-specific RG)
- if the arithmetic-mean concentration for the confirmation samples exceeded the block-specific RG

Following these criteria, additional excavation was not required in Block H. Figure 4-2 depicts the sampling results of each verification sidewall-sample. Verification sampling results are also listed in Tables 4-1 and 4-2 for excavation areas A and B, respectively. Copies of the verification sampling logs and chain of custody forms are in Appendix E. Laboratory reports are in Appendix F.

## 4.4 RESIDUAL-RISK ANALYSIS

A post-excavation residual-risk analysis (RRA) calculated the final Block H cancer and noncancer risk to industrial workers following soil removal to determine if the Block H remedial action objective (RAO) had been achieved. The post-excavation RRA data set consists of data from the verification sidewall-samples, along with historical surface-soil data (at 0–2 foot depth) for all locations that were not excavated. Backfill material was analyzed before being delivered to the site, in accordance with the *100% Soil Remedial Action Design for Blocks D, D Panhandle, F, G, and H* (Tetra Tech, 2015b), and was approved for use. Chemical concentrations in excavated samples were replaced in the RRA calculation with the concentrations of chemicals in the backfill material. Verification base samples were considered subsurface soil because they were collected

at the bottom of the two-foot excavation area, and thus were inaccessible to industrial workers (i.e., an incomplete exposure pathway). Appendix G includes a technical memorandum with details regarding the RRA and associated calculations. The following paragraphs summarize the post-excavation RRA.

The RRA first identified chemicals of potential concern (COPC) to be evaluated in the RRA by comparing the maximum detected chemical concentrations in the post-excavation database to current USEPA regional screening levels (RSLs). Chemicals detected at concentrations exceeding screening levels were retained in the RRA for quantitative evaluation. Chemicals retained as COPC in the 2012 HHRA were also retained in the RRA as COPC so that the pre-excavation soil-risk estimates could be compared to the post-excavation soil-risk estimates.

The exposure assessment assumptions used in the RRA are those presented in the USEPA Office of Solid Waste and Emergency Response Directive 9200.1–120, *Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors* (USEPA, 2014). Exposure-point concentrations were calculated using the current version of USEPA's *Pro-UCL* software (Version 5.0.00). The toxicity criteria (e.g., cancer slope-factors, reference doses) used to estimate cancer and noncancer risks are from the June 2015 RSL table published by USEPA. The equations used to calculate receptor intake and risk are the same as those used in the original baseline human health risk assessment prepared for Block H. The RRA concluded that BaPEq concentrations in remaining Block H soil do not exceed a lifetime cancer risk of $1\times10^{-5}$ for industrial workers exposed to BaPEq via ingestion, dermal contact, and inhalation; thus, the remediation effort meets the Block H RAO.

## 4.5 SOIL BACKFILL AND COMPACTION TESTING

Excavation areas were backfilled and final surfaces were graded to match existing grades. Material similar in grain size to the removed soil and obtained from an off-site borrow source (Aggregate Transport Corporation in Hanover, Maryland) was used as fill. Fill material was analyzed before being delivered to the site, in accordance with the *100% Soil Remedial Action Design for Blocks D, D Panhandle, F, G, and H* (Tetra Tech, 2015b), and was approved for use. Analytical data for the borrow-source sample is in Appendix H.

Backfill in the Block H excavation areas consisted of approximately 13 inches of No. 2 stone covered with a geotextile, followed by approximately six-inches of compacted crushed stone

(CR-6). Backfill materials were placed via excavator and dozer and compacted with a single-drum soil compactor or mechanical tamper, depending on the size and depth of the excavation. In-place compaction testing was done via nuclear moisture-density methods during backfill placement. Compaction-test data are in Appendix H. Final restoration, including paving, is discussed in Section 6.

**Table 4-1**

**Summary of Soil Verification Samples - Block H Area A**
**Block H Construction Completion Report**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**

| NSAMPLE<br>LAB ID<br>SAMPLE DATE<br>DUPLICATE SAMPLE | PRG | H-VB-A-1-2<br>240-51073-5<br>05/20/2015<br>-- | H-VB-A-2-2<br>240-51073-6<br>05/20/2015<br>-- | H-VB-A-3-2<br>240-51073-7<br>05/20/2015<br>-- | H-VS-A-1-1<br>240-51073-1<br>05/20/2015<br>-- | H-VS-A-2-1<br>240-51073-2<br>05/20/2015<br>-- | H-DUP01<br>240-51073-8<br>05/20/2015<br>H-VS-A-2-1 | H-VS-A-3-1<br>240-51073-3<br>05/20/2015<br>-- | H-VS-A-4-1<br>240-51073-4<br>05/20/2015<br>-- |
|---|---|---|---|---|---|---|---|---|---|
| **PAH (UG/KG)** | | | | | | | | | |
| ACENAPHTHYLENE | NA[4] | 0.41 U | 0.42 U | 0.43 U | 0.42 U | 0.42 U | 4.9 J | 0.44 U | 0.43 U |
| ANTHRACENE | NA[4] | 0.92 U | 0.93 U | 14 | 0.93 U | 0.93 U | 10 | 0.98 U | 0.95 U |
| BENZO(A)PYRENE EQUIVALENTS 1/2 NON-DETECT[1] | 2,900 | 0.76 U | 0.77 U | 82 | 0.77 U | 74 | 167 | 40 | 42 |
| BENZO(A)PYRENE EQUIVALENTS POSITIVE RESULTS[2] | 2,900 | 0.76 U | 0.77 U | 82 | 0.77 U | 74 | 167 | 39 | 42 |
| BENZO(A)ANTHRACENE | NA[3] | 0.75 U | 0.75 U | 60 | 0.75 U | 21 J | 57 J | 17 | 22 |
| BENZO(A)PYRENE | NA[3] | 0.76 U | 0.77 U | 55 | 0.77 U | 52 J | 120 J | 32 | 34 |
| BENZO(B)FLUORANTHENE | NA[3] | 0.7 U | 0.71 U | 66 | 0.71 U | 39 J | 93 J | 33 | 30 |
| BENZO(G,H,I)PERYLENE | NA[4] | 0.41 U | 0.42 U | 48 | 0.42 U | 54 J | 130 J | 34 | 32 |
| BENZO(K)FLUORANTHENE | NA[3] | 0.8 U | 0.81 U | 22 | 0.81 U | 33 J | 70 J | 14 | 22 |
| CHRYSENE | NA[3] | 1.3 U | 1.3 U | 75 | 1.3 U | 35 J | 76 J | 23 | 33 |
| DIBENZO(A,H)ANTHRACENE | NA[3] | 0.78 U | 0.79 U | 11 | 0.79 U | 12 J | 22 J | 0.83 U | 0.8 U |
| FLUORANTHENE | NA[4] | 4.5 J | 0.66 U | 110 | 0.66 U | 19 J | 55 J | 15 | 25 |
| INDENO(1,2,3-CD)PYRENE | NA[3] | 0.41 U | 0.42 U | 36 | 0.42 U | 36 J | 89 J | 22 | 23 |
| PHENANTHRENE | NA[4] | 0.86 U | 0.87 U | 110 | 0.87 U | 5.2 J | 20 | 7.8 J | 12 |
| PYRENE | NA(4) | 6.6 J | 0.53 U | 160 | 4.6 J | 52 J | 140 J | 39 | 58 |

Notes:

No results exceed the PRG.

[1] Calculated using one-half the detection limit for non-detected results.

[2] Calculated using a value of zero for non-detected results.

[3] cPAHs have been used in calculating the benzo(a)pyrene equivalents and therefore are not screened against the PRG.

[4] Non-cancer hazard was acceptable for industrial workers in the Block H HHRA; therefore no PRGs were necessary for non-carcinogenic PAHs.

U: Non-detect

J: Estimated result

PRG: preliminary remedial goal

--: No Duplicate collected

**Table 4-2**
**Summary of Soil Verification Samples - Block H Area B**
**Block H Construction Completion Report**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**

| SAMPLE NAME<br>LAB ID<br>SAMPLE DATE<br>DUPLICATE SAMPLE | RG | H-VB-B-1-2<br>240-51061-5<br>05/21/2015<br>-- | H-VB-B-2-2<br>240-51061-6<br>05/21/2015<br>-- | H-VS-B-1-1<br>240-51061-1<br>05/20/2015<br>-- | H-VS-B-2-1<br>240-51061-2<br>05/20/2015<br>-- | H-VS-B-3-1<br>240-51061-4<br>05/21/2015<br>-- | H-VS-B-4-1<br>240-51061-3<br>05/20/2015<br>-- |
|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| ANTHRACENE | NA[4] | 0.96 U | 0.95 U | 0.86 U | 4.4 J | 0.88 U | 0.9 U |
| BENZO(A)PYRENE EQUIVALENTS-1/2 NON-DETECT[1] | 2,900 | 0.79 U | 1.3 | 0.71 U | 27 | 0.72 U | 0.85 |
| BENZO(A)PYRENE EQUIVALENTS-POSITIVE RESULTS[2] | 2,900 | 0.79 U | 0.45 | 0.71 U | 27 | 0.72 U | 0.0038 |
| BENZO(A)ANTHRACENE | NA[3] | 0.78 U | 4.5 J | 0.7 U | 15 | 0.71 U | 0.73 U |
| BENZO(A)PYRENE | NA[3] | 0.79 U | 0.78 U | 0.71 U | 22 | 0.72 U | 0.74 U |
| BENZO(B)FLUORANTHENE | NA[3] | 0.73 U | 0.72 U | 0.65 U | 21 | 0.67 U | 0.68 U |
| BENZO(G,H,I)PERYLENE | NA[4] | 0.43 U | 0.42 U | 0.39 U | 17 | 0.4 U | 0.4 U |
| BENZO(K)FLUORANTHENE | NA[3] | 0.84 U | 0.83 U | 0.75 U | 8.3 | 0.77 U | 0.78 U |
| CHRYSENE | NA[3] | 1.4 U | 1.3 U | 1.2 U | 21 | 1.2 U | 3.8 J |
| DIBENZ(A,H)ANTHRACENE | NA[3] | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA[4] | 0.68 U | 5.7 J | 0.61 U | 24 | 4.3 J | 5.1 J |
| INDENO(1,2,3-CD)PYRENE | NA[3] | 0.43 U | 0.42 U | 0.39 U | 13 | 0.4 U | 0.4 U |
| PHENANTHRENE | NA[4] | 0.9 U | 4.9 J | 0.81 U | 11 | 0.82 U | 6.3 J |
| PYRENE | NA[4] | 4.7 J | 9.2 | 0.49 U | 42 | 6.4 J | 7.9 |

Notes:

No results exceed the RG.

[1] Calculated using one-half the detection limit for non-detected results.

[2] Calculated using a value of zero for non-detected results.

[3] cPAHs have been used in calculating the benzo(a)pyrene equivalents and therefore are not screened against the PRG.

[4] Non-cancer hazard was acceptable for industrial workers in the Block H HHRA; therefore no PRGs were necessary for non-carcinogenic PAHs.

NA: Not applicable
U: Non-detect
J: Estimated result
RG: remedial goal
--: no duplicate sample collected

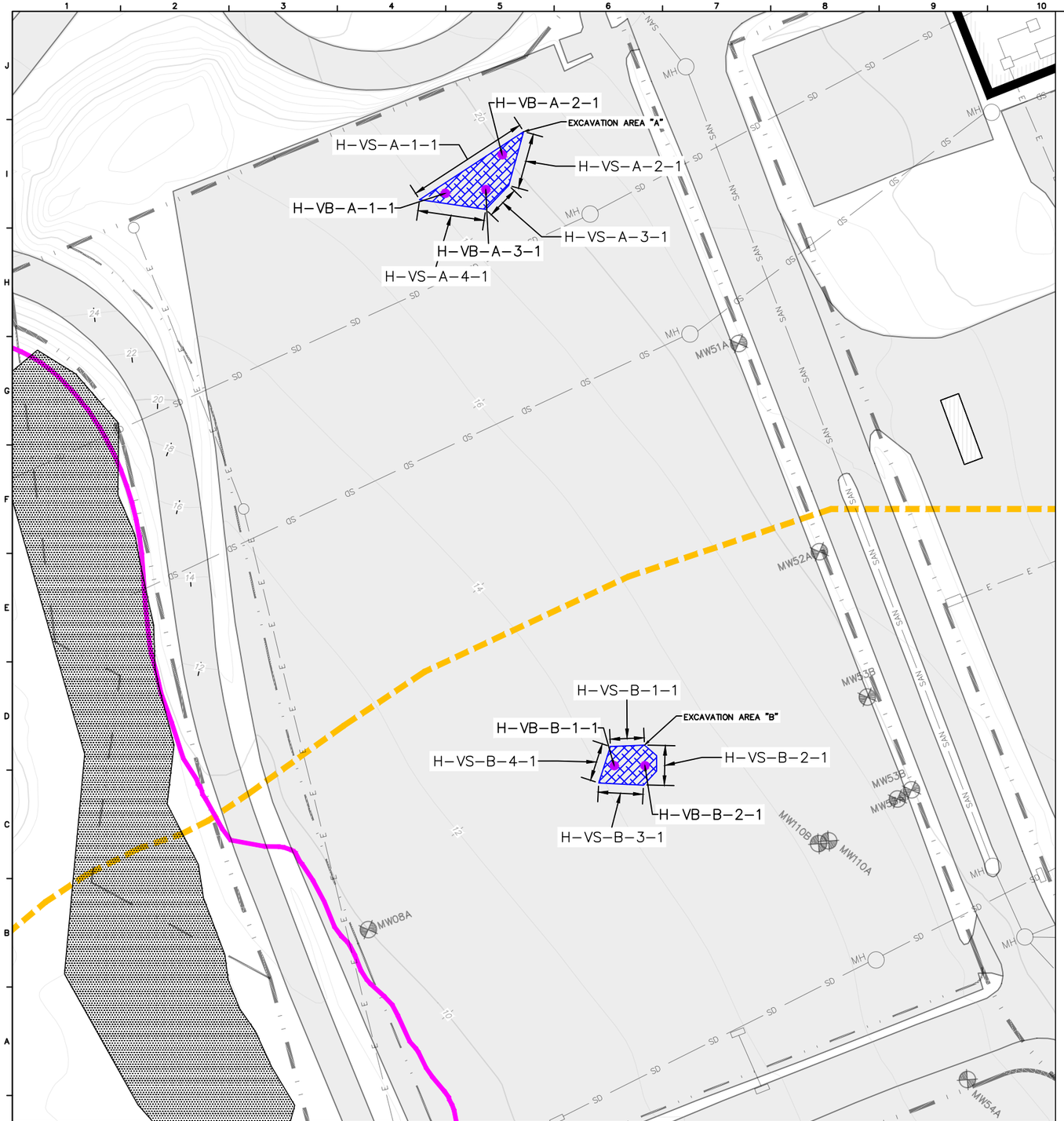


LEGEND:

- VERIFICATION SIDEWALL SAMPLE LOCATION
- VERIFICATION BASE SAMPLE LOCATION
- EXCAVATION BOUNDARY 2-FOOT DEPTH
- DELINEATED WETLAND AREA
- ASPHALT PAVEMENT
- CONTOUR LINE
- BLOCK BOUNDARY
- CRITICAL AREA LINE
- 100-FT FLOOD PLAIN LINE
- SD — STORM DRAIN
- SAN — SANITARY SEWER
- MH — MANHOLE
- MW — MONITORING WELL

GENERAL NOTES:
1. EXCAVATION BOUNDARIES BASED ON 100% SOIL REMEDIAL ACTION DESIGN (TETRA TECH INC., 2015)
2. SIDEWALL VERIFICATION SAMPLES WERE COLLECTED EVERY 100-FEET.
3. BASE VERIFICATION SAMPLES WERE COLLECTED EVERY 625 SQUARE FOOT.

TETRA TECH
www.tetratech.com
20251 CENTURY BLVD
GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000

STATE OF MARYLAND — SCOTT A. SANDER — No. 29015 — PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX

SOIL REMEDIAL ACTION
VERIFICATION SAMPLING LOCATIONS
BLOCK H

| | |
|---|---|
| DATE: | 10/02/2015 |
| PROJECT NO.: | 112IC07483 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 1 OF 1 |

COPYRIGHT TETRA TECH INC.

FIGURE 4-1

K:\CADD\MRC\112IC07483\Construction Completion\AS BUILT FIGURES.dwg IVANNA.GOLDSBERRY 10/2/2015 10:36:25 AM

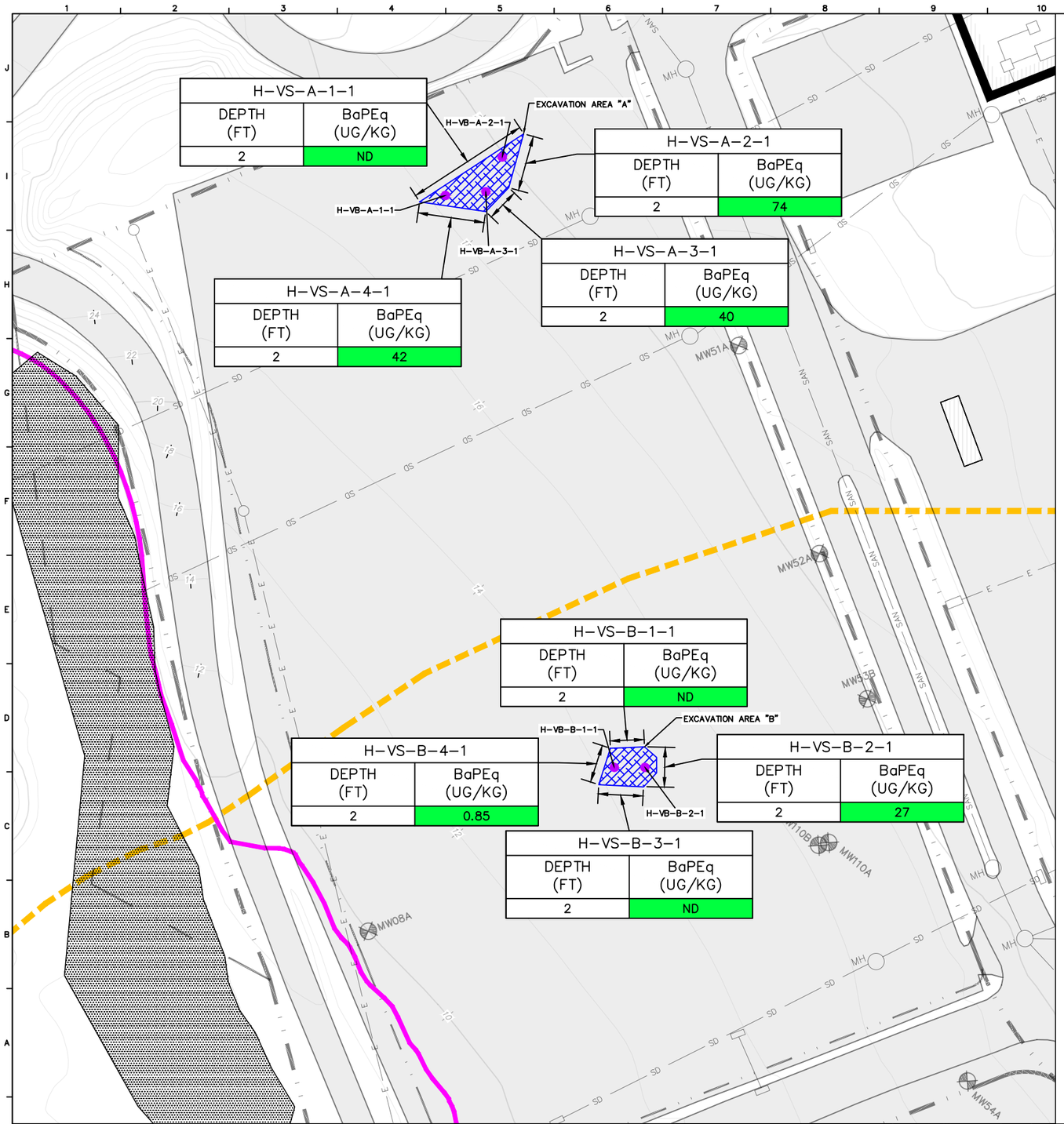


TABLE NOTES:

BELOW 2,900 UG/KG (SOIL PRELIMINARY REMEDIAL GOAL)

BaPEq – BENZO[A]PYRENE EQUIVALENT

FT – FEET

UG/KG – MICROGRAMS PER KILOGRAM

ND – NON-DETECT

VS – VERIFICATION SIDEWALL

LEGEND:

- VERIFICATION BASE SAMPLE
- EXCAVATION BOUNDARY 2-FOOT DEPTH
- DELINEATED WETLAND AREA
- ASPHALT PAVEMENT
- CONTOUR LINE
- BLOCK BOUNDARY
- CRITICAL AREA LINE
- 100-FT FLOOD PLAIN LINE
- SD — STORM DRAIN
- SAN — SANITARY SEWER
- MH — MANHOLE
- MW — MONITORING WELL

GENERAL NOTES:

1. EXCAVATION BOUNDARIES BASED ON 100% SOIL REMEDIAL ACTION DESIGN (TETRA TECH INC., 2015)
2. SIDEWALL VERIFICATION SAMPLES WERE COLLECTED EVERY 100-FEET.
3. SAMPLES WERE ANALYZED FOR POLYCYCLIC AROMATIC HYDROCARBONS BY UNITED STATES ENVIRONMENTAL PROTECTION AGENCY SW-846 METHOD 8270.

TETRA TECH
www.tetratech.com
20251 CENTURY BLVD
GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000

STATE OF MARYLAND — SCOTT I. KARP — No. 29015 — PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX

SOIL REMEDIAL ACTION
VERIFICATION SIDEWALL SAMPLING RESULTS
BLOCK H

| | |
|---|---|
| DATE: | 10/02/2015 |
| PROJECT NO.: | 112IC07483 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 1 OF 1 |

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FIGURE 4-2

K:\CADD\MRC\112IC07483\Construction Completion\AS BUILT FIGURES.dwg IVANNA.GOLDSBERRY 10/2/2015 10:36:25 AM

# Section 5
# Transportation and Disposal

Transportation and disposal (recycling) for the Block H soil remedial action included the following waste streams:

- benzo[a]pyrene-equivalent (BaPEq)-impacted soil
- asphalt
- general refuse

## 5.1 IMPACTED SOIL

Waste characterization samples were collected from each excavation area before soil removal at a frequency of one sample per 1,000 tons, as directed by the disposal facility; therefore, one sample was collected from each removal area. All samples were collected and analyzed for total petroleum-hydrocarbon gasoline-range and diesel-range organics by United States Environmental Protection Agency (USEPA) SW-846 Method 8015/9017B, for volatile organic compounds by USEPA SW-846 Method 8260, for polychlorinated biphenyls by USEPA SW-846 Method 8082, and for toxicity characteristic leaching procedure metals by USEPA SW-846 Method 1311/6010, in accordance with recycling facility requirements. Sampling results indicated that all batches were suitable for recycling at Soil Safe. Copies of the laboratory reports are in Appendix F.

Upon receipt of the sampling results, Profile W5-4001 was prepared to support the requested disposal-facility acceptance of the BaPEq-impacted soil. Profile W5-4001, which included transportation provided by the disposal facility, was submitted, and approved by the disposal facility in May 2015. Copies of the waste profile and approval sheet are in Appendix D.

Impacted soil was loaded into tri-axle dump trucks for transport to Soil Safe, Inc., in Brandywine, Maryland. Each truck had appropriate licensing, registration, and placarding, and was tarped and inspected before and after loading to ensure that it was in suitable condition for road transport. A uniform shipping-manifest was completed for each load. Seventeen dump-truck loads of impacted soil were sent to the recycling facility for the Block H remediation. Approximately 396 tons were

transported to Soil Safe, with an average truck carrying 23 tons. A predefined truck-traffic route was established in the means-and-methods work plan to minimize inconvenience to the public, while ensuring safe conditions for roadway users (including pedestrians and bicyclists) and personnel in work zones.

## 5.2 ASPHALT

Approximately 93 cubic yards of asphalt were removed from the Block H excavation areas. The asphalt was stockpiled in Block G and covered with plastic sheeting. The asphalt was transported off-site for recycling at P. Flanigan & Sons, Baltimore, Maryland on October 1, 2015.

## 5.3 GENERAL REFUSE

General refuse generated during the project was collected in a dumpster that was emptied as necessary and disposed of at the local municipal-waste landfill. Dumpster service was provided by Waste Management of Maryland, Inc.

# Section 6
# Decontamination, Site Restoration, and Demobilization

The following sections detail the final construction activities, which include decontamination, site restoration, and demobilization.

## 6.1 DECONTAMINATION

Equipment that contacted impacted soil was decontaminated before being removed from Block H. Equipment that required decontamination included one excavator bucket, a rubber-tire loader-bucket, and a holding tank for water. Decontamination consisted of removing residual soil from equipment-contact surfaces through a combination of scraping, rinsing, and scrubbing. Decontamination pads were built to capture decontamination water. That water was stored in frac tanks before being transported off-site for disposal. The wash and rinse water was disposed at Clean Harbors, Inc. in Baltimore, Maryland.

## 6.2 SITE RESTORATION

The Block H excavation areas were paved to match pre-existing conditions following backfill and compaction (as described in Section 4.3). The base course underlying the bituminous-concrete pavement consisted of crusher-run aggregate (CR-6) that meets the grading and physical property requirements of the Maryland State Highway Administration (MDSHA)Standard Specifications for Construction and Materials Section 901.01, Tables 901A and 901B(MDSHA, 2008). The bituminous-concrete base-course consists of a minimum two inches of hot-mix asphalt Superpave, 19mm, PG 64 22, Level 2 meeting MDSHA specification (Section 901.01, Tables 901C and 901D and Sections 904.01, 904.02, and 904.04) (MDSHA, 2008). The bituminous-concrete surface-course was constructed in accordance with MDSHA CM Sections 504.03.01 through 504.03.14

(MDSHA, 2008). Parking stripes were painted in the Block H excavation areas after the newly paved asphalt had cured.

## 6.3 DEMOBILIZATION

Temporary fences, equipment, and personnel were demobilized from Block H as tasks were completed and services no longer required. Final demobilization occurred after the parking stripes were painted on June 25, 2015. The project trailer and general refuse dumpster remain in Block G and will be used during soil remedial-action activities in other tax blocks.

# Section 7
# References


1. Maryland State Highway Administration (MDSHA), 2008. *Standard Specifications for Construction and Materials*, Maryland State Highway Administration, 2008.

2. Tetra Tech, Inc. (Tetra Tech), 2012. *Human Health Risk Assessment for Blocks D, E, F, G, and H Soils, Lockheed Martin Middle River Complex, Middle River, Maryland.* Report prepared by Tetra Tech, Inc., Germantown, Maryland for Lockheed Martin Corporation, Bethesda, Maryland. September.

3. Tetra Tech, Inc. (Tetra Tech), 2013. *Block H Remedial Action Plan. Lockheed Martin Middle River Complex, Middle River, Maryland*. Report prepared for Lockheed Martin Corporation, Bethesda, Maryland by Tetra Tech, Inc., Germantown, Maryland. November.

4. Tetra Tech, Inc. (Tetra Tech), 2014. *Remedial Action Plan Addendum: Blocks D, D Panhandle, F, G, and H Design-Investigation Soil-Sampling Report. Lockheed Martin Middle River Complex, Middle River, Maryland*. Report prepared for Lockheed Martin Corporation, Bethesda, Maryland by Tetra Tech, Inc., Germantown, Maryland. August.

5. Tetra Tech, Inc. (Tetra Tech), 2015a. *Block H Soil Remedial Action Plan Addendum 2: Remedial Action Objective and Project Implementation Schedule, Lockheed Martin Middle River Complex, Middle River, Maryland*. Report prepared for Lockheed Martin Corporation, Bethesda, Maryland by Tetra Tech, Inc., Germantown, Maryland. August.

6. Tetra Tech, Inc. (Tetra Tech), 2015b. *100% Soil Remedial Action Design for Blocks D, D Panhandle, F, G and H, Lockheed Martin Middle River Complex, Middle River, Maryland*. Report prepared for Lockheed Martin Corporation, Bethesda, Maryland by Tetra Tech, Inc., Germantown, Maryland. January.

7. United States Environmental Protection Agency (USEPA), 2014. D. Stalcup, *Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors*. Office of Superfund Remediation and Technology Innovation, Tech. Memo. OSWERDIR9285603, February.

# APPENDIX A—DAILY REPORTS

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 11, 2015 | Start Work at: | 6:50 AM | Depart Site at: | 5:30 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 70 to 80 | Skies: | Overcast | Wind: | Light | Precipitation: | Light Rain |
|---|---|---|---|---|---|---|---|

Weather Comments:

### Summary of Work/Major Activities

1. Remobilize to site, mobilize additional supplies to site.
2. Renew one call dig permit.
3. ACF Supply delivers material for installation of erosion and sediment controls.
4. Site Specific Health and Safety Training, Lockheed Martin EHS Training, Tom and Jeremy Vernotzy.
5. Met with Jim Brendell (Baltimore County Soil Conservation District). Reviewed erosion and sediment control documents.
6. Hertz Equipment Rental delivers trac-hoe, bobcat, PC-200lc Komatsu excavator and gator.
7. Renew One Call dig notification (15243316-old ticket), new ticket # 15280549, expires May 28th.

### Personnel On-Site

| Name: | Company: |
|---|---|
| Jim Ferguson | Tetra Tech, Inc. |
| Josh Mullis | Tetra Tech, Inc. |
| Larry Macher | Elite Environmental |
| Ben King | Elite Environmental |
| Mike Munzert | ACF Supply, Inc. |
| Gary Norris | Elite Environmental |
| Tom Vernotzy | Elite Environmental |
| Jeremy Vernotzy | Elite Environmental |
| Jim Brendell | Baltimore Co. SCD |
| Ivanna Goldsberry | Tetra Tech, Inc. |
| Michael Martin | Tetra Tech Inc. |
| | |
| | |
| | |

### Health & Safety Topics or Issues

Completed site specific health and safety training with Elite Env. employees Jeremy and Tom Vernotzy. Also completed Lockheed-Martin Contractor Safety training. Reviewed equipment operation safety, emergency notification procedures, hand signals and general safe work practices.

### QC Procedures/Inspections/Testing to be Performed Today

None.

### Planned Week Schedule

1. Remobilize to site.
2. Meet with Baltimore County Soil Conservation District representative.
3. Begin installation of erosion and sediment controls in Block G and fencing in Bock H.
4. Saw cut Excavation areas A and B within Block H.
4. Pull back fencing along Cow Pen Creek to allow for installation of super silt fence near the UST Area.

**Photos of Select Daily Activities**




Comments: Bob-cat mini-excavator and ditch-witch attachment. Ditch-witch attachment will be utilized for installation of silt fencing.




Comments: Komatsu Ecavator and Bob-cat skid steer.

**Photos of Select Daily Activities (continued)**



Comments: Silt fence and super-silt fence materials delivered by ACF Supply.

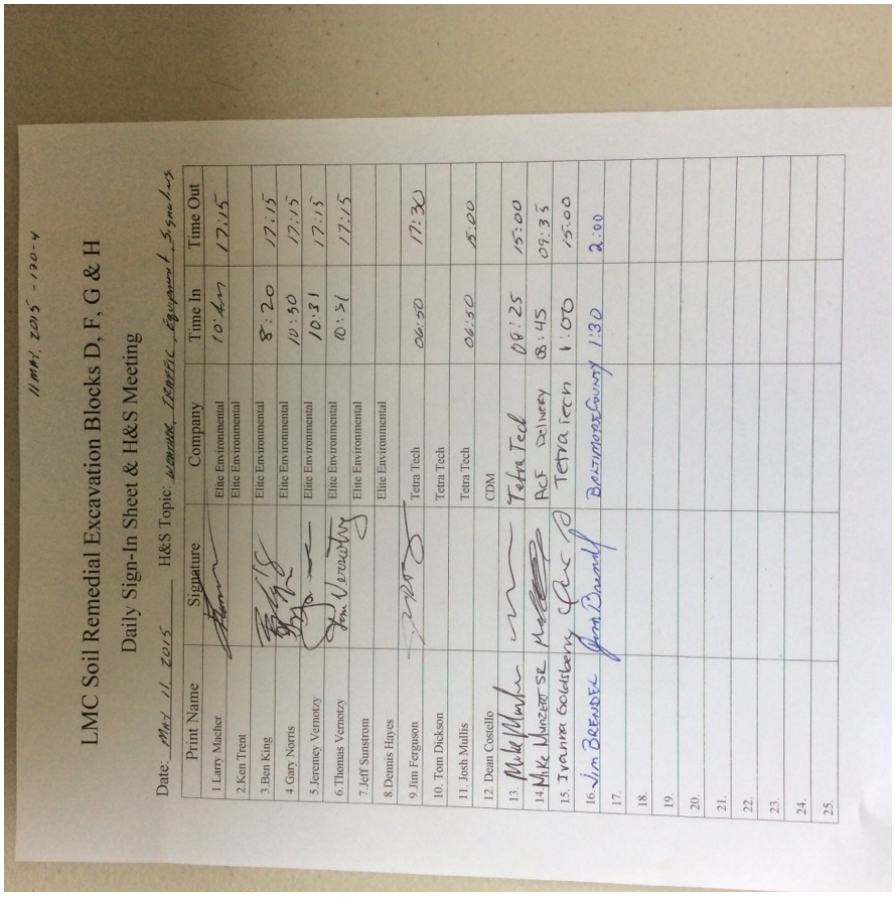

11 MAY, 2015 - 130-4

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: May 11, 2015 H&S Topic: Weather, Traffic, Equipment, Signalling

| Print Name | Signature | Company | Time In | Time Out |
|---|---|---|---|---|
| 1.Larry Macher | [signature] | Elite Environmental | 10:40 | 17:15 |
| 2.Ken Trent | | Elite Environmental | | |
| 3.Ben King | [signature] | Elite Environmental | 8:20 | 17:15 |
| 4.Gary Norris | [signature] | Elite Environmental | 10:30 | 17:15 |
| 5.Jeremey Vernotzy | [signature] | Elite Environmental | 10:31 | 17:15 |
| 6.Thomas Vernotzy | Tom Vernotzy | Elite Environmental | 10:31 | 17:15 |
| 7.Jeff Sunstrom | | Elite Environmental | | |
| 8.Dennis Hayes | | Elite Environmental | | |
| 9.Jim Ferguson | [signature] | Tetra Tech | 06:50 | 17:30 |
| 10. Tom Dickson | | Tetra Tech | | |
| 11. Josh Mullis | | Tetra Tech | 06:50 | 15:00 |
| 12. Dean Costello | | CDM | | |
| 13. Mike Munzer | [signature] | Tetra Tech | 08:25 | 15:00 |
| 14. Mike Munzer SR | [signature] | ACF Delivery | 08:45 | 09:35 |
| 15. Ivanna Goldsberry | [signature] | Tetra Tech | 1:00 | 15:00 |
| 16. Jim Brender | Jim Brender | Baltimore County | 1:30 | 2:00 |
| 17. | | | | |
| 18. | | | | |
| 19. | | | | |
| 20. | | | | |
| 21. | | | | |
| 22. | | | | |
| 23. | | | | |
| 24. | | | | |
| 25. | | | | |

Comments: 5/11/15 sign in sheet.

**Safety Sign-In Sheet**

Construction Manager

Submitted by:

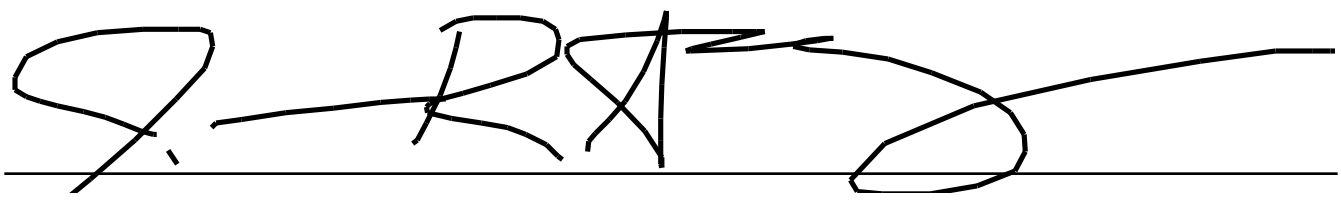

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 12, 2015 | Start Work at: | 6:50 AM | Depart Site at: | |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 70 to 80 | Skies: | Partly Cloudy | Wind: | Light | Precipitation: | None |
|---|---|---|---|---|---|---|---|

Weather Comments: Humid.

### Summary of Work/Major Activities

1. Tailgate safety meeting, discussed heat related issues, equipment checks, ditch-witch operations /safety, hand dig when approaching utilities during silt fence installation, equipment safety zones / swing radii, and communications (visual and portable radios).
2. Silt fence installation (north to south) across Block G. (Ditch-witch, bobcat mini-excavator).
3. Clearing of heavier brush in Block G excavation areas H and I. (Komatsu Excavator)
4. Silt fence installation approaching Bock G excavation areas H and I was complicated by multiple layers of asphalt, Elite had to excavate approximately 1.5' to get through asphalt.
5. Cones were placed in Block H to channel traffic away from saw it locations.

### Personnel On-Site

| Name: | Company: |
|---|---|
| Jim Ferguson | Tetra Tech |
| Larry Macher | Elite Environmental |
| Gary Norris | Elite Environmental |
| Ben King | Elite Environmental |
| Tom Vernotzy | Elite Environmental |
| Jeremy Vernotzy | Elite Environmental |
| | |
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| | |

### Health & Safety Topics or Issues

Equipment swing radii, heat related issues, ditch-witch operation / safety, communications (hand signals and radios),

### QC Procedures/Inspections/Testing to be Performed Today

Verify depth of trenching for silt fence installation

### Planned Week Schedule

Install erosion and sediment controls in Block G.
Continue clearing of heavier brush in Block G excavation ares H and I.
Roll back fence along cow pen creek to allow for installation so super silt fence.

**Photos of Select Daily Activities**



Comments: Installation os silt fence across Block G.  View looking south.



Comments: Silt fence installed in Block G (looking north), Block H in the background.

**Photos of Select Daily Activities (continued)**




Comments: Bob-cat skid steer with trenching (ditch-witch) attachment cutting surgical materials for silt fence installation.




Comments: Komatsu excavator clearing heavy brush in Block G UST area.

**Safety Sign-In Sheet**

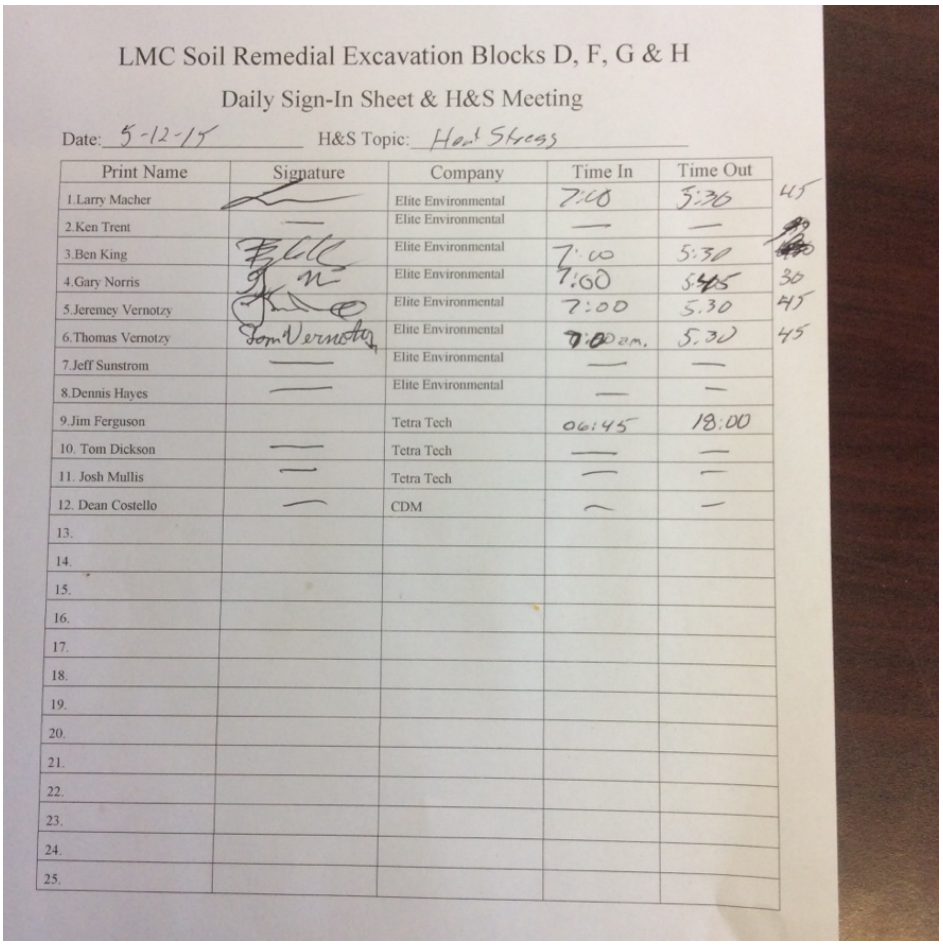

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: 5-12-15 H&S Topic: Heat Stress

| Print Name | Signature | Company | Time In | Time Out | |
|---|---|---|---|---|---|
| 1.Larry Macher | | Elite Environmental | 7:00 | 5:30 | 45 |
| 2.Ken Trent | — | Elite Environmental | — | — | |
| 3.Ben King | | Elite Environmental | 7:00 | 5:30 | |
| 4.Gary Norris | | Elite Environmental | 7:00 | 5:45 | 30 |
| 5.Jeremey Vernotzy | | Elite Environmental | 7:00 | 5:30 | 45 |
| 6.Thomas Vernotzy | Tom Vernotzy | Elite Environmental | 7:00 am. | 5:30 | 45 |
| 7.Jeff Sunstrom | — | Elite Environmental | — | — | |
| 8.Dennis Hayes | — | Elite Environmental | — | — | |
| 9.Jim Ferguson | | Tetra Tech | 06:45 | 18:00 | |
| 10. Tom Dickson | — | Tetra Tech | — | — | |
| 11. Josh Mullis | — | Tetra Tech | — | — | |
| 12. Dean Costello | — | CDM | — | — | |
| 13. | | | | | |
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| 25. | | | | | |

Construction Manager

Submitted by:

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 13, 2015 | Start Work at: | 6:22 AM | Depart Site at: | 6:00 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 60 to 70 | Skies: | Partly Cloudy | Wind: | Moderate | Precipitation: | None |
|---|---|---|---|---|---|---|---|

Weather Comments: Overcast, breezy and cool.

### Summary of Work/Major Activities

1. Tailgate safety meeting, discussed scope of work, traffic controls, emergency signaling, reviewed Site communications plan and equipment inspection documentation.
2. Erect fencing around Block H excavation areas A and B.
3. Hertz Equipment mechanic onsite to perform routine equipment maintenance checks and to install fire extinguishers on Bobcat mini-excavator and skid steer.
Mason Inc. on Site to move Con-Ex trailer to location behind office trailer in Block G.
4. Install public information signage adjacent to existing information circular boxes.
5. AV Burke LLC (surveyor) on Site to re-establish excavation corners in Block G areas where clearing and grubbing obscured previous markings. Additional tasks included layout of excavation areas in Blocks D and F so waste characterization sampling could be performed in addition to Utility clearance prior to mobilizing into those areas.
6. Complete silt fence installation in Block G and begin super silt fence installation in Block G.

### Personnel On-Site

| Name: | Company: |
|---|---|
| Jim Ferguson | Tetra Tech |
| Scott Nesbit | Tetra Tech |
| Michael Martin | Tetra Tech |
| Fred Kolberg | Tetra Tech |
| Larry Macher | Elite Environmental |
| Ben King | Elite Environmental |
| Gary Norris | Elite Environmental |
| Jeremy Vernotzy | Elite Environmental |
| Tom Vernotzy | Elite Environmental |
| Vince Burke | AV Burke LLC |
| Vinnie Burke | AV Burke LLC |
| Bryan Sczepanski | Hertz Equipment |
| Mark Ramsauop | Mason Inc. |
| | |

### Health & Safety Topics or Issues

Traffic control, site communication plans, equipment inspection, emergency alert signals.

### QC Procedures/Inspections/Testing to be Performed Today

1. Monitor silt fence and super silt fence installation as per Erosion and sediment control plan sheets C-15 and C-16.
2. Need to verify location of super silt diversion fence on the extreme east side of Block G. AV Burke Surveyor has LOD marked off LM property on North American Electrics property.
3. Need to clarify excavation procedures for Block G Area J since storm water drainage ditch transepts the southeast corner of the subject area.

### Planned Week Schedule

1. Install erosion and sediment controls in Block G.
2. Continue clearing brush in Block G, prep excavation areas H and I.
3. Roll back fence along Cow Pen Creek to allow installation of super silt fence.
4. Install temporary fencing in Block H around excavation areas A and B.
5. Surveyors locate excavation areas in Block F in preparation of utility location by Enviroscan also for waste characterization sampling.

**Photos of Select Daily Activities**



Comments: Temporary fencing installed in Block G Excavation Area B. Similar fencing installed around Block H excavation Area A.



Comments: Installation of super silt fence on east side of Block G excavation area H. Cow Pen Creek visible behind excavator.

**Photos of Select Daily Activities (continued)**



Comments: View looking south at Block G excavation area J. Storm water ditch transecting the eastern side of the excavation area.



Comments: View looking south at stakes delineating the location of the super silt diversion fence. Location of SSD fence crosses on to North American Electric property.

**Safety Sign-In Sheet**

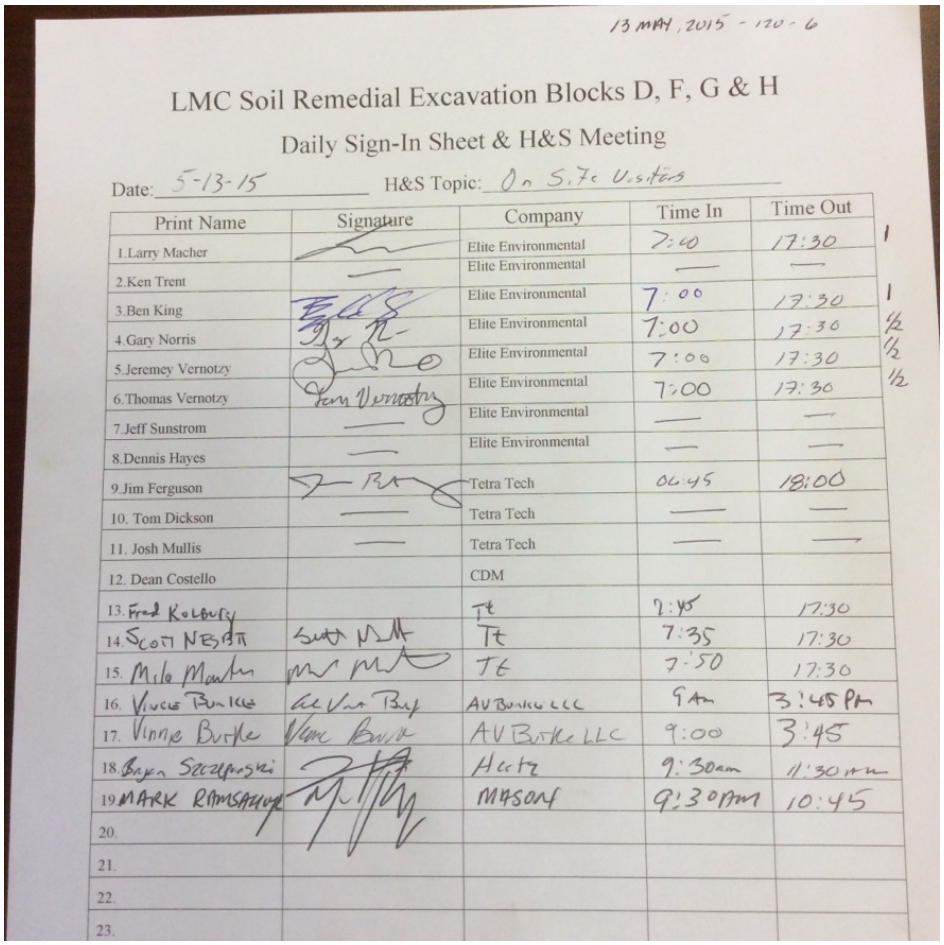

13 MAY, 2015 - 120 - 6

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: 5-13-15 H&S Topic: On Site Visitors

| Print Name | Signature | Company | Time In | Time Out | |
|---|---|---|---|---|---|
| 1.Larry Macher | | Elite Environmental | 7:40 | 17:30 | 1 |
| 2.Ken Trent | — | Elite Environmental | — | — | |
| 3.Ben King | | Elite Environmental | 7:00 | 17:30 | 1 |
| 4.Gary Norris | | Elite Environmental | 7:00 | 17:30 | ½ |
| 5.Jeremey Vernotzy | | Elite Environmental | 7:00 | 17:30 | ½ |
| 6.Thomas Vernotzy | Tom Vernotzy | Elite Environmental | 7:00 | 17:30 | ½ |
| 7.Jeff Sunstrom | — | Elite Environmental | — | — | |
| 8.Dennis Hayes | — | Elite Environmental | — | — | |
| 9.Jim Ferguson | | Tetra Tech | 06:45 | 18:00 | |
| 10. Tom Dickson | — | Tetra Tech | — | — | |
| 11. Josh Mullis | — | Tetra Tech | — | — | |
| 12. Dean Costello | | CDM | | | |
| 13. Fred Kolbury | | Tt | 7:45 | 17:30 | |
| 14. Scott Nesbit | | Tt | 7:35 | 17:30 | |
| 15. Mike Mantin | | Tt | 7:50 | 17:30 | |
| 16. Vince Burke | | AV Burke LLC | 9 Am | 3:45 PM | |
| 17. Vinnie Burke | | AV Burke LLC | 9:00 | 3:45 | |
| 18. Bryan Szczepanski | | Hertz | 9:30am | 11:30 am | |
| 19. MARK RAMSAUER | | MASON | 9:30pm | 10:45 | |
| 20. | | | | | |
| 21. | | | | | |
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Construction Manager

Submitted by:

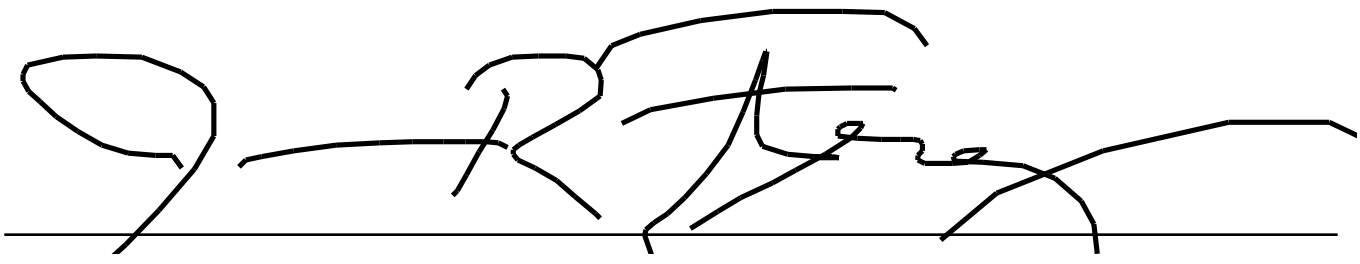

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 14, 2015 | Start Work at: | 6:50 AM | Depart Site at: | 6:00 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 60 to 70 | Skies: | Partly Cloudy | Wind: | None | Precipitation: | None |
|---|---|---|---|---|---|---|---|

Weather Comments: Cool

### Summary of Work/Major Activities

1. Complete installation of super silt fence in Block G Areas H, I, J, and the UST area.
2. Saw cut asphalt pavement in Block H Areas A and B.
3. Met with L. Macher and S. Nesbit to discuss plans moving forward. Toured site to observe progress with silt fence installation.
4. Trained additional Elite employees (Greene/ Sunstrom) who came for Lockheed Martin Contractor Training and Site Specific Health and Safety Training.
5. Met with M. Martin regarding waste disposal manifest signature authority approvals for Site personnel.

### Personnel On-Site

| Name: | | Company: | |
|---|---|---|---|
| Name: | Jim Ferguson | Company: | Tetra Tech |
| Name: | Scott Nesbit | Company: | Tetra Tech |
| Name: | Larry Macher | Company: | Elite Environmental |
| Name: | Ben King | Company: | Elite Environmental |
| Name: | Jeremy Vernotzy | Company: | Elite Environmental |
| Name: | Tom Vernotzy | Company: | Elite Environmental |
| Name: | William Soho | Company: | B and J Construction |
| Name: | Gary Norris | Company: | Elite Environmental |
| Name: | Joe Greene | Company: | Elite Environmental |
| Name: | Jeff Sunstrom | Company: | Elite Environmental |
| Name: | | Company: | |
| Name: | | Company: | |
| Name: | | Company: | |
| Name: | | Company: | |

### Health & Safety Topics or Issues

General equipment safety checks, traffic awareness and controls, sun effects and ultraviolet radiation (sunburn).

### QC Procedures/Inspections/Testing to be Performed Today

Super silt fence installation QA/QC.

### Planned Week Schedule

-Install erosion and sediment controls in Block G.
-Continue brush clearing in Block G, prep excavation Areas H and I.
-Roll back fence along Cow Pen Creek to allow installation of super silt fence.
-Install temporary fencing in Block H around Areas A and B.
-Surveyors locate excavation areas in Block F in preparation of utility location by Enviroscan also for waste characterization sampling.
-Saw cut asphalt in Block H Areas A and B.

**Photos of Select Daily Activities**



Comments: Saw cutting asphalt in Block H Area B.



Comments: Super silt fence installation along the north shore of Cow Pen Creek (Block G, Area J and UST area. Worker clipping geotextile to steel fencing.

**Photos of Select Daily Activities (continued)**



Comments: Improvised slide hammer for installing super silt fence on east side of Block G in the vicinity of North American Electric.

Comments:

**Safety Sign-In Sheet**

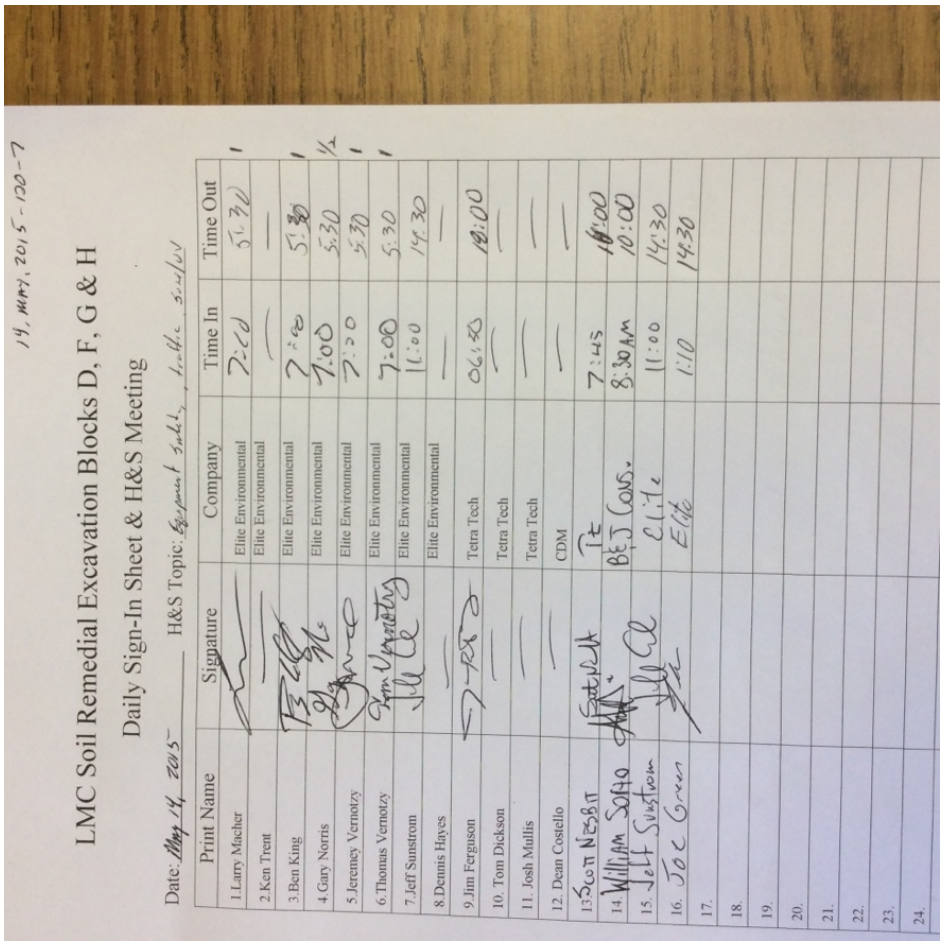

14, MAY, 2015 - 130-7

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: May 14 2015 H&S Topic: Equipment Safety, Traffic, Strikes

| Print Name | Signature | Company | Time In | Time Out | |
|---|---|---|---|---|---|
| 1. Larry Macher | | Elite Environmental | 7:20 | 5:30 | 1 |
| 2. Ken Trent | | Elite Environmental | — | — | |
| 3. Ben King | | Elite Environmental | 7:00 | 5:30 | 1 |
| 4. Gary Norris | | Elite Environmental | 7:00 | 5:30 | 1/2 |
| 5. Jeremey Vernotzy | | Elite Environmental | 7:00 | 5:30 | 1 |
| 6. Thomas Vernotzy | | Elite Environmental | 7:00 | 5:30 | 1 |
| 7. Jeff Sunstrom | | Elite Environmental | 11:00 | 14:30 | |
| 8. Dennis Hayes | | Elite Environmental | — | — | |
| 9. Jim Ferguson | | Tetra Tech | 06:50 | 10:00 | |
| 10. Tom Dickson | | Tetra Tech | — | — | |
| 11. Josh Mullis | | Tetra Tech | — | — | |
| 12. Dean Costello | | CDM | — | — | |
| 13. Scott Nesbit | | Fe | 7:45 | 10:00 | |
| 14. William Soho | | B&J Cons. | 8:30 AM | 10:00 | |
| 15. Jeff Sunstrom | | Elite | 11:00 | 14:30 | |
| 16. Joe Green | | Elite | 1:10 | 14:30 | |
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| 24. | | | | | |

Construction Manager

Submitted by:

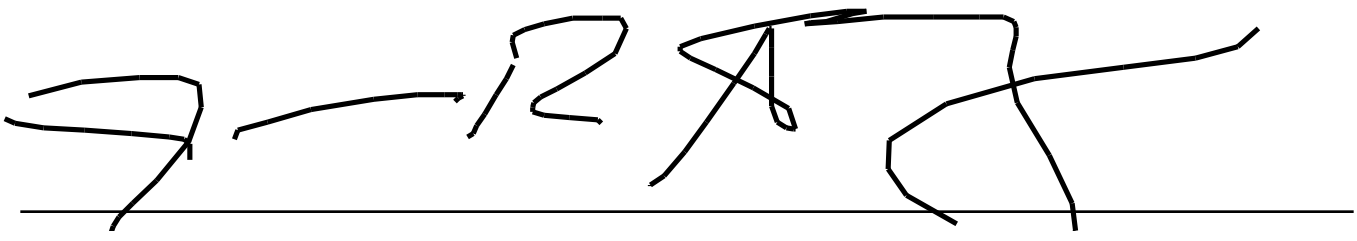

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 18, 2015 | Start Work at: | 7:00 AM | Depart Site at: | 6:00 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 70 to 80 | Skies: | Mostly Cloudy | Wind: | Light | Precipitation: | Other (explain) |
|---|---|---|---|---|---|---|---|

Weather Comments: Thunderstorms moving through area.

### Summary of Work/Major Activities

1. Elite Environmental crews worked on installation of super silt diversion fence in the east corner of Block G.
2. Kyle Trent (Elite Environmental) onsite for training. He will go to Concentrate for a physical prior to completing Site Specific and Lockheed Martin Contractor Training.
3. AV Burke LLC (surveyor) on site to verify limits of excavation in Block H areas 1 and 2.
4. Surveyors will also locate excavation areas in Block D to facilitate waste profile sampling to be performed later in the week.
5. Tetra Tech staff set up air monitoring equipment in the Eastern portion of Block G in the UST area where E and S controls are being installed.
6. Suspended work from 13:21 to 13:51 due to thunderstorm moving through the area.
7. Jeff Meadows on site to meet with Ken Trent regarding installation of temporary asphalt berm.
8. AV Burke LLC completes location of Block D excavation areas A, B, C, E, F and F1 before departing Site for evening.

### Personnel On-Site

| Name: | Company: |
|---|---|
| Jim Ferguson | Tetra Tech |
| Josh Mullis | Tetra Tech |
| Larry Macher | Elite Environmental |
| Ken Trent | Elite Environmental |
| Ben King | Elite Environmental |
| Gary Norris | Elite Environmental |
| Kyle Trent | Elite Environmental |
| Jeremy Vernotzy | Elite Environmental |
| Tom Vernotzy | Elite Environmental |
| Vince Burke | AV Burke LLC |
| Vinnie Burke | AV Burke LLC |
| Jeff Meadows | Meadows Paving |
| | |
| | |

**Health & Safety Topics or Issues**

1. Anticipate pop up thunderstorms throughout the day. Reviewed work stoppage criteria.
2. Equipment operation and signaling to operators.
3. Weather (heat related issues). Reminded personnel to take frequent water breaks due to heat and humidity conditions today.

**QC Procedures/Inspections/Testing to be Performed Today**

1. Verify super silt diversion fence installation.

**Planned Week Schedule**

1. Super silt diversion fence installation in Block G.
2. Surveyors to layout excavation Areas in Block D.
3. Complete waste excavation, confirmation sampling, and backfill placement within Areas A and B of Block H.
4. Waste characterization sampling in Block F and Block D.
5. Temporary asphalt berm installation in Block G.
6. Construction entrance installation in Block G.
7. Modified rock outlet installation in Block G

**Photos of Select Daily Activities**



Comments: Installing steel fence portion of super silt diversion fence on the east side of Block G (View looking south).



Comments: Workers tensioning fence and securing with wire.

**Photos of Select Daily Activities (continued)**



Comments: Overlap area with super silt diversion fence on left and super silt fence in southeast corner of Block G.



Comments: View of completed super silt fence  in southeast corner of Block G.

**Safety Sign-In Sheet**

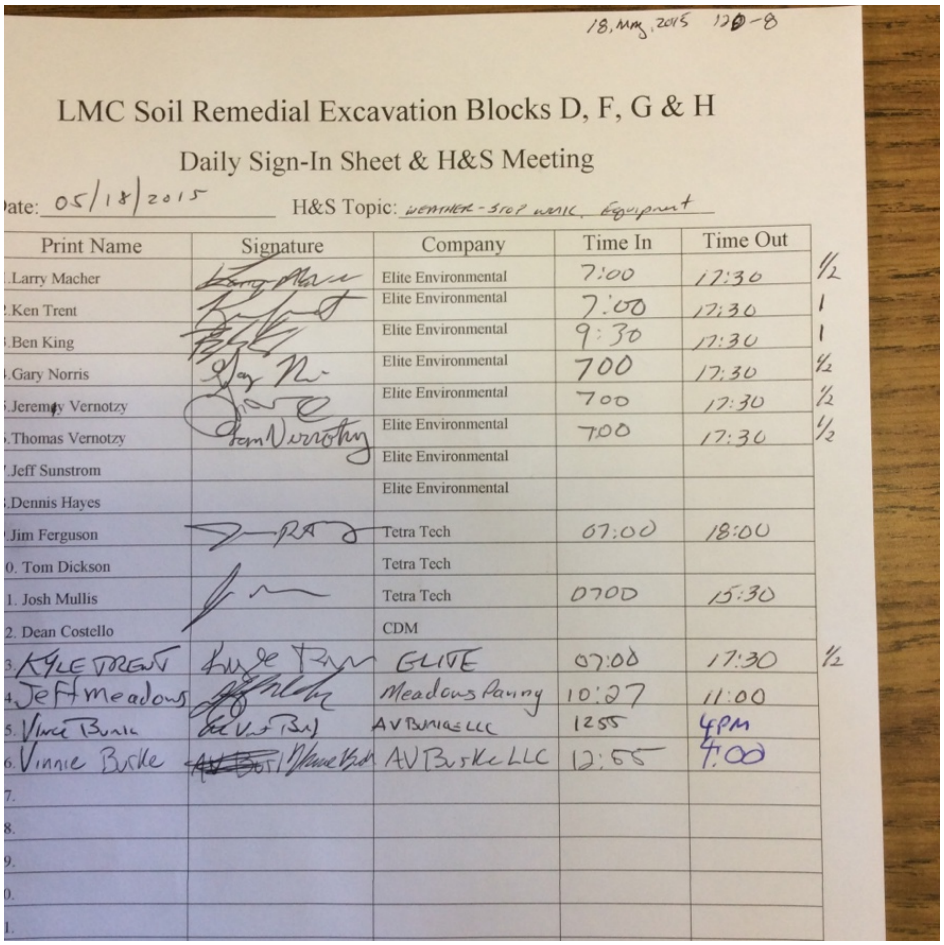

18, May, 2015 120-8

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: 05/18/2015 H&S Topic: WEATHER - STOP WORK, EQUIPMENT

| Print Name | Signature | Company | Time In | Time Out | |
|---|---|---|---|---|---|
| 1. Larry Macher | | Elite Environmental | 7:00 | 17:30 | 1/2 |
| 2. Ken Trent | | Elite Environmental | 7:00 | 17:30 | 1 |
| 3. Ben King | | Elite Environmental | 9:30 | 17:30 | 1 |
| 4. Gary Norris | | Elite Environmental | 700 | 17:30 | 1/2 |
| 5. Jeremy Vernotzy | | Elite Environmental | 700 | 17:30 | 1/2 |
| 6. Thomas Vernotzy | Tom Vernotzy | Elite Environmental | 700 | 17:30 | 1/2 |
| 7. Jeff Sunstrom | | Elite Environmental | | | |
| 8. Dennis Hayes | | Elite Environmental | | | |
| 9. Jim Ferguson | | Tetra Tech | 07:00 | 18:00 | |
| 10. Tom Dickson | | Tetra Tech | | | |
| 11. Josh Mullis | | Tetra Tech | 0700 | 15:30 | |
| 12. Dean Costello | | CDM | | | |
| 13. KYLE TRENT | | ELITE | 07:00 | 17:30 | 1/2 |
| 14. Jeff Meadows | | Meadows Paving | 10:27 | 11:00 | |
| 15. Vince Burke | | AV Burke LLC | 1255 | 4PM | |
| 16. Vinnie Burke | ~~AV Burke~~ | AV Burke LLC | 12:55 | 4:00 | |
| 17. | | | | | |
| 18. | | | | | |
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| 21. | | | | | |

Construction Manager

Submitted by:

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 19, 2015 | Start Work at: | 7:00 AM | Depart Site at: | 6:30 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 70 to 80 | Skies: | Overcast | Wind: | None | Precipitation: | Light Rain |
|---|---|---|---|---|---|---|---|

Weather Comments: Overcast, humid, intermittent rain showers.

### Summary of Work/Major Activities

1. Meadows Paving crew on site to install Temporary Asphalt Berm (TAB).
2. Performed Lockheed Martin Contractors ESH briefing in addition to Site Specific Health and Safety Training for Meadows Asphalt Paving.
3. Meadows Paving installed TAB along north and west sides of Block G.
4. Complete installation of super silt diversion fence in Block G north of UST area.
5. Set up truck queue on west side of Block H.

### Personnel On-Site

| Name: | | Company: | |
|---|---|---|---|
| Name: | Jim Ferguson | Company: | Tetra Tech |
| Name: | Josh Mullis | Company: | Tetra Tech |
| Name: | Larry Macher | Company: | Elite Environmental |
| Name: | Ken Trent | Company: | Elite Environmental |
| Name: | Ben King | Company: | Elite Environmental |
| Name: | Gary Norris | Company: | Elite Environmental |
| Name: | Kyle Trent | Company: | Elite Environmental |
| Name: | Jeff Sunstrom | Company: | Elite Environmental |
| Name: | Jeff Meadows | Company: | Meadows Paving |
| Name: | Greg Simmons | Company: | Meadows Paving |
| Name: | John Colleran | Company: | Meadows Paving |
| Name: | Richard Hott | Company: | Meadows Paving |
| Name: | Joe Greene | Company: | Elite Environmental |
| Name: | Brian Scezmanski | Company: | Hertz Equipment |

**Health & Safety Topics or Issues**

1. Heat related issues, hydration and frequent breaks.
2. Equipment safety, spotters, hand signals, safe work distances and approaching strangers.
3. Use appropriate lifting techniques when moving steel fencing in place.
4. Use of appropriate PPE when installing fencing with an emphasis on hand protection.

**QC Procedures/Inspections/Testing to be Performed Today**

1. Inspection of super silt diversion fencing.
2. Inspection of TAB.

**Planned Week Schedule**

1. Installation of TAB.
2. Installation of super silt diversion fence in Block G.
3. Enviroscan to perform utility location in Block F.
4. Complete waste excavation, confirmation sampling, and backfill placement within Areas A and B of Block H.

**Photos of Select Daily Activities**



Comments: TAB (not compacted) installed along north side of Block G.



Comments: Compacted TAB.

**Photos of Select Daily Activities (continued)**




Comments: Installation of TAB near construction entrance of Block G.




Comments: Super silt Diversion fence installation on the north east side of Block G.

**Safety Sign-In**

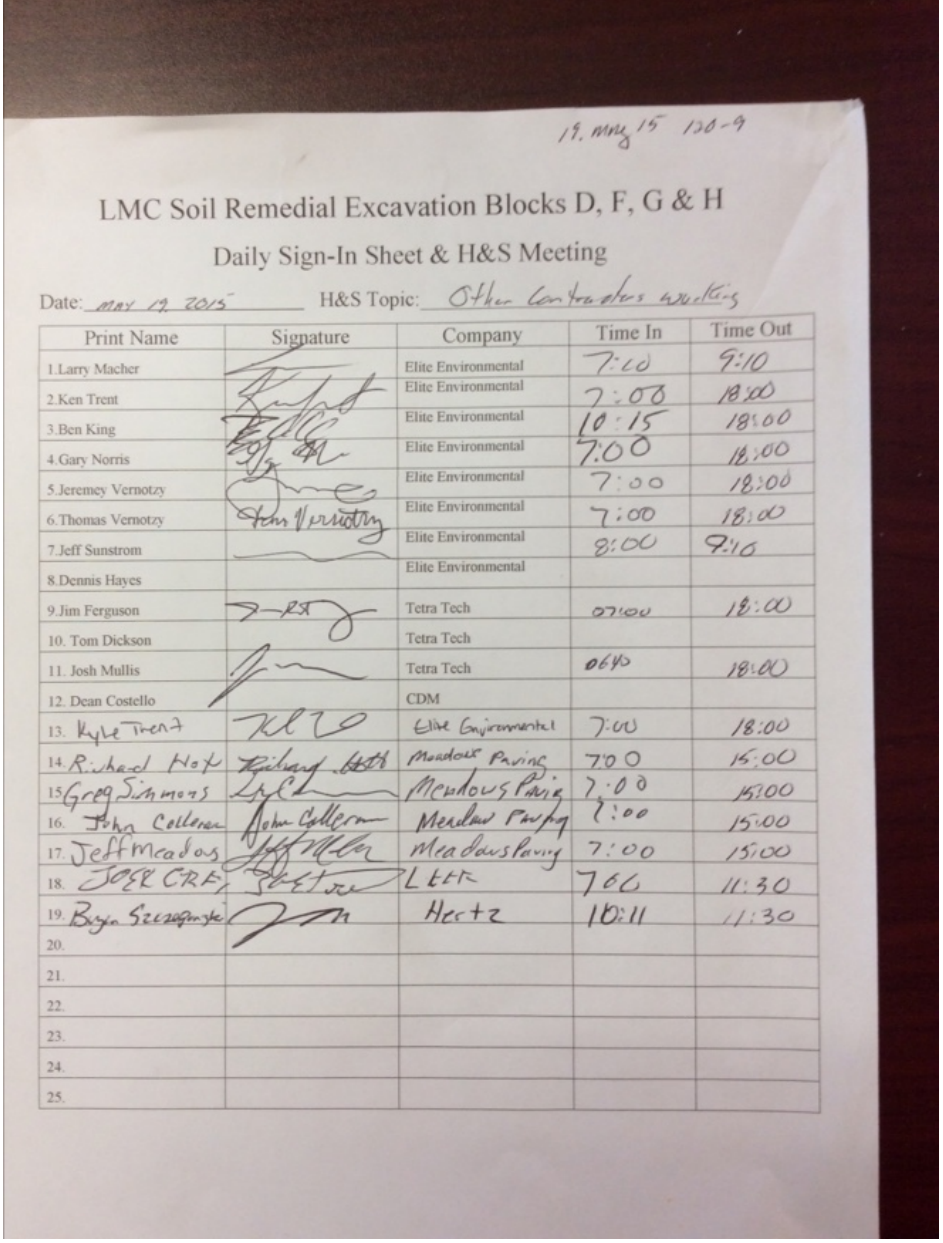

19 May 15 130-9

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: May 19 2015 H&S Topic: Other Contractors working

| Print Name | Signature | Company | Time In | Time Out |
|---|---|---|---|---|
| 1.Larry Macher | | Elite Environmental | 7:00 | 9:10 |
| 2.Ken Trent | | Elite Environmental | 7:00 | 18:00 |
| 3.Ben King | | Elite Environmental | 10:15 | 18:00 |
| 4.Gary Norris | | Elite Environmental | 7:00 | 18:00 |
| 5.Jeremey Vernotzy | | Elite Environmental | 7:00 | 18:00 |
| 6.Thomas Vernotzy | | Elite Environmental | 7:00 | 18:00 |
| 7.Jeff Sunstrom | | Elite Environmental | 8:00 | 9:10 |
| 8.Dennis Hayes | | Elite Environmental | | |
| 9.Jim Ferguson | | Tetra Tech | 07:00 | 18:00 |
| 10. Tom Dickson | | Tetra Tech | | |
| 11. Josh Mullis | | Tetra Tech | 0645 | 18:00 |
| 12. Dean Costello | | CDM | | |
| 13. Kyle Trent | | Elite Environmental | 7:00 | 18:00 |
| 14. Richard Hoyt | | Meadows Paving | 7:00 | 15:00 |
| 15 Greg Simmons | | Meadows Paving | 7:00 | 15:00 |
| 16. John Colleran | | Meadows Paving | 7:00 | 15:00 |
| 17. Jeff Meadows | | Meadows Paving | 7:00 | 15:00 |
| 18. JOSE CRE | | L tte | 706 | 11:30 |
| 19. Bryan Szczepanski | | Hertz | 10:11 | 11:30 |
| 20. | | | | |
| 21. | | | | |
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| 24. | | | | |
| 25. | | | | |

Construction Manager

Submitted by:

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 20, 2015 | Start Work at: | 6:30 AM | Depart Site at: | 6:30 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 70 to 80 | Skies: | Partly Cloudy | Wind: | Light | Precipitation: | None |
|---|---|---|---|---|---|---|---|

Weather Comments: Partly cloudy, winds out of the north.

### Summary of Work/Major Activities

1. Tailgate safety meeting, discussed soil load out logistics, safety precautions. Discussed spotters for truck load out, cleanup around excavations and traffic control.
2. Stopped by MRC security to provide security personnel with a courtesy notification about work to be done in Block H today.
3. Additional Elite crew will be finishing super silt diversion fence on east side of Block G in addition to construction entrance at Block G.
4. Bill Steinhart of Enviroscan on site in Block F to perform geophysical survey of excavation areas.
5. Completed loadout of 14 triaxial dump trucks in Block H. Ten trucks from excavation area A and four trucks at excavation area B.
6. Verification sampling completed for Block H Area A, partially complete for Block H Area B.
7. Air monitoring completed throughout the day.

### Personnel On-Site

| Name: | Company: |
|---|---|
| Jim Ferguson | Tetra Tech |
| Tom Dickson | Tetra Tech |
| Scott Nesbit | Tetra Tech |
| Michael Martin | Tetra Tech |
| Josh Mullis | Tetra Tech |
| Ken Trent | Elite Environmental |
| Larry Macher | Elite Environmental |
| Joe Greene | Elite Environmental |
| Gary Norris | Elite Environmental |
| Jeremy Vernotzy | Elite Environmental |
| Tom Vernotzy | Elite Environmental |
| Kyle Trent | Elite Environmental |
| Ben King | Elite Environmental |
| Dean Costello / Katie Young | CDM Smith |

**Health & Safety Topics or Issues**

1. Vehicle loadout procedures. Safety protocols for truck drivers. Spotters for trac hoe operator, trucks, and overhead utility line in Block H excavation Area B.

**QC Procedures/Inspections/Testing to be Performed Today**

1. Inspection of super silt diversion fence and construction entrance in Block G.
2. DUSTTRAK air monitoring stations placed around Areas A and B.
3. Verification sidewall and base sampling of Areas A and B.

**Planned Week Schedule**

1. Installation of TAB (completed 5/20).
2. Installation of super silt diversion fence in Block G (completed 5/20).
3. Enviroscan to perform utility clearance for excavation areas in Block F (completed 5/20), Block D, and Block D Panhandle.
4. Complete waste excavation (Area A complete 5/20).
5. Complete confirmation sampling (Area A complete 5/20).
6. Finish soil load out in Block H.
7. Survey Block H Areas A and B.
8. Complete backfill placement within Areas A and B of Block H.
8. Stage asphalt from Block H in Block G.
9. Baltimore County E and S inspection scheduled for 13:00 on 5/21 in Block G.

**Photos of Select Daily Activities**




Comments: Block H Excavation Area A soil loading.



Comments: Block H Excavation Area A.

**Photos of Select Daily Activities (continued)**



Comments: Triaxial dump truck used for offloading excavated soil.




Comments: Block H excavation Area A.

**Safety Sign-In Sheet**

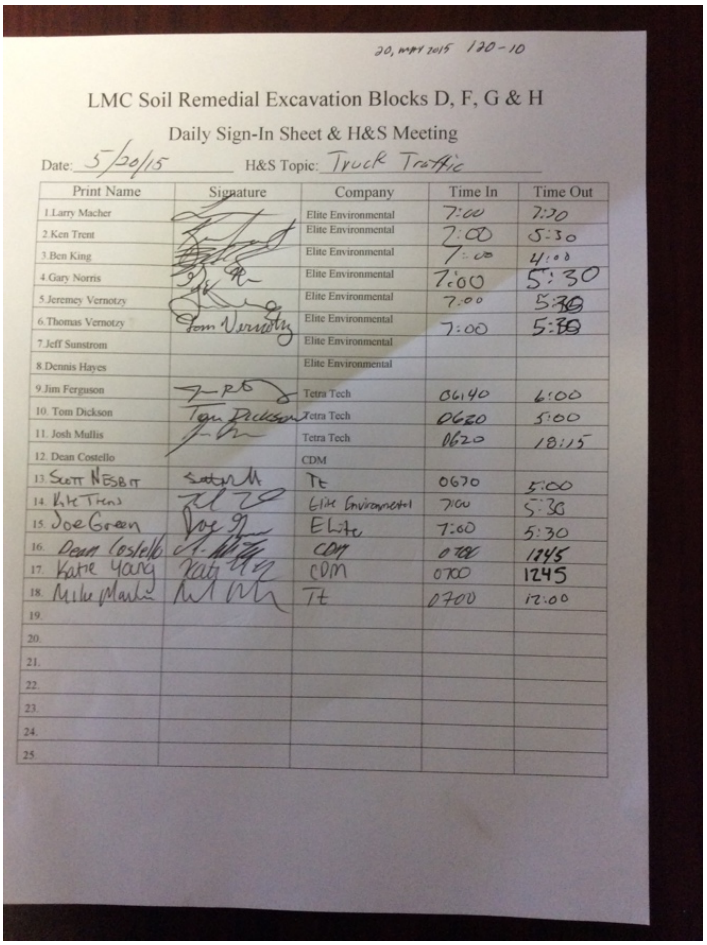

20, MAY 2015 120-10

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: 5/20/15 H&S Topic: Truck Traffic

| Print Name | Signature | Company | Time In | Time Out |
|---|---|---|---|---|
| 1. Larry Macher | | Elite Environmental | 7:00 | 7:20 |
| 2. Ken Trent | | Elite Environmental | 7:00 | 5:30 |
| 3. Ben King | | Elite Environmental | 7:00 | 4:00 |
| 4. Gary Norris | | Elite Environmental | 7:00 | 5:30 |
| 5. Jeremey Vernotzy | | Elite Environmental | 7:00 | 5:30 |
| 6. Thomas Vernotzy | Tom Vernotzy | Elite Environmental | 7:00 | 5:30 |
| 7. Jeff Sunstrom | | Elite Environmental | | |
| 8. Dennis Hayes | | Elite Environmental | | |
| 9. Jim Ferguson | | Tetra Tech | 0614O | 6:00 |
| 10. Tom Dickson | Tom Dickson | Tetra Tech | 0620 | 5:00 |
| 11. Josh Mullis | | Tetra Tech | 0620 | 18:15 |
| 12. Dean Costello | | CDM | | |
| 13. Scott NESBIT | | Tt | 0670 | 5:00 |
| 14. Kyle Thies | | Elite Environmental | 700 | 5:30 |
| 15. Joe Green | | Elite | 7:00 | 5:30 |
| 16. Dean Costello | | CDM | 0700 | 1245 |
| 17. Katie Yaeg | | CDM | 0700 | 1245 |
| 18. Mike Mark | | Tt | 0700 | 12:00 |
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Construction Manager

Submitted by:

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 21, 2015 | Start Work at: | 6:30 AM | Depart Site at: | 5:00 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 50 to 60 | Skies: | Overcast | Wind: | Moderate | Precipitation: | Light Rain |
|---|---|---|---|---|---|---|---|

Weather Comments: Light to moderate rain from 10am through the rest of the day, some periods of heavy rain in afternoon

### Summary of Work/Major Activities

1.Tailgate safety meeting, discussed soil load out logistics, safety precautions. Discussed spotters for truck load out, cleanup around excavations and traffic control. Proper PPE required when entering shallow excavations (if necessary), weather hazards due to rain.
2. Complete excavation and verification sampling of Block H Area B.
3. Three triaxial dump trucks loaded from Block H Area B excavation.
4. Block H Areas A and B excavation limits surveyed.
5. Equipment deliveries: front end loader, roller, and frac tank.
6. Use front end loader to move asphalt stockpiles from Block H Areas A and B to stockpile area inside Block G.
7. Surveyor marked excavation limits in Block D Panhandle.
8. Enviroscan completed geophysical survey of Block D and D Panhandle.
9. Air monitoring completed in Block H Area B during excavation.
10. Baltimore County inspector completed E&S inspection of Block G controls.
11. Begin to backfill Area B with crusher run 6 fill material, to be completed 5/22.
12. Place plastic liners in Areas A and B due to rain, will backfill on Friday due to rain/wet conditions interfering with compaction.

### Personnel On-Site

| Name: | Company: |
|---|---|
| Jim Ferguson | Tetra Tech |
| Josh Mullis | Tetra Tech |
| Ken Trent | Elite Environmental |
| Larry Macher | Elite Environmental |
| Gary Norris | Elite Environmental |
| Jeremy Vernotzy | Elite Environmental |
| Thomas Vernotzy | Elite Environmental |
| Jeff Sunstrom | Elite Environmental |
| Dennis Hayes | Elite Environmental |
| Joe Green | Elite Environmental |
| Kyle Trent | Elite Environmental |
| Vince Burke | AV Burke LLC |
| Jim Brendel | Baltimore County |
| Dean Costello | CDM Smith |

**Health & Safety Topics or Issues**

1. Vehicle loadout procedures. Safety protocols for truck drivers. Spotters for trac hoe operator, trucks, and overhead utility line in Block H excavation Area B.
2. Weather hazards due to light to moderate rainfall (slips, trips, and falls), possibility for lightning (not forecasted).
3. PPE requirements involving entering shallow excavations if necessary, tyvek booties must be worn.

**QC Procedures/Inspections/Testing to be Performed Today**

1. Baltimore County E&S Inspection of Block G controls, inspector notes minor issues involving revegetation of areas outside the super silt diversion fence in Block G disturbed during installation, those areas will be reseeded. The inspector will reinspect on Wednesday, May 27th.
2. DUSTTRAK air monitoring stations placed around Block H Area B.
3. Verification sidewall and base sampling of Block H Area B.

**Planned Week Schedule**

1. Installation of TAB (completed 5/20).
2. Installation of super silt diversion fence in Block G (completed 5/20).
3. Enviroscan to perform utility clearance for excavation areas in Block F (completed 5/20), Block D and Block D Panhandle (completed 5/21).
4. Complete waste excavation (Area A completed 5/20, Area B completed 5/21).
5. Complete confirmation sampling (Area A completed 5/20, Area B completed 5/21).
6. Finish soil load out in Block H (completed 5/21).
7. Survey Block H Areas A and B (completed 5/21).
8. Complete backfill placement within Areas A and B of Block H.
8. Stage asphalt from Block H in Block G.
9. Baltimore County E&S inspection scheduled for 13:00 on 5/21 in Block G (completed 5/21).
10. Surveyors mark excavation limits in Block D and D Panhandle (completed 5/21).

**Photos of Select Daily Activities**




Comments: Truck being loaded with excavated soil in Block H Area B. Asphalt stockpile covered due to light rain




Comments: Surveying Block H Area A excavation

**Photos of Select Daily Activities (continued)**




Comments: Crushed Run 6 offloaded into Block H Area B



Comments: Frac tank delivery into Block G from Rain for Rent

**Safety Sign-In Sheet**

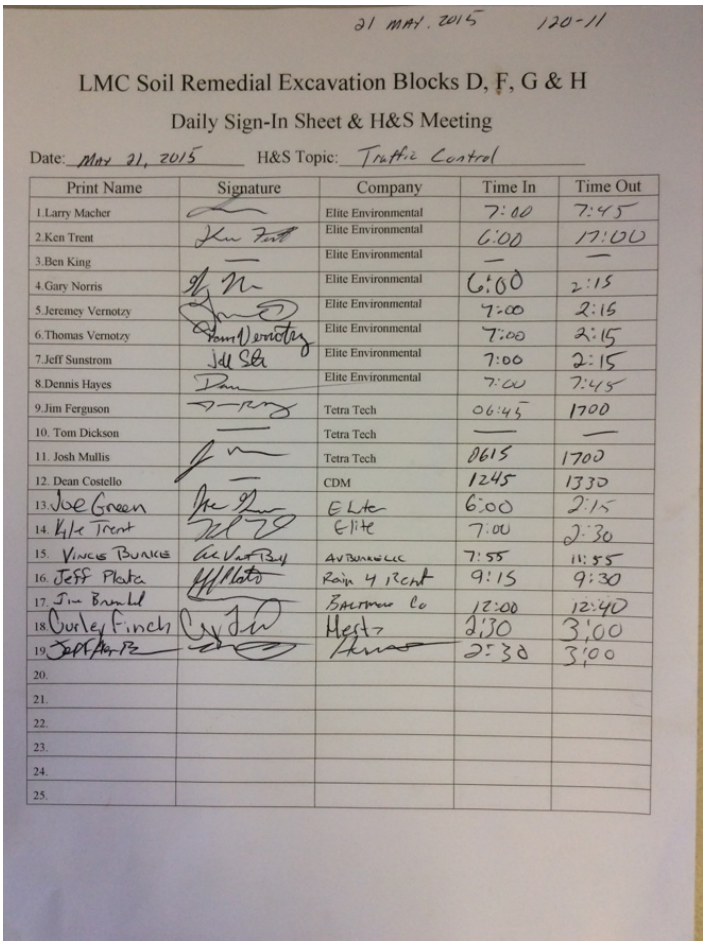

21 MAY. 2015 120-11

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: May 21, 2015 H&S Topic: Traffic Control

| Print Name | Signature | Company | Time In | Time Out |
|---|---|---|---|---|
| 1. Larry Macher | | Elite Environmental | 7:00 | 7:45 |
| 2. Ken Trent | | Elite Environmental | 6:00 | 17:00 |
| 3. Ben King | — | Elite Environmental | — | — |
| 4. Gary Norris | | Elite Environmental | 6:00 | 2:15 |
| 5. Jeremey Vernotzy | | Elite Environmental | 7:00 | 2:15 |
| 6. Thomas Vernotzy | | Elite Environmental | 7:00 | 2:15 |
| 7. Jeff Sunstrom | | Elite Environmental | 7:00 | 2:15 |
| 8. Dennis Hayes | | Elite Environmental | 7:00 | 7:45 |
| 9. Jim Ferguson | | Tetra Tech | 06:45 | 1700 |
| 10. Tom Dickson | — | Tetra Tech | — | — |
| 11. Josh Mullis | | Tetra Tech | 0615 | 1700 |
| 12. Dean Costello | — | CDM | 1245 | 1330 |
| 13. Joe Green | | Elite | 6:00 | 2:15 |
| 14. Kyle Trent | | Elite | 7:00 | 2:30 |
| 15. Vince Bunce | | AV Bunce LLC | 7:55 | 11:55 |
| 16. Jeff Plata | | Rain 4 Rent | 9:15 | 9:30 |
| 17. Jim Brandt | | Baltimore Co | 12:00 | 12:40 |
| 18. Durley Finch | | Hest | 2:30 | 3:00 |
| 19. Jeff Martz | | | 2:30 | 3:00 |
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Construction Manager

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 22, 2015 | Start Work at: | 7:00 AM | Depart Site at: | 6:00 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 60 to 70 | Skies: | Clear | Wind: | Moderate | Precipitation: | None |
|---|---|---|---|---|---|---|---|

Weather Comments:

### Summary of Work/Major Activities

1.Tailgate safety meeting, discussed backfill material dumping logistics, safety precautions. Discussed spotters for truck dumping, cleanup around excavations and traffic control. Proper PPE required when entering shallow excavations, wear rubber booties due to wet soil and potential slip hazards, 3 points of contact. Stay hydrated and wear sun block.
2. Complete relocating asphalt from Block H Area A to stockpile location in Block G.
3. Remove and roll up plastic liners placed in Areas A and B due to rain.
4. Pump out water (~200 gal) from Block H Area B and transfer to frac tank staged in Block G.
5. Delivery of smaller roller machine used to compact backfilled areas.
6. Four trucks of CR-2 dumped (Two each to Area A and Area B in Block H).
7. Ten trucks of CR-6 dumped (Nine to Area A and One to Area B in Block H).
8. Backfill Areas A and B in Block H with bottom layer of CR-2, then fabric, then CR-6 to grade. Area A requires 20 tons CR-6 to complete (to be completed 5/26). Area B completed 5/22.

### Personnel On-Site

| Name: | | Company: | |
|---|---|---|---|
| Name: | Josh Mullis | Company: | Tetra Tech |
| Name: | Ken Trent | Company: | Elite Environmental |
| Name: | Gary Norris | Company: | Elite Environmental |
| Name: | Jeremy Vernotzy | Company: | Elite Environmental |
| Name: | Thomas Vernotzy | Company: | Elite Environmental |
| Name: | Jeff Sunstrom | Company: | Elite Environmental |
| Name: | Joe Green | Company: | Elite Environmental |
| Name: | | Company: | |
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| Name: | | Company: | |
| Name: | | Company: | |

### Health & Safety Topics or Issues

1. Vehicle dumping procedures. Safety protocols for truck drivers. Spotters for trac hoe operator, trucks, and overhead utility line in Block H excavation Area B.
2. Weather: warmer temperatures forecasted, stay hydrated and wear sun block.
3. PPE requirements involving entering shallow excavations if necessary, tyvek booties must be worn.
4. Slip, trip, fall hazards resulting from rainfall yesterday, always have three points of contact and never walk backwards, rubber booties must be worn when soil is muddy.
5. General site cleanliness, keep work area clean, place PPE in designated areas away from possible cross contamination.

### QC Procedures/Inspections/Testing to be Performed Today

1. DUSTTRAK Air Monitoring stations set up for operational controls, only backfilling activities conducted.

### Planned Week Schedule

1. Installation of TAB (completed 5/20).
2. Installation of super silt diversion fence in Block G (completed 5/20).
3. Enviroscan to perform utility clearance for excavation areas in Block F (completed 5/20), Block D and Block D Panhandle (completed 5/21).
4. Complete waste excavation (Area A completed 5/20, Area B completed 5/21).
5. Complete confirmation sampling (Area A completed 5/20, Area B completed 5/21).
6. Finish soil load out in Block H (completed 5/21).
7. Survey Block H Areas A and B (completed 5/21).
8. Complete backfill placement within Areas A and B of Block H (Area A to be completed week of 5/26, Area B completed 5/22).
8. Stage asphalt from Block H in Block G (completed 5/22).
9. Baltimore County E&S inspection scheduled for 13:00 on 5/21 in Block G (completed 5/21).
10. Surveyors mark excavation limits in Block D and D Panhandle (completed 5/21).

Planned Activities for week of 5/26
1. Minor fixes to E&S controls in Block G (revegetation of area around SSDF).
2. Completion of backfill placement in Block H Area A.
3. Installation of silt fence in Block F.
4. Baltimore County inspection of E&S in Block G scheduled for 1100 on 5/27.
5. Begin excavation in Block G (tentative start date Thursday 5/28).

**Photos of Select Daily Activities**



Comments: CR-2 dumped into Block H Area B for backfilling.




Comments: CR-2 dumped into Block H Area A for backfilling.

**Photos of Select Daily Activities (continued)**



Comments: Block H Area A backfilled with CR-6 to grade.




Comments: Block H Area B backfilled with CR-6 to grade.

**Safety Sign-In Sheet**

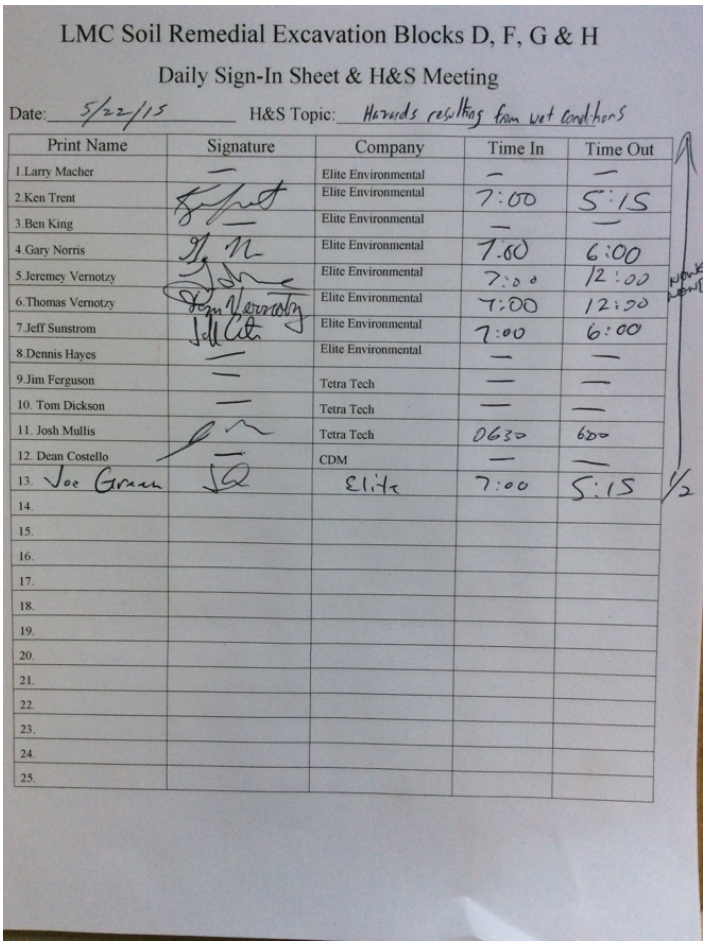

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: 5/22/15 H&S Topic: Hazards resulting from wet conditions

| Print Name | Signature | Company | Time In | Time Out |
|---|---|---|---|---|
| 1.Larry Macher | — | Elite Environmental | — | — |
| 2.Ken Trent | | Elite Environmental | 7:00 | 5:15 |
| 3.Ben King | — | Elite Environmental | — | — |
| 4.Gary Norris | | Elite Environmental | 7.00 | 6:00 |
| 5.Jeremey Vernotzy | | Elite Environmental | 7:00 | 12:00 |
| 6.Thomas Vernotzy | | Elite Environmental | 7:00 | 12:30 |
| 7.Jeff Sunstrom | | Elite Environmental | 7:00 | 6:00 |
| 8.Dennis Hayes | — | Elite Environmental | — | — |
| 9.Jim Ferguson | — | Tetra Tech | — | — |
| 10. Tom Dickson | — | Tetra Tech | — | — |
| 11. Josh Mullis | | Tetra Tech | 0630 | 600 |
| 12. Dean Costello | — | CDM | — | — |
| 13. Joe Green | | Elite | 7:00 | 5:15 |
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Construction Manager

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 26, 2015 | Start Work at: | 7:00 AM | Depart Site at: | 6:00 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 70 to 80 | Skies: | Clear | Wind: | Moderate | Precipitation: | None |
|---|---|---|---|---|---|---|---|

Weather Comments:

### Summary of Work/Major Activities

1.Tailgate safety meeting, discussed backfill material dumping logistics, safety precautions. Discussed spotters for truck dumping, cleanup around excavations and traffic control. Stay hydrated and wear sun block due to higher temps.
2. Complete installation of construction entrance into Block G.
3. Two trucks of CR-6 dumped in Block H Area A to complete backfilling.
4. Complete laying grass seed and curl-x on edge of super silt diversion fence (SSDF) in Block G.
5. Begin installation of posts for super silt fence in Block F.

### Personnel On-Site

| Name: | | Company: | |
|---|---|---|---|
| Name: | Josh Mullis | Company: | Tetra Tech |
| Name: | Jim Ferguson | Company: | Tetra Tech |
| Name: | Tom Dickson | Company: | Tetra Tech |
| Name: | Larry Macher | Company: | Elite Environmental |
| Name: | Gary Norris | Company: | Elite Environmental |
| Name: | Ben King | Company: | Elite Environmental |
| Name: | Kyle Trent | Company: | Elite Environmental |
| Name: | Jeremy Vernotzy | Company: | Elite Environmental |
| Name: | Thomas Vernotzy | Company: | Elite Environmental |
| Name: | | Company: | |
| Name: | | Company: | |
| Name: | | Company: | |
| Name: | | Company: | |
| Name: | | Company: | |

### Health & Safety Topics or Issues

1. Vehicle dumping procedures. Safety protocols for truck drivers. Spotters for trac hoe operator, trucks, and overhead utility line in Block H excavation Area B.
2. Weather: warmer temperatures forecasted, stay hydrated and wear sun block.

### QC Procedures/Inspections/Testing to be Performed Today

1. DUSTTRAK Air Monitoring stations set up for operational controls, only backfilling activities conducted in Block H.

### Planned Week Schedule

1. Install construction entrance in Block G (completed 5/26).
2. Minor fixes to E&S controls in Block G (revegetation of area around SSDF, completed 5/26).
3. Completion of backfill in Block H Area A (completed 5/26), followed by compaction testing in Block H Areas A and B.
4. Installation of silt fence in Block F.
5. Baltimore County inspection of E&S controls in Block G scheduled for 1100 on 5/27.
6. Begin excavation in Block G (tentative start date Thursday 5/28).
7. Asphalt restoration in Block H Areas A and B.

**Photos of Select Daily Activities**



Comments: Completed construction entrance in Block G.



Comments: Block H Area A backfilled with CR-6 to grade.

**Photos of Select Daily Activities (continued)**




Comments: Curl-x and grass seed on edge of SSDF in Block G installed.



Comments: Post installation for super silt fence in Block F.

**Safety Sign-In Sheet**



LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: 5/26/15 H&S Topic: Heat Stress, Equipment Safety

| Print Name | Signature | Company | Time In | Time Out |
|---|---|---|---|---|
| 1. Larry Macher | | Elite Environmental | 7:00 | 5:30 |
| 2. Ken Trent | — | Elite Environmental | — | — |
| 3. Ben King | | Elite Environmental | 7:00 | 5:30 |
| 4. Gary Norris | | Elite Environmental | 7:00 | 5:30 |
| 5. Jeremey Vernotzy | | Elite Environmental | 7:00 | 5:30 |
| 6. Thomas Vernotzy | Tom Vernotzy | Elite Environmental | 7:00 | 5:30 |
| 7. Jeff Sunstrom | — | Elite Environmental | — | — |
| 8. Dennis Hayes | — | Elite Environmental | — | — |
| 9. Jim Ferguson | | Tetra Tech | 07:00 | 17:45 |
| 10. Tom Dickson | Tom Dickson | Tetra Tech | 1300 | 1805 |
| 11. Josh Mullis | | Tetra Tech | 0620 | 1740 |
| 12. Dean Costello | — | CDM | — | — |
| 13. Kyle Trent | | Elite | 7:00 | 5:30 |
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Construction Manager

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 27, 2015 | Start Work at: | 7:00 AM | Depart Site at: | 5:40 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 70 to 80 | Skies: | Few Clouds | Wind: | Moderate | Precipitation: | Other (explain) |
|---|---|---|---|---|---|---|---|

Weather Comments: Heavy rain start @1630, last 30 mins, no lightning.

### Summary of Work/Major Activities

1. Tailgate safety meeting, discussed safety hazards resulting from silt fence installation including pinch points, lifting heavy objects, operator and on the ground personnel safety. Fire extinguisher refresher information and possible thunderstorms in the afternoon also covered.
2. Continue to install super silt fence (SSF) and super silt diversion fence (SSDF) in Block F.
3. Minor brush clearing required for SSF installation in southwest corner of Block F.
4. Complete compaction testing in Block H Areas A and B.
5. Baltimore County E&S inspection by Jim Brendel, minor fixes that were addressed have been approved, work may start in Block G.
6. Air monitoring completed in Block F during silt fence installation activities.

### Personnel On-Site

| Name: | Company: |
|---|---|
| Josh Mullis | Tetra Tech |
| Scott Nesbit | Tetra Tech |
| Tom Dickson | Tetra Tech |
| Jim Ferguson | Tetra Tech |
| Larry Macher | Elite Environmental |
| Ben King | Elite Environmental |
| Gary Norris | Elite Environmental |
| Jeremy Vernotzy | Elite Environmental |
| Thomas Vernotzy | Elite Environmental |
| Jeff Sunstrom | Elite Environmental |
| Kyle Trent | Elite Environmental |
| Leroy Marshall | Hillis Cornes |
| Alicia Rodrian/Paul Myers | Tetra Tech |
| Laura Burbage | CDM Smith |

### Health & Safety Topics or Issues

1. Slips, trips, and falls related to materials/objects on the ground (fence posts, shallow trench) on ground.
2. Fire extinguisher refresher (how to use, how to classify).
3. Pinch points involved with metal fencing and stapling geotextile.
4. Operator safety in heavy machinery and on the ground safety when in heavy machinery (use spotters, blind spots).
5. Be proactive and vigilant on the safety front.
6. Weather: warmer temperatures, possible thunderstorms in the afternoon, stay hydrated and wear sun block.

### QC Procedures/Inspections/Testing to be Performed Today

1. DUSTTRAK Air Monitoring stations set up in Block F during super silt fence installation.
2. Compaction testing of backfill completed and passed in Block H Areas A and B.
3. Approval from Baltimore County E&S Inspector Jim Brendell to start work in Block G.

### Planned Week Schedule

1. Install construction entrance in Block G (completed 5/26).
2. Minor fixes to E&S controls in Block G (revegetation of area around SSDF, completed 5/26).
3. Completion of backfill in Block H Area A (completed 5/26), followed by compaction testing in Block H Areas A and B (completed 5/27).
4. Installation of silt fence in Block F.
5. Baltimore County inspection of E&S controls in Block G scheduled for 1100 on 5/27 (completed and approved 5/27).
6. Begin excavation in Block G (tentative start date Monday 6/1).
7. Asphalt restoration in Block H Areas A and B.
8. Waste characterization sampling in Block F, D, and D Panhandle (scheduled for 5/29).

**Photos of Select Daily Activities**



Comments: Compaction testing performed in Block H Area B.



Comments: Super silt diversion fence installed in Block F.

**Photos of Select Daily Activities (continued)**



Comments: Minor vegetation clearing required to install super silt fence in Block F.

Comments:

**Safety Sign-In Sheet**

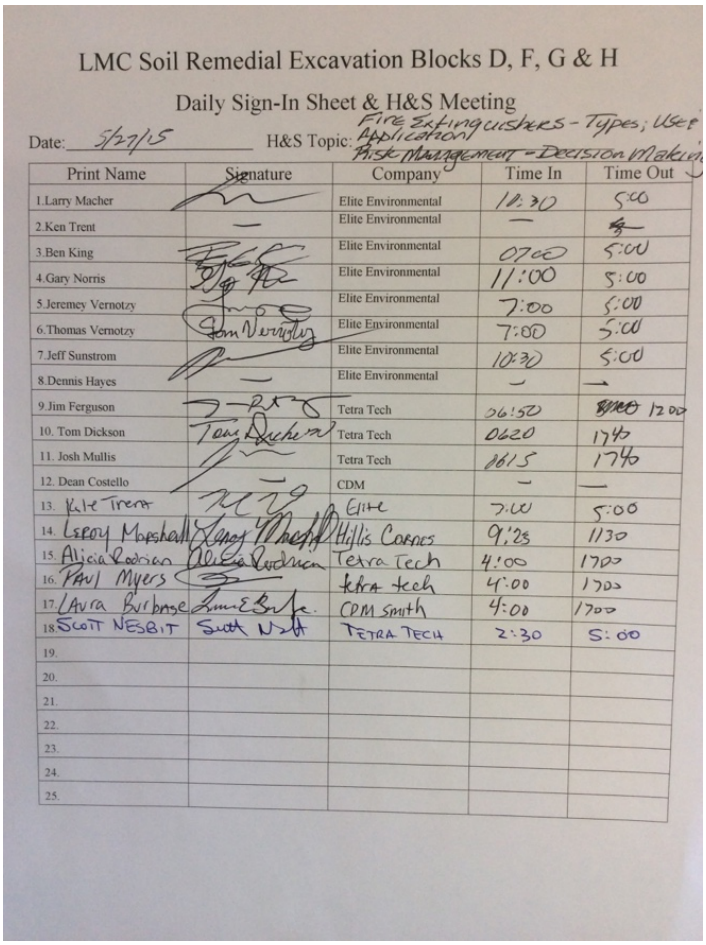

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: 5/27/15 H&S Topic: Fire Extinguishers - Types; User Application; Risk Management - Decision Making

| Print Name | Signature | Company | Time In | Time Out |
|---|---|---|---|---|
| 1.Larry Macher | | Elite Environmental | 10:30 | 5:00 |
| 2.Ken Trent | — | Elite Environmental | — | — |
| 3.Ben King | | Elite Environmental | 0700 | 5:00 |
| 4.Gary Norris | | Elite Environmental | 11:00 | 5:00 |
| 5.Jeremey Vernotzy | | Elite Environmental | 7:00 | 5:00 |
| 6.Thomas Vernotzy | Tom Vernotzy | Elite Environmental | 7:00 | 5:00 |
| 7.Jeff Sunstrom | | Elite Environmental | 10:30 | 5:00 |
| 8.Dennis Hayes | — | Elite Environmental | — | — |
| 9.Jim Ferguson | | Tetra Tech | 06:50 | 1200 |
| 10. Tom Dickson | Tom Dickson | Tetra Tech | 0620 | 1740 |
| 11. Josh Mullis | | Tetra Tech | 0615 | 1740 |
| 12. Dean Costello | — | CDM | — | — |
| 13. Kate Trent | | Elite | 7:00 | 5:00 |
| 14. Leroy Marshall | | Hollis Corres | 9:25 | 1130 |
| 15. Alicia Rodman | | Tetra Tech | 4:00 | 1700 |
| 16. Paul Myers | | tetra tech | 4:00 | 1700 |
| 17. Laura Burbage | | CDM smith | 4:00 | 1700 |
| 18. Scott Nesbit | | Tetra Tech | 2:30 | 5:00 |
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Construction Manager

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 28, 2015 | Start Work at: | 7:00 AM | Depart Site at: | 5:00 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 80 to 90 | Skies: | Few Clouds | Wind: | Light | Precipitation: | None |
|---|---|---|---|---|---|---|---|

Weather Comments: Thunderstorms begin @1530.

### Summary of Work/Major Activities

1. Tailgate safety meeting, discussed safety hazards resulting from silt fence installation including pinch points, lifting heavy objects, operator and on the ground personnel safety. Possibility for heat stress due to high temps.
2. Continue to install super silt fence (SSF) and super silt diversion fence (SSDF) in Block F.
3. Install modified rock outfall in western corner of Block F super silt fence.
4. Air monitoring completed in Block F during silt fence installation.
5. Ground wire uncovered 8" below surface in southwestern corner of Block F during silt fence installation trenching. Wire is inactive and from previous structures, Lockheed approved cutting wire and moving on with trenching.
6. Stop work @ 1530 due to thunderstorms.

### Personnel On-Site

| Name: | | Company: | |
|---|---|---|---|
| Name: | Josh Mullis | Company: | Tetra Tech |
| Name: | Scott Nesbit | Company: | Tetra Tech |
| Name: | Tom Dickson | Company: | Tetra Tech |
| Name: | Jim Ferguson | Company: | Tetra Tech |
| Name: | Larry Macher | Company: | Elite Environmental |
| Name: | Ben King | Company: | Elite Environmental |
| Name: | Gary Norris | Company: | Elite Environmental |
| Name: | Jeremy Vernotzy | Company: | Elite Environmental |
| Name: | Thomas Vernotzy | Company: | Elite Environmental |
| Name: | Kyle Trent | Company: | Elite Environmental |
| Name: | Katie Young | Company: | CDM Smith |
| Name: | | Company: | |
| Name: | | Company: | |
| Name: | | Company: | |

### Health & Safety Topics or Issues

1. Slips, trips, and falls related to materials/objects on the ground (fence posts, shallow trench) on ground.
2. Pinch points involved with metal fencing and stapling geotextile.
3. Operator safety in heavy machinery and on the ground safety when in heavy machinery (use spotters, blind spots).
4. Be proactive and vigilant on the safety front.
5. Weather: warmer temperatures, possible thunderstorms in the evening, stay hydrated and wear sun block.

### QC Procedures/Inspections/Testing to be Performed Today

1. DUSTTRAK Air Monitoring stations set up in Block F during super silt fence installation.

### Planned Week Schedule

1. Install construction entrance in Block G (completed 5/26).
2. Minor fixes to E&S controls in Block G (revegetation of area around SSDF, completed 5/26).
3. Completion of backfill in Block H Area A (completed 5/26), followed by compaction testing in Block H Areas A and B (completed 5/27).
4. Installation of silt fence in Block F.
5. Baltimore County inspection of E&S controls in Block G scheduled for 1100 on 5/27 (completed and approved 5/27).
6. Begin excavation in Block G (tentative start date Monday 6/1).
7. Asphalt restoration in Block H Areas A and B.
8. Waste characterization sampling in Block F, D, and D Panhandle (scheduled for 5/29).

**Photos of Select Daily Activities**



Comments: Ground wire uncovered in southwestern corner of Block F during super silt fence installation. Wiring is no longer active and was therefore cut and removed from the trench after Lockheed approval.



Comments: Modified rock outfall installed in the western area of Block F.

**Photos of Select Daily Activities (continued)**



Comments: Super silt fence installation in the western portion of Block F.



Comments: Caution tape identifying a possible fall hazard (hole) in Block F.

**Safety Sign-In Sheet**

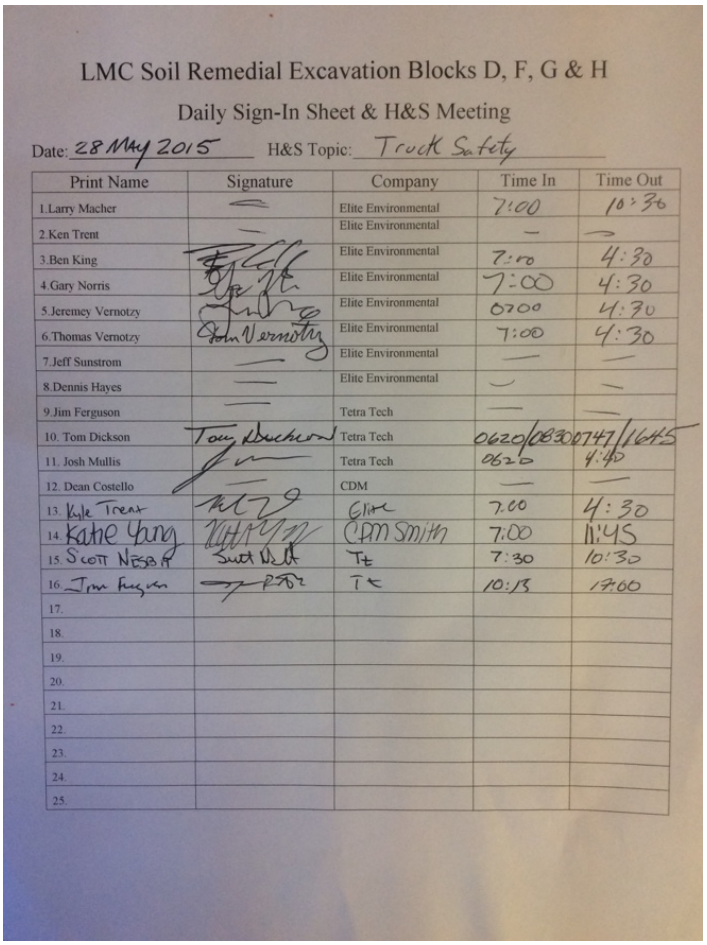

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: 28 May 2015 H&S Topic: Truck Safety

| Print Name | Signature | Company | Time In | Time Out |
|---|---|---|---|---|
| 1. Larry Macher | | Elite Environmental | 7:00 | 10:30 |
| 2. Ken Trent | — | Elite Environmental | — | — |
| 3. Ben King | | Elite Environmental | 7:00 | 4:30 |
| 4. Gary Norris | | Elite Environmental | 7:00 | 4:30 |
| 5. Jeremey Vernotzy | | Elite Environmental | 0700 | 4:30 |
| 6. Thomas Vernotzy | John Vernotzy | Elite Environmental | 7:00 | 4:30 |
| 7. Jeff Sunstrom | — | Elite Environmental | — | — |
| 8. Dennis Hayes | — | Elite Environmental | — | — |
| 9. Jim Ferguson | — | Tetra Tech | — | — |
| 10. Tom Dickson | Tom Dickson | Tetra Tech | 0620/0830 | 0747/1645 |
| 11. Josh Mullis | | Tetra Tech | 0620 | 4:40 |
| 12. Dean Costello | — | CDM | — | — |
| 13. Kyle Treat | | Elliott | 7:00 | 4:30 |
| 14. Katie Young | | CAM Smith | 7:00 | 11:45 |
| 15. Scott Nesbit | | Tt | 7:30 | 10:30 |
| 16. Jim Ferguson | | Tt | 10:13 | 17:00 |
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Construction Manager

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | May 29, 2015 | Start Work at: | 7:00 AM | Depart Site at: | 5:00 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 70 to 80 | Skies: | Few Clouds | Wind: | Moderate | Precipitation: | None |
|---|---|---|---|---|---|---|---|
| Weather Comments: | | | | | | | |

### Summary of Work/Major Activities

1. Tailgate safety meeting, discussed safety hazards resulting from silt fence installation including pinch points, lifting heavy objects, operator and on the ground personnel safety. Possibility for heat stress due to high temps.
2. Continue to install super silt fence (SSF) and super silt diversion fence (SSDF) in Block F.
3. Air monitoring completed in Block F during silt fence installation.
4. Waste characterization sampling completed in Blocks F, D, and D Panhandle.
5. Verification sample results indicate no further action required for Block H Areas A and B, asphalt paving may proceed.
6. Decon pad area set up in Block G for use during excavation activities starting 6/1 (tentatively).
7. Conduit (abandoned) uncovered during super silt fence installation in the eastern portion of Block F, the conduit was cut and removed from the hole after Lockheed approval.

### Personnel On-Site

| Name: | Company: |
|---|---|
| Josh Mullis | Tetra Tech |
| Jim Ferguson | Tetra Tech |
| Ben King | Elite Environmental |
| Gary Norris | Elite Environmental |
| Jeremy Vernotzy | Elite Environmental |
| Thomas Vernotzy | Elite Environmental |
| Kyle Trent | Elite Environmental |
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### Health & Safety Topics or Issues

1. Slips, trips, and falls related to materials/objects on the ground (fence posts, shallow trench) on ground.
2. Pinch points involved with metal fencing and stapling geotextile.
3. Operator safety in heavy machinery and on the ground safety when in heavy machinery (use spotters, blind spots).
4. Be proactive and vigilant on the safety front.
5. Weather: warmer temperatures, possible thunderstorms in the afternoon, stay hydrated and wear sun block.

### QC Procedures/Inspections/Testing to be Performed Today

1. DUSTTRAK Air Monitoring stations set up in Block F during super silt fence installation.
2. Waste Characterization sampling for Block F, D, and D Panhandle.
3. Verification sample results indicate no further action required for Block H Areas A and B, asphalt paving may proceed.

### Planned Week Schedule

1. Install construction entrance in Block G (completed 5/26).
2. Minor fixes to E&S controls in Block G (revegetation of area around SSDF, completed 5/26).
3. Completion of backfill in Block H Area A (completed 5/26), followed by compaction testing in Block H Areas A and B (completed 5/27).
4. Installation of silt fence in Block F.
5. Baltimore County inspection of E&S controls in Block G scheduled for 1100 on 5/27 (completed and approved 5/27).
6. Begin excavation in Block G (tentative start date Monday 6/1).
7. Asphalt restoration in Block H Areas A and B (to be completed at a later date).
8. Waste characterization sampling in Block F, D, and D Panhandle (completed 5/29).

Tentative schedule for week of 6/1:
1. Begin excavations in Block G.
2. Finish installation of super silt fence in Block F.
3. Conduct verification sampling, surveying, and backfill activities following excavations in Block G.
4. Saw cut concrete areas in Block F.

**Photos of Select Daily Activities**




Comments: Geoprobe DPT rig used for the waste characterization sampling in Blocks F, D, and D Panhandle.



Comments: Super silt fence installed in southwest corner of Block F, trip hazard identified with caution tape.

**Photos of Select Daily Activities (continued)**



Comments: Decontamination area set up in Block G.



Comments: Conduit (abandoned) uncovered during super silt fence installation in eastern area of Block F. Conduit cut and removed after Lockheed approval.

**Safety Sign-In Sheet**

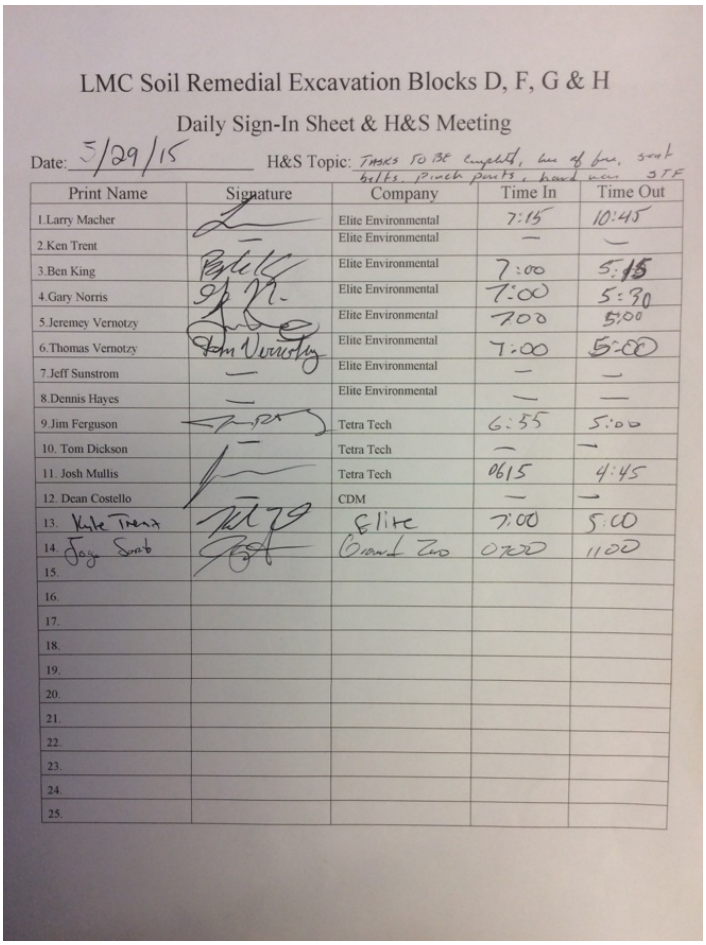

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: 5/29/15 H&S Topic: Tasks to be completed, use of fire, seat belts, pinch points, hand use STF

| Print Name | Signature | Company | Time In | Time Out |
|---|---|---|---|---|
| 1. Larry Macher | | Elite Environmental | 7:15 | 10:45 |
| 2. Ken Trent | — | Elite Environmental | — | — |
| 3. Ben King | | Elite Environmental | 7:00 | 5:15 |
| 4. Gary Norris | | Elite Environmental | 7:00 | 5:30 |
| 5. Jeremey Vernotzy | | Elite Environmental | 7:00 | 5:00 |
| 6. Thomas Vernotzy | | Elite Environmental | 7:00 | 5:00 |
| 7. Jeff Sunstrom | — | Elite Environmental | — | — |
| 8. Dennis Hayes | — | Elite Environmental | — | — |
| 9. Jim Ferguson | | Tetra Tech | 6:55 | 5:00 |
| 10. Tom Dickson | — | Tetra Tech | — | — |
| 11. Josh Mullis | | Tetra Tech | 0615 | 4:45 |
| 12. Dean Costello | | CDM | — | — |
| 13. Kate Trent | | Elite | 7:00 | 5:00 |
| 14. Jay Smith | | Grand Zero | 0700 | 1100 |
| 15. | | | | |
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Construction Manager

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | June 25, 2015 | Start Work at: | 6:30 AM | Depart Site at: | 5:00 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 70 to 80 | Skies: | Mostly Cloudy | Wind: | None | Precipitation: | Light Rain |
|---|---|---|---|---|---|---|---|

Weather Comments: Light rain in the evening, after 17:00

### Summary of Work/Major Activities

1. Staged backfill next to excavations in Block G Areas A-F (completed 6/25).
2. Excavated south wall of Block G Area H, sent one truck of soil to Soil Safe Disposal Facility (completed 6/25).
3. Inserted flow through packer into storm water pipe upgradient of Block G Area J (completed 6/25).
4. Coordinated trucking supplied by Veolia Environmental Services for the transport of the storm water from Block G for treatment and disposal at Clean Harbors of Baltimore (ongoing).
5. Applied striping to the Block H Area A and B Sites to facilitate removal of the 6' chain link fencing (Completed 6/25).
6. Installation of temporary asphalt berm (TAB) in Block D (completed 6/25).

### Personnel On-Site

| Name: | | Company: | |
|---|---|---|---|
| Name: | J. Ferguson | Company: | Tetra Tech |
| Name: | C. Snyder | Company: | Tetra Tech |
| Name: | L. Macher | Company: | Elite Environmental |
| Name: | K. Trent | Company: | Elite Environmental |
| Name: | Kyle Trent | Company: | Elite Environmental |
| Name: | B. King | Company: | Elite Environmental |
| Name: | J. Sunstrom | Company: | Elite Environmental |
| Name: | G. Norris | Company: | Elite Environmental |
| Name: | T. Vernotzy | Company: | Elite Environmental |
| Name: | J. Vernotzy | Company: | Elite Environmental |
| Name: | J.Colleran | Company: | Meadows Paving |
| Name: | D. Seabolt | Company: | Meadows Paving |
| Name: | J. Meadows/ J. Fortney | Company: | Meadows Paving |
| Name: | | Company: | |

**Health & Safety Topics or Issues**

1. Weather safety, procedures for thunder and lightening storms.
2. C. Snyder will be performing heat stress assessments.

**QC Procedures/Inspections/Testing to be Performed Today**

1. TAB QA/QC.
2. Collection of  composite sample from south wall of Block G Area J.

**Planned Week Schedule**

1. Begin backfill of excavations in Block G (work is ongoing).
2. Block D construction entrance construction (work is ongoing).
3. Remove temporary 6' chain link fence in Block H (week of 6/29).
4. Paint yellow striping in parking areas in Block H (completed 6/25).
5. Excavate south wall of Block G Area H (complete 6/25).
6. Begin excavation of Block G Area I (work deferred to later date due to subsurface conditions).
7. Pump storm water runoff from Block G Excavation Area J to frac tanks (6/22, 6/23).
8. Collect verification composite soil sample from south wall of Block G Area H (completed 6/25).
9. Install diversion fencing around Block G Area J and UST area. (completed 6/25)
10. Shipped 4 tankers of storm water to Clean Harbors for treatment and disposal (to be completed 6/26).
11. Install TAB in Block D (completed 6/25).

**Photos of Select Daily Activities**



Comments: TAB installation in Block D.



Comments: Installation of plastic along south wall of Block G Area H.

**Photos of Select Daily Activities (continued)**



Comments: Flow through packer installed to divert storm water from Block G Area J.



Comments: Hard suction pipe used for storm water diversion.

**Safety Sign-In Sheet**

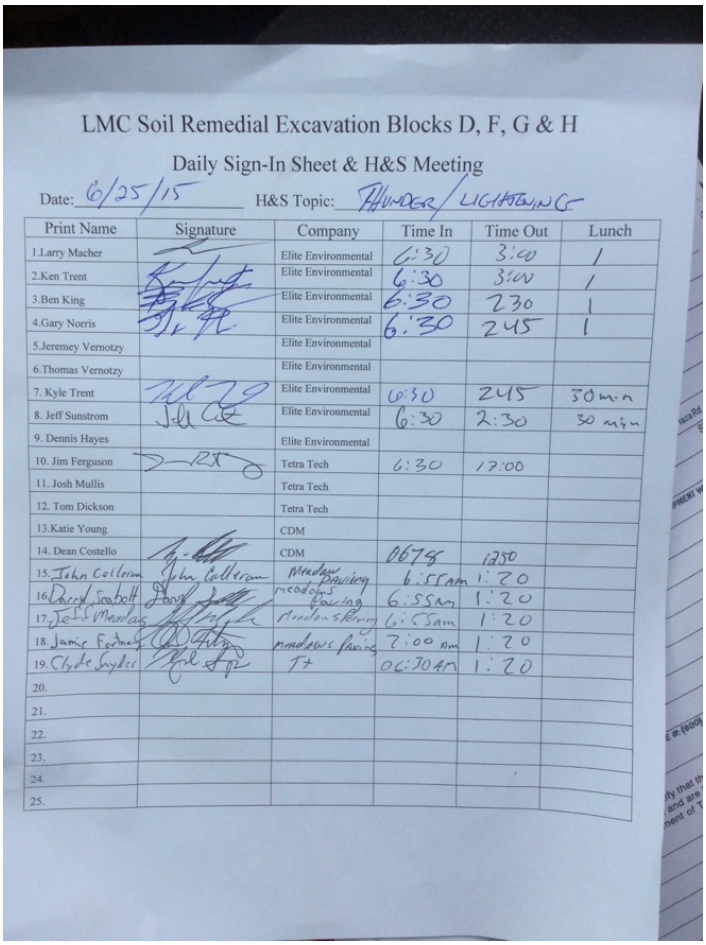

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: 6/25/15 H&S Topic: THUNDER / LIGHTENING

| Print Name | Signature | Company | Time In | Time Out | Lunch |
|---|---|---|---|---|---|
| 1.Larry Macher | | Elite Environmental | 6:30 | 3:00 | 1 |
| 2.Ken Trent | | Elite Environmental | 6:30 | 3:00 | 1 |
| 3.Ben King | | Elite Environmental | 6:30 | 2:30 | 1 |
| 4.Gary Norris | | Elite Environmental | 6:30 | 2:45 | 1 |
| 5.Jeremey Vernotzy | | Elite Environmental | | | |
| 6.Thomas Vernotzy | | Elite Environmental | | | |
| 7. Kyle Trent | | Elite Environmental | 6:30 | 2:45 | 30 min |
| 8. Jeff Sunstrom | | Elite Environmental | 6:30 | 2:30 | 30 min |
| 9. Dennis Hayes | | Elite Environmental | | | |
| 10. Jim Ferguson | | Tetra Tech | 6:30 | 17:00 | |
| 11. Josh Mullis | | Tetra Tech | | | |
| 12. Tom Dickson | | Tetra Tech | | | |
| 13.Katie Young | | CDM | | | |
| 14. Dean Costello | | CDM | 0678 | 1250 | |
| 15. John Colleran | John Colleran | Meadows Paving | 6:55AM | 1:20 | |
| 16. Darryl Sobott | | meadows paving | 6:55am | 1:20 | |
| 17. Jeff Mendes | | Meadows Paving | 6:55am | 1:20 | |
| 18. Jamie Fedrick | | meadows paving | 7:00 AM | 1:20 | |
| 19. Clyde Snyder | | T+ | 06:30AM | 1:20 | |
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| 22. | | | | | |
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| 25. | | | | | |

Construction Manager

Submitted by:

TETRA TECH, INC.

# DAILY CONSTRUCTION REPORT
## Middle River Complex
## Soil Remediation Blocks D, D Panhandle, F, G, and H

### Duration of Site Activities

| Date: | October 1, 2015 | Start Work at: | 6:30 AM | Depart Site at: | 4:45 PM |
|---|---|---|---|---|---|

### Weather Conditions

| Temperature (°F): | 50 to 60 | Skies: | Overcast | Wind: | Light | Precipitation: | Light Rain |
|---|---|---|---|---|---|---|---|

Weather Comments: Cloudy, overcast, steady, light to moderate rain.

### Summary of Work/Major Activities

1. Pre-storm preparations, re-enforcement of existing erosion and sediment controls in Blocks D, D Panhandle, F and G.
2. Load-out of concrete and asphalt from Block G. Trucking services provided by CAMZ. Concrete and asphalt trucked to Flannigans.
3. 11 loads of concrete and 3 loads of asphalt accepted by Flannigans.

### Personnel On-Site

| Name: | | Company: | |
|---|---|---|---|
| Name: | Jim Ferguson | Company: | Tetra Tech |
| Name: | Tom Dickson | Company: | Tetra Tech |
| Name: | Fred Kolberg | Company: | Tetra Tech |
| Name: | Mike Martin | Company: | Tetra Tech |
| Name: | Kai Tu | Company: | Tetra Tech |
| Name: | Larry Macher | Company: | Elite Env. |
| Name: | Kyle Trent | Company: | Elite Env. |
| Name: | Jeremy Vernotzy | Company: | Elite Env. |
| Name: | Tom Vernotzy | Company: | Elite Env. |
| Name: | Gary Norris | Company: | Elite Env. |
| Name: | | Company: | |
| Name: | | Company: | |
| Name: | | Company: | |
| Name: | | Company: | |

### Health & Safety Topics or Issues

1. Discussed performance of routine daily operations in the current rainy weather conditions and hazards that result due to decreased visibility, slips, trips and falls related to muddy or wet ground conditions.

### QC Procedures/Inspections/Testing to be Performed Today

1. Monitor reinforcement of erosion and sediment controls.
2. Monitor concrete and asphalt loadout in Block G.

### Planned Week Schedule

1. Backfill and compact Block D Panhandle Areas A and B (9/28-9/29).
2. Strip asphalt from Block D Panhandle (9/29).
3. Test pits for Block D storm water conveyance repairs (to be completed 10/7-10/8).
4. Complete Block D Area F-1 tie back repair (9/29, ongoing).
5. Remove rubble and storm water conveyance structure behind Block D Panhandle bulkhead (to be completed 10/7-10/8).
6. Install turbidity curtain in Block D Panhandle (9/28).
7. Complete density testing in Block D Panhandle Areas A and B (to be completed week of 10/5).
8. Baltimore County erosion and sediment control inspection (9/30).
9. Load-out 3 trucks of asphalt from Block D Panhandle (9/30).
10. Load-out 3 trucks of concrete rubble from Block F (9/30).
11. Load-out 11 trucks of concrete rubble from Block G (10/1).
12. Load-out 3 trucks of asphalt from Block G (asphalt derived from Block H Areas A and B (10/1)).

**Photos of Select Daily Activities**



Comments: 1. Block G asphalt load-out (asphalt source was Block H areas A and B). Asphalt is being delivered to Flannigans for recycling.



Comments: 2. Block D Panhandle pre-storm surface water runoff early in day 10/1.

**Safety Sign-In Sheet**

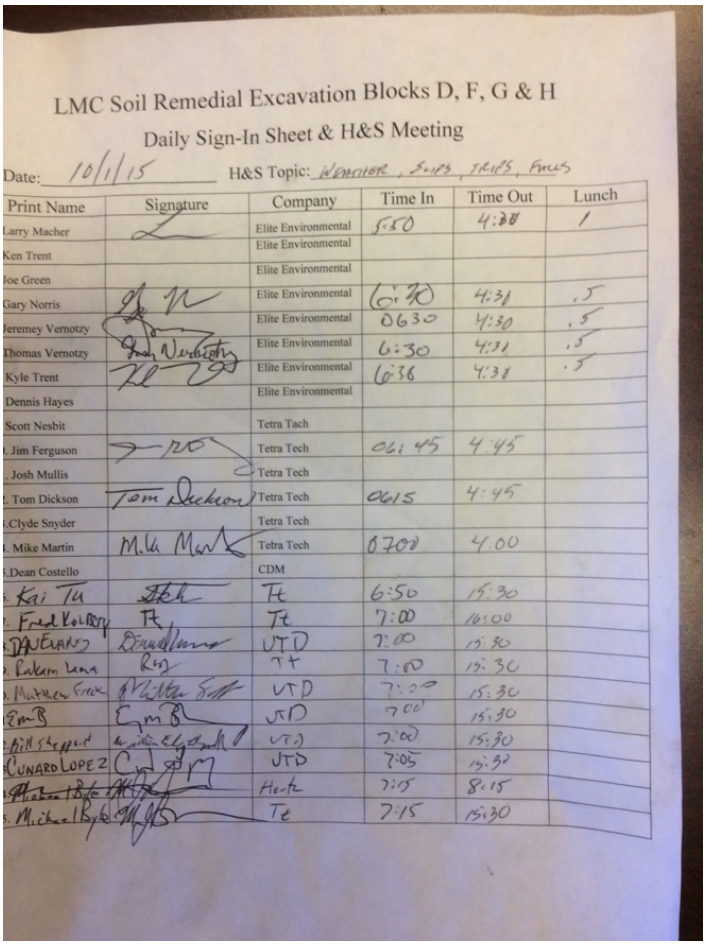

LMC Soil Remedial Excavation Blocks D, F, G & H

Daily Sign-In Sheet & H&S Meeting

Date: 10/1/15 H&S Topic: Weather, Slips, Trips, Falls

| Print Name | Signature | Company | Time In | Time Out | Lunch |
|---|---|---|---|---|---|
| Larry Macher | | Elite Environmental | 5:50 | 4:28 | 1 |
| Ken Trent | | Elite Environmental | | | |
| Joe Green | | Elite Environmental | | | |
| Gary Norris | | Elite Environmental | 6:30 | 4:31 | .5 |
| Jeremey Vernotzy | | Elite Environmental | 0630 | 4:30 | .5 |
| Thomas Vernotzy | | Elite Environmental | 6:30 | 4:31 | .5 |
| Kyle Trent | | Elite Environmental | 6:36 | 4:31 | .5 |
| Dennis Hayes | | Elite Environmental | | | |
| Scott Nesbit | | Tetra Tach | | | |
| Jim Ferguson | | Tetra Tech | 0615 | 4:45 | |
| Josh Mullis | | Tetra Tech | | | |
| Tom Dickson | Tom Dickson | Tetra Tech | 0615 | 4:45 | |
| Clyde Snyder | | Tetra Tech | | | |
| Mike Martin | | Tetra Tech | 0700 | 4.00 | |
| Dean Costello | | CDM | | | |
| Kai Tu | | Tt | 6:50 | 15:30 | |
| Fred Kolbert | | Tt | 7:00 | 16:00 | |
| DAVE EVANS | | UTD | 7:00 | 15:30 | |
| Rakam Lama | | Tt | 7:00 | 15:30 | |
| Matthew Frick | | UTD | 7:00 | 15:30 | |
| EmB | | UTD | 700 | 15:30 | |
| Bill Sheppard | | UTD | 7:00 | 15:30 | |
| CUNARD LOPEZ | | UTD | 7:05 | 15:32 | |
| | | Tt | 7:15 | 8:15 | |
| Michael Byrd | | Tt | 7:15 | 15:30 | |

Construction Manager

Submitted by:

# APPENDIX B—PERMITS AND APPROVALS

LOCKHEED MARTIN

# Dig Permit

See Enterprise Operations Procedure EO-28, Digging Projects, for instructions.

| Date | Project Manager |
|---|---|
| April 20, 2015 | John Morgan /Tom Blackman(Lockheed Martin)<br>Tony Apanavage (Tetra Tech) |

**Building/Location**

Block D, D Panhandle, F,G,H Soil Remedy Investigation, Middle River Complex

**Purpose of excavation**

Tetra Tech will oversee the setup of engineering controls and the excavation of contaminated soils in Tax Blocks D, D Panhandle, F, G and H, USTs in Blocks F and G and bulkhead repair in D Panhandle.

**Company/LM organization performing dig**

Tetra Tech, Elite Environmental

| Planned dig date | Duration | Start time |
|---|---|---|
| April 27, 2015-December 31 2015 | 8 months | 0700 |
| **Expected depth** | **Width** | **Length** |
| Approximately 0-7 feet deep | Width of excavations per drawings | Length of excavations per drawings |

| Underground utilities identified? | Overhead utilities? | Electrical lines? | Gas lines? |
|---|---|---|---|
| ☒ Yes ☐ No | ☒ Yes ☐ No ☐ N/A | ☒ Yes ☐ No | ☒ Yes ☐ No |
| **Sewer?** | **Water?** | **Telecommunications?** | **Other? Specify: Storm Water** |
| ☒ Yes ☐ No | ☒ Yes ☐ No | ☒ Yes ☐ No ☐ N/A | ☒ Yes ☐ No |

Site-specific or customer utility locating requirements completed?

☒ Yes ☐ No ☐ N/A

Sketch of dig project (or attach drawing)

**See Attached**

A private utility locating contractor (Enviroscan) was used to mark subsurface utilities on April 13-14, 2015. Confirmation letter attached.

Miss Utility Ticket # 15198939 (Block G and H)

The excavation areas are presented in the enclosed maps.

| | | | |
|---|---|---|---|
| Project Manager<br>Tony Apanavage | Date<br>April 15, 2015 | Customer<br>SECURITY | Date<br>4/21/15 |
| ~~Telecommunications~~ FACILITIES SUPERVISOR | Date | Customer | Date<br>4/23/15 |
| ESH | Date<br>4-20-15 | Customer | Date<br>4/21/15 |
| Building/Facility Manager | | | Date<br>4/21/15 |

P.M.

CPS

LI

CPIO

# GRADING AND EROSION AND SEDIMENT CONTROL PLAN FOR SOIL REMEDIAL ACTION LOCKHEED MARTIN MIDDLE RIVER COMPLEX MIDDLE RIVER, MARYLAND

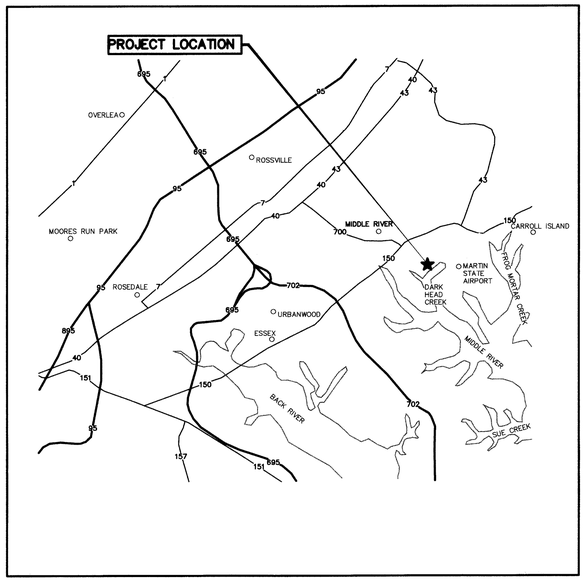


PROJECT VICINITY MAP
NOT TO SCALE

## DRAWING INDEX


| SHEET NO. | SHEET TITLE |
|---|---|
| T-1 | TITLE SHEET |
| T-2 | GENERAL NOTES, GRADING NOTES, AND LEGEND |
| C-1 | FACILITY WIDE EXISTING CONDITIONS |
| C-2 | BLOCK D – EXISTING CONDITIONS |
| C-3 | BLOCK D PANHANDLE – EXISTING CONDITIONS |
| C-4 | BLOCK F – EXISTING CONDITIONS |
| C-5 | BLOCK G – EXISTING CONDITIONS (SHEET 1 OF 2) |
| C-6 | BLOCK G – EXISTING CONDITIONS (SHEET 2 OF 2) |
| C-7 | BLOCK H – EXISTING CONDITIONS |
| C-8 | EROSION AND SEDIMENT CONTROL NOTES |
| C-9 | BLOCK D – GRADING AND EROSION & SEDIMENT CONTROL PLAN |
| C-10 | BLOCK D PANHANDLE – GRADING AND EROSION & SEDIMENT CONTROL PLAN |
| C-11 | BLOCK F – GRADING AND EROSION & SEDIMENT CONTROL PLAN |
| C-12 | BLOCK G – GRADING AND EROSION & SEDIMENT CONTROL PLAN (SHEET 1 OF 2) |
| C-13 | BLOCK G – GRADING AND EROSION & SEDIMENT CONTROL PLAN (SHEET 2 OF 2) |
| C-14 | BLOCK H – GRADING AND EROSION & SEDIMENT CONTROL PLAN |
| C-15 | EROSION AND SEDIMENT CONTROL DETAILS (SHEET 1 OF 3) |
| C-16 | EROSION AND SEDIMENT CONTROL DETAILS (SHEET 2 OF 3) |
| C-17 | EROSION AND SEDIMENT CONTROL DETAILS (SHEET 3 OF 3) |
| C-18 | SEEDING SPECIFICATIONS |





MIDDLE RIVER, MARYLAND, GOOGLE EARTH 2013

PROJECT LOCATION MAP
SCALE: 1"=1000'

DATUM:
HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL= NAVD 88

0 1000 2000
SCALE IN FEET

BALTIMORE COUNTY
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY
APPROVED FOR GRADING
EMB 4/24/15
4/24/15
Date

STORMWATER MANAGEMENT PERMIT NOT REQUIRED

BALTIMORE COUNTY SOIL CONSERVATION DISTRICT
APPROVED FOR SEDIMENT CONTROL 4-23-15
DATE
Jeffrey P. West
DISTRICT OFFICIAL
050-37JK6-15
PLAN NO.
TECHNICAL REVIEW FOR THE DISTRICT BY:
Dave Bachman
IF A GRADING PERMIT HAS NOT BEEN OBTAINED WITHIN TWO YEARS OF THIS APPROVAL, THIS PLAN SHALL BE RE-SUBMITTED TO THE DISTRICT.


TETRA TECH
www.tetratech.com
20251 CENTURY BLVD
GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000


STATE OF MARYLAND
SCOTT A. NESHIP
No. 20015
PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX
SOIL REMEDIAL ACTION
TITLE SHEET

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 1 OF 20 |

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T-1

K:\CADD\MRC\CIVIL\T-1.dwg PIT IVANNA.GOLDSBERRY 3/24/2015 2:55:19 PM

MARYLAND DEPARTMENT OF THE ENVIRONMENT
1800 Washington Boulevard • Baltimore MD 21230
410-537-3000 • 1-800-633-6101 • www.mde.maryland.gov

Larry Hogan
Governor

Boyd Rutherford
Lieutenant Governor

Ben Grumbles
Secretary

Date of Permit Issuance: 5/6/2015

Lockheed Martin Corporation
6801 Rockledge Drive
MP:CCT-246
Bethesda, Maryland 20817

RE: **MDRCC01CX**

Dear Mr. Thomas Blackman:

Please find enclosed documentation of coverage under the 2014 General Permit for Stormwater Associated with Construction Activity (MDRC) for:

**MRC Blocks D,F,G, and H Soil Remediation**

issued to

**Lockheed Martin Corporation**

Please note that the effective date of coverage under the General Permit is the date on the attached cover sheet. If the current erosion and sediment control plan approval covers only part of the entire site covered by this permit, be advised that this permit does not authorize discharges from the other portions of the site until the appropriate erosion and sediment control approval authority approves the erosion and sediment control plan for those portions. The permit also requires that the site have an approved stormwater management plan (unless exempt or waived by the stormwater approval authority) prior to earth disturbance. Part IV.C.3 of the permit requires the permittee to use the standard written report form as provided by MDE. The form is available on MDE's website at the following location both as a fillable Microsoft Word form and as an Adobe Acrobat file.

http://go.usa.gov/gFMW

Print this letter and the cover sheet and keep them with your permit file. In addition, download the 2014 General Permit from the above website, print it for your permit file, and refer to it to ensure compliance with its terms. Submit any modifications to this coverage, Transfers of Authorization, or Notices of Termination via the ePermits portal. If your contact information changes, update it through the ePermits portal.

Your cooperation in this matter is appreciated. If you have any questions, please call the administrative team for the General Permit at (410) 537-3019.

Sincerely,

Heather L. Nelson

Heather L. Nelson, Acting Director
Compliance Program
Water Management Administration

**GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY**

| **State Discharge Permit Number:** | **Effective Date:** 5/6/2015 |
|---|---|
| **MDRCC01CX** | **Expiration Date:** 12/31/2019 |
| | NOTE: If site work is complete per Part II. I. prior to the expiration date, the permittee must submit a Notice of Termination and terminate the permit. |

Pursuant to the provisions of Title 9 of the Environment Article, Annotated Code of Maryland, and regulations promulgated thereunder, and the provisions of the Clean Water Act, 33 U.S.C., Section 1251 et. seq., and implementing regulations 40 CFR Parts 122, 123, 124 and 125, the Department of the Environment hereby establishes conditions and requirements pertinent to stormwater associated with construction activity at the site described below and authorizes:

**Lockheed Martin Corporation**
**6801 Rockledge Drive**
**MP:CCT-246**
**Bethesda, Maryland 20817**

TO DISCHARGE STORMWATER FROM:

**MRC Blocks D,F,G, and H Soil Remediation**
construction project on
**2.15** acres
at property located at
**Tax Blocks D, F, G, and H within Lockheed Martin Corporation's Middle River Complex (MRC)**
**2323 Eastern Boulevard, Middle River, Maryland 21220**

*If the current erosion and sediment control plan approval covers only part of the entire site covered by this permit, this permit does not authorize discharges from the other portions of the site until the appropriate erosion and sediment control approval authority approves the erosion and sediment control plan for those portions.*

TO:
**Surface waters -- Cow Pen Creek and Dark Head Cove**

which is
**Waters protected for Support of Estuarine and Marine Aquatic Life and Shellfish Harvesting**

in accordance with the 2014 General Permit. The vicinity map submitted with the Notice of Intent is considered incorporated herein and made a part hereof.

TETRA TECH

F
COE
DLH

RECEIVED
NOV 18 2013
BY:

November 15, 2013

201305256

Ms. Beth Cole
Maryland Historical Trust
Maryland Department of Planning
100 Community Place
Crownsville, MD 21032

Dear Ms. Cole:

This letter is to request Maryland Historical Trust (MHT) project review for the Lockheed Martin soil remediation project in Blocks D, E, F, G and H at the Middle River property located in Baltimore County, Maryland (see attached Figures 1 and 2). The purpose of the soil remediation in Blocks D, E, F, G and H is to reduce the levels of contaminants of concern (COCs) in existing soils to meet standards under Maryland Department of the Environment's (MDE's) Controlled Hazardous Substances Program.

Activities proposed for the soil remediation work include excavation and removal of approximately 3,884 cubic yards (cy) of overlying soil in Block D (including 579 cy in the panhandle portion of Block D), 9,837 cy in Block E, 912 cy in Block F, 1,645 cy in Block G, and 332 cy in Block H (see Figure 3). The soil remediation work will also include removal of existing impervious pavement/concrete in Block E and the panhandle portion of Block D. Volume estimates of soil to be excavated in each block are currently preliminary and may be revised. Excavated soil and pavement/concrete will be loaded in trucks on-site and taken to an appropriate disposal facility or will be recycled.

Middle River

Additional activities proposed for the soil remediation work will include the removal of the floor drains in the Block E basement foundation, and the removal and relocation of the storm drain system in Block E. The new storm drain system will be designed based on the final grading plan selected for the site.

All excavated areas, including areas of pavement/concrete, will be replaced with in-kind clean fill material and topsoil and revegetated, Excavated areas in Blocks D, F, G, and H will be graded back to original contours; however, Block E is expected to be graded to drain with a minimum 2% grade.

Other areas of ground disturbance will include truck traffic and staging areas, as well as E&S control locations. These areas will be graded back to original contours.

Archeo
DLH
12/9/13
2ma

prior recent
200904457
201204955
2ma

w/in BA - 2031

The Maryland Historical Trust has determined that this undertaking will have no adverse effect on historic properties.
Dixie Henry Date 12/9/13

Tetra Tech, Inc.
20251 Century Blvd., Suite 200, Germantown, MD 20874-7114
Tel 301.528.5557 Fax 301.528.3000 www.tetratech.com

TETRA TECH

Standard best management practices will be employed during all work at the site, including seeding all exposed areas with a standard seed mix, restoring wetland areas as appropriate, following an approved erosion and sediment control plan, and obtaining a Construction General Permit for construction stormwater runoff.

Expected federal and state permits include a United States Army Corps of Engineers (USACE) Section 404 Maryland State Programmatic General Permit for minor work in wetlands, an Erosion/Sediment Control Approval from the Baltimore County Soil Conservation District, a site Grading Permit from Baltimore County Department of Environmental Protection and Sustainability, and a General Permit for Construction Activity (Stormwater) from MDE.

Included with this request is the MHT Project Review Form. I appreciate your input on this matter and if you have any questions or need additional information please contact me at (301) 528-3022.

Sincerely,

Michael Martin, PG
Regional Manager
Tetra Tech, Inc.

cc:
Tom Blackman, Lockheed Martin Corporation
Cannon Silver, CDM Smith
Laura Burbage, CDM Smith

MARYLAND
DEPARTMENT OF
NATURAL RESOURCES

*Martin O'Malley*, Governor
*Anthony G. Brown*, Lt. Governor
*Joseph P. Gill*, Secretary
*Frank W. Dawson III*, Deputy Secretary

December 18, 2013

Michael Martin
Tetra Tech
20251 Century Blvd., Suite 200
Germantown, MD 20874-7114

**RE: Environmental Review for Lockhead Martin property, jct. of Eastern Blvd and Wilson Point Rd., Middle River, soil remediation project, Blocks D, E, F, G, and H, Baltimore County, MD.**

Dear Mr. Martin:

The Wildlife and Heritage Service has determined that there are no State or Federal records for rare, threatened or endangered species within the boundaries of the project site as delineated. As a result, we have no specific comments or requirements pertaining to protection measures at this time. This statement should not be interpreted however as meaning that rare, threatened or endangered species are not in fact present. If appropriate habitat is available, certain species could be present without documentation because adequate surveys have not been conducted.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER# 2013.1738.ba

KEVIN KAMENETZ
*County Executive*

VINCENT J. GARDINA, *Director*
*Department of Environmental Protection and Sustainability*

Stormwater Management

410-887-3768
FAX 410-887-4804

July 23, 2014

Mr. Paul Myers
Tetra Tech, Inc.
20251 Century Blvd, Suite 200
Germantown, MD 20874-7114

RE: LOCKHEED MARTIN MIDDLE RIVER COMPLEX
Soil Remediation In Blocks D, F, G & H
Stormwater Management Variance
Middle River Watershed
**EPS Project I.D. M140086**
**EPS Tracking Number: 07-14-1848**

Dear Mr. Myers:

This office has reviewed the information submitted and finds that a stormwater management variance can be granted for this project under Section 33-4-113 (a) (2) of Title 4 of the Baltimore County Code. This section of the regulations allows a stormwater management variance to be granted if there are exceptional circumstances such that strict adherence to the provisions of this article would result in unreasonable hardship or practical difficulty and not fulfill the intent of the regulations. The proposed project is for the removal of contaminated soil and replacing it with clean soil. The existing grades will be reestablished once the contaminated soil is removed. There will be a reduction in impervious area as a result of this project. Since there will be a slight reduction in impervious area and water quality will be improved by the removal of contaminated soil, a stormwater management variance can be granted for this project.

Please contact Ed Schmaus of my staff at 410-887-3768 should you have any questions.

Very truly yours,

Thomas L. Vidmar, P.E., Deputy Director
Department of Environmental Protection
& Sustainability

TLV:jcm

variance approval letter private

# Final Report
# Geophysical Survey
# Utility/Structure Clearance for Soil Remediation Excavations
# Middle River Complex
# Blocks G and H
# Middle River, MD
# Enviroscan Reference Number 031548

**Prepared For: Tetra Tech NUS, Inc.**
**Prepared By: Enviroscan, Inc.**
**May 6, 2015**

1051 Columbia Avenue ● Lancaster, PA 17603 ● 717.396.8922 ● Fax 717.396.8746 ● email@enviroscan.com ● www.enviroscan.com

May 6, 2015

Mr. Tony Apanavage
**Tetra Tech NUS, Inc.**
20251 Century Boulevard
Suite 200
Germantown, MD 20874-7114

**RE:** Geophysical Survey
Utility/Structure Clearance for Soil Remediation Excavations
Middle River Complex
Blocks G and H
Middle River, MD
Enviroscan Reference Number 031548

Dear Mr. Apanavage:

Pursuant to your request for a proposal on April 2, 2015, Enviroscan, Inc. has conducted a multi-technique geophysical survey at the above-referenced site. The fieldwork was performed on April 15 and 16, 2015. The purpose of the survey was to perform utility clearance at client-designated proposed soil remediation excavations.

# Methods

The utility survey was completed using standard and/or routinely accepted practices of the geophysical industry and equipment representing the best available technology, including:

- a Radiodetection RD8000 Multi-Frequency pipe and cable tracer;
- a Radiodetection C.A.T. and Genny pipe and cable locator/tracer;
- a Fisher TW-6 electromagnetic (EM) pipe and cable locator/tracer;
- a GSSI SIR-4000 ground penetrating radar (GPR) system.

The principles of these techniques are detailed below.

## RD8000

Utility tracing was conducted using a Radiodetection RD8000 digital cable and pipe tracer. The transmitter can be directly coupled to exposed portions of a metallic pipe, cable, or wire or indirectly (inductively) to a subsurface metallic utility of known location/orientation. The transmitter remains stationary and energizes the metallic utility at a frequency selected by the operator (512 Hz, 8 kHz, 33 kHz, or 65 kHz), which is received at the ground surface by the digital locator. When the transmitter is directly coupled to the metallic utility, the digital receiver can also calculate the depth of the utility to an accuracy of ±10% of the actual depth of the utility. Please note the close proximity to bends in the traced line or poor signal strength can result in erroneous depth estimations.

## C.A.T. and Genny

The survey areas were also scanned with a Radiodetection C.A.T. and Genny pipe and cable locator and tracer. In Power mode, the C.A.T. detects the 50 to 60 Hertz (Hz) electromagnetic field generated by live power cables and other metallic utilities to which a live line is grounded. In Radio mode, the C.A.T. detects buried conductors (cables or metallic pipes) as they conduct and re-transmit commercial broadcast radio energy. In Genny mode, the C.A.T. detects signal generated by the Genny transmitter. The Genny transmitter can be coupled directly (conductively) to exposed portions of a metallic pipe, cable, or wire or inductively to a subsurface metallic utility with known location and orientation.

## TW-6

In order to detect unknown utilities, Enviroscan employed a Fisher TW-6 pipe and cable locator and tracer. In pipe and cable search mode, the TW-6 is essentially a deep-sensing metal detector that detects any highly electrically conductive materials (e.g. metals) by creating an electromagnetic field with a transmitting coil. A receiving coil at a fixed separation from the transmitter measures the field strength. As the instrument is swept along the ground surface, subsurface metallic bodies distort the transmitted field. The change in field strength/orientation is sensed by the receiver, setting off an audible alarm and/or causing deflection of an analog meter. The TW-6 can nominally detect a 2-inch metal pipe to a depth of 8 feet and a 10-inch metal pipe to a depth of 14 feet.

In pipe and cable tracing mode, the TW-6 transmitter can be coupled directly (conductively) to exposed portions of a metallic pipe, cable, or wire or inductively to a subsurface metallic utility with known location and orientation. The transmitter remains stationary and energizes or excites the metallic utility to be traced with an 81.92-kilohertz signal that can be traced at the ground surface using the mobile TW-6 receiver wand or probe.

## GPR

GPR systems produce cross-sectional images of subsurface features and layers by continuously emitting pulses of radar-frequency energy from a scanning antenna as it is towed along a survey profile. The radar pulses are reflected by interfaces between materials with differing dielectric properties. The reflections return to the antenna and are displayed on a video monitor as a continuous cross section in real time. Since the electrical properties of metal are distinctly different from soil and backfill materials, metallic pipes and other structures commonly produce dramatic and characteristic reflections. Fiberglass, plastic, concrete, and terra-cotta pipes and structures also produce recognizable, but less dramatic reflections. Scanning was performed using a GSSI SIR-4000 GPR controller with an internal hard drive and a color display, and both a high-frequency, high-resolution 400 megaHertz (MHz) antenna or transducer, and a lower frequency deep-penetrating 200 MHz transducer.

# Results Summary

The utility clearance survey results are depicted in Figures 1 through 3. The mapped utilities located during the survey are overlain on a base map of the site. The outlines of the proposed excavations appear as yellow polygons. Several utilities were found and marked in the field to pass through or near the proposed excavations.

The Results for H Block are depicted in Figure 1. Please note that the northern proposed excavation is near (and partially includes) a conductive soil anomaly detected in the EM-31 results from a survey performed for Tetra Tech in 2005. The southern proposed excavation is within an area of high conductivity soil. Neither area shows any metallic interference, indicating that the high conductivity is not from buried metal. Additionally, both proposed excavations are near a suspected metallic pipe or line, also delineated with the 2005 EM-31 data. This line was not detected during the field survey.

On Figure 2, the northern section of the G Block survey area is shown. Several GPR radargrams are depicted in the upper right hand corner of the map. These radargrams represent an anomaly found coincident with the southern proposed excavation in this figure. The radargrams are labeled A-A', B-B', and C-C'. Three magenta lines with similar labels are depicted on the map showing the locations of the radargrams. The radargrams show a highly disturbed area containing many radar reflective targets, suggesting buried debris. Scanning with the TW-6 metal detector found no metal in this area, indicating that the GPR anomaly is non-metallic.

Figure 3 depicts the southern section of G Block. Many of the proposed excavations in this figure have unknown utilities running near or through their boundaries. Examination of historic EM data for these excavations showed nothing of note.

## Limitations

The above-referenced geophysical survey was completed using standard and/or routinely accepted practices of the geophysical industry and equipment representing the best available technology. Enviroscan does not accept responsibility for survey limitations due to inherent technological limitations or unforeseen site-specific conditions. However, we make every effort to identify and notify the client of such limitations or conditions. In particular, please note the following specific limitations and recommendations:

- Enviroscan's field markings should be considered accurate to within approximately +/-18 inches for single lines. In contrast, since electromagnetic tracing of duct banks provides only a centerline, the bank itself may extend for 2 to 3 feet beyond the marked trace.

- The completion of this survey does not relieve any party of applicable legal obligations to notify the appropriate One-Call center prior to digging or drilling.

As always, we appreciate this opportunity to have worked with you. If you have any questions, please do not hesitate to contact me.

Sincerely,
**Enviroscan, Inc.**



William E. Steinhart III, M.Sc., P.G.
Principal Geophysicist

Technical Review By:
**Enviroscan, Inc.**



Felicia Kegel Bechtel, M.Sc., P.G.
President

enc.: Figure 1: Utility Survey Results Block H
Figure 2: Utility Survey Results Block G North
Figure 3: Utility Survey Results Block G South

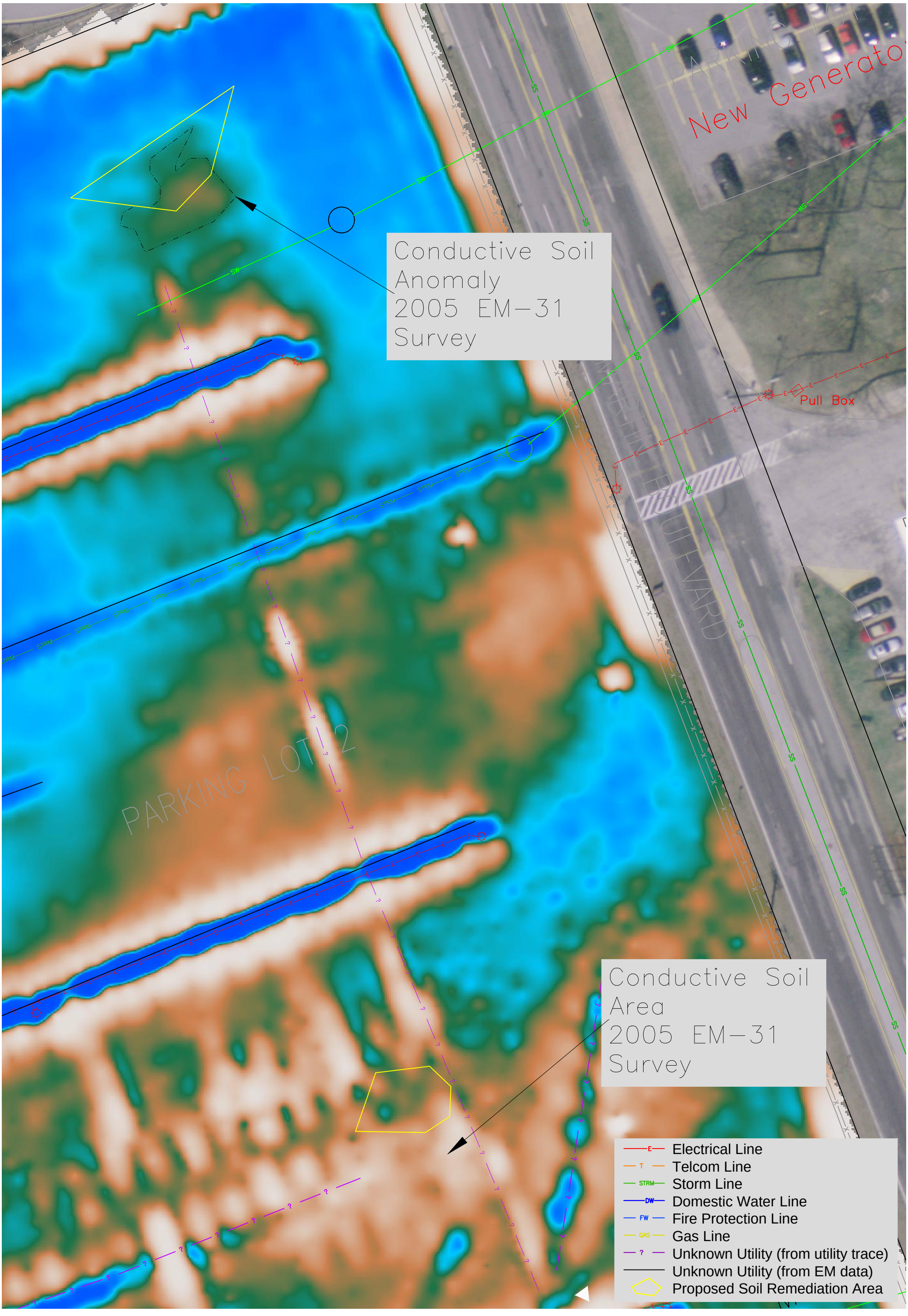


**Terrain Conductivity (mmho/m)**

-34 25 30 34 37 40 42 45 47 49 52 55 59 65 76 95

The information depicted on this drawing represents survey results on the date surveyed and can only be considered to be indicative of the general conditions existing on that survey date.

Coordinates in Maryland State Plane (feet) NAD-83 Datum.


Prepared by:

ENVIROSCAN, INC.

**Enviroscan, Inc.**
1051 Columbia Avenue
Lancaster, PA
(717) 396-8922


**Utility Survey Results Block H**

**H Block Survey Area**
**Middle River Complex**
**Middle River, MD**

Figure 1

| Project Number | Survey Date | Drawn by: |
|---|---|---|
| 031548 | 04/15/15 | WES |
| Original Scale | Revision/Issue | Approved by: |
| 1" = 40' | 04/30/15 | FKB |

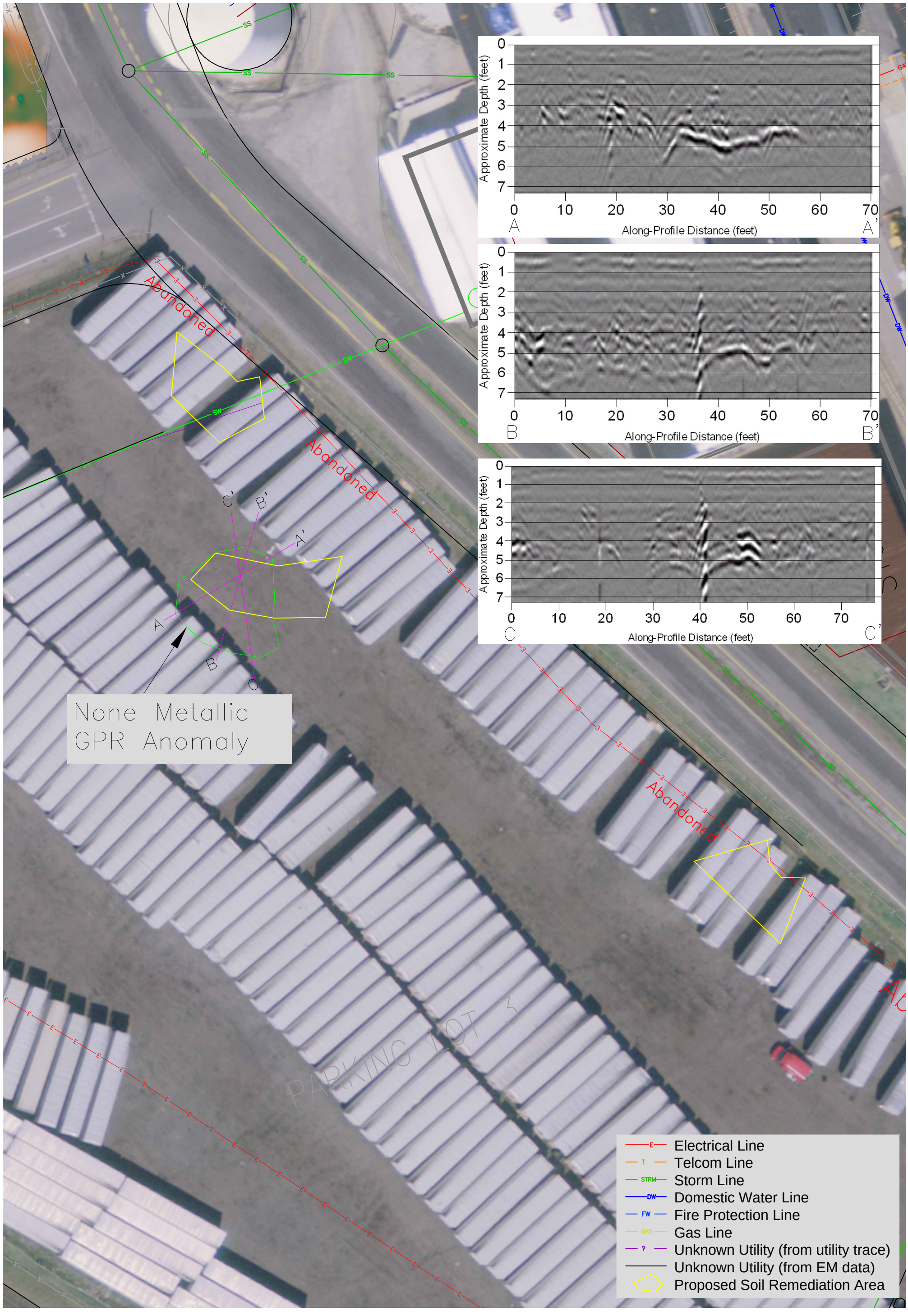


The information depicted on this drawing represents survey results on the date surveyed and can only be considered to be indicative of the general conditions existing on that survey date.

Coordinates in Maryland State Plane (feet) NAD-83 Datum.

Prepared by:

**Enviroscan, Inc.**
1051 Columbia Avenue
Lancaster, PA
(717) 396-8922

# Utility Survey Results Block G North

**G Block Survey Area**
**Middle River Complex**
**Middle River, MD**

Figure **2**

| Project Number | Survey Date | Drawn by: |
|---|---|---|
| 031548 | 04/15/15 | WES |
| **Original Scale** | **Revision/Issue** | **Approved by:** |
| 1" = 40' | 04/30/15 | FKB |




The information depicted on this drawing represents survey results on the date surveyed and can only be considered to be indicative of the general conditions existing on that survey date.

Coordinates in Maryland State Plane (feet) NAD-83 Datum.

Prepared by:

**Enviroscan, Inc.**
1051 Columbia Avenue
Lancaster, PA
(717) 396-8922

# Utility Survey Results Block G South

**G Block Survey Area**
**Middle River Complex**
**Middle River, MD**

Figure 3

| Project Number | Survey Date | Drawn by: |
|---|---|---|
| 031548 | 04/15/15 | WES |
| Original Scale | Revision/Issue | Approved by: |
| 1" = 40' | 04/30/15 | FKB |

# APPENDIX C—AIR-MONITORING DATA

**Appendix C**
**Real Time Dust Tracking Data - May 20, 2015**
**Block H Construction Completion Report**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| Dust Track Monitor Label | Recording Start Time | Average Dust (mg/m$^3$) |
|---|---|---|
| Dust 1 | 07:30 | 0.012 |
| | 07:45 | 0.01 |
| | 08:00 | 0.01 |
| | 08:15 | 0.01 |
| | 08:30 | 0.01 |
| | 08:45 | 0.01 |
| | 09:00 | 0.01 |
| | 09:15 | 0.01 |
| | 09:30 | 0.01 |
| | 09:45 | 0.01 |
| | 10:00 | 0.01 |
| | 10:15 | 0.01 |
| | 10:30 | 0.011 |
| | 10:45 | 0.009 |
| | 11:00 | 0.01 |
| | 11:15 | 0.009 |
| | 11:30 | 0.009 |
| | 11:45 | 0.011 |
| | 12:00 | 0.008 |
| | 12:15 | 0.007 |
| | 12:30 | 0.011 |
| | 12:45 | 0.009 |
| | 13:00 | 0.009 |
| | 13:15 | 0.011 |
| | 13:30 | 0.011 |
| | 13:45 | 0.011 |
| | 14:00 | 0.014 |
| | 14:15 | 0.012 |
| | 14:30 | 0.013 |
| | 14:45 | 0.013 |
| | 15:00 | 0.011 |
| | 15:15 | 0.011 |
| | 15:30 | 0.009 |
| | 15:45 | 0.012 |
| Dust 2 | 07:00 | 0.011 |
| | 07:15 | 0.013 |
| | 07:30 | 0.012 |
| | 07:45 | 0.016 |
| | 08:00 | 0.017 |
| | 08:15 | 0.018 |
| | 08:30 | 0.017 |

**Appendix C**
**Real Time Dust Tracking Data - May 20, 2015**
**Block H Construction Completion Report**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| Dust Track Monitor Label | Recording Start Time | Average Dust (mg/m$^3$) |
|---|---|---|
| Dust 2 | 08:45 | 0.015 |
| | 09:00 | 0.017 |
| | 09:15 | 0.014 |
| | 09:30 | 0.016 |
| | 09:45 | 0.013 |
| | 10:00 | 0.016 |
| | 10:15 | 0.014 |
| | 10:30 | 0.015 |
| | 10:45 | 0.014 |
| | 11:00 | 0.014 |
| | 11:15 | 0.015 |
| | 11:30 | 0.013 |
| | 11:45 | 0.015 |
| | 12:00 | 0.018 |
| | 12:15 | 0.016 |
| | 12:30 | 0.014 |
| | 12:45 | 0.012 |
| | 13:00 | 0.014 |
| | 13:15 | 0.015 |
| | 13:30 | 0.016 |
| | 13:45 | 0.018 |
| | 14:00 | 0.019 |
| | 14:15 | 0.019 |
| | 14:30 | 0.021 |
| | 14:45 | 0.021 |
| | 15:00 | 0.018 |
| | 15:15 | 0.018 |
| | 15:30 | 0.014 |
| | 15:45 | 0.014 |
| | 16:00 | 0.014 |
| Dust 3 | 07:00 | 0.01 |
| | 07:30 | 0.01 |
| | 07:45 | 0.01 |
| | 08:00 | 0.016 |
| | 08:15 | 0.012 |
| | 08:30 | 0.011 |
| | 08:45 | 0.011 |
| | 09:00 | 0.01 |
| | 09:15 | 0.009 |
| | 09:30 | 0.01 |
| | 09:45 | 0.011 |

**Appendix C**
**Real Time Dust Tracking Data - May 20, 2015**
**Block H Construction Completion Report**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| Dust Track Monitor Label | Recording Start Time | Average Dust (mg/m$^3$) |
|---|---|---|
| Dust 3 | 10:00 | 0.012 |
| | 10:15 | 0.009 |
| | 10:30 | 0.008 |
| | 10:45 | 0.011 |
| | 11:00 | 0.01 |
| | 11:15 | 0.011 |
| | 11:30 | 0.007 |
| | 11:45 | 0.006 |
| | 12:00 | 0.007 |
| | 12:15 | 0.007 |
| | 12:30 | 0.008 |
| | 12:45 | 0.009 |
| | 13:00 | 0.011 |
| | 13:15 | 0.009 |
| | 13:30 | 0.01 |
| | 13:45 | 0.01 |
| | 14:00 | 0.011 |
| | 14:15 | 0.017 |
| | 14:30 | 0.012 |
| | 14:45 | 0.01 |
| | 15:00 | 0.01 |
| | 15:15 | 0.008 |
| | 15:30 | 0.008 |
| | 15:45 | 0.008 |
| | 16:00 | 0.009 |

**Appendix C**
**Real Time Dust Tracking Data - May 21, 2015**
**Block H Construction Completion Report**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| Dust Track Monitor Label | Recording Start Time | Average Dust (mg/m$^3$) |
|---|---|---|
| Dust 1 | 06:45 | 0.011 |
| | 07:00 | 0.011 |
| | 07:15 | 0.01 |
| | 07:30 | 0.01 |
| | 07:45 | 0.01 |
| | 08:00 | 0.007 |
| | 08:15 | 0.006 |
| | 08:30 | 0.007 |
| | 08:45 | 0.008 |
| | 09:00 | 0.007 |
| | 09:15 | 0.008 |
| | 09:30 | 0.01 |
| | 09:45 | 0.012 |
| | 10:00 | 0.007 |
| | 10:15 | 0.008 |
| | 10:30 | 0.008 |
| | 10:45 | 0.009 |
| Dust 2 | 06:45 | 0.014 |
| | 07:00 | 0.014 |
| | 07:15 | 0.022 |
| | 07:30 | 0.015 |
| | 07:45 | 0.013 |
| | 08:00 | 0.01 |
| | 08:15 | 0.01 |
| | 08:30 | 0.01 |
| | 08:45 | 0.01 |
| | 09:00 | 0.01 |
| | 09:15 | 0.01 |
| | 09:30 | 0.013 |
| | 09:45 | 0.015 |
| | 10:00 | 0.012 |
| | 10:15 | 0.012 |
| | 10:30 | 0.011 |
| | 10:45 | 0.011 |
| | 11:00 | 0.009 |
| Dust 3 | 06:45 | 0.011 |
| | 07:00 | 0.011 |
| | 07:15 | 0.015 |
| | 07:30 | 0.01 |
| | 07:45 | 0.013 |
| | 08:00 | 0.007 |

**Appendix C**
**Real Time Dust Tracking Data - May 21, 2015**
**Block H Construction Completion Report**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| Dust Track Monitor Label | Recording Start Time | Average Dust ($mg/m^3$) |
|---|---|---|
| Dust 3 | 08:15 | 0.006 |
| | 08:30 | 0.006 |
| | 08:45 | 0.006 |
| | 09:00 | 0.006 |
| | 09:15 | 0.006 |
| | 09:30 | 0.008 |
| | 09:45 | 0.011 |
| | 10:00 | 0.008 |
| | 10:15 | 0.008 |
| | 10:30 | 0.007 |
| | 10:45 | 0.007 |
| | 11:00 | 0.005 |

**Appendix C**
**Real Time Dust Tracking Data - May 22, 2015**
**Block H Construction Completion Report**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| Dust Track Monitor Label | Recording Start Time | Average Dust (mg/m$^3$) |
|---|---|---|
| Dust 1 | 07:30 | 0.022 |
| | 07:45 | 0.021 |
| | 08:00 | 0.016 |
| | 08:15 | 0.014 |
| | 08:30 | 0.011 |
| | 08:45 | 0.011 |
| | 09:00 | 0.013 |
| | 09:15 | 0.011 |
| | 09:30 | 0.01 |
| | 09:45 | 0.014 |
| | 10:00 | 0.01 |
| | 10:15 | 0.01 |
| | 10:30 | 0.009 |
| | 10:45 | 0.01 |
| | 11:00 | 0.01 |
| | 11:15 | 0.008 |
| | 11:30 | 0.011 |
| | 11:45 | 0.009 |
| | 12:00 | 0.012 |
| | 12:15 | 0.009 |
| | 12:30 | 0.008 |
| | 12:45 | 0.008 |
| | 13:15 | 0.011 |
| | 13:30 | 0.014 |
| | 13:45 | 0.025 |
| | 14:00 | 0.008 |
| | 14:15 | 0.008 |
| | 14:30 | 0.008 |
| | 14:45 | 0.177 |
| | 15:00 | 0.051 |
| | 15:15 | 0.033 |
| Dust 2 | 07:45 | 0.004 |
| | 08:00 | 0.022 |
| | 08:15 | 0.021 |
| | 08:30 | 0.023 |
| | 08:45 | 0.021 |
| | 09:00 | 0.019 |
| | 09:15 | 0.018 |
| | 09:30 | 0.017 |
| | 09:45 | 0.018 |
| | 10:00 | 0.018 |

**Appendix C**
**Real Time Dust Tracking Data - May 22, 2015**
**Block H Construction Completion Report**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| Dust Track Monitor Label | Recording Start Time | Average Dust ($mg/m^3$) |
|---|---|---|
| Dust 2 | 10:15 | 0.018 |
| | 10:30 | 0.018 |
| | 10:45 | 0.017 |
| | 11:00 | 0.018 |
| | 11:15 | 0.016 |
| | 11:30 | 0.016 |
| | 11:45 | 0.016 |
| | 12:00 | 0.018 |
| | 12:15 | 0.016 |
| | 12:30 | 0.017 |
| | 12:45 | 0.016 |
| | 13:15 | 0.018 |
| | 13:30 | 0.018 |
| | 13:45 | 0.017 |
| | 14:00 | 0.017 |
| | 14:15 | 0.016 |
| | 14:30 | 0.016 |
| | 14:45 | 0.017 |
| | 15:00 | 0.017 |
| | 15:15 | 0.017 |
| Dust 3 | 07:45 | 0.016 |
| | 08:00 | 0.017 |
| | 08:15 | 0.015 |
| | 08:30 | 0.015 |
| | 08:45 | 0.013 |
| | 09:00 | 0.012 |
| | 09:15 | 0.011 |
| | 09:30 | 0.009 |
| | 09:45 | 0.009 |
| | 10:00 | 0.01 |
| | 10:15 | 0.01 |
| | 10:30 | 0.008 |
| | 10:45 | 0.009 |
| | 11:00 | 0.008 |
| | 11:15 | 0.008 |
| | 11:30 | 0.007 |
| | 11:45 | 0.007 |
| | 12:00 | 0.008 |
| | 12:15 | 0.007 |
| | 12:30 | 0.007 |
| | 12:45 | 0.007 |

**Appendix C**
**Real Time Dust Tracking Data - May 22, 2015**
**Block H Construction Completion Report**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| Dust Track Monitor Label | Recording Start Time | Average Dust ($mg/m^3$) |
|---|---|---|
| Dust 3 | 13:15 | 0.007 |
| | 13:30 | 0.007 |
| | 13:45 | 0.007 |
| | 14:00 | 0.006 |
| | 14:15 | 0.007 |
| | 14:30 | 0.007 |
| | 14:45 | 0.006 |
| | 15:00 | 0.007 |
| | 15:15 | 0.007 |

**Appendix C**
**Real Time Dust Tracking Data - May 26, 2015**
**Block H Construction Completion Report**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| Dust Track Monitor Label | Recording Start Time | Average Dust (mg/m$^3$) |
|---|---|---|
| Dust 1 | 08:45 | 0.02 |
| | 09:00 | 0.03 |
| | 09:15 | 0.03 |
| | 10:30 | 0.055 |
| | 10:45 | 0.037 |
| | 11:00 | 0.044 |
| | 11:15 | 0.032 |
| | 11:30 | 0.03 |
| | 11:45 | 0.03 |
| | 12:00 | 0.033 |
| | 12:15 | 0.031 |
| | 12:30 | 0.045 |
| | 12:45 | 0.068 |
| | 13:00 | 0.026 |
| Dust 2 | 08:30 | 0.027 |
| | 08:45 | 0.031 |
| | 10:30 | 0.038 |
| | 10:45 | 0.034 |
| | 11:00 | 0.035 |
| | 11:15 | 0.037 |
| | 11:30 | 0.037 |
| | 11:45 | 0.038 |
| | 12:00 | 0.036 |
| | 12:15 | 0.037 |
| | 12:30 | 0.035 |
| | 12:45 | 0.035 |
| | 13:00 | 0.034 |
| | 13:15 | 0.034 |
| Dust 3 | 08:30 | 0 |
| | 10:30 | 0.029 |
| | 10:45 | 0.024 |
| | 11:00 | 0.024 |
| | 11:15 | 0.025 |
| | 11:30 | 0.026 |
| | 11:45 | 0.025 |
| | 12:00 | 0.024 |
| | 12:15 | 0.024 |
| | 12:30 | 0.024 |
| | 12:45 | 0.024 |
| | 13:00 | 0.023 |
| | 13:15 | 0.022 |

# Dust Control and Air Monitoring and Sampling Plan for Soil Remedy Construction for Blocks D, D Panhandle, F, G, and H Lockheed Martin Middle River Complex 2323 Eastern Boulevard Middle River, Maryland

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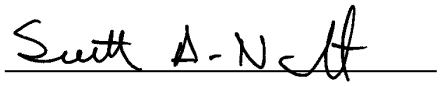

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# ACRONYMS

| | |
|---|---|
| µg/m$^3$ | microgram(s) per cubic meter |
| µm | micron (micrometer) |
| ABIH | American Board of Industrial Hygiene |
| ACGIH | American Conference of Industrial Hygienists |
| AIHA | American Industrial Hygiene Association |
| CAS | Chemical Abstract Services |
| CIH | Certified Industrial Hygienist |
| COC | chain of custody |
| CSLO | crystalline silica |
| HD | Higgins-Dewell |
| IH | industrial hygiene; industrial hygienist |
| Lockheed Martin | Lockheed Martin Corporation |
| mg | milligram |
| mg/m$^3$ | milligram per cubic meter |
| mm | millimeter |
| MRC | Middle River Complex |
| NA | not applicable or not available |
| NIOSH | National Institute for Occupational Safety and Health |
| NMAM | NIOSH Manual of Analytical Methods |
| OSHA | Occupational Safety and Health Administration |
| PAHs | polycyclic aromatic hydrocarbons |
| PAHL | polycyclic aromatic hydrocarbons- low volume |
| PEL | permissible exposure limit |
| PTFE | polytetrafluoroethylene |
| QC | quality control |
| R | respirable |
| RTDs | real-time detection |
| T | thoracic |
| Tetra Tech | Tetra Tech, Inc. |
| TLV-TWA | threshold limit value-time weighted average |
| USEPA | United States Environmental Protection Agency |

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# Section 1
# Introduction

This dust control and air monitoring and sampling plan describes the monitoring procedures that will be used during soil excavation and remediation activities to control airborne and air-driven dusts. Airborne dusts can be generated during the following excavation and remediation activities:

- Excavation of contaminated soil within identified tax blocks –Potential dust generation is anticipated to be low to moderate, and easily controlled via water misting.

- Loading and unloading of transportation vehicles – Potential dust generation is anticipated to be low to moderate, and can occur during transfer of excavated material from the excavator or loader into the transportation vehicle, or during restoration when trucks dump backfill material on-site. Loading at a higher vantage point increases mechanical agitation, thereby increasing potential dust generation. Dust generation is expected to decrease as more material is loaded into the vehicle and drop distance decreases. Dust generated during loading activities can be easily controlled by misting soil with water, and by soil transit.

- Degradation of haul roads or construction entrance resulting from heavy traffic use – Potential dust generation is anticipated to be moderate to high. As the road surface pulverizes it becomes more easily airborne. However, travel distances are minimal, and generated dust can be easily controlled via water misting.

- Tracking soils from tax blocks onto improved and unimproved roadways – Potential for dust generation is anticipated to be low. To minimize this potential, trucks will be examined prior to leaving the Tax block for residual soils (mud on the tires). In these cases, the trucks will be routed through the adjacent decontamination unit for pressure washing wheels, tires, and undercarriage before exiting onto in-plant and public thoroughfares.

Airborne dusts may also result from high winds. In addition, any eroded soil or sediment resulting from rainfall can also dry out and become airborne if agitated. The implementation of the Erosion and Sediment Control Plan (Tetra Tech, March 2015) is designed to prevent this from occurring.

In general, dust generation can be controlled by misting dry soil and road surfaces, by keeping soil stockpiles covered and/or vegetated (based on anticipated storage time) and by managing soil excavation, dumping and grading operations.

# Section 2
# Dust Suppression Methods

Dust generation is mitigated by applying water to knock down or pre-saturate media, thereby preventing particulates from becoming airborne during mechanical action. Substances that draw or retain water (e.g., calcium chloride) can be added to the water to extend the suppression period. Calcium chloride can also be applied to road or other exposed soil surfaces directly, either as a solid or as a 30% solution. Dust generation can be minimized as follows:

- Water trucks with spray nozzles and hose attachments will be used to mist surfaces used by vehicles; a hose can be used for spot treatment and where necessary during loading and unloading operations.

- Separate portable tanks and systems can be placed at the decontamination pad, at the wheel wash and stabilized construction entrance.

- Power brooms can be used to collect and remove soil and sediment from improved surfaces and from paved travel routes. These devices are equipped with water tanks to minimize dust generation during sweeping/collection.

- Correct placement of the stabilized construction entrance and decontamination pad in relationship to public roadways can help limit construction dust to the work area. Vehicles will be decontaminated by washing to remove stuck on soil and sediment. The stabilized construction entrance will shake off material on wheels and tires, and provide a final soil collection point within the tax block (in the contamination reduction zone).

- Housekeeping – Prompt cleanup of soil spilled during loading/transport helps prevent spread and cross contamination both within, and the spread of contamination outside of the tax block.

- Soil staging areas/soil stockpiles – Excavated soil will be staged in piles and covered to prevent erosion including dust spread by overland transport of soil by runoff. Backfill soil can be stockpiled and vegetated to minimize erosion until it is needed.

## 2.1 DUST SUPPRESSION ON IMPROVED ROAD SURFACES

As stated in previous text, efforts to reduce dust on improved road surfaces will be made through:

- Vigilant inspections of vehicles leaving the construction sites
- Diligent employment of the decontamination process to remove visual soils from trucks/trailers and
- Through proper construction and maintenance of engineered temporary control measures including stabilized construction entrances and erosion and sediment control traps to control migration of soils from trucks to these areas.

Normal travel areas such as paved on-facility roads and improved surfaces (e.g., parking lots) will be visually monitored to ensure soil and sediment are not tracked onto these surfaces. If it is, the following actions will take place:

1. Load outs and deliveries will be temporarily suspended until source is identified and cleaned.
2. The frequency of housekeeping measures will be increased to minimize and, if possible, eliminate reoccurrence. The frequency of wheel washing before leaving the tax block will also be increased if necessary, as will the frequency of wet sweeping paved on-facility roads and parking lots.
3. Power broom affected areas will be wet to remove residual accumulation. If necessary, a combination of the water truck and power broom can be used.

## 2.2 DUST SUPPRESSION ON AGGREGATE BASED HAUL ROADS

The degradation of on-site haul roads can be one of the largest contributors to airborne dusts during remediation activities. Quarried limestone will be used to stabilize the construction entrance, and as a construction aggregate for driving surfaces. Dust generation if it occurs would be expected to be higher at turnaround points, sharp turns, and changes in elevation, where the surface is worn due to repeated traffic patterns that pulverize surface materials. As traffic moves over the surface, particulates are reduced in size and can become airborne more easily. To combat these effects, the following dust control measures will be used on haul roads:

- As the surface becomes more worn and pulverized, dust will become more of an issue. The water truck will be used more frequently to control dust emissions as the road degrades. Note that over-watering can cause slurry conditions that will result in tracking the material onto roadways, and therefore must be prevented. It should be noted that with the length of the planned haul roads within the tax blocks and the sizes of the stone to be used in the stabilized construction entrances, the slurrying aspect is considered negligible but recognized.

- To further control fugitive dust production on unpaved haul roads, solid calcium chloride or a calcium chloride solution (in water) can be applied. Calcium chloride attracts and retains moisture and helps keep the road surface slightly damp, thus reducing dust production. A 30% calcium chloride solution can also be applied. Calcium chloride binds with lime due to its chemical composition; the magnesium within the limestone/dolomite forms a crust that helps to retain fines and minimize dust generation and erosion.

- Areas of more vulnerable to severe pulverization may be resurfaced with additional aggregate and watered and re-compacted more frequently to maintain the surface.

Haul roads and impervious areas are used to provide a travel surface, but also provide separation from the underlying contaminated soil in the exclusion zone. Therefore, the following controls must be diligently applied

- Good housekeeping - Personnel must diligently clean up contaminated soil spills on pervious and impervious surfaces to avoid potential cross-contamination through construction vehicles tracking the materials into unaffected areas.

- Decontamination - Trucks/Trailers will be routed through the decontamination pad so that wheels and tires can be pressure-washed before exiting over the stabilized construction entrance as an additional control measure to prevent contaminated and uncontaminated construction materials from leaving the exclusion and/or contamination reduction zone.

- Visual inspection – Only trucks/trailers visually inspected and approved as clean will be released from the site.

Public or private roadways within the facility will be visually monitored for the presence of tracked construction materials (limestone residue; surface soil, etc.), and will be addressed according to procedures outlined in Section 2.1, which would be to wet broom any indication of limestone residue from the affected roadways. The plan view drawing for each tax block indicates wheel wash locations, vehicle exit points, and excavation limits. These are provided in Appendix A.

## 2.3 CRYSTALLINE SILICA

To assess the potential for exposure to crystalline silica (quartz), bulk samples will be collected to evaluate percentage composition to determine if silica is present in greater than 1% composition. In addition, respirable air samples will be collected to determine if airborne concentrations of crystalline silica within airborne dusts also are present in concentrations greater than 0.05mg/$m^3$. Dolomitic limestone will be used as a construction aggregate in construction entrances and as a wear surface for haul roads and is a potential source for crystalline silica. Table 2-1, LaFarge Material Safety Data Sheet excerpt contains a list of dolomitic limestone geochemical constituents and associated percent concentrations.

Additionally, the soils to be excavated may also contain crystalline silica and will serve as a potential source contributor.

## 2.4 DUST DETECTION USING REAL-TIME DETECTION (RTD) MONITORING EQUIPMENT

Dust control efforts for larger particles (greater than 7.0 microns [µm] in concentrations greater than 3.0 milligrams per cubic meter [mg/$m^3$] air) will be assessed visually, but dust outside the visible spectrum (less than 7.0 µm in size and less than 3.0 mg/$m^3$ in concentration) will be assessed via real time detection (RTD) monitoring instrumentation that measures airborne concentrations of respirable particulates.

Respirable fractions can pass deeper into the lungs and can pose a potential local (acute) and systemic (chronic) hazard and affect human health.

Respirable particulates may be expelled during exhalation; trapped within the mucus and expelled through the mucociliary tract, or become lodged in the lungs. Because respirable dusts due to their size cannot be seen by the naked eye, visual observations cannot be used for its control. Frequent water application during any dust generating activities, and/or in response to traffic density, will be used as a precautionary control measure. However, RTD readings must be used to assess the effectiveness of (respirable) dust control. The RTD monitor will be linked via telemetry to transmit alerts or texts when action levels are being approached, so that controls can be instituted before action levels are exceeded.

**Permissible Exposure Limits (PELs)/Time Weighted Averages (TWAs)**

Through an evaluation of previous soil media sampling results of the materials to be excavated, mathematical evaluations were conducted to determine potential airborne concentrations (worst case scenario) based on source concentrations of various identified contaminants. These values were compared to PELs/TWAs to determine if an exceedance of these limits were theoretically possible. The following information are the PELs/TWAs for the contaminants of concern:

- Crystalline silica [American Conference of Industrial Hygienists (ACGIH) — 0.025 $mg/m^3$ (used to screen the limestone used for haul roads [up to 20% may be comprised of crystalline silica – quartz] and soil components) from a selected representative excavation.

- Polycyclic aromatic hydrocarbons (PAHs) — 0.2 $mg/m^3$ as coal tar pitch volatiles — used to screen the excavated soil components from selected representative tax blocks.

- Metals (arsenic and hexavalent chromium) (0.01 $mg/m^3$ and 0.005$mg/m^3$, respectively) were reported in very low concentrations within bulk samples collected on the surface. Mathematical calculations indicate there are insufficient source concentrations to present an inhalation exposure concern. However, as these materials are a solid, they will be captured in the RTD result.

**RTD Action Levels**

The following action levels will be used for all PAHs laden soils (including BaPEq) (as determined by the evaluation of soil concentrations) and percent silica:

**Tax Block D:—**5 $mg/m^3$ - Based on the highest reported concentration (22,517µg/kg) of Benzo(a)pyrene Equivalent (BaPEq); dust concentrations would have to exceed over 2,000 $mg/m^3$ to represent an exposure concern to this specific BaPEq compound. Of this Total dust value, the respirable dust faction will represent only a small fraction. Therefore this action level is considered very conservative.

**Tax Block D-Panhandle:**—5 $mg/m^3$ - Based on the highest reported concentration (6,008 µg/kg) of Benzo(a)pyrene Equivalent (BaPEq); hexavalent chromium 1.2 µg/kg. Airborne dust concentrations would have to be well in excess of 600,000 $mg/m^3$ to exceed the mixture PEL/TWA for these compounds. Of this Total dust value, the respirable dust faction will represent only a small fraction. Therefore this action level is considered very conservative.

**Tax Block F:**—5 $mg/m^3$ - Based on the highest reported concentration (38,098µg/kg) of Benzo(a)Pyrene Equivalent (BaPEq), dust concentrations would have to exceed 1,315 $mg/m^3$ in order to represent an exposure concern to exceed the PEL/TWA for this compound. Of this Total dust value, the respirable dust faction will represent only a small fraction. Therefore this action level is considered very conservative.

**Tax Block G:**—5 mg/$m^3$ - Based on the highest reported concentration (24,698µg/kg) of Benzo(a)pyrene Equivalent (BaPEq), dust concentrations would have to exceed 1315 mg/$m^3$ in order to represent an exposure concern to exceed the PEL/TWA for this compound. Note: One sample G-TP-D-N with a reported concentration of 230,000µg/kg, would require airborne dust levels to exceed 217 mg/$m^3$ in order to present an exposure concern to this compound. Of this Total dust value, the respirable dust faction will represent only a small fraction. Therefore this action level is considered very conservative.

**Tax Block H:**—5 mg/$m^3$ Based on the highest reported concentration (460,008µg/kg) of Benzo(a)Pyrene Equivalent (BaPEq), dust concentrations would have to exceed 1,087 mg/$m^3$ in order to represent an exposure concern to exceed the PEL/TWA for this compound. Of this Total dust value, the respirable dust faction will represent only a small fraction. Therefore this action level is considered very conservative.

Given the reported soil concentrations and excavation dimensions, it is unlikely that exceedances greater than a chemical-specific time-weighted average - threshold limit values (TWA-TLVs) or permissible exposure limits (PELs) will be observed  In addition, these action levels represent 50% of the concentration associated with overexposure, making the action levels even more conservative and protective of human health. These action levels also provide protection from total and respirable dust particulates not otherwise classified.

**Table 2-1**

**LaFarge Materials Safety Data Sheet Excerpt,**
**Chemical Composition – Limestone and Dolomite**
**Lockheed Martin, Middle River Complex**

| Component | Percent (By Weight) | CAS Number | OSHA PEL -TWA ($mg/m^3$) | ACGIH TLV-TWA ($mg/m^3$) | $LD_{50}$ | $LC_{50}$ |
|---|---|---|---|---|---|---|
| Calcium Carbonate* | 50-100 | 1317-65-3 | 15 (T), 5 (R) | 10 (T) | NA | NA |
| Magnesium Carbonate* | 0-50 | 546-93-0 | 15 (T), 5 (R) | 3 (R); 10 (T) | NA | NA |
| Crystalline Silica (as Quartz) | 0-15 | 14808-60-7 | [(10) / (%$SiO_2$+2)] (R); [(30) / (%$SiO_2$+2)] (T) | 0.025 (R) | NA | NA |
| Particulate Not Otherwise Regulated | - | NA | 5 (R) 15 (T) | 3 (R); 10 (T) | NA | NA |

Note: Exposure limits for components noted with an * contain no asbestos and <1% crystalline silica

The following table describes the mineral composition of Limestone and Dolomite.

| Rock Type | Rock | Mineral | Mineral Formula | Mineral Composition |
|---|---|---|---|---|
| Sedimentary Rocks | Limestone | Calcite and Aragonite | $CaCO_3$ | Calcium Carbonate |
| | | Clay Minerals | (Mg, Al) $Si_3O_{12}$ | Magnesium Aluminum Silicate |
| | | Chert or Diatomite | $SiO_2$ | Silicon Dioxide |
| | Dolomite (Dolostone) | Dolomite | $CaMg(CO_3)_2$ | Calcium Magnesium Carbonate |
| | | Clay Minerals | (Mg, Al) $Si_3O_{12}$ | Magnesium Aluminum Silicate |
| | | Chert or Diatomite | $SiO_2$ | Silicon Dioxide |
| **Crystalline silica content: Sedimentary types 1-20%; Quartz 100%.** | | | | |

*Source:* *LaFarge Material Safety Data Sheet Limestone & Dolomite, Revised 03/01/2014*

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# Section 3
# Real Time Detection (RTD) Monitoring Instrumentation

Area and personal real-time detection (RTD) monitoring instrumentation will be used during remediation activities for at-risk populations, including ground personnel and equipment operators, to assess whether working in the excavation areas are potentially being overexposed to dust generated from contaminated soil. Perimeter air monitoring will be conducted to determine if dust control measures are performing as desired, or if dust concentrations greater than acceptable limits are putting others at risk. Perimeter monitoring will use RTD monitoring instrumentation at multiple locations (one location upwind, and two to three downwind) at identified cardinal points. Area monitors will be placed at or near the fence lines and/or associated tax block demarcations. Final placement will be determined in the field based on existing (real time) environmental conditions.

## 3.1 SELECTED INSTRUMENTATION

The Dust Trak II, Aerosol Monitor PM 2.5 8530 Desk Top Model will be used to monitor airborne dusts/particulates. This instrument comes with an environmental enclosure and tripod unit that permits the air intake to be set at varying vertical elevations. The environmental enclosure is equipped with a wireless modem to permit real time notification and alerts.

The SidePak AM510 Personal Aerosol Monitor is a personal monitor that can be worn on a belt with the air intake positioned within the breathing zone of high risk personnel. High-risk personnel are those based on their assigned tasks would place them in areas where dust exposure would have the potential to be the greatest. These persons would include ground support personnel employed to direct and oversee truck loading, survey personnel and equipment operators. Specification sheets for RTD air monitoring instrumentation are in Appendix B.

## 3.2 RTD POSITIONING

Monitoring instrumentation for RTD will be spatially positioned to detect, measure, and display dust concentrations from the one upwind and 2-3 selected downwind positions on the perimeter of each tax block, based on wind direction and variability in wind direction. Variations in placement are possible based on actual field conditions.

Each tax block will be marked for 15 cardinal positions (north, north-northeast, east-northeast, east, east-southeast, etc.). The final distance or placement of the instrument from the source will be determined in the field, based on wind direction (along with site orientation), wind speed, and visual observations. If visible dust appears to be carrying over established stations, monitors may be moved.

## 3.3 FREQUENCY OF MONITORING

Air monitoring will be performed within each tax block to measure airborne dust concentrations at the perimeter of the work area, and for personnel occupying potential high exposure risk locations (selected ground personnel and equipment operators) in addition to assessing the efficacy of the dust control measures.

- **Base Monitoring Frequency** - Air monitoring using RTDs will be conducted daily to monitor generation of dust and potential off site migration. RTDs will be positioned and monitored continuously during activities that could potentially generate airborne dusts.

- If predetermined action levels as specified in section 2.4 are approached, the frequency of dust-control measures will be increased, as will monitoring intensity, to reduce airborne dust levels and to quantify success.

- The highest concentrations of polycyclic aromatic hydrocarbons (PAHs/BaPEq) in soil were in Block F. Therefore, additional air sampling will be conducted in this tax block during remediation activities.

- The frequency of the dust monitoring may be reduced if sufficient data establish contaminant concentrations below action levels.

- Monitoring for airborne dusts/particulates will not be conducted during rain events, because rain washes dust and particulates from the air. Monitoring during heavy rains may also damage instrumentation.

## 3.4 METEOROLOGICAL DATA

Meteorological data will be gathered from a portable meteorological station positioned at each tax block during remediation activity. Additional meteorological data will also be obtained from a station at the Martin State Airport. Wind socks will be placed at two locations at each tax block during remediation activities as these provide visual indication of wind direction and speed. Meteorological data for each work day will be downloaded and maintained as part of the project record.

## 3.5 RECORDKEEPING

All particulate monitors will be set to record data (data logging) as it is collected during potential dust generating activities as defined in Section 1. Data will be downloaded periodically to avoid overwriting any data collected during instrument operation. The placement of the instruments (based on meteorological data), distances from potential dust and particulate sources, and any information that may affect the outcome of the data or derived results will also be recorded either electronically or written within a logbook.

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# Section 4
# Air Sampling

Air sampling (the collection of analytical air samples for PAHs and crystalline silica) will be conducted to:

- Assess personal exposure of those persons working within high exposure risk job classifications including ground support personnel and equipment operators.
- Gather information to support the validity of air monitoring results obtained through the use of RTDs.
- Obtain data to support the efficacy of dust control measures employed.

Air sampling will not be conducted at each tax block. It will however be conducted at:

- The start of the project in an effort to correlate real-time detection (RTD) instrumentation data with collected sample data.
- Air samples will also be collected at Tax Block F, as it has the highest reported polycyclic aromatic hydrocarbon (PAH) concentrations in soil.
- Air samples shall be collected to quantify dust generation during those activities as defined in Section 1.

The SSHO will determine when and where additional air samples shall be collected based on derived field data and field observations.

## 4.1 POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)

PAHs, including BaPEq, represent the most abundant contaminant within the soils for all of the tax blocks. Air sampling for PAHs (including BaPEq) will be conducted using:

- **NIOSH Manual of Analytical Methods (NMAM) Number 5506** – uses a 37 millimeter (mm), 2-micron (µm) polytetrafluoroethylene (PTFE, i.e., Teflon®) filter + washed XAD sorbent tube (100 milligram [mg] front section; 50 mg back section); during collection, the XAD tube is placed in a tube holder to protect against ultraviolet (UV) light and temperature degradation.

- **Sample flow rate:** two liters per minute for a preferred eight-hour time frame. Shorter sample runs may be collected provided minimum volume is obtained.
- **Pump calibration** - with a representative media in line.
    - volume (minimum): 200 liters
    - volume (maximum): 1000 liters
- **Shipment:** transfer filters to culture tubes; wrap sorbent and culture tubes in aluminum foil; ship at 0 degrees Centigrade (C).
- **Sample stability**: protect from heat and UV light.

The NIOSH methodology used for PAH sampling is in Appendix C.

## 4.2 CRYSTALLINE SILICA

We have determined that silica is contaminant that best represents the potential exposure scenario for total dust or respirable dust particulates, not otherwise classified. The NIOSH methodology used for silica sampling is in Appendix C. Air sampling for crystalline silica will be conducted using:

- **NIOSH Method 7500:** silica is present in excavated or backfilled soil band can be liberated from degrading dolomitic limestone placed on haul roads.
- **Sampler:** cyclone + filter (10-mm nylon cyclone, Higgins-Dewell cyclone, or aluminum cyclone + 5-µm polyvinyl chloride membrane)
- **Flow rate:** nylon cyclone: 1.7 L/min; HD cyclone: 2.2 L/min; aluminum cyclone: 2.5 L/min
    - Volume (minimum): 400 liters
    - Volume (maximum): 1000 liters
- **Shipment:** routine
- **Sample stability:** stable

## 4.3 QUALITY ASSURANCE/QUALITY CONTROL

The site safety and health officer (SSHO) or the industrial hygiene (IH) technician will conduct quality assurance/quality control (QA/QC) by ensuring that proper sampling, collection, and chemical analysis procedures were followed. QA/QC procedures assess the precision, accuracy, representativeness, and comparability of monitoring results.

## 4.4 SAMPLE NUMBERING AND MANAGEMENT

The SSHO or the IH technician will record all air samples on chain-of-custody (COC) forms. Each COC form will include:

- the identification numbers of the samples collected on a given day
- time(s) (on- and off-duration) of collection
- estimated flow rate
- total volume of air collected
- names of the samplers
- any pertinent information regarding the sampling event that may affect sampling results

The COC form will identify the requested chemical analyses, and the record of the release and custody to document sample possession. The SSHO, IH technician, or appropriate designee is responsible for the care and custody of the samples collected until they are delivered to the analytical laboratory or entrusted to a carrier. Transfer of custody to another party is formally documented on the COC form. Sample logs or other records will be signed and dated according to protocol. Containers used to ship samples will be sealed according to United States Environmental Protection Agency (USEPA) requirements to maintain sample integrity, and the shipments will be accompanied by the COC record identifying the contents. The COC may be carbon copy or electronic, providing the necessary information is provided. One copy of the COC record will accompany the shipment, and the SSHO or the IH Technician will retain another copy of each COC. A sample of the COC custody form is in Appendix D.

### 4.4.1 Nomenclature for Ambient Air Samples

Perimeter air samples will be collected at up to four of 15 cardinal positions (north, north-northeast, northeast, east-northeast, east, east-southeast, etc.). Sample nomenclature used to identify air samples will be identified by the facility (Middle River Complex [MRC]), followed by the tax block, followed by the media type (AS for air sample) and its sequential number, followed by the sample category (perimeter, operator, or ground support), the analytical code (PAH-low volume [PAHL] or crystalline silica [CSLO]), followed by the sampling date. For

example, sample MRC-BLDA-S01-PER-PAHL-022615 represents the first air sample collected at Block D along the perimeter, for PAHs-low volume on February 26, 2015.

### 4.4.2 Quality Control (QC) Sample Numbering

The QC code will consist of a three- to four-segment alpha-numeric code that identifies the sample QC type, the date the sample was collected, and the number of this type of QC sample collected on that date. QC types are identified as field duplicate (FD) or method blanks (MB), and the valid matrix code is air sample (AS). The sampling time recorded for duplicate samples on the COC form and labels will be "0000" so that the samples are "blind" to the laboratory. Notes detailing the duplicate sample number, time, date, and type will be recorded on the sample log sheet and in the field log book to document its location. The time on blind samples will always be recorded as "0000" on the COC. Sample log sheets are not provided to the laboratory.

#### 4.4.2.1 Field Duplicates

Field duplicates are collected to check the laboratory accuracy under identical conditions. Duplicate samples will be collected side by side with the original. Duplicate nomenclature will consist of QC type (FB or MB), followed by sample type (AS), followed by analytical code (PAH-L or CSLO), followed by the date, followed by a sequential number. For example, sample FD-AS-PAHL-021615-001 indicates a field duplicate for an air sample analyzed for PAHs and collected on February 16, 2015, with a sequential number (001) assigned by the SSHO and/or the IH technician. Field duplicates will be collected for each analysis at Blocks D, D-Panhandle, F, G, and H at a frequency of one QC sample per ten analytical air samples.

## 4.5 RECORDKEEPING

### 4.5.1 Air Sample Log Sheets

Each sample will be recorded on a sample log sheet or multi-sample log sheet. These forms are used to document daily air sampling activities and other pertinent on-site information that may impact the collection of samples. Examples of log sheets are in Appendix D.

### 4.5.2 Calibration Record

Calibration of the air sampling pumps will be recorded on the "Air Sample/Multi-Air Sample Log Sheet" provided in Appendix D.

## 4.6 DATA MANAGEMENT

Data management procedures used in this dust control and air monitoring/sampling plan are designed to ensure that all sampling and analytical data are collected, stored, and maintained in an efficient and secure environment, so the data quality meets the plan objectives. The efficiency of the data management process will be maximized by using standardized data collection and review procedures.

## 4.7 DATA QUALITY REVIEW

Data quality review will be conducted on all ambient samples to determine whether analytical laboratory data collected are of acceptable quality for use in decision-making. This review begins with data validation, which is a comparison of data quality indicators (DQIs) to prescribed acceptance criteria. The DQIs are measures used to assess the completeness, sensitivity, accuracy, precision, comparability, and representativeness of the sample collection and sample analysis process. The output of this review is a set of alphabetic flags such as "U" – not detected, "J" - estimated, "R" - rejected, or combinations thereof that may apply to individual results based on its validation. These flags infer the general quality of the data.

### 4.7.1 Certified Industrial Hygienist (CIH) Review

All data collected during air sampling efforts will be submitted to a CIH, who will approve or identify discrepancies within sample collection, analytical screening, and/or laboratory reporting. Data analyzed will include air sample log sheets, COC forms, calibration records, calculations of air volumes, and laboratory-provided information.

**Table 4-1**

**Sample Summary Table**
**Lockheed Martin Middle River Complex**
**Page 1 of 3**

| Sample Number | Media | Comments |
|---|---|---|
| **Geotechnical Particulate Sieve Analysis** | | |
| MRC-SS-BL___MMDDYR-0001 | Soils | Geotechnical Soil Particulate analysis |
| MRC-SG-BL___MMDDYR-0001 | Dolomitic limestone | Geotechnical Dolomitic limestone Particulate analysis |
| **Air Sampling Block ___ – Perimeter (Area) Samples** | | |
| MRC-BL_-AS_ _PER-PAHL-mmddyr | PAH analysis | Perimeter air sample collected during potential dust generating activities – up wind |
| MRC-BL_-AS_ _PER-PAHL-mmddyr | PAH analysis | Perimeter air sample collected during potential dust generating activities – down wind |
| MRC-BL_-AS_ _-PER-PAHL-mmddyr | PAH analysis | Perimeter air sample collected during potential dust generating activities – down wind |
| MRC-BL_-AS_ _-PER-CSLO-mmddyr | Crystalline silica – respirable dust | Perimeter air sample collected during potential dust generating activities – down wind |
| MRC-BL_-AS_ _-PER-CSLO-mmddyr | Crystalline silica – respirable dust | Perimeter air sample collected during potential dust generating activities – down wind |
| MRC-BL_-AS_ _-PER-CSLO-mmddyr | Crystalline silica – respirable dust | Perimeter air sample collected during potential dust generating activities – down wind |

**Table 4-1**

**Sample Summary Table**
**Lockheed Martin Middle River Complex**
**Page 2 of 3**

| Sample Number | Media | Comments |
|---|---|---|
| **Air Sampling Block ___ – High Risk Personnel - Personal Air Samples** | | |
| MRC-BL_-AS_ _-PER-CSLO-mmddyr | Crystalline silica – respirable dust | Perimeter air sample collected during potential dust generating activities – down wind |
| MRC-BL_-AS_ _-OPR-PAHL-mmddyr | PAH analysis | High Risk Personnel – Personal Air Samples to quantitate exposure potential within these job classifications considered high risk (for exposure) |
| MRC-BL_-AS_ _-OPR-PAHL-mmddyr | Crystalline silica – respirable dust | High Risk Personnel – Personal Air Samples to quantitate exposure potential within these job classifications considered high risk (for exposure) |
| MRC-BL_-AS_ _-GRD-PAHL-mmddyr | PAH analysis | High Risk Personnel – Personal Air Samples to quantitate exposure potential within these job classifications considered high risk (for exposure) |
| MRC-BL_-AS_ _-GRD-PAHL-mmddyr | Crystalline silica – respirable dust | High Risk Personnel – Personal Air Samples to quantitate exposure potential within these job classifications considered high risk (for exposure) |

**Table 4-1**

**Sample Summary Table**
**Lockheed Martin Middle River Complex**
**Page 3 of 3**

| Quality Control Samples | | | |
|---|---|---|---|
| **Sample Number** | **Analysis** | **Frequency** | **Comments** |
| FD-ASPAHL-mmddyr__ __ | PAH analysis | Duplicate – 1 for every 10 air samples collected | Duplicate air sample collected within the immediate proximity and flow rate to establish duplicate conditions |
| FD-ASCSLO-mmddyr__ __ | Crystalline silica – respirable dust analysis | Duplicate – 1 for every 10 air samples collected | Duplicate air sample collected within the immediate proximity and flow rate to establish duplicate conditions |
| MB-ASPAHL-mmddyr__ __ | Method blank for PAH analysis | Method blank | The media employed in these samples will travel and be exposed to all of the same conditions that the samples are exposed with the exception, there will be no active air drawn across or through this media. The sample media will be opened then sealed up, then subjected to the same shipping constraints as the sample media. |
| MB-ASCSLO-mmddyr__ __ | Method blank for crystalline silica, respirable dust analysis | Method blank | The media employed in these samples will travel and be exposed to all of the same conditions that the air samples are exposed to with the exception, there will be no active air drawn across or through this media. The sample media will be opened then sealed up, then subjected to the same shipping constraints as the sample media. |

# Section 5
# References


1. Grading and Erosion and Sediment Control Plan for Soil Remedial Action, Lockheed Martin Middle River Complex, Middle River, Maryland, Tetra Tech, March, 2015.

2. LaFarge Material Safety Data Sheet Limestone & Dolomite, Revised 03/01/2014.

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# APPENDIX A—EXCAVATION AREAS IN TAX BLOCKS D; D-PANHANDLE; F; G; AND H

# GRADING AND
# EROSION AND SEDIMENT CONTROL PLAN FOR
# SOIL REMEDIAL ACTION
# LOCKHEED MARTIN MIDDLE RIVER COMPLEX
# MIDDLE RIVER, MARYLAND

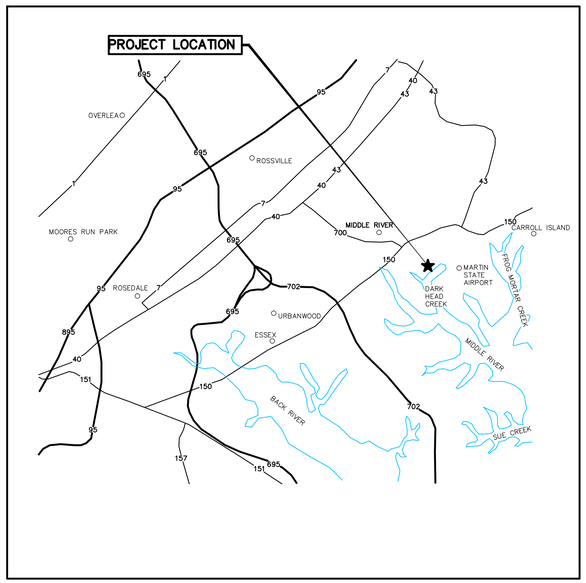


PROJECT VICINITY MAP
NOT TO SCALE

## DRAWING INDEX


| SHEET NO. | SHEET TITLE |
|---|---|
| T-1 | TITLE SHEET |
| T-2 | GENERAL NOTES, GRADING NOTES, AND LEGEND |
| C-1 | FACILITY WIDE EXISTING CONDITIONS |
| C-2 | BLOCK D – EXISTING CONDITIONS |
| C-3 | BLOCK D PANHANDLE – EXISTING CONDITIONS |
| C-4 | BLOCK F – EXISTING CONDITIONS |
| C-5 | BLOCK G – EXISTING CONDITIONS (SHEET 1 OF 2) |
| C-6 | BLOCK G – EXISTING CONDITIONS (SHEET 2 OF 2) |
| C-7 | BLOCK H – EXISTING CONDITIONS |
| C-8 | EROSION AND SEDIMENT CONTROL NOTES |
| C-9 | BLOCK D – GRADING AND EROSION & SEDIMENT CONTROL PLAN |
| C-10 | BLOCK D PANHANDLE – GRADING AND EROSION & SEDIMENT CONTROL PLAN |
| C-11 | BLOCK F – GRADING AND EROSION & SEDIMENT CONTROL PLAN |
| C-12 | BLOCK G – GRADING AND EROSION & SEDIMENT CONTROL PLAN (SHEET 1 OF 2) |
| C-13 | BLOCK G – GRADING AND EROSION & SEDIMENT CONTROL PLAN (SHEET 2 OF 2) |
| C-14 | BLOCK H – GRADING AND EROSION & SEDIMENT CONTROL PLAN |
| C-15 | EROSION AND SEDIMENT CONTROL DETAILS (SHEET 1 OF 3) |
| C-16 | EROSION AND SEDIMENT CONTROL DETAILS (SHEET 2 OF 3) |
| C-17 | EROSION AND SEDIMENT CONTROL DETAILS (SHEET 3 OF 3) |
| C-18 | SEEDING SPECIFICATIONS |


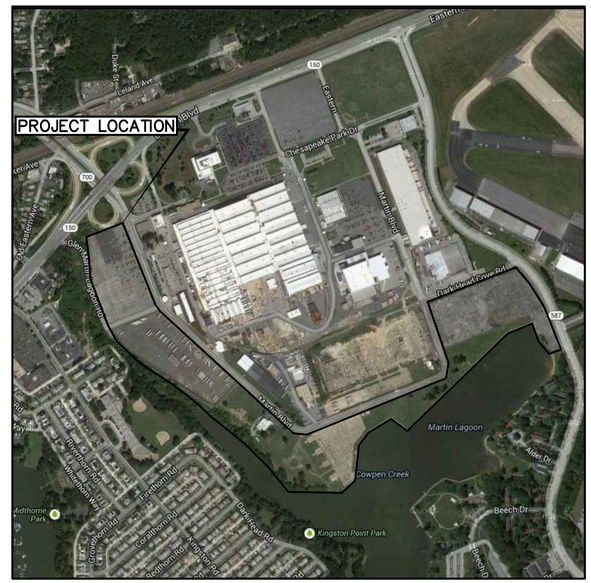


MIDDLE RIVER, MARYLAND, GOOGLE EARTH 2013

PROJECT LOCATION MAP
SCALE: 1"=1000'

DATUM:
HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL= NAVD 88

0 1000 2000
SCALE IN FEET

BALTIMORE COUNTY SOIL CONSERVATION DISTRICT

APPROVED FOR SEDIMENT CONTROL _____ DATE

_____ DISTRICT OFFICIAL _____ PLAN NO.

TECHNICAL REVIEW FOR THE DISTRICT BY:

_____

**IF A GRADING PERMIT HAS NOT BEEN OBTAINED WITHIN TWO YEARS OF THIS APPROVAL, THIS PLAN SHALL BE RE-SUBMITTED TO THE DISTRICT.**


TETRA TECH
www.tetratech.com
20251 CENTURY BLVD
GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000


STATE OF MARYLAND
SCOTT I. SABIN
No. 29015
PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX
SOIL REMEDIAL ACTION
TITLE SHEET

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 1 OF 20 |

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T-1

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## GENERAL NOTES:

1. GRID COORDINATES REFERENCE MARYLAND STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN DATUM OF 1983 (MDSPCS NAD83). ELEVATIONS REFERENCE NORTH AMERICAN VERTICAL DATUM, 1988 (NAVD88).
2. UNLESS OTHERWISE NOTED, GROUND SURFACE TOPOGRAPHY OBTAINED FROM DRAWING NO. 22042C01 TITLED "SITE PLAN, CHESAPEAKE PARK, LMC PROPERTIES, INC." (REV C DATED 10/02/02) PREPARED BY TAI CONSULTING ENGINEERS, OWINGS MILLS, MARYLAND AND NOTED THEREON AS BEING OBTAINED FROM FIELD RUN SURVEY CONDUCTED BY DMW, INC. DURING JUNE 1999 FLOATED TO STATE GRID. GROUND SURFACE TOPOGRAPHY BETWEEN COW PEN CREEK AND CHESAPEAKE PARK PLAZA AND DELINEATED WETLAND LIMITS SURVEYED BY TETRA TECH, NEWARK, DELAWARE DURING NOVEMBER AND DECEMBER 2009.
3. ADDITIONAL HORIZONTAL INFORMATION OBTAINED FROM TAI DRAWING NOTED ABOVE AND NOTED THEREON AS BEING OBTAINED FROM BALTIMORE COUNTY OFFICE OF INFORMATION TECHNOLOGY GIS SERVICES UNIT WITH MARCH 1995 DATE OF CAPTURE.
4. EXISTING UTILITIES OBTAINED FROM TAI DRAWING NOTED ABOVE AND NOTED THEREON AS BEING OBTAINED FROM DMW FIELD RUN SURVEY AND LOCKHEED MARTIN PROPERTIES, INC. DRAWING TITLED "EXHIBIT #6 EXISTING UTILITIES PLAN."
5. BOUNDARY LINES OBTAINED FROM TAI DRAWING NOTED ABOVE AND NOTED THEREON AS BEING OBTAINED FROM RECORDED PLAT E.H.K., JR. 51 FOLIO 43 "1ST AMENDED CHESAPEAKE PARK RE-SUBDIVISION" PREPARED BY MARYLAND SURVEYING AND ENGINEERING CO., INC. 4/24/84 WITH BOUNDARY ORIENTED TO BALTIMORE COUNTY METROPOLITAN DISTRICT GRID, BUT SHOULD NOT BE CONSIDERED A BOUNDARY SURVEY.
6. 1% ANNUAL CHANCE FLOOD (100-YEAR FLOOD) ELEVATION IS 8.5-FT NAVD88 BASED ON "FLOOD INSURANCE STUDY, BALTIMORE COUNTY, MARYLAND (UNINCORPORATED AREAS)" FLOOD INSURANCE STUDY NUMBER 240010V000C [FEMA, SEPTEMBER 2009 (PRELIMINARY)].
7. CHESAPEAKE BAY CRITICAL AREA BOUNDARY OBTAINED FROM MARYLAND DEPARTMENT OF NATURAL RESOURCES WEBSITE. AREAS WITHIN THE CHESAPEAKE BAY CRITICAL AREA ARE INTENSELY DEVELOPED AREA (IDA) CATEGORY.
8. TWO FOOT CONTOUR INTERVAL FOR GROUND SURFACE TOPOGRAPHY UNLESS OTHERWISE NOTED.
9. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. CHECK GRAPHIC SCALE BEFORE SCALING DRAWING.
10. UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. VERIFICATION OF UTILITY LOCATIONS MUST BE MADE PRIOR TO WORK ON-SITE. NOTIFY MISS UTILITY OF MARYLAND (1-800-257-7777; www.missutility.net) AT LEAST 48 HOURS, BUT NOT MORE THAN 10 WORKING DAYS, PRIOR TO THE DAY EXCAVATION WILL COMMENCE. MISS UTILITY OF MARYLAND IS NOT EXPECTED TO HAVE COMPLETE RECORD OF UTILITIES FOR THE MIDDLE RIVER COMPLEX. IN ADDITION TO NOTIFYING MISS UTILITY OF MARYLAND, VERIFY UTILITY LOCATIONS PRIOR TO BEGINNING ANY WORK USING A MINIMUM OF TWO PASSIVE METHODS (E.G., ELECTROMAGNETIC INDUCTION, GROUND PENETRATING RADAR, MAGNETIC LOCATORS, ACOUSTIC SURVEY, ETC.).
11. INSPECT INDIVIDUAL AREAS PRIOR TO CONSTRUCTION TO VERIFY EXISTING SITE CONDITIONS.
12. PROVIDE HORIZONTAL AND VERTICAL CONTROL FOR CONSTRUCTION.
13. STAKE THE LOCATION OF REMOVAL AND DISTURBED AREAS PRIOR TO ACTUAL WORK.
14. THE SOLE LOCATION FOR INGRESS AND EGRESS TO INDIVIDUAL AREAS SHALL BE VIA CONSTRUCTION ENTRANCE(S) WHICH SHALL BE CONSTRUCTED ACCORDING TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN. PROVIDE INGRESS/EGRESS CONTROL INTO INDIVIDUAL AREAS AS PART OF AREA-SPECIFIC MOBILIZATION ACTIVITIES.
15. PROVIDE PROTECTION FOR EXISTING UTILITIES TO REMAIN IN SERVICE.
16. LIMIT WORK TO INDIVIDUAL AREAS WITHIN THE APPROVED LIMITS OF DISTURBANCE.
17. MAINTAIN WORK AREAS FREE FROM DUST AND ODORS.
18. PROPERTY LINE INFORMATION TAKEN FROM RECORDED PLAT E.H.K., JR 51 FOLIO 43 "1ST AMENDED CHESAPEAKE PARK RE-SUBDIVISION" PREPARED BY MARYLAND SURVEYING AND ENGINEERING CO. INC. 4/24/84. PROPERTY LINES HAVE BEEN ORIENTED TO THE BALTIMORE COUNTY METROPOLITAN DISTRICT GRID. SHOULD NOT BE CONSIDERED A BOUNDARY SURVEY.
19. IN ACCORDANCE WITH THE CODE OF MARYLAND REGULATIONS 26.17.04.11 (5) ALL IN-STREAM CONSTRUCTION IN DARK HEAD COVE WHICH MAY ADVERSELY AFFECT ANADROMOUS FISH SPAWNING AREAS, SHALL BE PROHIBITED FROM MARCH 15 THROUGH JUNE 15.

## TIDAL DATUMS AT BALTIMORE, FORT McHENRY, PATAPSCO RIVER, MARYLAND

TIDAL EPOCH: 1983-2001

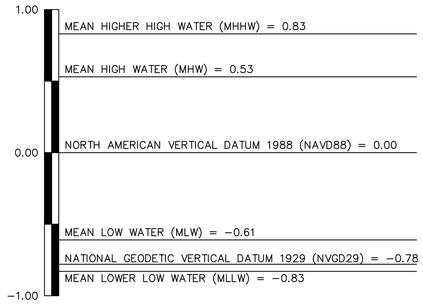


ELEVATIONS OF TIDAL DATUMS REFERRED TO IN FEET.
ELEVATIONS OF TIDAL DATUMS COMPUTED USING
BENCHMARK 857 4680 TIDAL 32.

## TRAFFIC AND STOCKPILE NOTES:

ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT VIA A STABILIZED CONSTRUCTION ENTRANCE. CONTRACTOR SHALL REMOVE OR IMPORT DIRT AS REQUIRED. ANY STOCKPILE AREA CREATED FOR THIS MATERIAL SHALL BE MANAGED BY A SEDIMENT CONTROL DEVICE AT ALL TIMES.
TEMPORARY STOCKPILES SHALL BE:

1. LOCATED WITHIN THE LIMIT OF DISTURBANCE (LOD).
2. DRAIN TO A FUNCTIONING SEDIMENT CONTROL DEVICE.
3. POSITIONED TO NOT IMPEDE UPON, OR IMPAIR THE FUNCTION OF SAID DEVICE.
4. POSITIONED TO NOT ALTER DRAINAGE DIVIDES.

## GENERAL GRADING NOTES AND CERTIFICATIONS:

1. THE PROPOSED GRADING SHOWN ON THIS PLAN MEETS THE REQUIREMENTS SET FORTH BY BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND COMPLIES WITH ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE. HOWEVER, DUE TO BUILDING TYPES AND LAYOUT, SOME FIELD ADJUSTMENTS MAY BE REQUIRED. ALL CHANGES MUST COMPLY WITH THE ABOVE MENTIONED REQUIREMENTS.
2. ALL SWALES HAVE BEEN DESIGNED BY THE ENGINEER TO CONVEY RUNOFF ACCORDING TO BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS DESIGN STANDARDS.
3. THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST BUFFER EASEMENT OR OTHER FOREST RETENTION AREAS, EXCEPT AS PERMITTED BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY.
4. STORMWATER MANAGEMENT HAS BEEN ADDRESSED BY A STORMWATER MANAGEMENT VARIANCE.

## SITE DATA:

1. DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
   VERTICAL=NAVD 88
2. BENCHMARK: NORTHING: 604746.50 EASTING: 1473183.47 ELEVATION: 15.73 CONCRETE MONUMENT

## OWNER'S / DEVELOPER'S CERTIFICATION - GRADING:

I/WE HEREBY CERTIFY THAT ALL GRADING ON THIS SITE WILL BE DONE IN ACCORDANCE WITH THE CURRENT GRADING REQUIREMENTS AS SET FORTH BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND RESOURCE MANAGEMENT AND WITH THE REQUIREMENTS SPECIFIED IN ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE.

OWNER / DEVELOPER SIGNATURE TITLE DATE

PRINTED NAME

## OWNER'S / DEVELOPER'S CERTIFICATION - AIR QUALITY:

I ACKNOWLEDGE THAT I AM RESPONSIBLE UNDER THE CODE OF MARYLAND REGULATION (26.11.06.03) TO PREVENT PARTICULATE MATTER FROM BECOMING AIRBORNE DUE TO GRADING, LAND CLEARING, EXCAVATION, CONSTRUCTION OR OTHER RELATED ACTIVITIES. I HAVE RECEIVED A COPY OF "GUIDELINES TO THE AIR POLLUTION REGULATIONS FOR CONTROLLING EXCESS ABP (DUST) ON ACTIVITY SITES" WHICH INCLUDES A COPY OF COMAR 26.11.06.03. I WILL CONTACT THE ENVIRONMENTAL HEALTH SECTION AT 887-4065 AT LEAST THREE DAYS PRIOR TO BEGINNING WORK.

OWNER / DEVELOPER SIGNATURE TITLE DATE

PRINTED NAME

## GENERAL LEGEND:

- PROPOSED EXCAVATION TO 2-FOOT DEPTH
- PROPOSED EXCAVATION TO 3-FOOT DEPTH
- PROPOSED EXCAVATION TO 4-FOOT DEPTH
- PROPOSED EXCAVATION TO 6-FOOT DEPTH
- PROPOSED EXCAVATION TO 7-FOOT DEPTH
- UNDERGROUND STORAGE TANK REMOVAL AREA
- DELINEATED WETLAND AREA
- EXISTING BUILDINGS
- PROPOSED BLOCK D PANHANDLE STORM DRAIN REPAIR EXCAVATION TO 5-FOOT DEPTH

## GENERAL LEGEND:

- EXISTING PROPERTY LINE/BLOCK BOUNDARY
- EXISTING EDGE OF PAVEMENT
- 10 — EXISTING ELEVATION CONTOUR (10 FT. INTERVAL)
- 8 — EXISTING ELEVATION CONTOUR (2 FT. INTERVAL)
- EXISTING EDGE OF WATER
- X X X — EXISTING FENCELINE
- MH — EXISTING MANHOLE
- E E E — EXISTING ELECTRIC LINE
- SAN SAN — EXISTING SANITARY SEWER LINE
- GAS GAS — EXISTING GAS LINE
- W W W — EXISTING WATER LINE
- FW — EXISTING FIRE PROTECTION WATER LINE
- OIL — EXISTING OIL LINE
- EXISTING STORM SEWER LINE
- LIMITS OF EXCAVATION LINE
- RAILROAD
- TREE LINE
- 100 YEAR FLOODPLAIN (SEE GENERAL NOTE 6)
- CHESAPEAKE BAY CRITICAL AREA BUFFER
- LIMITS OF DISTURBANCE
- GROUNDWATER INJECTION SYSTEM
- MW — MONITORING WELL
- INLET PROTECTION
- CONCRETE CURBS
- TAB TAB — TEMPORARY ASPHALT BERM
- SFPA SFPA — SILT FENCE ON PAVED SURFACE
- SF SF SF SF — SILT FENCE
- SSF SSF — SUPER SILT FENCE
- TC TC — TURBIDITY CURTAIN
- PST — PORTABLE SEDIMENT TANK
- PERIMETER DIKE/SWALE
- STABILIZED CONSTRUCTION ENTRANCE (WITH MOUNTABLE BERM)
- IMPERVIOUS AREAS
- MODIFIED ROCK OUTLET PROTECTION III
- SOIL STOCKPILE/MATERIAL STAGING AREA

DETAIL NUMBER
FIRST SHEET CALLED OUT ON — FIRST SHEET SHOWN ON

**DETAIL INDICATOR**

BALTIMORE COUNTY SOIL CONSERVATION DISTRICT
**APPROVED FOR SEDIMENT CONTROL**

DATE


TETRA TECH
www.tetratech.com
20251 CENTURY BLVD
GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000


STATE OF MARYLAND — SCOTT A. SAMUEL — No. 29015 — PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX
SOIL REMEDIAL ACTION
GENERAL NOTES, GRADING NOTES, AND LEGEND

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 2 OF 20 |

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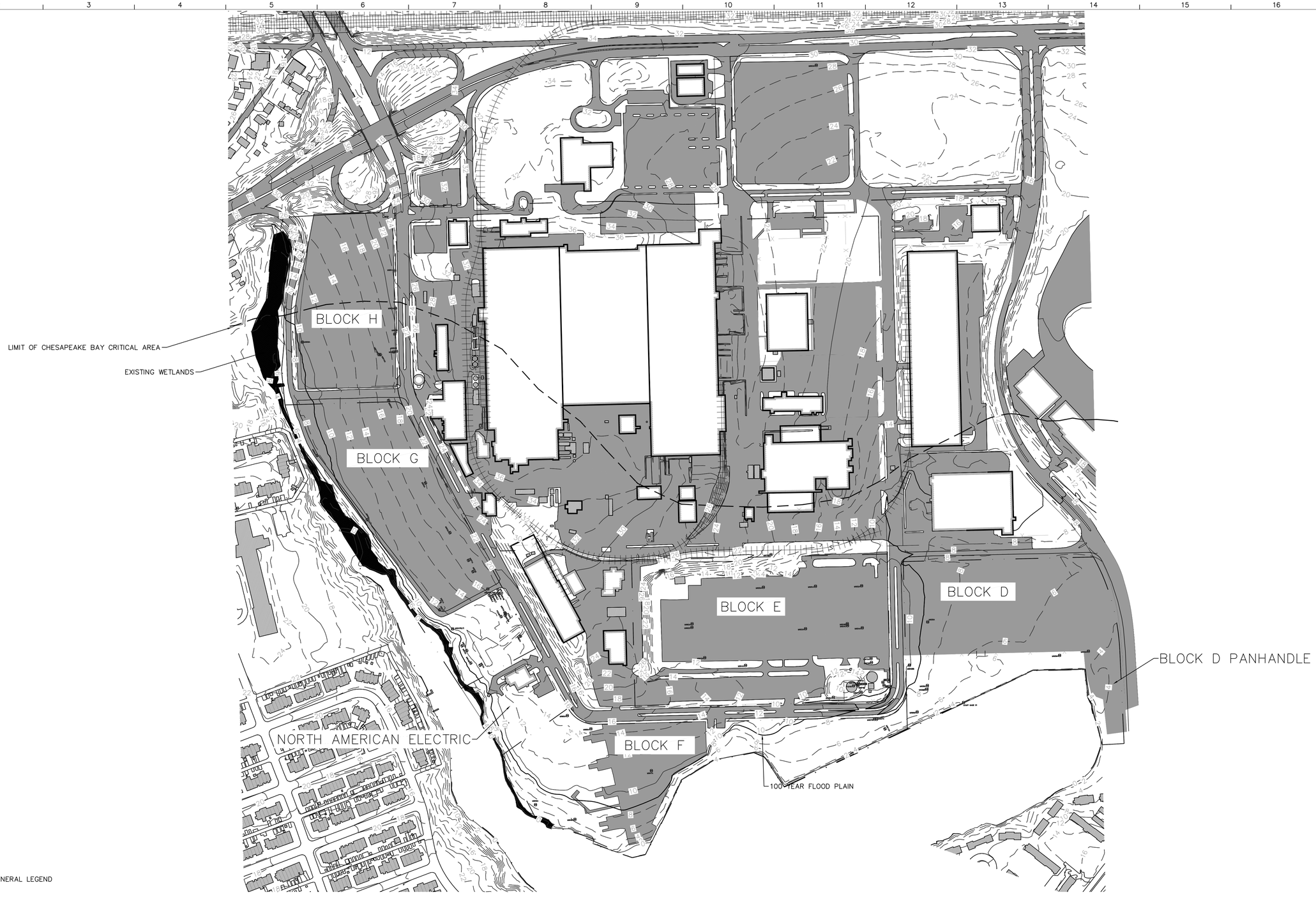


LEGEND:
REFER TO DRAWING T-2 FOR GENERAL LEGEND

NOTES:
1. THIS DRAWING PRESENTS FACILITY WIDE EXISTING CONDITIONS. REFER TO DRAWINGS C-2 THROUGH C-7 FOR EXISTING CONDITIONS (INCLUDING UTILITIES AND CONTOUR LABELS) FOR INDIVIDUAL REMEDIAL ACTION AREAS. REFER TO DRAWINGS C-9 THROUGH C-14 FOR GRADING AND EROSION AND SEDIMENT CONTROL PLANS FOR INDIVIDUAL REMEDIAL ACTION AREAS.

DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL=NAVD 88

0 200 400
SCALE IN FEET

TETRA TECH
www.tetratech.com
20251 CENTURY BLVD
GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000

STATE OF MARYLAND
SCOTT A. NESSEN
No. 20015
PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

# LOCKHEED MARTIN
# MIDDLE RIVER COMPLEX

## SOIL REMEDIAL ACTION
## FACILITY WIDE EXISITING CONDITIONS

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 3 OF 20 |

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C-1

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DARK HEAD COVE ROAD

BLOCK BOUNDARY

N

24" Ø RCP STORM SEWER

24" Ø RCP STORM SEWER

24" Ø RCP STORM SEWER

30" Ø RCP STORM SEWER

5' X 5', CONC. BOX CULVERT STORM SEWER

PARKING LOT NO. 6

MATCHLINE (SEE SHEET C-3)

24" CMP

32" CMP

MH

MH

MW35A

MW105B

MW73A

MW73B

MW38A

MW38B

'96D

STAFF GAGE 01

OUTFALL 9

OUTFALL 7

MW40A

MW39A

8OF001 (MSA)

LEGEND:
REFER TO DRAWING T-2 FOR GENERAL LEGEND

NOTES:
1. REFER TO DRAWING C-8 FOR EROSION AND SEDIMENT CONTROL NOTES AND SEED MIXTURES
2. REFER TO DRAWING C-9 FOR THE BLOCK D EROSION AND SEDIMENT CONTROL PLAN
3. THE LIMITS OF THE 100-YEAR FLOOD PLAIN AND CHESAPEAKE BAY CRITICAL AREA ARE INDICTED ON DRAWING C-1. THE BLOCK D REMEDIAL ACTION AREA IS LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA. THE BLOCK D REMEDIAL ACTION IS MOSTLY LOCATED WITHIN THE 100-YEAR FLOOD PLAIN.

DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL=NAVD 88

0 40 80
SCALE IN FEET

TETRA TECH
www.tetratech.com
20251 CENTURY BLVD
GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000

STATE OF MARYLAND
SCOTT A. RESSLER
No. 29015
PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX

SOIL REMEDIAL ACTION
BLOCK D – EXISTING CONDITION

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 4 OF 20 |

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C-2

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LEGEND:
REFER TO DRAWING T-2 FOR GENERAL LEGEND

NOTES:
1. REFER TO DRAWING T-2 FOR GENERAL NOTES
2. REFER TO DRAWING C-8 FOR EROSION AND SEDIMENT CONTROL NOTES.
3. REFER TO DRAWING C-10 FOR BLOCK D PANHANDLE EROSION AND SEDIMENT CONTROL PLAN.
4. THE LIMITS OF THE 100-YEAR FLOOD PLAIN AND CHESAPEAKE BAY CRITICAL AREA ARE INDICATED ON DRAWING C-1. THE BLOCK D PANHANDLE REMEDIAL ACTION AREA IS LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA. THE BLOCK D PANHANDLE REMEDIAL ACTION AREA IS LOCATED WITHIN THE 100-YEAR FLOOD PLAIN.

DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL=NAVD 88

0 30 60
SCALE IN FEET


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GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000


STATE OF MARYLAND SCOTT A. NESBIT No. 28015 PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX
SOIL REMEDIAL ACTION
BLOCK D PANHANDLE – EXISTING CONDITION

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| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 5 OF 20 |

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LEGEND:
REFER TO DRAWING T-2 FOR GENERAL LEGEND

NOTES:
1. REFER TO DRAWING C-8 FOR EROSION AND SEDIMENT CONTROL NOTES.
2. REFER TO DRAWING C-11 FOR THE BLOCK F EROSION AND SEDIMENT CONTROL PLAN.
3. THE LIMIT OF THE 100-YEAR FLOOD PLAIN AND CHESAPEAKE BAY CRITICAL AREA ARE INDICATED ON DRAWING C-1. THE BLOCK F REMEDIAL ACTION AREA IS LOCATED ENTIRELY WITHIN THE CHESAPEAKE BAY CRITICAL AREA. THE BLOCK F REMEDIAL ACTION IS PARTIALLY LOCATED WITHIN THE 100-YEAR FLOOD PLAIN.

DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL=NAVD 88

0 40 80
SCALE IN FEET

TETRA TECH
www.tetratech.com
20251 CENTURY BLVD
GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000

STATE OF MARYLAND
SCOTT A. NESBIT
No. 25015
PROFESSIONAL ENGINEER

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# LOCKHEED MARTIN
# MIDDLE RIVER COMPLEX
## SOIL REMEDIAL ACTION
## BLOCK F – EXISTING CONDITIONS

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| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
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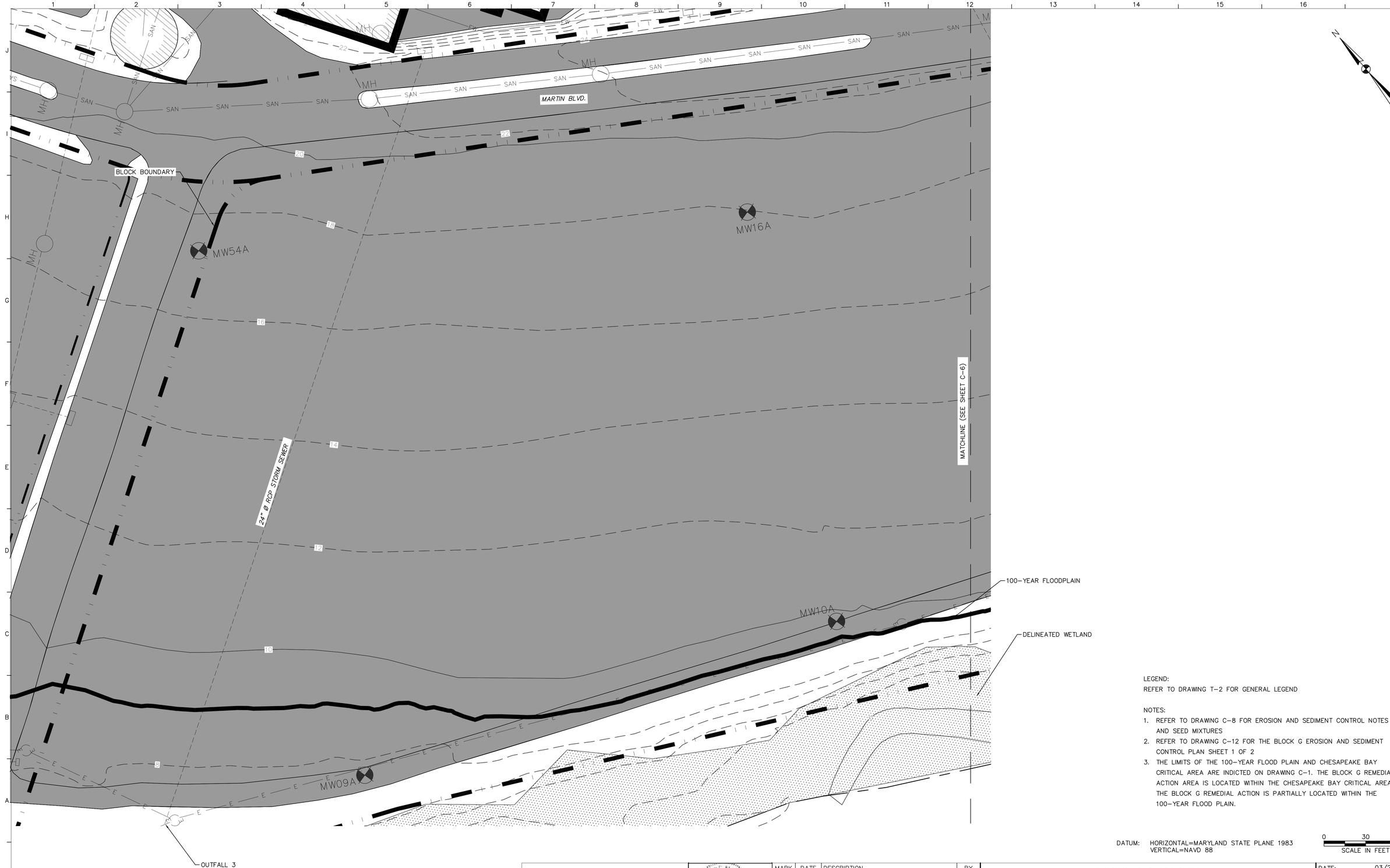


LEGEND:
REFER TO DRAWING T-2 FOR GENERAL LEGEND

NOTES:
1. REFER TO DRAWING C-8 FOR EROSION AND SEDIMENT CONTROL NOTES AND SEED MIXTURES
2. REFER TO DRAWING C-12 FOR THE BLOCK G EROSION AND SEDIMENT CONTROL PLAN SHEET 1 OF 2
3. THE LIMITS OF THE 100-YEAR FLOOD PLAIN AND CHESAPEAKE BAY CRITICAL AREA ARE INDICTED ON DRAWING C-1. THE BLOCK G REMEDIAL ACTION AREA IS LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA. THE BLOCK G REMEDIAL ACTION IS PARTIALLY LOCATED WITHIN THE 100-YEAR FLOOD PLAIN.

DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL=NAVD 88

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# LOCKHEED MARTIN
# MIDDLE RIVER COMPLEX

## SOIL REMEDIAL ACTION
## BLOCK G – EXISTING CONDITIONS
## (SHEET 1 OF 2)

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| DATE: | 03/25/2015 |
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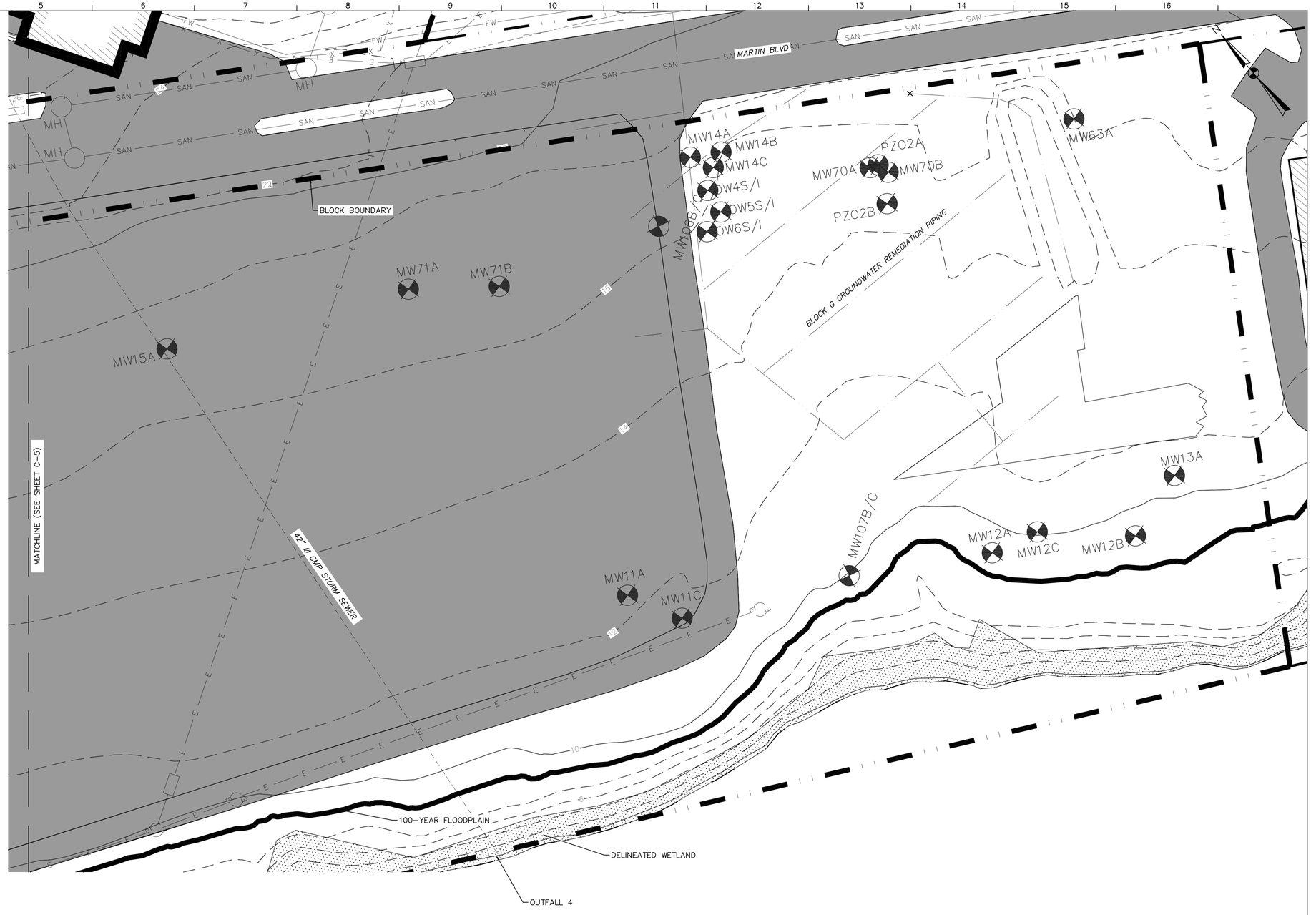


LEGEND:
REFER TO DRAWING T-2 FOR GENERAL LEGEND

NOTES:
1. REFER TO DRAWING C-8 FOR EROSION AND SEDIMENT CONTROL NOTES AND SEED MIXTURES
2. REFER TO DRAWING C-13 FOR THE BLOCK G EROSION AND SEDIMENT CONTROL PLAN SHEET 2 OF 2
3. THE LIMITS OF THE 100-YEAR FLOOD PLAIN AND CHESAPEAKE BAY CRITICAL AREA ARE INDICATED ON DRAWING C-1. THE BLOCK G REMEDIAL ACTION AREA IS LOCATED WITHIN THE CHESAPEAKE BAY CRITICAL AREA. THE BLOCK G REMEDIAL ACTION IS PARTIALLY LOCATED WITHIN THE 100-YEAR FLOOD PLAIN.

DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL=NAVD 88

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LOCKHEED MARTIN
MIDDLE RIVER COMPLEX

SOIL REMEDIAL ACTION
BLOCK G – EXISTING CONDITIONS
(SHEET 2 OF 2)

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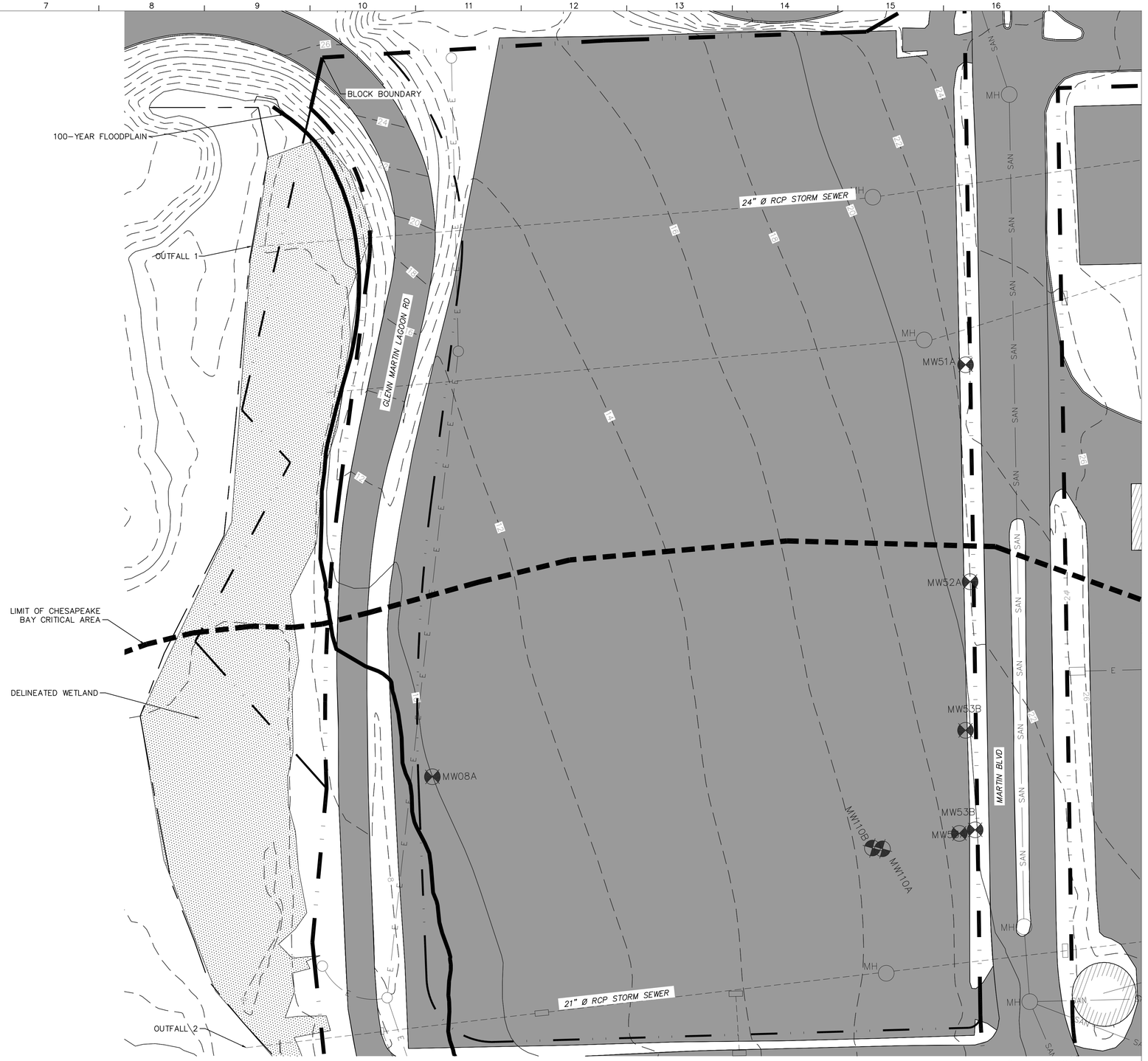


LEGEND:
REFER TO DRAWING T-2 FOR GENERAL LEGEND

NOTES:
1. REFER TO DRAWING C-8 FOR EROSION AND SEDIMENT CONTROL NOTES.
2. REFER TO DRAWING C-14 FOR THE BLOCK H EROSION AND SEDIMENT CONTROL PLAN.
3. THE LIMIT OF THE 100-YEAR FLOOD PLAIN AND CHESAPEAKE BAY CRITICAL AREA ARE INDICATED ON DRAWING C-1. THE BLOCK H REMEDIAL ACTION AREA IS LOCATED OUTSIDE OF THE 100-YEAR FLOOD PLAIN AND PARTIALLY INSIDE OF THE CHESAPEAKE BAY CRITICAL AREA.

DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
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STATE OF MARYLAND
SCOTT A. NASH
No. 29015
PROFESSIONAL ENGINEER

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# LOCKHEED MARTIN
# MIDDLE RIVER COMPLEX

## SOIL REMEDIAL ACTION
## BLOCK H – EXISTING CONDITIONS

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| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
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## BALTIMORE COUNTY SPECIFIC EROSION AND SEDIMENT CONTROL PLAN GENERAL NOTES:

1. REFER TO "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN.
2. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, MINOR FIELD ADJUSTMENTS CAN AND WILL BE MADE TO INSURE THE CONTROL OF ANY SEDIMENT. CHANGES IN SEDIMENT CONTROL PRACTICES, REQUIRE PRIOR APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT.
3. AT THE END OF EACH WORKING DAY, ALL SEDIMENT CONTROL PRACTICES WILL BE INSPECTED AND LEFT IN OPERATIONAL CONDITION.
4. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A.) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1), AND B.) SEVEN (7) DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
5. ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES RE-SUBMISSION TO BALTIMORE COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
6. DUST CONTROL WILL BE PROVIDED FOR ALL DISTURBED AREAS. REFER TO "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PG. H-30-1, FOR ACCEPTABLE METHODS AND SPECIFICATIONS FOR DUST CONTROL.
7. ANY VARIATIONS FROM THE SEQUENCE OF OPERATIONS STATED ON THIS PLAN REQUIRES THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT PRIOR TO THE INITIATION OF THE CHANGE.
8. EXCESS CUT OR BORROW MATERIAL SHALL GO TO, OR COME FROM, RESPECTIVELY, A SITE WITH AN OPEN GRADING PERMIT.
9. THE FOLLOWING ITEM MAY BE USED AS APPLICABLE: REFER TO MARYLAND'S GUIDELINES TO WATERWAY CONSTRUCTION" BY THE WATER MANAGEMENT ADMINISTRATION OF THE MARYLAND DEPARTMENT OF THE ENVIRONMENT,REVISED NOVEMBER,2000, FOR THE STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED WEREIN FOR WATERWAY CONSTRUCTION.
10. PUMPING SEDIMENT-LADEN WATER INTO WATERS OF THE STATE IS STRICTLY PROHIBITED. ANY PORTABLE DEWATERING DEVICE MUST BE LOCATED WITHIN THE LIMIT OF DISTURBANCE.

## ADDITIONAL STATE OF MARYLAND EROSION AND SEDIMENT CONTROL PLAN GENERAL NOTES:

1. THE CONTRACTOR SHALL NOTIFY BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS, AND INSPECTIONS – SEDIMENT CONTROL (PAI-SC) AT (410) 887-3226 AT LEAST 48 HOURS BEFORE COMMENCING ANY LAND DISTURBANCE ACTIVITY TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN PROJECT REPRESENTATIVES AND THE PAI-SC INSPECTOR.
2. THE CONTRACTOR MUST NOTIFY PAI-SC IN WRITING AND BY TELEPHONE AT THE FOLLOWING POINTS:
   a. THE REQUIRED PRE-CONSTRUCTION MEETING
   b. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES.
   c. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S).
   d. PRIOR TO REMOVAL OF ALL SEDIMENT CONTROL DEVICES.
   e. PRIOR TO FINAL ACCEPTANCE.
3. THE CONTRACTOR SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE AND SHALL HAVE THEM INSPECTED AND APPROVED BY THE PAI-SC INSPECTOR PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES.
4. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC ROADS. ALL MATERIALS DEPOSITED ONTO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY.
5. THE CONTRACTOR SHALL APPLY SOD OR SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS AND STOCKPILES WITHIN SEVEN (7) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED IN THE AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. (REQUIREMENT MAY BE REDUCED TO THREE (3) DAYS FOR SENSITIVE AREAS.)
6. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE CONTRACTOR SHALL STABILIZE AND HAVE ESTABLISHED PERMANENT STABILIZATION FOR ALL CONTRIBUTORY DISTURBED AREAS USING SOD OR AN APPROVED PERMANENT SEED MIXTURE WITH REQUIRED SOIL AMENDMENTS AND AN APPROVED ANCHORED MULCH. WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHERE THE SLOPE DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED AS SOON AS POSSIBLE, BUT NO LATER THAN SEVEN (7) CALENDAR DAYS AFTER ESTABLISHMENT. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, TEMPORARY SEED AND ANCHORED STRAW MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE APPLIED BY MARCH 15 OR EARLIER IF GROUND AND WEATHER CONDITIONS ALLOW.
7. THE SITES APPROVAL LETTER, APPROVED EROSION AND SEDIMENT CONTROL PLANS, DAILY LOG BOOKS, AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF WMA AND THE AGENCY RESPONSIBLE FOR PROJECT.
8. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOW FROM TRAVERSING THE SLOPES OR BY INSTALLING PROTECTIVE DEVICES TO LOWER THE WATER DOWN SLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF A CUT OR FILL SLOPE UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADES DONE TO PROMOTE SHEET FLOW DRAINAGE. PROTECTIVE METHODS MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
9. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING, RIP-RAP, OR BY OTHER APPROVED STABILIZATION MEASURES.
10. TEMPORARY SEDIMENT CONTROL DEVICES MAY BE REMOVED, WITH PERMISSION OF THE PAI-SC INSPECTOR, WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATIONS WITHIN THIS TIME PERIOD AS WELL.
11. NO PERMANENT CUT OR FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS. A SLOPE GRADIENT OF UP TO 2:1 WILL BE PERMITTED IN NON-MAINTENANCE AREAS PROVIDED THAT THOSE AREAS ARE INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN WITH A LOW-MAINTENANCE GROUND COVER SPECIFIED FOR PERMANENT STABILIZATION. SLOPE GRADIENT STEEPER THAN 2:1 WILL NOT BE PERMITTED WITH VEGETATIVE STABILIZATION.
12. FOR FINISHED GRADING, THE CONTRACTOR SHALL PROVIDE ADEQUATE GRADIENTS TO PREVENT WATER FROM PONDING FOR MORE THAN TWENTY FOUR (24) HOURS AFTER THE END OF THE RAINFALL EVENT. DRAINAGE COURSES AND SWALE FLOW AREAS MAY TAKE AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL EVENT TO DRAIN. AREAS DESIGNATED TO HAVE STANDING WATER SHALL NOT BE REQUIRED TO MEET THIS REQUIREMENT.
13. SEDIMENT TRAPS AND BASINS ARE NOT PERMITTED WITHIN 20 FEET OF A FOUNDATION THAT EXISTS OR IS UNDER CONSTRUCTION. NO STRUCTURE MAY BE CONSTRUCTED WITHIN 20 FEET OF AN ACTIVE SEDIMENT TRAP OR BASIN.
14. THE PAI-SC INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SAFETY OR SEDIMENT CONTROL MEASURES, IF DEEMED NECESSARY.
15. ALL TRAP DEPTH DIMENSIONS ARE RELATIVE TO OUTLET ELEVATION. ALL TRAPS MUST HAVE A STABLE OUTFALL. ALL TRAPS AND BASINS SHALL HAVE STABLE INFLOW POINTS.
16. VEGETATIVE STABILIZATION SHALL BE PREFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. REFER TO APPROPRIATE SPECIFICATIONS FOR TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SODDING, AND GROUND COVERS.
17. SEDIMENT SHALL BE REMOVED AND THE TRAP OR BASIN RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE QUARTER OF THE TOTAL DEPTH OF THE TRAP OR BASIN. TOTAL DEPTH SHALL BE MEASURED FROM THE TRAP OR BASIN BOTTOM TO THE CREST OF THE OUTFALL.

## ADDITIONAL STATE OF MARYLAND EROSION AND SEDIMENT CONTROL PLAN GENERAL NOTES (CONTINUED):

18. SEDIMENT REMOVED FROM TRAPS (AND BASINS) SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN, WETLAND, OR TREE-SAVE AREA. WHEN PUMPING SEDIMENT LADEN WATER, THE DISCHARGE MUST BE DIRECTED TO A SEDIMENT TRAPPING DEVICE PRIOR TO RELEASE FROM THE SITE. A SUMP PIT MAY BE USED IF SEDIMENT TRAPS THEMSELVES ARE BEING PUMPED OUT.
19. ALL WATER REMOVED FROM EXCAVATED AREAS SHALL BE PASSED THROUGH AN APPROVED DEWATERING PRACTICE OR PUMPED TO A SEDIMENT TRAP OR BASIN PRIOR TO DISCHARGE FROM THE SITE
20. WHERE DEEMED APPROPRIATE BY THE ENGINEER OR INSPECTOR, SEDIMENT BASINS AND TRAPS MAY NEED TO BE SURROUNDED WITH AN APPROVED SAFETY FENCE. THE FENCE MUST CONFORM TO LOCAL ORDINANCES AND REGULATIONS. THE DEVELOPER OR OWNER SHALL CHECK WITH LOCAL BUILDING OFFICIALS ON APPLICABLE SAFETY REQUIREMENTS. WHERE SAFETY FENCE IS DEEMED APPROPRIATE AND LOCAL ORDINANCES DO NOT SPECIFY FENCING SIZES AND TYPES, THE FOLLOWING SHALL BE USED AS A MINIMUM STANDARD: THE SAFETY FENCE MUST BE MADE OF WELDED WIRE AND AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THAN 2 INCHES IN WIDTH AND 4 INCHES IN HEIGHT WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED AND IN GOOD CONDITION AT ALL TIMES.
21. OFF-SITE SPOIL OR BORROW AREAS ON STATE OR FEDERAL PROPERTY MUST HAVE PRIOR APPROVAL BY WMA AND OTHER APPLICABLE STATE, FEDERAL, AND LOCAL AGENCIES; OTHERWISE APPROVAL MUST BE GRANTED BY THE LOCAL AUTHORITIES. ALL WASTE AND BORROW AREAS OFF-SITE MUST BE PROTECTED BY SEDIMENT CONTROL MEASURES AND STABILIZED.
22. SITES WHERE INFILTRATION DEVICES ARE USED FOR THE CONTROL OF STORMWATER, EXTREME CARE MUST BE TAKEN TO PREVENT RUNOFF FROM UNSTABILIZED AREAS FROM ENTERING THE STRUCTURE DURING CONSTRUCTION. SEDIMENT CONTROL DEVICES PLACED IN INFILTRATION AREAS MUST HAVE BOTTOM ELEVATIONS AT LEAST TWO (2) FEET HIGHER THAN THE FINISH GRADE BOTTOM ELEVATION OF THE INFILTRATION PRACTICE. WHEN CONVERTING A SEDIMENT TRAP TO AN INFILTRATION DEVICE, ALL ACCUMULATED SEDIMENT MUST BE REMOVED AND DISPOSED OF PRIOR TO FINAL GRADING OF INFILTRATION DEVICE.
23. WHEN A STORM DRAIN SYSTEM OUTFALL IS DIRECTED TO A SEDIMENT TRAP OR SEDIMENT BASIN AND THE SYSTEM IS TO BE USED FOR TEMPORARILY CONVEYING SEDIMENT LADEN WATER, ALL STORM DRAIN INLETS IN NON-SUMP AREAS SHALL HAVE A TEMPORARY ASPHALT BERMS CONSTRUCTED AT THE TIME OF BASE PAVING TO DIRECT GUTTER FLOW INTO THE INLETS TO AVOID SURCHARGING AND OVERFLOW OF INLETS IN SUMP AREAS.
24. SITE INFORMATION:
   a. TOTAL AREA OF FACILITY = 205.94 ACRES
   b. TOTAL AREA OF PROJECT SITE = 80.29 ACRES
   c. AREA WITHIN LIMITS OF DISTURBANCE = 24.41 ACRES
   d. AREA TO BE ROOFED OR PAVED = 0 ACRES OF NEWLY PAVED AREAS
   e. EXCAVATION AREA = 2.37 ACRES
   f. TOTAL CUT = 6,979 CUBIC YARDS
   g. TOTAL FILL = 6,979 CUBIC YARDS
   h. OFF-SITE WASTE / BORROW AREA LOCATION – KING AND QUEEN LANDFILL, PLYMOUTH VIRGINIA

REFER TO DRAWINGS C-9 THROUGH C-14 FOR LIMITS OF DISTURBANCE, EXCAVATION AREAS, AND CUT/FILL VOLUMES RELATED TO INDIVIDUAL AREAS.

## INLET PROTECTION NOTE:

THE CONTRACTOR IS REQUIRED TO INSTALL INLET PROTECTION ON ALL STORM DRAIN INLETS WITH THE EXCEPTION OF THE FOLLOWING:

1. ANY INLET OUTFALLING DIRECTLY INTO A SEDIMENT TRAPPING DEVICE.*
2. INLETS ON PRIVATE OR PUBLIC PAVED ROADWAYS OPEN TO THE PUBLIC.

ALL INLET PROTECTION WILL BE INSTALLED AS DIRECTED BY THE INSPECTOR IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, PAGE E-23 (OR AS MAY BE AMENDED). THE REMOVAL OF ANY INLET PROTECTION DEVICES WILL REQUIRE APPROVAL FROM THE INSPECTOR.

*STORM DRAINS SHALL BE FLUSHED PRIOR TO TRAPPING DEVICE REMOVAL.

## MAINTENANCE NOTE:

SILT FENCE ON PAVED AREAS, SUPER SILT FENCE, AND INLET PROTECTION SHALL BE INSPECTED AND MAINTAINED EACH DAY AND AFTER EACH STORM EVENT. MAINTENANCE INCLUDES, BUT IS NOT LIMITED TO, REMOVAL OF ALL ACCUMULATED SEDIMENT. GEOTEXTILE FABRIC SHALL BE REPLACED AS NEEDED TO ENSURE PROPER FUNCTION. ANY DAMAGED OR REMOVED SUPER SILT FENCE SHALL BE REPAIRED OR REPLACED BY THE END OF EACH DAY.

## SEQUENCE OF OPERATIONS FOR EACH AREA:

1. NOTIFY BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS, AND INSPECTIONS – SEDIMENT CONTROL (PAI-SC) AT (410) 887-3226 AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
2. NOTIFY MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE), INSPECTION AND COMPLIANCE PROGRAM (410) 537-3510 AT LEAST 7 DAYS PRIOR TO BEGINNING WORK.
3. CONTACT MISS UTILITY TO LOCATE ALL SITE UTILITIES WITHIN LIMITS OF DISTURBANCE. FOLLOWING UTILITY LOCATION, VISIT SITE TO VERIFY SITE CONDITIONS
4. IF APPLICABLE, ORANGE HIGH VISIBILITY FENCE SHALL BE MANUALLY INSTALLED ALONG THE LIMIT OF DISTURBANCE, WHERE THE LIMIT IS WITHIN 50 FEET OF THE FOREST BUFFER/CONSERVATION EASEMENT. THIS SHALL BE COMPLETED BY AND INSPECTED AT, THE PRECONSTRUCTION MEETING.
5. CLEAR AND GRUB FOR SEDIMENT & EROSION CONTROL MEASURES OR DEVICES ONLY.
6. INSTALL SEDIMENT & EROSION CONTROL MEASURES AND DEVICES IN BLOCK G. SEDIMENT AND EROSION CONTROL MEASURES WILL BE INSTALLED ONE BLOCK AT A TIME IN THE ORDER OF SEQUENCE NOTED IN ITEM NUMBER 8 BELOW.
7. NOTIFY PAI-SC, INSPECTION AND COMPLIANCE DIVISION UPON COMPLETION OF SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES INSTALLATION.
8. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, CLEAR REMAINDER OF PROPOSED EXCAVATION AREAS. EXCAVATION ACTIVITIES WILL BEGIN IN BLOCK H AND PROCEED TO BLOCKS G, F, D PANHANDLE, AND D. PRIOR TO BEGINNING NEXT BLOCK, CURRENT BLOCK MUST BE STABILIZED. SILT FENCE ON PAVED AREAS, SUPER SILT FENCE, AND INLET PROTECTION SHALL BE INSPECTED AND MAINTAINED EACH DAY AND AFTER EACH STORM EVENT. MAINTENANCE INCLUDES, BUT IS NOT LIMITED TO, REMOVAL OF ALL ACCUMULATED SEDIMENT. GEOTEXTILE FABRIC SHALL BE REPLACED AS NEEDED TO ENSURE PROPER FUNCTION. ANY DAMAGED OR REMOVED FILTER FENCE SHALL BE REPAIRED OR REPLACED BY THE END OF EACH DAY.
9. EXCAVATE SOIL IDENTIFIED IN THE RESIDUAL RISK ANALYSIS AS NEEDING TO BE REMOVED TO MEET A SITE-WIDE 95% UPPER CONFIDENCE LIMIT OF 1 X 10 -5 CANCER RISK, AND TRANSPORT SOIL OFF-SITE FOR DISPOSAL WITHIN A PERMITTED LANDFILL (LANDFILL TO BE IDENTIFIED PRIOR TO EXCAVATION). PERFORM VERIFICATION SAMPLING TO VERIFY REMOVAL OF SOIL TO MEET A SITE-WIDE 95% UCL BELOW THE PRELIMINARY REMEDIAL GOALS. IF SOIL WITH COC CONCENTRATIONS GREATER THAN THE PRG REMAINS, ADJUST EROSION AND SEDIMENT CONTROLS AS REQUIRED, OBTAIN ADJUSTMENT APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR, THEN CONTINUE EXCAVATION. REPEAT THIS PROCESS UNTIL VERIFICATION SAMPLES INDICATE REMOVAL OF SOIL TO MEET THE SITE-WIDE 95% UCL AND BACKFILL EXCAVATION. UPON COMPLETION PERMANENTLY STABILIZE ALL DISTURBED AREAS.
10. DUE TO CONTAMINANT DISTRIBUTION IN BLOCK H AND THE REQUIREMENT TO MAINTAIN PUBLIC PARKING DURING IMPLEMENTATION OF REMEDIAL ACTIVITIES, THE REMEDIAL ACTIVITIES IN BLOCK H WILL BE PERFORMED IN 2 PHASES. PHASE 1 WILL INCLUDE INSTALLING AND MAINTAINING EROSION CONTROL MEASURES WHILE EXCAVATION IS CONDUCTED WITHIN THE SOUTHERN HALF OF BLOCK H. ONCE THESE EXCAVATIONS ARE BACKFILLED AND STABILIZED, EROSION CONTROL MEASURE WILL BE MOVED TO ESTABLISH EROSION CONTROL FOR PHASE 2. DURING IMPLEMENTATION OF PHASE 2 THE EROSION CONTROL MEASURES WILL BE MAINTAINED. EROSION CONTROL MEASURES WILL BE REMOVED FROM BLOCK H FOLLOWING STABILIZATION.
11. UPON STABILIZATION OF SITE WITH ESTABLISHED VEGETATION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL MEASURES AND STABILIZE THOSE AREAS DISTURBED BY THIS PROCESS.

## STANDARD STABILIZATION NOTE:

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND SEVEN (7) DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

## CONSULTANT'S CERTIFICATION:

I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT AND THE CURRENT STATE OF MARYLAND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

DATE _____ SIGNATURE _____

MD. LICENSE NO. _____ PRINTED NAME _____

## OWNER'S / DEVELOPER'S CERTIFICATION:

I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/WE ALSO CERTIFY THAT THE SITE WILL BE INSPECTED AT THE END OF EACH WORKING DAY, AND THAT ANY NEEDED MAINTENANCE WILL BE COMPLETED SO AS TO INSURE THAT ALL SEDIMENT CONTROL PRACTICES ARE LEFT IN OPERATIONAL CONDITION. I/WE AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATIONS BY THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS.

OWNER / DEVELOPER SIGNATURE _____ DATE _____

PRINTED NAME _____ TITLE _____

BALTIMORE COUNTY SOIL CONSERVATION DISTRICT

**APPROVED FOR SEDIMENT CONTROL**

_____ DATE _____

TETRA TECH
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GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000

STATE OF MARYLAND SCOTT A. NESH NO. 29015 PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX
SOIL REMEDIAL ACTION
EROSION AND SEDIMENT CONTROL NOTES

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | TWS |
| DRAWN BY: | SPC |
| CHECKED BY: | SAN |
| SHEET: | 10 OF 20 |

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| Point Table | | | |
|---|---|---|---|
| Point # | Raw Description | Northing | Easting |
| 1 | D1 | 605643.4548 | 1474446.6578 |
| 2 | D2 | 605647.7145 | 1474474.4289 |
| 3 | D3 | 605611.0120 | 1474488.2221 |
| 4 | D4 | 605603.4768 | 1474442.5575 |
| 5 | D5 | 605805.6712 | 1474620.8770 |
| 6 | D6 | 605829.5058 | 1474637.5612 |
| 7 | D7 | 605830.4793 | 1474664.6645 |
| 8 | D8 | 605774.1437 | 1474650.0589 |
| 9 | D9 | 605772.9664 | 1474633.5043 |
| 10 | D10 | 605943.7603 | 1474698.8152 |
| 11 | D11 | 605968.6820 | 1474679.8931 |
| 12 | D12 | 606000.9313 | 1474726.0725 |
| 13 | D13 | 605964.6195 | 1474751.6517 |
| 14 | D14 | 605950.0287 | 1474725.2642 |
| 15 | D15 | 605949.2290 | 1474715.6669 |
| 16 | D16 | 605846.3091 | 1475078.9600 |
| 17 | D17 | 605846.2680 | 1475106.9600 |
| 18 | D18 | 605818.2681 | 1475106.9189 |
| 19 | D19 | 605818.3091 | 1475078.9189 |
| 20 | D20 | 605671.1652 | 1474881.6919 |
| 21 | D21 | 605636.4024 | 1474912.0003 |
| 22 | D22 | 605587.5506 | 1474861.0774 |
| 23 | D23 | 605634.7897 | 1474833.2040 |
| 24 | D24 | 605590.3211 | 1474804.1472 |
| 25 | D25 | 605521.8349 | 1474778.6712 |
| 26 | D26 | 605522.8742 | 1474664.7885 |
| 27 | D27 | 605590.6217 | 1474713.0453 |
| 28 | D28 | 605456.5107 | 1474646.3149 |
| 29 | D29 | 605467.1882 | 1474573.9990 |
| 30 | D30 | 605547.8034 | 1474605.2206 |
| 31 | D31 | 605599.4211 | 1474475.8952 |

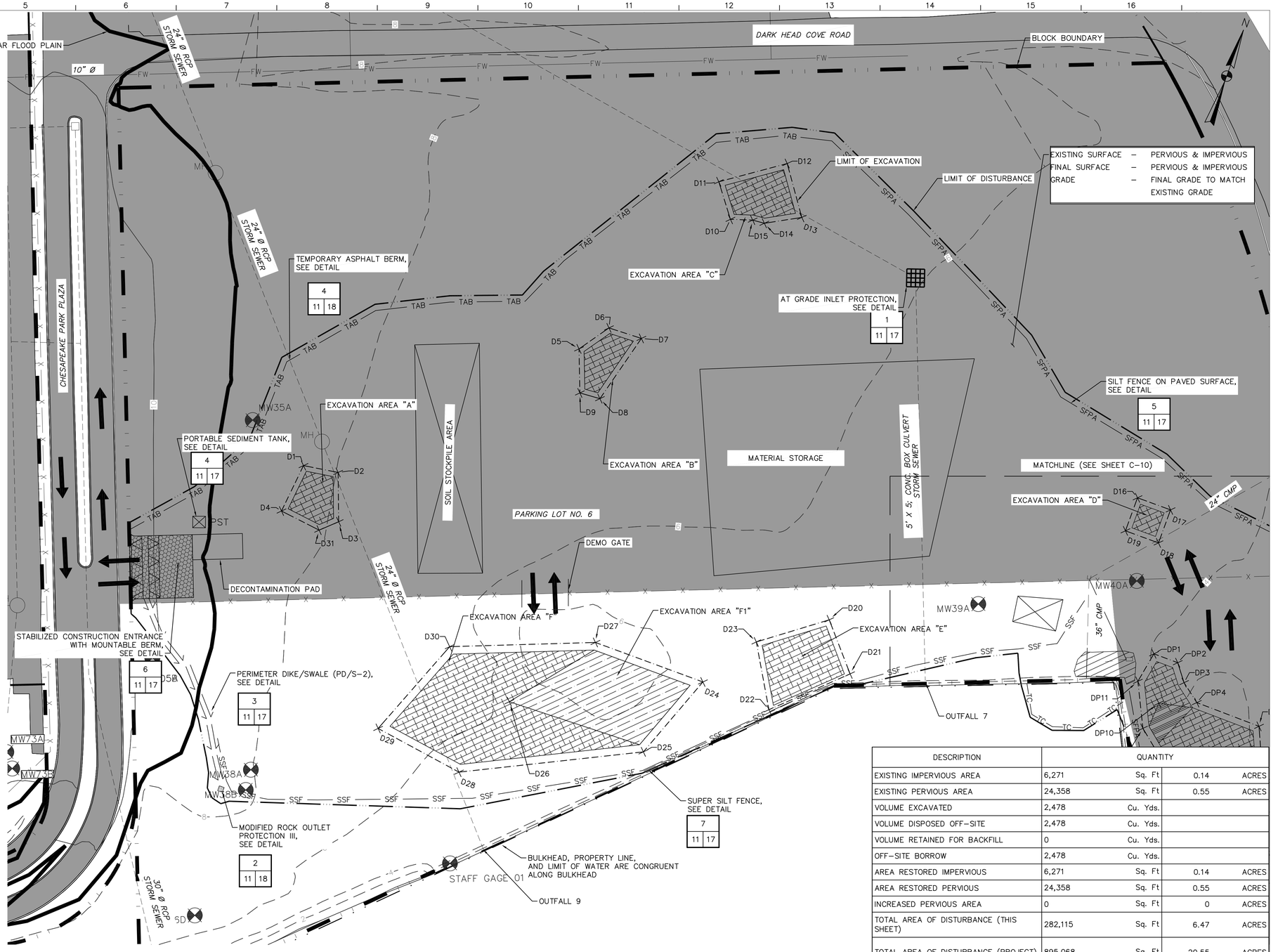


LEGEND:
REFER TO DRAWING T–2 FOR GENERAL LEGEND
➡ CONSTRUCTION TRAFFIC

NOTES:
1. REFER TO DRAWING C–8 FOR EROSION AND SEDIMENT CONTROL NOTES AND DRAWING C–18 FOR SEED MIXTURES
2. STORM DRAINS LOCATED WITHIN THE LIMITS OF EXCAVATION WILL BE PROTECTED AND SUPPORTED DURING EXCAVATION AND BACKFILL ACTIVITIES
3. PERVIOUS AREAS TO BE STABILIZED WITH PERMANENT SEED MIXTURE PROVIDED ON DRAWING C–18.
4. ASPHALT WILL BE REMOVED IN THE AREAS DESIGNATED FOR PLACEMENT OF THE CONSTRUCTION ENTRANCE PRIOR TO THE CONSTRUCTION ENTRANCE INSTALLATION.
5. FOR ACCESS PURPOSES THE EASTERNMOST EXCAVATION AREAS WILL BE EXCAVATED FIRST. AFTER RESTORATION OF THE EASTERNMOST EXCAVATION AREAS EXCAVATION WILL PROCEED WEST.
6. THE FENCE SOUTH OF THE PAVED SURFACE WILL BE CUT TO GAIN ACCESS TO THE EXCAVATION AREAS IN THE GRASS.
7. NO NEW UTILITIES PROPOSED.
8. ALL WORK PERFORMED WITHIN LOCKHEED MARTIN PROPERTY LINES.
9. EXISTING CONTOURS AND SURFACE CONDITIONS WILL BE RE–ESTABLISED ONCE THE CONTAMINATED SOIL HAS BEEN REMOVED.
10. CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THE DISTURBED AREA ONLY VIA THE STABILIZED CONSTRUCTION ENTRANCE.

| DESCRIPTION | QUANTITY | | |
|---|---|---|---|
| EXISTING IMPERVIOUS AREA | 6,271 | Sq. Ft | 0.14 ACRES |
| EXISTING PERVIOUS AREA | 24,358 | Sq. Ft | 0.55 ACRES |
| VOLUME EXCAVATED | 2,478 | Cu. Yds. | |
| VOLUME DISPOSED OFF–SITE | 2,478 | Cu. Yds. | |
| VOLUME RETAINED FOR BACKFILL | 0 | Cu. Yds. | |
| OFF–SITE BORROW | 2,478 | Cu. Yds. | |
| AREA RESTORED IMPERVIOUS | 6,271 | Sq. Ft | 0.14 ACRES |
| AREA RESTORED PERVIOUS | 24,358 | Sq. Ft | 0.55 ACRES |
| INCREASED PERVIOUS AREA | 0 | Sq. Ft | 0 ACRES |
| TOTAL AREA OF DISTURBANCE (THIS SHEET) | 282,115 | Sq. Ft | 6.47 ACRES |
| TOTAL AREA OF DISTURBANCE (PROJECT) | 895,068 | Sq. Ft | 20.55 ACRES |

DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL=NAVD 88

0 40 80
SCALE IN FEET

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GERMANTOWN, MD 20874
T: (301) 528–5552 | F: (301) 528–3000

STATE OF MARYLAND — SCOTT A. NASH — No. 20015 — PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

# LOCKHEED MARTIN
# MIDDLE RIVER COMPLEX
## SOIL REMEDIAL ACTION
## BLOCK D –
## GRADING AND EROSION & SEDIMENT CONTROL PLAN

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 11 OF 20 |

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| Point Table | | | |
|---|---|---|---|
| Point # | Raw Description | Northing | Easting |
| 32 | DP1 | 605734.1158 | 1475133.6770 |
| 33 | DP2 | 605733.9248 | 1475153.9137 |
| 34 | DP3 | 605720.7363 | 1475164.0736 |
| 35 | DP4 | 605709.3020 | 1475179.0102 |
| 36 | DP5 | 605708.4685 | 1475232.0015 |
| 37 | DP6 | 605680.6582 | 1475244.4845 |
| 38 | DP7 | 605658.1438 | 1475194.5103 |
| 39 | DP8 | 605658.5608 | 1475166.3780 |
| 40 | DP9 | 605675.3543 | 1475145.7523 |
| 41 | DP10 | 605698.5194 | 1475150.7839 |
| 42 | DP11 | 605709.1517 | 1475129.1654 |
| 43 | DP12 | 605541.3988 | 1475233.1791 |
| 44 | DP13 | 605522.9955 | 1475272.4765 |
| 45 | DP14 | 605482.4726 | 1475271.7826 |
| 46 | DP15 | 605506.7529 | 1475246.5366 |

| DESCRIPTION | QUANTITY | | | |
|---|---|---|---|---|
| EXISTING IMPERVIOUS AREA | 34,486 | Sq. Ft | 0.79 | ACRES |
| EXISTING PERVIOUS AREA | 2,031 | Sq. Ft | 0.05 | ACRES |
| VOLUME EXCAVATED | 1,139 | Cu. Yds. | | |
| VOLUME DISPOSED OFF-SITE | 1,139 | Cu. Yds. | | |
| VOLUME RETAINED FOR BACKFILL | 0 | Cu. Yds. | | |
| OFF-SITE BORROW | 1,139 | Cu. Yds. | | |
| AREA RESTORED IMPERVIOUS | 0 | Sq. Ft | 0 | ACRES |
| AREA RESTORED PERVIOUS | 36,517 | Sq. Ft | 0.84 | ACRES |
| INCREASED PERVIOUS AREA | 34,486 | Sq. Ft | 0.79 | ACRES |
| TOTAL AREA OF DISTURBANCE (THIS SHEET) | 59,771 | Sq. Ft | 1.37 | ACRES |
| TOTAL AREA OF DISTURBANCE (PROJECT) | 895,068 | Sq. Ft | 20.55 | ACRES |

LEGEND:
REFER TO DRAWING T-2 FOR GENERAL LEGEND
➡ CONSTRUCTION TRAFFIC

NOTES:
1. REFER TO DRAWING C-8 FOR EROSION AND SEDIMENT CONTROL NOTES AND DRAWING C-18 FOR SEED MIXTURES
2. STORM DRAINS LOCATED WITHIN THE LIMITS OF EXCAVATION WILL BE PROTECTED AND SUPPORTED DURING EXCAVATION AND BACKFILL ACTIVITIES
3. STORM DRAIN REPAIR WILL BE COMPLETED BEFORE ANY OTHER INTRUSIVE WORK BEGINS IN THE BLOCK D PANHANDLE.
4. ALL IMPERVIOUS SURFACES WITHIN THE LIMITS OF DISTURBANCE IN THE BLOCK D PANHANDLE WILL BE REMOVED AND MADE PERVIOUS.
5. PERVIOUS AREAS TO BE STABILIZED WITH PERMANENT SEED MIXTURE PROVIDED ON DRAWING C-18.
6. FOR ACCESS PURPOSES THE SOUTHERNMOST EXCAVATION AREA WILL BE EXCAVATED FIRST. AFTER RESTORATION OF THE SOUTHERNMOST EXCAVATION AREAS EXCAVATION WILL PROCEED NORTH.
7. ACCESS TO THE BLOCK D PANHANDLE WILL BE THROUGH THE BLOCK D CONSTRUCTION ENTRANCE.
8. NO NEW UTILITIES PROPOSED.
9. ALL WORK PERFORMED WITHIN LOCKHEED MARTIN PROPERTY LINES.
10. EXISTING CONTOURS WILL BE RE-ESTABLISED ONCE THE CONTAMINATED SOIL HAS BEEN REMOVED.
11. SINKHOLE BACKFILL WILL BE USED AS NEEDED AS SINKHOLES ARE ENCOUNTERED. SINKHOLE BACKFILL WILL ALSO BE USED TO BACKFILL STORM DRAIN REPAIR AREA.
12. THE TURBIDITY CURTAIN WILL BE REMOVED UPON COMPLETION OF THE STORM DRAIN REPAIR AND RELOCATED TO ADDRESS ANY SINKHOLE REPAIRS NEEDED ALONG THE BULKHEAD WALL.
13. CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THE DISTURBED AREA ONLY VIA THE STABILIZED CONSTRUCTION ENTRANCE.

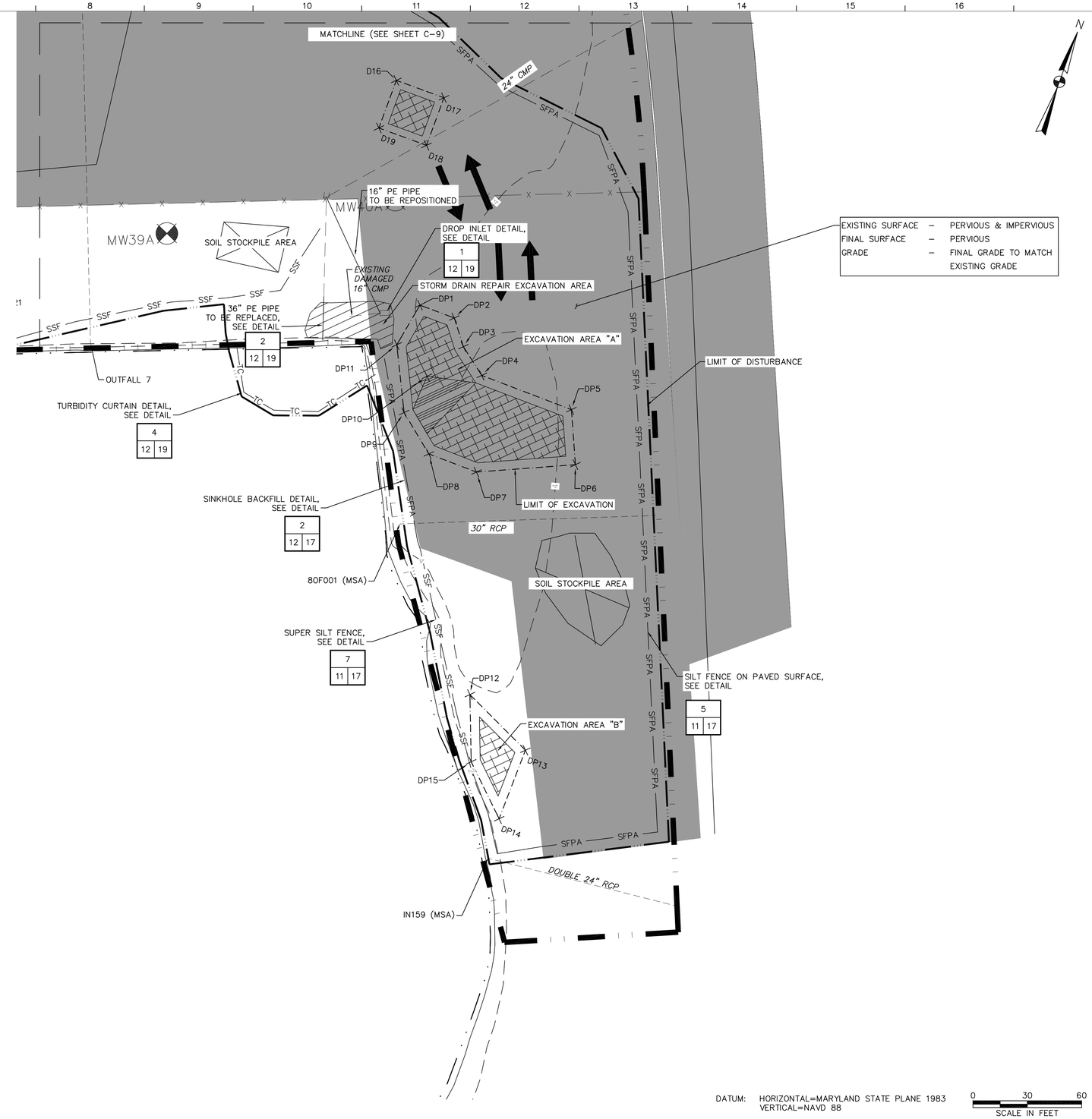


DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL=NAVD 88

0 30 60
SCALE IN FEET

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GERMANTOWN, MD 20874
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STATE OF MARYLAND
SCOTT A. NESSEN
No. 29015
PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX
SOIL REMEDIAL ACTION
BLOCK D PANHANDLE –
GRADING AND EROSION & SEDIMENT CONTROL PLAN

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 12 OF 20 |

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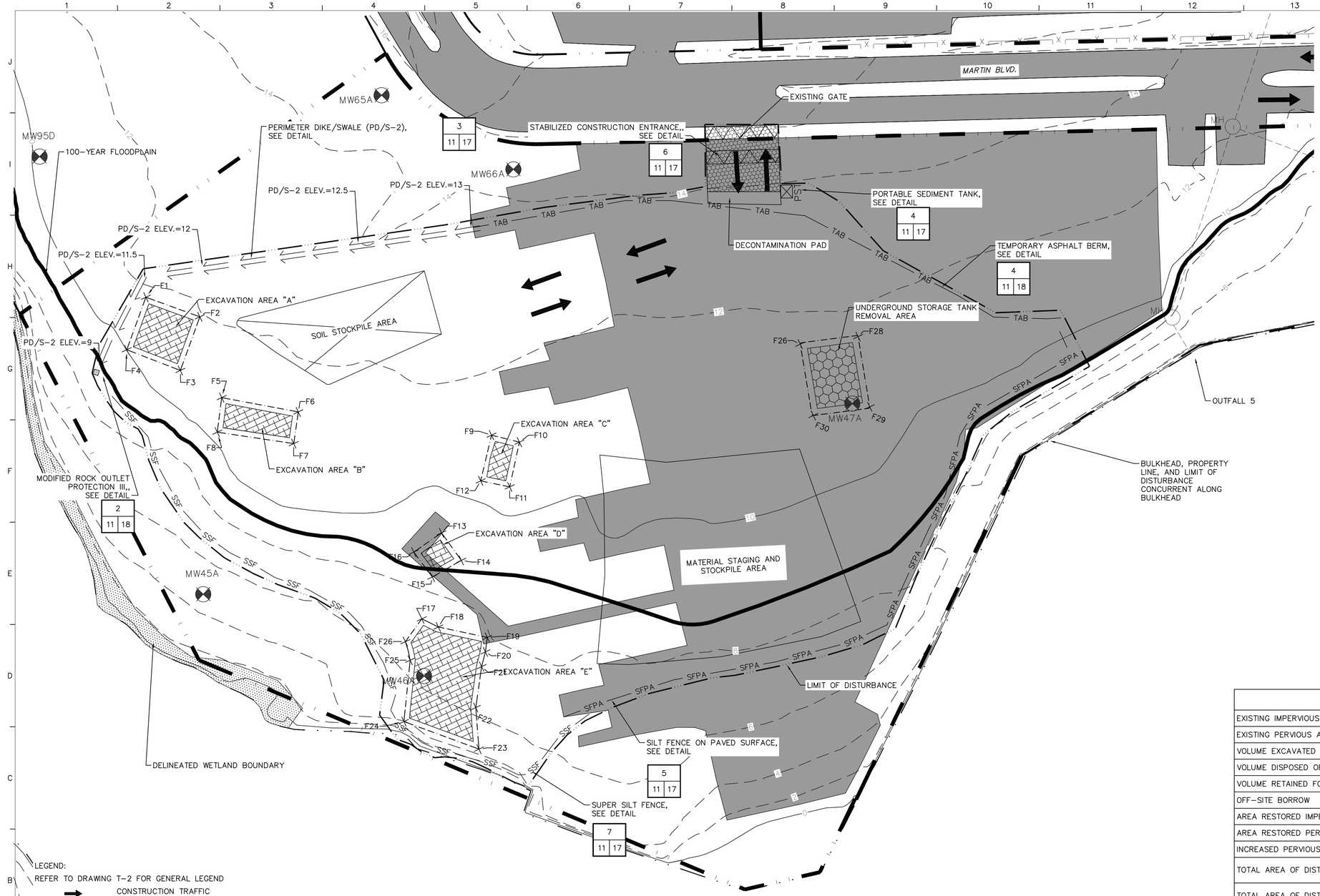


| Point Table | | | |
|---|---|---|---|
| Point # | Raw Description | Northing | Easting |
| 47 | F1 | 604527.4615 | 1472935.3877 |
| 48 | F2 | 604527.4615 | 1472980.2549 |
| 49 | F3 | 604482.8793 | 1472980.2549 |
| 50 | F4 | 604483.7677 | 1472935.3877 |
| 51 | F5 | 604473.9629 | 1473017.8872 |
| 52 | F6 | 604483.9090 | 1473077.9563 |
| 53 | F7 | 604459.4165 | 1473083.0865 |
| 54 | F8 | 604447.3925 | 1473023.8814 |
| 55 | F9 | 604518.4736 | 1473226.0233 |
| 56 | F10 | 604520.7860 | 1473248.3761 |
| 57 | F11 | 604485.3408 | 1473253.2089 |
| 58 | F12 | 604481.9954 | 1473230.2882 |
| 59 | F13 | 604433.3480 | 1473215.4459 |
| 60 | F14 | 604418.4130 | 1473237.3150 |
| 61 | F15 | 604398.4393 | 1473220.4951 |
| 62 | F16 | 604411.7920 | 1473200.1990 |
| 63 | F17 | 604364.8863 | 1473223.9564 |
| 64 | F18 | 604363.3333 | 1473238.2922 |
| 65 | F19 | 604368.7718 | 1473277.0110 |
| 66 | F20 | 604357.6111 | 1473279.5046 |
| 67 | F21 | 604345.7951 | 1473280.6390 |
| 68 | F22 | 604314.1102 | 1473287.3261 |
| 69 | F23 | 604284.4666 | 1473300.7645 |
| 70 | F24 | 604284.6576 | 1473238.3046 |
| 71 | F25 | 604331.4227 | 1473226.4848 |
| 72 | F26 | 604343.7209 | 1473218.0049 |
| 73 | F26 | 604667.7844 | 1473428.3732 |
| 74 | F28 | 604688.8209 | 1473468.8011 |
| 75 | F29 | 604640.3633 | 1473496.1634 |
| 76 | F30 | 604618.9307 | 1473457.0665 |

| DESCRIPTION | QUANTITY | | | |
|---|---|---|---|---|
| EXISTING IMPERVIOUS AREA | 2,625 | Sq. Ft | 0.06 | ACRES |
| EXISTING PERVIOUS AREA | 9,810 | Sq. Ft | 0.23 | ACRES |
| VOLUME EXCAVATED | 1,504 | Cu. Yds. | | |
| VOLUME DISPOSED OFF-SITE | 1,504 | Cu. Yds. | | |
| VOLUME RETAINED FOR BACKFILL | 0 | Cu. Yds. | | |
| OFF-SITE BORROW | 1504 | Cu. Yds. | | |
| AREA RESTORED IMPERVIOUS | 2,625 | Sq. Ft | 0.06 | ACRES |
| AREA RESTORED PERVIOUS | 9,810 | Sq. Ft | 0.23 | ACRES |
| INCREASED PERVIOUS AREA | 0 | Sq. Ft | 0 | ACRES |
| TOTAL AREA OF DISTURBANCE (THIS SHEET) | 228,674 | Sq. Ft. | 5.25 | ACRES |
| TOTAL AREA OF DISTURBANCE (PROJECT) | 895,068 | Sq. Ft | 20.55 | ACRES |

LEGEND:
REFER TO DRAWING T-2 FOR GENERAL LEGEND
CONSTRUCTION TRAFFIC

NOTES:
1. REFER TO DRAWING C-8 FOR EROSION AND SEDIMENT CONTROL NOTES AND DRAWING C-18 FOR SEED MIXTURES
2. STORM DRAINS LOCATED WITHIN THE LIMITS OF EXCAVATION WILL BE PROTECTED AND SUPPORTED DURING EXCAVATION AND BACKFILL ACTIVITIES
3. PERVIOUS AREAS TO BE STABILIZED WITH PERMANENT SEED MIXTURE PROVIDED ON DRAWING C-18.
4. NO NEW UTILITIES PROPOSED.
5. ALL WORK PERFORMED WITHIN LOCKHEED MARTIN PROPERTY LINES.
6. EXISTING CONTOURS AND SURFACE CONDITIONS WILL BE RE-ESTABLISED ONCE THE CONTAMINATED SOIL HAS BEEN REMOVED.
7. ASPHALT WILL BE REMOVED IN THE AREAS DESIGNATED FOR PLACEMENT OF THE CONSTRUCTION ENTRANCE PRIOR TO THE CONSTRUCTION ENTRANCE INSTALLATION.
8. CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THE DISTURBED AREA ONLY VIA THE STABILIZED CONSTRUCTION ENTRANCE.

DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL=NAVD 88

0 40 80
SCALE IN FEET

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STATE OF MARYLAND — SCOTT A. RESSLER — No. 29015 — PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX

SOIL REMEDIAL ACTION
BLOCK F - GRADING AND EROSION & SEDIMENT CONTROL PLAN

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 13 OF 20 |

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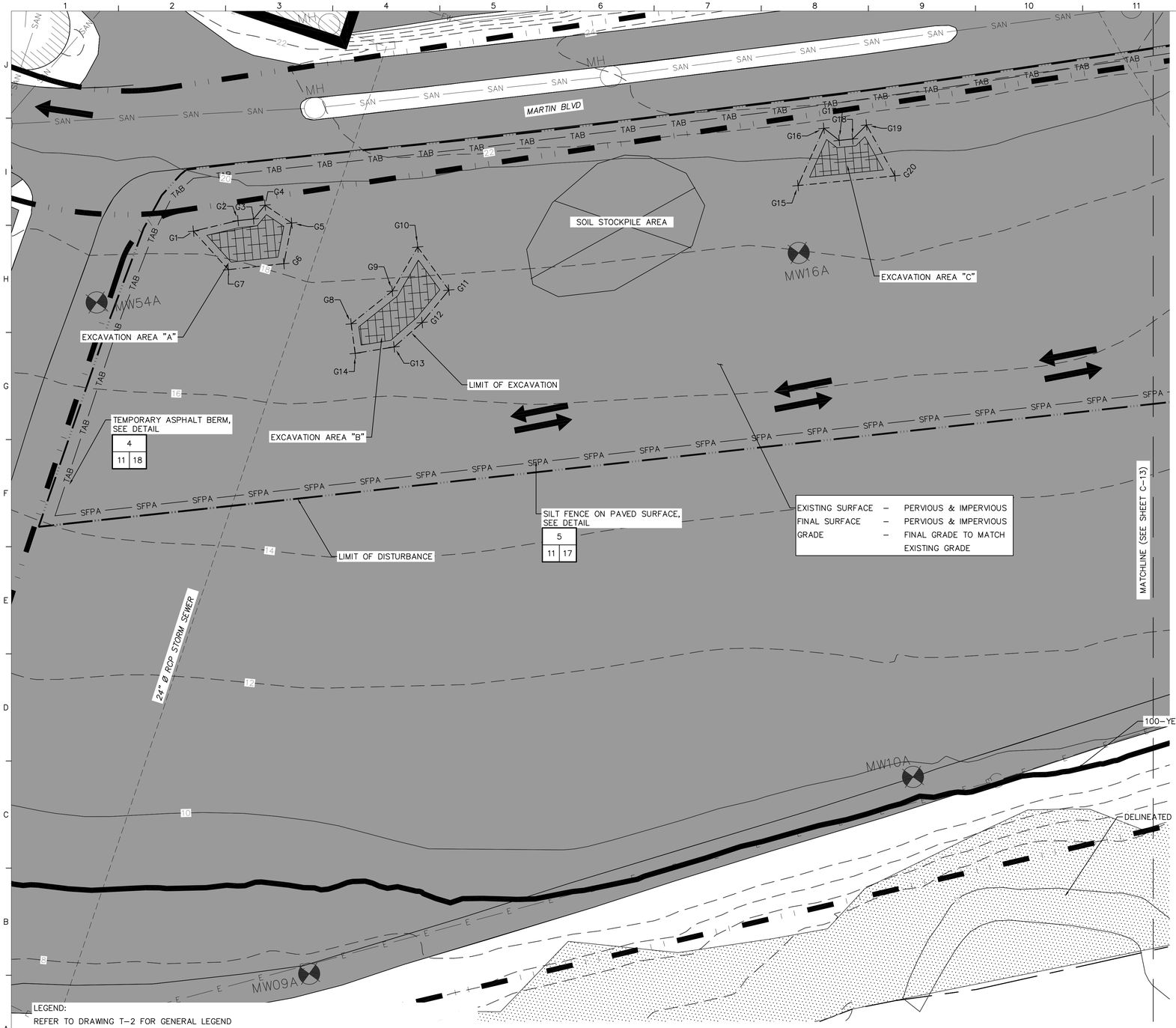


| Point Table | | | |
|---|---|---|---|
| Point # | Raw Description | Northing | Easting |
| 77 | G1 | 605752.2724 | 1471912.8890 |
| 78 | G2 | 605736.8995 | 1471933.5871 |
| 79 | G3 | 605730.8434 | 1471939.8416 |
| 80 | G4 | 605730.8197 | 1471950.0107 |
| 81 | G5 | 605712.8725 | 1471951.9336 |
| 82 | G6 | 605701.5950 | 1471931.5855 |
| 83 | G7 | 605723.3387 | 1471908.9543 |
| 84 | G8 | 605650.8421 | 1471929.9968 |
| 85 | G9 | 605645.0128 | 1471958.9837 |
| 86 | G10 | 605649.9680 | 1471987.1254 |
| 87 | G11 | 605620.9742 | 1471979.8407 |
| 88 | G12 | 605620.7772 | 1471956.1961 |
| 89 | G13 | 605624.0044 | 1471935.5594 |
| 90 | G14 | 605638.4710 | 1471918.7280 |
| 91 | G15 | 605508.3654 | 1472151.0680 |
| 92 | G16 | 605517.9383 | 1472185.0722 |
| 93 | G17 | 605506.9528 | 1472185.3953 |
| 94 | G18 | 605501.6709 | 1472190.8341 |
| 95 | G19 | 605500.7677 | 1472201.8988 |
| 96 | G20 | 605470.1179 | 1472190.2561 |

LEGEND:
REFER TO DRAWING T-2 FOR GENERAL LEGEND
➡ CONSTRUCTION TRAFFIC

NOTES:
1. REFER TO DRAWING C-8 FOR EROSION AND SEDIMENT CONTROL NOTES AND DRAWING C-18 FOR SEED MIXTURES
2. STORM DRAINS AND ELECTRIC UTILITIES LOCATED WITHIN OR IN CLOSE PROXIMITY TO THE LIMIT OF EXCAVATION WILL BE PROTECTED AND SUPPORTED DURING EXCAVATION AND BACKFILLING ACTIVITIES
3. NO NEW UTILITIES PROPOSED.
4. ALL WORK PERFORMED WITHIN LOCKHEED MARTIN PROPERTY LINES.
5. EXISTING CONTOURS AND SURFACE CONDITIONS WILL BE RE-ESTABLISED ONCE THE CONTAMINATED SOIL HAS BEEN REMOVED.
6. CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THE DISTURBED AREA ONLY VIA THE STABILIZED CONSTRUCTION ENTRANCE.

| DESCRIPTION | QUANTITY | | | |
|---|---|---|---|---|
| EXISTING IMPERVIOUS AREA | 3,778 | Sq. Ft | 0.09 | ACRES |
| EXISTING PERVIOUS AREA | 0 | Sq. Ft | 0 | ACRES |
| VOLUME EXCAVATED | 280 | Cu. Yds. | | |
| VOLUME DISPOSED OFF-SITE | 280 | Cu. Yds. | | |
| VOLUME RETAINED FOR BACKFILL | 0 | Cu. Yds. | | |
| OFF-SITE BORROW | 280 | Cu. Yds. | | |
| AREA RESTORED IMPERVIOUS | 3,778 | Sq. Ft | 0.09 | ACRES |
| AREA RESTORED PERVIOUS | 0 | Sq. Ft | 0 | ACRES |
| INCREASED PERVIOUS AREA | 0 | Sq. Ft | 0 | ACRES |
| TOTAL AREA OF DISTURBANCE (THIS SHEET) | 120,093 | Sq. Ft | 2.76 | ACRES |
| TOTAL AREA OF DISTURBANCE (PROJECT) | 895,068 | Sq. Ft | 20.55 | ACRES |

DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL=NAVD 88

0 30 60
SCALE IN FEET

TETRA TECH
www.tetratech.com
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GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000

STATE OF MARYLAND — SCOTT A. SEIDEL — No. 29015 — PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX
SOIL REMEDIAL ACTION
BLOCK G – GRADING AND EROSION & SEDIMENT CONTROL PLAN (SHEET 1 OF 2)

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 14 OF 20 |

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| Point Table | | | |
|---|---|---|---|
| Point # | Raw Description | Northing | Easting |
| 97 | G21 | 605281.0611 | 1472374.7767 |
| 98 | G22 | 605267.3422 | 1472388.0344 |
| 99 | G23 | 605254.9137 | 1472374.9090 |
| 100 | G24 | 605267.4747 | 1472361.8871 |
| 101 | G25 | 605263.1946 | 1472393.6652 |
| 102 | G26 | 605274.1281 | 1472426.0283 |
| 103 | G27 | 605242.2320 | 1472407.0660 |
| 104 | G28 | 605250.6220 | 1472393.5549 |
| 105 | G29 | 605116.4282 | 1472402.0919 |
| 106 | G30 | 605105.3364 | 1472420.8960 |
| 107 | G31 | 605094.4613 | 1472404.4108 |
| 108 | G32 | 605103.0649 | 1472394.6775 |
| 109 | G33 | 605065.0474 | 1472365.7439 |
| 110 | G34 | 605053.4663 | 1472379.3838 |
| 111 | G35 | 605040.3530 | 1472366.7691 |
| 112 | G36 | 605051.0903 | 1472350.5861 |
| 113 | G37 | 604958.7707 | 1472383.2082 |
| 114 | G38 | 604933.1068 | 1472385.7139 |
| 115 | G39 | 604910.2330 | 1472412.5966 |
| 116 | G40 | 604901.2642 | 1472392.7244 |
| 117 | G41 | 604899.9372 | 1472379.6902 |
| 118 | G42 | 604893.1760 | 1472362.1662 |
| 119 | G43 | 604902.7147 | 1472368.3659 |
| 120 | G44 | 604903.9658 | 1472362.1483 |
| 121 | G45 | 604921.9642 | 1472374.1472 |
| 122 | G46 | 604921.7659 | 1472345.1663 |
| 123 | G47 | 604958.8661 | 1472345.2596 |
| 124 | G48 | 604897.6387 | 1472486.2604 |
| 125 | G49 | 604874.1448 | 1472515.2867 |
| 126 | G50 | 604849.0230 | 1472487.9639 |
| 127 | G51 | 604872.3648 | 1472459.6203 |
| 128 | G52 | 604839.6392 | 1472517.5697 |
| 129 | G53 | 604827.5434 | 1472533.4974 |
| 130 | G54 | 604805.2446 | 1472516.5633 |
| 131 | G55 | 604817.3404 | 1472500.6356 |
| 132 | G56 | 604819.7954 | 1472529.7292 |
| 133 | G57 | 604796.4135 | 1472562.1836 |
| 134 | G58 | 604778.5636 | 1472549.3235 |
| 135 | G59 | 604801.9455 | 1472516.8692 |

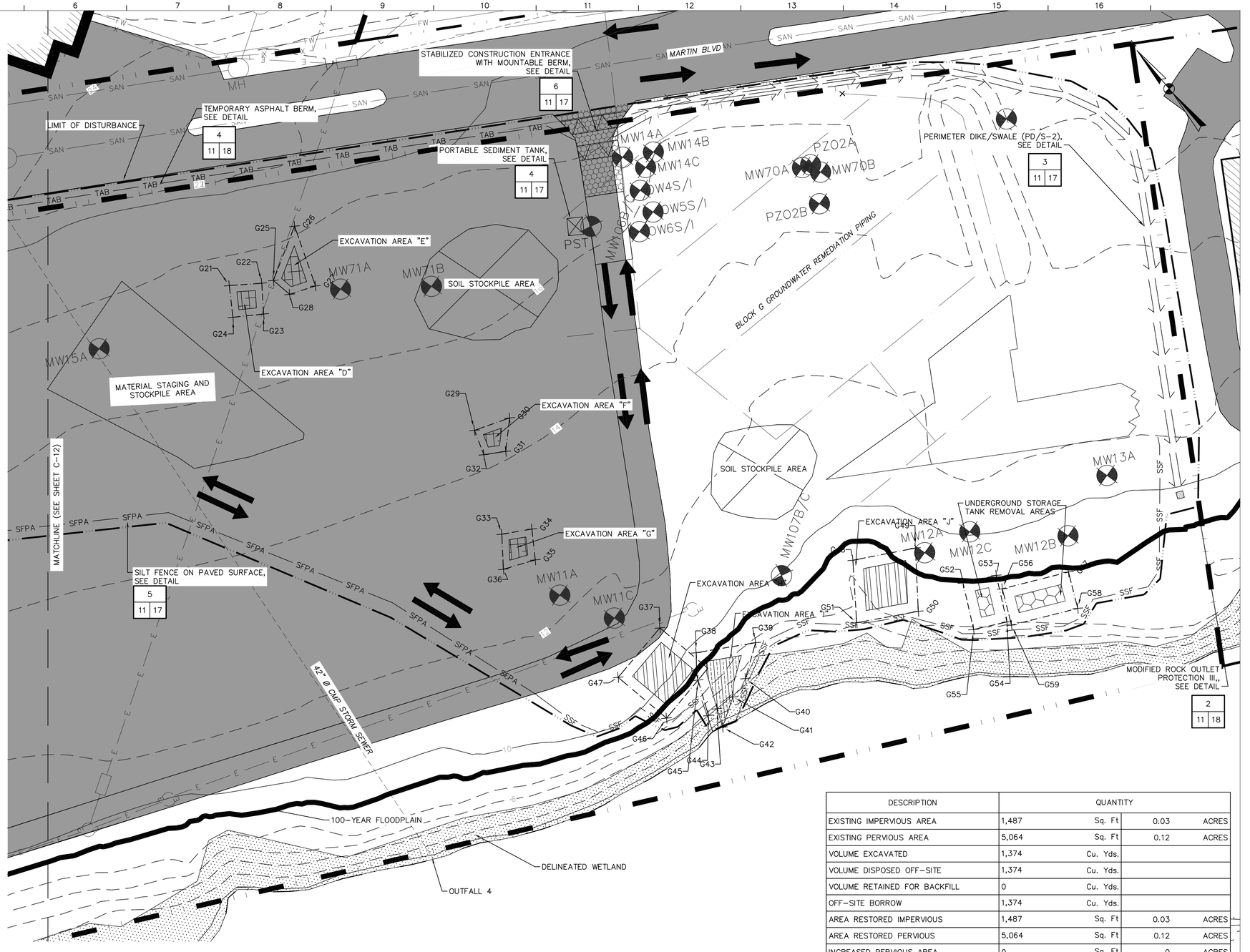


LEGEND:
REFER TO DRAWING T-2 FOR GENERAL LEGEND
TBD TO BE DETERMINED
➡ CONSTRUCTION TRAFFIC

NOTES:
1. REFER TO DRAWING C-8 FOR EROSION AND SEDIMENT CONTROL NOTES AND DRAWING C-18 FOR SEED MIXTURES
2. STORM DRAINS AND ELECTRIC UTILITIES LOCATED WITHIN OR IN CLOSE PROXIMITY TO THE LIMIT OF EXCAVATION WILL BE PROTECTED AND SUPPORTED DURING EXCAVATION AND BACKFILLING ACTIVITIES
3. NO NEW UTILITIES PROPOSED.
4. ALL WORK PERFORMED WITHIN LOCKHEED MARTIN PROPERTY LINES.
5. EXISTING CONTOURS AND SURFACE CONDITIONS WILL BE RE-ESTABLISED ONCE THE CONTAMINATED SOIL HAS BEEN REMOVED.
6. COORDINATES LISTED IN TABLE ABOVE FOR POINTS 128 THROUGH 135 ARE APPROXIMATE. ACTUAL COORDINATES WILL BE DETERMINED IN THE FIELD FOLLOWING GEOPHYSICS TO LOCATE UNDERGROUND STORAGE TANKS.
7. ASPHALT WILL BE REMOVED IN THE AREAS DESIGNATED FOR PLACEMENT OF THE CONSTRUCTION ENTRANCE PRIOR TO THE CONSTRUCTION ENTRANCE INSTALLATION.
8. CONSTRUCTION VEHICLES SHALL ENTER AND EXIT THE DISTURBED AREA ONLY VIA THE STABILIZED CONSTRUCTION ENTRANCE.

| DESCRIPTION | QUANTITY | | | |
|---|---|---|---|---|
| EXISTING IMPERVIOUS AREA | 1,487 | Sq. Ft | 0.03 | ACRES |
| EXISTING PERVIOUS AREA | 5,064 | Sq. Ft | 0.12 | ACRES |
| VOLUME EXCAVATED | 1,374 | Cu. Yds. | | |
| VOLUME DISPOSED OFF-SITE | 1,374 | Cu. Yds. | | |
| VOLUME RETAINED FOR BACKFILL | 0 | Cu. Yds. | | |
| OFF-SITE BORROW | 1,374 | Cu. Yds. | | |
| AREA RESTORED IMPERVIOUS | 1,487 | Sq. Ft | 0.03 | ACRES |
| AREA RESTORED PERVIOUS | 5,064 | Sq. Ft | 0.12 | ACRES |
| INCREASED PERVIOUS AREA | 0 | Sq. Ft | 0 | ACRES |
| TOTAL AREA OF DISTURBANCE (THIS SHEET) | 197,381 | Sq. Ft | 4.53 | ACRES |
| TOTAL AREA OF DISTURBANCE (PROJECT) | 895,068 | Sq. Ft | 20.55 | ACRES |

DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL=NAVD 88

0 30 60
SCALE IN FEET

TETRA TECH
www.tetratech.com
20251 CENTURY BLVD
GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000

STATE OF MARYLAND SCOTT I. GOLDSBERRY No. 29015 PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

# LOCKHEED MARTIN
# MIDDLE RIVER COMPLEX
## SOIL REMEDIAL ACTION
## BLOCK G – GRADING AND EROSION & SEDIMENT CONTROL PLAN (SHEET 2 F 2)

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 15 OF 20 |

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C-13

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| Point Table | | | |
|---|---|---|---|
| Point # | Raw Description | Northing | Easting |
| 136 | H1 | 606467.6187 | 1471519.7712 |
| 137 | H2 | 606427.8785 | 1471508.7632 |
| 138 | H3 | 606410.2361 | 1471491.7907 |
| 139 | H4 | 606417.4512 | 1471442.9496 |
| 140 | H5 | 606014.9504 | 1471608.9217 |
| 141 | H6 | 606007.2382 | 1471617.8162 |
| 142 | H7 | 605995.7544 | 1471617.8162 |
| 143 | H8 | 605985.4932 | 1471608.2688 |
| 144 | H9 | 605987.1208 | 1471575.1174 |
| 145 | H10 | 606013.9053 | 1471583.7971 |

| DESCRIPTION | QUANTITY | | | |
|---|---|---|---|---|
| EXISTING IMPERVIOUS AREA | 2,751 | Sq. Ft | 0.06 | ACRES |
| EXISTING PERVIOUS AREA | 0 | Sq. Ft | 0 | ACRES |
| VOLUME EXCAVATED | 204 | Cu. Yds. | | |
| VOLUME DISPOSED OFF-SITE | 204 | Cu. Yds. | | |
| VOLUME RETAINED FOR BACKFILL | 0 | Cu. Yds. | | |
| OFF-SITE BORROW | 204 | Cu. Yds. | | |
| AREA RESTORED IMPERVIOUS | 2,751 | Sq. Ft | 0.06 | ACRES |
| AREA RESTORED PERVIOUS | 0 | Sq. Ft | 0 | ACRES |
| INCREASED PERVIOUS AREA | 0 | Sq. Ft | 0 | ACRES |
| TOTAL AREA OF DISTURBANCE (THIS SHEET) | 7,034 | Sq. Ft | 0.16 | ACRES |
| TOTAL AREA OF DISTURBANCE (PROJECT) | 895,068 | Sq. Ft | 20.55 | ACRES |

LEGEND:
REFER TO DRAWING T-2 FOR GENERAL LEGEND
CONSTRUCTION TRAFFIC

NOTES:
1. REFER TO DRAWING C-8 FOR EROSION AND SEDIMENT CONTROL NOTES.
2. NO NEW UTILITIES PROPOSED.
3. ALL WORK PERFORMED WITHIN LOCKHEED MARTIN PROPERTY LINES.
4. EXISTING CONTOURS AND SURFACE CONDITIONS WILL BE RE-ESTABLISED ONCE THE CONTAMINATED SOIL HAS BEEN REMOVED.
5. CONTRACTOR SHALL ONLY DISTURB THE AREAS WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY.
6. STABILIZATION SHALL BE THE APPLICATION OF STONE BASE.
7. EROSION AND SEDIMENT CONTROLS WILL NOT BE INSTALLED IN BLOCK H DUE TO SAME DAY STABILIZATION OF EXCAVATED AREAS. CONTRACTOR SHALL DISTURB ONLY THAT WHICH CAN BE COMPLETED AND STABILIZED WITH STONE BASE (MINIMUM) BY THE END OF EACH WORK DAY.

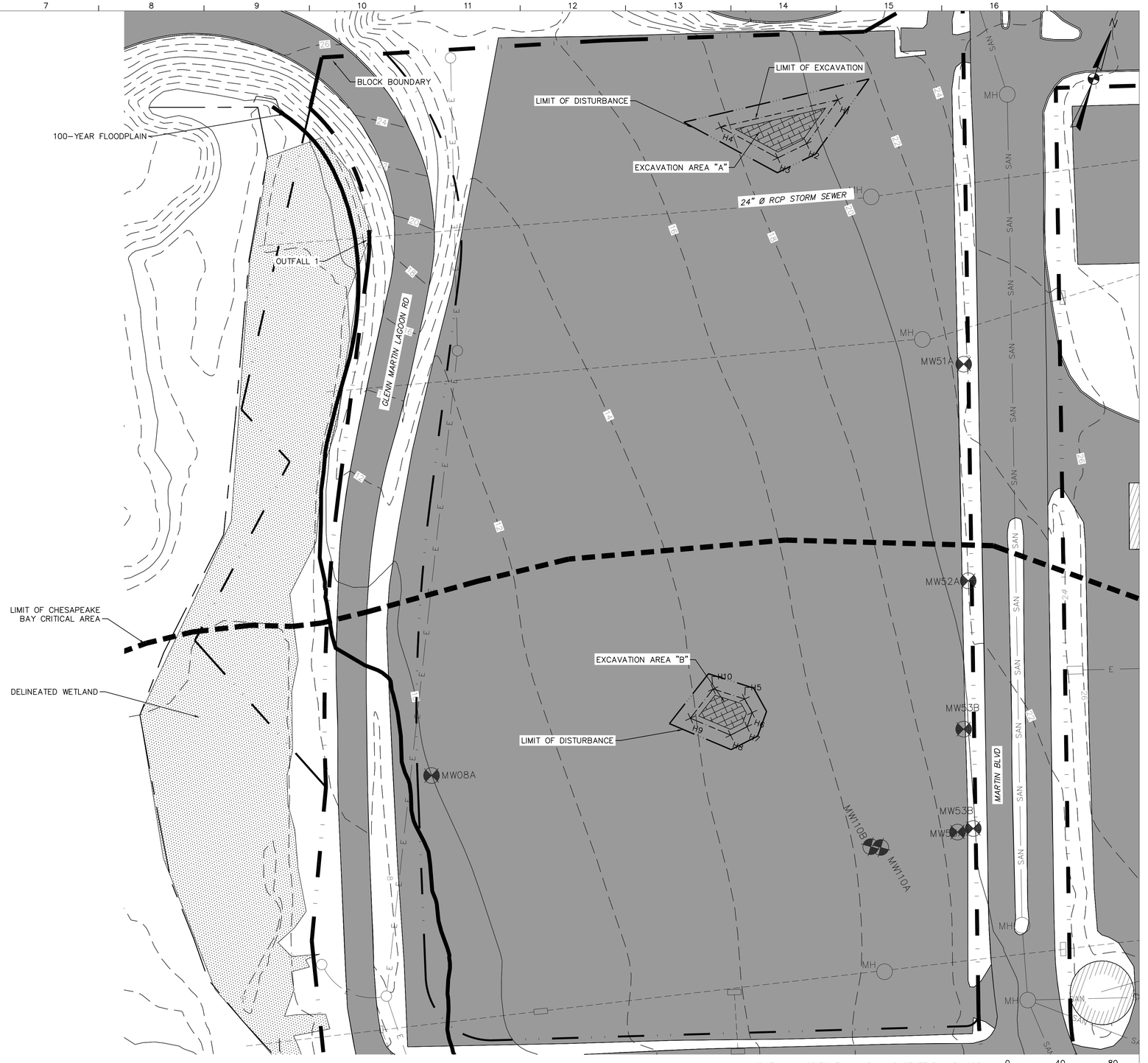


DATUM: HORIZONTAL=MARYLAND STATE PLANE 1983
VERTICAL=NAVD 88

0 40 80
SCALE IN FEET


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T: (301) 528-5552 | F: (301) 528-3000


STATE OF MARYLAND — SCOTT A. NEISER — No. 29015 — PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

# LOCKHEED MARTIN
# MIDDLE RIVER COMPLEX
## SOIL REMEDIAL ACTION
## BLOCK H -
## GRADING AND EROSION & SEDIMENT CONTROL PLAN

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 16 OF 20 |

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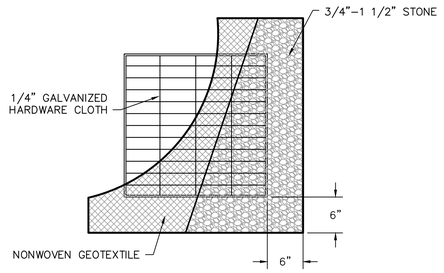


PLAN/CUT AWAY VIEW

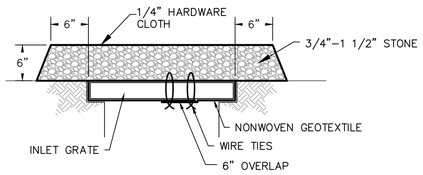


CROSS SECTION

CONSTRUCTION SPECIFICATIONS

1. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H–1 MATERIALS.
2. LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS. SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.
3. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE GRATE.
4. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

## AT GRADE INLET PROTECTION DETAIL

NOT TO SCALE — 1 | 11 17

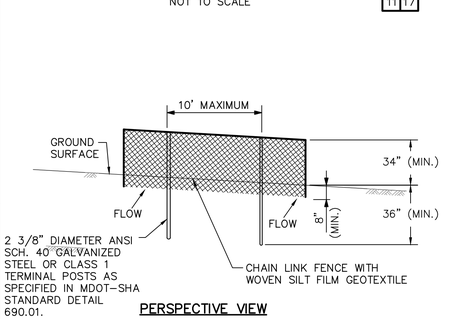


PERSPECTIVE VIEW

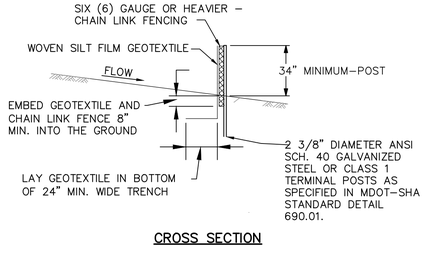


CROSS SECTION

CONSTRUCTION SPECIFICATIONS

1. INSTALL 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 6 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2⅜ INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H–1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND. LAY THE GEOTEXTILE IN THE BOTTOM OF THE 24 INCH WIDE TRENCH.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF THREE VERTICAL FEET TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H–1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

## SUPER SILT FENCE DETAIL

NOT TO SCALE — 7 | 11 17

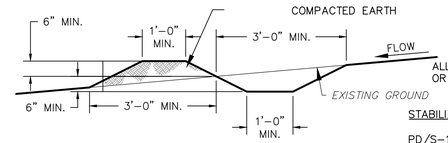


CROSS SECTION A–A'

STABILIZATION

PD/S–1: SEED AND MULCH (DRAINING ≤ 1 ACRE) (NOT ALLOWED FOR CLEAR WATER DIVERSION)

PD/S–2: SEED AND COVER WITH SOIL, STABILIZATION MATTING OR LINE WITH SOD (DRAINING BETWEEN 1 AND 2 ACRES)

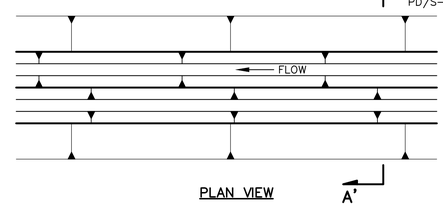


CONTINUOUS GRADE 0.5% MIN. TO 10% MAX SLOPE

PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF DIKE/SWALE.
2. EXCAVATE OR SHAPE DIKE/SWALE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED.
3. COMPACT FILL.
4. CONSTRUCT DIKE/SWALE ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
5. PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
6. STABILIZE DIKE/SWALE WITHIN 3 DAYS OF INSTALLATION. STABILIZE DIKE/SWALES USED FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.
7. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP PERIMETER DIKE/SWALE AND POINT OF DISCHARGE FREE OF EROSION AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B–4 VEGETATIVE STABILIZATION.
8. UPON REMOVAL OF DIKE/SWALE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, MULCH, OR AS SPECIFIED ON APPROVED PLAN.

NOTE: MAXIMUM DRAINAGE AREA FOR THIS PRACTICE IS 2 ACRES.

## PERIMETER DIKE/SWALE DETAIL

NOT TO SCALE — 3 | 11 17

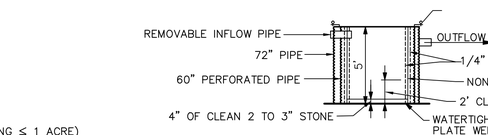


ELEVATION

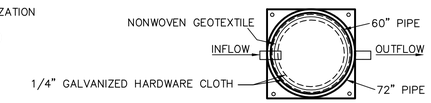


PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. PROVIDE 1 CUBIC FOOT OF STORAGE FOR EACH GALLON PER MINUTE OF PUMP CAPACITY. REQUIRED STORAGE VOLUME MAY BE ATTAINED BY PLACEMENT OF TANKS IN PARALLEL WITH INFLOW EVENLY DISTRIBUTED AMONG TANKS. OVERTOPPING OF TANKS IS NOT PERMITTED.
2. USE 60 INCH CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS, 6 INCHES ON CENTER FOR THE INNER PIPE. LINE PIPE WITH NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H–1 MATERIALS, SANDWICHED BETWEEN, AND ATTACHED TO, ¼ INCH HARDWARE CLOTH.
3. OVERLAP GEOTEXTILE 8 INCHES MINIMUM AT VERTICAL SEAM AND AT THE BOTTOM PLATE.
4. ANCHOR GEOTEXTILE AT BOTTOM OF TANK WITH 4 INCHES OF 2 TO 3 INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE.
5. USE 72 INCH CORRUGATED METAL OR PLASTIC OUTER PIPE WITH PERMANENT OUTFLOW PIPE WITH INVERT LOWER THAN INFLOW PIPE
6. INFLOW PIPE MUST DISCHARGE INTO INNER PIPE AND BE REMOVABLE.
7. PLACE TANK ON LEVEL SURFACE AND DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
8. A PORTABLE SEDIMENT TANK REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT FROM INNER PIPE WHEN IT REACHES TWO FEET IN DEPTH. IF SYSTEM CLOGS, PULL OUT INNER PIPE, REMOVE ACCUMULATED SEDIMENT, AND REPLACE GEOTEXTILE. KEEP POINT OF DISCHARGE FREE OF EROSION.

## PORTABLE SEDIMENT TANK DETAIL

NOT TO SCALE — 4 | 11 17

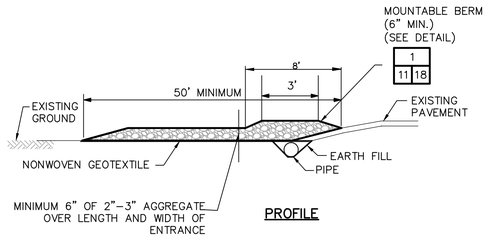


PROFILE

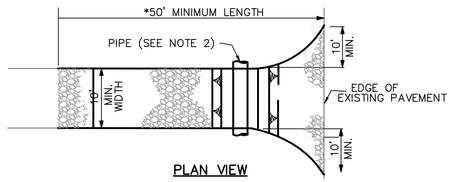


PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H–1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

## STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM DETAIL

NOT TO SCALE — 6 | 11 17

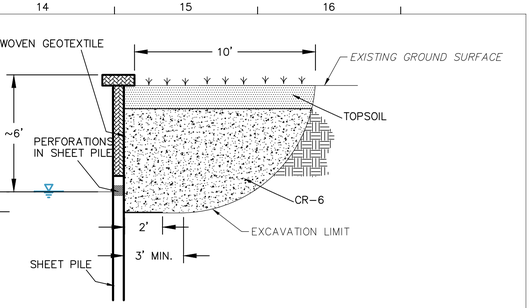


CONSTRUCTION SPECIFICATIONS

1. CR–6 WILL HAVE COMPRESSIVE STRENGTH OF 50 TO 100 PSI.
2. CR–6 WILL BE PLACED IN MAX 12–INCH LIFTS. THE NEXT LIFT WILL NOT BE PLACED UNTIL THE UNDERLYING LIFT IS STRONG ENOUGH TO HAVE A ONE FOOT VERTICAL FACE UNDER LOAD OF THE NEXT LIFT (I.E. APPROXIMATELY 2 PSI OR 288 PSF OF COMPRESSIVE STRENGTH).
3. BOTTOM OF THE EXCAVATION LIMIT NEAR THE SHEET PILE WILL BE 3 FEET HORIZONTAL OR SLOPING AWAY FROM THE SHEET PILE.

## SINKHOLE BACKFILL DETAIL

NOT TO SCALE — 2 | 12 17

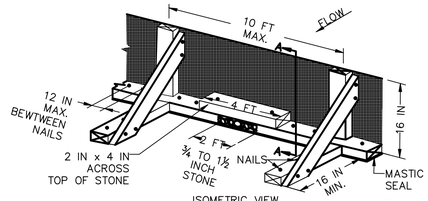


ISOMETRIC VIEW

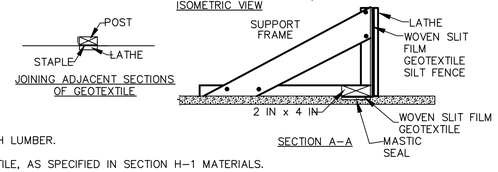


JOINING ADJACENT SECTIONS OF GEOTEXTILE

SECTION A–A

1. USE NOMINAL 2 INCH X 4 INCH LUMBER.
2. USE WOVEN SLIT FILM GEOTEXTILE, AS SPECIFIED IN SECTION H–1 MATERIALS.
3. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H–1 MATERIALS.
4. SPACE UPRIGHT SUPPORTS NO MORE THAN 10 FEET APART.
5. PROVIDE A TWO FOOT OPENING BETWEEN EVERY SET OF SUPPORTS AND PLACE STONE IN THE OPENING OVER GEOTEXTILE.
6. KEEP SILT FENCE TAUT AND SECURELY STAPLE TO THE UPSLOPE SIDE OF UPRIGHT SUPPORTS. EXTEND GEOTEXTILE UNDER 2x4.
7. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, FOLD, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. ATTACH LATHE.
8. PROVIDE A MASTIC SEAL BETWEEN PAVEMENT, GEOTEXTILE, AND 2x4 TO PREVENT SEDIMENT–LADEN WATER FROM ESCAPING BENEATH SILT FENCE INSTALLATION.
9. SECURE BOARDS TO PAVEMENT WITH 40D 5 INCH MINIMUM LENGTH NAILS.
10. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. MAINTAIN WATER TIGHT SEAL ALONG BOTTOM. REPLACE STONE IF DISPLACED.

## SILT FENCE ON PAVED SURFACE DETAIL

NOT TO SCALE — 5 | 11 17

BALTIMORE COUNTY SOIL CONSERVATION DISTRICT

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STATE OF MARYLAND — SCOTT A. NESSE — No. 29015 — PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
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LOCKHEED MARTIN
MIDDLE RIVER COMPLEX

SOIL REMEDIAL ACTION
EROSION AND SEDIMENT CONTROL DETAILS
(SHEET 1 OF 3)

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | TWS |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 17 OF 20 |

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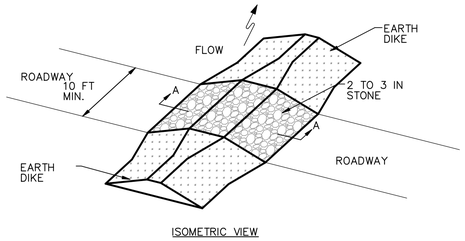


ISOMETRIC VIEW

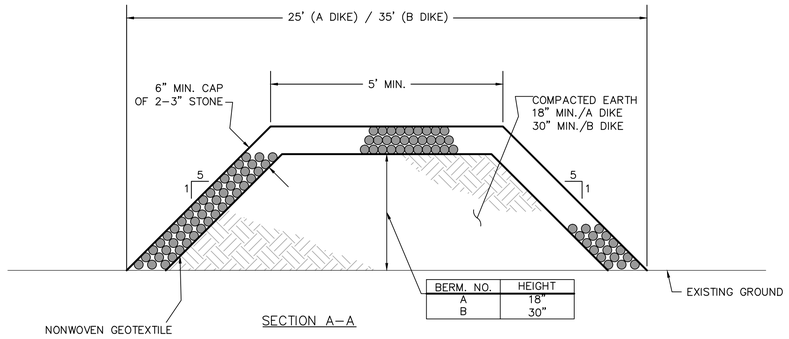


| BERM. NO. | HEIGHT |
|---|---|
| A | 18" |
| B | 30" |

SECTION A–A

## CONSTRUCTION SPECIFICATIONS

1. USE MINIMUM WIDTH OF 10 FEET TO ALLOW FOR VEHICULAR PASSAGE.
2. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H–1 MATERIALS, OVER THE EARTH MOUND PRIOR TO PLACING STONE.
3. PLACE 2 TO 3 INCH STONE OR EQUIVALENT RECYCLED CONCRETE AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE MOUNTABLE BERM.
4. MAINTAIN LINE, GRADE, AND CROSS SECTION. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN SPECIFIED DIMENSIONS. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE.

## MOUNTABLE BERM DETAIL

NOT TO SCALE

1 | 11 | 18

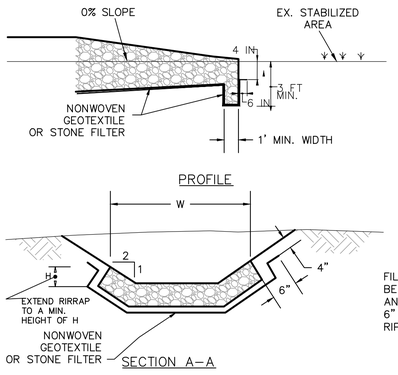


STONE SHALL BE CLASS I RIP–RAP D50=9.5" T=19"

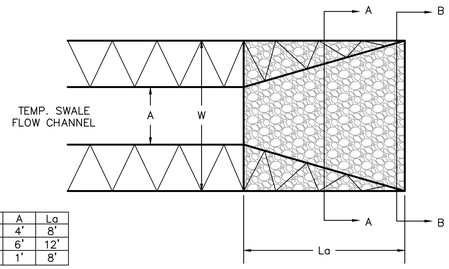


| | W | A | La |
|---|---|---|---|
| 'A' TEMP. SWALE | 8' | 4' | 8' |
| 'B' TEMP. SWALE | 12' | 6' | 12' |
| PD/S | 2' | 1' | 8' |

PLAN VIEW

FILTER FABRIC SHALL BE EMBEDDED A MIN. OF 4" AND SHALL EXTEND AT LEAST 6" BEYOND THE EDGE OF THE RIP–RAP

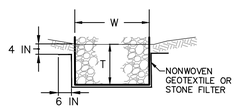


SECTION B–B

## CONSTRUCTION SPECIFICATIONS

1. RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
2. USE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H–1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
3. PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (⅜ TO 1½ INCH MINIMUM STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
4. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF RIPRAP.
5. CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
6. WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
7. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
8. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND RIPRAP DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

## MODIFIED ROCK OUTLET PROTECTION III DETAIL

NOT TO SCALE

2 | 11 | 18

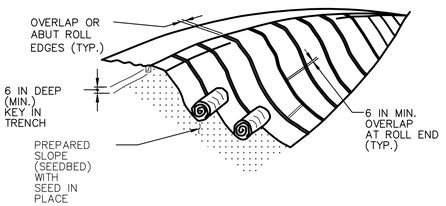


## TEMPORARY SOIL STABILIZATION MATTING SLOPE APPLICATION

NOT TO SCALE

3 | 11 | 18

## CONSTRUCTION SPECIFICATIONS

1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN 1.5 LB/FT$^2$.
2. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN–MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON–LEACHING AND NON–TOXIC TO VEGETATION AND SEED GERMINATION AND NON–INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
3. SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 11/2 INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH–SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION & SEDIMENT CONTROL PLAN.
5. UNROLL MATTING DOWNSLOPE. LAY MAT SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
6. OVERLAP OR ABUT ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSLOPE MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.
7. KEY IN THE UPSLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY.
8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
9. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B–4 VEGETATIVE STABILIZATION.

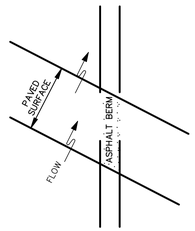


PLAN VIEW

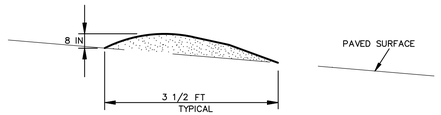


CROSS SECTION

## CONSTRUCTION SPECIFICATIONS

1. CONSTRUCT BERM ON AN UNINTERRUPTED, CONTINUOUS GRADE.
2. INSTALL BERM TO CONFORM TO CROSS SECTION DIMENSIONS OF A UNIFORM HEIGHT OF 8 INCHES MINIMUM AND APPROXIMATE WIDTH OF 3½ FEET.
3. PROVIDE OUTLET PROTECTION AS REQUIRED ON PLAN.
4. COMPACT ASPHALT BERM.
5. REPAIR DAMAGED ASPHALT. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE.
6. UPON REMOVAL OF ASPHALT BERM, RETURN TO ORIGINAL CONDITIONS OR AS SPECIFIED ON APPROVED PLAN.

## TEMPORARY ASPHALT BERM

NOT TO SCALE

4 | 11 | 18

## GEOTEXTILE SPECIFICATIONS

| | | WOVEN SILT FILM | | WOVEN MONOFILAMENT | | NONWOVEN GEOTEXTILE | |
|---|---|---|---|---|---|---|---|
| | | MINIMUM AVERAGE ROLL VALUE* | | | | | |
| PROPERTY | TEST METHOD | MD | CD | MD | CD | MD | CD |
| GRAB TENSILE STRENGTH | ASTM D–4632 | 200 lb | 200 lb | 370 lb | 250 lb | 200 lb | 200 lb |
| GRAB TENSILE ELONGATION | ASTM D–4632 | 15% | 10% | 15% | 15% | 50% | 50% |
| TRAPEZODIAL TEAR STRENGTH | ASTM D–4533 | 75 lb | 75 lb | 100 lb | 60 lb | 80 lb | 80 lb |
| PUNCTURE STRENGTH | ASTM D–6241 | 450 lb | | 900 lb | | 450 lb | |
| APPARENT OPENING SIZE** | ASTM D–4751 | U.S. SIEVE 30 (0.59 mm) | | U.S. SIEVE 70 (0.21 mm) | | U.S. SIEVE 70 (0.21 mm) | |
| PERMITTIVITY | ASTM D–4491 | 0.05 sec$^{-1}$ | | 0.28 sec$^{-1}$ | | 1.1 sec$^{-1}$ | |
| ULTRAVIOLET RESISTANCE RETAINED AT 500 HOURS | ASTM D–4355 | 70% strength | | 70% strength | | 70% strength | |

* ALL NUMERIC VALUES EXCEPT APPARENT OPENING SIZE (AOS) REPRESENT MINIMUM AVERAGE ROLL VALUES (MARV). MARV IS CALCULATED AS THE TYPICAL MINUS TWO STANDARD DEVIATIONS. MD IS MACHINE DIRECTION; CD IS CROSS DIRECTION.
** VALUES FOR AOS REPRESENT THE AVERAGE MAXIMUM OPENING.

GEOTEXTILES MUST BE EVALUATED BY THE NATIONAL TRANSPORTATION PRODUCT EVALUATION PROGRAM (NTPEP) AND CONFORM TO THE VALUES IN THIS TABLE.

THE GEOTEXTILE MUST BE INERT TO COMMONLY ENCOUNTERED CHEMICALS AND HYDROCARBONS AND MUST BE ROT AND MILDEW RESISTANT. THE GEOTEXTILE MUST BE MANUFACTURED FROM FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS AND COMPOSED OF A MINIMUM OF 95 PERCENT BY WEIGHT OF POLYOLEFINS OR POLYESTERS, AND FORMED INTO A STABLE NETWORK SO THE FILAMENTS OR YARNS RETAIN THEIR DIMENSIONAL STABILITY RELATIVE TO EACH OTHER, INCLUDING SELVAGES.

WHEN MORE THAN ONE SECTION OF GEOTEXTILE IS NECESSARY OVERLAP THE SECTIONS BY AT LEAST ONE FOOT. THE GEOTEXTILE MUST BE PULLED TAUT OVER THE APPLIED SURFACE. EQUIPMENT MUST NOT RUN OVER EXPOSED FABRIC. WHEN PLACING RIPRAP ON GEOTEXTILE, DO NOT EXCEED A ONE FOOT DROP HEIGHT.

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| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
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LOCKHEED MARTIN
MIDDLE RIVER COMPLEX
SOIL REMEDIAL ACTION
EROSION AND SEDIMENT CONTROL DETAILS
(SHEET 2 OF 3)

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|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | TWS |
| DRAWN BY: | SPC |
| CHECKED BY: | SAN |
| SHEET: | 18 OF 20 |

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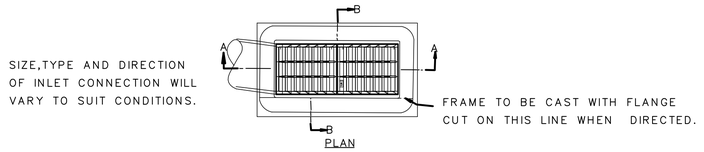


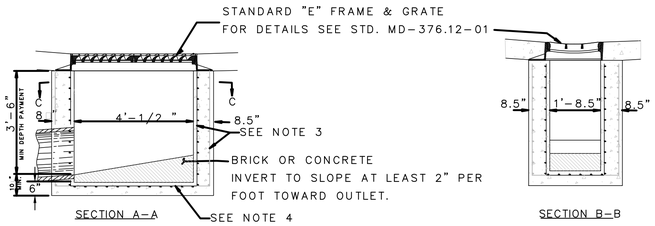


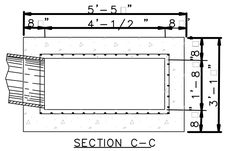


**CONSTRUCTION SPECIFICATIONS**

1. BRICK FOR MASONRY TO COMPLY WITH THE LATEST SHA. SPECIFICATIONS.
2. INLET SHALL BE CONSTRUCTED OF REINFORCED CONCRETE MIX NO. 2 (3,000 PSI)
3. WHEN DEPTH IS LESS THAN 7'-0", WALL REINFORCEMENT SHALL BE ONE LAYER OF NO. 4 DEFORMED BARS @ 6" C/C, TWO WAYS, AND HAVE 3" COVER ON INSIDE. WHEN DEPTH IS GREATER THAN 7'-0" AND LESS THAN 15'-0", WALL REINFORCEMENT TO BE TWO LAYERS OF NO. 4 DEFORMED BARS @ 6" C/C, TWO WAYS, ON INSIDE AND OUTSIDE OF WALL WITH 2" COVER.
4. BASE REINFORCEMENT SHALL BE ONE LAYER OF NO. 4 DEFORMED BARS @ 6" C/C, TWO WAYS, WITH 2" COVER FROM TOP OF BASE.
5. FROM THE CURB LINE, INLET HAS BEEN DESIGNED FOR HS-25 LOADING, ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND FOR A MAXIMUM DEPTH OF 15'-0".

## STANDARD TYPE E INLET DETAIL

NOT TO SCALE — 1 | 12 | 19

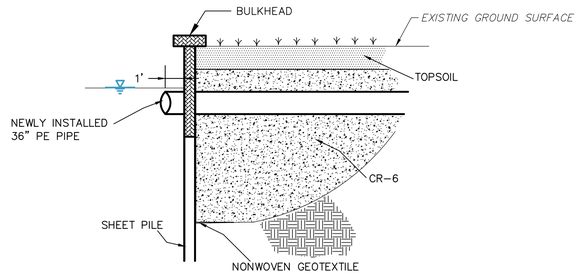


CONSTRUCTION SPECIFICATIONS

1. CR-6 WILL HAVE COMPRESSIVE STRENGTH OF 50 TO 100 PSI.
2. CR-6 WILL BE PLACED IN MAX 12-INCH LIFTS. THE NEXT LIFT WILL NOT BE PLACED UNTIL THE UNDERLYING LIFT IS STRONG ENOUGH TO HAVE A ONE FOOT VERTICAL FACE UNDER LOAD OF THE NEXT LIFT (I.E. APPROXIMATELY 2 PSI OR 288 PSF OF COMPRESSIVE STRENGTH).
3. BOTTOM OF THE EXCAVATION LIMIT NEAR THE SHEET PILE WILL BE 3 FEET HORIZONTAL OR SLOPING AWAY FROM THE SHEET PILE.
4. 36" PE PIPE WILL BE PLACED IN EXISTING HOLE IN THE BULKHEAD.

## STORM DRAIN PIPE REPAIR DETAIL

NOT TO SCALE — 2 | 15 | 19

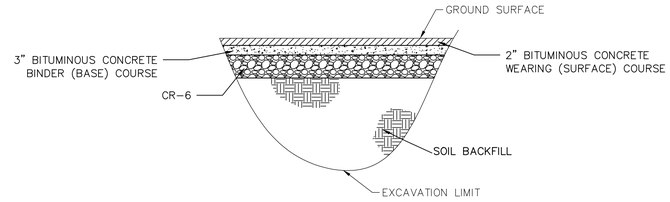


CONSTRUCTION SPECIFICATIONS

1. CR-6 WILL HAVE COMPRESSIVE STRENGTH OF 50 TO 100 PSI.

## ASPHALT RESURFACING DETAIL

NOT TO SCALE — 3 | 11 | 19

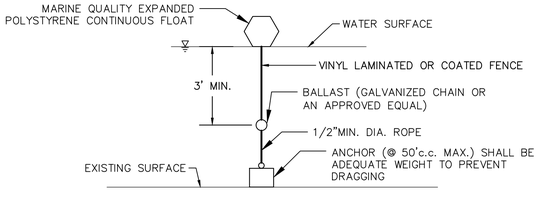


**CONSTRUCTION SPECIFICATIONS**

1. BARRIERS SHOULD BE A BRIGHT COLOR (YELLOW OR "INTERNATIONAL" ORANGE ARE RECOMMENDED) THAT WILL ATTRACT THE ATTENTION OF NEARBY BOATERS
2. CONSTRUCTION FABRIC – THICKNESS, 45 MILS. WEIGHT 18 OZ. SQ YD. GRAB TENSILE STRENGTH, 300 LBS. UV INHIBITOR MUST BE INCLUDED.
3. SEAMS IN THE FABRIC SHALL BE EITHER VULCANIZED, WELDED, OR SEWN, AND SHALL DEVELOP THE FULL STRENGTH OF THE FABRIC.
4. FLOTATION DEVICES SHALL BE FLEXIBLE, BUOYANT UNITS, CONTAINED IN AN INDIVIDUAL FLOTATION SLEEVE OR COLLAR ATTACHED TO THE CURTAIN. BUOYANCY PROVIDED BY THE FLOTATION UNITS SHALL BE SUFFICIENT TO SUPPORT THE WEIGHT OF THE CURTAIN AND MAINTAIN A FREEBOARD OF AT LEAST 3 INCHES ABOVE THE WATER SURFACE.

## TURBIDITY CURTAIN DETAIL

NOT TO SCALE — 4 | 12 | 19

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STATE OF MARYLAND — SCOTT A. NESIT — No. 29015 — PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
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LOCKHEED MARTIN
MIDDLE RIVER COMPLEX

SOIL REMEDIAL ACTION
EROSION AND SEDIMENT CONTROL DETAILS
(SHEET 3 OF 3)

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 19 OF 20 |

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C-17

MARYLAND AVIATION ADMINISTRATION SEEDING SPECIFICATIONS

REFERENCES TO ITEM #S NOTED BELOW ARE FOUND IN MARYLAND AVIATION ADMINISTRATION'S MANUAL ENTITLED SPECIFICATIONS FOR PERFORMING LANDSCAPING ACTIVITIES FOR THE MARYLAND AVIATION ADMINISTRATION DATED JANUARY 2008.

ITEM 903 SEEDING

DESCRIPTION

903–1.1 GENERAL. This item provides specifications for seeding of areas as designated on plans or as directed by the MAA Engineer. The species, mixtures, and methods of application provided in this item have been designed to reduce the attractiveness of airport grounds to wildlife. Only MAA–approved species, mixtures, and rates of application provided in this item may be used to establish vegetation. All activities associated with seeding including soil preparation, seed application, fertilization, and maintenance shall also conform to these approved standards.

MATERIALS

903–2.1 SEED. All seed shall comply with the Maryland Seed Law (Agricultural Article of the Annotated Code of Maryland). Only MAA–approved species, mixtures, and rates of application provided in this item may be used to establish vegetation. Seed will be sampled and tested by an inspector from the Turf and Seed Section, Maryland Department of Agriculture (MDA), Annapolis, Maryland. All lawn and turf seed and mixtures shall be free from the following state–listed restricted noxious weeds:

corn cockle (agrostemma githago),
bentgrass (Agrostis spp.),*
redtop (Agrostis gigantea) *
wild onion (Allium canadense),
wild garlic (Allium vineale),
bindweed (Calstegia spp.),
dodder (Cuscuta spp.),
Bermuda grass (Cynodon dactylon),
orchardgrass (Dactylis glomerata),
tall fescue (Festuca arundinacea) *
meadow fescue (Festuca pratensis) *,
velvetgrass (Holcus lanatus),
annual bluegrass (Poa annua),
rough bluegrass (Poa trivialis),*
timothy (Phleum pratense), and
Johnson grass (Sorgum halepense).

* These species may be included as a labeled component of a mixture when each is present in excess of five percent of the mixture by weight.

Restricted noxious–weed seed may not exceed 0.5 percent by weight of any seed mixture. In addition, all seeds sold in Maryland shall be free from the following listed prohibited noxious weeds: balloonvine (Cardiospermum halicacabum), quackgrass (Elytrigia repens), sicklepod (Senna obtusifolia), sorghum (Sorghum spp.), Canada thistle (Cirsium arvense), plumeless thistle (Carduus spp.–includes musk thistle and curled thistle), and serrated tussock (Nassella trichotoma).

903.2.1.1 APPROVED SPECIES. The following table contains species that are approved by MAA for use in seed mixtures. Purity requirements and germination requirements are also provided.

**APPROVED PLANT SPECIES**
**MMA SEED MIXTURES**

| | PURITY* NOT LESS THAN % | MINIMUM % GERMINATION** | PURE LIVE SEED FACTOR |
|---|---|---|---|
| CERTIFIED TURF–TYPE TALL FESCUE (Festua arundinacea) | 98 | 90 | 1.1300 |
| CERTIFIED KENTUCKY BLUE GRASS (poa pratensis) | 90 | 80 | 1.3900 |
| FOWL BLUEGRASS (Poa Palustris) | 90 | 80 | 1.3900 |
| HARD FESCUE (Festuca longifolia) | 98 | 90 | 1.1300 |
| CHEWING RED FESCUE (Festuca rubra commutata) | 98 | 90 | 1.1300 |
| ANNUAL RYEGRASS (Lolium multiflorum) | 95 | 85 | 1.2400 |
| PERENNIAL RYEGRASS (Lolium perenne) | 90 | 80 | 1.3900 |
| CREEPING BENTGRASS (Agrostis Stolonifera) | 90 | 80 | 1.3900 |
| SWITCHGRASS (Panicum Virgatum) | 90 | 80 | 1.3900 |
| LITTLE BLUESTEM (Andropogon scoparius) | 62 | 94 | 1.7100 |

*THE PERCENTAGE WEIGHT OF PURE SEED PRESENT SHALL BE FREE OF ANY AGRICULTURE SEEDS, INERT MATTER, AND OTHER SEEDS DISTINGUISHABLE BY THEIR PERCENTAGE.

**THE PERCENTAGE OF GERMINATION SHALL BE ACTUAL SPROUTS AND SHALL NOT INCLUDE HARD SEEDS UNLESS SPECIFICALLY PERMITTED BY THE MAA ENGINEER.

903–2.1.2 PURITY. All seed shall be free of all state–designated noxious weeks listed in Paragraph 2.1.1 and conform to MAA specifications. To ensure compliance, MAA requires sampling and testing of seed by the Turf and Seed Section, Maryland Department of Agriculture (MDA). The Contractor shall furnish the MAA Engineer with duplicate signed copies of a statement by the Turf and Seed Section certifying that each lot of seed has been laboratory tested within six months of date of delivery. This statement shall include the following information:

- name and address of laboratory,
- date of test,
- lot number,
- the results of tests as to name, percentages of purity and of germination,
- percentage of weed content for the seed furnished,
- and, in the case of a mixture, the proportions of each kind of seed.

Seed shall be furnished in standard containers with the seed name, lot number, net weight, percentages of purity, germination rate and hard seed, and percentage of maximum weed seed content clearly marked. All seed containers shall be tagged with a MDA supervised mix program seed tag.

903–2.1.3 MIXTURES AND APPLICATION RATES. Only seed mixtures and application rates described in this item may be used unless otherwise approved by the MAA Engineer. seed mixtures shall meet criteria detailed in Paragraph 903–2.1.2. Seed mixtures have been formulated to minimize the attractiveness of areas to wildlife of common landscape scenarios. The appropriate seed mixture for application will be designated based on environmental conditions and may vary from site to site. All planting rates listed are in pounds of Pure Live Seed (PLS) per acre.

Seed mixtures, application scenarios, and rates for permanent cool–season grasses are as follows:

a. Seed Mixture No. 1 – relatively flat areas (grade less than 4:1) subject to normal conditions and regular mowing (Application rate = 234 lbs PLS/acre)
b. Seed Mixture No. 2 – sloped areas (grade greater than 4:1) not subject to regular mowing (Application Rate = 115 lbs PLS/acre); and
c. Seed Mixture No. 3 – wetlands and their associated buffer zones (Application rate = 131 lbs PLS/acre).

Seed Mixture No. 1: Relatively flat areas regularly mowed and exposed to normal conditions (Application rate = 234 lbs PLS/acre)

| Seed | | Rate of Application (lbs of PLS/acre) |
|---|---|---|
| 85% | Certified Turf–Type Tall Fescue | 192 |
| 10% | Certified Kentucky Bluegrass | 28 |
| 5% | Perennial Ryegrass | 14 |
| Supplemental Seed | | |
| | Annual Ryegrass | 25 |

Seed Mixture No. 2: Sloped areas not subject to regular mowing (Application rate = 115 lbs PLS/acre)

| Seed | | Rate of Application (lbs of PLS/acre) |
|---|---|---|
| 75% | Hard Fescue | 85 |
| 20% | Chewing Fescue | 23 |
| 5% | Kentucky Bluegrass | 7 |
| Supplemental Seed | | |
| | Redtop | 3 |

Seed Mixture No. 3: Wetland areas and their associated buffer zones (Application rate = 131 lbs PLS/acre)

| Seed | | Rate of Application (lbs of PLS/acre) |
|---|---|---|
| 60% | Creeping Bentgrass | 83 |
| 30% | Fowl Bluegrass | 34 |
| 10% | Switchgrass | 14 |
| Supplemental Seed | | |
| | Redtop | 3 |

903.2.1.4 SEEDING SEASON. Application of seed and seed mixtures shall occur within a specified seeding season unless otherwise approved by the MAA Engineer. No seed or seed mixtures are to be applied on frozen ground or when the temperature is at or below 35 degrees Farenheit (7.2 degrees Centigrade). Under these conditions, a layer of mulch should be applied in accordance with Item 905, Mulching, to stabilize the site, and permanent seeding should occur in the subsequent seeding season. Seed application may occur during the seeding season dates listed below. Seeding performed after October 20 should be a temporary cover of annual ryegrass and followed by overseeding of the appropriate seed mixture during the spring seeding season.

**SEEDING SEASONS**

| | |
|---|---|
| PERMANENT COOL–SEASON GRASSES | MARCH 1 TO APRIL 20 AND AUGUST 1 TO OCTOBER 20, INCLUSIVE |
| TEMPORARY COVER OF ANNUAL RYE/REDTOP | MARCH 1 TO APRIL 30 AND AUGUST 1 TO NOVEMBER 30, INCLUSIVE |
| TEMPORARY COVER OF WARM–SEASON GRASSES (LITTLE BLUESTEM ONLY) | MAY 1 TO JULY 31, INCLUSIVE. RATE OF APPLICATION SHOULD BE 13.6 LBS. PLS PER ACRE |

903–2.2 LIME. Lime shall consist of ground limestone and contain at least 85 percent total carbonates. Lime shall be ground to a fineness so that at least 90 percent will pass through a No. 20 mesh sieve and 50 percent will pass through a No. 100 mesh sieve. Dolomitic lime or a high magnesium lime shall contain at least 10 percent magnesium oxide. Lime shall be applied by approved methods detailed in Section 903–3.3 of this item. The rate of application will be based on results of soil tests.

903–2.3 FERTILIZER. Fertilizer shall be standard commercial fertilizer (supplied separately or in mixtures) and meet the requirements of applicable state and federal laws (O–F–241) as well as standards of the Association of Official Agricultural Chemists. Nitrogen–Phosphorus–Potassium (N–P–K) concentrations shall be determined from analysis of soil samples. Methods of fertilizer application shall conform to standards described in Section 903–3.3 of this item. Fertilizer shall be furnished in standard containers that are clearly labeled with name, weight, and guaranteed analysis of the contents (percentage of total nitrogen, available phosphoric acid, and water–soluble potash). Mixed fertilizers shall not contain any hydrated lime or cyanamide compounds. Fertilizers failing to meet the specified analysis may be approved by the MAA Engineer, providing sufficient materials are applied to conform with the specified nutrients per unit of measure without additional cost to MAA.

The fertilizers may be supplied in the following forms:
a. A dry, free–flowing fertilizer suitable for application by a common fertilizer spreader;
b. A finely ground fertilizer soluble in water, suitable for application by power sprayers; or
c. A granular or pellet form suitable for application by blower equipment.

The rate of application will be based on results of soil tests performed by the University of Maryland Soil Testing Laboratory. By law, persons applying fertilizer to State–owned land shall follow the recommendations of the University of Maryland as set forth in the "Plant Nutrient Recommendations Based on Soil Tests for Turf Maintenance" and the "Plant Nutrient Recommendations Based on Soil Tests for Sod Production". Application of the fertilizer shall be in a manner that is consistent with the recommendations of the University of Maryland Cooperative Extension.

CONSTRUCTION METHODS AND EQUIPMENT

903–3.1 GENERAL. This section provides approved methods for the application of and includes standards for seedbed preparation, methods of application, and equipment to be used during the process. Lime and fertilizer shall be applied to seeded areas before the seed is spread. The mixture of seed will be determined for sites based on environmental conditions as described in Paragraph 903–2.1.3.

903–3.2 ADVANCE PREPARATION. Areas designated for seeding shall be properly prepared in advance of seed application. The area shall be tilled and graded prior to application of lime and fertilizer, and the surface area shall be cleared of any stones larger than 1 inch in diameter, sticks, stumps, and other debris that might interfere with sowing of seed, growth of grasses, or subsequent maintenance of grass–covered areas. Damage caused by erosion or other forces that occur after the completion of grading shall be repaired prior to the application of fertilizer and lime. The Contractor will repair such damage, which may include filling gullies, smoothing irregularities, and repairing other incidental damage before beginning the application of fertilizer and ground limestone.

If an area to be seeded is sparsely sodded, weedy, barren and unworked, or packed and hard, all grass and weeds shall first be cut or otherwise satisfactorily disposed of, and the soil then scarified or otherwise loosened to a depth not less than 5 inches (125 mm). Clods shall be broken and the top 3 inches (75 mm) of soil shall be worked into a satisfactory condition by discing or by use of cultipackers, rollers, drags, harrows, or other appropriate means.

An area to be seeded shall be considered a satisfactory seedbed (without requiring additional treatment) if it has recently been thoroughly loosened and worked to a depth of not less than 5 inches; the top 3 inches of soil is loose, friable, and is reasonably free from large clods, rocks, large roots, or other undesirable matter; appropriate amounts of fertilizer and lime have been added; and, if it has been shaped to the required grade immediately prior to seeding. For slope areas steeper than 3:1 (three horizontal to one vertical), the subsoil shall be loose to a depth of 1 inch.

After completion of tilling and grading, lime and fertilizer shall be applied within 48 hours according to the specified rate (Paragraphs 903–2.2 and 2.3) and methods (Paragraphs 903–3.3.1 and 903–3.3.2) approved by MAA. The seeding mixture shall be applied within 48 hours after application of lime and fertilizer. To firm the seeded areas, cultipacking shall occur immediately after seeding.

903–3.3 METHODS OF APPLICATION. Lime, fertilizer, and seed mixes shall be applied by either the dry or wet application methods that have been approved by MAA and are detailed below.

903–3.3.1 DRY APPLICATION METHOD

a. Liming. If soil test results indicate that lime is needed, the following procedures will be used: following advance preparation of the seedbed, lime shall be applied prior to the application of any fertilizer or seed and only on seedbeds that have been prepared as described in paragraph 903–3.2. The lime shall be uniformly spread and worked into the top 2 inches of soil, after which the seedbed shall be properly graded again.
b. Fertilizing. Following advance preparations (and liming if necessary), fertilizershall be spread uniformly at the specified rate to provide no less than the minimum quantity stated in Paragraph 903–2.3.
c. Seeding. Seed mixtures shall be sown immediately after fertilization of the seedbed. The fertilizer and seed shall be lightly raked to a depth of 1 inch for newly graded and disturbed areas.
d. Rolling. After the seed has been properly covered, the seedbed shall be immediately compacted using a cultipacker or an approved lawnroller.

903–3.3.2 WET APPLICATION METHOD/HYDROSEEDING

A. GENERAL.The contractor may elect to apply seed and fertilizer as per paragraphs c and d of this section in the form of an aqueous mixture by spraying over the previously prepared seedbed using methods and equipment approved by MAA. The rates of application shall be as specified in paragraphs 903–2.1 through 903–2.3.

B. SPRAYING EQUIPMENT. The spraying equipment shall have a container or water tank equipped with a liquid level gauge capable of reading increments of 50 gallons or less over the entire range of the tank capacity. The liquid level gauge shall be mounted so as to be visible to the nozzle operator at all times. The container or tank shall also be equipped with a mechanical power–driven agitator capable of keeping all the solids in the mixture in complete suspension at all times until used.

The spraying equipment shall also include a pressure pump capable of delivering 100 gallons per minute at a pressure of 100 pounds per square inch. The pressure pump assemblage shall be configured to allow the mixture to flow through the tank when not being sprayed from the nozzle. All pump passages and pipelines shall be capable of providing clearance for 5/8–inch solids. The power unit for the pump and agitator shall have controls mounted so as to be accessible to the nozzle operator. A pressure gauge shall be connected to and mounted immediately behind the nozzle.

The nozzle pipe shall be mounted on an elevated supporting stand in such a manner that it can be rotated through 360 degrees horizontally and inclined vertically from at least 20 degrees below to at least 60 degrees above the horizontal. There shall be a quick–acting, three–way control valve connecting the recirculating line to the nozzle pipe and mounted so that the nozzle operator can control and regulate the amount of flow of mixture to be supplied so that mixtures may be properly sprayed over a distance varying from 20 feet to 100 feet. One shall be a close–range ribbon nozzle, one a medium–range ribbon nozzle, and one a long–range jet nozzle. for ease of removal and cleaning, All nozzles shall be connected to the nozzle pipe by means of quick–release couplings. In order to reach areas inaccessible to the regular equipment, an extension hose at least 50 feet in length shall be provided to which the nozzles may be connected.

C. MIXTURES. Lime shall be applied separately in the quantity specified, prior to the fertilizing and seeding operations. Lime should be added to and mixed with water at a concentration not to exceed 220 pounds of lime for every 100 gallons of water. After lime has been applied, the tank should be emptied and rinsed with fresh water. Seed and fertilizer shall be mixed together in the relative proportions specified, but the resulting concentration should not exceed 220 pounds of mixture per 100 gallons of water and should be applied within 30 minutes to prevent fertilizer burn of the seeds.

All water used shall be obtained from fresh water sources and shall be free from injurious chemicals and other toxic substances harmful to plant life. Brackish water shall not be used at any time. The contractor shall identify all sources of water to the MAA engineer at least two weeks prior to use. The engineer may take samples of the water at the source or from the tank at any time and have a laboratory test the samples for chemical and saline content. The contractor shall not use any water from any source that is disapproved by the engineer following such tests.

All mixtures shall be constantly agitated from the time they are mixed until they are finally applied to the seedbed. All such mixtures shall be used within 30 minutes from the time they were mixed or they shall be wasted and disposed of at a location acceptable to the engineer.

D. SPRAYING. Lime shall be sprayed upon previously prepared seedbeds on which the lime, if required, shall have been worked in already. The mixtures shall be applied using a high–pressure spray which shall always be directed upward into the air so that the mixtures will fall to the ground in a uniform spray. Nozzles or sprays shall never be directed toward the ground in such a manner that might produce erosion or runoff. Particular care shall be exercised to ensure that the application is made uniformly, at the prescribed rate, and to guard against misses and overlapped areas. Predetermined quantities of the mixture shall be used in accordance with specifications to cover specified sections of known areas. To checks the rate and uniformity of application, the applicator will observe the degree of wetting of the ground or distribute test sheets of paper or pans over the area at intervals and observe the quantity of material deposited thereon.

On surfaces that are to be mulched as indicated by the plans or designated by the MAA engineer, seed and fertilizer applied by the spray method need not be raked into the soil or rolled. however, on surfaces on which mulch is not to be used, the raking and rolling operations will be required after the soil has dried.

903–3.4 MAINTENANCE OF SEEDED AREAS. The contractor shall protect seeded areas against traffic or other use by warning signs or barricades, as approved by the engineer. Surfaces gullied or otherwise damaged following seeding shall be repaired by regrading and reseeding as directed. The contractor shall mow, water as directed, and otherwise maintain seeded areas in a satisfactory condition until final inspection and acceptance of the work.

When either the dry or wet application method outlined above is used for work performed out of season, the contractor will be required to establish a good stand of grass of uniform color and density to the satisfaction of the engineer. If at the time when the contract has been otherwise completed it is not possible to make an adequate determination of the color, density, and uniformity of such stand of grass, payment for the unaccepted portions of the areas seeded out of season will be withheld until such time as these requirements have been met.

ITEM 904 SODDING

DESCRIPTION

904–1 This item provides standards for furnishing, hauling, and placing approved live sod on prepared areas as indicated on site plans. Sod will only be applied to landscape areas and shall be mowed frequently. All sodding activities shall conform to these specifications at the locations shown on site plans or as directed by the MAA Engineer.

MATERIALS

904–2.1 SOD. Sod furnished by the Contractor shall have a good cover of living or growing grass. This includes grass that is seasonally dormant during the cold or dry seasons and capable of renewing growth after the dormant period. All sod shall be obtained from areas in which the soil is reasonably fertile and contains a high percentage of loamy topsoil. Sod shall be cut or stripped from living, thickly matted turf relatively free of weeds or other undesirable foreign plants, large stones, roots, or other materials that might be detrimental to the development of the sod or to future maintenance. Grass sod shall be Maryland–certified or approved and shall comply with the Maryland Sod Law of the Annotated Code of Maryland (Agricultural Article Sections

9–101 through 9–110). Each load of sod shall bear a Maryland State Approved or Certified label at the time of delivery on the job. Sod shall be either: (1) Bluegrass sod containing not less than 80 percent Kentucky bluegrass (Poa pratensis) and not more than 20 percent Red Fescue (Festuca rubra); or (2) certified turf type–tall fescue (Festuca arundinacea) sod containing not less than 80 percent certified turf type–tall fescue (Festuca arundinacea) grass and not more than 20 percent Kentucky Bluegrass (Poa pratensis) and Red Fescue (Festuca rubra). Any vegetation more than 6 inches in height shall be mowed to a height of 3 inches or less before sod is lifted. Sod, including the soil containing the roots and the emergent plant growth, shall be cut uniformly to a thickness not less than that specified in Section 904–3.4.

904–2.2 LIME. Lime shall conform to standards described in Section 903, 'Seeding.'

904–2.3 FERTILIZER. Fertilizers and application methods shall conform to the standards previously described in Section 903, 'Seeding.'

904–2.4 WATER. All water shall conform to the standards previously described in Paragraph 902–2.4, 'Water.'

904–2.5 SOILS FOR REPAIR. All soils for repairs shall conform to the standards previously described in Paragraph 901–2.3, 'Soils for Repair.'

CONSTRUCTION REQUIREMENTS

904–3.1 GENERAL. Areas to be sodded shall be clearly indicated by site plans. Areas requiring special ground surface preparation, such as tilling, and those areas in a satisfactory condition that are to remain undisturbed shall also be shown on the plans.

Suitable equipment necessary for proper preparation of the ground surface and for the handling and placing of all required materials shall be on hand, in good condition, and shall be approved by the MAA Engineer before sodding operations begin. The Contractor shall demonstrate to the MAA Engineer, before starting the various operations, that the application of required materials, such as fertilizer and limestone, will be made at the specified rates.

904–3.2 ADVANCE PREPARATION. If the area to be sodded is sparsely vegetated, weedy, barren and unworked, or packed and hard, all existing herbaceous vegetation shall be removed. The soil shall then be scarified or otherwise loosened to a depth of at least 5 inches (125 mm). Clods shall be pulverized, and the top 3 inches (75 mm) of soil shall be worked into a satisfactory bed by discing or use of cultipackers, rollers, drags, harrows, or other equipment approved by the MAA Engineer. The area shall then be properly graded as indicated by site plans.

After grading of areas is complete and prior to the application of fertilizer and limestone, areas to be sodded shall be raked or otherwise cleared of stones larger than 1 inch in diameter, sticks, stumps, and other debris which might interfere with sodding, growth of grasses, or subsequent maintenance of grass–covered areas. If any damage by erosion or other causes has occurred after grading of areas and before beginning the application of fertilizer and ground limestone, the Contractor shall repair such damage. This may include filling gullies, smoothing irregularities, and repairing other incidental damage.

An area to be sodded will be considered a satisfactory seedbed without requiring additional treatment if it recently has been thoroughly loosened and worked to a depth of not less than 5 inches as a result of grading operations and, if immediately prior to sodding, the top 3 inches of soil is loose, friable, reasonably free from large clods, rocks, large roots, or other undesirable matter, and is shaped to the required grade. For slope areas steeper than 3:1 (three horizontal to one vertical) the subsoil shall be loosened to a depth of 1 inch. Lime and fertilizer shall be applied within 48 hours after tilling as described in 903–3.3 and 3.4. The sod shall be applied immediately after the lime and fertilizer have been worked into the soil.

904–3.3 APPLICATION OF FERTILIZER AND LIME. Following ground surface preparation, fertilizer shall be uniformly spread as described in Section 903–3.3 at a rate that will provide at least the minimum quantity of fertilizer required. If the use of ground limestone is specified, it shall be spread as described in Section 903–3.3, 'Methods of Application'; at a rate that will provide at least the minimum quantity of lime required. These materials shall be incorporated into the soil to a depth of at least 2 inches by discing, raking, or other methods approved by the MAA Engineer. Any stones larger than 1 inch in diameter, large clods, roots, and other litter brought to the surface by this operation shall be removed.

904–3.4 OBTAINING AND DELIVERING SOD. The sod shall be well rooted, grown in the State of Maryland, and field grown for a minimum of 12 months. After inspection and approval of the sod by the MAA Engineer, the sod shall be cut with approved sod cutters to such a thickness that after placement on the prepared bed, but before compaction, it shall have a uniform attached soil thickness of at least 0.75 inch. Sod sections or strips shall be cut in uniform widths of at least 14 inches and in lengths of at least 18 inches, but not to lengths that might inhibit placement without breaking, tearing, or loss of soil. Where strips are required, the sod shall be rolled or folded undamaged, with the grass facing inward. The Contractor may be required to mow high grass before cutting sod.

Sod shall be transplanted within 24 hours from the time of harvest unless circumstances beyond the Contractor's control make storage necessary. In such cases, sod shall be stacked, kept moist, protected from exposure to the air and sun, and shall be kept from freezing. Sod shall only be harvested and mowed when soil moisture conditions are such that favorable results can be expected. Where soil is too dry, permission to cut sod may be granted only after it has been sufficiently watered to moisten the soil to the depth at which the sod will be cut.

904–3.5 PLACING SOD. Sodding shall only be performed during seasons when satisfactory results can be expected. Frozen sod shall not be used and sod shall not be placed upon frozen soil. Sod may be transplanted during periods of drought with the approval of the MAA Engineer, provided the sod bed is watered to moisten the soil to a depth of at least 4 inches immediately prior to laying the sod.

The sod shall be moist and shall be placed on a bed, prepared according to Paragraphs 904–3.2 'Advance Preparation', and 904–3.3, 'Application of Fertilizer and Lime'by hand. Pitchforks shall not be used to handle sod, and dumping from vehicles shall not be permitted. The sod shall be placed carefully by hand, edge to edge and with staggered joints, in rows at right angles to the slopes, starting at the base of the area to be sodded and working upward. The sod shall immediately be pressed firmly into contact with the sod bed by tamping or rolling with approved equipment to provide a true and even surface, and ensure knitting without displacement of the sod or deformation of the surfaces of sodded areas. Where the sod has been displaced during sodding operations, the workmen replacing it shall work from ladders or treaded planks to prevent further displacement. Where the grades are such that the flow of water will be from paved surfaces across sodded areas, the surface of the soil in the sod after compaction shall be set approximately 1.5 inches below the pavement edge. Where the flow will be over the sodded areas and onto the paved surfaces around manholes and inlets, the surface of the soil in the sod after compaction shall be placed flush with pavement edges.

On slopes steeper than 1:2.5 and in V–shaped or flat–bottom ditches or gutters, the sod shall be secured with wooden pegs at least 18 inches long and a cross–sectional area of at least 0.75–square inch, or by other methods of securing sod approved by the MAA Engineer. The pegs shall be driven flush with the surface of the sod. The pegs shall be of sufficient number and at adequate spacing to secure sod from displacement. The use of sod staples or other means of securing the sod from displacement may be approved by the MAA Engineer provided satisfactory results are expected.

904–3.6 WATERING. Adequate water and watering equipment shall be on hand before sodding begins, and sod shall be kept moist until it has become established and its continued growth assured. In all cases, watering shall be done in a manner that will avoid erosion from the application of excessive quantities and will avoid damage to the finished surface.

904–3.7 ESTABLISHING TURF.

904–3.7.1 GENERAL. The Contractor shall provide general care for the sodded areas as soon as the sod has been laid and shall continue to provide such care until final inspection and acceptance of the work.

904–3.7.2 PROTECTION. All sodded areas shall be protected against traffic or other use by warning signs and barricades approved by the MAA Engineer.

904–3.7.3 MOWING. The Contractor shall mow the sodded areas with approved mowing equipment, depending upon climatic and growth conditions and the needs for mowing of specific areas. in the event that weeds or other undesirable vegetation establishes to such an extent that, either cut or uncut, they threaten to smother the sodded species, the weeds shall be mowed and the clippings raked and removed from the area. Spot applications of an appropriate herbicide by a licensed applicator shall be approved by the MAA Engineer to remove invasive species. The appropriate herbicide shall be determined on a case–by–case basis, depending on the location and type of weed.

904–3.7.4 REPAIR. When the surface has become gullied or otherwise damaged during the period covered by this contract, the affected areas shall be repaired to re–establish the grade and the condition of the soil and shall then be re–sodded as specified in Paragraph 904–3.5, 'Placing Sod', at the Contractor's expense

ITEM 905 MULCHING

DESCRIPTION

905–1.1 GENERAL. This item provides the Contractor with MAA–approved specifications for mulch and the application of mulch including distribution of mulch and securing of mulched areas. Areas to be mulched will be clearly shown on site plans or otherwise designated by the MAA Engineer.

MATERIALS

905–2.1 TYPES OF MULCH. Acceptable mulch shall be composed of the materials listed below or composed of any locally available materials that are similar to those specified and approved by the MAA Engineer. Low–grade, shalely, soiled, partially rotted hay, straw, or other materials unfit for animal consumption will not be acceptable for use as mulch. Straw or other material that is fresh, excessively brittle, or is in such an advanced stage of decomposition as to smother or retard the planted grass, is not acceptable. Clean, weed–free straw may be used. Mulch materials containing matured seed with the potential to establish and be detrimental to the project or the surrounding area is not acceptable.

a. Shredded Hardwood Bark. Shredded hardwood bark shall consist of hardwood tree bark that has been milled and screened to ensure a maximum 4–inch (100–mm) particle size, provide a uniform texture, and be free from sawdust, toxic substances, and other foreign materials.

b. Wood Chips. Wood chips shall be produced by a chipping machine to a size specified by the MAA Engineer. Chips may not have been subjected to any conditions that would shorten their useful life or cause them to lose any of their value as mulch. Wood chips shall be free from bark, leaves, twigs, wood shavings, sawdust, toxic substances, and other foreign material.

c. Wood Cellulose Fiber. Wood cellulose fiber shall consist of a processed wood product with uniform fiber characteristics. The fiber shall be capable of remaining in a uniform suspension under agitation in water and blending with seed, fertilizer, and other additives to form a homogeneous slurry. The fiber shall perform satisfactorily in hydraulic seeding equipment without clogging or damaging the system. The slurry shall contain a green dye to provide easy visual inspection for uniformity of application.

Certification showing that the fiber material conforms to the following specifications shall be provided by the manufacturer:

**Wood Cellulose Fiber Requirements**

| | |
|---|---|
| Particle Length, in. (mm) | Approximately 1/2 (13) |
| Particle Thickness, in. (mm) | Approximately 1/16 (1.5) |
| Net dry Weight Content | Minimum as stated on bag |
| TAPPI* T 509, pH | 4.0 to 8.5 |
| Ash Content, TAPPI* Standard T 413, % max | 7.0 |
| Water Holding Capacity, % min | 90 |

*Technical Association of Pulp and Paper Industry

The material shall be delivered in packages of uniform net weight of 75 lbs (34 kg) or less and shall be clearly labeled with the name of the manufacturer, net weight, and a supplemental statement of the net weight content.

905–2.2 INSPECTION. Within five days after acceptance of the bid, the Contractor shall provide representative samples of mulch material to be used to the MAA Engineer and identify the source of the material and quantities of mulch materials available. The samples provided may be used as standards with the approval of the MAA Engineer and any materials brought on the site that do not meet these standards may be rejected.

CONSTRUCTION REQUIREMENTS

905–3.1 ADVANCE PREPARATION. Before spreading mulch, all large clods, stumps, stones, brush, roots, and other foreign material shall be removed from the area to be mulched. Mulch shall be applied immediately after seeding unless otherwise specified. The application and spreading of mulch may be by hand methods, blower, or other mechanical methods, provided a uniform covering is obtained.

905–3.2 APPLICATION OF MULCH. The Contractor shall evenly apply mulch materials to areas indicated by site plans or otherwise designated by the MAA Engineer. Cellulose–fiber or wood–pulp mulch shall be applied at the rate of 1,500 pounds (dry weight) per acre. Mulch may be blown on the slopes and use of cutters in the equipment for this purpose will be permitted to the extent that at least 95 percent of the mulch in place on the slope is 6 inches or more in length. When mulch applied by the blowing methods is cut, the loose depth in place shall be 1 to 2 inches. Cellulose fiber or wood–pulp mulch shall be applied as an aqueous mixture by spraying at the rate of 1,500 pounds (dry weight) per acre using spraying equipment approved by the MAA Engineer.

905–3.3 SECURING MULCH. Mulch shall be held in place by light discing, a thin coating of topsoil, pins, stakes, wire mesh, or other methods approved by the MAA Engineer. If the 'peg and string'method is used, the mulch shall be secured with stakes or wire pins driven into the ground on 5–foot centers or less. Binder twine shall be strung between adjacent stakes in straight lines and crossed diagonally over the mulch. The stakes shall be firmly driven nearly flush to the ground to draw the twine tightly onto the mulch.

905–3.4 MAINTENANCE OF MULCHED AREAS. The Contractor shall care for mulched areas until final acceptance of the project. Care required may consist of providing protection against traffic or other disturbances by placement of warning signs and/or barricades before or immediately after mulching has been completed.

The Contractor may be required to repair or replace any mulching that is defective or becomes damaged before the project is finished and deemed satisfactory by the MAA Engineer. When, in the judgment of the MAA Engineer, defects or damage result from poor workmanship or failure to meet the requirements of the specifications, the cost of the necessary repairs or replacement will be borne by the Contractor. However, once the Contractor has completed the mulching of an area in accordance with the provisions of the specifications and to the satisfaction of the Engineer, no additional work at his expense will be required. Any subsequent repairs and/or replacements deemed necessary by the Engineer may be made by the Contractor and will be paid for as additional or extra work.

BALTIMORE COUNTY SOIL CONSERVATION DISTRICT
**APPROVED FOR SEDIMENT CONTROL**

DATE

TETRA TECH
www.tetratech.com
20251 CENTURY BLVD
GERMANTOWN, MD 20874
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STATE OF MARYLAND — SCOTT A. NEWLIN — No. 29015 — PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX
SOIL REMEDIAL ACTION
SEED SPECIFICATIONS

| | |
|---|---|
| DATE: | 03/25/2015 |
| PROJECT NO.: | 112IC05956 |
| DESIGNED BY: | ISG |
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# APPENDIX B—RTDS SPECIFICATION SHEETS



HEALTH AND SAFETY

Exposure Monitoring



## Features and Benefits

- Easy to program, easy to operate
- New graphical user interface with color touch-screen
- Perform in-line gravimetric analysis for custom reference calibrations
- Automatic zeroing (with optional zero module) minimizes the effect of zero drift
- Measure aerosol concentrations corresponding to $PM_1$, $PM_{2.5}$, $PM_{10}$, or Respirable size fractions

## DustTrak™ II Aerosol Monitor

### Models 8530, 8531, and 8532

*Desktop or Handheld Units for Any Environment, Any Application*

The new DustTrak II Aerosol Monitors are battery-operated, data-logging, light-scattering laser photometers that give you real-time aerosol mass readings. They use a sheath air system that isolates the aerosol in the optics chamber to keep the optics clean for improved reliability and low maintenance. Suitable for clean office settings as well as harsh industrial workplaces, construction and environmental sites and other outdoor applications. DustTrak II monitors measure aerosol contaminants such as dust, smoke, fumes and mists.

## Applications

- Industrial/occupational hygiene surveys
- Indoor air quality investigations
- Outdoor environmental monitoring
- Baseline trending and screening
- Point source monitoring
- Engineering control evaluations
- Engineering studies
- Remote monitoring
- Process monitoring
- Emissions monitoring
- Aerosol research studies

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## Easy to Program and Operate

The new graphical user interface with color touch-screen puts everything at your fingertips. The easy-to-read display shows real-time mass concentration and graphical data as well as other statistical information along with instrument pump, laser and flow status, and much more. Perform quick walk-through surveys or program the instrument's advanced logging modes for long-term sampling investigations. Program start times, total sampling times, logging intervals, alarm setpoints and many other parameters. You can even set up the instrument for continuous unattended operation.

## Desktop Models: Ideal for Long-Term Surveys and Remote Monitoring Applications

Manual and programmable data logging functions also make DustTrak II desktop monitors ideal for unattended applications. They come with USB (device and host), Ethernet, and analog and alarm outputs allowing remote access to data. User adjustable alarm setpoints for instantaneous or 15-minute short-term excursion limit (STEL) are available on desktop models. The alarm output with user-defined setpoint alerts you when upset or changing conditions occur.

All DustTrak II desktop monitors have three unique features:

- Gravimetric sampling capability using a 37-mm filter cassette which can be inserted in-line with the aerosol stream allowing you to perform an integral gravimetric analysis for custom reference calibrations.
- They can be zeroed automatically using the external zeroing module. This optional accessory is used when sampling over extended periods of time. By zeroing the monitor during sampling, the effect of zero drift is minimized.
- STEL alarm feature for tracking 15-minute average mass concentrations when alarm setpoint has been reached for applications like monitoring fugitive emissions at hazardous waste sites.

## Handheld Models: Perfect for Walk-Through Surveys and Single-Point Data Collection Applications

DustTrak II handheld models are lightweight and portable. They're perfect for industrial hygiene surveys, point source location monitoring, indoor air quality investigations, engineering control evaluations/validation, and for baseline trending and screening. Like desktop models, they have manual and programmable data logging functions. In addition, they have single-point data logging capability. Single-point data collection is used for walk-through industrial hygiene surveys and indoor air quality investigations.

## New Software Makes Monitoring Easier than Ever

TrakPro™ Data Analysis Software allows you to set up and program directly from a PC. A new feature is the ability for remote programming and data acquisition from your PC via wireless (922 MHz or 2.4 GHz) communications or over an Ethernet network. As always, you can print graphs, raw data tables, and statistical and comprehensive reports for recordkeeping purposes.



## DustTrak II Aerosol Monitor Features

### All Models

- Li-Ion rechargeable batteries
- Internal and external battery charging capabilities
- Outlet port for isokinetic sampling applications
- User serviceable sheath flow and pump filters
- Logged test pause and restart feature
- Logged test programming
  - Color touch screen—either manual mode or program mode
  - TrakPro™ Data Analysis Software via a PC
- User adjustable custom calibration settings
- Instantaneous alarm settings with visual and audible warnings
- Real-time graph display
- View statistical information during and after sampling
- On-screen instrument status indicators: FLOW, LASER and FILTER
- Filter service indicator for user preventative maintenance

### All Desktop Models

- Hot swappable batteries
- Gravimetric reference sample capability
- Long life 10,000-hour internal pump
- TrakPro Data Analysis Software
- Auto zeroing module (optional accessory)
- STEL alarm setpoint



### All Handheld Models

- Long life 2,500-hour internal pump
- Single-point data collection for walk through surveys
- TrakPro Data Analysis Software



## Battery Performance

| Models 8530/8531 (typical) 6600 mAH Li-Ion Battery Pack (P/N 801680) | 1 Battery | 2 Batteries |
|---|---|---|
| Battery Runtime (hours) | up to 6 | up to 12 |
| Charge Time * (hours) in DustTrak | 4 | 8 |
| Charge Time* (hours) in external battery charger (P/N 801685) | 4 | 8 |

| Model 8532 (typical) 3600 mAH Li-Ion Battery Pack (P/N 801681) | Battery |
|---|---|
| Battery Runtime (hours) | up to 6 |
| Charge Time * (hours) in DustTrak | 4 |
| Charge Time* (hours) in external battery charger (P/N 801686) | 4 |

*of a fully depleted battery





# Specifications

## Models 8530, 8531, and 8532
## DustTrak™ II Aerosol Monitor

**Sensor Type**
90° light scattering

**Particle Size Range**
0.1 to 10 µm

**Aerosol Concentration Range**

| | |
|---|---|
| 8530 Desktop | 0.001 to 150 mg/m$^3$ |
| 8531 Desktop High Conc. | 0.001 to 400 mg/m$^3$ |
| 8532 Handheld | 0.001 to 150 mg/m$^3$ |

**Resolution**
±0.1% of reading or 0.001 mg/m$^3$, whichever is greater

**Zero Stability**
±0.002 mg/m$^3$ per 24 hours at 10 sec time constant

**Flow Rate**
3.0 L/min set at factory, 1.40 to 3.0 L/min, user adjustable

**Flow Accuracy**
±5% of factory set point, internal flow controlled

**Temperature Coefficient**
+0.001 mg/m$^3$ per °C

**Operational Temp**
32 to 120°F (0 to 50°C)

**Storage Temp**
-4 to 140°F (-20 to 60°C)

**Operational Humidity**
0 to 95% RH, non-condensing

**Time Constant**
User adjustable, 1 to 60 seconds

**Data Logging**
5 MB of on-board memory (>60,000 data points)
45 days at 1 minute logging interval

**Log Interval**
User adjustable, 1 second to 1 hour

**Physical Size (HWD)**

| | |
|---|---|
| Handheld | 4.9 x 4.8 x 12.5 in.<br>(12.5 x 12.1 x 31.6 cm) |
| Desktop | 5.3 x 8.5 x 8.8 in.<br>(13.5 x 21.6 x 22.4 cm) |

**Weight**

| | |
|---|---|
| Handheld | 2.9 lb (1.3 kg), 3.3 lb (1.5 kg) with battery |
| Desktop | 3.5 lb (1.6 kg), 4.5 lb (2.0 kg)–1 battery,<br>5.5 lb (2.5 kg)–2 batteries |

**Communications**

| | |
|---|---|
| 8530/31 | USB (host and device) and Ethernet. Stored data accessible using flash memory drive |
| 8532 | USB (Hose and device). Stored data accessible using flash memory drive |

**Power–AC**
Switching AC power adapter with universal line cord included, 115–240 VAC

**Analog Out**

| | |
|---|---|
| 8530/31 | User selectable output, 0 to 5 V or 2 to 20 mA<br>User selectable scaling range |

**Alarm Out**

| | |
|---|---|
| 8530/31 | Relay or audible buzzer<br>Relay<br>Non-latching MOSFET switch<br>User selectable set point<br>–5% deadband<br>Connector 4-pin, Mini-DIN connectors |
| 8532 | Audible buzzer |

**Screen**

| | |
|---|---|
| 8530/31 | 5.7 in. VGA color touchscreen |
| 8532 | 3.5 in. VGA color touchscreen |

**Gravimetric Sampling**

| | |
|---|---|
| 8530/31 | Removable 37 mm cartridge (user supplied) |

**CE Rating**

| | |
|---|---|
| Immunity | EN61236-1:2006 |
| Emissions | EN61236-1:2006 |

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# SidePak™ AM510 Personal Aerosol Monitor




The SidePak AM510 Personal Aerosol Monitor for industrial hygiene and safety professionals displays and data logs aerosol concentration in real time. The rugged, belt-mountable laser photometer is compact and quiet, minimizing interference and worker discomfort. The built-in sampling pump lets you attach a wide variety of size-selective aerosol inlet conditioners for breathing zone or area measurements with a respirable cyclone or one of the three integrated impactors.

The SidePak monitor incorporates TSI's Smart Battery Management System. This system utilizes a built-in "gas gauge" in the battery packs to monitor battery condition and provide precise run time information.

The SidePak monitor's easy-to-read display shows your data as both real-time aerosol mass-concentration and 8-hour time-weighted average (TWA). The monitor's intrinsic safety rating makes it ideal for hazardous/explosive environments. With its convenient data logging and long battery life, the SidePak is also ideal for extended sampling. The easy-to-use TrakPro™ Data Analysis Software lets you create effective graphs and reports.

## User Friendly

- Small, lightweight and quiet to maximize worker acceptance
- Rugged design with secure belt clip
- Easy-to-understand user interface with only four keys
- Lockable keypad prevents tampering while sampling
- User-adjustable sample flow rate
- Define, label and store multiple calibration constants
- Easy-to-read LCD display
- Convenient, threaded tripod socket accommodates area sampling

## Advanced Features

- Smart Battery Management System provides precise run time information, maximizes battery capacity and speeds charging
- Integrated pump allows use of size-selective aerosol inlet conditioners
- Built-in impactors let you choose "none," 1.0, 2.5 or 10-micron cut off
- Display shows real-time concentrations (mg/m$^3$) and "on-the-fly" TWA as you data log
- Display statistics: max, min and average readings, elapsed time and 8-hour TWA

## Quick and Easy Reports

- Convenient preprogramming for occupational exposure sampling
- Data log for long periods and store multiple tests
- Analyze data, print graphs and create reports with TrakPro software
- USB port lets you conveniently connect to your computer

## Power to Spare

- Long-lasting NiMH rechargeable battery packs eliminate "memory" issues
- Choice of rechargeable NiMH smart battery packs or AA-cell pack

TSI.

# Specifications

## SidePak AM510 Personal Aerosol Monitor

### Sensitivity

| | |
|---|---|
| Sensor type | 90° light scattering, 670 nm laser diode |
| Aerosol concentration range | 0.001 to 20 mg/m³ (calibrated to respirable fraction of ISO 12103-1, A1 test dust) |
| Particle size range | 0.1 to 10 micrometer (µm) |
| Minimum resolution | 0.001 mg/m³ |
| Zero stability | ±0.001 mg/m³ over 24 hours using 10-second time-constant |
| Temperature coefficient | Approximately +0.0005 mg/m³ per °C (for variations from temperature at which instrument was last zeroed) |

### Flow Rate

| | |
|---|---|
| Range | User-adjustable, 0.7 to 1.8 liters/min (lpm) |

### Temperature Range

| | |
|---|---|
| Operating range | 0 to 50°C (32 to 120°F) |
| Storage range | -20 to 60°C (-4 to 140°F) |

### Time Constant (LCD display)

| | |
|---|---|
| Range | User-adjustable, 1 to 60 seconds |

### Data Logging

| | |
|---|---|
| Data points | Approx. 31,000 (21 days logging once per minute) |
| Logging interval | User-adjustable, 1 second to 1 hour |

### User-Select Calibration Factors

| | |
|---|---|
| Factory setting | 1.0 (non-adjustable) |
| User-defined settings | 3, with user-defined labels |
| Range | 0.1 to 10.0, user-adjustable |

### Physical

| | |
|---|---|
| External Dimensions | 106 mm × 92 mm × 70 mm (4.2 in. × 3.7 in. × 2.8 in.) with 801724 battery<br>130 mm × 92 mm × 70 mm (5.1 in. × 3.7 in. × 2.8 in.) with 801722 or 801708 battery |
| Weight | 0.46 kg (16 oz) with 801724 battery<br>0.54 kg (19 oz) with 801722 battery<br>0.54 kg (19 oz) with 801708 battery |
| Display | 2 line × 12 character LCD |
| Tripod socket | 1/4–20 female thread |

### Power Supply/Charger (P/N 2613210)

| | |
|---|---|
| Input voltage range | 100 to 240 VAC, 50 to 60 Hz |
| Output voltage | 9 VDC @ 1.0 A |
| Battery charge time | 6.5 hours |

Specifications are subject to change without notice.
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### Maintenance

| | |
|---|---|
| Factory clean/calibrate | Recommended annually |
| User zero calibration | Before each use |
| User flow calibration | As needed |

### Battery Information

| Battery Option | Charge Time* | Intrinsically Safe |
|---|---|---|
| 1650 mAH NiMH Pack (P/N 801724) | 3.5 Hours | Yes** |
| 2700 mAH NiMH Pack (P/N 801722) | 5.5 Hours | Yes** |
| 6-Cell AA-size Pack (P/N 801708) | NA | No |

* Of a fully depleted battery
** All dust plugs and gaskets must be installed.

### Typical Battery Life

| Battery Pack | Cell Type | Hours @ 0.7 lpm | Hours @ 1.7 lpm |
|---|---|---|---|
| 1650 mAH NiMH Pack (P/N 801724) | NiMH (4.8 V, 1650 mAH) | 11.5 | 9.2 |
| 2700 mAH NiMH Pack (P/N 801722) | NiMH (4.8 V, 2700 mAH) | 19.8 | 15.6 |
| 6-Cell AA-size Pack | AA Alkaline Cells | 29.6 | 22.5 |
| (P/N 801708, with six user-supplied AA cells) | AA NiMH Cells (1600 mAH per cell. Cells cannot be charged while inside AA Pack) | 8.8 | 6.7 |

### Communications Interface

| | |
|---|---|
| Type | USB 1.1 |
| Connector, instrument | USB Mini-B (socket) |

### Minimum Computer Requirements for TrakPro Software

| | |
|---|---|
| Communications port | Universal Serial Bus (USB) v1.1 or higher |
| Operating system | Microsoft Windows® 98, Me, 2000, XP (USB not supported in Windows 95 or NT) |

### Approvals

| | |
|---|---|
| Intrinsic Safety Rating Information | TSI Battery Pack P/Ns: 801722 or 801724<br>INTRINSICALLY SAFE CSA<br>Exia<br>Class I Groups A, B, C, D<br>T2A with 801724<br>T2C with 801722<br>File: 200507<br>TSI Battery Pack P/N: 801708<br>NOT INTRINSICALLY SAFE |
| CE Immunity | EN61326-1:1997 + A11998 Clause 6 |
| CE Emissions | EN61326:1997 + Amendment A1:1998 |


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# APPENDIX C—NIOSH ANALYTICAL AIR SAMPLING METHODOLOGY

# POLYNUCLEAR AROMATIC HYDROCARBONS by HPLC 5506

Formulae: Table 1 MW: Table 1 CAS: Table 2 RTECS: Table 2

**METHOD:** 5506, Issue 3 **EVALUATION:** PARTIAL **Issue 1:** 15 May 1985
**Issue 3:** 15 January 1998

**OSHA:** Table 3
**NIOSH:** Table 3
**ACGIH:** Table 3

**PROPERTIES:** Table 1

**Compounds**

| | | |
|---|---|---|
| acenaphthene | benzo[ghi]perylene | fluorene |
| acenaphthylene | benzo[a]pyrene | indeno[1,2,3-cd]pyrene |
| anthracene | benzo[e]pyrene | naphthalene |
| benz[a]anthracene | chrysene | phenanthrene |
| benzo[b]fluoranthene | dibenz[a,h]anthracene | pyrene |
| benzo[k]fluoranthene | fluoranthene | |

**NAMES & SYNONYMS:** Polycyclic aromatic hydrocarbons, PAHs; also see Table 2.

## SAMPLING

**SAMPLER:** FILTER + SORBENT TUBE (37-mm, 2-µm, PTFE + washed XAD-2, 100 mg/50 mg)

**FLOW RATE:** 2 L/min

**VOL-MIN:** 200 L
**-MAX:** 1000 L

**SHIPMENT:** transfer filters to culture tubes; wrap sorbent and culture tubes in Al foil; ship @ 0 °C

**SAMPLE STABILITY:** unknown; protect from heat and UV light

**FIELD BLANKS:** 3 to 10 field blanks per set
**MEDIA BLANKS:** 6 to 10 media blanks per set

## ACCURACY

**RANGE STUDIED:** not determined

**BIAS:** not determined

**OVERALL PRECISION ($\hat{S}_{rt}$):** not determined

**ACCURACY:** not determined

## MEASUREMENT

**TECHNIQUE:** HPLC, FLUORESCENCE/UV DETECTION

**ANALYTE:** compounds listed above

**EXTRACTION:** 5 mL acetonitrile; ultrasonic bath, 30 to 60 minutes

**INJECTION VOLUME:** 10 to 50 µL

**MOBILE PHASE:** acetonitrile/water gradient @ ambient temperature, 1 mL/min

**COLUMN:** 250 x 4.6-mm, reversed-phase, 5-µm $C_{18}$

**DETECTOR:** UV @ 254 nm; fluorescence @ 340 nm (excitation), 425 nm (emission)

**CALIBRATION:** standards in acetonitrile

**RANGE:** see EVALUATION OF METHOD

**ESTIMATED LOD:** see EVALUATION OF METHOD

**PRECISION ($\hat{S}_r$):** see EVALUATION OF METHOD

**APPLICABILITY:** This method is applicable to samples that can be extracted with acetonitrile. This method is not applicable to samples that require a different extraction solvent or contain large amounts of highly adsorptive particulate matter, e.g., fly ash or diesel soot; also, this method is not applicable to asphalt fume samples.

**INTERFERENCES:** Any compound that elutes at the same HPLC retention time may interfere. Heat, ozone, $NO_2$, or UV light may cause sample degradation.

**OTHER METHODS:** This revises P&CAM 206 and 251 [1]. Method 5515 uses the same sampling technique, with gas chromatographic measurement [2]. Method 5800 uses the same sampling technique, and a flow-injection method to determine total polycyclic aromatic compounds at two different sets of fluorescent wavelengths [3].

**REAGENTS:**

1. Water, distilled, deionized, degassed.
2. Acetonitrile, HPLC grade, degassed.
3. PAH test mixture,* a liquid standard containing the PAHs except benzo[e]pyrene (EPA 610 Polynuclear Aromatic Hydrocarbons,Supelco, Cat. No. 4-8743; or equivalent).
4. Benzo[e]pyrene,* solid (Supelco, Cat. No. 44-2475; or equivalent).

* See SPECIAL PRECAUTIONS

**EQUIPMENT:**

1. Sampler:
   a. Filter. 37-mm, 2-µm pore size, PTFE membrane filter laminated to PTFE, (Zefluor, Pall Gelman Sciences, Cat. No. P5PJ037;SKC Inc., Cat. No. 225-17-07; or equivalent filter), cellulose spacer ring, 37-mm OD, 32-mm ID, (SKC Inc., Cat. No. 225-23; or equivalent) in a 37-mm cassette filter holder.
      NOTE: If sampling is to be done in bright sunlight, use opaque or foil-wrapped cassettes to prevent sample degradation.
   b. Sorbent tube, washed XAD-2 resin (front = 100 mg; back = 50 mg) (ORBO 43, Supelco, Cat. No. 2-0258; or equivalent), connected to filter with minimum length of PVC tubing. Plastic caps are required after sampling.
      NOTE: If pressure drop is excessive or pump fails, use a larger diameter sorbent tube with XAD-2 resin (ORBO 42 Large, Supelco, Cat. No. 2-0264U; or equivalent).
2. Personal sampling pump capable of operating for 8 h at 2 L/min, with flexible connecting tubing.
3. Aluminum foil.
4. Refrigerant, bagged.
5. Culture tubes, PTFE-lined screw cap, 13-mm x 100-mm.
6. Forceps.
7. Syringe filters, 0.45-µm, 25-mm, PTFE (Acrodisc-CR, Pall Gelman Sciences, Cat. No. 4219; or equivalent).
8. Pipet, 5-mL.
9. Syringe or micropipets, 1- to 100-µL.
10. Ultrasonic bath.
11. HPLC, with gradient capability, fluorescence (excitation @ 340 nm, emission @ 425 nm) and UV (254 nm) detectors in series, electronic integrator, and a 250 x 4.6-mm $C_{18}$ column (Vydac 201TP, The Separations Group, Hesperia, CA, Cat. No. 201TP54; or equivalent).
12. Volumetric flasks, 10- and 100-mL.
13. Recommendation: lighting in laboratory should be incandescent or UV-shielded fluorescent.

**SPECIAL PRECAUTIONS:** Treat all polynuclear aromatic hydrocarbons as carcinogens. Samples and unused standards are considered toxic waste. Dispose of in an appropriate manner. Counter tops and equipment should be checked regularly with a "black light" for fluorescence as an indicator of contamination by PAHs.

**SAMPLING:**

1. Calibrate each personal sampling pump with a representative sampler in line.
2. Take personal samples at 2 L/min for a total sample size of 200 to 1000 L.
3. Immediately after sampling, transfer the filter carefully with forceps to a culture tube. Hold filter at edge to avoid disturbing the collected sample. Cap the tube and wrap in aluminum foil.
   NOTE: This step is necessary to avoid loss of analytes by sublimation.
4. Cap the sorbent tube and wrap in aluminum foil.
5. Ship to laboratory in insulated container with bagged refrigerant.

**SAMPLE PREPARATION:**

NOTE: UV light may degrade PAHs; therefore, recommend using yellow, UV-absorbing shields for fluorescent lights or use incandescent lighting.

6. Refrigerate samples upon receipt at laboratory.
7. Extract PAH from filters.
   a. Add 5.0 mL of acetonitrile to each culture tube containing a filter. Similarly, add 5.0 mL of acetonitrile to each culture tube containing the media and reagent blanks. Cap the tubes.
   b. Place capped tubes in an ultrasonic bath for 30 to 60 min.
8. Desorb PAH from sorbent.
   a. Score each sorbent tube with a file in front of the front (larger) sorbent section. Break tube at score line.
   b. Transfer front glass wool plug and front sorbent section to a culture tube. Transfer back sorbent section, and the middle glass wool plug to a second culture tube.
   c. Add 5.0 mL acetonitrile to each culture tube. Cap the tubes.
   d. Place capped tubes in an ultrasonic bath for 30 to 60 min.
9. Filter all sample extracts through an 0.45-µm syringe filter.

**CALIBRATION AND QUALITY CONTROL:**

10. Calibrate daily with at least six working standards.
    NOTE: If a benzo[e]pyrene standard is needed, weigh desired amount and add to a known volume of the PAH test mixture.
    a. Dilute aliquots of the PAH test mixture (containing benzo[e]pyrene if needed) with acetonitrile in 10-mL volumetric flasks. The concentration range should cover most of the PAH concentrations in the samples.
    b. During analysis, intersperse working standards with samples and blanks.
    c. Prepare calibration graphs (peak area vs. µg of each PAH per sample).
11. Recovery and desorption efficiency.
    a. Determine recovery (R) from filters and desorption efficiency (DE) from sorbent tubes at least once for each lot of filters and sorbent tubes used in the range of interest.
       (1) Filters. Using a microliter syringe or a micropipette, spike four filters at each of five concentration levels with a mixture of the analytes. Allow the filters to dry in the dark overnight. Analyze the filters (steps 7, 9, and 13 through 15). Prepare graphs of R vs. amounts found.
       (2) Sorbent tubes. Transfer an unused front sorbent section to a culture tube. Prepare a total of 24 culture tubes in order to measure DE at five concentration levels plus blank in quadruplicate. Using a microliter syringe or micropipette, add calibration stock solution directly to sorbent. Cap culture tubes and allow to stand overnight. Desorb and analyze (steps 8, 9, and 13 through 15). Prepare graphs of DE vs. amounts found.
    b. Check R and DE at two levels for each sample set, in duplicate. Repeat determination of R or DE graphs if checks do not agree to within ±5% of R or DE graph.
12. Analyze at least three field blanks for each sample medium.

**MEASUREMENT:**

13. Set HPLC according to manufacturer's instructions, conditions on page 5506-1, and steps 14 and 15.
14. Inject sample aliquot (10 to 50 µL). Start mobile phase gradient:
    a. Linear gradient from 60% acetonitrile/40% deionized water to 100% acetonitrile at 1 mL/min over 20 min.
    b. Hold at 100% acetonitrile for 20 min.
    c. Linear gradient to initial condition, 5 min.
15. Measure peak areas for each analyte using the appropriate detector as specified in Table 1.
    NOTE 1: The order of elution for the PAHs appears in Table 4.
    NOTE 2: If peak area is above the calibration range, dilute with acetonitrile, reanalyze, and apply dilution factor in calculations.
    NOTE 3: If sample has many interferences, additional sample cleanup may be necessary.

**CALCULATIONS:**

16. Read the mass, µg (corrected for R or DE) of each analyte found on the filter (W) and front sorbent ($W_f$) and back sorbent ($W_b$) sections, and on the average media blank filter (B) and front sorbent ($B_f$) and back sorbent ($B_b$) sections from the calibration graphs.
17. Calculate concentration, C ($mg/m^3$), as the sum of the particulate concentration and the vapor concentration in the actual air volume sampled, V (L).

$$C = \frac{\left\{ W + W_f + W_b - B - B_f - B_b \right\}}{V}, \ mg/m^3$$

NOTE 1: µg/mL = $mg/m^3$

NOTE 2: $W_f$ and $W_b$ include analyte originally collected on the filter as particulate, then volatilized during sampling. This can be a significant fraction for many PAHs (e.g., anthracene, fluoranthene, fluorene, naphthalene, phenanthrene).

**EVALUATION OF METHOD:**

The UV detector is used to analyze for some PAHs (see Table 1), and the remaining PAHs are analyzed by a fluorescent detector, which gave better sensitivity for some PAHs. The ranges of the limit of detection (LOD) and the limit of quantitation (LOQ) values for the 17 PAHs are reported in Table 4 [4]. The LOD and LOQ values varied because of differences in the detectors used and the concentrations of the standards. Therefore, it is important that the LOD and LOQ values be determined for each set of samples. The LOQs are the lower end of the analytical ranges. The upper end of the analytical ranges were not determined.

This method was evaluated by means of a user check [5]. An independent laboratory prepared spiked filters and sorbent tubes for a recovery and desorption efficiency study (see Table 4). For the filters, except naphthalene, the recovery results were greater than or equal to 75%. Since naphthalene is fairly volatile under ambient conditions, this may account for the poor recovery results. For the sorbent tubes, only four of the 17 analytes had desorption efficiencies that were greater than or equal to 75%. During the user check, the sorbent tubes were extracted by adding 5 mL acetonitrile and were allowed to stand for 30 minutes with occasional swirling. In more recent quality control experiments, the desorption efficiencies were often better for some analytes (see Table 4) [4]. These results were achieved using an ultrasonic bath for 30 to 60 minutes. The results indicated the importance of preparing media spikes for recovery and desorption efficiency studies for each set of samples; moreover, the results reenforce this need when using new lots of media.

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[4] NIOSH unpublished data.

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[12] NIOSH [1992]. NIOSH recommendations foroccupational safety and health, compendium of policy documents and statements. Cincinnati, OH: National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 92-100.

**METHOD REVISED BY:**

L. D. Olsen, B. R. Belinky, C. E. Neumeister, L. B. Jaycox, and D. D. Dollberg, NIOSH/DPSE.

**TABLE 1. FORMULAS AND PHYSICAL PROPERTIES.**

| COMPOUND (by M.W.) | FORMULA | WEIGHT | DETECTOR | MELTING POINT (°C) | BOILING POINT (°C) | REFERENCE |
|---|---|---|---|---|---|---|
| 1. NAPHTHALENE | $C_{10}H_8$ | 128.17 | UV | 80.2 | 218 | [6] |
| 2. ACENAPHTHYLENE | $C_{12}H_8$ | 152.20 | UV | 92.5 | 280 | [6] |
| 3. ACENAPHTHENE | $C_{12}H_{10}$ | 154.21 | UV | 93.4 | 279 | [6] |
| 4. FLUORENE | $C_{13}H_{10}$ | 166.22 | UV | 115 | 295 | [6] |
| 5. ANTHRACENE | $C_{14}H_{10}$ | 178.23 | UV | 215 | 340 | [6] |
| 6. PHENANTHRENE | $C_{14}H_{10}$ | 178.23 | UV | 99.2 | 340 | [6 |
| 7. FLUORANTHENE | $C_{16}H_{10}$ | 202.26 | FL | 108 | 384 | [6] |
| 8. PYRENE | $C_{16}H_{10}$ | 202.26 | FL | 151 | 404 | [6] |
| 9. BENZ[a]ANTHRACENE | $C_{18}H_{12}$ | 228.29 | FL | 167 | 435 | [7] |
| 10. CHRYSENE | $C_{18}H_{12}$ | 228.29 | UV | 258 | 448 | [6] |
| 11. BENZO[b]FLUORANTHENE | $C_{20}H_{12}$ | 252.32 | FL | 168 | – | [7] |
| 12. BENZO[k]FLUORANTHENE | $C_{20}H_{12}$ | 252.32 | FL | 217 | 480 | [6] |
| 13. BENZO[a]PYRENE | $C_{20}H_{12}$ | 252.32 | FL | 177 | 495 | [6, 8] |
| 14. BENZO[e]PYRENE | $C_{20}H_{12}$ | 252.32 | FL | 178 | 311 | [6] |
| 15. BENZO[ghi]PERYLENE | $C_{22}H_{12}$ | 276.34 | FL | 278 | – | [7] |
| 16. INDENO[1,2,3-cd]PYRENE | $C_{22}H_{12}$ | 276.34 | FL | 164 | – | [7] |
| 17. DIBENZ[a,h]ANTHRACENE | $C_{22}H_{14}$ | 278.35 | FL | 270 | 524 | [7, 8] |

**TABLE 2. SYNONYMS, CAS AND RTECS NUMBERS.**

| COMPOUND (alphabetically) | SYNONYMS, CAS and RTECS Numbers* |
|---|---|
| 1. ACENAPHTHENE | CAS # 83-32-9; RTECS # AB1000000 |
| 2. ACENAPHTHYLENE | acenaphthalene; CAS # 208-96-8; RTECS # AB1254000 |
| 3. ANTHRACENE | CAS # 120-12-7; RTECS # CA9350000 |
| 4. BENZ[a]ANTHRACENE | 1,2-benzanthracene; benzo[b]phenanthrene; 2,3-benzophenanthrene; tetraphene; CAS # 56-55-3; RTECS # CV9275000 |
| 5. BENZO[b]FLUORANTHENE | 3,4-benzofluoranthene; 2,3-benzofluoranthene; benz[e]acephenanthrylene; B(b)F; CAS # 205-99-2; RTECS # CU1400000 |
| 6. BENZO[k]FLUORANTHENE | 11,12-benzofluoranthene; CAS # 207-08-9; RTECS # DF6350000 |
| 7. BENZO[ghi]PERYLENE | 1,12-benzoperylene; CAS # 191-24-2; RTECS # DI6200500 |
| 8. BENZO[a]PYRENE | 3,4-benzopyrene; 6,7-benzopyrene; B(a)P; BP; CAS # 50-32-8; RTECS # DJ3675000 |
| 9. BENZO[e]PYRENE | 1,2-benzopyrene; 4,5-benzopyrene; B(e)P; CAS # 192-97-2; RTECS # DJ4200000 |
| 10. CHRYSENE | 1,2-benzophenanthrene; benzo[a]phenanthrene; CAS # 218-01-9; RTECS # GC0700000 |
| 11. DIBENZ[a,h]ANTHRACENE | 1,2,5,6-dibenzanthracene; CAS # 53-70-3; RTECS # HN2625000 |
| 12. FLUORANTHENE | benzo[j]fluorene; CAS # 206-44-0; RTECS # LL4025000 |
| 13. FLUORENE | CAS # 86-73-7; RTECS # LL5670000 |
| 14. INDENO[1,2,3-cd]PYRENE | 2,3-phenylenepyrene; CAS # 193-39-5; RTECS # NK9300000 |
| 15. NAPHTHALENE | naphthene; CAS # 91-20-3; RTECS # QJ0525000 |
| 16. PHENANTHRENE | CAS # 85-01-8; RTECS # SF7175000 |
| 17. PYRENE | benzo[def]phenanthrene; CAS # 129-00-0; RTECS # UR2450000 |

* Data from [6, 8, and 9].

**TABLE 3. EXPOSURE LIMITS*.**

| COMPOUND | OSHA† | NIOSH‡ | ACGIH§ |
|---|---|---|---|
| 1. ANTHRACENE | 0.2 mg/m³ | – | |
| 2. BENZ[a]ANTHRACENE | – | – | suspect human carcinogen |
| 3. BENZO[b]FLUORANTHENE | – | – | suspect human carcinogen |
| 4. BENZO[a]PYRENE | 0.2 mg/m³ | – | suspect human carcinogen |
| 5. CHRYSENE | 0.2 mg/m³ | potential occupational carcinogen§ | animal carcinogen |
| 6. NAPHTHALENE | 10 ppm; STEL 15 ppm | 10 ppm; STEL 15 ppm | 10 ppm; STEL 15 ppm |
| 7. PHENANTHRENE | 0.2 mg/m³ | – | – |
| 8. PYRENE | 0.2 mg/m³ | – | – |

* This table only includes the compounds with established exposure limit values.
† Information from [10].
‡ Information from [11].
§ Information from [12].

**TABLE 4. LOD AND LOQ VALUES, AND RECOVERY DATA.**

| COMPOUND (by elution order) | Range of values* | | Recoveries (%)† | |
|---|---|---|---|---|
| | LOD (µg per sample) | LOQ (µg per sample) | Filters | Sorbent tubes |
| 1. NAPHTHALENE | 0.20 - 0.80 | 0.39 - 2.6 | 49.6 | 68.5 |
| 2. ACENAPHTHYLENE | 0.090 - 2.0 | 0.28 - 6.6 | 98.2 | 98.2 |
| 3. ACENAPHTHENE | 0.20 - 5.0 | 0.58 - 16. | -- | -- |
| 4. FLUORENE | 0.030 - 0.30 | 0.099 - 0.26 | 95.0 | 95.0 |
| 5. PHENANTHRENE | 0.0070 - 0.060 | 0.023 - 0.19 | 99.0, 90.4* | 84.0, 92.5*, 82.6* |
| 6. ANTHRACENE | 0.0010 - 0.090 | 0.023 - 0.30 | 81.8, 94.4* | 72.8, 96.2*, 72.9* |
| 7. FLUORANTHENE | 0.0020 - 0.090 | 0.0066 - 0.30 | 94.9, 90.4* | 73.0, 93.5*, 81.7* |
| 8. PYRENE | 0.0010 - 0.30 | 0.0036 - 0.99 | 94.4, 76.1* | 84.9, 77.0*, 75.9* |
| 9. BENZ[a]ANTHRACENE | 0.0010 - 0.090 | 0.0042 - 0.30 | 86.6, 92.7* | 62.4, 95.0*, 72.3* |
| 10. CHRYSENE | 0.0070 - 0.20 | 0.023 - 0.37 | 94.6, 89.9* | 62.7, 89.8*, 74.0* |
| 11. BENZO[e]PYRENE | 0.0060 - 0.80 | 0.020 - 2.6 | 110 | 48.3 |
| 12. BENZO[b]FLUORANTHENE | 0.0030 - 0.20 | 0.011 - 0.66 | 94.8 | 64.2 |
| 13. BENZO[k]FLUORANTHENE | 0.0020 - 0.040 | 0.0054 - 0.13 | 103 | 53.2 |
| 14. BENZO[a]PYRENE | 0.0020 - 0.10 | 0.0051 - 0.33 | 101, 88.1* | 50.4, 91.6*, 68.4* |
| 15. DIBENZ[a,h]ANTHRACENE | 0.0040 - 0.60 | 0.014 - 2.0 | 76.5 | 61.0 |
| 16. BENZO[ghi]PERYLENE | 0.0030 - 0.50 | 0.011 - 1.7 | 76.5 | 61.0 |
| 17. INDENO[1,2,3-cd]PYRENE | 0.0090 - 0.20 | 0.027 - 0.66 | 91.6 | 36.5 |

* Data from [4].
† Data from [5]



ACENAPHTHENE



ACENAPHTHYLENE

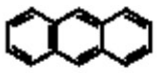

ANTHRACENE

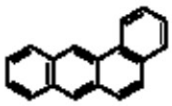

BENZ[a]ANTHRACENE

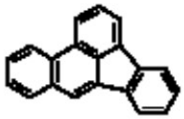

BENZO[b]FLUORANTHENE

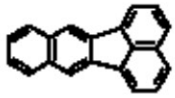

BENZO[k]FLUORANTHENE



BENZO[g h i]PERYLENE

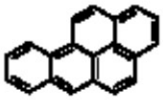

BENZO[a]PYRENE



BENZO[e]PYRENE

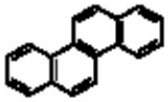

CHRYSENE

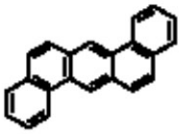

DIBENZ[a,h]ANTHRACENE

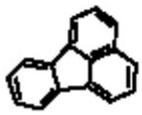

FLUORANTHENE



FLUORENE

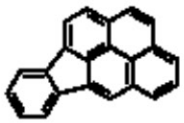

INDENO[1,2,3-c d]PYRENE

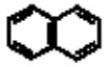

NAPHTHALENE

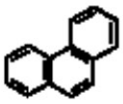

PHENANTHRENE

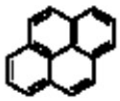

PYRENE

Figure 1. Structure of the PAHs.

# SILICA, CRYSTALLINE, by XRD (filter redeposition) 7500

$SiO_2$ MW: 60.08 CAS: 14808-60-7 (quartz) RTECS: VV7330000 (quartz)
14464-46-1 (cristobalite) VV7325000 (cristobalite)
15468-32-3 (tridymite) VV7335000 (tridymite)

**METHOD: 7500, Issue 4** **EVALUATION: FULL** **Issue 1: 15 August 1990**
**Issue 4: 15 March 2003**

**OSHA :** quartz (respirable) 10 mg/m³/(%$SiO_2$+2); cristobalite and tridymite (respirable) ½ the above
**NIOSH:** 0.05 mg/m³; carcinogen
**ACGIH:** quartz (respirable) 0.1 mg/m³
cristobalite (respirable) 0.05 mg/m³
tridymite (respirable) 0.05 mg/m³

**PROPERTIES:** solid; d 2.65 g/cm³ @ 0 °C; crystalline transformations: quartz to tridymite @ 867 °C; tridymite to cristobalite @ 1470 °C; α-quartz to ß-quartz @ 573 °C

**SYNONYMS:** free crystalline silica; silicon dioxide

## SAMPLING

| | |
|---|---|
| **SAMPLER:** | CYCLONE + FILTER (10-mm nylon cyclone, Higgins-Dewell (HD) cyclone, or aluminum cyclone + 5-µm PVC membrane) *see sampling section |
| **FLOW RATE:** | Nylon cyclone: 1.7 L/min; HD cyclone: 2.2 L/min; aluminum cyclone: 2.5 L/min |
| **VOL-MIN:** | 400 L |
| **-MAX:** | 1000 L |
| **SHIPMENT:** | Routine |
| **SAMPLE STABILITY:** | Stable |
| **BLANKS:** | 2 to 10 per set (see step 13.g.) |
| **BULK SAMPLE:** | High-volume or settled dust; to identify interferences |

## ACCURACY

| | |
|---|---|
| **RANGE STUDIED:** | 25 to 2500 µg/m³ [1] (800-L sample) |
| **BIAS:** | None known |
| **OVERALL PRECISION ($\hat{S}_{rT}$):** | 0.09 (50 to 200 µg) [1] |
| **ACCURACY:** | ± 18% |

## MEASUREMENT

| | |
|---|---|
| **TECHNIQUE:** | X-RAY POWDER DIFFRACTION |
| **ANALYTE:** | Crystalline $SiO_2$ |
| **ASH:** | Muffle furnace or RF plasma asher or dissolve in tetrahydrofuran |
| **REDEPOSIT:** | On 0.45-µm Ag membrane filter |
| **XRD:** | Cu target X-ray tube, graphite monochromator<br>Optimize for intensity; 1° slit<br>Slow step scan, 0.02°/10 sec<br>Integrated intensity with background subtraction |
| **CALIBRATION:** | NIST SRM 1878a quartz, NIST SRM 1879a cristobalite, USGS 210-75-0043 tridymite suspensions in 2-propanol. |
| **RANGE:** | 0.02 to 2 mg $SiO_2$ per sample [2] |
| **ESTIMATED LOD:** | 0.005 mg $SiO_2$ per sample [2] |
| **PRECISION ($\hat{S}_r$):** | 0.08 @ 0.05 to 0.2 mg per sample [1] |

**APPLICABILITY:** The working range is 0.025 to 2.5 mg/m³ for an 800-L air sample.

**INTERFERENCES:** Micas, potash, feldspars, zircon, graphite, and aluminosilicates. See APPENDIX.

**OTHER METHODS:** This is similar to the method in the Criteria Document [3] and P&CAM 259 [4] which has been collaboratively tested [1]. This method is similar, except for sample collection, to S315 [5,6]. Method P&CAM 109 [7,8,9], which incorporates an internal standard, has been dropped. XRD can distinguish the three silica polymorphs and silica interferences can be eliminated by phosphoric acid treatment. IR (methods 7602 and 7603) can also quantify quartz, cristobalite and tridymite if amorphorous silica and silicates are not present in large amounts. However sensitivity is reduced if multiple polymorphs are present and secondary peaks must be used. Crystalline silica can also be determined by visible absorption spectrophotometry (e.g., Method 7601), but polymorphs can not be distinguished. Visible absorption methods also have larger laboratory-to-laboratory variability than XRD and IR methods and therefore are recommended for research use only [10].

**REAGENTS:**

1. Silica Standards.
   a. Quartz* (SRMs 1878a, 2950, 2951, 2958) and Cristobalite* (SRMs 1879a, 2960, 2957), available from Standard Reference Materials Program, Rm. 204, Bldg. 202, National Institute of Standards and Technology (NIST), Gaithersburg, MD 20899; www.nist.gov.
   b. Tridymite* (210-75-0043) available from U.S. Geological Survey, Box 25046, MS 973, Denver, CO 80225.
2. 2-Propanol*, reagent grade.
3. Desiccant.
4. Glue or tape for securing Ag filters to XRD holders.
5. Optional: tetrahydrofuran (THF)* (if LTA or muffle furnace are unavailable).
6. 1.5 % parlodion solution. (Dissolve 1.5 g of parlodion* in isopentyl acetate* and dilute to 100 mL with isopentyl acetate.)
7. Optional (if calcite present): 25% v/v concentrated hydrochloric acid* (ACS reagent grade) in distilled water and 25-mm filters of PVC or cellulose ester with pore size of 1 µm or less.

* See SPECIAL PRECAUTIONS.

**EQUIPMENT:**

1. Sampler:
   a. Filter: Polyvinyl chloride (PVC) filter, 37-mm, 5.0-µm pore size supported with backup pad in a two-piece, 37-mm cassette filter holder (preferably, conductive) held together by tape or cellulose shrink band.
      NOTE: Check each new lot of PVC filters by analyzing one or more by this method. For example, Gelman VM-1 filters (all lots) were found to be unacceptable because of high ash and background. If THF is used, check for complete dissolution by dissolving a blank PVC filter and following steps 5c through 8.
   b. Cyclone: 10-mm nylon, Higgins-Dewell (HD), Aluminum (Al), or equivalent [11].
2. Area air sampler: PVC membrane filter, 37-mm diameter, 5-µm pore size; three-piece filter cassette.
3. Sampling pumps with flexible connecting tubing, capable of the following flow rates: nylon cyclone, 1.7 L/min; HD cyclone, 2.2 L/min; Al cyclone, 2.5 L/min; and bulk sampler, 3 L/min.
4. Silver membrane filters, 25-mm diameter, 0.45-µm pore size, available from Sterlitech Corp., 22027 70$^{th}$ Ave S, Kent, WA 98032-1911; www.sterlitech.com.
5. X-ray powder diffractometer (XRD) equipped with copper target X-ray tube, graphite monochromator, and scintillation detector.
6. Reference specimen (mica, Arkansas stone, or other stable standard) for data normalization.
7. Low-temperature radio-frequency plasma asher (LTA) or muffle furnace, or ultrasonic bath (≥150 W), for filter preparation.
8. Vacuum filtration assembly and side-arm vacuum flask with a 25-mm filter holder.
9. Sieve, 10-µm, for wet sieving.
10. Analytical balance (0.001 mg); magnetic stirrer with thermally insulated top; ultrasonic bath or probe; volumetric pipettes and flasks; Pyrex crucibles with covers (muffle furnace); 40-mL wide-mouth or 50-mL centrifuge tubes (THF method); desiccator; reagent bottles with ground glass stoppers; drying oven; polyethylene wash bottle.
11. Explosion-resistant hot plate.
12. Teflon sheet, 0.3 to 1 mm thick.

**SPECIAL PRECAUTIONS:** Avoid inhaling silica dust [3]. THF is extremely flammable and should be used in a fume hood. 2-Propanol, parlodion and isopentyl acetate are flammable. Hydrochloric acid is corrosive and should be used in a fume hood.

**SAMPLING:**

1. Calibrate each personal sampling pump with a representative sampler in line.
2. Sample at 1.7 ± 5% L/min with nylon cyclone or 2.2 ± 5% L/min with HD cyclone for a total sample size of 400 to 1000 L. Do not exceed 2 mg dust loading on the filter.
   NOTE 1: Do not allow the sampler assembly to be inverted at any time when using a cyclone. Turning the cyclone to anything other than a horizontal orientation may deposit oversized material from the cyclone body onto the filter.
   NOTE 2: A single sampler/flow rate should be used for a given application. Sampling for both crystalline silica and coal mine dust should be done in accordance with the ISO/CEN/ACGIH/ASTM respirable aerosol sampling convention. Flow rates of 1.7 L/min for the Dorr-Oliver nylon cyclone and 2.2 L/min for the Higgins-Dewell cyclone have been found to be optimal for this purpose. Outside of coal mine dust sampling, the regulatory agencies currently use these flow rates with the Dorr-Oliver cyclone in the United States and the Higgins-Dewell sampler in the United Kingdom. Though the sampling recommendations presented in a NIOSH Criteria Document have been formally accepted by MSHA for coal mine dust sampling, the Dorr-Oliver cyclone at 2.0 L/min with 1.38 conversion factor is currently used in the United States for the purpose of matching an earlier sampling convention [12]. In any case, a single sampler/flow rate should be used in any given application so as to eliminate bias introduced by differences between sampler types and sampler conventions [11].
3. Take an area air sample or collect a settled dust sample, if dust in the work environment has not been previously characterized.

**SAMPLE PREPARATION:**

4. Samples may be characterized by one of the following methods, as appropriate.
   a. **Interference check.** Prepare area dust sample or settled dust bulk sample for XRD analysis by mounting the collection sample directly on an XRD sample holder, or by depositing or redepositing the dust on another filter for mounting, or by packing an XRD powder holder. Proceed to step 11.
   b. **Qualitative Analysis.** Prepare the area air sample or settled dust sample for qualitative analysis by grinding and/or wet sieving to best match the airborne dust particle size. Wet sieve with a 10-µm sieve, 2-propanol, and an ultrasonic bath [13], followed by evaporation of excess alcohol, drying in an oven for 2 hours, and overnight storage in a desiccator. Deposit the end product on a filter (steps 7-8) or pack in a conventional XRD powder holder.
      NOTE 1: For quantitative determination of % $SiO_2$, weigh out, in triplicate, 2 mg sieved dust, transfer to a 50-mL beaker, add 10 mL 2-propanol, and continue with step 6.
      NOTE 2: In a bulk sample, if there is an interfering compound(s) that renders the identification and quantitation of quartz very difficult, the sample will need to be carefully treated in hot phosphoric acid [14] to dissolve the interfering compound(s) and avoid the loss of quartz. This treatment can be used to dissolve several 50-mg sample aliquots in order to concentrate the quartz content for the purpose of lowering the LOD.
5. Use one of the following methods to prepare filter samples and blanks:
   a. **Low Temperature Ashing:** Place the filters in 50-mL beakers within the low temperature asher so that the sample exposure to the plasma is optimized. Ash according to manufacturer's instructions. After ashing, carefully add 15 mL 2-propanol to each beaker; or
   b. **Muffle Furnace Ashing:**
      i. If the samples contain a significant amount of calcite (>20% of total dust loading), silica may be lost due to formation of $CaSiO_3$. Remove the calcite by the following procedure: Place a 0.5-µm, 25-mm PVC filter in the filtration apparatus and clamp the filter funnel over it. Remove the sample filter from the cassette, fold, and drop it on the 25-mm filter. Add 10 mL 25% v/v HCl and

5 mL 2-propanol to the filter funnel and allow to stand for 5 min. Apply vacuum and slowly aspirate the acid and alcohol in the funnel, washing with three successive 10-mL portions of distilled water. Release the vacuum. Carry both filters through the ashing step together.

ii. Place the filter samples in porcelain crucibles, loosely cover and ash in muffle furnace for 2 h at 600 °C (800 °C if graphite is present). Add several mL 2-propanol to the ash, scrape the crucible with a glass rod to loosen all particles and transfer the residue to a 50-mL beaker. Wash the crucible several more times and add wash to beaker. Add 2-propanol to the beaker to bring the volume to about 15 mL; or

c. **Filter Dissolution:** Using forceps and a spatula, remove the filter from the cassette, fold the filter three times, and place in the bottom of a 40- or 50-mL centrifuge tube. Add 10 mL THF and allow to stand for at least 5 min. Cap the centrifuge tube with aluminum foil to prevent contamination. Gently agitate the centrifuge tube by hand or with a vortex mixer making sure the THF does not go near the top of the tube. Place the tube in an ultrasonic bath (water level 2.5 cm from top) for at least 10 min. (The filter should be totally dissolved.) Just prior to filtering, agitate the sample for 10 to 20 sec on a vortex mixer. Continue with step 6, substituting THF for 2-propanol and centrifuge tube for beaker.

6. Cover the beaker with a watchglass and agitate in an ultrasonic bath for at least 3 min. Observe the suspension to make sure that the agglomerated particles are broken up. Wash the underside of the watchglass with 2-propanol, collecting the washings in the beaker.

7. Place a silver filter in the filtration apparatus. Attach the funnel securely over the entire filter circumference. With no vacuum, pour 2 to 3 mL 2-propanol onto the filter. Pour the sample suspension from the beaker into the funnel. After the transfer, rinse the beaker several times and add rinsings to the funnel for a total volume of 20 mL. In order to minimize feathering of the sample outside the deposition area, allow the suspension to settle for a few minutes prior to applying vacuum. Do not rinse the chimney after the material has been deposited on the silver filter. Rinsing the chimney can disturb the thin layer deposition.

8. Leave the vacuum on after filtration to produce a dry filter. Place 2 drops of 1.5% parlodion solution on a glass slide. Remove the silver filter with forceps and fix the material to the filter by placing the bottom side of the filter in the parlodion solution. Place the saturated filter on top of the Teflon sheet which has been heated on the hot plate at a low temperature setting. When thoroughly dry, mount the silver filter in the XRD sample holder.

**CALIBRATION AND QUALITY CONTROL:**

9. Prepare and analyze at least 6 levels of standard filters.

NOTE 1: Calibration standards are limited to NIST and USGS certified standards of known purity, particle size, and sample-to-sample homogeneity. At least 12 materials, including 5-µm Min-U-Sil, previously used by laboratories throughout the United States and Canada, have been evaluated, and none have been found to be acceptable alternatives to the certified standards cited within this method [10]. Standard reference materials should be corrected for phase purity.

NOTE 2: Crystalline silica methods require calibration standards of known purity, specific particle size and distribution, and sample-to-sample homogeneity. Establishing traceability of secondary calibration standards to the specified NIST and USGS primary standards requires the use of measurement methods with better precision and accuracy than the XRD, IR and visible absorption spectrophotometry methods commonly used in the industrial hygiene field can provide. In addition, particle size distribution measurements have considerable error. Therefore, the use of secondary calibration standards that are traceable to NIST and USGS certified standards is not appropriate.

NOTE 3: NIST SRM 2950 calibration set (α-quartz) and NIST SRM 2960 calibration set (cristobalite) may be useful for preparing working standards at known concentrations.

a. Prepare two suspensions of each analyte in 2-propanol by weighing 10 and 50 mg of the standard material to the nearest 0.01 mg. Quantitatively transfer each to a 1-L glass-stoppered bottle using 1.00 L of 2-propanol.

b. Suspend the powder in 2-propanol with an ultrasonic probe or bath for 20 min. Immediately move the bottle to a magnetic stirrer with thermally insulated top and add a stirring bar. Allow the solution to return to room temperature before withdrawing aliquots.

c. Mount a silver filter on the filtration apparatus. Place several mL of 2-propanol on the filter. Turn off the stirrer and shake vigorously by hand. Immediately remove the stopper and withdraw an aliquot from the center at half-height of the 10 mg/L or 50 mg/L suspension. Do not adjust the volume in the pipet by expelling part of the suspension. If more than the desired aliquot is withdrawn, discard the aliquot in a beaker, rinse and dry the pipet, and take a new aliquot. Transfer the aliquot from the pipet to the silver filter, keeping the tip of the pipet near the surface but not submerged in the delivered suspension.

d. Rinse the pipet with several mL 2-propanol, draining the rinse into the funnel. Repeat the rinse several times.

e. Allow the suspension to settle for a few minutes prior to applying vacuum. Apply vacuum and rapidly filter the suspension. Do not wash down the sides of the funnel after the deposit is in place since this will rearrange the material on the silver filter. Leave vacuum on until filter is dry. Place 2 drops of 1.5% parlodion solution on a glass slide. Remove the silver filter with forceps and fix the material to the filter by placing the bottom side of the filter in the parlodion solution. Place the saturated filter on top of the heated Teflon sheet. When thoroughly dry, mount the silver filter in the XRD sample holder. Prepare working standard filters, in triplicate, at e.g., 10, 20, 50, 100, 250, and 500 µg.

f. Analyze the working standards together with samples and blanks (step 12). The XRD intensities for the working standards (step 12.d) are designated $I_x^o$ and are then normalized (step 12.e) to obtain $\bar{I}_x^o$. Correct the intensities of working standards >200 µg for matrix absorption (steps 12.f and 13).

g. Prepare a calibration graph ($\bar{I}_x^o$, vs µg of each standard).

NOTE: Poor repeatability (>10% above 0.04 mg silica) at any given level indicates that new standards should be made. The data should lie along a straight line. A weighted least squares ($1/\sigma^2$ weighting) is preferable.

h. Determine the slope, m, of the calibration graph in counts/µg. The intercept, b, on the abscissa should be within ± 5 µg of zero.

NOTE: A large intercept indicates an error in determining the background, i.e., an incorrect baseline or interference by another phase.

10. NOTE: The following procedure for absorption correction is not necessary in situations that have been previously documented as requiring no corrections.

Select six silver membrane filters as media blanks randomly from the same box of filters to be used for depositing the samples. These will be used to test for sample self-absorption. Mount each of the media blanks on the filtration apparatus and apply vacuum to draw 5 to 10 mL 2-propanol through the filter. Remove, let dry, and mount on XRD holders. Determine the net normalized count for the silver peak, $I_{Ag}$, for each media blank (step 12.g). Obtain an average value for the six media blanks, $\bar{I}_{Ag}^o$.

NOTE: The analyst is a critical part of this analytical procedure [12]. A high level of analyst expertise is required to optimize instrument parameters and correct for matrix interferences either during the sample preparation phase or the data analysis and interpretation phase [15]. The analyst should have some training (university or short course) in mineralogy or crystallography in order to have a background in crystal structure, diffraction patterns and mineral transformation. In addition, an intensive short course in the fundamentals of X-ray diffraction can be useful.

**MEASUREMENT:**

11. Obtain a qualitative X-ray diffraction scan (e.g., 10 to 80 °2θ) of the area air sample (or bulk settled dust) to determine the presence of free silica polymorphs and interferences (see APPENDIX). The diffraction peaks are:

| Mineral | Peak (2-Theta Degrees) | | |
|---|---|---|---|
| | Primary | Secondary | Tertiary |
| Quartz | 26.66 | 20.85 | 50.16 |
| Cristobalite | 21.93 | 36.11 | 31.46 |
| Tridymite | 21.62 | 20.50 | 23.28 |
| Silver | 38.12 | 44.28 | 77.47 |

NOTE: There is an alternative to scanning an area air sample, settled dust sample, or ground bulk sample to prove lack of contamination. A slow scan of the three main peaks of quartz (also cristobalite and tridymite if their absence has not been previously confirmed) on a personal air sample, with verification that their intensity ratios are within 15% of pure quartz, is sufficient evidence that other materials are not interfering in the silica determination.

12. Perform the following for each sample, working standard, and blank filter:
    a. Mount the reference specimen. Determine the net intensity, $I_r$, of the reference specimen before and after each filter is scanned. Use a diffraction peak of high intensity that can be rapidly but reproducibly ($S_r$ <0.01) measured.
    b. Mount the sample, working standard, or blank filter. Measure the diffraction peak area for each silica polymorph. Scan times must be long, e.g., 15 min (longer scan times will lower the limit of detection).
    c. Measure the background on each side of the peak for one-half the time used for peak scanning. The sum of these two counts is the average background. Determine the position of the background for each sample.
    d. Calculate the net intensity, $I_x$, (the difference between the peak integrated count and the total background count).
    e. Calculate and record the normalized intensity, $I_x$, for each peak:

$$I_x = \frac{I_x}{I_r} \cdot N$$

NOTE: Select a convenient normalization scale factor, N, which is approximately equivalent to the net count for the reference specimen peak, and use this value of N for all analyses. Normalizing to the reference specimen intensity compensates for long-term drift in X-ray tube intensity. If intensity measurements are stable, the reference specimen may be run less frequently and the net intensities should be normalized to the most recently-measured reference intensity.

    f. Determine the normalized count, $I_{Ag}$, of an interference-free silver peak on the sample filter following the same procedure. Use a short scan time for the silver peak (e.g., 5% of scan time for analyte peaks) throughout the method.
    g. Field blanks may be analyzed by scanning the 2-theta range used for the analyte and silver peaks to verify that contamination of the filters has not occurred. The analyte peak should be absent. The normalized intensity of the silver peak should match that of the media blank. Each laboratory should determine the specifics of field blank use for its application. When contamination does occur, the reason should be investigated and appropriate action taken. In practice, contamination of field blanks is extremely rare and usually is not consistent across filters. The analysis of blanks may be abbreviated if experience indicates that contamination is not likely with current field and laboratory operations; however, occasional confirmation of non-contamination is prudent.

**CALCULATIONS:**

13. Calculate the concentration of crystalline silica, C ($mg/m^3$), in the air volume sampled, V (L):

$$C = \frac{I_x \cdot f(t) - b}{m \cdot V}, mg/m^3$$

$I_x$ = normalized intensity for sample peak
b = intercept of calibration graph ($I_x^o$ vs. µg)
m = slope of calibration graph, counts/µg
f(t) = $-R \ln T/(1 - T^R)$ = absorption correction factor (Table 1)

$R$ = $\sin(\Theta_{Ag})/\sin(\Theta_x)$
$T$ = $I_{Ag}/(\text{average } I^o_{Ag})$ = transmittance of sample
$I_{Ag}$ = normalized silver peak intensity from sample
$I^o_{Ag}$ = normalized silver peak intensity from media blanks (average of six values)

**EVALUATION OF METHOD:**

This method is based on P&CAM 259 which was collaboratively tested [1]. The testing included a ruggedization step to test the effects of the use of muffle furnace or plasma asher (but not the use of THF), shipment of samples, ashing time, and ultrasonication time. None of these factors was found to have an effect. The method was shown to have no bias when referenced to the Talvitie spectrophotometric method [14] and when all standards and samples were Min-U-Sil 5. The relative standard deviations ($S_r$) for intralaboratory, total measurement and overall (including sampling) variability are:

| | Analyte Level (µg) | Measurement Precision ($S_r$) | Overall Precision ($S_{rT}$) |
|---|---|---|---|
| Intralaboratory | 50-200 | 0.08 [1] | |
| | 20 | 0.20 [5] | |
| | 10 | 0.28 [9] | |
| Total (intra- and interlaboratory) | 50-200 | 0.17 [1] | 0.29 [1] |

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**APPENDIX: INTERFERENCES**

Interferences include barite, micas (muscovite, biotite), potash, feldspars (microcline, plagioclase), montmorillonite, sillimanite, zircon, graphite, iron carbide, clinoferrosilite, wollastonite, sanidine, leucite, orthoclase, and lead sulfide.

The patterns for three forms of aluminum phosphate [JCPDS 10-423, 11-500, 20-44] are practically identical to those of quartz, cristobalite and tridymite, respectively. The quartz secondary and cristobalite primary peaks are close; cristobalite secondary peak is overlapped by a quartz peak; tridymite, if present in sufficient quantity, will interfere with all of the main (primary, secondary and tertiary) quartz and cristobalite peaks. Silver chloride, if present on the silver filter, interferes slightly with the primary quartz peak. Many of these interferences occur in the presence of quartz; however, in a study of samples collected in 11 different industries, Altree-Williams [20] found no significant interferences.

The presence of elements such as iron can result in appreciable X-ray fluorescence which leads to high background intensity. A diffracted-beam monochromator will minimize this problem.

If calcite is present, loss of quartz will occur when samples are ashed in a muffle furnace. See SAMPLE PREPARATION (step 5.b) for procedure to remove calcite.

If interferences with the primary silica peak are present, use a less sensitive peak. When overlaps are not severe, a smaller receiving slit or chromium radiation may be used; however, a new calibration curve will be necessary.

**Table 1. Absorption correction factor as a function of transmittance for some silica-silver peak combinations [16-21].**

| | | f(T) (at indicated degrees 2-θ) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Transmittance | Silica | 26.66 | 26.66 | 20.83 | 20.83 | 21.93 | 21.93 | 21.62 | 21.62 |
| T | Silver | 38.12 | 44.28 | 38.12 | 44.28 | 38.12 | 44.28 | 38.12 | 44.28 |
| 1.00 | | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |
| 0.99 | | 1.0071 | 1.0082 | 1.0091 | 1.0105 | 1.0087 | 1.0100 | 1.0088 | 1.0101 |
| 0.98 | | 1.0144 | 1.0166 | 1.0184 | 1.0212 | 1.0174 | 1.0201 | 1.0177 | 1.0204 |
| 0.97 | | 1.0217 | 1.0251 | 1.0278 | 1.0321 | 1.0264 | 1.0305 | 1.0268 | 1.0309 |
| 0.96 | | 1.0292 | 1.0337 | 1.0373 | 1.0432 | 1.0355 | 1.0410 | 1.0360 | 1.0416 |
| 0.95 | | 1.0368 | 1.0425 | 1.0470 | 1.0544 | 1.0447 | 1.0517 | 1.0453 | 1.0524 |
| 0.94 | | 1.0445 | 1.0514 | 1.0569 | 1.0659 | 1.0541 | 1.0625 | 1.0548 | 1.0635 |
| 0.93 | | 1.0523 | 1.0605 | 1.0670 | 1.0776 | 1.0636 | 1.0736 | 1.0645 | 1.0747 |
| 0.92 | | 1.0602 | 1.0697 | 1.0772 | 1.0894 | 1.0733 | 1.0849 | 1.0743 | 1.0861 |
| 0.91 | | 1.0683 | 1.0791 | 1.0876 | 1.1015 | 1.0831 | 1.0963 | 1.0844 | 1.0977 |
| 0.90 | | 1.0765 | 1.0886 | 1.0982 | 1.1138 | 1.0932 | 1.1080 | 1.0945 | 1.1096 |
| 0.89 | | 1.0848 | 1.0983 | 1.1089 | 1.1264 | 1.1034 | 1.1199 | 1.1049 | 1.1216 |
| 0.88 | | 1.0933 | 1.1081 | 1.1199 | 1.1392 | 1.1137 | 1.1320 | 1.1154 | 1.1339 |
| 0.87 | | 1.1019 | 1.1181 | 1.1311 | 1.1522 | 1.1243 | 1.1443 | 1.1261 | 1.1464 |
| 0.86 | | 1.1106 | 1.1283 | 1.1424 | 1.1654 | 1.1350 | 1.1568 | 1.1370 | 1.1592 |
| 0.85 | | 1.1195 | 1.1387 | 1.1540 | 1.1790 | 1.1460 | 1.1696 | 1.1481 | 1.1722 |
| 0.84 | | 1.1286 | 1.1493 | 1.1657 | 1.1927 | 1.1571 | 1.1827 | 1.1595 | 1.1854 |
| 0.83 | | 1.1378 | 1.1600 | 1.1777 | 1.2068 | 1.1685 | 1.1959 | 1.1710 | 1.1989 |
| 0.82 | | 1.1471 | 1.1709 | 1.1899 | 1.2211 | 1.1800 | 1.2095 | 1.1827 | 1.2126 |
| 0.81 | | 1.1566 | 1.1821 | 1.2024 | 1.2357 | 1.1918 | 1.2232 | 1.1946 | 1.2266 |
| 0.80 | | 1.1663 | 1.1934 | 1.2150 | 1.2506 | 1.2038 | 1.2373 | 1.2068 | 1.2409 |
| 0.79 | | 1.1762 | 1.2050 | 1.2280 | 1.2658 | 1.2160 | 1.2516 | 1.2192 | 1.2555 |
| 0.78 | | 1.1863 | 1.2168 | 1.2411 | 1.2812 | 1.2284 | 1.2663 | 1.2319 | 1.2703 |
| 0.77 | | 1.1965 | 1.2288 | 1.2546 | 1.2971 | 1.2411 | 1.2812 | 1.2447 | 1.2855 |
| 0.76 | | 1.2069 | 1.2410 | 1.2683 | 1.3132 | 1.2540 | 1.2964 | 1.2579 | 1.3009 |
| 0.75 | | 1.2175 | 1.2535 | 1.2822 | 1.3297 | 1.2672 | 1.3119 | 1.2713 | 1.3167 |
| 0.74 | | 1.2283 | 1.2662 | 1.2965 | 1.3456 | 1.2806 | 1.3278 | 1.2849 | 1.3328 |
| 0.73 | | 1.2394 | 1.2792 | 1.3110 | 1.3637 | 1.2944 | 1.3440 | 1.2989 | 1.3493 |
| 0.72 | | 1.2506 | 1.2924 | 1.3259 | 1.3812 | 1.3084 | 1.3605 | 1.3131 | 1.3661 |
| 0.71 | | 1.2621 | 1.3059 | 1.3410 | 1.3991 | 1.3226 | 1.3774 | 1.3276 | 1.3883 |
| 0.70 | | 1.2738 | 1.3197 | 1.3565 | 1.4174 | 1.3372 | 1.3946 | 1.3424 | 1.4008 |
| 0.69 | | 1.2857 | 1.3337 | 1.3723 | 1.4362 | 1.3521 | 1.4122 | 1.3576 | 1.4187 |
| 0.68 | | 1.2979 | 1.3481 | 1.3885 | 1.4553 | 1.3673 | 1.4303 | 1.3730 | 1.4370 |
| 0.67 | | 1.3103 | 1.3682 | 1.4050 | 1.4749 | 1.3829 | 1.4487 | 1.3888 | 1.4558 |
| 0.66 | | 1.3230 | 1.3777 | 1.4218 | 1.4949 | 1.3987 | 1.4675 | 1.4050 | 1.4749 |
| 0.65 | | 1.3359 | 1.3931 | 1.4390 | 1.5154 | 1.4150 | 1.4868 | 1.4215 | 1.4945 |
| 0.64 | | 1.3491 | 1.4087 | 1.4567 | 1.5363 | 1.4316 | 1.5064 | 1.4383 | 1.5145 |
| 0.63 | | 1.3626 | 1.4247 | 1.4747 | 1.5578 | 1.4485 | 1.5266 | 1.4556 | 1.5350 |
| 0.62 | | 1.3765 | 1.4411 | 1.4931 | 1.5797 | 1.4659 | 1.5472 | 1.4732 | 1.5560 |
| 0.61 | | 1.3906 | 1.4578 | 1.5120 | 1.6022 | 1.4836 | 1.5684 | 1.4913 | 1.5775 |
| 0.60 | | 1.4050 | 1.4749 | 1.5314 | 1.6252 | 1.5018 | 1.5900 | 1.5098 | 1.5995 |
| 0.59 | | 1.4198 | 1.4925 | 1.5511 | 1.6488 | 1.5204 | 1.6122 | 1.5287 | 1.6221 |
| 0.58 | | 1.4349 | 1.5104 | 1.5714 | 1.6730 | 1.5394 | 1.6349 | 1.5481 | 1.6452 |
| 0.57 | | 1.4504 | 1.5288 | 1.5922 | 1.6978 | 1.5590 | 1.6582 | 1.5679 | 1.6689 |
| 0.56 | | 1.4662 | 1.5476 | 1.6135 | 1.7233 | 1.5790 | 1.6820 | 1.5883 | 1.6932 |
| 0.55 | | 1.4824 | 1.5670 | 1.6353 | 1.7494 | 1.5995 | 1.7065 | 1.6092 | 1.7181 |
| 0.54 | | 1.4991 | 1.6858 | 1.6577 | 1.7762 | 1.6205 | 1.7317 | 1.6306 | 1.7437 |
| 0.53 | | 1.5161 | 1.6071 | 1.6807 | 1.8037 | 1.6421 | 1.7575 | 1.6525 | 1.7699 |
| 0.52 | | 1.5336 | 1.6279 | 1.7043 | 1.8319 | 1.6642 | 1.7840 | 1.6751 | 1.7969 |
| 0.51 | | 1.5515 | 1.6493 | 1.7285 | 1.8609 | 1.6870 | 1.8112 | 1.6982 | 1.8246 |
| 0.50 | | 1.5699 | 1.6713 | 1.7534 | 1.8908 | 1.7103 | 1.8391 | 1.7220 | 1.8531 |

# APPENDIX D—CHAIN OF CUSTODY; AIR SAMPLING LOG SHEETS; AND AIR SAMPLING LABELS

# Tetra Tech NUS, Inc. CHAIN OF CUSTODY

NO.



| Project No: | Facility: | Project Manger: | Phone: | Laboratory Name and Contact: |
|---|---|---|---|---|
| | LMC/MRC | | | |
| Samplers: | | Field Ops. Leader: | Phone: | Address: |
| | | Fed Ex Airbill Number: | | City, State, Zip: |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | Container Type: Plastic (P) or Glass (G) | P/G | P | | | | | | |
| | | | | | | | | | | Preservative Used: | 0°C | | | | | | | |
| Date Year: 2015 | Time | Sample ID | Location ID | Air Intake (FT) | Elapsed time (minutes) | Average Flow rate (lpm) | Total volume (Liters) | Total No. of Containers | ANALYSIS | *Poly-nucleated Aromatic hydrocarbons, NIOSH Method 5506; 37mm Cassette/XAD-2 Tube 100mg/50mg* | *Crystallie Silca, NIOSH Method 7500; 37mm cassette* | | | | | | | Comments |
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| 1. Relinquished By: | Date: | Time: | 1. Received By: | Date: | Time: |
|---|---|---|---|---|---|
| 2. Relinquished By: | Date: | Time: | 2. Received By: | Date: | Time: |

**Comments:** PAH samples will be protected from Ultra-violet light degradation. Collected samples will be wrapped in aluminum foil. PAH samples will also be cooled to 0°C for storage and shipment.

Sheet1 Sheet2 Sheet3

# TETRA TECH, INC.

## AIR SAMPLE LOG SHEET

Project Name: Lockheed Martin, Middle River Complex Project Number: 112IC05956

PAH Air Sampling analysis during Excavation Tax Block - .

Sample Date: _____/_____/_____ Sampler:

Air Sample Pump Type: Serial ID No.

Tetra Tech Sample No.: Client Sample No.:

Analytical Method No.: NIOSH 5506 Analytical Technique: HPLC Fluorescence/UV Detection

Analyte(s): Polycyclic Aromatic Hydrocarbons (PAHs)

TLV of Single Compound: 0.2 mg/$m^3$ as coal tar pitch volatiles TLV of Mixture:

Sample Media: FILTER+SOLID SORBENT (37mm, 2µm, PTFE = washed XAD,100 mg/50 mg); 2 lpm ( Minimum volume = 200L; Max Volume 1000 Liters)

Average Flow Rate Average Flow Rate

Before Sampling: 2.0 l/min. After Sampling: l/min.

Average Flow Rate over Sampling Period: l/min.

Pump Status Checked at: _____ _____ _____ _____ _____ _____

Sample Type: (TWA/STEL/ENVIR)

Time On: Time Off: Total Time: Air Volume Sampled: liters

Worker or Area Sampled: SS No.: XXX-XX-

Plant Location or Process:

Job Description:

Filter Cassettes/Tubes Labeled and Sealed: Yes No N/A (Circle One)

Storage/Handling/Transportation Protect against UV light, wrap in aluminum foil; cool to 0˚C.

Comments: _____

_____

_____

# PRE- AND POST-PUMP CALIBRATION DATA
# ELECTRONIC PRIMARY FLOW CALIBRATION

Calibrator Type:_____Serial Number:_____Primary Calibration Date:_____

| Date | Media | Flow Cell Volume (ml) | Flow Rate 1 | Flow Rate 2 | Flow Rate 3 | Average Flow Rate | Initials |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |

**WORKER ACTIVITY LOG**

| TEST HOUR | TASK(S) | 0,1,2,3,4 | PLANT LOCATION(S) |
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| 1 | | | |
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| | Weather: | | |
| 2 | | | |
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| | Weather: | | |
| 3 | | | |
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| TEST HOUR | TASK(S) | 0,1,2,3,4 | PLANT LOCATION(S) |
|---|---|---|---|
| | Weather: | | |
| 4 | | | |
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| | Weather: | | |
| 5 | | | |
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| | Weather: | | |
| 6 | | | |
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| TEST HOUR | TASK(S) | 0,1,2,3,4 | PLANT LOCATION(S) |
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| | Weather: | | |
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| | Weather: | | |
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| | Weather: | | |

**TETRA TECH, INC.**

**AIR SAMPLE LOG SHEET**

Project Name: Lockheed Martin Middle River Complex Project Number: 112IC05953

Sample Date: _____ Sampler: Tom Dickson

Instrument Type: Personal Air Sampling Pump Required Flow rate: 2.5 Lpm

Analytical Method No.: NIOSH 7500 Analyte(s): Crystalline Silica - 14808-60-7 (quartz);

14464-46-1 (cristobalite); 15468-32-3 (tridymite)

Analytical Technique: Gravimetric analysis/ X-ray Powder Diffraction (XRD)

Sample Media: 37mm 5µ, 3pc PVC Cassette; Aluminum Cyclone Pre-tare Weight: _____

Tetra Tech Sample No.: _____ Lab Sample No.: _____

| Regulatory Authority | | | |
|---|---|---|---|
| OSHA | quartz (respirable) 10 mg/$m^3$/ (%SiO2+2); | Cristobalite (respirable) 10 mg/$m^3$/ (%SiO2+2) | Tridymite (respirable) 5 mg/$m^3$/ (%SiO2+2) |
| NIOSH | 0.05 mg/$m^3$ Mixture | | |
| ACGIH | quartz (respirable) 0.1 mg/$m^3$/ (%SiO2+2); | Cristobalite (respirable) 0.05 mg/$m^3$/ (%SiO2+2) | Tridymite (respirable) 0.05 mg/$m^3$/ (%SiO2+2) |

PUMP status/CALIBRATION DATA/Flow rate Confirmation

Calibrator Type: _____ Serial Number: _____ Primary Calibration Date: _____

| Time/Flow Rate 1 | Time/Flow Rate 2 | Time/Flow Rate 3 | Time/Flow Rate 4 | Time/Flow Rate 5 | Avg. Flow Rate | Initials |
|---|---|---|---|---|---|---|
| | | | | | | |

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Sample Information

Sample Time On:_____ Sample Time Off:_____ Elapsed Time (minutes):_____

Elapsed Time (minutes):_____ X _____ (Avg. Flow Rate) = _____ Air Volume Sampled:_____ liters

Worker or Area Sampled:_____ Social Security No. (Last four):_____

Location or Process: _____

Job Description:_____

_____

Comments: _____

_____

Sample Management Information

Filter Cassettes/Tubes Labeled and Sealed: ☒ Yes ☐ No ☐ NA

Storage/Handling/Transportation: Samples Chilled: ☐ Yes ☐ No ☐ NA

Chain of Custody Contained in the Sample Shipment Container: ☒ Yes ☐ No ☐ NA

Laboratory notified of sample shipment: ☒ Yes ☐ No ☐ NA

Comments:_____

_____

_____

_____

**WORKER ACTIVITY LOG**

| TEST HOUR | TASK(S) | * | LOCATION(S) |
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| TEST HOUR | TASK(S) | * | LOCATION(S) |
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| TEST HOUR | TASK(S) | * | LOCATION(S) |
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**Tetra Tech, Inc. Multi-Air Sample Log Sheet**

**Project Name:** Lockheed Martin, Middle River Complex **Project Number:** 112IC05956

| NIOSH # | Media | Lab Identification | Pre-weight (mg) | Sample Identification | Pump ID | Date | Start Time | Stop Time | Total Minutes | Flow Rate (lpm) | Total Volume (L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7500 | 1 | | NA | | Gil Air 5<br>TA 127 | | | | | | |

Calibration: Type:_____ Serial #:_____ Flow Cell Capacity: 5-500ml Flow rate: Pre = _____ /Post = _____ Avg= Initials:_____

Comments: SILICA, CRYSTALLINE, by XRD (filter redeposition); CYCLONE + FILTER (10-mm nylon cyclone, Higgins-Dewell (HD) cyclone, or aluminum cyclone + 5-:m PVC membrane);Nylon cyclone: 1.7 L/min; HD cyclone: 2.2 L/min; aluminum cyclone: 2.5 L/min

| NIOSH # | Media | Lab Identification | Pre-weight (mg) | Sample Identification | Pump ID | Date | Start Time | Stop Time | Total Minutes | Flow Rate (lpm) | Total Volume (L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7500 | 1 | | NA | | Gil Air 5<br>TA 127 | | | | | | |

Calibration: Type:_____ Serial #:_____ Flow Cell Capacity: 5-500ml Flow rate: Pre = _____ /Post _____ Avg= _____ Initials:_____

Comments: SILICA, CRYSTALLINE, by XRD (filter redeposition); CYCLONE + FILTER (10-mm nylon cyclone, Higgins-Dewell (HD) cyclone, or aluminum cyclone + 5-:m PVC membrane);Nylon cyclone: 1.7 L/min; HD cyclone: 2.2 L/min; aluminum cyclone: 2.5 L/min

| **NIOSH #** | **Media** | **Lab Identification** | **Pre-weight (mg)** | **Sample Identification** | **Pump ID** | **Date** | **Start Time** | **Stop Time** | **Total Minutes** | **Flow Rate (lpm)** | **Total Volume (L)** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7500 | 1 | | NA | | Gil Air 5<br>TA 127 | | | | | | |

Calibration: Type: NA Serial #: NA Flow Cell Capacity: NA Flow rate: Pre = /Post = Avg= Initials:

Comments: SILICA, CRYSTALLINE, by XRD (filter redeposition); CYCLONE + FILTER (10-mm nylon cyclone, Higgins-Dewell (HD) cyclone, or aluminum cyclone + 5-:m PVC membrane);Nylon cyclone: 1.7 L/min; HD cyclone: 2.2 L/min; aluminum cyclone: 2.5 L/min

| 7500 | 1 | | NA | | Gil Air 5<br>TA 127 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|

Calibration: Type: Serial #: Flow Cell Capacity: 5-500ml Flow rate: Pre = /Post = Avg= Initials:

Comments: SILICA, CRYSTALLINE, by XRD (filter redeposition); CYCLONE + FILTER (10-mm nylon cyclone, Higgins-Dewell (HD) cyclone, or aluminum cyclone + 5-:m PVC membrane);Nylon cyclone: 1.7 L/min; HD cyclone: 2.2 L/min; aluminum cyclone: 2.5 L/min

| NIOSH # | Media | Lab Identification | Pre-weight | Sample Identification | Pump ID | Date | Start Time | Stop Time | Total Minutes | Flow Rate (lpm) | Total Volume (L) |
|---|---|---|---|---|---|---|---|---|---|---|---|

| NIOSH # | Media | Lab Identification | Pre-weight (mg) | Sample Identification | Pump ID | Date | Start Time | Stop Time | Total Minutes | Flow Rate (lpm) | Total Volume (L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | (mg) | | | | | | | | |
| 5506 PAHs | 2 | | NA | | Gil Air 5 | | | | | | |

Calibration: Type: Bios Defender 510 Serial #: _____ Flow Cell Capacity: 5-500ml Flow rate: Pre = _____ /Post = _____ Avg= _____ Initials: _____

Comments: **POLYNUCLEAR AROMATIC HYDROCARBONS by HPLC;** FILTER + SORBENT TUBE (37-mm, 2-µm, PTFE + washed XAD-2, 100 mg/50 mg); **FLOW RATE:** 2 L/min; **VOL-MIN:** 200 L/ VOL-**MAX:** 1000 L; **SHIPMENT:** transfer filters to culture tubes; wrap sorbent and culture tubes in Al foil; ship @ 0˚C; **SAMPLE STABILITY**: unknown; protect from heat and UV light.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5506 PAHs | 2 | | NA | | Gil Air 5 | | | | | | |

Calibration: Type: Bios Defender 510 Serial #: _____ Flow Cell Capacity: 5-500ml Flow rate: Pre = _____ /Post = _____ Avg= _____ Initials: _____

Comments: **POLYNUCLEAR AROMATIC HYDROCARBONS by HPLC;** FILTER + SORBENT TUBE (37-mm, 2-µm, PTFE + washed XAD-2, 100 mg/50 mg); **FLOW RATE:** 2 L/min; **VOL-MIN:** 200 L/ VOL-**MAX:** 1000 L; **SHIPMENT:** transfer filters to culture tubes; wrap sorbent and culture tubes in Al foil; ship @ 0˚C; **SAMPLE STABILITY**: unknown; protect from heat and UV light.

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5506 PAHs | 2 | | NA | | Gil Air 5 | | | | | | |

Calibration: Type: Bios Defender 510 Serial #: _____ Flow Cell Capacity: 5-500ml Flow rate: Pre = _____ /Post = _____ Avg= _____ Initials: _____

| NIOSH # | Media | Lab Identification | Pre-weight (mg) | Sample Identification | Pump ID | Date | Start Time | Stop Time | Total Minutes | Flow Rate (lpm) | Total Volume (L) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Comments: **POLYNUCLEAR AROMATIC HYDROCARBONS by HPLC;** FILTER + SORBENT TUBE (37-mm, 2-µm, PTFE + washed XAD-2, 100 mg/50 mg); **FLOW RATE:** 2 L/min; **VOL-MIN:** 200 L/ VOL-**MAX:** 1000 L; **SHIPMENT:** transfer filters to culture tubes; wrap sorbent and culture tubes in Al foil; ship @ 0˚C; **SAMPLE STABILITY**: unknown; protect from heat and UV light. | | | | | | | | | | | |
| 5506 PAHs | 2 | | NA | | Gil Air 5 | | | | | | |

Calibration: Type: Bios Defender 510 Serial #:_____ Flow Cell Capacity: 5-500ml Flow rate: Pre = _____/Post = _____ Avg=_____ Initials:

Comments: **POLYNUCLEAR AROMATIC HYDROCARBONS by HPLC;** FILTER + SORBENT TUBE (37-mm, 2-µm, PTFE + washed XAD-2, 100 mg/50 mg); **FLOW RATE:** 2 L/min; **VOL-MIN:** 200 L/ VOL-**MAX:** 1000 L; **SHIPMENT:** transfer filters to culture tubes; wrap sorbent and culture tubes in Al foil; ship @ 0˚C; **SAMPLE STABILITY**: unknown; protect from heat and UV light.

1) 7500: Crystalline Silica: 37mm Cassette, 5µm PVC Cassette with aluminum cyclone

2) PAHs: Filter + Solid Sorbent (37mm, 2µm, PTFE = washed XAD,100 mg/50 mg)

**SAMPLE LABELS (PAHs), NIOSH METHOD 5506**

| | | | |
|---|---|---|---|
| Sample ID: | On: Off: | Sample ID: | On: Off: |
| Avg Flowrate (Lpm): | Volume(L): | Avg Flowrate (Lpm): | Volume(L): |
| Sample ID: | On: Off: | Sample ID: | On: Off: |
| Avg Flowrate (Lpm): | Volume(L): | Avg Flowrate (Lpm): | Volume(L): |
| Sample ID: | On: Off: | Sample ID: | On: Off: |
| Avg Flowrate (Lpm): | Volume(L): | Avg Flowrate (Lpm): | Volume(L): |
| Sample ID: | On: Off: | Sample ID: | On: Off: |
| Avg Flowrate (Lpm): | Volume(L): | Avg Flowrate (Lpm): | Volume(L): |
| Sample ID: | On: Off: | Sample ID: | On: Off: |
| Avg Flowrate (Lpm): | Volume(L): | Avg Flowrate (Lpm): | Volume(L): |
| Sample ID: | On: Off: | Sample ID: | On: Off: |
| Avg Flowrate (Lpm): | Volume(L): | Avg Flowrate (Lpm): | Volume(L): |
| Sample ID: | On: Off: | Sample ID: | On: Off: |
| Avg Flowrate (Lpm): | Volume(L): | Avg Flowrate (Lpm): | Volume(L): |
| Sample ID: | On: Off: | Sample ID: | On: Off: |
| Avg Flowrate (Lpm): | Volume(L): | Avg Flowrate (Lpm): | Volume(L): |
| Sample ID: | On: Off: | Sample ID: | On: Off: |
| Avg Flowrate (Lpm): | Volume(L): | Avg Flowrate (Lpm): | Volume(L): |
| Sample ID: | On: Off: | Sample ID: | On: Off: |
| Avg Flowrate (Lpm): | Volume(L): | Avg Flowrate (Lpm): | Volume(L): |
| Sample ID: | On: Off: | Sample ID: | On: Off: |
| Avg Flowrate (Lpm): | Volume(L): | Avg Flowrate (Lpm): | Volume(L): |

**SAMPLE LABELS NIOSH METHOD 7500 CRYSTALLINE SILICA**

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____ On:_____ Off:_____

Avg Flowrate (Lpm): _____ Volume(L):_____

Sample ID: _____On:_____Off:_____

Avg Flowrate (Lpm): _____Volume(L):_____

Sample ID: _____On:_____Off:_____

Avg Flowrate (Lpm): _____Volume(L):_____

# APPENDIX D—TRANSPORTATION AND DISPOSAL DOCUMENTATION

Soil Safe

# Material Characterization Report
## Brandywine, Maryland



*Please complete all sections of the form, sign where indicated and return completed form to:*

**Soil Safe, Inc.**
**6700 Alexander Bell Dr., Suite 300, Columbia MD 21046**
**Phone: 410 872-3990 Fax: 410 872-9082**

**Project Information**

Site Name: Lockheed Martin Middle River

Address: 195 Chesapeake Park Plaza Road

City, State Zip: Middle River, MD 21220 | County: Baltimore

Contact: Mike Musheno

Phone: 610-656-4012 | Fax: 410-682-0854

Approximate Quantity: ~~6700~~ KST 564 - BLOCK "H" 2,457 - BLOCK "G" | Unit of Measure: (Check One) KST ☐ Drums ☑ Tons ☐ Yards

Type of Contamination: ☑ Gasoline ☑ Diesel ☐ Fuel Oil ☐ Hydraulic Oil ☐ Heating Oil ☐ Kerosene ☐ Jet Fuel ☑ Motor Oil ☑ Used Oil

☑ Other (explain):

Contamination Source: ☐ UST ☐ AST ☐ Spill ☑ Historic

Other (explain): PAHs

Past Use of Site: ☑ Industrial ☐ Commercial ☐ Residential

Describe Past Use of Site: Currently vehicle parking and equipment storage, former WWTP and wind tunnel.

**Certifications**

I, the undersigned, understand that any soil delivered to Soil Safe's facility that is found to be non-conforming will not be accepted for processing. I further understand that the Client shall be solely responsible for its removal. In the event that the Client does not remove the soils in a timely manner, Soil Safe, acting as agent for the Client, may arrange to have the soil removed and disposed of at a properly permitted facility at the Client's sole expense.

I, the undersigned, Certify that, to the best of my knowledge, the soil submitted for acceptance to Soil Safe does not contain Polychlorinated Biphenyl's (PCB's), as defined by 40 CFR761, at levels greater than 5 ppm. I further certify that, to the best of my knowledge, the soil does not contain herbicides, pesticides, or any other constituents at levels which would cause the soil to be characterized as toxic or hazardous as defined by 40 CFR 261. I further certify that all documentation, including all soil analysis, that has been performed on the subject site has been provided to Soil Safe and that the soils have not been or are not presently the focus of a remediation for contaminants other than those that are being disclosed to Soil Safe, Inc.

I, the undersigned, am the generator or a properly authorized agent for the generator. By signing below I certify that I have been granted the authority to execute this document.

Print Name: Tom Blackman | Company: Lockheed Martin Corp

Title: Project Lead | Signature: Tom Blackman

Soil Safe

# Material Characterization Report
## Brandywine, Maryland



The Brandywine Facility requires the following analysis for approval of material into the facility.

| Analysis | Method | Acceptance Criteria |
|---|---|---|
| TPH – As appropriate for the type of contamination | 8015 / 9071B | Less than 25,000 ppm |
| BTEX | By an EPA Approved Method | Less than 500 ppm |
| PCB's | 8082 | Less than 5 ppm |
| TCLP Metals *Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver* | 1311/6010 | Less than RCRA |

Note: Other tests may be required depending on type of contamination. Soil not specifically exempted under 40CFR261.4 (b) (10) will require a Full TCLP List instead of TCLP Metals.

- Analytical requirements can be reduced if both of the following conditions are met:
  - A. Soils are impacted with only virgin oil(s).
  - B. One of the following Reduced Analytical Documents is provided: (check the applicable document provided)
    - ☐ MDE UST document completed by MDE Representative
    - ☐ Another Maryland document or form completed by a Department Representative
    - ☐ An MDE equivalent document from another State
    - ☐ Spill response document completed by or for a Government Agency
    - ☐ A UST document completed by a Soil Safe Employee
    - ☐ Single family home affidavit
    - ☐ Commercial transportation spill affidavit

- Reduced analytical are:
  - A. BTEX
  - B. TPH – As appropriate for the type of oil that was discharged.

Site Diagram (please sketch or attach drawing showing source of soil on project site)

Sample and Analysis Certification

I certify that soils were sampled as noted above and the results are representative of the stated volume to be shipped to Soil Safe, Inc.
Signature: _____

### Chain of Payment

**The information below must be provided for billing purposes and is required for project approval.**

**Instructions**
In order, starting with the generator and ending with Billing Company please provide the chain of payment for the project that you wish to have approved for acceptance by Soil Safe. Please contact Soil Safe with any questions you may have.

### Generator Information

Generator: Lockheed Martin Corp — Contact: Mike Musheno
Address: 195 Chesapeake Park Plaza Road — City, State Zip: Middle River, MD 21220
Phone: 610-656-4012 — Fax: 410-682-0854

Company: _____ — Contact: _____
Address: _____ — City, State Zip: _____
Phone: _____ — Fax: _____

Company: _____ — Contact: _____
Address: _____ — City, State Zip: _____
Phone: _____ — Fax: _____

*If additional space is needed, please attach a separate sheet providing the information requested.

### Billing Information

Company: Elite Environmental — Contact: Kenneth Trent
Address: 1814 Turkey Point Road — City, State Zip: Baltimore, MD 21901
Phone: (877) 202-4448 — Fax: _____

### Chain of Payment Certification

I, the undersigned verify that the information provided above is true and accurate. The information is complete and follows the Chain of Payment, as it will occur upon invoice for the project. Any changes to this Chain will be reported to Soil Safe as soon as possible.

Print Name: Kenneth Trent — Company: Elite Environmental
Title: President — Signature: _____

# *SOIL SAFE INCORPORATED CERTIFICATE OF RECYCLE*

Soil Safe Incorporated has accepted 396.03 tons of non-hazardous, petroleum contaminated soil, transported or 17 truck(s) from:

**195 Chesapeake Park Plaza Road**
**Middle River MD 21220**

Under approval number W5-4001 and billed under invoice # 66844

This material was contracted by and between Soil Safe, Inc. and
Elite Environmental Broker, Generator, or Agent, representing
Lockheed Martin Middle River , generator.

This material was analyzed prior to acceptance by a certified soils technician to determine soil components and specific product usage. Soil Safe Incorporated has taken full responsibility for this material: including safe handling, processing, storage, and reuse. We hereby certify that all of the above was executed in accordance with all existing laws and regulations.

Soil Safe certified on 23 September 2015 that this material has been recycled into an environmentally benign product.

State of Maryland
My commission expires December 7, 2018
As sworn to me this 23 September 2015

Notary

**CERTIFICATE ISSUED TO:**
Elite Environmental
P.O. Box 615
Cape Canavaral FL 32920

**GENERATOR:**

Lockheed Martin Middle River

*Soil Safe Incorporated is a corporation committed to the safe handling, processing and recycling of non-hazardous petroleum contaminated soil.*

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**Manifest Tracking Sheet**
**Soil Remedial Action - Block H**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| Manifest Number | | Block | Area | Truck Number | Driver | Net Weight (tons) | Net Weight (pounds) | Date |
|---|---|---|---|---|---|---|---|---|
| **Block H Area A** | | | | | | | | |
| 332658 | TT-BH-A-1 | H | A | I 7 | C. Wallace | 24.73 | 49460 | 5/20/2015 |
| 332687 | TT-BH-A-2 | H | A | I 15 | B. Ashford | 26.93 | 53860 | 5/20/2015 |
| 332686 | TT-BH-A-3 | H | A | I 10 | D. Whalen | 24.77 | 49540 | 5/20/2015 |
| 332685 | TT-BH-A-4 | H | A | I 6 | W. Banks | 22.66 | 45320 | 5/20/2015 |
| 332659 | TT-BH-A-5 | H | A | 78 | E. Trapp | 21.46 | 42920 | 5/20/2015 |
| 332661 | TT-BH-A-6 | H | A | 83 | J. Harrell | 22.37 | 44740 | 5/20/2015 |
| 332660 | TT-BH-A-7 | H | A | 80 | B. Davis | 17.88 | 35760 | 5/20/2015 |
| 332662 | TT-BH-A-8 | H | A | 61 | J. Trapp | 23.42 | 46840 | 5/20/2015 |
| 332633 | TT-BH-A-9 | H | A | I 15 | B Ashford | 25.53 | 51060 | 5/20/2015 |
| 332664 | TT-BH-A-10 | H | A | I 10 | D. Whalen | 23.37 | 46740 | 5/20/2015 |
| | | | | | **Subtotal** | 233.12 | 466240 | |
| **Block H Area B** | | | | | | | | |
| 332665 | TT-BH-B-1 | H | B | I 7 | C. Wallace | 25.27 | 50540 | 5/20/2015 |
| 332666 | TT-BH-B-2 | H | B | I 6 | W. Banks | 23.38 | 46760 | 5/20/2015 |
| 332667 | TT-BH-B-3 | H | B | 83 | J. Harrell | 22.21 | 44420 | 5/21/2015 |
| 332668 | TT-BH-B-4 | H | B | 80 | B. Davis | 17.87 | 35740 | 5/21/2015 |
| 332669 | TT-BH-B-5 | H | B | I-15 | B. Ashford | 24.6 | 49200 | 5/21/2015 |
| 332670 | TT-BH-B-6 | H | B | I-6 | B. Banks | 22.59 | 45180 | 5/21/2015 |
| 332671 | TT-BH-B-7 | H | B | I-7 | C. Wallace | 26.99 | 53980 | 5/21/2015 |
| | | | | | **Subtotal** | 162.91 | 325820 | |
| | | | | | **Block H Total=** | **396.03** | **792060** | |

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number 105

332658

### GENERATOR

Generator Name LMC (Mike Musheno)

Address 195 Chesapeake Park Plaza Rd.

Middle River, MD 21220

Phone No. (610) 656-4012

Shipping Location Lockheed Martin(LMC)Middle River

Address 195 Chesapeake Park Plaza Rd.

Middle River, MD 21220

Phone No. (610) 656-4012

Approval Number W5-4001

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non DOT/RCRA Regulated

| | | |
|---|---|---|
| GROSS | 36.83 T | GROSS |
| TARE | 12.10 T | TARE |
| NET | 24.73 T | NET |
| | | TONNAGE |

11:29AM 05/20/2015

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

Generator Authorized Agent Name _____ Signature _____ Shipment Date 5-20-15

### TRANSPORTER

Transporter Name IOJ

Address [illegible]

Driver Name (Print) [illegible]

Vehicle License No./State 242 [illegible] SE

Truck Number I-7

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature _____ Shipment Date 5-20-15

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature _____ Delivery Date 5-20-15

### DESTINATION

Site Name Brandywine

Phone No. 301-782-3036

Address 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent _____ Signature _____ Receipt Date 5-20-15

White - Facility Green - Facility Yellow - Generator Pink - Broker Goldenrod - Contractor Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number

11-BH-A2

332687

### GENERATOR

Generator Name LMC (Mike Musheno)

Address 195 Chesapeake Park Plaza Rd

Middle River, MD 21220

Phone No. (610) 656-4012

Shipping Location Lockheed Martin(LMC)Middle River

Address 195 Chesapeake Park Plaza Rd

Middle River, MD 21220

Phone No. (610) 656-4012

Approval Number

W5-4001

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non DOT/RCRA Regulated

GROSS

TARE

NET

TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

Agent for Lockheed Martin

Generator Authorized Agent Name — Signature — 5-20-15 Shipment Date

### TRANSPORTER

Transporter Name LOS Trucking

Address 3540 Crain Hwy Bowie Md

Driver Name (Print) B Ashford

Vehicle License No./State 246ED96

Truck Number 1-15

I hereby certify that the above named material was picked up at the generator site listed above.

B Ashford 5-20-15

Driver Signature — Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

B Ashford 5-20-15

Driver Signature — Delivery Date

### DESTINATION

Site Name Brandywine Phone No. 301-782-3036

Address 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date

White - Facility Green - Facility Yellow - Generator Pink - Broker Goldenrod - Contractor Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: 332686

### GENERATOR

Generator Name: LMC (Mike Musheno)
Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220
Phone No.: (610) 656-4012

Shipping Location: Lockheed Martin(LMC)Middle River
Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220
Phone No.: (610) 656-4012

Approval Number: W5-4001

Description of Material: Non-Regulated Petroleum Contaminated Soil
Non DOT/RCRA Regulated

GROSS
TARE
NET
TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

James P. Keenan Agent for Lockheed Martin — Signature — 5-20-15
Generator Authorized Agent Name — Signature — Shipment Date

### TRANSPORTER

Transporter Name: IOJ Trucking
Address: 3540 Crain hwy
Bowie, md 20716

Driver Name (Print): Derrick Whalen
Vehicle License No./State: 236ED89
Truck Number: I-10

I hereby certify that the above named material was picked up at the generator site listed above.

Derrick Whalen — 5/20/15
Driver Signature — Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Derrick Whalen — 5/20/15
Driver Signature — Delivery Date

### DESTINATION

Site Name: Brandywine
Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt

White - Facility  Green - Facility  Yellow - Generator  Pink - Broker  Goldenrod - Contractor  Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number

332685

### GENERATOR

Generator Name LMC (Mike Mushenio) Shipping Location Lockheed Martin MC Middle River

Address 195 Chesapeake Park Plaza Rd Address 195 Chesapeake Park Plaza Rd

Middle River, MD 21220 Middle River, MD 21220

Phone No. (610) 656-4012 Phone No. (610) 656-4012

Approval Number W5-4001

Description of Material

Non-Regulated Petroleum Contaminated Soil

Non DOT/RCRA Regulated

GROSS

TARE

NET

TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

Generator Authorized Agent Name Signature Shipment Date

### TRANSPORTER

Transporter Name IOJ Driver Name (Print) Bill Banks

Address Bowie, MD Vehicle License No./State 712 ED4U MD

Truck Number 6

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature Shipment Date 5/20/15

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature 5/21/15 Delivery Date

### DESTINATION

Site Name Brandywine Phone No. 301-782-3036

Address 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent Signature Receipt Date

White - Facility Green - Facility Yellow - Generator Pink - Broker Goldenrod - Contractor Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: TT-BH-A-5

332659

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220

Phone No.: (610) 656-4012

Shipping Location: Lockheed Martin(LMC)Middle River

Address: 195 Chesapeake Park Plaza Rd
Middle River, MD 21220

Phone No.: (610) 656-4012

Approval Number: W5-4001

Description of Material: Non-Regulated Petroleum Contaminated Soil
Non DOT/RCRA Regulated

GROSS
TARE
NET
TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

James R. Ferguson Agent for Lockheed Mart. — Signature — 5-20-15

Generator Authorized Agent Name — Signature — Shipment Date

### TRANSPORTER

Transporter Name: Trapp Ent

Address: 627 Hammonds Ferry Rd
Linthicum Md

Driver Name (Print): SONNY TRAPP

Vehicle License No./State: E40409D

Truck Number: 78

I hereby certify that the above named material was picked up at the generator site listed above.

Sonny Trapp — 5-20-15

Driver Signature — Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Sonny Trapp — 5-20-15

Driver Signature — Delivery Date

### DESTINATION

Site Name: Brandywine

Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date

White - Facility  Green - Facility  Yellow - Generator  Pink - Broker  Goldenrod - Contractor  Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: TT-BH-A-6

332661

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd

Middle River, MD 21220

Phone No.: (610) 656-4012

Shipping Location: Lockheed Martin(LMC)Middle River

Address: 195 Chesapeake Park Plaza Rd

Middle River, MD 21220

Phone No.: (610) 656-4012

Approval Number: WS-4001

Description of Material: Non-Regulated Petroleum Contaminated Soil

Non DOT/RCRA Regulated

GROSS

TARE

NET

TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

James P. Ferguson Agt for Lockheed Martin — 5-20-15

Generator Authorized Agent Name — Signature — Shipment Date

### TRANSPORTER

Transporter Name: TRAPP

Address: bush md

Driver Name (Print): Jimbo

Vehicle License No./State: E156270

Truck Number: 83

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature — 5/20 Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature — 5/20 Delivery Date

### DESTINATION

Site Name: Brandywine — Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date

White - Facility  Green - Facility  Yellow - Generator  Pink - Broker  Goldenrod - Contractor  Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: TT-BH-A-7

332660

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220

Phone No.: (610) 656-4012

Shipping Location: Lockheed Martin(LMC)Middle River

Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220

Phone No.: (610) 656-4012

Approval Number: WS-4001

Description of Material: Non-Regulated Petroleum Contaminated Soil

Non DOT/RCRA Regulated

GROSS

TARE

NET

TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

James R Ferguson Agent for Lockheed Martin — 5-20-15

Generator Authorized Agent Name — Signature — Shipment Date

### TRANSPORTER

Transporter Name: Trapp Trucking

Address: 627 Hammonds Ferry Rd
Linthicum Md

Driver Name (Print): Brad

Vehicle License No./State: E52520D MD

Truck Number: #80

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature — 5/20/15 Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature — 5/20/15 Delivery Date

### DESTINATION

Site Name: Brandywine — Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date

White - Facility  Green - Facility  Yellow - Generator  Pink - Broker  Goldenrod - Contractor  Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: FT-BH-A-8

332662

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220

Phone No.: (610) 656-4012

Shipping Location: Lockheed Martin(LMC)Middle River

Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220

Phone No.: (610) 656-4012

Approval Number: W5-4001

Description of Material: Non-Regulated Petroleum Contaminated Soil
Non DOT/RCRA Regulated

GROSS
TARE
NET
TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

Agent for Terry P Ferguson, Lockheed Martin — 5-20-15

Generator Authorized Agent Name / Signature / Shipment Date

### TRANSPORTER

Transporter Name: Trapp

Address: 627 Hammonds Ferry Rd
Linthicum, MD

Driver Name (Print): Jeff Trapp

Vehicle License No./State: E45602GD

Truck Number: 601

I hereby certify that the above named material was picked up at the generator site listed above.

Jeff Trapp — 5/20/15

Driver Signature / Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Jeff Trapp — 5/20/15

Driver Signature / Delivery Date

### DESTINATION

Site Name: Brandywine

Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent / Signature / Receipt Date

White - Facility  Green - Facility  Yellow - Generator  Pink - Broker  Goldenrod - Contractor  Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: TT-BH-A-9

332663

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd
Middle River, MD 21220

Phone No.: (610) 656-4012

Shipping Location: Lockheed Martin(LMC)Middle River

Address: 195 Chesapeake Park Plaza Rd
Middle River, MD 21220

Phone No.: (610) 656-4012

Approval Number: W5-4001

Description of Material:
Non-Regulated Petroleum Contaminated Soil
Non DOT/RCRA Regulated

GROSS
TARE
NET
TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

James R. Ferguson Agent for Lockheed Martin — [signature] — 5-20-15

Generator Authorized Agent Name — Signature — Shipment Date

### TRANSPORTER

Transporter Name: Los Trucking

Address: 3540 Crain Hwy
Bowie Md

Driver Name (Print): B Ashford

Vehicle License No./State: 246 E 796

Truck Number: T-15

I hereby certify that the above named material was picked up at the generator site listed above.

[signature] 5-20-15

Driver Signature — Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

[signature] 5-20-15

Driver Signature — Delivery Date

### DESTINATION

Site Name: Brandywine

Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date

White - Facility  Green - Facility  Yellow - Generator  Pink - Broker  Goldenrod - Contractor  Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: TT-B11-A-10

332664

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220

Phone No.: (610) 656-4012

Shipping Location: Lockheed Martin(LMC)Middle River

Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220

Phone No.: (610) 656-4012

Approval Number: W5-4001

Description of Material:
Non-Regulated Petroleum Contaminated Soil
Non DOT/RCRA Regulated

GROSS
TARE
NET
TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

[illegible] Agent for Lockheed Martin — [signature] — 5-20-15

Generator Authorized Agent Name — Signature — Shipment Date

### TRANSPORTER

Transporter Name: IOJ Trucking

Address: 3540 Crain hwy
Bowie, md 20716

Driver Name (Print): Derrick Whalen

Vehicle License No./State: 236ED89

Truck Number: I-10

I hereby certify that the above named material was picked up at the generator site listed above.

Derrick Whalen — 5/20/15

Driver Signature — Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Derrick Whalen — 5/20/15

Driver Signature — Delivery Date

### DESTINATION

Site Name: Brandywine

Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date

White - Facility  Green - Facility  Yellow - Generator  Pink - Broker  Goldenrod - Contractor  Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: 11-BH-A-[illegible]

332665

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd.

Middle River, MD 21220

Phone No.: (610) 656-4012

Shipping Location: Lockheed Martin(LMC)Middle River

Address: 195 Chesapeake Park Plaza Rd.

Middle River, MD 21220

Phone No.: (610) 656-4012

Approval Number: W5-4001

Description of Material: Non-Regulated Petroleum Contaminated Soil

Non DOT/RCRA Regulated

GROSS

TARE

NET

TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

Agent for Lockheed Martin

Jennifer Ferguson — Signature — 5-20-15

Generator Authorized Agent Name — Signature — Shipment Date

### TRANSPORTER

Transporter Name: IOS

Address: 3540 Crain Hwy

Bowie MD 20716

Driver Name (Print): Craig

Vehicle License No./State: 242 CD55

Truck Number: I-7

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature — 5-20-15 Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature — 5-20-15 Delivery Date

### DESTINATION

Site Name: Brandywine — Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date

White - Facility  Green - Facility  Yellow - Generator  Pink - Broker  Goldenrod - Contractor  Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: TT-BH-B-7

332666

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220

Phone No.: (610) 656-4012

Shipping Location: Lockheed Martin(LMC)Middle River

Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220

Phone No.: (610) 656-4012

Approval Number: W5-4001

Description of Material:
Non-Regulated Petroleum Contaminated Soil
Non DOT/RCRA Regulated

GROSS
TARE
NET
TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

James R Grauser Agent for Lockheed Martin — Generator Authorized Agent Name

Signature

5-20-2015 — Shipment Date

### TRANSPORTER

Transporter Name: IO J Trucking

Address: Bowie, MD

Driver Name (Print): Bill Banks

Vehicle License No./State: 212 ED 46 MD

Truck Number: 6

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature — Shipment Date: 5/20/15

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature — Delivery Date: 5/20/15

### DESTINATION

Site Name: Brandywine

Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date

White - Facility  Green - Facility  Yellow - Generator  Pink - Broker  Goldenrod - Contractor  Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: TT-BH-B-4

332667

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd.

Middle River, MD 21220

Phone No.: (610) 636-4012

Shipping Location: Lockheed Martin(LMC)Middle River

Address: 195 Chesapeake Park Plaza Rd.

Middle River, MD 21220

Phone No.: (610) 636-4012

Approval Number: W5-4001

Description of Material: Non-Regulated Petroleum Contaminated Soil; Non DOT/RCRA Regulated

GROSS

TARE

NET

TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

James R Ferguson Agent for Lockheed Martin — Signature — 5-20-15

Generator Authorized Agent Name / Signature / Shipment Date

### TRANSPORTER

Transporter Name: TRAPP

Address:

Driver Name (Print): Jimbo

Vehicle License No./State: E45627D

Truck Number: 83

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature — 5/20 Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature — 5/20 Delivery Date

### DESTINATION

Site Name: Brandywine Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent / Signature / Receipt Date

White - Facility Green - Facility Yellow - Generator Pink - Broker Goldenrod - Contractor Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: TT-BH-B-4

332668

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220

Phone No.: (610) 656-4012

Shipping Location: Lockheed Martin(LMC)Middle River

Address: 195 Chesapeake Park Plaza Rd
Middle River, MD 21220

Phone No.: (610) 656-4012

Approval Number: W5-4001

Description of Material: Non-Regulated Petroleum Contaminated Soil

Non DOT/RCRA Regulated

GROSS

TARE

NET

TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

James R. Ferguson Agent for Lockheed Martin — Signature — 5-20-15

Generator Authorized Agent Name — Signature — Shipment Date

### TRANSPORTER

Transporter Name: Trapp Trucking

Address: 627 Hammonds Ferry Rd
Linthicum Md

Driver Name (Print): Brad

Vehicle License No./State: E52520D

Truck Number: #80

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature — 5/20/15 Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature — 5/20/15 Delivery Date

### DESTINATION

Site Name: Brandywine

Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date

White - Facility  Green - Facility  Yellow - Generator  Pink - Broker  Goldenrod - Contractor  Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: TT-BH-B-5

332669

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd.

Middle River, MD 21220

Phone No. (610) 636-4012

Shipping Location: Lockheed Martin(LMC) Middle River

Address: 195 Chesapeake Park Plaza Rd

Middle River, MD 21220

Phone No. (610) 636-4012

Approval Number: W5-4001

Description of Material: Non-Regulated Petroleum Contaminated Soil; Non DOT/RCRA Regulated

GROSS

TARE

NET

TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

James R Ferguson Agent for Lockheed Martin — Generator Authorized Agent Name

Signature

5-21-15 — Shipment Date

### TRANSPORTER

Transporter Name: LJS Trucking

Address: 3540 Crain Hwy

Bowie Md

Driver Name (Print): B Ashford

Vehicle License No./State: 246 E 96

Truck Number: L-15

I hereby certify that the above named material was picked up at the generator site listed above.

B Ashford 5-21-15

Driver Signature — Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

B Ashford 5-21-15

Driver Signature — Delivery Date

### DESTINATION

Site Name: Brandywine

Phone No. 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date

White - Facility  Green - Facility  Yellow - Generator  Pink - Broker  Goldenrod - Contractor  Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: TT-BH-B-6

332670

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd.

Middle River, MD 21220

Phone No.: (610) 656-4012

Shipping Location: Lockheed Martin(LMC)Middle River

Address: 195 Chesapeake Park Plaza Rd.

Middle River, MD 21220

Phone No.: (610) 656-4012

Approval Number: W5-4001

Description of Material: Non-Regulated Petroleum Contaminated Soil

Non DOT/RCRA Regulated

GROSS

TARE

NET

TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

Agent for LMC

Generator Authorized Agent Name — Signature — 5-21-15 Shipment Date

### TRANSPORTER

Transporter Name: IOJ

Address: BOWIE, MD

Driver Name (Print): BILL BANKS

Vehicle License No./State: ~~ZIZ~~ ZIZ ED49 MD

Truck Number: 6

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature — 5/21/15 Shipment Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature — 5/21/15 Delivery Date

### DESTINATION

Site Name: Brandywine Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent — Signature — Receipt Date

White - Facility Green - Facility Yellow - Generator Pink - Broker Goldenrod - Contractor Blue - Trucking Co.

# SOIL SAFE, INC.

## NON-HAZARDOUS MATERIAL MANIFEST

Log Number: TI-BH-B-7

332671

### GENERATOR

Generator Name: LMC (Mike Musheno)

Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220

Phone No.: (610) 636-4012

Shipping Location: Lockheed Martin(LMC)Middle River

Address: 195 Chesapeake Park Plaza Rd.
Middle River, MD 21220

Phone No.: (610) 636-4012

Approval Number: W5-4001

Description of Material: Non-Regulated Petroleum Contaminated Soil; Non DOT/RCRA Regulated

GROSS

TARE

NET

TONNAGE

**I hereby certify that the above named material does not contain free liquid as defined by 40 CFR Part 260.10 or any applicable state law, is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.**

James P. Ferguson — Agent for Lockheed Martin — Signature — 5-21-15

Generator Authorized Agent Name / Signature / Shipment Date

### TRANSPORTER

Transporter Name: IOS

Address: 3540 Crain Hwy
Bowie MD 20716

Driver Name (Print): CRAIG

Vehicle License No./State: 242 EDS

Truck Number: I-7

I hereby certify that the above named material was picked up at the generator site listed above.

Driver Signature — Shipment Date: 5-21-15

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature — Delivery Date: 5-21-15

### DESTINATION

Site Name: Brandywine

Phone No.: 301-782-3036

Address: 16001 Mattawoman Drive, Brandywine, Md. 20613

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Name of Authorized Agent / Signature / Receipt Date

White - Facility  Green - Facility  Yellow - Generator  Pink - Broker  Goldenrod - Contractor  Blue - Trucking Co.

# APPENDIX E—SAMPLING DOCUMENTATION

# SAMPLING LOG SHEETS

Tetra Tech

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: MRC Soil Remediation Blocks D, D Pan, F, G, H
Project No.: 112IC07483

Soil Block: Block H
Excavation Area: A
Sampled By: Josh Mullis
C.O.C. No.: #1

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date | Time | Sample ID | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| 5/20/15 | 1401 | H-VB-A-1-2 | Sandy clay to clayey sand, sl moist, red/brown |
| 5/20/15 | 1358 | H-VB-A-2-2 | Sandy clay to clayey sand, sl moist, red/brown |
| 5/20/15 | 1356 | H-VB-A-3-2 | Sandy clay to clayey sand, sl moist, red/brown |

**COMPOSITE SAMPLE DATA:**

| Date | Time | Sample ID | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| 5/20/15 | 1408 | H-VS-A-1-1 | Sandy clay composite, sl moist, red/brown |
| 5/20/15 | 1345 | H-VS-A-2-1 | " " |
| 5/20/15 | 1347 | H-VS-A-3-1 | " " |
| 5/20/15 | 1352 | H-VS-A-4-1 | " " |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| PAH (8270D) | 1-4oz glass jar unpres'd. | 4°C | |

**OBSERVATIONS / NOTES:**

VS = sidewall composites

VB = Base grab

**MAP:**

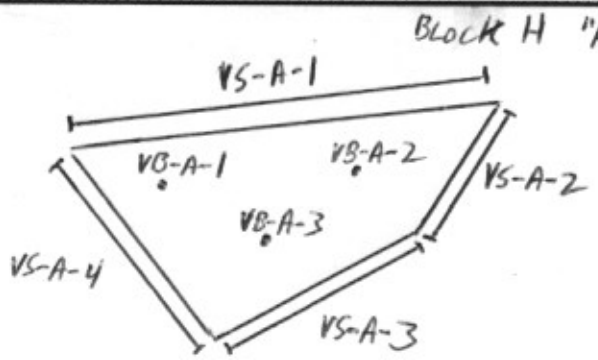


Circle if Applicable:

| MS/MSD | Duplicate ID No.: |
|---|---|
| — | H-DUP01 (H-VS-A-2-1) |

Signature(s):

Tetra Tech

# SOIL & SEDIMENT SAMPLE LOG SHEET



Project Site Name: MRC Soil Remediation Blocks D, D Pan, F, G, H
Project No.: 112IC07483

Soil Block: BLOCK H
Excavation Area: AREA B
Sampled By: Josh Mullis
C.O.C. No.: #2

[] Surface Soil
[X] Subsurface Soil
[] Sediment
[] Other:
[] QA Sample Type:

Type of Sample:
[X] Low Concentration
[] High Concentration

**GRAB SAMPLE DATA:**

| Date | Time | Sample ID | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| 5/21/15 | 0915 | H-VB-B-1-2 | Clay, dark red moist |
| 5/21/15 | 0920 | H-VB-B-2-2 | Sandy Clay, dark red, moist |
| | | | |

**COMPOSITE SAMPLE DATA:**

| Date | Time | Sample ID | Description (Sand, Silt, Clay, Moisture, etc.) |
|---|---|---|---|
| 5/20/15 | 1623 | H-VS-B-1-1 | Sandy Clay composite, moist, tan to red |
| 5/20/15 | 1626 | H-VS-B-2-1 | " " |
| 5/21/15 | 0910 | H-VS-B-3-1 | " " |
| 5/20/15 | 1632 | H-VS-B-4-1 | " " |
| | | | |
| | | | |
| | | | |
| | | | |

**SAMPLE COLLECTION INFORMATION:**

| Analysis | Container Requirements | Collected | Other |
|---|---|---|---|
| PAH (8270D) | 1-4oz glass jar unpres. ea. | YES | |
| | | | |
| | | | |
| | | | |
| | | | |

**OBSERVATIONS / NOTES:**

VS= Sidewall composite

VB= Base grab

**MAP:**

Block H "AREA B"

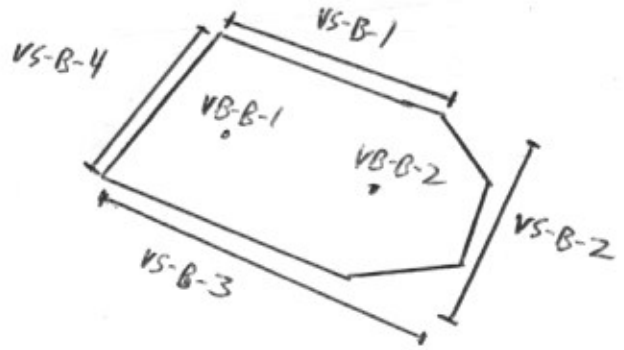


**Circle if Applicable:**

| MS/MSD | Duplicate ID No.: |
|---|---|
| — | — |

Signature(s):

# CHAIN OF CUSTODY FORMS

## CHAIN OF CUSTODY RECORD

| PROJECT NO.: | SITE NAME: |
|---|---|
| 112IC07483 | MAC Sp.1 Remediation (Block H) |

SAMPLERS (SIGNATURE): JOSH MULLIS

| STATION NO. | DATE | TIME | COMP | GRAB | STATION LOCATION | NO. OF CON-TAINERS | PAH (8270D) | | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5/20 | 1408 | X | | H-US-A-1-1 | 1 | X | | | | | | ★ 3 DAY TAT |
| | | 1345 | X | | H-US-A-2-1 | 1 | X | | | | | | ★ TESTAMERICA |
| | | 1347 | X | | H-US-A-3-1 | 1 | X | | | | | | NORTH CANTON, OH ★ |
| | | 1352 | X | | H-US-A-4-1 | 1 | X | | | | | | |
| | | 1401 | | X | H-UB-A-1-2 | 1 | X | | | | | | |
| | | 1358 | | X | H-UB-A-2-2 | 1 | X | | | | | | |
| | | 1356 | | X | H-UB-A-3-2 | 1 | X | | | | | | |
| | | — | X | | H-DUP01 | 1 | X | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
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| | | | | | | 5/20/15 | | | | | | | |
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| RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY(SIGNATURE): | RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY(SIGNATURE): |
|---|---|---|---|---|---|
| | 5/20 1545 | | | | |
| RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY (SIGNATURE): | RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY(SIGNATURE): |
| | | | | | |
| RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED FOR LABORATORY BY (SIGNATURE): | DATE / TIME: | REMARKS: | |
| | | | | | |

Order No. 70440 (0693)

## CHAIN OF CUSTODY RECORD

| PROJECT NO.: | SITE NAME: |
|---|---|
| 112IC07483 | MAC Soil Remediation (Block H) |

SAMPLERS (SIGNATURE): JOSH MULLIS

| STATION NO. | DATE | TIME | COMP | GRAB | STATION LOCATION / SAMPLE ID | NO. OF CONTAINERS | PAH (8270D) | | | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5/20 | 1623 | X | | H-VS-B-1-1 | 1 | X | | | | | | | ^ 3 DAY TAT ^ |
| | 5/20 | 1626 | X | | H-VS-B-2-1 | 1 | X | | | | | | | ^ TESTAMERICA |
| | 5/20 | 1632 | X | | ~~for~~ H-VS-B-4-1 | 1 | X | | | | | | | NORTH CANTON^ |
| | 5/21 | 0910 | X | ~~X~~ | H-VS-B-3-1 | 1 | X | | | | | | | |
| | 5/21 | 0915 | | X | H-VB-B-1-2 | 1 | X | | | | | | | |
| | 5/21 | 0920 | | X | H-VB-B-2-2 | 1 | X | | | | | | | |
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5/21/15

| RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY(SIGNATURE): | RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY(SIGNATURE): |
|---|---|---|---|---|---|
| | 5/21 1545 | | | | |
| RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY (SIGNATURE): | RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY(SIGNATURE): |
| | | | | | |
| RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED FOR LABORATORY BY (SIGNATURE): | DATE / TIME: | REMARKS: | |
| | | | | | |

Order No. 70440 (0693)

# APPENDIX F—LABORATORY REPORTS

# LABORATORY REPORTS

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

Job Number: 240-51073-1

Job Description: MRC Soil Remediation (Block H)

For:
Tetra Tech, Inc.
Foster Plaza 7
661 Anderson Drive
Pittsburgh, PA 15220-2745

Attention: Mr. Scott Nesbit



Approved for release.
John McFadden
Project Manager I
5/27/2015 5:07 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
05/27/2015

cc: Tony Apanavage
Samantha Brenner
Kelly Carper
Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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# CASE NARRATIVE

## Client: Tetra Tech, Inc.

## Project: MRC Soil Remediation (Block H)

## Report Number: 240-51073-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

**RECEIPT**

The samples were received on 5/22/2015 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.6º C.

**SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)**

Samples H-US-A-1-1 (240-51073-1), H-US-A-2-1 (240-51073-2), H-US-A-3-1 (240-51073-3), H-US-A-4-1 (240-51073-4), H-UB-A-1-2 (240-51073-5), H-UB-A-2-2 (240-51073-6), H-UB-A-3-2 (240-51073-7) and H-DUP01 (240-51073-8) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 05/22/2015 and analyzed on 05/26/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**PERCENT SOLIDS**

Samples H-US-A-1-1 (240-51073-1), H-US-A-2-1 (240-51073-2), H-US-A-3-1 (240-51073-3), H-US-A-4-1 (240-51073-4), H-UB-A-1-2 (240-51073-5), H-UB-A-2-2 (240-51073-6), H-UB-A-3-2 (240-51073-7) and H-DUP01 (240-51073-8) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 05/22/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 181541

Lab Sample ID: STD4 240-181541/3 IC Client Sample ID:

Date Analyzed: 05/19/15 16:38 Lab File ID: 50519003.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzoic acid | 7.21 | Poor Chromatography | ulmanm | 05/19/15 17:08 |
| 4-Chloroaniline | 7.57 | Poor Chromatography | ulmanm | 05/19/15 17:08 |
| 2,4-Dinitrophenol | 9.05 | Poor Chromatography | ulmanm | 05/19/15 17:08 |

Lab Sample ID: STD2 240-181541/5 IC Client Sample ID:

Date Analyzed: 05/19/15 17:28 Lab File ID: 50519005.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzoic acid | 7.20 | Poor Chromatography | ulmanm | 05/19/15 17:57 |
| Indeno[1,2,3-cd]pyrene | 16.43 | Poor Chromatography | ulmanm | 05/19/15 17:57 |

Lab Sample ID: STD1 240-181541/6 IC Client Sample ID:

Date Analyzed: 05/19/15 17:53 Lab File ID: 50519006.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 16.43 | Poor Chromatography | ulmanm | 05/19/15 18:21 |
| Dibenz(a,h)anthracene | 16.44 | Poor Chromatography | ulmanm | 05/19/15 18:21 |
| Benzo[g,h,i]perylene | 17.05 | Poor Chromatography | ulmanm | 05/19/15 18:21 |

Lab Sample ID: STD9 240-181541/7 IC Client Sample ID:

Date Analyzed: 05/19/15 18:18 Lab File ID: 50519007.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 4-Chloroaniline | 7.57 | Poor Chromatography | ulmanm | 05/19/15 19:02 |
| Caprolactam | 7.86 | Poor Chromatography | ulmanm | 05/19/15 19:02 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 181541

Lab Sample ID: STD8 240-181541/8 IC Client Sample ID:

Date Analyzed: 05/19/15 18:43 Lab File ID: 50519008.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Caprolactam | 7.85 | Poor Chromatography | ulmanm | 05/19/15 19:10 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 182204

Lab Sample ID: CCV 240-182204/2 CCVIS Client Sample ID:

Date Analyzed: 05/24/15 09:19 Lab File ID: 50524002.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,4-Dioxane | 2.99 | Poor Chromatography | ulmanm | 05/24/15 10:05 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 182251

Lab Sample ID: CCV 240-182251/2 CCVIS Client Sample ID:

Date Analyzed: 05/26/15 07:52 Lab File ID: 50526002.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,4-Dioxane | 2.94 | Poor Chromatography | ulmanm | 05/26/15 08:38 |
| Pyridine | 3.52 | Poor Chromatography | ulmanm | 05/26/15 08:38 |
| 4-Chloroaniline | 7.51 | Poor Chromatography | ulmanm | 05/26/15 08:38 |

Lab Sample ID: 240-51073-2 Client Sample ID: H-US-A-2-1

Date Analyzed: 05/26/15 14:33 Lab File ID: 50526018.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 13.72 | Poor Chromatography | ulmanm | 05/27/15 08:57 |
| Benzo[k]fluoranthene | 13.74 | Poor Chromatography | ulmanm | 05/27/15 08:57 |
| Dibenz(a,h)anthracene | 16.17 | Poor Chromatography | ulmanm | 05/27/15 08:57 |
| Benzo[g,h,i]perylene | 16.75 | Poor Chromatography | ulmanm | 05/27/15 08:57 |

Lab Sample ID: 240-51073-3 Client Sample ID: H-US-A-3-1

Date Analyzed: 05/26/15 14:58 Lab File ID: 50526019.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[k]fluoranthene | 13.75 | Poor Chromatography | ulmanm | 05/27/15 08:59 |
| Indeno[1,2,3-cd]pyrene | 16.16 | Poor Chromatography | ulmanm | 05/27/15 08:59 |
| Benzo[g,h,i]perylene | 16.75 | Poor Chromatography | ulmanm | 05/27/15 08:59 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 182251

Lab Sample ID: 240-51073-4 Client Sample ID: H-US-A-4-1

Date Analyzed: 05/26/15 15:23 Lab File ID: 50526020.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 13.72 | Poor Chromatography | ulmanm | 05/27/15 09:00 |
| Benzo[k]fluoranthene | 13.74 | Poor Chromatography | ulmanm | 05/27/15 09:00 |
| Indeno[1,2,3-cd]pyrene | 16.16 | Poor Chromatography | ulmanm | 05/27/15 09:00 |

Lab Sample ID: 240-51073-7 Client Sample ID: H-UB-A-3-2

Date Analyzed: 05/26/15 16:39 Lab File ID: 50526023.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[k]fluoranthene | 13.75 | Poor Chromatography | ulmanm | 05/27/15 09:02 |

Lab Sample ID: 240-51073-8 Client Sample ID: H-DUP01

Date Analyzed: 05/26/15 17:04 Lab File ID: 50526024.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 13.72 | Poor Chromatography | ulmanm | 05/27/15 09:05 |
| Benzo[k]fluoranthene | 13.74 | Poor Chromatography | ulmanm | 05/27/15 09:05 |
| Dibenz(a,h)anthracene | 16.15 | Poor Chromatography | ulmanm | 05/27/15 09:05 |

# SAMPLE SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-51073-1

| Lab Sample ID | Client Sample ID | Client Matrix | Date/Time Sampled | Date/Time Received |
|---|---|---|---|---|
| 240-51073-1 | H-US-A-1-1 | Solid | 05/20/2015 1408 | 05/22/2015 0930 |
| 240-51073-2 | H-US-A-2-1 | Solid | 05/20/2015 1345 | 05/22/2015 0930 |
| 240-51073-3 | H-US-A-3-1 | Solid | 05/20/2015 1347 | 05/22/2015 0930 |
| 240-51073-4 | H-US-A-4-1 | Solid | 05/20/2015 1352 | 05/22/2015 0930 |
| 240-51073-5 | H-UB-A-1-2 | Solid | 05/20/2015 1401 | 05/22/2015 0930 |
| 240-51073-6 | H-UB-A-2-2 | Solid | 05/20/2015 1358 | 05/22/2015 0930 |
| 240-51073-7 | H-UB-A-3-2 | Solid | 05/20/2015 1356 | 05/22/2015 0930 |
| 240-51073-8FD | H-DUP01 | Solid | 05/20/2015 0000 | 05/22/2015 0930 |

# EXECUTIVE SUMMARY - Detections

Client: Tetra Tech, Inc. Job Number: 240-51073-1

| Lab Sample ID / Analyte | Client Sample ID | Result | Qualifier | Reporting Limit | Units | Method |
|---|---|---|---|---|---|---|
| **240-51073-1** | **H-US-A-1-1** | | | | | |
| Pyrene | | 4.6 | J | 8.0 | ug/Kg | 8270D |
| Percent Solids | | 84 | | 0.10 | % | Moisture |
| Percent Moisture | | 16 | | 0.10 | % | Moisture |
| **240-51073-2** | **H-US-A-2-1** | | | | | |
| Benzo[a]anthracene | | 21 | | 7.9 | ug/Kg | 8270D |
| Benzo[a]pyrene | | 52 | | 7.9 | ug/Kg | 8270D |
| Benzo[b]fluoranthene | | 39 | | 7.9 | ug/Kg | 8270D |
| Benzo[g,h,i]perylene | | 54 | | 7.9 | ug/Kg | 8270D |
| Benzo[k]fluoranthene | | 33 | | 7.9 | ug/Kg | 8270D |
| Chrysene | | 35 | | 7.9 | ug/Kg | 8270D |
| Dibenz(a,h)anthracene | | 12 | | 7.9 | ug/Kg | 8270D |
| Fluoranthene | | 19 | | 7.9 | ug/Kg | 8270D |
| Indeno[1,2,3-cd]pyrene | | 36 | | 7.9 | ug/Kg | 8270D |
| Phenanthrene | | 5.2 | J | 7.9 | ug/Kg | 8270D |
| Pyrene | | 52 | | 7.9 | ug/Kg | 8270D |
| Percent Solids | | 85 | | 0.10 | % | Moisture |
| Percent Moisture | | 15 | | 0.10 | % | Moisture |
| **240-51073-3** | **H-US-A-3-1** | | | | | |
| Benzo[a]anthracene | | 17 | | 8.4 | ug/Kg | 8270D |
| Benzo[a]pyrene | | 32 | | 8.4 | ug/Kg | 8270D |
| Benzo[b]fluoranthene | | 33 | | 8.4 | ug/Kg | 8270D |
| Benzo[g,h,i]perylene | | 34 | | 8.4 | ug/Kg | 8270D |
| Benzo[k]fluoranthene | | 14 | | 8.4 | ug/Kg | 8270D |
| Chrysene | | 23 | | 8.4 | ug/Kg | 8270D |
| Fluoranthene | | 15 | | 8.4 | ug/Kg | 8270D |
| Indeno[1,2,3-cd]pyrene | | 22 | | 8.4 | ug/Kg | 8270D |
| Phenanthrene | | 7.8 | J | 8.4 | ug/Kg | 8270D |
| Pyrene | | 39 | | 8.4 | ug/Kg | 8270D |
| Percent Solids | | 79 | | 0.10 | % | Moisture |
| Percent Moisture | | 21 | | 0.10 | % | Moisture |

# EXECUTIVE SUMMARY - Detections

Client: Tetra Tech, Inc. Job Number: 240-51073-1

| Lab Sample ID / Analyte | Client Sample ID | Result | Qualifier | Reporting Limit | Units | Method |
|---|---|---|---|---|---|---|
| **240-51073-4** | **H-US-A-4-1** | | | | | |
| Benzo[a]anthracene | | 22 | | 8.1 | ug/Kg | 8270D |
| Benzo[a]pyrene | | 34 | | 8.1 | ug/Kg | 8270D |
| Benzo[b]fluoranthene | | 30 | | 8.1 | ug/Kg | 8270D |
| Benzo[g,h,i]perylene | | 32 | | 8.1 | ug/Kg | 8270D |
| Benzo[k]fluoranthene | | 22 | | 8.1 | ug/Kg | 8270D |
| Chrysene | | 33 | | 8.1 | ug/Kg | 8270D |
| Fluoranthene | | 25 | | 8.1 | ug/Kg | 8270D |
| Indeno[1,2,3-cd]pyrene | | 23 | | 8.1 | ug/Kg | 8270D |
| Phenanthrene | | 12 | | 8.1 | ug/Kg | 8270D |
| Pyrene | | 58 | | 8.1 | ug/Kg | 8270D |
| Percent Solids | | 82 | | 0.10 | % | Moisture |
| Percent Moisture | | 18 | | 0.10 | % | Moisture |
| **240-51073-5** | **H-UB-A-1-2** | | | | | |
| Fluoranthene | | 4.5 | J | 7.9 | ug/Kg | 8270D |
| Pyrene | | 6.6 | J | 7.9 | ug/Kg | 8270D |
| Percent Solids | | 85 | | 0.10 | % | Moisture |
| Percent Moisture | | 15 | | 0.10 | % | Moisture |
| **240-51073-6** | **H-UB-A-2-2** | | | | | |
| Percent Solids | | 83 | | 0.10 | % | Moisture |
| Percent Moisture | | 17 | | 0.10 | % | Moisture |
| **240-51073-7** | **H-UB-A-3-2** | | | | | |
| Anthracene | | 14 | | 8.2 | ug/Kg | 8270D |
| Benzo[a]anthracene | | 60 | | 8.2 | ug/Kg | 8270D |
| Benzo[a]pyrene | | 55 | | 8.2 | ug/Kg | 8270D |
| Benzo[b]fluoranthene | | 66 | | 8.2 | ug/Kg | 8270D |
| Benzo[g,h,i]perylene | | 48 | | 8.2 | ug/Kg | 8270D |
| Benzo[k]fluoranthene | | 22 | | 8.2 | ug/Kg | 8270D |
| Chrysene | | 75 | | 8.2 | ug/Kg | 8270D |
| Dibenz(a,h)anthracene | | 11 | | 8.2 | ug/Kg | 8270D |
| Fluoranthene | | 110 | | 8.2 | ug/Kg | 8270D |
| Indeno[1,2,3-cd]pyrene | | 36 | | 8.2 | ug/Kg | 8270D |
| Phenanthrene | | 110 | | 8.2 | ug/Kg | 8270D |
| Pyrene | | 160 | | 8.2 | ug/Kg | 8270D |
| Percent Solids | | 83 | | 0.10 | % | Moisture |
| Percent Moisture | | 17 | | 0.10 | % | Moisture |

# EXECUTIVE SUMMARY - Detections

Client: Tetra Tech, Inc. Job Number: 240-51073-1

| Lab Sample ID / Analyte | Client Sample ID | Result | Qualifier | Reporting Limit | Units | Method |
|---|---|---|---|---|---|---|
| **240-51073-8FD** | **H-DUP01** | | | | | |
| Acenaphthylene | | 4.9 | J | 7.8 | ug/Kg | 8270D |
| Anthracene | | 10 | | 7.8 | ug/Kg | 8270D |
| Benzo[a]anthracene | | 57 | | 7.8 | ug/Kg | 8270D |
| Benzo[a]pyrene | | 120 | | 7.8 | ug/Kg | 8270D |
| Benzo[b]fluoranthene | | 93 | | 7.8 | ug/Kg | 8270D |
| Benzo[g,h,i]perylene | | 130 | | 7.8 | ug/Kg | 8270D |
| Benzo[k]fluoranthene | | 70 | | 7.8 | ug/Kg | 8270D |
| Chrysene | | 76 | | 7.8 | ug/Kg | 8270D |
| Dibenz(a,h)anthracene | | 22 | | 7.8 | ug/Kg | 8270D |
| Fluoranthene | | 55 | | 7.8 | ug/Kg | 8270D |
| Indeno[1,2,3-cd]pyrene | | 89 | | 7.8 | ug/Kg | 8270D |
| Phenanthrene | | 20 | | 7.8 | ug/Kg | 8270D |
| Pyrene | | 140 | | 7.8 | ug/Kg | 8270D |
| Percent Solids | | 85 | | 0.10 | % | Moisture |
| Percent Moisture | | 15 | | 0.10 | % | Moisture |

# METHOD SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-51073-1

| Description | Lab Location | Method | Preparation Method |
|---|---|---|---|
| **Matrix: Solid** | | | |
| Semivolatile Organic Compounds (GC/MS) | TAL CAN | SW846 8270D | |
| Ultrasonic Extraction | TAL CAN | | SW846 3550C |
| Percent Moisture | TAL CAN | EPA Moisture | |

**Lab References:**

TAL CAN = TestAmerica Canton

**Method References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

# METHOD / ANALYST SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-51073-1

| Method | Analyst | Analyst ID |
|---|---|---|
| SW846 8270D | Ulman, Mark | MRU |
| EPA Moisture | Eikelberry, Nicholas | NJE |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Client Sample ID:** **H-US-A-1-1**

Lab Sample ID: 240-51073-1 Date Sampled: 05/20/2015 1408
Client Matrix: Solid % Moisture: 15.9 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182251 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50526017.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 29.83 g |
| Analysis Date: | 05/26/2015 1408 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.91 | U | 0.91 | 8.0 |
| Acenaphthylene | | 0.42 | U | 0.42 | 8.0 |
| Anthracene | | 0.93 | U | 0.93 | 8.0 |
| Benzo[a]anthracene | | 0.75 | U | 0.75 | 8.0 |
| Benzo[a]pyrene | | 0.77 | U | 0.77 | 8.0 |
| Benzo[b]fluoranthene | | 0.71 | U | 0.71 | 8.0 |
| Benzo[g,h,i]perylene | | 0.42 | U | 0.42 | 8.0 |
| Benzo[k]fluoranthene | | 0.81 | U | 0.81 | 8.0 |
| Chrysene | | 1.3 | U | 1.3 | 8.0 |
| Dibenz(a,h)anthracene | | 0.79 | U | 0.79 | 8.0 |
| Fluoranthene | | 0.66 | U | 0.66 | 8.0 |
| Fluorene | | 0.63 | U | 0.63 | 8.0 |
| Indeno[1,2,3-cd]pyrene | | 0.42 | U | 0.42 | 8.0 |
| Naphthalene | | 0.98 | U | 0.98 | 8.0 |
| Phenanthrene | | 0.87 | U | 0.87 | 8.0 |
| Pyrene | | 4.6 | J | 0.53 | 8.0 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 74 | | 34 - 110 |
| Phenol-d5 (Surr) | 75 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 70 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 73 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 70 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 66 | | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Client Sample ID: H-US-A-2-1**

Lab Sample ID: 240-51073-2 Date Sampled: 05/20/2015 1345
Client Matrix: Solid % Moisture: 14.6 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182251 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50526018.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 29.58 g |
| Analysis Date: | 05/26/2015 1433 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.90 | U | 0.90 | 7.9 |
| Acenaphthylene | | 0.42 | U | 0.42 | 7.9 |
| Anthracene | | 0.93 | U | 0.93 | 7.9 |
| Benzo[a]anthracene | | 21 | | 0.75 | 7.9 |
| Benzo[a]pyrene | | 52 | | 0.76 | 7.9 |
| Benzo[b]fluoranthene | | 39 | | 0.70 | 7.9 |
| Benzo[g,h,i]perylene | | 54 | | 0.42 | 7.9 |
| Benzo[k]fluoranthene | | 33 | | 0.81 | 7.9 |
| Chrysene | | 35 | | 1.3 | 7.9 |
| Dibenz(a,h)anthracene | | 12 | | 0.78 | 7.9 |
| Fluoranthene | | 19 | | 0.65 | 7.9 |
| Fluorene | | 0.63 | U | 0.63 | 7.9 |
| Indeno[1,2,3-cd]pyrene | | 36 | | 0.42 | 7.9 |
| Naphthalene | | 0.97 | U | 0.97 | 7.9 |
| Phenanthrene | | 5.2 | J | 0.87 | 7.9 |
| Pyrene | | 52 | | 0.52 | 7.9 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 74 | | 34 - 110 |
| Phenol-d5 (Surr) | 76 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 75 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 75 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 74 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 67 | | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Client Sample ID: H-US-A-3-1**

Lab Sample ID: 240-51073-3 Date Sampled: 05/20/2015 1347
Client Matrix: Solid % Moisture: 21.4 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182251 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50526019.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 30.45 g |
| Analysis Date: | 05/26/2015 1458 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.95 | U | 0.95 | 8.4 |
| Acenaphthylene | | 0.44 | U | 0.44 | 8.4 |
| Anthracene | | 0.98 | U | 0.98 | 8.4 |
| Benzo[a]anthracene | | 17 | | 0.79 | 8.4 |
| Benzo[a]pyrene | | 32 | | 0.80 | 8.4 |
| Benzo[b]fluoranthene | | 33 | | 0.74 | 8.4 |
| Benzo[g,h,i]perylene | | 34 | | 0.44 | 8.4 |
| Benzo[k]fluoranthene | | 14 | | 0.85 | 8.4 |
| Chrysene | | 23 | | 1.4 | 8.4 |
| Dibenz(a,h)anthracene | | 0.83 | U | 0.83 | 8.4 |
| Fluoranthene | | 15 | | 0.69 | 8.4 |
| Fluorene | | 0.66 | U | 0.66 | 8.4 |
| Indeno[1,2,3-cd]pyrene | | 22 | | 0.44 | 8.4 |
| Naphthalene | | 1.0 | U | 1.0 | 8.4 |
| Phenanthrene | | 7.8 | J | 0.91 | 8.4 |
| Pyrene | | 39 | | 0.55 | 8.4 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 71 | | 34 - 110 |
| Phenol-d5 (Surr) | 69 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 62 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 67 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 65 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 64 | | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Client Sample ID: H-US-A-4-1**

Lab Sample ID: 240-51073-4 Date Sampled: 05/20/2015 1352
Client Matrix: Solid % Moisture: 18.5 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182251 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50526020.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 30.21 g |
| Analysis Date: | 05/26/2015 1523 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.93 | U | 0.93 | 8.1 |
| Acenaphthylene | | 0.43 | U | 0.43 | 8.1 |
| Anthracene | | 0.95 | U | 0.95 | 8.1 |
| Benzo[a]anthracene | | 22 | | 0.77 | 8.1 |
| Benzo[a]pyrene | | 34 | | 0.78 | 8.1 |
| Benzo[b]fluoranthene | | 30 | | 0.72 | 8.1 |
| Benzo[g,h,i]perylene | | 32 | | 0.43 | 8.1 |
| Benzo[k]fluoranthene | | 22 | | 0.83 | 8.1 |
| Chrysene | | 33 | | 1.3 | 8.1 |
| Dibenz(a,h)anthracene | | 0.80 | U | 0.80 | 8.1 |
| Fluoranthene | | 25 | | 0.67 | 8.1 |
| Fluorene | | 0.65 | U | 0.65 | 8.1 |
| Indeno[1,2,3-cd]pyrene | | 23 | | 0.43 | 8.1 |
| Naphthalene | | 1.0 | U | 1.0 | 8.1 |
| Phenanthrene | | 12 | | 0.89 | 8.1 |
| Pyrene | | 58 | | 0.54 | 8.1 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 73 | | 34 - 110 |
| Phenol-d5 (Surr) | 73 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 68 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 72 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 69 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 68 | | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Client Sample ID: H-UB-A-1-2**

Lab Sample ID: 240-51073-5 Date Sampled: 05/20/2015 1401
Client Matrix: Solid % Moisture: 15.3 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182251 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50526021.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 29.96 g |
| Analysis Date: | 05/26/2015 1548 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.90 | U | 0.90 | 7.9 |
| Acenaphthylene | | 0.41 | U | 0.41 | 7.9 |
| Anthracene | | 0.92 | U | 0.92 | 7.9 |
| Benzo[a]anthracene | | 0.75 | U | 0.75 | 7.9 |
| Benzo[a]pyrene | | 0.76 | U | 0.76 | 7.9 |
| Benzo[b]fluoranthene | | 0.70 | U | 0.70 | 7.9 |
| Benzo[g,h,i]perylene | | 0.41 | U | 0.41 | 7.9 |
| Benzo[k]fluoranthene | | 0.80 | U | 0.80 | 7.9 |
| Chrysene | | 1.3 | U | 1.3 | 7.9 |
| Dibenz(a,h)anthracene | | 0.78 | U | 0.78 | 7.9 |
| Fluoranthene | | 4.5 | J | 0.65 | 7.9 |
| Fluorene | | 0.63 | U | 0.63 | 7.9 |
| Indeno[1,2,3-cd]pyrene | | 0.41 | U | 0.41 | 7.9 |
| Naphthalene | | 0.97 | U | 0.97 | 7.9 |
| Phenanthrene | | 0.86 | U | 0.86 | 7.9 |
| Pyrene | | 6.6 | J | 0.52 | 7.9 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 78 | | 34 - 110 |
| Phenol-d5 (Surr) | 77 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 75 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 77 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 77 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 73 | | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Client Sample ID: H-UB-A-2-2**

Lab Sample ID: 240-51073-6 Date Sampled: 05/20/2015 1358
Client Matrix: Solid % Moisture: 16.8 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182251 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50526022.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 30.09 g |
| Analysis Date: | 05/26/2015 1614 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.91 | U | 0.91 | 8.0 |
| Acenaphthylene | | 0.42 | U | 0.42 | 8.0 |
| Anthracene | | 0.93 | U | 0.93 | 8.0 |
| Benzo[a]anthracene | | 0.75 | U | 0.75 | 8.0 |
| Benzo[a]pyrene | | 0.77 | U | 0.77 | 8.0 |
| Benzo[b]fluoranthene | | 0.71 | U | 0.71 | 8.0 |
| Benzo[g,h,i]perylene | | 0.42 | U | 0.42 | 8.0 |
| Benzo[k]fluoranthene | | 0.81 | U | 0.81 | 8.0 |
| Chrysene | | 1.3 | U | 1.3 | 8.0 |
| Dibenz(a,h)anthracene | | 0.79 | U | 0.79 | 8.0 |
| Fluoranthene | | 0.66 | U | 0.66 | 8.0 |
| Fluorene | | 0.63 | U | 0.63 | 8.0 |
| Indeno[1,2,3-cd]pyrene | | 0.42 | U | 0.42 | 8.0 |
| Naphthalene | | 0.98 | U | 0.98 | 8.0 |
| Phenanthrene | | 0.87 | U | 0.87 | 8.0 |
| Pyrene | | 0.53 | U | 0.53 | 8.0 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 76 | | 34 - 110 |
| Phenol-d5 (Surr) | 65 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 61 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 64 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 63 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 68 | | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Client Sample ID: H-UB-A-3-2**

Lab Sample ID: 240-51073-7 Date Sampled: 05/20/2015 1356
Client Matrix: Solid % Moisture: 17.3 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182251 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50526023.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 29.67 g |
| Analysis Date: | 05/26/2015 1639 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.93 | U | 0.93 | 8.2 |
| Acenaphthylene | | 0.43 | U | 0.43 | 8.2 |
| Anthracene | | 14 | | 0.95 | 8.2 |
| Benzo[a]anthracene | | 60 | | 0.77 | 8.2 |
| Benzo[a]pyrene | | 55 | | 0.78 | 8.2 |
| Benzo[b]fluoranthene | | 66 | | 0.72 | 8.2 |
| Benzo[g,h,i]perylene | | 48 | | 0.43 | 8.2 |
| Benzo[k]fluoranthene | | 22 | | 0.83 | 8.2 |
| Chrysene | | 75 | | 1.3 | 8.2 |
| Dibenz(a,h)anthracene | | 11 | | 0.81 | 8.2 |
| Fluoranthene | | 110 | | 0.67 | 8.2 |
| Fluorene | | 0.65 | U | 0.65 | 8.2 |
| Indeno[1,2,3-cd]pyrene | | 36 | | 0.43 | 8.2 |
| Naphthalene | | 1.0 | U | 1.0 | 8.2 |
| Phenanthrene | | 110 | | 0.89 | 8.2 |
| Pyrene | | 160 | | 0.54 | 8.2 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 74 | | 34 - 110 |
| Phenol-d5 (Surr) | 70 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 67 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 69 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 68 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 69 | | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Client Sample ID: H-DUP01**

Lab Sample ID: 240-51073-8FD Date Sampled: 05/20/2015 0000
Client Matrix: Solid % Moisture: 14.7 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182251 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50526024.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 29.93 g |
| Analysis Date: | 05/26/2015 1704 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.89 | U | 0.89 | 7.8 |
| Acenaphthylene | | 4.9 | J | 0.41 | 7.8 |
| Anthracene | | 10 | | 0.92 | 7.8 |
| Benzo[a]anthracene | | 57 | | 0.74 | 7.8 |
| Benzo[a]pyrene | | 120 | | 0.75 | 7.8 |
| Benzo[b]fluoranthene | | 93 | | 0.69 | 7.8 |
| Benzo[g,h,i]perylene | | 130 | | 0.41 | 7.8 |
| Benzo[k]fluoranthene | | 70 | | 0.80 | 7.8 |
| Chrysene | | 76 | | 1.3 | 7.8 |
| Dibenz(a,h)anthracene | | 22 | | 0.78 | 7.8 |
| Fluoranthene | | 55 | | 0.65 | 7.8 |
| Fluorene | | 0.62 | U | 0.62 | 7.8 |
| Indeno[1,2,3-cd]pyrene | | 89 | | 0.41 | 7.8 |
| Naphthalene | | 0.96 | U | 0.96 | 7.8 |
| Phenanthrene | | 20 | | 0.86 | 7.8 |
| Pyrene | | 140 | | 0.52 | 7.8 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 76 | | 34 - 110 |
| Phenol-d5 (Surr) | 73 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 65 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 71 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 66 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 68 | | 19 - 110 |

**General Chemistry**

**Client Sample ID:** **H-US-A-1-1**

Lab Sample ID: 240-51073-1 Date Sampled: 05/20/2015 1408
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 84 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 16 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

**General Chemistry**

**Client Sample ID:** **H-US-A-2-1**

Lab Sample ID: 240-51073-2 Date Sampled: 05/20/2015 1345
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 85 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 15 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

**General Chemistry**

**Client Sample ID:** **H-US-A-3-1**

Lab Sample ID: 240-51073-3 Date Sampled: 05/20/2015 1347
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 79 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 21 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

**General Chemistry**

**Client Sample ID:** **H-US-A-4-1**

Lab Sample ID: 240-51073-4 Date Sampled: 05/20/2015 1352
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 82 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 18 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

**General Chemistry**

**Client Sample ID:** **H-UB-A-1-2**

Lab Sample ID: 240-51073-5 Date Sampled: 05/20/2015 1401
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 85 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 15 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

**General Chemistry**

**Client Sample ID:** **H-UB-A-2-2**

Lab Sample ID: 240-51073-6 Date Sampled: 05/20/2015 1358
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 83 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 17 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

**General Chemistry**

**Client Sample ID:** **H-UB-A-3-2**

Lab Sample ID: 240-51073-7 Date Sampled: 05/20/2015 1356
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 83 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 17 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

**General Chemistry**

**Client Sample ID:** **H-DUP01**

Lab Sample ID: 240-51073-8FD
Client Matrix: Solid

Date Sampled: 05/20/2015 0000
Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 85 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 15 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

## Surrogate Recovery Report

**8270D Semivolatile Organic Compounds (GC/MS)**

**Client Matrix: Solid**

| Lab Sample ID | Client Sample ID | 2FP %Rec | PHL %Rec | NBZ %Rec | FBP %Rec | TBP %Rec | TPH %Rec |
|---|---|---|---|---|---|---|---|
| 240-51073-1 | H-US-A-1-1 | 73 | 75 | 70 | 70 | 66 | 74 |
| 240-51073-2 | H-US-A-2-1 | 75 | 76 | 75 | 74 | 67 | 74 |
| 240-51073-3 | H-US-A-3-1 | 67 | 69 | 62 | 65 | 64 | 71 |
| 240-51073-4 | H-US-A-4-1 | 72 | 73 | 68 | 69 | 68 | 73 |
| 240-51073-5 | H-UB-A-1-2 | 77 | 77 | 75 | 77 | 73 | 78 |
| 240-51073-6 | H-UB-A-2-2 | 64 | 65 | 61 | 63 | 68 | 76 |
| 240-51073-7 | H-UB-A-3-2 | 69 | 70 | 67 | 68 | 69 | 74 |
| 240-51073-8 | H-DUP01 | 71 | 73 | 65 | 66 | 68 | 76 |
| MB 240-182098/17-A | | 77 | 78 | 70 | 73 | 59 | 75 |
| LCS 240-182098/18-A | | 77 | 77 | 77 | 73 | 71 | 75 |
| 240-51073-8 MS | H-DUP01 MS | 68 | 68 | 68 | 65 | 64 | 66 |
| 240-51073-8 MSD | H-DUP01 MSD | 71 | 71 | 69 | 64 | 64 | 70 |

| Surrogate | Acceptance Limits |
|---|---|
| 2FP = 2-Fluorophenol (Surr) | 31-110 |
| PHL = Phenol-d5 (Surr) | 28-110 |
| NBZ = Nitrobenzene-d5 (Surr) | 24-110 |
| FBP = 2-Fluorobiphenyl (Surr) | 27-110 |
| TBP = 2,4,6-Tribromophenol (Surr) | 19-110 |
| TPH = Terphenyl-d14 (Surr) | 34-110 |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Method Blank - Batch: 240-182098**

**Method: 8270D**
**Preparation: 3550C**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-182098/17-A | Analysis Batch: | 240-182204 | Instrument ID: | A4HP9 |
| Client Matrix: | Solid | Prep Batch: | 240-182098 | Lab File ID: | 50524018.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30 g |
| Analysis Date: | 05/24/2015 1555 | Units: | ug/Kg | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | | |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| Acenaphthene | 0.76 | U | 0.76 | 6.7 |
| Acenaphthylene | 0.35 | U | 0.35 | 6.7 |
| Anthracene | 0.78 | U | 0.78 | 6.7 |
| Benzo[a]anthracene | 0.63 | U | 0.63 | 6.7 |
| Benzo[a]pyrene | 0.64 | U | 0.64 | 6.7 |
| Benzo[b]fluoranthene | 0.59 | U | 0.59 | 6.7 |
| Benzo[g,h,i]perylene | 0.35 | U | 0.35 | 6.7 |
| Benzo[k]fluoranthene | 0.68 | U | 0.68 | 6.7 |
| Chrysene | 1.1 | U | 1.1 | 6.7 |
| Dibenz(a,h)anthracene | 0.66 | U | 0.66 | 6.7 |
| Fluoranthene | 0.55 | U | 0.55 | 6.7 |
| Fluorene | 0.53 | U | 0.53 | 6.7 |
| Indeno[1,2,3-cd]pyrene | 0.35 | U | 0.35 | 6.7 |
| Naphthalene | 0.82 | U | 0.82 | 6.7 |
| Phenanthrene | 0.73 | U | 0.73 | 6.7 |
| Pyrene | 0.44 | U | 0.44 | 6.7 |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| Terphenyl-d14 (Surr) | 75 | 34 - 110 |
| Phenol-d5 (Surr) | 78 | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 70 | 24 - 110 |
| 2-Fluorophenol (Surr) | 77 | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 73 | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 59 | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Lab Control Sample - Batch: 240-182098**

**Method: 8270D**
**Preparation: 3550C**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-182098/18-A | Analysis Batch: | 240-182204 | Instrument ID: | A4HP9 |
| Client Matrix: | Solid | Prep Batch: | 240-182098 | Lab File ID: | 50524019.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30 g |
| Analysis Date: | 05/24/2015 1620 | Units: | ug/Kg | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | | |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| Acenaphthene | 667 | 477 | 72 | 49 - 110 | |
| Acenaphthylene | 667 | 466 | 70 | 49 - 110 | |
| Anthracene | 667 | 480 | 72 | 48 - 110 | |
| Benzo[a]anthracene | 667 | 491 | 74 | 48 - 110 | |
| Benzo[a]pyrene | 667 | 589 | 88 | 44 - 110 | |
| Benzo[b]fluoranthene | 667 | 560 | 84 | 47 - 110 | |
| Benzo[g,h,i]perylene | 667 | 643 | 96 | 50 - 110 | |
| Benzo[k]fluoranthene | 667 | 606 | 91 | 38 - 110 | |
| Chrysene | 667 | 528 | 79 | 51 - 110 | |
| Dibenz(a,h)anthracene | 667 | 612 | 92 | 46 - 110 | |
| Fluoranthene | 667 | 534 | 80 | 48 - 110 | |
| Fluorene | 667 | 472 | 71 | 51 - 110 | |
| Indeno[1,2,3-cd]pyrene | 667 | 642 | 96 | 47 - 110 | |
| Naphthalene | 667 | 479 | 72 | 49 - 110 | |
| Phenanthrene | 667 | 483 | 72 | 49 - 110 | |
| Pyrene | 667 | 528 | 79 | 46 - 110 | |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| Terphenyl-d14 (Surr) | 75 | 34 - 110 |
| Phenol-d5 (Surr) | 77 | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 77 | 24 - 110 |
| 2-Fluorophenol (Surr) | 77 | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 73 | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 71 | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-182098**

**Method: 8270D**
**Preparation: 3550C**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-51073-8 | Analysis Batch: | 240-182251 | Instrument ID: | A4HP9 |
| Client Matrix: | Solid | Prep Batch: | 240-182098 | Lab File ID: | 50526025.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 29.99 g |
| Analysis Date: | 05/26/2015 1729 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | | |

| | | | | | |
|---|---|---|---|---|---|
| MSD Lab Sample ID: | 240-51073-8 | Analysis Batch: | 240-182251 | Instrument ID: | A4HP9 |
| Client Matrix: | Solid | Prep Batch: | 240-182098 | Lab File ID: | 50526026.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30.47 g |
| Analysis Date: | 05/26/2015 1754 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | | |

| | % Rec. | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | MS | MSD | Limit | RPD | RPD Limit | MS Qual | MSD Qual |
| Acenaphthene | 65 | 66 | 32 - 110 | 0 | 38 | | |
| Acenaphthylene | 62 | 64 | 34 - 110 | 2 | 39 | | |
| Anthracene | 65 | 67 | 36 - 110 | 2 | 30 | | |
| Benzo[a]anthracene | 63 | 68 | 34 - 110 | 5 | 34 | | |
| Benzo[a]pyrene | 67 | 70 | 32 - 110 | 1 | 30 | | |
| Benzo[b]fluoranthene | 68 | 69 | 29 - 110 | 1 | 36 | | |
| Benzo[g,h,i]perylene | 76 | 82 | 35 - 110 | 4 | 30 | | |
| Benzo[k]fluoranthene | 70 | 75 | 34 - 110 | 4 | 32 | | |
| Chrysene | 66 | 72 | 36 - 110 | 7 | 30 | | |
| Dibenz(a,h)anthracene | 81 | 86 | 37 - 110 | 4 | 30 | | |
| Fluoranthene | 69 | 73 | 29 - 110 | 3 | 36 | | |
| Fluorene | 64 | 65 | 38 - 110 | 1 | 33 | | |
| Indeno[1,2,3-cd]pyrene | 79 | 82 | 36 - 110 | 2 | 30 | | |
| Naphthalene | 63 | 66 | 28 - 110 | 3 | 50 | | |
| Phenanthrene | 66 | 68 | 35 - 110 | 1 | 34 | | |
| Pyrene | 60 | 64 | 31 - 110 | 4 | 37 | | |

| Surrogate | MS % Rec | MSD % Rec | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 66 | 70 | 34 - 110 |
| Phenol-d5 (Surr) | 68 | 71 | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 68 | 69 | 24 - 110 |
| 2-Fluorophenol (Surr) | 68 | 71 | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 65 | 64 | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 64 | 64 | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-182098**

**Method: 8270D**
**Preparation: 3550C**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-51073-8 | Units: | ug/Kg | MSD Lab Sample ID: | 240-51073-8 |
| Client Matrix: | Solid | | | Client Matrix: | Solid |
| Dilution: | 1.0 | | | Dilution: | 1.0 |
| Analysis Date: | 05/26/2015 1729 | | | Analysis Date: | 05/26/2015 1754 |
| Prep Date: | 05/22/2015 1231 | | | Prep Date: | 05/22/2015 1231 |
| Leach Date: | N/A | | | Leach Date: | N/A |

| Analyte | Sample Result/Qual | | MS Spike Amount | MSD Spike Amount | MS Result/Qual | MSD Result/Qual |
|---|---|---|---|---|---|---|
| Acenaphthene | 0.89 | U | 782 | 770 | 506 | 507 |
| Acenaphthylene | 4.9 | J | 782 | 770 | 490 | 501 |
| Anthracene | 10 | | 782 | 770 | 518 | 528 |
| Benzo[a]anthracene | 57 | | 782 | 770 | 548 | 579 |
| Benzo[a]pyrene | 120 | | 782 | 770 | 647 | 656 |
| Benzo[b]fluoranthene | 93 | | 782 | 770 | 627 | 621 |
| Benzo[g,h,i]perylene | 130 | | 782 | 770 | 725 | 758 |
| Benzo[k]fluoranthene | 70 | | 782 | 770 | 621 | 647 |
| Chrysene | 76 | | 782 | 770 | 589 | 629 |
| Dibenz(a,h)anthracene | 22 | | 782 | 770 | 657 | 684 |
| Fluoranthene | 55 | | 782 | 770 | 593 | 614 |
| Fluorene | 0.62 | U | 782 | 770 | 504 | 501 |
| Indeno[1,2,3-cd]pyrene | 89 | | 782 | 770 | 707 | 718 |
| Naphthalene | 0.96 | U | 782 | 770 | 490 | 506 |
| Phenanthrene | 20 | | 782 | 770 | 534 | 540 |
| Pyrene | 140 | | 782 | 770 | 611 | 634 |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

**Duplicate - Batch: 240-182160**

**Method: Moisture**
**Preparation: N/A**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | 240-50885-A-1 DU | Analysis Batch: | 240-182160 | Instrument ID: | No Equipment Assigned |
| Client Matrix: | Solid | Prep Batch: | N/A | Lab File ID: | N/A |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | |
| Analysis Date: | 05/22/2015 1723 | Units: | % | Final Weight/Volume: | |
| Prep Date: | N/A | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Sample Result/Qual | Result | RPD | Limit | Qual |
|---|---|---|---|---|---|
| Percent Solids | 48 | 48 | 0 | 20 | |
| Percent Moisture | 52 | 52 | 0 | 20 | |

# DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc. Job Number: 240-51073-1

| Lab Section | Qualifier | Description |
|---|---|---|
| GC/MS Semi VOA | | |
| | U | Indicates the analyte was analyzed for but not detected. |
| | J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

## QC Association Summary

| Lab Sample ID | Client Sample ID | Report Basis | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| **GC/MS Semi VOA** | | | | | |
| **Prep Batch: 240-182098** | | | | | |
| LCS 240-182098/18-A | Lab Control Sample | T | Solid | 3550C | |
| MB 240-182098/17-A | Method Blank | T | Solid | 3550C | |
| 240-51073-1 | H-US-A-1-1 | T | Solid | 3550C | |
| 240-51073-2 | H-US-A-2-1 | T | Solid | 3550C | |
| 240-51073-3 | H-US-A-3-1 | T | Solid | 3550C | |
| 240-51073-4 | H-US-A-4-1 | T | Solid | 3550C | |
| 240-51073-5 | H-UB-A-1-2 | T | Solid | 3550C | |
| 240-51073-6 | H-UB-A-2-2 | T | Solid | 3550C | |
| 240-51073-7 | H-UB-A-3-2 | T | Solid | 3550C | |
| 240-51073-8FD | H-DUP01 | T | Solid | 3550C | |
| 240-51073-8MS | Matrix Spike | T | Solid | 3550C | |
| 240-51073-8MSD | Matrix Spike Duplicate | T | Solid | 3550C | |
| **Analysis Batch:240-182204** | | | | | |
| LCS 240-182098/18-A | Lab Control Sample | T | Solid | 8270D | 240-182098 |
| MB 240-182098/17-A | Method Blank | T | Solid | 8270D | 240-182098 |
| **Analysis Batch:240-182251** | | | | | |
| 240-51073-1 | H-US-A-1-1 | T | Solid | 8270D | 240-182098 |
| 240-51073-2 | H-US-A-2-1 | T | Solid | 8270D | 240-182098 |
| 240-51073-3 | H-US-A-3-1 | T | Solid | 8270D | 240-182098 |
| 240-51073-4 | H-US-A-4-1 | T | Solid | 8270D | 240-182098 |
| 240-51073-5 | H-UB-A-1-2 | T | Solid | 8270D | 240-182098 |
| 240-51073-6 | H-UB-A-2-2 | T | Solid | 8270D | 240-182098 |
| 240-51073-7 | H-UB-A-3-2 | T | Solid | 8270D | 240-182098 |
| 240-51073-8FD | H-DUP01 | T | Solid | 8270D | 240-182098 |
| 240-51073-8MS | Matrix Spike | T | Solid | 8270D | 240-182098 |
| 240-51073-8MSD | Matrix Spike Duplicate | T | Solid | 8270D | 240-182098 |

**Report Basis**
T = Total

Client: Tetra Tech, Inc. Job Number: 240-51073-1

## QC Association Summary

| Lab Sample ID | Client Sample ID | Report Basis | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| **General Chemistry** | | | | | |
| **Analysis Batch:240-182160** | | | | | |
| 240-50885-A-1 DU | Duplicate | T | Solid | Moisture | |
| 240-51073-1 | H-US-A-1-1 | T | Solid | Moisture | |
| 240-51073-2 | H-US-A-2-1 | T | Solid | Moisture | |
| 240-51073-3 | H-US-A-3-1 | T | Solid | Moisture | |
| 240-51073-4 | H-US-A-4-1 | T | Solid | Moisture | |
| 240-51073-5 | H-UB-A-1-2 | T | Solid | Moisture | |
| 240-51073-6 | H-UB-A-2-2 | T | Solid | Moisture | |
| 240-51073-7 | H-UB-A-3-2 | T | Solid | Moisture | |
| 240-51073-8FD | H-DUP01 | T | Solid | Moisture | |

**Report Basis**
T = Total

Client: Tetra Tech, Inc. Job Number: 240-51073-1

## Laboratory Chronicle

**Lab ID: 240-51073-1** **Client ID: H-US-A-1-1**

Sample Date/Time: 05/20/2015 14:08 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51073-B-1-A | | 240-182251 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51073-B-1-A | | 240-182251 | 240-182098 | 05/26/2015 14:08 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51073-A-1 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab ID: 240-51073-2** **Client ID: H-US-A-2-1**

Sample Date/Time: 05/20/2015 13:45 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51073-B-2-A | | 240-182251 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51073-B-2-A | | 240-182251 | 240-182098 | 05/26/2015 14:33 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51073-A-2 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab ID: 240-51073-3** **Client ID: H-US-A-3-1**

Sample Date/Time: 05/20/2015 13:47 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51073-B-3-A | | 240-182251 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51073-B-3-A | | 240-182251 | 240-182098 | 05/26/2015 14:58 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51073-A-3 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab ID: 240-51073-4** **Client ID: H-US-A-4-1**

Sample Date/Time: 05/20/2015 13:52 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51073-B-4-A | | 240-182251 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51073-B-4-A | | 240-182251 | 240-182098 | 05/26/2015 15:23 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51073-A-4 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab ID: 240-51073-5** **Client ID: H-UB-A-1-2**

Sample Date/Time: 05/20/2015 14:01 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51073-B-5-A | | 240-182251 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51073-B-5-A | | 240-182251 | 240-182098 | 05/26/2015 15:48 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51073-A-5 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

## Laboratory Chronicle

**Lab ID: 240-51073-6** **Client ID: H-UB-A-2-2**

Sample Date/Time: 05/20/2015 13:58 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51073-B-6-A | | 240-182251 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51073-B-6-A | | 240-182251 | 240-182098 | 05/26/2015 16:14 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51073-A-6 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab ID: 240-51073-7** **Client ID: H-UB-A-3-2**

Sample Date/Time: 05/20/2015 13:56 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51073-B-7-A | | 240-182251 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51073-B-7-A | | 240-182251 | 240-182098 | 05/26/2015 16:39 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51073-A-7 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab ID: 240-51073-8** **Client ID: H-DUP01**

Sample Date/Time: 05/20/2015 00:00 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51073-B-8-A | | 240-182251 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51073-B-8-A | | 240-182251 | 240-182098 | 05/26/2015 17:04 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51073-A-8 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab ID: 240-51073-8 MS** **Client ID: H-DUP01**

Sample Date/Time: 05/20/2015 00:00 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51073-B-8-B MS | | 240-182251 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51073-B-8-B MS | | 240-182251 | 240-182098 | 05/26/2015 17:29 | 1 | TAL CAN | MRU |

**Lab ID: 240-51073-8 MSD** **Client ID: H-DUP01**

Sample Date/Time: 05/20/2015 00:00 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51073-B-8-C MSD | | 240-182251 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51073-B-8-C MSD | | 240-182251 | 240-182098 | 05/26/2015 17:54 | 1 | TAL CAN | MRU |

Client: Tetra Tech, Inc. Job Number: 240-51073-1

## Laboratory Chronicle

**Lab ID: MB** **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | MB 240-182098/17-A | | 240-182204 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | MB 240-182098/17-A | | 240-182204 | 240-182098 | 05/24/2015 15:55 | 1 | TAL CAN | MRU |

**Lab ID: LCS** **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | LCS 240-182098/18-A | | 240-182204 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | LCS 240-182098/18-A | | 240-182204 | 240-182098 | 05/24/2015 16:20 | 1 | TAL CAN | MRU |

**Lab ID: DU** **Client ID: N/A**

Sample Date/Time: 05/18/2015 10:15 Received Date/Time: 05/19/2015 08:50

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| A:Moisture | 240-50885-A-1 DU | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab References:**
TAL CAN = TestAmerica Canton

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **exBENZALDEHYD_00022** | 06/10/16 | 05/14/15 | MEOH, Lot 0000085233 | 200 mL | EXLIST1_S11_00001 | 4 mL | Atrazine | 40 ug/mL |
| | | | | | | | Benzaldehyde | 40 ug/mL |
| | | | | | | | Caprolactam | 40 ug/mL |
| .EXLIST1_S11_00001 | 08/31/16 | | Restek, Lot A0108989 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| **EXBNASPIKE_00042** | 06/10/16 | 05/11/15 | MEOH, Lot 0000085233 | 200 mL | EXLIST1_S1_00001 | 4 mL | 1,1'-Biphenyl | 20 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 20 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 20 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 20 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,4-Dioxane | 20 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 20 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 20 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 20 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 20 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 20 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 20 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 20 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 40 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 20 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 20 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 20 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 20 ug/mL |
| | | | | | | | 2-Chlorophenol | 20 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 20 ug/mL |
| | | | | | | | 2-Methylphenol | 20 ug/mL |
| | | | | | | | 2-Nitroaniline | 20 ug/mL |
| | | | | | | | 2-Nitrophenol | 20 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 20 ug/mL |
| | | | | | | | 3-Methylphenol | 10 ug/mL |
| | | | | | | | 3-Nitroaniline | 20 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 40 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 20 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 20 ug/mL |
| | | | | | | | 4-Chloroaniline | 20 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 20 ug/mL |
| | | | | | | | 4-Methylphenol | 10 ug/mL |
| | | | | | | | 4-Nitroaniline | 20 ug/mL |
| | | | | | | | 4-Nitrophenol | 40 ug/mL |
| | | | | | | | Acenaphthene | 20 ug/mL |
| | | | | | | | Acenaphthylene | 20 ug/mL |
| | | | | | | | Acetophenone | 20 ug/mL |
| | | | | | | | Aniline | 20 ug/mL |
| | | | | | | | Anthracene | 20 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Azobenzene | 20 ug/mL |
| | | | | | | | Benzo[a]anthracene | 20 ug/mL |
| | | | | | | | Benzo[a]pyrene | 20 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 20 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 20 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 20 ug/mL |
| | | | | | | | Benzyl alcohol | 20 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 20 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 20 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 20 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 20 ug/mL |
| | | | | | | | Carbazole | 20 ug/mL |
| | | | | | | | Chrysene | 20 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 20 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 20 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 20 ug/mL |
| | | | | | | | Dibenzofuran | 20 ug/mL |
| | | | | | | | Diethyl phthalate | 20 ug/mL |
| | | | | | | | Dimethyl phthalate | 20 ug/mL |
| | | | | | | | Fluoranthene | 20 ug/mL |
| | | | | | | | Fluorene | 20 ug/mL |
| | | | | | | | Hexachlorobenzene | 20 ug/mL |
| | | | | | | | Hexachlorobutadiene | 20 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 20 ug/mL |
| | | | | | | | Hexachloroethane | 20 ug/mL |
| | | | | | | | Hexadecane | 20 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 20 ug/mL |
| | | | | | | | Isophorone | 20 ug/mL |
| | | | | | | | n-Decane | 20 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 20 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 20 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 40 ug/mL |
| | | | | | | | n-Octadecane | 20 ug/mL |
| | | | | | | | Naphthalene | 20 ug/mL |
| | | | | | | | Nitrobenzene | 20 ug/mL |
| | | | | | | | Pentachlorophenol | 40 ug/mL |
| | | | | | | | Phenanthrene | 20 ug/mL |
| | | | | | | | Phenol | 20 ug/mL |
| | | | | | | | Pyrene | 20 ug/mL |
| | | | | | | | Pyridine | 20 ug/mL |
| | | | | | EXLIST1_S10_00001 | 4 mL | Benzoic acid | 40 ug/mL |
| | | | | | | | Indene | 40 ug/mL |
| | | | | | EXLIST1_S9_00001 | 4 mL | 3,3'-Dichlorobenzidine | 40 ug/mL |
| | | | | | | | Benzidine | 40 ug/mL |
| .EXLIST1_S1_00001 | 09/30/16 | | Restek, Lot A0109703 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Methylphenol | 500 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Methylphenol | 500 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| .EXLIST1_S10_00001 | 08/31/16 | | Restek, Lot A0108988 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| .EXLIST1_S9_00001 | 07/31/16 | | Restek, Lot A0108709 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| **EXBNASURR W_00022** | 06/10/16 | 04/18/15 | MEOH, Lot 85233 | 2000 mL | SMLIST1 SURR_00003 | 8 mL | 2,4,6-Tribromophenol (Surr) | 20 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 20 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 20 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 20 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 20 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 20 ug/mL |
| .SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L1 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1PAH ST_00004 | 2 uL | 1,1'-Biphenyl | 0.1 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 0.1 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 0.1 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 0.1 ug/mL |
| | | | | | | | Acenaphthene | 0.1 ug/mL |
| | | | | | | | Acenaphthylene | 0.1 ug/mL |
| | | | | | | | Anthracene | 0.1 ug/mL |
| | | | | | | | Benzo[a]anthracene | 0.1 ug/mL |
| | | | | | | | Benzo[a]pyrene | 0.1 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 0.1 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 0.1 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 0.1 ug/mL |
| | | | | | | | Chrysene | 0.1 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 0.1 ug/mL |
| | | | | | | | Dibenzofuran | 0.1 ug/mL |
| | | | | | | | Fluoranthene | 0.1 ug/mL |
| | | | | | | | Fluorene | 0.1 ug/mL |
| | | | | | | | Hexachlorobenzene | 0.1 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 0.1 ug/mL |
| | | | | | | | Naphthalene | 0.1 ug/mL |
| | | | | | | | Phenanthrene | 0.1 ug/mL |
| | | | | | | | Pyrene | 0.1 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 0.1 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 0.1 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 0.1 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | Restek, Lot A0101020 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1PAH ST_00004 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 3 mL | SMLIST1 PAH_00004 | 300 uL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 60 uL | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 PAH_00004 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L2 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 10 uL | 1,1'-Biphenyl | 0.5 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 0.5 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 0.5 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,4-Dioxane | 0.5 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 0.5 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 0.5 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 0.5 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 0.5 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 0.5 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 0.5 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 0.5 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 1 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 0.5 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 0.5 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 0.5 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 0.5 ug/mL |
| | | | | | | | 2-Chlorophenol | 0.5 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 0.5 ug/mL |
| | | | | | | | 2-Methylphenol | 0.5 ug/mL |
| | | | | | | | 2-Nitroaniline | 0.5 ug/mL |
| | | | | | | | 2-Nitrophenol | 0.5 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 0.5 ug/mL |
| | | | | | | | 3-Nitroaniline | 0.5 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 1 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 0.5 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 0.5 ug/mL |
| | | | | | | | 4-Chloroaniline | 0.5 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 0.5 ug/mL |
| | | | | | | | 4-Nitroaniline | 0.5 ug/mL |
| | | | | | | | 4-Nitrophenol | 1 ug/mL |
| | | | | | | | Acenaphthene | 0.5 ug/mL |
| | | | | | | | Acenaphthylene | 0.5 ug/mL |
| | | | | | | | Acetophenone | 0.5 ug/mL |
| | | | | | | | Aniline | 0.5 ug/mL |
| | | | | | | | Anthracene | 0.5 ug/mL |
| | | | | | | | Azobenzene | 0.5 ug/mL |
| | | | | | | | Benzo[a]anthracene | 0.5 ug/mL |
| | | | | | | | Benzo[a]pyrene | 0.5 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 0.5 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 0.5 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 0.5 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzyl alcohol | 0.5 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 0.5 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 0.5 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 0.5 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 0.5 ug/mL |
| | | | | | | | Carbazole | 0.5 ug/mL |
| | | | | | | | Chrysene | 0.5 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 0.5 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 0.5 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 0.5 ug/mL |
| | | | | | | | Dibenzofuran | 0.5 ug/mL |
| | | | | | | | Diethyl phthalate | 0.5 ug/mL |
| | | | | | | | Dimethyl phthalate | 0.5 ug/mL |
| | | | | | | | Fluoranthene | 0.5 ug/mL |
| | | | | | | | Fluorene | 0.5 ug/mL |
| | | | | | | | Hexachlorobenzene | 0.5 ug/mL |
| | | | | | | | Hexachlorobutadiene | 0.5 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 0.5 ug/mL |
| | | | | | | | Hexachloroethane | 0.5 ug/mL |
| | | | | | | | Hexadecane | 0.5 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 0.5 ug/mL |
| | | | | | | | Isophorone | 0.5 ug/mL |
| | | | | | | | n-Decane | 0.5 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 0.5 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 0.5 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 1 ug/mL |
| | | | | | | | n-Octadecane | 0.5 ug/mL |
| | | | | | | | Naphthalene | 0.5 ug/mL |
| | | | | | | | Nitrobenzene | 0.5 ug/mL |
| | | | | | | | Pentachlorophenol | 1 ug/mL |
| | | | | | | | Phenanthrene | 0.5 ug/mL |
| | | | | | | | Phenol | 0.5 ug/mL |
| | | | | | | | Pyrene | 0.5 ug/mL |
| | | | | | | | Pyridine | 0.5 ug/mL |
| | | | | | | | Benzoic acid | 1 ug/mL |
| | | | | | | | Indene | 1 ug/mL |
| | | | | | | | Atrazine | 1 ug/mL |
| | | | | | | | Benzaldehyde | 1 ug/mL |
| | | | | | | | Caprolactam | 1 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 1 ug/mL |
| | | | | | | | Benzidine | 1 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 0.5 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 0.5 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 0.5 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 0.5 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 0.5 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 0.5 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L3 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 20 uL | 1,1'-Biphenyl | 1 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1 ug/mL |
| | | | | | | | 1,4-Dioxane | 1 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1 ug/mL |
| | | | | | | | 2-Chlorophenol | 1 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1 ug/mL |
| | | | | | | | 2-Methylphenol | 1 ug/mL |
| | | | | | | | 2-Nitroaniline | 1 ug/mL |
| | | | | | | | 2-Nitrophenol | 1 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1 ug/mL |
| | | | | | | | 3-Nitroaniline | 1 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1 ug/mL |
| | | | | | | | 4-Chloroaniline | 1 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1 ug/mL |
| | | | | | | | 4-Nitroaniline | 1 ug/mL |
| | | | | | | | 4-Nitrophenol | 2 ug/mL |
| | | | | | | | Acenaphthene | 1 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Acenaphthylene | 1 ug/mL |
| | | | | | | | Acetophenone | 1 ug/mL |
| | | | | | | | Aniline | 1 ug/mL |
| | | | | | | | Anthracene | 1 ug/mL |
| | | | | | | | Azobenzene | 1 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1 ug/mL |
| | | | | | | | Benzyl alcohol | 1 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1 ug/mL |
| | | | | | | | Carbazole | 1 ug/mL |
| | | | | | | | Chrysene | 1 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1 ug/mL |
| | | | | | | | Dibenzofuran | 1 ug/mL |
| | | | | | | | Diethyl phthalate | 1 ug/mL |
| | | | | | | | Dimethyl phthalate | 1 ug/mL |
| | | | | | | | Fluoranthene | 1 ug/mL |
| | | | | | | | Fluorene | 1 ug/mL |
| | | | | | | | Hexachlorobenzene | 1 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1 ug/mL |
| | | | | | | | Hexachloroethane | 1 ug/mL |
| | | | | | | | Hexadecane | 1 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1 ug/mL |
| | | | | | | | Isophorone | 1 ug/mL |
| | | | | | | | n-Decane | 1 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2 ug/mL |
| | | | | | | | n-Octadecane | 1 ug/mL |
| | | | | | | | Naphthalene | 1 ug/mL |
| | | | | | | | Nitrobenzene | 1 ug/mL |
| | | | | | | | Pentachlorophenol | 2 ug/mL |
| | | | | | | | Phenanthrene | 1 ug/mL |
| | | | | | | | Phenol | 1 ug/mL |
| | | | | | | | Pyrene | 1 ug/mL |
| | | | | | | | Pyridine | 1 ug/mL |
| | | | | | | | Benzoic acid | 2 ug/mL |
| | | | | | | | Indene | 2 ug/mL |
| | | | | | | | Atrazine | 2 ug/mL |
| | | | | | | | Benzaldehyde | 2 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Caprolactam | 2 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 2 ug/mL |
| | | | | | | | Benzidine | 2 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 1 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 1 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 1 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 1 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 1 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 1 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L4 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 40 uL | 1,1'-Biphenyl | 2 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 2 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 2 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 2 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2 ug/mL |
| | | | | | | | 1,4-Dioxane | 2 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 2 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 2 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 2 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 2 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 2 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 2 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 2 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 4 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 2 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 2 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 2 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 2 ug/mL |
| | | | | | | | 2-Chlorophenol | 2 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 2 ug/mL |
| | | | | | | | 2-Methylphenol | 2 ug/mL |
| | | | | | | | 2-Nitroaniline | 2 ug/mL |
| | | | | | | | 2-Nitrophenol | 2 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 3 & 4 Methylphenol | 2 ug/mL |
| | | | | | | | 3-Nitroaniline | 2 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 4 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 2 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 2 ug/mL |
| | | | | | | | 4-Chloroaniline | 2 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 2 ug/mL |
| | | | | | | | 4-Nitroaniline | 2 ug/mL |
| | | | | | | | 4-Nitrophenol | 4 ug/mL |
| | | | | | | | Acenaphthene | 2 ug/mL |
| | | | | | | | Acenaphthylene | 2 ug/mL |
| | | | | | | | Acetophenone | 2 ug/mL |
| | | | | | | | Aniline | 2 ug/mL |
| | | | | | | | Anthracene | 2 ug/mL |
| | | | | | | | Azobenzene | 2 ug/mL |
| | | | | | | | Benzo[a]anthracene | 2 ug/mL |
| | | | | | | | Benzo[a]pyrene | 2 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 2 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 2 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 2 ug/mL |
| | | | | | | | Benzyl alcohol | 2 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 2 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 2 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 2 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 2 ug/mL |
| | | | | | | | Carbazole | 2 ug/mL |
| | | | | | | | Chrysene | 2 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 2 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 2 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 2 ug/mL |
| | | | | | | | Dibenzofuran | 2 ug/mL |
| | | | | | | | Diethyl phthalate | 2 ug/mL |
| | | | | | | | Dimethyl phthalate | 2 ug/mL |
| | | | | | | | Fluoranthene | 2 ug/mL |
| | | | | | | | Fluorene | 2 ug/mL |
| | | | | | | | Hexachlorobenzene | 2 ug/mL |
| | | | | | | | Hexachlorobutadiene | 2 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 2 ug/mL |
| | | | | | | | Hexachloroethane | 2 ug/mL |
| | | | | | | | Hexadecane | 2 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 2 ug/mL |
| | | | | | | | Isophorone | 2 ug/mL |
| | | | | | | | n-Decane | 2 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 2 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 2 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 4 ug/mL |
| | | | | | | | n-Octadecane | 2 ug/mL |
| | | | | | | | Naphthalene | 2 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Nitrobenzene | 2 ug/mL |
| | | | | | | | Pentachlorophenol | 4 ug/mL |
| | | | | | | | Phenanthrene | 2 ug/mL |
| | | | | | | | Phenol | 2 ug/mL |
| | | | | | | | Pyrene | 2 ug/mL |
| | | | | | | | Pyridine | 2 ug/mL |
| | | | | | | | Benzoic acid | 4 ug/mL |
| | | | | | | | Indene | 4 ug/mL |
| | | | | | | | Atrazine | 4 ug/mL |
| | | | | | | | Benzaldehyde | 4 ug/mL |
| | | | | | | | Caprolactam | 4 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 4 ug/mL |
| | | | | | | | Benzidine | 4 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 2 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 2 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 2 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 2 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 2 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 2 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L5 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 100 uL | 1,1'-Biphenyl | 5 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 5 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 5 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 5 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 5 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 5 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 5 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 5 ug/mL |
| | | | | | | | 1,4-Dioxane | 5 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 5 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 5 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 5 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 5 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 5 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 5 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 5 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,4-Dinitrophenol | 10 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 5 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 5 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 5 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 5 ug/mL |
| | | | | | | | 2-Chlorophenol | 5 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 5 ug/mL |
| | | | | | | | 2-Methylphenol | 5 ug/mL |
| | | | | | | | 2-Nitroaniline | 5 ug/mL |
| | | | | | | | 2-Nitrophenol | 5 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 5 ug/mL |
| | | | | | | | 3-Nitroaniline | 5 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 10 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 5 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 5 ug/mL |
| | | | | | | | 4-Chloroaniline | 5 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 5 ug/mL |
| | | | | | | | 4-Nitroaniline | 5 ug/mL |
| | | | | | | | 4-Nitrophenol | 10 ug/mL |
| | | | | | | | Acenaphthene | 5 ug/mL |
| | | | | | | | Acenaphthylene | 5 ug/mL |
| | | | | | | | Acetophenone | 5 ug/mL |
| | | | | | | | Aniline | 5 ug/mL |
| | | | | | | | Anthracene | 5 ug/mL |
| | | | | | | | Azobenzene | 5 ug/mL |
| | | | | | | | Benzo[a]anthracene | 5 ug/mL |
| | | | | | | | Benzo[a]pyrene | 5 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 5 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 5 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 5 ug/mL |
| | | | | | | | Benzyl alcohol | 5 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 5 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 5 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 5 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 5 ug/mL |
| | | | | | | | Carbazole | 5 ug/mL |
| | | | | | | | Chrysene | 5 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 5 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 5 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 5 ug/mL |
| | | | | | | | Dibenzofuran | 5 ug/mL |
| | | | | | | | Diethyl phthalate | 5 ug/mL |
| | | | | | | | Dimethyl phthalate | 5 ug/mL |
| | | | | | | | Fluoranthene | 5 ug/mL |
| | | | | | | | Fluorene | 5 ug/mL |
| | | | | | | | Hexachlorobenzene | 5 ug/mL |
| | | | | | | | Hexachlorobutadiene | 5 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 5 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Hexachloroethane | 5 ug/mL |
| | | | | | | | Hexadecane | 5 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 5 ug/mL |
| | | | | | | | Isophorone | 5 ug/mL |
| | | | | | | | n-Decane | 5 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 5 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 5 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 10 ug/mL |
| | | | | | | | n-Octadecane | 5 ug/mL |
| | | | | | | | Naphthalene | 5 ug/mL |
| | | | | | | | Nitrobenzene | 5 ug/mL |
| | | | | | | | Pentachlorophenol | 10 ug/mL |
| | | | | | | | Phenanthrene | 5 ug/mL |
| | | | | | | | Phenol | 5 ug/mL |
| | | | | | | | Pyrene | 5 ug/mL |
| | | | | | | | Pyridine | 5 ug/mL |
| | | | | | | | Benzoic acid | 10 ug/mL |
| | | | | | | | Indene | 10 ug/mL |
| | | | | | | | Atrazine | 10 ug/mL |
| | | | | | | | Benzaldehyde | 10 ug/mL |
| | | | | | | | Caprolactam | 10 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 10 ug/mL |
| | | | | | | | Benzidine | 10 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 5 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L6 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 200 uL | 1,1'-Biphenyl | 10 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 10 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 10 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 10 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 10 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 10 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,3-Dinitrobenzene | 10 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 10 ug/mL |
| | | | | | | | 1,4-Dioxane | 10 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 10 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 10 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 10 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 10 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 10 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 10 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 10 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 20 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 10 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 10 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 10 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 10 ug/mL |
| | | | | | | | 2-Chlorophenol | 10 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 10 ug/mL |
| | | | | | | | 2-Methylphenol | 10 ug/mL |
| | | | | | | | 2-Nitroaniline | 10 ug/mL |
| | | | | | | | 2-Nitrophenol | 10 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 10 ug/mL |
| | | | | | | | 3-Nitroaniline | 10 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 20 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 10 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 10 ug/mL |
| | | | | | | | 4-Chloroaniline | 10 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 10 ug/mL |
| | | | | | | | 4-Nitroaniline | 10 ug/mL |
| | | | | | | | 4-Nitrophenol | 20 ug/mL |
| | | | | | | | Acenaphthene | 10 ug/mL |
| | | | | | | | Acenaphthylene | 10 ug/mL |
| | | | | | | | Acetophenone | 10 ug/mL |
| | | | | | | | Aniline | 10 ug/mL |
| | | | | | | | Anthracene | 10 ug/mL |
| | | | | | | | Azobenzene | 10 ug/mL |
| | | | | | | | Benzo[a]anthracene | 10 ug/mL |
| | | | | | | | Benzo[a]pyrene | 10 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 10 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 10 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 10 ug/mL |
| | | | | | | | Benzyl alcohol | 10 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 10 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 10 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 10 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 10 ug/mL |
| | | | | | | | Carbazole | 10 ug/mL |
| | | | | | | | Chrysene | 10 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 10 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Di-n-octyl phthalate | 10 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 10 ug/mL |
| | | | | | | | Dibenzofuran | 10 ug/mL |
| | | | | | | | Diethyl phthalate | 10 ug/mL |
| | | | | | | | Dimethyl phthalate | 10 ug/mL |
| | | | | | | | Fluoranthene | 10 ug/mL |
| | | | | | | | Fluorene | 10 ug/mL |
| | | | | | | | Hexachlorobenzene | 10 ug/mL |
| | | | | | | | Hexachlorobutadiene | 10 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 10 ug/mL |
| | | | | | | | Hexachloroethane | 10 ug/mL |
| | | | | | | | Hexadecane | 10 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 10 ug/mL |
| | | | | | | | Isophorone | 10 ug/mL |
| | | | | | | | n-Decane | 10 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 10 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 10 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 20 ug/mL |
| | | | | | | | n-Octadecane | 10 ug/mL |
| | | | | | | | Naphthalene | 10 ug/mL |
| | | | | | | | Nitrobenzene | 10 ug/mL |
| | | | | | | | Pentachlorophenol | 20 ug/mL |
| | | | | | | | Phenanthrene | 10 ug/mL |
| | | | | | | | Phenol | 10 ug/mL |
| | | | | | | | Pyrene | 10 ug/mL |
| | | | | | | | Pyridine | 10 ug/mL |
| | | | | | | | Benzoic acid | 20 ug/mL |
| | | | | | | | Indene | 20 ug/mL |
| | | | | | | | Atrazine | 20 ug/mL |
| | | | | | | | Benzaldehyde | 20 ug/mL |
| | | | | | | | Caprolactam | 20 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 20 ug/mL |
| | | | | | | | Benzidine | 20 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 10 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 10 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 10 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 10 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 10 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 10 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | Restek, Lot A0101020 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L7 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 300 uL | 1,1'-Biphenyl | 15 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 15 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 15 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 15 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 15 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 15 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 15 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 15 ug/mL |
| | | | | | | | 1,4-Dioxane | 15 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 15 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 15 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 15 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 15 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 15 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 15 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 15 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 30 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 15 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 15 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 15 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 15 ug/mL |
| | | | | | | | 2-Chlorophenol | 15 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 15 ug/mL |
| | | | | | | | 2-Methylphenol | 15 ug/mL |
| | | | | | | | 2-Nitroaniline | 15 ug/mL |
| | | | | | | | 2-Nitrophenol | 15 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 15 ug/mL |
| | | | | | | | 3-Nitroaniline | 15 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 30 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 15 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 15 ug/mL |
| | | | | | | | 4-Chloroaniline | 15 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 15 ug/mL |
| | | | | | | | 4-Nitroaniline | 15 ug/mL |
| | | | | | | | 4-Nitrophenol | 30 ug/mL |
| | | | | | | | Acenaphthene | 15 ug/mL |
| | | | | | | | Acenaphthylene | 15 ug/mL |
| | | | | | | | Acetophenone | 15 ug/mL |
| | | | | | | | Aniline | 15 ug/mL |
| | | | | | | | Anthracene | 15 ug/mL |
| | | | | | | | Azobenzene | 15 ug/mL |
| | | | | | | | Benzo[a]anthracene | 15 ug/mL |
| | | | | | | | Benzo[a]pyrene | 15 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 15 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzo[g,h,i]perylene | 15 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 15 ug/mL |
| | | | | | | | Benzyl alcohol | 15 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 15 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 15 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 15 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 15 ug/mL |
| | | | | | | | Carbazole | 15 ug/mL |
| | | | | | | | Chrysene | 15 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 15 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 15 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 15 ug/mL |
| | | | | | | | Dibenzofuran | 15 ug/mL |
| | | | | | | | Diethyl phthalate | 15 ug/mL |
| | | | | | | | Dimethyl phthalate | 15 ug/mL |
| | | | | | | | Fluoranthene | 15 ug/mL |
| | | | | | | | Fluorene | 15 ug/mL |
| | | | | | | | Hexachlorobenzene | 15 ug/mL |
| | | | | | | | Hexachlorobutadiene | 15 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 15 ug/mL |
| | | | | | | | Hexachloroethane | 15 ug/mL |
| | | | | | | | Hexadecane | 15 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 15 ug/mL |
| | | | | | | | Isophorone | 15 ug/mL |
| | | | | | | | n-Decane | 15 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 15 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 15 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 30 ug/mL |
| | | | | | | | n-Octadecane | 15 ug/mL |
| | | | | | | | Naphthalene | 15 ug/mL |
| | | | | | | | Nitrobenzene | 15 ug/mL |
| | | | | | | | Pentachlorophenol | 30 ug/mL |
| | | | | | | | Phenanthrene | 15 ug/mL |
| | | | | | | | Phenol | 15 ug/mL |
| | | | | | | | Pyrene | 15 ug/mL |
| | | | | | | | Pyridine | 15 ug/mL |
| | | | | | | | Benzoic acid | 30 ug/mL |
| | | | | | | | Indene | 30 ug/mL |
| | | | | | | | Atrazine | 30 ug/mL |
| | | | | | | | Benzaldehyde | 30 ug/mL |
| | | | | | | | Caprolactam | 30 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 30 ug/mL |
| | | | | | | | Benzidine | 30 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 15 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 15 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 15 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 15 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 15 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Terphenyl-d14 (Surr) | 15 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L8 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 400 uL | 1,1'-Biphenyl | 20 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 20 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 20 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 20 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 20 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,4-Dioxane | 20 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 20 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 20 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 20 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 20 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 20 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 20 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 20 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 40 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 20 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 20 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 20 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 20 ug/mL |
| | | | | | | | 2-Chlorophenol | 20 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 20 ug/mL |
| | | | | | | | 2-Methylphenol | 20 ug/mL |
| | | | | | | | 2-Nitroaniline | 20 ug/mL |
| | | | | | | | 2-Nitrophenol | 20 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 20 ug/mL |
| | | | | | | | 3-Nitroaniline | 20 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 40 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 20 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 20 ug/mL |
| | | | | | | | 4-Chloroaniline | 20 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 20 ug/mL |
| | | | | | | | 4-Nitroaniline | 20 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4-Nitrophenol | 40 ug/mL |
| | | | | | | | Acenaphthene | 20 ug/mL |
| | | | | | | | Acenaphthylene | 20 ug/mL |
| | | | | | | | Acetophenone | 20 ug/mL |
| | | | | | | | Aniline | 20 ug/mL |
| | | | | | | | Anthracene | 20 ug/mL |
| | | | | | | | Azobenzene | 20 ug/mL |
| | | | | | | | Benzo[a]anthracene | 20 ug/mL |
| | | | | | | | Benzo[a]pyrene | 20 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 20 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 20 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 20 ug/mL |
| | | | | | | | Benzyl alcohol | 20 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 20 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 20 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 20 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 20 ug/mL |
| | | | | | | | Carbazole | 20 ug/mL |
| | | | | | | | Chrysene | 20 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 20 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 20 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 20 ug/mL |
| | | | | | | | Dibenzofuran | 20 ug/mL |
| | | | | | | | Diethyl phthalate | 20 ug/mL |
| | | | | | | | Dimethyl phthalate | 20 ug/mL |
| | | | | | | | Fluoranthene | 20 ug/mL |
| | | | | | | | Fluorene | 20 ug/mL |
| | | | | | | | Hexachlorobenzene | 20 ug/mL |
| | | | | | | | Hexachlorobutadiene | 20 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 20 ug/mL |
| | | | | | | | Hexachloroethane | 20 ug/mL |
| | | | | | | | Hexadecane | 20 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 20 ug/mL |
| | | | | | | | Isophorone | 20 ug/mL |
| | | | | | | | n-Decane | 20 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 20 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 20 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 40 ug/mL |
| | | | | | | | n-Octadecane | 20 ug/mL |
| | | | | | | | Naphthalene | 20 ug/mL |
| | | | | | | | Nitrobenzene | 20 ug/mL |
| | | | | | | | Pentachlorophenol | 40 ug/mL |
| | | | | | | | Phenanthrene | 20 ug/mL |
| | | | | | | | Phenol | 20 ug/mL |
| | | | | | | | Pyrene | 20 ug/mL |
| | | | | | | | Pyridine | 20 ug/mL |
| | | | | | | | Benzoic acid | 40 ug/mL |
| | | | | | | | Indene | 40 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Atrazine | 40 ug/mL |
| | | | | | | | Benzaldehyde | 40 ug/mL |
| | | | | | | | Caprolactam | 40 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 40 ug/mL |
| | | | | | | | Benzidine | 40 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 20 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 20 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 20 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 20 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 20 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 20 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L9 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 500 uL | 1,1'-Biphenyl | 25 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 25 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 25 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 25 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 25 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 25 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 25 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 25 ug/mL |
| | | | | | | | 1,4-Dioxane | 25 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 25 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 25 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 25 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 25 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 25 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 25 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 25 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 50 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 25 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 25 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 25 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 25 ug/mL |
| | | | | | | | 2-Chlorophenol | 25 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 25 ug/mL |
| | | | | | | | 2-Methylphenol | 25 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Nitroaniline | 25 ug/mL |
| | | | | | | | 2-Nitrophenol | 25 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 25 ug/mL |
| | | | | | | | 3-Nitroaniline | 25 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 50 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 25 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 25 ug/mL |
| | | | | | | | 4-Chloroaniline | 25 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 25 ug/mL |
| | | | | | | | 4-Nitroaniline | 25 ug/mL |
| | | | | | | | 4-Nitrophenol | 50 ug/mL |
| | | | | | | | Acenaphthene | 25 ug/mL |
| | | | | | | | Acenaphthylene | 25 ug/mL |
| | | | | | | | Acetophenone | 25 ug/mL |
| | | | | | | | Aniline | 25 ug/mL |
| | | | | | | | Anthracene | 25 ug/mL |
| | | | | | | | Azobenzene | 25 ug/mL |
| | | | | | | | Benzo[a]anthracene | 25 ug/mL |
| | | | | | | | Benzo[a]pyrene | 25 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 25 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 25 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 25 ug/mL |
| | | | | | | | Benzyl alcohol | 25 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 25 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 25 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 25 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 25 ug/mL |
| | | | | | | | Carbazole | 25 ug/mL |
| | | | | | | | Chrysene | 25 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 25 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 25 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 25 ug/mL |
| | | | | | | | Dibenzofuran | 25 ug/mL |
| | | | | | | | Diethyl phthalate | 25 ug/mL |
| | | | | | | | Dimethyl phthalate | 25 ug/mL |
| | | | | | | | Fluoranthene | 25 ug/mL |
| | | | | | | | Fluorene | 25 ug/mL |
| | | | | | | | Hexachlorobenzene | 25 ug/mL |
| | | | | | | | Hexachlorobutadiene | 25 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 25 ug/mL |
| | | | | | | | Hexachloroethane | 25 ug/mL |
| | | | | | | | Hexadecane | 25 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 25 ug/mL |
| | | | | | | | Isophorone | 25 ug/mL |
| | | | | | | | n-Decane | 25 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 25 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 25 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | n-Octadecane | 25 ug/mL |
| | | | | | | | Naphthalene | 25 ug/mL |
| | | | | | | | Nitrobenzene | 25 ug/mL |
| | | | | | | | Pentachlorophenol | 50 ug/mL |
| | | | | | | | Phenanthrene | 25 ug/mL |
| | | | | | | | Phenol | 25 ug/mL |
| | | | | | | | Pyrene | 25 ug/mL |
| | | | | | | | Pyridine | 25 ug/mL |
| | | | | | | | Benzoic acid | 50 ug/mL |
| | | | | | | | Indene | 50 ug/mL |
| | | | | | | | Atrazine | 50 ug/mL |
| | | | | | | | Benzaldehyde | 50 ug/mL |
| | | | | | | | Caprolactam | 50 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 50 ug/mL |
| | | | | | | | Benzidine | 50 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 25 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 25 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 25 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 25 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 25 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 25 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | Restek, Lot A0101020 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 SS W_00004** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMLIST1 SS ST_00004 | 200 uL | Acenaphthene | 10 ug/mL |
| | | | | | | | Acenaphthylene | 10 ug/mL |
| | | | | | | | Anthracene | 10 ug/mL |
| | | | | | | | Benzo[a]anthracene | 10 ug/mL |
| | | | | | | | Benzo[a]pyrene | 10 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 10 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 10 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 10 ug/mL |
| | | | | | | | Chrysene | 10 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 10 ug/mL |
| | | | | | | | Fluoranthene | 10 ug/mL |
| | | | | | | | Fluorene | 10 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 10 ug/mL |
| | | | | | | | Naphthalene | 10 ug/mL |
| | | | | | | | Phenanthrene | 10 ug/mL |
| | | | | | | | Pyrene | 10 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 10 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 10 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 10 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 10 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Phenol-d5 (Surr) | 10 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 10 ug/mL |
| .SMLIST1 SS ST_00004 | 06/30/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 SS S1_00004 | 1 mL | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | SMLIST1SS SUR_00002 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 SS S1_00004 | 06/30/16 | | Restek, Lot A0107697 | | (Purchased Reagent) | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| ..SMLIST1SS SUR_00002 | 09/30/18 | | Restek, Lot A092712 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |

# Certification Summary

Client: Tetra Tech, Inc. TestAmerica Job ID: 240-51073-1
Project/Site: MRC Soil Remediation (Block H)

| Laboratory | Authority | Program | EPA Region | Certification ID |
|---|---|---|---|---|
| TestAmerica Canton | California | State Program | 9 | 2927 |
| TestAmerica Canton | Connecticut | State Program | 1 | PH-0590 |
| TestAmerica Canton | Florida | NELAP | 4 | E87225 |
| TestAmerica Canton | Georgia | State Program | 4 | N/A |
| TestAmerica Canton | Illinois | NELAP | 5 | 200004 |
| TestAmerica Canton | Kansas | NELAP | 7 | E-10336 |
| TestAmerica Canton | Kentucky (UST) | State Program | 4 | 58 |
| TestAmerica Canton | Kentucky (WW) | State Program | 4 | 98016 |
| TestAmerica Canton | L-A-B | DoD ELAP | | L2315 |
| TestAmerica Canton | Minnesota | NELAP | 5 | 039-999-348 |
| TestAmerica Canton | Nevada | State Program | 9 | OH-000482008A |
| TestAmerica Canton | New Jersey | NELAP | 2 | OH001 |
| TestAmerica Canton | New York | NELAP | 2 | 10975 |
| TestAmerica Canton | Ohio VAP | State Program | 5 | CL0024 |
| TestAmerica Canton | Oregon | NELAP | 10 | 4062 |
| TestAmerica Canton | Pennsylvania | NELAP | 3 | 68-00340 |
| TestAmerica Canton | Texas | NELAP | 6 | |
| TestAmerica Canton | USDA | Federal | | P330-13-00319 |
| TestAmerica Canton | Virginia | NELAP | 3 | 460175 |
| TestAmerica Canton | Washington | State Program | 10 | C971 |
| TestAmerica Canton | West Virginia DEP | State Program | 3 | 210 |
| TestAmerica Canton | Wisconsin | State Program | 5 | 999518190 |

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

# Method 8270D

## Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Matrix: Solid  Level: Low

GC Column (1): RXI-5SILMS  ID: 0.45(mm)

| Client Sample ID | Lab Sample ID | 2FP # | PHL # | NBZ # | FBP # | TBP # | TPH # |
|---|---|---|---|---|---|---|---|
| H-US-A-1-1 | 240-51073-1 | 73 | 75 | 70 | 70 | 66 | 74 |
| H-US-A-2-1 | 240-51073-2 | 75 | 76 | 75 | 74 | 67 | 74 |
| H-US-A-3-1 | 240-51073-3 | 67 | 69 | 62 | 65 | 64 | 71 |
| H-US-A-4-1 | 240-51073-4 | 72 | 73 | 68 | 69 | 68 | 73 |
| H-UB-A-1-2 | 240-51073-5 | 77 | 77 | 75 | 77 | 73 | 78 |
| H-UB-A-2-2 | 240-51073-6 | 64 | 65 | 61 | 63 | 68 | 76 |
| H-UB-A-3-2 | 240-51073-7 | 69 | 70 | 67 | 68 | 69 | 74 |
| H-DUP01 | 240-51073-8 | 71 | 73 | 65 | 66 | 68 | 76 |
|  | MB 240-182098/17-A | 77 | 78 | 70 | 73 | 59 | 75 |
|  | LCS 240-182098/18-A | 77 | 77 | 77 | 73 | 71 | 75 |
| H-DUP01 MS | 240-51073-8 MS | 68 | 68 | 68 | 65 | 64 | 66 |
| H-DUP01 MSD | 240-51073-8 MSD | 71 | 71 | 69 | 64 | 64 | 70 |

| | QC LIMITS |
|---|---|
| 2FP = 2-Fluorophenol (Surr) | 31-110 |
| PHL = Phenol-d5 (Surr) | 28-110 |
| NBZ = Nitrobenzene-d5 (Surr) | 24-110 |
| FBP = 2-Fluorobiphenyl (Surr) | 27-110 |
| TBP = 2,4,6-Tribromophenol (Surr) | 19-110 |
| TPH = Terphenyl-d14 (Surr) | 34-110 |

# Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50524019.D

Lab ID: LCS 240-182098/18-A Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | LCS CONCENTRATION (ug/Kg) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Acenaphthene | 667 | 477 | 72 | 49-110 | |
| Acenaphthylene | 667 | 466 | 70 | 49-110 | |
| Anthracene | 667 | 480 | 72 | 48-110 | |
| Benzo[a]anthracene | 667 | 491 | 74 | 48-110 | |
| Benzo[a]pyrene | 667 | 589 | 88 | 44-110 | |
| Benzo[b]fluoranthene | 667 | 560 | 84 | 47-110 | |
| Benzo[g,h,i]perylene | 667 | 643 | 96 | 50-110 | |
| Benzo[k]fluoranthene | 667 | 606 | 91 | 38-110 | |
| Chrysene | 667 | 528 | 79 | 51-110 | |
| Dibenz(a,h)anthracene | 667 | 612 | 92 | 46-110 | |
| Fluoranthene | 667 | 534 | 80 | 48-110 | |
| Fluorene | 667 | 472 | 71 | 51-110 | |
| Indeno[1,2,3-cd]pyrene | 667 | 642 | 96 | 47-110 | |
| Naphthalene | 667 | 479 | 72 | 49-110 | |
| Phenanthrene | 667 | 483 | 72 | 49-110 | |
| Pyrene | 667 | 528 | 79 | 46-110 | |

# Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50526025.D

Lab ID: 240-51073-8 MS Client ID: H-DUP01 MS

| COMPOUND | SPIKE ADDED (ug/Kg) | SAMPLE CONCENTRATION (ug/Kg) | MS CONCENTRATION (ug/Kg) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Acenaphthene | 782 | 0.89 U | 506 | 65 | 32-110 | |
| Acenaphthylene | 782 | 4.9 J | 490 | 62 | 34-110 | |
| Anthracene | 782 | 10 | 518 | 65 | 36-110 | |
| Benzo[a]anthracene | 782 | 57 | 548 | 63 | 34-110 | |
| Benzo[a]pyrene | 782 | 120 | 647 | 67 | 32-110 | |
| Benzo[b]fluoranthene | 782 | 93 | 627 | 68 | 29-110 | |
| Benzo[g,h,i]perylene | 782 | 130 | 725 | 76 | 35-110 | |
| Benzo[k]fluoranthene | 782 | 70 | 621 | 70 | 34-110 | |
| Chrysene | 782 | 76 | 589 | 66 | 36-110 | |
| Dibenz(a,h)anthracene | 782 | 22 | 657 | 81 | 37-110 | |
| Fluoranthene | 782 | 55 | 593 | 69 | 29-110 | |
| Fluorene | 782 | 0.62 U | 504 | 64 | 38-110 | |
| Indeno[1,2,3-cd]pyrene | 782 | 89 | 707 | 79 | 36-110 | |
| Naphthalene | 782 | 0.96 U | 490 | 63 | 28-110 | |
| Phenanthrene | 782 | 20 | 534 | 66 | 35-110 | |
| Pyrene | 782 | 140 | 611 | 60 | 31-110 | |

# Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50526026.D

Lab ID: 240-51073-8 MSD Client ID: H-DUP01 MSD

| COMPOUND | SPIKE ADDED (ug/Kg) | MSD CONCENTRATION (ug/Kg) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Acenaphthene | 770 | 507 | 66 | 0 | 38 | 32-110 | |
| Acenaphthylene | 770 | 501 | 64 | 2 | 39 | 34-110 | |
| Anthracene | 770 | 528 | 67 | 2 | 30 | 36-110 | |
| Benzo[a]anthracene | 770 | 579 | 68 | 5 | 34 | 34-110 | |
| Benzo[a]pyrene | 770 | 656 | 70 | 1 | 30 | 32-110 | |
| Benzo[b]fluoranthene | 770 | 621 | 69 | 1 | 36 | 29-110 | |
| Benzo[g,h,i]perylene | 770 | 758 | 82 | 4 | 30 | 35-110 | |
| Benzo[k]fluoranthene | 770 | 647 | 75 | 4 | 32 | 34-110 | |
| Chrysene | 770 | 629 | 72 | 7 | 30 | 36-110 | |
| Dibenz(a,h)anthracene | 770 | 684 | 86 | 4 | 30 | 37-110 | |
| Fluoranthene | 770 | 614 | 73 | 3 | 36 | 29-110 | |
| Fluorene | 770 | 501 | 65 | 1 | 33 | 38-110 | |
| Indeno[1,2,3-cd]pyrene | 770 | 718 | 82 | 2 | 30 | 36-110 | |
| Naphthalene | 770 | 506 | 66 | 3 | 50 | 28-110 | |
| Phenanthrene | 770 | 540 | 68 | 1 | 34 | 35-110 | |
| Pyrene | 770 | 634 | 64 | 4 | 37 | 31-110 | |

# Column to be used to flag recovery and RPD values

FORM III 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Lab File ID: 50524018.D  Lab Sample ID: MB 240-182098/17-A

Matrix: Solid  Date Extracted: 05/22/2015 12:31

Instrument ID: A4HP9  Date Analyzed: 05/24/2015 15:55

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| | LCS 240-182098/18-A | 50524019.D | 05/24/2015 16:20 |
| H-US-A-1-1 | 240-51073-1 | 50526017.D | 05/26/2015 14:08 |
| H-US-A-2-1 | 240-51073-2 | 50526018.D | 05/26/2015 14:33 |
| H-US-A-3-1 | 240-51073-3 | 50526019.D | 05/26/2015 14:58 |
| H-US-A-4-1 | 240-51073-4 | 50526020.D | 05/26/2015 15:23 |
| H-UB-A-1-2 | 240-51073-5 | 50526021.D | 05/26/2015 15:48 |
| H-UB-A-2-2 | 240-51073-6 | 50526022.D | 05/26/2015 16:14 |
| H-UB-A-3-2 | 240-51073-7 | 50526023.D | 05/26/2015 16:39 |
| H-DUP01 | 240-51073-8 | 50526024.D | 05/26/2015 17:04 |
| H-DUP01 MS | 240-51073-8 MS | 50526025.D | 05/26/2015 17:29 |
| H-DUP01 MSD | 240-51073-8 MSD | 50526026.D | 05/26/2015 17:54 |

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Lab File ID: 50519001.D  DFTPP Injection Date: 05/19/2015

Instrument ID: A4HP9  DFTPP Injection Time: 15:52

Analysis Batch No.: 181541

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30.0- 80.0% of mass 198 | 50.2 | |
| 68 | Less than 2.0% of mass 69 | 0.0 | (0.0)1 |
| 69 | Mass 69 relative abundance | 49.8 | |
| 70 | Less than 2.0% of mass 69 | 0.1 | (0.2)1 |
| 127 | 25.0 - 75.0% of mass 198 | 52.5 | |
| 197 | Less than 1.0% of mass 198 | 0.0 | |
| 198 | Base Peak, 100% relative abundance | 100.0 | |
| 199 | 5.0 to 9.0% of mass 198 | 6.5 | |
| 275 | 10.0- 30.0% of mass 198 | 17.1 | |
| 365 | Greater than 0.75% of mass 198 | 1.7 | |
| 441 | Present, but less than mass 443 | 10.5 | |
| 442 | 40.0 - 110.0% of mass 198 | 62.4 | |
| 443 | 15.0 - 24.0% of mass 442 | 12.0 | (19.3)2 |

1-Value is % mass 69  2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | STD5 240-181541/2 | 50519002.D | 05/19/2015 | 16:13 |
| | STD4 240-181541/3 | 50519003.D | 05/19/2015 | 16:38 |
| | STD3 240-181541/4 | 50519004.D | 05/19/2015 | 17:03 |
| | STD2 240-181541/5 | 50519005.D | 05/19/2015 | 17:28 |
| | STD1 240-181541/6 | 50519006.D | 05/19/2015 | 17:53 |
| | STD9 240-181541/7 | 50519007.D | 05/19/2015 | 18:18 |
| | STD8 240-181541/8 | 50519008.D | 05/19/2015 | 18:43 |
| | STD7 240-181541/9 | 50519009.D | 05/19/2015 | 19:08 |
| | STD6 240-181541/10 | 50519010.D | 05/19/2015 | 19:33 |
| | ICV 240-181541/11 | 50519011.D | 05/19/2015 | 19:58 |

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Lab File ID: 50524001.D  DFTPP Injection Date: 05/24/2015

Instrument ID: A4HP9  DFTPP Injection Time: 08:58

Analysis Batch No.: 182204

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30.0- 80.0% of mass 198 | 49.2 | |
| 68 | Less than 2.0% of mass 69 | 0.0 | (0.0)1 |
| 69 | Mass 69 relative abundance | 47.2 | |
| 70 | Less than 2.0% of mass 69 | 0.2 | (0.3)1 |
| 127 | 25.0 - 75.0% of mass 198 | 54.0 | |
| 197 | Less than 1.0% of mass 198 | 0.0 | |
| 198 | Base Peak, 100% relative abundance | 100.0 | |
| 199 | 5.0 to 9.0% of mass 198 | 6.5 | |
| 275 | 10.0- 30.0% of mass 198 | 17.3 | |
| 365 | Greater than 0.75% of mass 198 | 1.6 | |
| 441 | Present, but less than mass 443 | 9.9 | |
| 442 | 40.0 - 110.0% of mass 198 | 56.5 | |
| 443 | 15.0 - 24.0% of mass 442 | 10.9 | (19.4)2 |

1-Value is % mass 69  2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | CCV 240-182204/2 | 50524002.D | 05/24/2015 | 09:19 |
| | MB 240-182098/17-A | 50524018.D | 05/24/2015 | 15:55 |
| | LCS 240-182098/18-A | 50524019.D | 05/24/2015 | 16:20 |

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Lab File ID: 50526001.D DFTPP Injection Date: 05/26/2015

Instrument ID: A4HP9 DFTPP Injection Time: 07:30

Analysis Batch No.: 182251

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30.0- 80.0% of mass 198 | 47.8 | |
| 68 | Less than 2.0% of mass 69 | 0.0 | (0.0)1 |
| 69 | Mass 69 relative abundance | 49.8 | |
| 70 | Less than 2.0% of mass 69 | 0.2 | (0.4)1 |
| 127 | 25.0 - 75.0% of mass 198 | 52.0 | |
| 197 | Less than 1.0% of mass 198 | 0.0 | |
| 198 | Base Peak, 100% relative abundance | 100.0 | |
| 199 | 5.0 to 9.0% of mass 198 | 6.6 | |
| 275 | 10.0- 30.0% of mass 198 | 16.4 | |
| 365 | Greater than 0.75% of mass 198 | 1.6 | |
| 441 | Present, but less than mass 443 | 9.6 | |
| 442 | 40.0 - 110.0% of mass 198 | 52.9 | |
| 443 | 15.0 - 24.0% of mass 442 | 10.3 | (19.4)2 |

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | CCV 240-182251/2 | 50526002.D | 05/26/2015 | 07:52 |
| H-US-A-1-1 | 240-51073-1 | 50526017.D | 05/26/2015 | 14:08 |
| H-US-A-2-1 | 240-51073-2 | 50526018.D | 05/26/2015 | 14:33 |
| H-US-A-3-1 | 240-51073-3 | 50526019.D | 05/26/2015 | 14:58 |
| H-US-A-4-1 | 240-51073-4 | 50526020.D | 05/26/2015 | 15:23 |
| H-UB-A-1-2 | 240-51073-5 | 50526021.D | 05/26/2015 | 15:48 |
| H-UB-A-2-2 | 240-51073-6 | 50526022.D | 05/26/2015 | 16:14 |
| H-UB-A-3-2 | 240-51073-7 | 50526023.D | 05/26/2015 | 16:39 |
| H-DUP01 | 240-51073-8 | 50526024.D | 05/26/2015 | 17:04 |
| H-DUP01 MS | 240-51073-8 MS | 50526025.D | 05/26/2015 | 17:29 |
| H-DUP01 MSD | 240-51073-8 MSD | 50526026.D | 05/26/2015 | 17:54 |

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Sample No.: STD6 240-181541/10 Date Analyzed: 05/19/2015 19:33

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50519010.D Heated Purge: (Y/N) N

Calibration ID: 28569

| | | DCB | | NPT | | ANT | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 193601 | 6.41 | 821091 | 7.53 | 384100 | 9.04 |
| UPPER LIMIT | | 387202 | 6.91 | 1642182 | 8.03 | 768200 | 9.54 |
| LOWER LIMIT | | 96801 | 5.91 | 410546 | 7.03 | 192050 | 8.54 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 240-181541/11 | | 185978 | 6.42 | 801807 | 7.53 | 376179 | 9.04 |
| CCV 240-182204/2 CCVIS | | 227740 | 6.37 | 951162 | 7.48 | 428019 | 8.99 |
| CCV 240-182251/2 CCVIS | | 215591 | 6.35 | 897571 | 7.47 | 426951 | 8.97 |

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Sample No.: STD6 240-181541/10 Date Analyzed: 05/19/2015 19:33

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50519010.D Heated Purge: (Y/N) N

Calibration ID: 28569

| | | PHN | | CRY | | PRY | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 530433 | 10.31 | 495913 | 12.63 | 357574 | 14.45 |
| UPPER LIMIT | | 1060866 | 10.81 | 991826 | 13.13 | 715148 | 14.95 |
| LOWER LIMIT | | 265217 | 9.81 | 247957 | 12.13 | 178787 | 13.95 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 240-181541/11 | | 519420 | 10.32 | 490052 | 12.63 | 347707 | 14.44 |
| CCV 240-182204/2 CCVIS | | 638945 | 10.26 | 561273 | 12.55 | 441142 | 14.31 |
| CCV 240-182251/2 CCVIS | | 610136 | 10.24 | 549061 | 12.53 | 428118 | 14.28 |

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Sample No.: CCV 240-182204/2  Date Analyzed: 05/24/2015 09:19

Instrument ID: A4HP9  GC Column: RXI-5SILMS  ID: 0.45(mm)

Lab File ID (Standard): 50524002.D  Heated Purge: (Y/N) N

Calibration ID: 28569

| | | DCB | | NPT | | ANT | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 227740 | 6.37 | 951162 | 7.48 | 428019 | 8.99 |
| UPPER LIMIT | | 455480 | 6.87 | 1902324 | 7.98 | 856038 | 9.49 |
| LOWER LIMIT | | 113870 | 5.87 | 475581 | 6.98 | 214010 | 8.49 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| MB 240-182098/17-A | | 197586 | 6.37 | 843653 | 7.48 | 412024 | 8.99 |
| LCS 240-182098/18-A | | 201927 | 6.36 | 864458 | 7.48 | 420531 | 8.99 |

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Sample No.: CCV 240-182204/2  Date Analyzed: 05/24/2015 09:19

Instrument ID: A4HP9  GC Column: RXI-5SILMS  ID: 0.45(mm)

Lab File ID (Standard): 50524002.D  Heated Purge: (Y/N) N

Calibration ID: 28569

| | | PHN | | CRY | | PRY | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 638945 | 10.26 | 561273 | 12.55 | 441142 | 14.31 |
| UPPER LIMIT | | 1277890 | 10.76 | 1122546 | 13.05 | 882284 | 14.81 |
| LOWER LIMIT | | 319473 | 9.76 | 280637 | 12.05 | 220571 | 13.81 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| MB 240-182098/17-A | | 633737 | 10.26 | 522854 | 12.54 | 344862 | 14.30 |
| LCS 240-182098/18-A | | 622299 | 10.26 | 542983 | 12.54 | 368945 | 14.30 |

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Sample No.: CCV 240-182251/2 Date Analyzed: 05/26/2015 07:52

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50526002.D Heated Purge: (Y/N) N

Calibration ID: 28569

| | | DCB | | NPT | | ANT | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 215591 | 6.35 | 897571 | 7.47 | 426951 | 8.97 |
| UPPER LIMIT | | 431182 | 6.85 | 1795142 | 7.97 | 853902 | 9.47 |
| LOWER LIMIT | | 107796 | 5.85 | 448786 | 6.97 | 213476 | 8.47 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| 240-51073-1 | H-US-A-1-1 | 179754 | 6.35 | 743293 | 7.46 | 355302 | 8.97 |
| 240-51073-2 | H-US-A-2-1 | 169208 | 6.35 | 676576 | 7.46 | 331866 | 8.97 |
| 240-51073-3 | H-US-A-3-1 | 181544 | 6.35 | 748526 | 7.46 | 359716 | 8.97 |
| 240-51073-4 | H-US-A-4-1 | 182161 | 6.35 | 747313 | 7.46 | 354962 | 8.97 |
| 240-51073-5 | H-UB-A-1-2 | 175773 | 6.35 | 702256 | 7.47 | 333488 | 8.97 |
| 240-51073-6 | H-UB-A-2-2 | 182995 | 6.35 | 743797 | 7.46 | 352592 | 8.97 |
| 240-51073-7 | H-UB-A-3-2 | 188277 | 6.35 | 745898 | 7.46 | 361555 | 8.97 |
| 240-51073-8 | H-DUP01 | 187640 | 6.35 | 763794 | 7.46 | 364753 | 8.97 |
| 240-51073-8 MS | H-DUP01 MS | 180072 | 6.35 | 760239 | 7.46 | 374831 | 8.97 |
| 240-51073-8 MSD | H-DUP01 MSD | 182000 | 6.35 | 778706 | 7.46 | 385133 | 8.97 |

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Sample No.: CCV 240-182251/2  Date Analyzed: 05/26/2015 07:52

Instrument ID: A4HP9  GC Column: RXI-5SILMS  ID: 0.45(mm)

Lab File ID (Standard): 50526002.D  Heated Purge: (Y/N) N

Calibration ID: 28569

| | | PHN | | CRY | | PRY | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 610136 | 10.24 | 549061 | 12.53 | 428118 | 14.28 |
| UPPER LIMIT | | 1220272 | 10.74 | 1098122 | 13.03 | 856236 | 14.78 |
| LOWER LIMIT | | 305068 | 9.74 | 274531 | 12.03 | 214059 | 13.78 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| 240-51073-1 | H-US-A-1-1 | 548739 | 10.24 | 441785 | 12.52 | 323951 | 14.27 |
| 240-51073-2 | H-US-A-2-1 | 510768 | 10.24 | 426062 | 12.52 | 310950 | 14.27 |
| 240-51073-3 | H-US-A-3-1 | 557916 | 10.23 | 463881 | 12.52 | 343926 | 14.26 |
| 240-51073-4 | H-US-A-4-1 | 560266 | 10.24 | 459056 | 12.52 | 342372 | 14.27 |
| 240-51073-5 | H-UB-A-1-2 | 519250 | 10.24 | 434540 | 12.52 | 315671 | 14.27 |
| 240-51073-6 | H-UB-A-2-2 | 549509 | 10.24 | 451986 | 12.52 | 332011 | 14.27 |
| 240-51073-7 | H-UB-A-3-2 | 560742 | 10.23 | 456800 | 12.52 | 350111 | 14.26 |
| 240-51073-8 | H-DUP01 | 570346 | 10.23 | 456882 | 12.52 | 357175 | 14.26 |
| 240-51073-8 MS | H-DUP01 MS | 559076 | 10.23 | 483374 | 12.52 | 355931 | 14.27 |
| 240-51073-8 MSD | H-DUP01 MSD | 568712 | 10.23 | 493351 | 12.52 | 380159 | 14.27 |

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51073-1

SDG No.:

Client Sample ID: H-US-A-1-1 | Lab Sample ID: 240-51073-1

Matrix: Solid | Lab File ID: 50526017.D

Analysis Method: 8270D | Date Collected: 05/20/2015 14:08

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 29.83(g) | Date Analyzed: 05/26/2015 14:08

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182251 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.91 | U | 8.0 | 0.91 |
| 208-96-8 | Acenaphthylene | 0.42 | U | 8.0 | 0.42 |
| 120-12-7 | Anthracene | 0.93 | U | 8.0 | 0.93 |
| 56-55-3 | Benzo[a]anthracene | 0.75 | U | 8.0 | 0.75 |
| 50-32-8 | Benzo[a]pyrene | 0.77 | U | 8.0 | 0.77 |
| 205-99-2 | Benzo[b]fluoranthene | 0.71 | U | 8.0 | 0.71 |
| 191-24-2 | Benzo[g,h,i]perylene | 0.42 | U | 8.0 | 0.42 |
| 207-08-9 | Benzo[k]fluoranthene | 0.81 | U | 8.0 | 0.81 |
| 218-01-9 | Chrysene | 1.3 | U | 8.0 | 1.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.79 | U | 8.0 | 0.79 |
| 206-44-0 | Fluoranthene | 0.66 | U | 8.0 | 0.66 |
| 86-73-7 | Fluorene | 0.63 | U | 8.0 | 0.63 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 0.42 | U | 8.0 | 0.42 |
| 91-20-3 | Naphthalene | 0.98 | U | 8.0 | 0.98 |
| 85-01-8 | Phenanthrene | 0.87 | U | 8.0 | 0.87 |
| 129-00-0 | Pyrene | 4.6 | J | 8.0 | 0.53 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 74 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 75 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 70 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 73 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 70 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 66 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51073-1

SDG No.:

Client Sample ID: H-US-A-2-1 | Lab Sample ID: 240-51073-2

Matrix: Solid | Lab File ID: 50526018.D

Analysis Method: 8270D | Date Collected: 05/20/2015 13:45

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 29.58(g) | Date Analyzed: 05/26/2015 14:33

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182251 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.90 | U | 7.9 | 0.90 |
| 208-96-8 | Acenaphthylene | 0.42 | U | 7.9 | 0.42 |
| 120-12-7 | Anthracene | 0.93 | U | 7.9 | 0.93 |
| 56-55-3 | Benzo[a]anthracene | 21 | | 7.9 | 0.75 |
| 50-32-8 | Benzo[a]pyrene | 52 | | 7.9 | 0.76 |
| 205-99-2 | Benzo[b]fluoranthene | 39 | | 7.9 | 0.70 |
| 191-24-2 | Benzo[g,h,i]perylene | 54 | | 7.9 | 0.42 |
| 207-08-9 | Benzo[k]fluoranthene | 33 | | 7.9 | 0.81 |
| 218-01-9 | Chrysene | 35 | | 7.9 | 1.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 12 | | 7.9 | 0.78 |
| 206-44-0 | Fluoranthene | 19 | | 7.9 | 0.65 |
| 86-73-7 | Fluorene | 0.63 | U | 7.9 | 0.63 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 36 | | 7.9 | 0.42 |
| 91-20-3 | Naphthalene | 0.97 | U | 7.9 | 0.97 |
| 85-01-8 | Phenanthrene | 5.2 | J | 7.9 | 0.87 |
| 129-00-0 | Pyrene | 52 | | 7.9 | 0.52 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 74 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 76 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 75 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 75 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 74 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 67 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51073-1

SDG No.:

Client Sample ID: H-US-A-3-1 | Lab Sample ID: 240-51073-3

Matrix: Solid | Lab File ID: 50526019.D

Analysis Method: 8270D | Date Collected: 05/20/2015 13:47

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30.45(g) | Date Analyzed: 05/26/2015 14:58

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 21.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182251 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.95 | U | 8.4 | 0.95 |
| 208-96-8 | Acenaphthylene | 0.44 | U | 8.4 | 0.44 |
| 120-12-7 | Anthracene | 0.98 | U | 8.4 | 0.98 |
| 56-55-3 | Benzo[a]anthracene | 17 | | 8.4 | 0.79 |
| 50-32-8 | Benzo[a]pyrene | 32 | | 8.4 | 0.80 |
| 205-99-2 | Benzo[b]fluoranthene | 33 | | 8.4 | 0.74 |
| 191-24-2 | Benzo[g,h,i]perylene | 34 | | 8.4 | 0.44 |
| 207-08-9 | Benzo[k]fluoranthene | 14 | | 8.4 | 0.85 |
| 218-01-9 | Chrysene | 23 | | 8.4 | 1.4 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.83 | U | 8.4 | 0.83 |
| 206-44-0 | Fluoranthene | 15 | | 8.4 | 0.69 |
| 86-73-7 | Fluorene | 0.66 | U | 8.4 | 0.66 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 22 | | 8.4 | 0.44 |
| 91-20-3 | Naphthalene | 1.0 | U | 8.4 | 1.0 |
| 85-01-8 | Phenanthrene | 7.8 | J | 8.4 | 0.91 |
| 129-00-0 | Pyrene | 39 | | 8.4 | 0.55 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 71 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 69 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 62 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 67 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 65 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 64 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51073-1

SDG No.:

Client Sample ID: H-US-A-4-1 | Lab Sample ID: 240-51073-4

Matrix: Solid | Lab File ID: 50526020.D

Analysis Method: 8270D | Date Collected: 05/20/2015 13:52

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30.21(g) | Date Analyzed: 05/26/2015 15:23

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 18.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182251 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.93 | U | 8.1 | 0.93 |
| 208-96-8 | Acenaphthylene | 0.43 | U | 8.1 | 0.43 |
| 120-12-7 | Anthracene | 0.95 | U | 8.1 | 0.95 |
| 56-55-3 | Benzo[a]anthracene | 22 | | 8.1 | 0.77 |
| 50-32-8 | Benzo[a]pyrene | 34 | | 8.1 | 0.78 |
| 205-99-2 | Benzo[b]fluoranthene | 30 | | 8.1 | 0.72 |
| 191-24-2 | Benzo[g,h,i]perylene | 32 | | 8.1 | 0.43 |
| 207-08-9 | Benzo[k]fluoranthene | 22 | | 8.1 | 0.83 |
| 218-01-9 | Chrysene | 33 | | 8.1 | 1.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.80 | U | 8.1 | 0.80 |
| 206-44-0 | Fluoranthene | 25 | | 8.1 | 0.67 |
| 86-73-7 | Fluorene | 0.65 | U | 8.1 | 0.65 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 23 | | 8.1 | 0.43 |
| 91-20-3 | Naphthalene | 1.0 | U | 8.1 | 1.0 |
| 85-01-8 | Phenanthrene | 12 | | 8.1 | 0.89 |
| 129-00-0 | Pyrene | 58 | | 8.1 | 0.54 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 73 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 73 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 68 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 72 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 69 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 68 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51073-1

SDG No.:

Client Sample ID: H-UB-A-1-2 | Lab Sample ID: 240-51073-5

Matrix: Solid | Lab File ID: 50526021.D

Analysis Method: 8270D | Date Collected: 05/20/2015 14:01

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 29.96(g) | Date Analyzed: 05/26/2015 15:48

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 15.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182251 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.90 | U | 7.9 | 0.90 |
| 208-96-8 | Acenaphthylene | 0.41 | U | 7.9 | 0.41 |
| 120-12-7 | Anthracene | 0.92 | U | 7.9 | 0.92 |
| 56-55-3 | Benzo[a]anthracene | 0.75 | U | 7.9 | 0.75 |
| 50-32-8 | Benzo[a]pyrene | 0.76 | U | 7.9 | 0.76 |
| 205-99-2 | Benzo[b]fluoranthene | 0.70 | U | 7.9 | 0.70 |
| 191-24-2 | Benzo[g,h,i]perylene | 0.41 | U | 7.9 | 0.41 |
| 207-08-9 | Benzo[k]fluoranthene | 0.80 | U | 7.9 | 0.80 |
| 218-01-9 | Chrysene | 1.3 | U | 7.9 | 1.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.78 | U | 7.9 | 0.78 |
| 206-44-0 | Fluoranthene | 4.5 | J | 7.9 | 0.65 |
| 86-73-7 | Fluorene | 0.63 | U | 7.9 | 0.63 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 0.41 | U | 7.9 | 0.41 |
| 91-20-3 | Naphthalene | 0.97 | U | 7.9 | 0.97 |
| 85-01-8 | Phenanthrene | 0.86 | U | 7.9 | 0.86 |
| 129-00-0 | Pyrene | 6.6 | J | 7.9 | 0.52 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 78 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 77 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 75 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 77 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 77 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 73 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51073-1

SDG No.:

Client Sample ID: H-UB-A-2-2 | Lab Sample ID: 240-51073-6

Matrix: Solid | Lab File ID: 50526022.D

Analysis Method: 8270D | Date Collected: 05/20/2015 13:58

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30.09(g) | Date Analyzed: 05/26/2015 16:14

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 16.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182251 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.91 | U | 8.0 | 0.91 |
| 208-96-8 | Acenaphthylene | 0.42 | U | 8.0 | 0.42 |
| 120-12-7 | Anthracene | 0.93 | U | 8.0 | 0.93 |
| 56-55-3 | Benzo[a]anthracene | 0.75 | U | 8.0 | 0.75 |
| 50-32-8 | Benzo[a]pyrene | 0.77 | U | 8.0 | 0.77 |
| 205-99-2 | Benzo[b]fluoranthene | 0.71 | U | 8.0 | 0.71 |
| 191-24-2 | Benzo[g,h,i]perylene | 0.42 | U | 8.0 | 0.42 |
| 207-08-9 | Benzo[k]fluoranthene | 0.81 | U | 8.0 | 0.81 |
| 218-01-9 | Chrysene | 1.3 | U | 8.0 | 1.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.79 | U | 8.0 | 0.79 |
| 206-44-0 | Fluoranthene | 0.66 | U | 8.0 | 0.66 |
| 86-73-7 | Fluorene | 0.63 | U | 8.0 | 0.63 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 0.42 | U | 8.0 | 0.42 |
| 91-20-3 | Naphthalene | 0.98 | U | 8.0 | 0.98 |
| 85-01-8 | Phenanthrene | 0.87 | U | 8.0 | 0.87 |
| 129-00-0 | Pyrene | 0.53 | U | 8.0 | 0.53 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 76 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 65 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 61 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 64 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 63 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 68 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51073-1

SDG No.:

Client Sample ID: H-UB-A-3-2 | Lab Sample ID: 240-51073-7

Matrix: Solid | Lab File ID: 50526023.D

Analysis Method: 8270D | Date Collected: 05/20/2015 13:56

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 29.67(g) | Date Analyzed: 05/26/2015 16:39

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 17.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182251 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.93 | U | 8.2 | 0.93 |
| 208-96-8 | Acenaphthylene | 0.43 | U | 8.2 | 0.43 |
| 120-12-7 | Anthracene | 14 | | 8.2 | 0.95 |
| 56-55-3 | Benzo[a]anthracene | 60 | | 8.2 | 0.77 |
| 50-32-8 | Benzo[a]pyrene | 55 | | 8.2 | 0.78 |
| 205-99-2 | Benzo[b]fluoranthene | 66 | | 8.2 | 0.72 |
| 191-24-2 | Benzo[g,h,i]perylene | 48 | | 8.2 | 0.43 |
| 207-08-9 | Benzo[k]fluoranthene | 22 | | 8.2 | 0.83 |
| 218-01-9 | Chrysene | 75 | | 8.2 | 1.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 11 | | 8.2 | 0.81 |
| 206-44-0 | Fluoranthene | 110 | | 8.2 | 0.67 |
| 86-73-7 | Fluorene | 0.65 | U | 8.2 | 0.65 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 36 | | 8.2 | 0.43 |
| 91-20-3 | Naphthalene | 1.0 | U | 8.2 | 1.0 |
| 85-01-8 | Phenanthrene | 110 | | 8.2 | 0.89 |
| 129-00-0 | Pyrene | 160 | | 8.2 | 0.54 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 74 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 70 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 67 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 69 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 68 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 69 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51073-1

SDG No.:

Client Sample ID: H-DUP01 | Lab Sample ID: 240-51073-8

Matrix: Solid | Lab File ID: 50526024.D

Analysis Method: 8270D | Date Collected: 05/20/2015 00:00

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 29.93(g) | Date Analyzed: 05/26/2015 17:04

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182251 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.89 | U | 7.8 | 0.89 |
| 208-96-8 | Acenaphthylene | 4.9 | J | 7.8 | 0.41 |
| 120-12-7 | Anthracene | 10 | | 7.8 | 0.92 |
| 56-55-3 | Benzo[a]anthracene | 57 | | 7.8 | 0.74 |
| 50-32-8 | Benzo[a]pyrene | 120 | | 7.8 | 0.75 |
| 205-99-2 | Benzo[b]fluoranthene | 93 | | 7.8 | 0.69 |
| 191-24-2 | Benzo[g,h,i]perylene | 130 | | 7.8 | 0.41 |
| 207-08-9 | Benzo[k]fluoranthene | 70 | | 7.8 | 0.80 |
| 218-01-9 | Chrysene | 76 | | 7.8 | 1.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 22 | | 7.8 | 0.78 |
| 206-44-0 | Fluoranthene | 55 | | 7.8 | 0.65 |
| 86-73-7 | Fluorene | 0.62 | U | 7.8 | 0.62 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 89 | | 7.8 | 0.41 |
| 91-20-3 | Naphthalene | 0.96 | U | 7.8 | 0.96 |
| 85-01-8 | Phenanthrene | 20 | | 7.8 | 0.86 |
| 129-00-0 | Pyrene | 140 | | 7.8 | 0.52 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 76 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 73 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 65 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 71 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 66 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 68 | | 19-110 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-51073-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-181541/6 | 50519006.D |
| Level 2 | STD2 240-181541/5 | 50519005.D |
| Level 3 | STD3 240-181541/4 | 50519004.D |
| Level 4 | STD4 240-181541/3 | 50519003.D |
| Level 5 | STD5 240-181541/2 | 50519002.D |
| Level 6 | STD6 240-181541/10 | 50519010.D |
| Level 7 | STD7 240-181541/9 | 50519009.D |
| Level 8 | STD8 240-181541/8 | 50519008.D |
| Level 9 | STD9 240-181541/7 | 50519007.D |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 1,4-Dioxane | 0.9036 | 0.8928<br>0.9199 | 0.8324<br>0.8887 | 0.9650<br>0.9115 | 0.9191 | Ave | | 0.9041 | | | | 4.1 | | 20.0 | | | |
| N-Nitrosodimethylamine | 1.3840 | 1.4220<br>1.3760 | 1.4073<br>1.3564 | 1.4484<br>1.3802 | 1.3973 | Ave | | 1.3964 | | | | 2.1 | | 20.0 | | | |
| Pyridine | 2.4156 | 2.3195<br>2.4350 | 2.4287<br>2.3192 | 2.5699<br>2.4261 | 2.4265 | Ave | | 2.4176 | | | | 3.2 | | 20.0 | | | |
| Benzaldehyde | 1.3314 | 1.6346<br>1.3131 | 1.6235<br>1.2017 | 1.6280<br>1.1863 | 1.5252 | Ave | | 1.4305 | | | 0.0100 | 13.5 | | 20.0 | | | |
| Phenol | 2.5022 | 2.7530<br>2.4310 | 2.7433<br>2.2478 | 2.7828<br>2.2989 | 2.6477 | Ave | | 2.5508 | | | 0.8000 | 8.3 | | 20.0 | | | |
| Aniline | 3.0790 | 3.2327<br>3.0110 | 3.3080<br>2.8381 | 3.3576<br>2.8828 | 3.2156 | Ave | | 3.1156 | | | | 6.2 | | 20.0 | | | |
| Bis(2-chloroethyl)ether | 1.9859 | 2.0888<br>1.9600 | 2.1211<br>1.7796 | 2.1194<br>1.9018 | 2.1170 | Ave | | 2.0092 | | | 0.7000 | 6.2 | | 20.0 | | | |
| 2-Chlorophenol | 1.6102 | 1.6039<br>1.5763 | 1.5825<br>1.5172 | 1.6330<br>1.5318 | 1.5937 | Ave | | 1.5811 | | | 0.8000 | 2.5 | | 20.0 | | | |
| n-Decane | 2.2518 | 2.3524<br>2.1845 | 2.5161<br>2.0576 | 2.4989<br>2.0953 | 2.4429 | Ave | | 2.2999 | | | | 7.8 | | 20.0 | | | |
| 1,3-Dichlorobenzene | 1.5793 | 1.6288<br>1.5334 | 1.5848<br>1.4552 | 1.6181<br>1.4677 | 1.4935 | Ave | | 1.5451 | | | | 4.4 | | 20.0 | | | |
| 1,4-Dichlorobenzene | 1.6150 | 1.6152<br>1.5546 | 1.6713<br>1.4626 | 1.5829<br>1.4532 | 1.5449 | Ave | | 1.5625 | | | | 4.8 | | 20.0 | | | |
| Benzyl alcohol | 1.2761 | 1.3455<br>1.2479 | 1.3302<br>1.1704 | 1.3619<br>1.2002 | 1.3141 | Ave | | 1.2808 | | | | 5.4 | | 20.0 | | | |
| 1,2-Dichlorobenzene | 1.5319 | 1.5668<br>1.4836 | 1.5407<br>1.3886 | 1.5085<br>1.4134 | 1.4592 | Ave | | 1.4866 | | | | 4.2 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-51073-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 2-Methylphenol | 1.7458 | 1.7985<br>1.6873 | 1.8540<br>1.5902 | 1.8102<br>1.6212 | 1.7989 | Ave | | 1.7383 | | | 0.7000 | 5.5 | | 20.0 | | | |
| bis (2-chloroisopropyl) ether | 2.5928 | 2.7533<br>2.5252 | 2.7073<br>2.3984 | 2.7657<br>2.4662 | 2.6843 | Ave | | 2.6116 | | | | 5.3 | | 20.0 | | | |
| Indene | 2.6567 | 3.0391<br>2.4352 | 3.1252<br>2.1916 | 3.0650<br>2.1183 | 2.9077 | Ave | | 2.6923 | | | | 15.0 | | 20.0 | | | |
| 3 & 4 Methylphenol | 1.8303 | 1.9404<br>1.7500 | 1.9416<br>1.6587 | 1.9620<br>1.6856 | 1.9169 | Ave | | 1.8357 | | | | 6.7 | | 20.0 | | | |
| N-Nitrosodi-n-propylamine | 1.2154 | 1.2671<br>1.1450 | 1.2644<br>1.0825 | 1.3130<br>1.0829 | 1.2542 | Ave | | 1.2030 | | | 0.5000 | 7.4 | | 20.0 | | | |
| Acetophenone | 2.2686 | 2.3538<br>2.1825 | 2.4932<br>2.0194 | 2.4745<br>2.0669 | 2.3478 | Ave | | 2.2758 | | | 0.0100 | 7.7 | | 20.0 | | | |
| Hexachloroethane | 0.6336 | 0.6684<br>0.6179 | 0.6870<br>0.5949 | 0.6524<br>0.5925 | 0.6486 | Ave | | 0.6369 | | | 0.3000 | 5.3 | | 20.0 | | | |
| Nitrobenzene | 0.4296 | 0.4264<br>0.4270 | 0.4305<br>0.4064 | 0.4449<br>0.4102 | 0.4370 | Ave | | 0.4265 | | | 0.2000 | 3.0 | | 20.0 | | | |
| Isophorone | 0.7863 | 0.8375<br>0.7683 | 0.8705<br>0.7334 | 0.8591<br>0.7293 | 0.8117 | Ave | | 0.7995 | | | 0.4000 | 6.8 | | 20.0 | | | |
| 2-Nitrophenol | 0.1732 | 0.1664<br>0.1728 | 0.1718<br>0.1641 | 0.1859<br>0.1627 | 0.1752 | Ave | | 0.1715 | | | 0.1000 | 4.3 | | 20.0 | | | |
| 2,4-Dimethylphenol | 0.3598 | 0.3852<br>0.3438 | 0.4059<br>0.3308 | 0.3870<br>0.3203 | 0.3711 | Ave | | 0.3630 | | | 0.2000 | 8.2 | | 20.0 | | | |
| Benzoic acid | 0.2103 | 0.1495<br>0.2207 | 0.1964<br>0.2204 | 0.1907<br>0.2163 | 0.2013 | Ave | | 0.2007 | | | | 11.7 | | 20.0 | | | |
| Bis(2-chloroethoxy)methane | 0.5112 | 0.5409<br>0.5001 | 0.5675<br>0.4695 | 0.5522<br>0.4600 | 0.5399 | Ave | | 0.5177 | | | 0.3000 | 7.6 | | 20.0 | | | |
| 2,4-Dichlorophenol | 0.2542 | 0.2640<br>0.2496 | 0.2560<br>0.2413 | 0.2518<br>0.2383 | 0.2394 | Ave | | 0.2493 | | | 0.2000 | 3.6 | | 20.0 | | | |
| 1,2,4-Trichlorobenzene | 0.2549 | 0.2671<br>0.2557 | 0.2655<br>0.2428 | 0.2636<br>0.2396 | 0.2490 | Ave | | 0.2548 | | | | 4.1 | | 20.0 | | | |
| Naphthalene | 1.1358<br>1.0409 | 1.1284<br>1.0070 | 1.1222<br>0.9560 | 1.1041<br>0.9365 | 1.0713 | Ave | | 1.0558 | | | 0.7000 | 7.1 | | 20.0 | | | |
| 4-Chloroaniline | 0.4749 | 0.5185<br>0.4672 | 0.4881<br>0.4585 | 0.5067<br>0.4557 | 0.4992 | Ave | | 0.4836 | | | 0.0100 | 4.8 | | 20.0 | | | |
| 2,6-Dichlorophenol | 0.2472 | 0.2422<br>0.2398 | 0.2496<br>0.2293 | 0.2501<br>0.2261 | 0.2377 | Ave | | 0.2403 | | | | 3.7 | | 20.0 | | | |
| Hexachlorobutadiene | 0.1070 | 0.1075<br>0.1076 | 0.1082<br>0.1036 | 0.1092<br>0.1013 | 0.0993 | Ave | | 0.1055 | | | 0.0100 | 3.4 | | 20.0 | | | |
| Caprolactam | 0.1184 | 0.1302<br>0.1163 | 0.1310<br>0.1125 | 0.1279<br>0.1124 | 0.1164 | Ave | | 0.1206 | | | 0.0100 | 6.5 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-51073-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 4-Chloro-3-methylphenol | 0.3214 | 0.3328<br>0.3118 | 0.3465<br>0.3033 | 0.3324<br>0.2950 | 0.3200 | Ave | | 0.3204 | | | 0.2000 | 5.3 | | 20.0 | | | |
| 2-Methylnaphthalene | 0.7233<br>0.6402 | 0.6767<br>0.6190 | 0.6730<br>0.5793 | 0.6751<br>0.5649 | 0.6401 | Ave | | 0.6435 | | | 0.4000 | 7.8 | | 20.0 | | | |
| 1-Methylnaphthalene | 0.6059<br>0.5584 | 0.5979<br>0.5464 | 0.5830<br>0.5099 | 0.5827<br>0.5075 | 0.5426 | Ave | | 0.5594 | | | | 6.4 | | 20.0 | | | |
| Hexachlorocyclopentadiene | 0.2216 | 0.2241<br>0.2307 | 0.2508<br>0.2286 | 0.2359<br>0.2264 | 0.2502 | Ave | | 0.2335 | | | 0.0500 | 4.8 | | 20.0 | | | |
| 1,2,4,5-Tetrachlorobenzene | 0.3963 | 0.4546<br>0.3863 | 0.4169<br>0.3634 | 0.4243<br>0.3490 | 0.4192 | Ave | | 0.4013 | | | 0.0100 | 8.6 | | 20.0 | | | |
| 2,4,6-Trichlorophenol | 0.3265 | 0.3096<br>0.3311 | 0.3365<br>0.3208 | 0.3436<br>0.3207 | 0.3317 | Ave | | 0.3276 | | | 0.2000 | 3.2 | | 20.0 | | | |
| 2,4,5-Trichlorophenol | 0.3560 | 0.3399<br>0.3488 | 0.3513<br>0.3324 | 0.3468<br>0.3230 | 0.3420 | Ave | | 0.3425 | | | 0.2000 | 3.1 | | 20.0 | | | |
| 1,1'-Biphenyl | 1.7463<br>1.4825 | 1.6365<br>1.4570 | 1.5991<br>1.3745 | 1.5708<br>1.3364 | 1.5473 | Ave | | 1.5278 | | | 0.0100 | 8.5 | | 20.0 | | | |
| 2-Chloronaphthalene | 1.2365<br>1.1097 | 1.1402<br>1.1016 | 1.2332<br>1.0431 | 1.1387<br>1.0210 | 1.1211 | Ave | | 1.1272 | | | 0.8000 | 6.5 | | 20.0 | | | |
| 2-Nitroaniline | 0.4421 | 0.4124<br>0.4584 | 0.4345<br>0.4381 | 0.4516<br>0.4457 | 0.4681 | Ave | | 0.4439 | | | 0.0100 | 3.8 | | 20.0 | | | |
| Dimethyl phthalate | 1.1745 | 1.1490<br>1.1432 | 1.2182<br>1.1175 | 1.1562<br>1.0826 | 1.1538 | Ave | | 1.1494 | | | 0.0100 | 3.4 | | 20.0 | | | |
| 1,3-Dinitrobenzene | 0.1968 | 0.1478<br>0.2062 | 0.1623<br>0.2044 | 0.1647<br>0.2042 | 0.1941 | Ave | | 0.1850 | | | | 12.5 | | 20.0 | | | |
| 2,6-Dinitrotoluene | 0.2742 | 0.2092<br>0.2852 | 0.2436<br>0.2710 | 0.2598<br>0.2746 | 0.2579 | Ave | | 0.2594 | | | | 9.2 | | 20.0 | | | |
| Acenaphthylene | 2.2036<br>1.9316 | 1.9932<br>1.8871 | 2.0495<br>1.7960 | 2.0489<br>1.7326 | 1.9536 | Ave | | 1.9551 | | | 0.9000 | 7.3 | | 20.0 | | | |
| 3-Nitroaniline | 0.4033 | 0.3358<br>0.3840 | 0.3728<br>0.3835 | 0.3908<br>0.3771 | 0.4056 | Ave | | 0.3816 | | | 0.0100 | 5.7 | | 20.0 | | | |
| 2,4-Dinitrophenol | 0.1219 | +++++<br>0.1349 | 0.0974<br>0.1327 | 0.1164<br>0.1396 | 0.1369 | Ave | | 0.1257 | | | 0.0100 | 12.0 | | 20.0 | | | |
| Acenaphthene | 1.2564<br>1.0877 | 1.2219<br>1.0411 | 1.2389<br>0.9640 | 1.2025<br>0.9262 | 1.1687 | Ave | | 1.1230 | | | 0.9000 | 11.0 | | 20.0 | | | |
| 4-Nitrophenol | 0.1155 | 0.1082<br>0.1234 | 0.1244<br>0.1205 | 0.1212<br>0.1212 | 0.1134 | Ave | | 0.1185 | | | | 4.7 | | 20.0 | | | |
| 2,4-Dinitrotoluene | 0.3374 | 0.2591<br>0.3380 | 0.2946<br>0.3362 | 0.3348<br>0.3348 | 0.3468 | Ave | | 0.3227 | | | 0.2000 | 9.3 | | 20.0 | | | |
| Dibenzofuran | 1.6225<br>1.5238 | 1.5869<br>1.4750 | 1.6226<br>1.4183 | 1.5489<br>1.3750 | 1.5322 | Ave | | 1.5228 | | | 0.8000 | 5.7 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-51073-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 2,3,4,6-Tetrachlorophenol | 0.2548 | 0.2550<br>0.2396 | 0.2541<br>0.2265 | 0.2521<br>0.2240 | 0.2502 | Ave | | 0.2445 | | | 0.0100 | 5.3 | | 20.0 | | | |
| Diethyl phthalate | 1.0858 | 1.2661<br>0.9999 | 1.2427<br>0.9391 | 1.2336<br>0.8897 | 1.2021 | Ave | | 1.1074 | | | 0.0100 | 13.5 | | 20.0 | | | |
| Hexadecane | 1.1899 | 1.3496<br>1.1218 | 1.4099<br>1.0574 | 1.3645<br>0.9964 | 1.3829 | Ave | | 1.2340 | | | | 13.2 | | 20.0 | | | |
| 4-Chlorophenyl phenyl ether | 0.4950 | 0.5189<br>0.4832 | 0.5273<br>0.4763 | 0.5167<br>0.4712 | 0.4965 | Ave | | 0.4981 | | | 0.4000 | 4.2 | | 20.0 | | | |
| 4-Nitroaniline | 0.3223 | 0.2997<br>0.3357 | 0.3206<br>0.3399 | 0.3524<br>0.3501 | 0.3161 | Ave | | 0.3296 | | | 0.0100 | 5.5 | | 20.0 | | | |
| Fluorene | 1.3603<br>1.2307 | 1.3053<br>1.1820 | 1.3090<br>1.1120 | 1.2895<br>1.0811 | 1.2603 | Ave | | 1.2367 | | | 0.9000 | 7.6 | | 20.0 | | | |
| 4,6-Dinitro-2-methylphenol | 0.0984 | 0.0678<br>0.1050 | 0.0739<br>0.1042 | 0.0911<br>0.1067 | 0.0927 | Ave | | 0.0925 | | | 0.0100 | 15.8 | | 20.0 | | | |
| N-Nitrosodiphenylamine | 0.5929 | 0.5565<br>0.5505 | 0.5758<br>0.4914 | 0.5686<br>0.4590 | 0.5626 | Ave | | 0.5447 | | | 0.0100 | 8.4 | | 20.0 | | | |
| 1,2-Diphenylhydrazine(as Azobenzene) | 1.2529 | 1.1553<br>1.2311 | 1.2129<br>1.1588 | 1.2156<br>1.1213 | 1.1833 | Ave | | 1.1927 | | | | 3.6 | | 20.0 | | | |
| Azobenzene | 1.2527 | 1.1659<br>1.2317 | 1.2129<br>1.1588 | 1.2147<br>1.1212 | 1.1833 | Ave | | 1.1927 | | | | 3.6 | | 20.0 | | | |
| 4-Bromophenyl phenyl ether | 0.1772 | 0.1583<br>0.1782 | 0.1657<br>0.1699 | 0.1658<br>0.1630 | 0.1613 | Ave | | 0.1674 | | | 0.1000 | 4.3 | | 20.0 | | | |
| Hexachlorobenzene | 0.1529<br>0.1603 | 0.1501<br>0.1494 | 0.1603<br>0.1357 | 0.1608<br>0.1301 | 0.1557 | Ave | | 0.1506 | | | 0.1000 | 7.3 | | 20.0 | | | |
| Atrazine | 0.1588 | 0.1604<br>0.1472 | 0.1712<br>0.1342 | 0.1540<br>0.1164 | 0.1438 | Ave | | 0.1482 | | | 0.0100 | 11.6 | | 20.0 | | | |
| n-Octadecane | 0.8877 | 0.8851<br>0.8514 | 0.8994<br>0.7725 | 0.9206<br>0.7128 | 0.8966 | Ave | | 0.8533 | | | | 8.5 | | 20.0 | | | |
| Pentachlorophenol | 0.1142 | 0.1095<br>0.1126 | 0.1056<br>0.1061 | 0.1097<br>0.1022 | 0.1136 | Ave | | 0.1092 | | | 0.0500 | 3.9 | | 20.0 | | | |
| Phenanthrene | 1.2206<br>1.1473 | 1.1676<br>1.1478 | 1.2082<br>1.0741 | 1.1826<br>1.0403 | 1.1163 | Ave | | 1.1450 | | | 0.7000 | 5.2 | | 20.0 | | | |
| Anthracene | 1.2450<br>1.1757 | 1.1627<br>1.1507 | 1.2312<br>1.0832 | 1.1891<br>1.0585 | 1.1380 | Ave | | 1.1593 | | | 0.7000 | 5.3 | | 20.0 | | | |
| Carbazole | 1.0866 | 1.0467<br>1.0982 | 1.1042<br>1.0483 | 1.0332<br>1.0327 | 0.9151 | Ave | | 1.0456 | | | 0.0100 | 5.7 | | 20.0 | | | |
| Di-n-butyl phthalate | 1.3842 | 1.2629<br>1.3583 | 1.2162<br>1.2956 | 1.0608<br>1.1522 | 1.1007 | Ave | | 1.2289 | | | 0.0100 | 9.6 | | 20.0 | | | |
| Fluoranthene | 1.0702<br>1.0739 | 1.0007<br>1.0617 | 1.0330<br>1.0156 | 0.8851<br>0.9374 | 0.8646 | Ave | | 0.9936 | | | 0.6000 | 8.0 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton  Job No.: 240-51073-1  Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9  GC Column: RXI-5SILMS  ID: 0.45(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13  Calibration End Date: 05/19/2015 19:33  Calibration ID: 28569

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Benzidine | 0.7195 | 0.4659<br>0.8060 | 0.4950<br>0.7453 | 0.6094<br>0.7274 | 0.7127 | Ave | | 0.6601 | | | | 18.7 | | 20.0 | | | |
| Pyrene | 1.4882<br>1.2107 | 1.2287<br>1.2563 | 1.3146<br>1.1256 | 1.1401<br>1.0285 | 1.1193 | Ave | | 1.2124 | | | 0.6000 | 11.1 | | 20.0 | | | |
| Butyl benzyl phthalate | 0.6661 | 0.6545<br>0.6868 | 0.6812<br>0.6470 | 0.6955<br>0.6373 | 0.6186 | Ave | | 0.6609 | | | 0.0100 | 4.0 | | 20.0 | | | |
| Bis(2-ethylhexyl) phthalate | 0.9305 | 0.9509<br>0.9522 | 0.9286<br>0.9041 | 0.9172<br>0.9073 | 0.9026 | Ave | | 0.9242 | | | 0.0100 | 2.2 | | 20.0 | | | |
| 3,3'-Dichlorobenzidine | 0.3488 | 0.3083<br>0.3654 | 0.3422<br>0.3431 | 0.3653<br>0.3370 | 0.3698 | Ave | | 0.3475 | | | 0.0100 | 5.8 | | 20.0 | | | |
| Benzo[a]anthracene | 1.2551<br>1.1113 | 1.1370<br>1.1451 | 1.1777<br>1.0796 | 1.1398<br>1.0556 | 1.0686 | Ave | | 1.1300 | | | 0.8000 | 5.5 | | 20.0 | | | |
| Chrysene | 1.0753<br>1.0452 | 1.0299<br>1.0516 | 1.0378<br>0.9927 | 1.0326<br>0.9852 | 1.0017 | Ave | | 1.0280 | | | 0.7000 | 2.9 | | 20.0 | | | |
| Di-n-octyl phthalate | 2.2096 | 1.8812<br>2.1308 | 2.1822<br>2.1487 | 2.1616<br>2.0895 | 2.0486 | Ave | | 2.1065 | | | 0.0100 | 5.0 | | 20.0 | | | |
| Benzo[b]fluoranthene | 1.1716<br>1.3043 | 1.0938<br>1.3098 | 1.2233<br>1.2855 | 1.2408<br>1.2473 | 1.2292 | Ave | | 1.2340 | | | 0.7000 | 5.5 | | 20.0 | | | |
| Benzo[k]fluoranthene | 1.3447<br>1.3450 | 1.0891<br>1.2602 | 1.2965<br>1.2712 | 1.2618<br>1.2671 | 1.1933 | Ave | | 1.2588 | | | 0.7000 | 6.3 | | 20.0 | | | |
| Benzo[a]pyrene | 1.1341<br>1.2615 | 1.0802<br>1.2211 | 1.1676<br>1.2351 | 1.1626<br>1.2207 | 1.1516 | Ave | | 1.1816 | | | 0.7000 | 4.9 | | 20.0 | | | |
| Indeno[1,2,3-cd]pyrene | 1.1222<br>1.1388 | 0.9885<br>1.1466 | 1.0897<br>1.1432 | 1.0972<br>1.1276 | 1.0655 | Ave | | 1.1021 | | | 0.5000 | 4.6 | | 20.0 | | | |
| Dibenz(a,h)anthracene | 1.0227<br>0.9494 | 0.7889<br>0.9548 | 0.8965<br>0.9576 | 0.9116<br>0.9557 | 0.9059 | Ave | | 0.9270 | | | 0.4000 | 6.9 | | 20.0 | | | |
| Benzo[g,h,i]perylene | 1.1182<br>0.9082 | 0.8289<br>0.8934 | 0.9433<br>0.8861 | 0.9553<br>0.8782 | 0.8637 | Ave | | 0.9195 | | | 0.5000 | 9.1 | | 20.0 | | | |
| 2-Fluorophenol (Surr) | 1.7624 | 1.7144<br>1.7032 | 1.7922<br>1.6394 | 1.7839<br>1.6830 | 1.7510 | Ave | | 1.7287 | | | | 3.1 | | 20.0 | | | |
| Phenol-d5 (Surr) | 2.3175 | 2.3936<br>2.2539 | 2.4917<br>2.1240 | 2.5025<br>2.1564 | 2.4400 | Ave | | 2.3350 | | | | 6.3 | | 20.0 | | | |
| Nitrobenzene-d5 (Surr) | 0.4194<br>0.4105 | 0.4011<br>0.4031 | 0.4413<br>0.3867 | 0.4218<br>0.3889 | 0.4149 | Ave | | 0.4097 | | | | 4.2 | | 20.0 | | | |
| 2-Fluorobiphenyl (Surr) | 1.1333<br>1.1325 | 1.1972<br>1.1268 | 1.2161<br>1.0714 | 1.1833<br>1.0516 | 1.1526 | Ave | | 1.1405 | | | | 4.8 | | 20.0 | | | |
| 2,4,6-Tribromophenol (Surr) | 0.1077 | 0.0909<br>0.1008 | 0.1214<br>0.0976 | 0.1106<br>0.0987 | 0.1117 | Ave | | 0.1049 | | | | 9.3 | | 20.0 | | | |
| Terphenyl-d14 (Surr) | 0.8804<br>0.7315 | 0.7776<br>0.7627 | 0.8097<br>0.7196 | 0.7828<br>0.7025 | 0.7419 | Ave | | 0.7676 | | | | 7.0 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-51073-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-181541/6 | 50519006.D |
| Level 2 | STD2 240-181541/5 | 50519005.D |
| Level 3 | STD3 240-181541/4 | 50519004.D |
| Level 4 | STD4 240-181541/3 | 50519003.D |
| Level 5 | STD5 240-181541/2 | 50519002.D |
| Level 6 | STD6 240-181541/10 | 50519010.D |
| Level 7 | STD7 240-181541/9 | 50519009.D |
| Level 8 | STD8 240-181541/8 | 50519008.D |
| Level 9 | STD9 240-181541/7 | 50519007.D |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 1,4-Dioxane | DCB | Ave | 437349 | 25364<br>678748 | 44490<br>875415 | 94888<br>1071779 | 204428 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| N-Nitrosodimethylamine | DCB | Ave | 669858 | 40397<br>1015299 | 75213<br>1336166 | 142419<br>1622853 | 310805 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Pyridine | DCB | Ave | 1169135 | 65894<br>1796760 | 129804<br>2284580 | 252683<br>2852686 | 539720 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzaldehyde | DCB | Ave | 1288765 | 92873<br>1937862 | 173546<br>2367472 | 320146<br>2789876 | 678500 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Phenol | DCB | Ave | 1211072 | 78210<br>1793803 | 146621<br>2214218 | 273616<br>2703136 | 588905 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Aniline | DCB | Ave | 1490234 | 91835<br>2221782 | 176801<br>2795756 | 330134<br>3389742 | 715240 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Bis(2-chloroethyl)ether | DCB | Ave | 961174 | 59339<br>1446236 | 113368<br>1753057 | 208390<br>2236160 | 470877 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Chlorophenol | DCB | Ave | 779327 | 45563<br>1163143 | 84578<br>1494525 | 160561<br>1801164 | 354483 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| n-Decane | DCB | Ave | 1089874 | 66829<br>1611919 | 134475<br>2026918 | 245704<br>2463707 | 543351 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,3-Dichlorobenzene | DCB | Ave | 764399 | 46273<br>1131497 | 84704<br>1433496 | 159098<br>1725766 | 332181 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,4-Dichlorobenzene | DCB | Ave | 781643 | 45886<br>1147110 | 89326<br>1440764 | 155636<br>1708760 | 343627 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzyl alcohol | DCB | Ave | 617657 | 38224<br>920785 | 71097<br>1152906 | 133907<br>1411267 | 292290 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,2-Dichlorobenzene | DCB | Ave | 741420 | 44510<br>1094726 | 82346<br>1367873 | 148325<br>1661946 | 324559 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Methylphenol | DCB | Ave | 844971 | 51093<br>1245014 | 99088<br>1566475 | 177989<br>1906240 | 400110 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-51073-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| bis (2-chloroisopropyl) ether | DCB | Ave | 1254906 | 78218<br>1863294 | 144698<br>2362564 | 271936<br>2899809 | 597059 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Indene | DCB | Ave | 2571685 | 172671<br>3593725 | 334061<br>4317768 | 602742<br>4981628 | 1293487 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| 3 & 4 Methylphenol | DCB | Ave | 885883 | 55124<br>1291298 | 103773<br>1633917 | 192913<br>1981943 | 426360 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| N-Nitrosodi-n-propylamine | DCB | Ave | 588267 | 35995<br>844874 | 67577<br>1066310 | 129098<br>1273279 | 278969 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Acetophenone | DCB | Ave | 1098028 | 66868<br>1610414 | 133252<br>1989235 | 243307<br>2430314 | 522214 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexachloroethane | DCB | Ave | 306655 | 18988<br>455911 | 36720<br>586054 | 64152<br>696636 | 144274 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Nitrobenzene | NPT | Ave | 881849 | 51212<br>1311835 | 95445<br>1641533 | 186218<br>2033115 | 414662 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Isophorone | NPT | Ave | 1613983 | 100598<br>2360460 | 193006<br>2962105 | 359605<br>3614192 | 770147 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Nitrophenol | NPT | Ave | 355489 | 19987<br>530972 | 38093<br>662613 | 77803<br>806348 | 166221 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4-Dimethylphenol | NPT | Ave | 738605 | 46270<br>1056425 | 90003<br>1335910 | 161993<br>1587377 | 352124 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzoic acid | NPT | Ave | 863566 | 35924<br>1356259 | 87082<br>1780038 | 159687<br>2143463 | 381956 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Bis(2-chloroethoxy)methane | NPT | Ave | 1049423 | 64968<br>1536607 | 125830<br>1896177 | 231164<br>2279697 | 512274 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4-Dichlorophenol | NPT | Ave | 521888 | 31714<br>767012 | 56758<br>974522 | 105402<br>1181230 | 227101 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,2,4-Trichlorobenzene | NPT | Ave | 523332 | 32082<br>785634 | 58869<br>980805 | 110342<br>1187259 | 236219 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Naphthalene | NPT | Ave | 26175<br>2136740 | 135538<br>3093857 | 248799<br>3860979 | 462181<br>4641347 | 1016506 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4-Chloroaniline | NPT | Ave | 974799 | 62283<br>1435601 | 108219<br>1851876 | 212116<br>2258200 | 473689 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,6-Dichlorophenol | NPT | Ave | 507422 | 29093<br>736882 | 55344<br>926144 | 104704<br>1120596 | 225522 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexachlorobutadiene | NPT | Ave | 219736 | 12907<br>330747 | 23984<br>418372 | 45722<br>502094 | 94180 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Caprolactam | NPT | Ave | 485955 | 31284<br>714615 | 58108<br>908745 | 107044<br>1114386 | 220881 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| 4-Chloro-3-methylphenol | NPT | Ave | 659774 | 39974<br>957931 | 76821<br>1224897 | 139154<br>1461983 | 303610 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Methylnaphthalene | NPT | Ave | 16668<br>1314168 | 81278<br>1901792 | 149220<br>2339575 | 282595<br>2799718 | 607347 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-51073-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 1-Methylnaphthalene | NPT | Ave | 13963<br>1146338 | 71814<br>1678815 | 129268<br>2059588 | 243897<br>2515213 | 514799 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexachlorocyclopentadiene | ANT | Ave | <br>212762 | 12378<br>325359 | 25499<br>423785 | 45693<br>513405 | 105131 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,2,4,5-Tetrachlorobenzene | ANT | Ave | <br>380570 | 25110<br>544673 | 42396<br>673702 | 82170<br>791502 | 176143 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4,6-Trichlorophenol | ANT | Ave | <br>313555 | 17101<br>466876 | 34212<br>594742 | 66538<br>727392 | 139400 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4,5-Trichlorophenol | ANT | Ave | <br>341863 | 18774<br>491813 | 35718<br>616169 | 67151<br>732446 | 143689 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,1'-Biphenyl | ANT | Ave | 18690<br>1423587 | 90391<br>2054434 | 162604<br>2547893 | 304189<br>3030624 | 650189 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Chloronaphthalene | ANT | Ave | 13234<br>1065581 | 62981<br>1553379 | 125393<br>1933553 | 220516<br>2315459 | 471083 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Nitroaniline | ANT | Ave | <br>424554 | 22782<br>646434 | 44185<br>812162 | 87460<br>1010730 | 196699 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Dimethyl phthalate | ANT | Ave | <br>1127807 | 63464<br>1612061 | 123874<br>2071500 | 223899<br>2455040 | 484839 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,3-Dinitrobenzene | ANT | Ave | <br>188957 | 8162<br>290742 | 16504<br>378878 | 31887<br>463022 | 81563 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,6-Dinitrotoluene | ANT | Ave | <br>263284 | 11553<br>402112 | 24768<br>502298 | 50315<br>622795 | 108364 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Acenaphthylene | ANT | Ave | 23584<br>1854837 | 110097<br>2660914 | 208398<br>3329215 | 396781<br>3929079 | 820907 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 3-Nitroaniline | ANT | Ave | <br>387312 | 18551<br>541482 | 37904<br>710843 | 75673<br>855276 | 170449 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4-Dinitrophenol | ANT | Ave | <br>234052 | +++++<br>380406 | 19800<br>491793 | 45069<br>633352 | 115054 | <br>20.0 | +++++<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Acenaphthene | ANT | Ave | 13447<br>1044451 | 67492<br>1467981 | 125974<br>1786900 | 232880<br>2100351 | 491073 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4-Nitrophenol | ANT | Ave | <br>221858 | 11950<br>347906 | 25305<br>446826 | 46954<br>549567 | 95320 | <br>20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| 2,4-Dinitrotoluene | ANT | Ave | <br>323966 | 14309<br>476601 | 29955<br>623273 | 64835<br>759144 | 145743 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Dibenzofuran | ANT | Ave | 17365<br>1463274 | 87656<br>2079939 | 164987<br>2629085 | 299961<br>3118196 | 643835 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,3,4,6-Tetrachlorophenol | ANT | Ave | <br>244625 | 14086<br>337863 | 25839<br>419830 | 48826<br>507877 | 105136 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Diethyl phthalate | ANT | Ave | <br>1042627 | 69934<br>1409993 | 126358<br>1740846 | 238903<br>2017617 | 505129 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexadecane | ANT | Ave | <br>1142639 | 74545<br>1581821 | 143363<br>1960160 | 264237<br>2259625 | 581090 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-51073-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 4-Chlorophenyl phenyl ether | ANT | Ave | 475305 | 28661<br>681360 | 53622<br>882962 | 100068<br>1068616 | 208618 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4-Nitroaniline | ANT | Ave | 309515 | 16553<br>473334 | 32596<br>630108 | 68243<br>794049 | 132812 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Fluorene | ANT | Ave | 14558<br>1181824 | 72097<br>1666768 | 133104<br>2061385 | 249715<br>2451718 | 529582 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4,6-Dinitro-2-methylphenol | PHN | Ave | 260936 | 11899<br>405092 | 23262<br>534950 | 54056<br>679391 | 121257 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| N-Nitrosodiphenylamine | PHN | Ave | 1572390 | 97621<br>2124595 | 181291<br>2522749 | 337256<br>2923625 | 736340 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| 1,2-Diphenylhydrazine(as Azobenzene) | PHN | Ave | 1661459 | 101336<br>2375637 | 190959<br>2974105 | 360513<br>3571295 | 774349 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Azobenzene | PHN | Ave | 1661218 | 102265<br>2376771 | 190959<br>2974105 | 360241<br>3570851 | 774337 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4-Bromophenyl phenyl ether | PHN | Ave | 234984 | 13887<br>343776 | 26083<br>436145 | 49164<br>519173 | 105534 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexachlorobenzene | PHN | Ave | 2527<br>212572 | 13163<br>288366 | 25236<br>348354 | 47698<br>414202 | 101917 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Atrazine | PHN | Ave | 421103 | 28138<br>568041 | 53920<br>688971 | 91321<br>741214 | 188174 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| n-Octadecane | PHN | Ave | 1177228 | 77632<br>1642987 | 141592<br>1982679 | 273014<br>2270229 | 586714 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Pentachlorophenol | PHN | Ave | 302897 | 19206<br>434512 | 33264<br>544703 | 65051<br>650714 | 148629 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Phenanthrene | PHN | Ave | 20170<br>1521407 | 102409<br>2214926 | 190217<br>2756919 | 350742<br>3313239 | 730477 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Anthracene | PHN | Ave | 20574<br>1559011 | 101984<br>2220409 | 193839<br>2780135 | 352653<br>3371126 | 744643 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Carbazole | PHN | Ave | 1440872 | 91808<br>2119100 | 173843<br>2690566 | 306434<br>3289131 | 598785 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Di-n-butyl phthalate | PHN | Ave | 1835603 | 110775<br>2621017 | 191477<br>3325383 | 314595<br>3669607 | 720235 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Fluoranthene | PHN | Ave | 17685<br>1424022 | 87776<br>2048812 | 162631<br>2606595 | 262494<br>2985416 | 565744 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzidine | CRY | Ave | 1784002 | 65114<br>2739703 | 123801<br>3487416 | 288393<br>4141330 | 738111 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Pyrene | CRY | Ave | 18857<br>1501041 | 85863<br>2135077 | 164389<br>2633606 | 269764<br>2927703 | 579633 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Butyl benzyl phthalate | CRY | Ave | 825808 | 45739<br>1167212 | 85180<br>1513714 | 164563<br>1814087 | 320324 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Bis(2-ethylhexyl) phthalate | CRY | Ave | 1153610 | 66449<br>1618266 | 116125<br>2115270 | 217021<br>2582603 | 467391 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-51073-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 3,3'-Dichlorobenzidine | CRY | Ave | 864928 | 43091<br>1241902 | 85573<br>1605282 | 172869<br>1918417 | 382988 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Benzo[a]anthracene | CRY | Ave | 15904<br>1377712 | 79454<br>1946133 | 147267<br>2526054 | 269698<br>3004851 | 553364 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Chrysene | CRY | Ave | 13625<br>1295782 | 71968<br>1787198 | 129774<br>2322624 | 244325<br>2804425 | 518744 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Di-n-octyl phthalate | PRY | Ave | 1975272 | 105077<br>2825727 | 204936<br>3755074 | 376499<br>4542762 | 796268 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzo[b]fluoranthene | PRY | Ave | 11750<br>1165964 | 61094<br>1737025 | 114882<br>2246526 | 216121<br>2711635 | 477789 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzo[k]fluoranthene | PRY | Ave | 13486<br>1202344 | 60833<br>1671236 | 121761<br>2221648 | 219773<br>2754757 | 463824 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzo[a]pyrene | PRY | Ave | 11374<br>1127677 | 60333<br>1619343 | 109650<br>2158506 | 202504<br>2653884 | 447611 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Indeno[1,2,3-cd]pyrene | PRY | Ave | 11254<br>1018010 | 55215<br>1520587 | 102340<br>1997854 | 191100<br>2451465 | 414135 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Dibenz(a,h)anthracene | PRY | Ave | 10257<br>848666 | 44066<br>1266277 | 84196<br>1673591 | 158778<br>2077789 | 352115 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzo[g,h,i]perylene | PRY | Ave | 11214<br>811837 | 46299<br>1184787 | 88587<br>1548497 | 166390<br>1909196 | 335726 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Fluorophenol (Surr) | DCB | Ave | 853026 | 48704<br>1256749 | 95785<br>1614882 | 175400<br>1978977 | 389474 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Phenol-d5 (Surr) | DCB | Ave | 1121676 | 67998<br>1663125 | 133174<br>2092284 | 246062<br>2535617 | 542727 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Nitrobenzene-d5 (Surr) | NPT | Ave | 9666<br>842627 | 48176<br>1238638 | 97850<br>1561937 | 176561<br>1927158 | 393620 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Fluorobiphenyl (Surr) | ANT | Ave | 12129<br>1087462 | 66127<br>1588839 | 123659<br>1985989 | 229145<br>2384803 | 484320 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4,6-Tribromophenol (Surr) | ANT | Ave | 103401 | 5021<br>142204 | 12341<br>180881 | 21411<br>223852 | 46949 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Terphenyl-d14 (Surr) | CRY | Ave | 11156<br>906899 | 54340<br>1296265 | 101250<br>1683742 | 185228<br>1999755 | 384196 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

Curve Type Legend:
Ave = Average ISTD

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Lab Sample ID (1): CCV 240-182204/2 CCVIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/24/2015 09:19

| ANALYTE | RT | RESOLUTION (%) |
|---|---|---|
| 2-Fluorophenol (Surr) | 5.15 | 100.0 |
| Phenol-d5 (Surr) | 6.00 | 100.0 |
| Nitrobenzene-d5 (Surr) | 6.84 | 100.0 |
| Naphthalene | 7.50 | 100.0 |
| 2-Fluorobiphenyl (Surr) | 8.39 | 100.0 |
| Acenaphthylene | 8.87 | 100.0 |
| Acenaphthene | 9.02 | 100.0 |
| Fluorene | 9.46 | 100.0 |
| 2,4,6-Tribromophenol (Surr) | 9.66 | 100.0 |
| Phenanthrene | 10.28 | 100.0 |
| Anthracene | 10.32 | 100.0 |
| Fluoranthene | 11.30 | 100.0 |
| Pyrene | 11.50 | 100.0 |
| Terphenyl-d14 (Surr) | 11.58 | 100.0 |
| Benzo[a]anthracene | 12.54 | 100.0 |
| Chrysene | 12.58 | 100.0 |
| Benzo[b]fluoranthene | 13.76 | 30.30 |
| Benzo[k]fluoranthene | 13.80 | 100.0 |
| Benzo[a]pyrene | 14.23 | 100.0 |
| Indeno[1,2,3-cd]pyrene | 16.24 | 100.0 |
| Dibenz(a,h)anthracene | 16.25 | 100.0 |

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Lab Sample ID (1): CCV 240-182251/2 CCVIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/26/2015 07:52

| ANALYTE | RT | RESOLUTION (%) |
|---|---|---|
| 2-Fluorophenol (Surr) | 5.13 | 100.0 |
| Phenol-d5 (Surr) | 5.99 | 100.0 |
| Nitrobenzene-d5 (Surr) | 6.83 | 100.0 |
| Naphthalene | 7.49 | 100.0 |
| 2-Fluorobiphenyl (Surr) | 8.37 | 100.0 |
| Acenaphthylene | 8.85 | 100.0 |
| Acenaphthene | 9.00 | 100.0 |
| Fluorene | 9.43 | 100.0 |
| 2,4,6-Tribromophenol (Surr) | 9.64 | 100.0 |
| Phenanthrene | 10.26 | 100.0 |
| Anthracene | 10.31 | 100.0 |
| Fluoranthene | 11.28 | 100.0 |
| Pyrene | 11.48 | 100.0 |
| Terphenyl-d14 (Surr) | 11.56 | 100.0 |
| Benzo[a]anthracene | 12.51 | 100.0 |
| Chrysene | 12.55 | 100.0 |
| Benzo[b]fluoranthene | 13.73 | 30.40 |
| Benzo[k]fluoranthene | 13.76 | 100.0 |
| Benzo[a]pyrene | 14.20 | 100.0 |
| Indeno[1,2,3-cd]pyrene | 16.18 | 100.0 |
| Dibenz(a,h)anthracene | 16.19 | 100.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Lab Sample ID: ICV 240-181541/11 Calibration Date: 05/19/2015 19:58

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50519011.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | Ave | 0.9041 | 0.9054 | | 10.0 | 10.0 | 0.1 | 30.0 |
| N-Nitrosodimethylamine | Ave | 1.396 | 1.187 | | 8.50 | 10.0 | -15.0 | 30.0 |
| Pyridine | Ave | 2.418 | 2.428 | | 10.0 | 10.0 | 0.4 | 30.0 |
| Benzaldehyde | Ave | 1.430 | 1.394 | 0.0100 | 19.5 | 20.0 | -2.5 | 30.0 |
| Phenol | Ave | 2.551 | 2.460 | 0.8000 | 9.64 | 10.0 | -3.6 | 30.0 |
| Aniline | Ave | 3.116 | 3.029 | | 9.72 | 10.0 | -2.8 | 30.0 |
| Bis(2-chloroethyl)ether | Ave | 2.009 | 1.980 | 0.7000 | 9.85 | 10.0 | -1.5 | 30.0 |
| 2-Chlorophenol | Ave | 1.581 | 1.582 | 0.8000 | 10.0 | 10.0 | 0.0 | 30.0 |
| n-Decane | Ave | 2.300 | 2.213 | | 9.62 | 10.0 | -3.8 | 30.0 |
| 1,3-Dichlorobenzene | Ave | 1.545 | 1.560 | | 10.1 | 10.0 | 1.0 | 30.0 |
| 1,4-Dichlorobenzene | Ave | 1.562 | 1.566 | | 10.0 | 10.0 | 0.2 | 30.0 |
| Benzyl alcohol | Ave | 1.281 | 1.275 | | 9.96 | 10.0 | -0.4 | 30.0 |
| 1,2-Dichlorobenzene | Ave | 1.487 | 1.493 | | 10.0 | 10.0 | 0.4 | 30.0 |
| 2-Methylphenol | Ave | 1.738 | 1.785 | 0.7000 | 10.3 | 10.0 | 2.7 | 30.0 |
| bis (2-chloroisopropyl) ether | Ave | 2.612 | 2.567 | | 9.83 | 10.0 | -1.7 | 30.0 |
| Indene | Ave | 2.692 | 2.672 | | 19.8 | 20.0 | -0.8 | 30.0 |
| 3 & 4 Methylphenol | Ave | 1.836 | 1.834 | | 9.99 | 10.0 | -0.0 | 30.0 |
| N-Nitrosodi-n-propylamine | Ave | 1.203 | 1.175 | 0.5000 | 9.77 | 10.0 | -2.3 | 30.0 |
| Acetophenone | Ave | 2.276 | 2.225 | 0.0100 | 9.78 | 10.0 | -2.2 | 30.0 |
| Hexachloroethane | Ave | 0.6369 | 0.6315 | 0.3000 | 9.91 | 10.0 | -0.9 | 30.0 |
| Nitrobenzene | Ave | 0.4265 | 0.4128 | 0.2000 | 9.68 | 10.0 | -3.2 | 30.0 |
| Isophorone | Ave | 0.7995 | 0.7856 | 0.4000 | 9.83 | 10.0 | -1.7 | 30.0 |
| 2-Nitrophenol | Ave | 0.1715 | 0.1659 | 0.1000 | 9.67 | 10.0 | -3.3 | 30.0 |
| 2,4-Dimethylphenol | Ave | 0.3630 | 0.3462 | 0.2000 | 9.54 | 10.0 | -4.6 | 30.0 |
| Benzoic acid | Ave | 0.2007 | 0.2153 | | 21.5 | 20.0 | 7.3 | 30.0 |
| Bis(2-chloroethoxy)methane | Ave | 0.5177 | 0.4966 | 0.3000 | 9.59 | 10.0 | -4.1 | 30.0 |
| 2,4-Dichlorophenol | Ave | 0.2493 | 0.2423 | 0.2000 | 9.72 | 10.0 | -2.8 | 30.0 |
| 1,2,4-Trichlorobenzene | Ave | 0.2548 | 0.2536 | | 9.95 | 10.0 | -0.5 | 30.0 |
| Naphthalene | Ave | 1.056 | 1.035 | 0.7000 | 9.80 | 10.0 | -2.0 | 30.0 |
| 4-Chloroaniline | Ave | 0.4836 | 0.4673 | 0.0100 | 9.66 | 10.0 | -3.4 | 30.0 |
| 2,6-Dichlorophenol | Ave | 0.2403 | 0.2391 | | 9.95 | 10.0 | -0.5 | 30.0 |
| Hexachlorobutadiene | Ave | 0.1055 | 0.1043 | 0.0100 | 9.89 | 10.0 | -1.1 | 30.0 |
| Caprolactam | Ave | 0.1206 | 0.1185 | 0.0100 | 19.6 | 20.0 | -1.8 | 30.0 |
| 4-Chloro-3-methylphenol | Ave | 0.3204 | 0.3110 | 0.2000 | 9.71 | 10.0 | -2.9 | 30.0 |
| 2-Methylnaphthalene | Ave | 0.6435 | 0.5990 | 0.4000 | 9.31 | 10.0 | -6.9 | 30.0 |
| 1-Methylnaphthalene | Ave | 0.5594 | 0.5641 | | 10.1 | 10.0 | 0.8 | 30.0 |
| Hexachlorocyclopentadiene | Ave | 0.2335 | 0.2198 | 0.0500 | 9.41 | 10.0 | -5.9 | 30.0 |
| 1,2,4,5-Tetrachlorobenzene | Ave | 0.4013 | 0.3799 | 0.0100 | 9.47 | 10.0 | -5.3 | 30.0 |
| 2,4,6-Trichlorophenol | Ave | 0.3276 | 0.3227 | 0.2000 | 9.85 | 10.0 | -1.5 | 30.0 |
| 2,4,5-Trichlorophenol | Ave | 0.3425 | 0.3412 | 0.2000 | 9.96 | 10.0 | -0.4 | 30.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Lab Sample ID: ICV 240-181541/11  Calibration Date: 05/19/2015 19:58

Instrument ID: A4HP9  Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS  ID: 0.45(mm)  Calib End Date: 05/19/2015 19:33

Lab File ID: 50519011.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | Ave | 1.528 | 1.461 | 0.0100 | 9.56 | 10.0 | -4.4 | 30.0 |
| 2-Chloronaphthalene | Ave | 1.127 | 1.079 | 0.8000 | 9.57 | 10.0 | -4.3 | 30.0 |
| 2-Nitroaniline | Ave | 0.4439 | 0.4270 | 0.0100 | 9.62 | 10.0 | -3.8 | 30.0 |
| Dimethyl phthalate | Ave | 1.149 | 1.127 | 0.0100 | 9.81 | 10.0 | -1.9 | 30.0 |
| 1,3-Dinitrobenzene | Ave | 0.1850 | 0.1852 | | 10.0 | 10.0 | 0.0 | 30.0 |
| 2,6-Dinitrotoluene | Ave | 0.2594 | 0.2674 | | 10.3 | 10.0 | 3.1 | 30.0 |
| Acenaphthylene | Ave | 1.955 | 1.803 | 0.9000 | 9.22 | 10.0 | -7.8 | 30.0 |
| 3-Nitroaniline | Ave | 0.3816 | 0.3845 | 0.0100 | 10.1 | 10.0 | 0.7 | 30.0 |
| 2,4-Dinitrophenol | Ave | 0.1257 | 0.1127 | 0.0100 | 17.9 | 20.0 | -10.3 | 30.0 |
| 4-Nitrophenol | Ave | 0.1185 | 0.1108 | | 18.7 | 20.0 | -6.5 | 30.0 |
| Acenaphthene | Ave | 1.123 | 1.080 | 0.9000 | 9.62 | 10.0 | -3.8 | 30.0 |
| 2,4-Dinitrotoluene | Ave | 0.3227 | 0.3269 | 0.2000 | 10.1 | 10.0 | 1.3 | 30.0 |
| Dibenzofuran | Ave | 1.523 | 1.432 | 0.8000 | 9.40 | 10.0 | -6.0 | 30.0 |
| 2,3,4,6-Tetrachlorophenol | Ave | 0.2445 | 0.2379 | 0.0100 | 9.73 | 10.0 | -2.7 | 30.0 |
| Diethyl phthalate | Ave | 1.107 | 1.052 | 0.0100 | 9.50 | 10.0 | -5.0 | 30.0 |
| Hexadecane | Ave | 1.234 | 1.167 | | 9.46 | 10.0 | -5.4 | 30.0 |
| 4-Chlorophenyl phenyl ether | Ave | 0.4981 | 0.4688 | 0.4000 | 9.41 | 10.0 | -5.9 | 30.0 |
| 4-Nitroaniline | Ave | 0.3296 | 0.3075 | 0.0100 | 9.33 | 10.0 | -6.7 | 30.0 |
| Fluorene | Ave | 1.237 | 1.155 | 0.9000 | 9.34 | 10.0 | -6.6 | 30.0 |
| 4,6-Dinitro-2-methylphenol | Ave | 0.0925 | 0.0932 | 0.0100 | 20.2 | 20.0 | 0.8 | 30.0 |
| N-Nitrosodiphenylamine | Ave | 0.5447 | 0.5685 | 0.0100 | 20.9 | 20.0 | 4.4 | 30.0 |
| 1,2-Diphenylhydrazine(as Azobenzene) | Ave | 1.191 | 1.277 | | 10.7 | 10.0 | 7.2 | 30.0 |
| Azobenzene | Ave | 1.193 | 1.277 | | 10.7 | 10.0 | 7.0 | 30.0 |
| 4-Bromophenyl phenyl ether | Ave | 0.1674 | 0.1740 | 0.1000 | 10.4 | 10.0 | 3.9 | 30.0 |
| Atrazine | Ave | 0.1482 | 0.1532 | 0.0100 | 20.7 | 20.0 | 3.3 | 30.0 |
| Hexachlorobenzene | Ave | 0.1506 | 0.1518 | 0.1000 | 10.1 | 10.0 | 0.8 | 30.0 |
| n-Octadecane | Ave | 0.8533 | 0.8589 | | 10.1 | 10.0 | 0.7 | 30.0 |
| Pentachlorophenol | Ave | 0.1092 | 0.1129 | 0.0500 | 20.7 | 20.0 | 3.4 | 30.0 |
| Phenanthrene | Ave | 1.145 | 1.081 | 0.7000 | 9.44 | 10.0 | -5.6 | 30.0 |
| Anthracene | Ave | 1.159 | 1.131 | 0.7000 | 9.75 | 10.0 | -2.5 | 30.0 |
| Carbazole | Ave | 1.046 | 1.021 | 0.0100 | 9.76 | 10.0 | -2.4 | 30.0 |
| Di-n-butyl phthalate | Ave | 1.229 | 1.343 | 0.0100 | 10.9 | 10.0 | 9.3 | 30.0 |
| Fluoranthene | Ave | 0.9936 | 1.015 | 0.6000 | 10.2 | 10.0 | 2.2 | 30.0 |
| Benzidine | Ave | 0.6601 | 0.6002 | | 18.2 | 20.0 | -9.1 | 30.0 |
| Pyrene | Ave | 1.212 | 1.117 | 0.6000 | 9.21 | 10.0 | -7.9 | 30.0 |
| Butyl benzyl phthalate | Ave | 0.6609 | 0.6396 | 0.0100 | 9.68 | 10.0 | -3.2 | 30.0 |
| Bis(2-ethylhexyl) phthalate | Ave | 0.9242 | 0.8756 | 0.0100 | 9.47 | 10.0 | -5.3 | 30.0 |
| 3,3'-Dichlorobenzidine | Ave | 0.3475 | 0.3233 | 0.0100 | 18.6 | 20.0 | -7.0 | 30.0 |
| Benzo[a]anthracene | Ave | 1.130 | 1.054 | 0.8000 | 9.33 | 10.0 | -6.7 | 30.0 |
| Chrysene | Ave | 1.028 | 1.064 | 0.7000 | 10.3 | 10.0 | 3.5 | 30.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Lab Sample ID: ICV 240-181541/11  Calibration Date: 05/19/2015 19:58

Instrument ID: A4HP9  Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS  ID: 0.45(mm)  Calib End Date: 05/19/2015 19:33

Lab File ID: 50519011.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Di-n-octyl phthalate | Ave | 2.107 | 2.158 | 0.0100 | 10.2 | 10.0 | 2.4 | 30.0 |
| Benzo[b]fluoranthene | Ave | 1.234 | 1.214 | 0.7000 | 9.83 | 10.0 | -1.7 | 30.0 |
| Benzo[k]fluoranthene | Ave | 1.259 | 1.300 | 0.7000 | 10.3 | 10.0 | 3.2 | 30.0 |
| Benzo[a]pyrene | Ave | 1.182 | 1.199 | 0.7000 | 10.1 | 10.0 | 1.5 | 30.0 |
| Indeno[1,2,3-cd]pyrene | Ave | 1.102 | 1.076 | 0.5000 | 9.76 | 10.0 | -2.4 | 30.0 |
| Dibenz(a,h)anthracene | Ave | 0.9270 | 0.9027 | 0.4000 | 9.74 | 10.0 | -2.6 | 30.0 |
| Benzo[g,h,i]perylene | Ave | 0.9195 | 0.8512 | 0.5000 | 9.26 | 10.0 | -7.4 | 30.0 |
| 2-Fluorophenol (Surr) | Ave | 1.729 | 1.923 | | 11.1 | 10.0 | 11.2 | 30.0 |
| Phenol-d5 (Surr) | Ave | 2.335 | 2.596 | | 11.1 | 10.0 | 11.2 | 30.0 |
| Nitrobenzene-d5 (Surr) | Ave | 0.4097 | 0.4442 | | 10.8 | 10.0 | 8.4 | 30.0 |
| 2-Fluorobiphenyl (Surr) | Ave | 1.141 | 1.243 | | 10.9 | 10.0 | 9.0 | 30.0 |
| 2,4,6-Tribromophenol (Surr) | Ave | 0.1049 | 0.1158 | | 11.0 | 10.0 | 10.3 | 30.0 |
| Terphenyl-d14 (Surr) | Ave | 0.7676 | 0.7679 | | 10.0 | 10.0 | 0.0 | 30.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Lab Sample ID: CCV 240-182204/2  Calibration Date: 05/24/2015 09:19

Instrument ID: A4HP9  Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS  ID: 0.45(mm)  Calib End Date: 05/19/2015 19:33

Lab File ID: 50524002.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | Ave | 0.9041 | 0.9037 | | 10.0 | 10.0 | -0.0 | 20.0 |
| N-Nitrosodimethylamine | Ave | 1.396 | 1.369 | | 9.80 | 10.0 | -2.0 | 20.0 |
| Pyridine | Ave | 2.418 | 2.459 | | 10.2 | 10.0 | 1.7 | 20.0 |
| Benzaldehyde | Ave | 1.430 | 1.333 | 0.0100 | 18.6 | 20.0 | -6.8 | 20.0 |
| Phenol | Ave | 2.551 | 2.433 | 0.8000 | 9.54 | 10.0 | -4.6 | 20.0 |
| Aniline | Ave | 3.116 | 3.008 | | 9.65 | 10.0 | -3.5 | 20.0 |
| Bis(2-chloroethyl)ether | Ave | 2.009 | 2.125 | 0.7000 | 10.6 | 10.0 | 5.8 | 20.0 |
| 2-Chlorophenol | Ave | 1.581 | 1.610 | 0.8000 | 10.2 | 10.0 | 1.8 | 20.0 |
| n-Decane | Ave | 2.300 | 2.183 | | 9.49 | 10.0 | -5.1 | 20.0 |
| 1,3-Dichlorobenzene | Ave | 1.545 | 1.587 | | 10.3 | 10.0 | 2.7 | 20.0 |
| 1,4-Dichlorobenzene | Ave | 1.562 | 1.592 | | 10.2 | 10.0 | 1.9 | 20.0 |
| Benzyl alcohol | Ave | 1.281 | 1.252 | | 9.78 | 10.0 | -2.2 | 20.0 |
| 1,2-Dichlorobenzene | Ave | 1.487 | 1.526 | | 10.3 | 10.0 | 2.6 | 20.0 |
| 2-Methylphenol | Ave | 1.738 | 1.743 | 0.7000 | 10.0 | 10.0 | 0.3 | 20.0 |
| bis (2-chloroisopropyl) ether | Ave | 2.612 | 2.559 | | 9.80 | 10.0 | -2.0 | 20.0 |
| Indene | Ave | 2.692 | 2.522 | | 18.7 | 20.0 | -6.3 | 20.0 |
| 3 & 4 Methylphenol | Ave | 1.836 | 1.779 | | 9.69 | 10.0 | -3.1 | 20.0 |
| N-Nitrosodi-n-propylamine | Ave | 1.203 | 1.150 | 0.5000 | 9.56 | 10.0 | -4.4 | 20.0 |
| Acetophenone | Ave | 2.276 | 2.250 | 0.0100 | 9.89 | 10.0 | -1.1 | 20.0 |
| Hexachloroethane | Ave | 0.6369 | 0.6362 | 0.3000 | 9.99 | 10.0 | -0.1 | 20.0 |
| Nitrobenzene | Ave | 0.4265 | 0.4448 | 0.2000 | 10.4 | 10.0 | 4.3 | 20.0 |
| Isophorone | Ave | 0.7995 | 0.7812 | 0.4000 | 9.77 | 10.0 | -2.3 | 20.0 |
| 2-Nitrophenol | Ave | 0.1715 | 0.1772 | 0.1000 | 10.3 | 10.0 | 3.3 | 20.0 |
| 2,4-Dimethylphenol | Ave | 0.3630 | 0.3561 | 0.2000 | 9.81 | 10.0 | -1.9 | 20.0 |
| Benzoic acid | Ave | 0.2007 | 0.2116 | | 21.1 | 20.0 | 5.4 | 20.0 |
| Bis(2-chloroethoxy)methane | Ave | 0.5177 | 0.5062 | 0.3000 | 9.78 | 10.0 | -2.2 | 20.0 |
| 2,4-Dichlorophenol | Ave | 0.2493 | 0.2464 | 0.2000 | 9.88 | 10.0 | -1.2 | 20.0 |
| 1,2,4-Trichlorobenzene | Ave | 0.2548 | 0.2544 | | 9.99 | 10.0 | -0.1 | 20.0 |
| Naphthalene | Ave | 1.056 | 1.035 | 0.7000 | 9.80 | 10.0 | -2.0 | 20.0 |
| 4-Chloroaniline | Ave | 0.4836 | 0.4787 | 0.0100 | 9.90 | 10.0 | -1.0 | 20.0 |
| 2,6-Dichlorophenol | Ave | 0.2403 | 0.2447 | | 10.2 | 10.0 | 1.9 | 20.0 |
| Hexachlorobutadiene | Ave | 0.1055 | 0.1074 | 0.0100 | 10.2 | 10.0 | 1.8 | 20.0 |
| Caprolactam | Ave | 0.1206 | 0.1193 | 0.0100 | 19.8 | 20.0 | -1.1 | 20.0 |
| 4-Chloro-3-methylphenol | Ave | 0.3204 | 0.3122 | 0.2000 | 9.74 | 10.0 | -2.6 | 20.0 |
| 2-Methylnaphthalene | Ave | 0.6435 | 0.6116 | 0.4000 | 9.50 | 10.0 | -5.0 | 20.0 |
| 1-Methylnaphthalene | Ave | 0.5594 | 0.5442 | | 9.73 | 10.0 | -2.7 | 20.0 |
| Hexachlorocyclopentadiene | Ave | 0.2335 | 0.2309 | 0.0500 | 9.89 | 10.0 | -1.1 | 20.0 |
| 1,2,4,5-Tetrachlorobenzene | Ave | 0.4013 | 0.3846 | 0.0100 | 9.58 | 10.0 | -4.2 | 20.0 |
| 2,4,6-Trichlorophenol | Ave | 0.3276 | 0.3316 | 0.2000 | 10.1 | 10.0 | 1.2 | 20.0 |
| 2,4,5-Trichlorophenol | Ave | 0.3425 | 0.3493 | 0.2000 | 10.2 | 10.0 | 2.0 | 20.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Lab Sample ID: CCV 240-182204/2  Calibration Date: 05/24/2015 09:19

Instrument ID: A4HP9  Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS  ID: 0.45(mm)  Calib End Date: 05/19/2015 19:33

Lab File ID: 50524002.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | Ave | 1.528 | 1.466 | 0.0100 | 9.59 | 10.0 | -4.1 | 20.0 |
| 2-Chloronaphthalene | Ave | 1.127 | 1.102 | 0.8000 | 9.77 | 10.0 | -2.3 | 20.0 |
| 2-Nitroaniline | Ave | 0.4439 | 0.4656 | 0.0100 | 10.5 | 10.0 | 4.9 | 20.0 |
| Dimethyl phthalate | Ave | 1.149 | 1.191 | 0.0100 | 10.4 | 10.0 | 3.6 | 20.0 |
| 1,3-Dinitrobenzene | Ave | 0.1850 | 0.2142 | | 11.6 | 10.0 | 15.8 | 20.0 |
| 2,6-Dinitrotoluene | Ave | 0.2594 | 0.2994 | | 11.5 | 10.0 | 15.4 | 20.0 |
| Acenaphthylene | Ave | 1.955 | 1.907 | 0.9000 | 9.75 | 10.0 | -2.5 | 20.0 |
| 3-Nitroaniline | Ave | 0.3816 | 0.3964 | 0.0100 | 10.4 | 10.0 | 3.9 | 20.0 |
| 2,4-Dinitrophenol | Ave | 0.1257 | 0.1480 | 0.0100 | 23.6 | 20.0 | 17.8 | 20.0 |
| Acenaphthene | Ave | 1.123 | 1.071 | 0.9000 | 9.54 | 10.0 | -4.6 | 20.0 |
| 4-Nitrophenol | Ave | 0.1185 | 0.1436 | | 24.2 | 20.0 | 21.2* | 20.0 |
| 2,4-Dinitrotoluene | Ave | 0.3227 | 0.3682 | 0.2000 | 11.4 | 10.0 | 14.1 | 20.0 |
| Dibenzofuran | Ave | 1.523 | 1.520 | 0.8000 | 9.98 | 10.0 | -0.2 | 20.0 |
| 2,3,4,6-Tetrachlorophenol | Ave | 0.2445 | 0.2438 | 0.0100 | 9.97 | 10.0 | -0.3 | 20.0 |
| Diethyl phthalate | Ave | 1.107 | 1.068 | 0.0100 | 9.65 | 10.0 | -3.5 | 20.0 |
| Hexadecane | Ave | 1.234 | 1.119 | | 9.07 | 10.0 | -9.3 | 20.0 |
| 4-Chlorophenyl phenyl ether | Ave | 0.4981 | 0.4841 | 0.4000 | 9.72 | 10.0 | -2.8 | 20.0 |
| 4-Nitroaniline | Ave | 0.3296 | 0.3738 | 0.0100 | 11.3 | 10.0 | 13.4 | 20.0 |
| Fluorene | Ave | 1.237 | 1.184 | 0.9000 | 9.57 | 10.0 | -4.3 | 20.0 |
| 4,6-Dinitro-2-methylphenol | Ave | 0.0925 | 0.1098 | 0.0100 | 23.8 | 20.0 | 18.8 | 20.0 |
| N-Nitrosodiphenylamine | Ave | 0.5447 | 0.4951 | 0.0100 | 18.2 | 20.0 | -9.1 | 20.0 |
| 1,2-Diphenylhydrazine(as Azobenzene) | Ave | 1.191 | 1.183 | | 9.92 | 10.0 | -0.7 | 20.0 |
| Azobenzene | Ave | 1.193 | 1.184 | | 9.92 | 10.0 | -0.8 | 20.0 |
| 4-Bromophenyl phenyl ether | Ave | 0.1674 | 0.1644 | 0.1000 | 9.82 | 10.0 | -1.8 | 20.0 |
| Hexachlorobenzene | Ave | 0.1506 | 0.1342 | 0.1000 | 8.91 | 10.0 | -10.9 | 20.0 |
| Atrazine | Ave | 0.1482 | 0.1448 | 0.0100 | 19.5 | 20.0 | -2.3 | 20.0 |
| n-Octadecane | Ave | 0.8533 | 0.7530 | | 8.82 | 10.0 | -11.8 | 20.0 |
| Pentachlorophenol | Ave | 0.1092 | 0.1023 | 0.0500 | 18.7 | 20.0 | -6.3 | 20.0 |
| Phenanthrene | Ave | 1.145 | 1.081 | 0.7000 | 9.44 | 10.0 | -5.6 | 20.0 |
| Anthracene | Ave | 1.159 | 1.105 | 0.7000 | 9.53 | 10.0 | -4.7 | 20.0 |
| Carbazole | Ave | 1.046 | 1.066 | 0.0100 | 10.2 | 10.0 | 2.0 | 20.0 |
| Di-n-butyl phthalate | Ave | 1.229 | 1.378 | 0.0100 | 11.2 | 10.0 | 12.1 | 20.0 |
| Fluoranthene | Ave | 0.9936 | 1.046 | 0.6000 | 10.5 | 10.0 | 5.2 | 20.0 |
| Benzidine | Ave | 0.6601 | 0.6970 | | 21.1 | 20.0 | 5.6 | 20.0 |
| Pyrene | Ave | 1.212 | 1.230 | 0.6000 | 10.1 | 10.0 | 1.4 | 20.0 |
| Butyl benzyl phthalate | Ave | 0.6609 | 0.7164 | 0.0100 | 10.8 | 10.0 | 8.4 | 20.0 |
| Bis(2-ethylhexyl) phthalate | Ave | 0.9242 | 1.025 | 0.0100 | 11.1 | 10.0 | 10.9 | 20.0 |
| 3,3'-Dichlorobenzidine | Ave | 0.3475 | 0.3427 | 0.0100 | 19.7 | 20.0 | -1.4 | 20.0 |
| Benzo[a]anthracene | Ave | 1.130 | 1.101 | 0.8000 | 9.75 | 10.0 | -2.5 | 20.0 |
| Chrysene | Ave | 1.028 | 1.052 | 0.7000 | 10.2 | 10.0 | 2.3 | 20.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Lab Sample ID: CCV 240-182204/2  Calibration Date: 05/24/2015 09:19

Instrument ID: A4HP9  Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS  ID: 0.45(mm)  Calib End Date: 05/19/2015 19:33

Lab File ID: 50524002.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Di-n-octyl phthalate | Ave | 2.107 | 2.268 | 0.0100 | 10.8 | 10.0 | 7.7 | 20.0 |
| Benzo[b]fluoranthene | Ave | 1.234 | 1.206 | 0.7000 | 9.77 | 10.0 | -2.3 | 20.0 |
| Benzo[k]fluoranthene | Ave | 1.259 | 1.342 | 0.7000 | 10.7 | 10.0 | 6.6 | 20.0 |
| Benzo[a]pyrene | Ave | 1.182 | 1.217 | 0.7000 | 10.3 | 10.0 | 3.0 | 20.0 |
| Indeno[1,2,3-cd]pyrene | Ave | 1.102 | 1.195 | 0.5000 | 10.8 | 10.0 | 8.5 | 20.0 |
| Dibenz(a,h)anthracene | Ave | 0.9270 | 0.9811 | 0.4000 | 10.6 | 10.0 | 5.8 | 20.0 |
| Benzo[g,h,i]perylene | Ave | 0.9195 | 0.9867 | 0.5000 | 10.7 | 10.0 | 7.3 | 20.0 |
| 2-Fluorophenol (Surr) | Ave | 1.729 | 1.778 | | 10.3 | 10.0 | 2.8 | 20.0 |
| Phenol-d5 (Surr) | Ave | 2.335 | 2.294 | | 9.83 | 10.0 | -1.7 | 20.0 |
| Nitrobenzene-d5 (Surr) | Ave | 0.4097 | 0.4253 | | 10.4 | 10.0 | 3.8 | 20.0 |
| 2-Fluorobiphenyl (Surr) | Ave | 1.141 | 1.134 | | 9.94 | 10.0 | -0.6 | 20.0 |
| 2,4,6-Tribromophenol (Surr) | Ave | 0.1049 | 0.1022 | | 9.74 | 10.0 | -2.6 | 20.0 |
| Terphenyl-d14 (Surr) | Ave | 0.7676 | 0.7396 | | 9.63 | 10.0 | -3.7 | 20.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Lab Sample ID: CCV 240-182251/2 Calibration Date: 05/26/2015 07:52

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50526002.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | Ave | 0.9041 | 0.9480 | | 10.5 | 10.0 | 4.9 | 20.0 |
| N-Nitrosodimethylamine | Ave | 1.396 | 1.361 | | 9.74 | 10.0 | -2.6 | 20.0 |
| Pyridine | Ave | 2.418 | 2.483 | | 10.3 | 10.0 | 2.7 | 20.0 |
| Benzaldehyde | Ave | 1.430 | 1.357 | 0.0100 | 19.0 | 20.0 | -5.2 | 20.0 |
| Phenol | Ave | 2.551 | 2.445 | 0.8000 | 9.59 | 10.0 | -4.1 | 20.0 |
| Aniline | Ave | 3.116 | 3.019 | | 9.69 | 10.0 | -3.1 | 20.0 |
| Bis(2-chloroethyl)ether | Ave | 2.009 | 2.106 | 0.7000 | 10.5 | 10.0 | 4.8 | 20.0 |
| 2-Chlorophenol | Ave | 1.581 | 1.623 | 0.8000 | 10.3 | 10.0 | 2.7 | 20.0 |
| n-Decane | Ave | 2.300 | 2.198 | | 9.56 | 10.0 | -4.4 | 20.0 |
| 1,3-Dichlorobenzene | Ave | 1.545 | 1.609 | | 10.4 | 10.0 | 4.1 | 20.0 |
| 1,4-Dichlorobenzene | Ave | 1.562 | 1.615 | | 10.3 | 10.0 | 3.4 | 20.0 |
| Benzyl alcohol | Ave | 1.281 | 1.263 | | 9.86 | 10.0 | -1.4 | 20.0 |
| 1,2-Dichlorobenzene | Ave | 1.487 | 1.544 | | 10.4 | 10.0 | 3.9 | 20.0 |
| 2-Methylphenol | Ave | 1.738 | 1.733 | 0.7000 | 9.97 | 10.0 | -0.3 | 20.0 |
| bis (2-chloroisopropyl) ether | Ave | 2.612 | 2.528 | | 9.68 | 10.0 | -3.2 | 20.0 |
| Indene | Ave | 2.692 | 2.527 | | 18.8 | 20.0 | -6.2 | 20.0 |
| 3 & 4 Methylphenol | Ave | 1.836 | 1.762 | | 9.60 | 10.0 | -4.0 | 20.0 |
| N-Nitrosodi-n-propylamine | Ave | 1.203 | 1.121 | 0.5000 | 9.32 | 10.0 | -6.8 | 20.0 |
| Acetophenone | Ave | 2.276 | 2.242 | 0.0100 | 9.85 | 10.0 | -1.5 | 20.0 |
| Hexachloroethane | Ave | 0.6369 | 0.6382 | 0.3000 | 10.0 | 10.0 | 0.2 | 20.0 |
| Nitrobenzene | Ave | 0.4265 | 0.4458 | 0.2000 | 10.5 | 10.0 | 4.5 | 20.0 |
| Isophorone | Ave | 0.7995 | 0.8004 | 0.4000 | 10.0 | 10.0 | 0.1 | 20.0 |
| 2-Nitrophenol | Ave | 0.1715 | 0.1823 | 0.1000 | 10.6 | 10.0 | 6.3 | 20.0 |
| 2,4-Dimethylphenol | Ave | 0.3630 | 0.3634 | 0.2000 | 10.0 | 10.0 | 0.1 | 20.0 |
| Benzoic acid | Ave | 0.2007 | 0.2139 | | 21.3 | 20.0 | 6.6 | 20.0 |
| Bis(2-chloroethoxy)methane | Ave | 0.5177 | 0.5040 | 0.3000 | 9.74 | 10.0 | -2.6 | 20.0 |
| 2,4-Dichlorophenol | Ave | 0.2493 | 0.2553 | 0.2000 | 10.2 | 10.0 | 2.4 | 20.0 |
| 1,2,4-Trichlorobenzene | Ave | 0.2548 | 0.2557 | | 10.0 | 10.0 | 0.4 | 20.0 |
| Naphthalene | Ave | 1.056 | 1.043 | 0.7000 | 9.87 | 10.0 | -1.3 | 20.0 |
| 4-Chloroaniline | Ave | 0.4836 | 0.4786 | 0.0100 | 9.90 | 10.0 | -1.0 | 20.0 |
| 2,6-Dichlorophenol | Ave | 0.2403 | 0.2474 | | 10.3 | 10.0 | 3.0 | 20.0 |
| Hexachlorobutadiene | Ave | 0.1055 | 0.1076 | 0.0100 | 10.2 | 10.0 | 2.0 | 20.0 |
| Caprolactam | Ave | 0.1206 | 0.1206 | 0.0100 | 20.0 | 20.0 | -0.0 | 20.0 |
| 4-Chloro-3-methylphenol | Ave | 0.3204 | 0.3188 | 0.2000 | 9.95 | 10.0 | -0.5 | 20.0 |
| 2-Methylnaphthalene | Ave | 0.6435 | 0.6282 | 0.4000 | 9.76 | 10.0 | -2.4 | 20.0 |
| 1-Methylnaphthalene | Ave | 0.5594 | 0.5593 | | 10.0 | 10.0 | -0.0 | 20.0 |
| Hexachlorocyclopentadiene | Ave | 0.2335 | 0.2151 | 0.0500 | 9.21 | 10.0 | -7.9 | 20.0 |
| 1,2,4,5-Tetrachlorobenzene | Ave | 0.4013 | 0.3820 | 0.0100 | 9.52 | 10.0 | -4.8 | 20.0 |
| 2,4,6-Trichlorophenol | Ave | 0.3276 | 0.3211 | 0.2000 | 9.80 | 10.0 | -2.0 | 20.0 |
| 2,4,5-Trichlorophenol | Ave | 0.3425 | 0.3317 | 0.2000 | 9.69 | 10.0 | -3.1 | 20.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Lab Sample ID: CCV 240-182251/2  Calibration Date: 05/26/2015 07:52

Instrument ID: A4HP9  Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS  ID: 0.45(mm)  Calib End Date: 05/19/2015 19:33

Lab File ID: 50526002.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | Ave | 1.528 | 1.426 | 0.0100 | 9.33 | 10.0 | -6.7 | 20.0 |
| 2-Chloronaphthalene | Ave | 1.127 | 1.072 | 0.8000 | 9.51 | 10.0 | -4.9 | 20.0 |
| 2-Nitroaniline | Ave | 0.4439 | 0.4505 | 0.0100 | 10.1 | 10.0 | 1.5 | 20.0 |
| Dimethyl phthalate | Ave | 1.149 | 1.146 | 0.0100 | 9.97 | 10.0 | -0.3 | 20.0 |
| 1,3-Dinitrobenzene | Ave | 0.1850 | 0.2068 | | 11.2 | 10.0 | 11.7 | 20.0 |
| 2,6-Dinitrotoluene | Ave | 0.2594 | 0.2825 | | 10.9 | 10.0 | 8.9 | 20.0 |
| Acenaphthylene | Ave | 1.955 | 1.843 | 0.9000 | 9.43 | 10.0 | -5.7 | 20.0 |
| 3-Nitroaniline | Ave | 0.3816 | 0.3807 | 0.0100 | 9.98 | 10.0 | -0.2 | 20.0 |
| 2,4-Dinitrophenol | Ave | 0.1257 | 0.1281 | 0.0100 | 20.4 | 20.0 | 1.9 | 20.0 |
| Acenaphthene | Ave | 1.123 | 1.088 | 0.9000 | 9.69 | 10.0 | -3.1 | 20.0 |
| 4-Nitrophenol | Ave | 0.1185 | 0.1383 | | 23.3 | 20.0 | 16.7 | 20.0 |
| 2,4-Dinitrotoluene | Ave | 0.3227 | 0.3519 | 0.2000 | 10.9 | 10.0 | 9.0 | 20.0 |
| Dibenzofuran | Ave | 1.523 | 1.454 | 0.8000 | 9.55 | 10.0 | -4.5 | 20.0 |
| 2,3,4,6-Tetrachlorophenol | Ave | 0.2445 | 0.2389 | 0.0100 | 9.77 | 10.0 | -2.3 | 20.0 |
| Diethyl phthalate | Ave | 1.107 | 1.025 | 0.0100 | 9.26 | 10.0 | -7.4 | 20.0 |
| Hexadecane | Ave | 1.234 | 1.075 | | 8.71 | 10.0 | -12.9 | 20.0 |
| 4-Chlorophenyl phenyl ether | Ave | 0.4981 | 0.4786 | 0.4000 | 9.61 | 10.0 | -3.9 | 20.0 |
| 4-Nitroaniline | Ave | 0.3296 | 0.3357 | 0.0100 | 10.2 | 10.0 | 1.9 | 20.0 |
| Fluorene | Ave | 1.237 | 1.159 | 0.9000 | 9.37 | 10.0 | -6.3 | 20.0 |
| 4,6-Dinitro-2-methylphenol | Ave | 0.0925 | 0.1070 | 0.0100 | 23.2 | 20.0 | 15.8 | 20.0 |
| N-Nitrosodiphenylamine | Ave | 0.5447 | 0.5023 | 0.0100 | 18.4 | 20.0 | -7.8 | 20.0 |
| 1,2-Diphenylhydrazine(as Azobenzene) | Ave | 1.191 | 1.184 | | 9.93 | 10.0 | -0.6 | 20.0 |
| Azobenzene | Ave | 1.193 | 1.184 | | 9.93 | 10.0 | -0.7 | 20.0 |
| 4-Bromophenyl phenyl ether | Ave | 0.1674 | 0.1674 | 0.1000 | 10.0 | 10.0 | -0.0 | 20.0 |
| Hexachlorobenzene | Ave | 0.1506 | 0.1396 | 0.1000 | 9.27 | 10.0 | -7.3 | 20.0 |
| Atrazine | Ave | 0.1482 | 0.1501 | 0.0100 | 20.3 | 20.0 | 1.3 | 20.0 |
| n-Octadecane | Ave | 0.8533 | 0.7217 | | 8.46 | 10.0 | -15.4 | 20.0 |
| Pentachlorophenol | Ave | 0.1092 | 0.1026 | 0.0500 | 18.8 | 20.0 | -6.0 | 20.0 |
| Phenanthrene | Ave | 1.145 | 1.100 | 0.7000 | 9.61 | 10.0 | -3.9 | 20.0 |
| Anthracene | Ave | 1.159 | 1.114 | 0.7000 | 9.61 | 10.0 | -3.9 | 20.0 |
| Carbazole | Ave | 1.046 | 1.084 | 0.0100 | 10.4 | 10.0 | 3.7 | 20.0 |
| Di-n-butyl phthalate | Ave | 1.229 | 1.382 | 0.0100 | 11.2 | 10.0 | 12.5 | 20.0 |
| Fluoranthene | Ave | 0.9936 | 1.061 | 0.6000 | 10.7 | 10.0 | 6.7 | 20.0 |
| Benzidine | Ave | 0.6601 | 0.6592 | | 20.0 | 20.0 | -0.1 | 20.0 |
| Pyrene | Ave | 1.212 | 1.248 | 0.6000 | 10.3 | 10.0 | 2.9 | 20.0 |
| Butyl benzyl phthalate | Ave | 0.6609 | 0.7050 | 0.0100 | 10.7 | 10.0 | 6.7 | 20.0 |
| Bis(2-ethylhexyl) phthalate | Ave | 0.9242 | 1.009 | 0.0100 | 10.9 | 10.0 | 9.1 | 20.0 |
| 3,3'-Dichlorobenzidine | Ave | 0.3475 | 0.3487 | 0.0100 | 20.1 | 20.0 | 0.4 | 20.0 |
| Benzo[a]anthracene | Ave | 1.130 | 1.089 | 0.8000 | 9.63 | 10.0 | -3.7 | 20.0 |
| Chrysene | Ave | 1.028 | 1.028 | 0.7000 | 10.0 | 10.0 | 0.0 | 20.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Lab Sample ID: CCV 240-182251/2  Calibration Date: 05/26/2015 07:52

Instrument ID: A4HP9  Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS  ID: 0.45(mm)  Calib End Date: 05/19/2015 19:33

Lab File ID: 50526002.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Di-n-octyl phthalate | Ave | 2.107 | 2.267 | 0.0100 | 10.8 | 10.0 | 7.6 | 20.0 |
| Benzo[b]fluoranthene | Ave | 1.234 | 1.249 | 0.7000 | 10.1 | 10.0 | 1.2 | 20.0 |
| Benzo[k]fluoranthene | Ave | 1.259 | 1.332 | 0.7000 | 10.6 | 10.0 | 5.8 | 20.0 |
| Benzo[a]pyrene | Ave | 1.182 | 1.194 | 0.7000 | 10.1 | 10.0 | 1.1 | 20.0 |
| Indeno[1,2,3-cd]pyrene | Ave | 1.102 | 1.212 | 0.5000 | 11.0 | 10.0 | 10.0 | 20.0 |
| Dibenz(a,h)anthracene | Ave | 0.9270 | 0.9867 | 0.4000 | 10.6 | 10.0 | 6.4 | 20.0 |
| Benzo[g,h,i]perylene | Ave | 0.9195 | 1.006 | 0.5000 | 10.9 | 10.0 | 9.4 | 20.0 |
| 2-Fluorophenol (Surr) | Ave | 1.729 | 1.750 | | 10.1 | 10.0 | 1.2 | 20.0 |
| Phenol-d5 (Surr) | Ave | 2.335 | 2.288 | | 9.80 | 10.0 | -2.0 | 20.0 |
| Nitrobenzene-d5 (Surr) | Ave | 0.4097 | 0.4290 | | 10.5 | 10.0 | 4.7 | 20.0 |
| 2-Fluorobiphenyl (Surr) | Ave | 1.141 | 1.107 | | 9.70 | 10.0 | -3.0 | 20.0 |
| 2,4,6-Tribromophenol (Surr) | Ave | 0.1049 | 0.0998 | | 9.51 | 10.0 | -4.9 | 20.0 |
| Terphenyl-d14 (Surr) | Ave | 0.7676 | 0.7212 | | 9.40 | 10.0 | -6.0 | 20.0 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51073-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-182098/17-A

Matrix: Solid | Lab File ID: 50524018.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30(g) | Date Analyzed: 05/24/2015 15:55

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182204 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.76 | U | 6.7 | 0.76 |
| 208-96-8 | Acenaphthylene | 0.35 | U | 6.7 | 0.35 |
| 120-12-7 | Anthracene | 0.78 | U | 6.7 | 0.78 |
| 56-55-3 | Benzo[a]anthracene | 0.63 | U | 6.7 | 0.63 |
| 50-32-8 | Benzo[a]pyrene | 0.64 | U | 6.7 | 0.64 |
| 205-99-2 | Benzo[b]fluoranthene | 0.59 | U | 6.7 | 0.59 |
| 191-24-2 | Benzo[g,h,i]perylene | 0.35 | U | 6.7 | 0.35 |
| 207-08-9 | Benzo[k]fluoranthene | 0.68 | U | 6.7 | 0.68 |
| 218-01-9 | Chrysene | 1.1 | U | 6.7 | 1.1 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.66 | U | 6.7 | 0.66 |
| 206-44-0 | Fluoranthene | 0.55 | U | 6.7 | 0.55 |
| 86-73-7 | Fluorene | 0.53 | U | 6.7 | 0.53 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 0.35 | U | 6.7 | 0.35 |
| 91-20-3 | Naphthalene | 0.82 | U | 6.7 | 0.82 |
| 85-01-8 | Phenanthrene | 0.73 | U | 6.7 | 0.73 |
| 129-00-0 | Pyrene | 0.44 | U | 6.7 | 0.44 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 75 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 78 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 70 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 77 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 73 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 59 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51073-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-182098/18-A

Matrix: Solid | Lab File ID: 50524019.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30(g) | Date Analyzed: 05/24/2015 16:20

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182204 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 477 | | 6.7 | 0.76 |
| 208-96-8 | Acenaphthylene | 466 | | 6.7 | 0.35 |
| 120-12-7 | Anthracene | 480 | | 6.7 | 0.78 |
| 56-55-3 | Benzo[a]anthracene | 491 | | 6.7 | 0.63 |
| 50-32-8 | Benzo[a]pyrene | 589 | | 6.7 | 0.64 |
| 205-99-2 | Benzo[b]fluoranthene | 560 | | 6.7 | 0.59 |
| 191-24-2 | Benzo[g,h,i]perylene | 643 | | 6.7 | 0.35 |
| 207-08-9 | Benzo[k]fluoranthene | 606 | | 6.7 | 0.68 |
| 218-01-9 | Chrysene | 528 | | 6.7 | 1.1 |
| 53-70-3 | Dibenz(a,h)anthracene | 612 | | 6.7 | 0.66 |
| 206-44-0 | Fluoranthene | 534 | | 6.7 | 0.55 |
| 86-73-7 | Fluorene | 472 | | 6.7 | 0.53 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 642 | | 6.7 | 0.35 |
| 91-20-3 | Naphthalene | 479 | | 6.7 | 0.82 |
| 85-01-8 | Phenanthrene | 483 | | 6.7 | 0.73 |
| 129-00-0 | Pyrene | 528 | | 6.7 | 0.44 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 75 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 77 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 77 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 77 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 73 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 71 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51073-1

SDG No.:

Client Sample ID: H-DUP01 MS | Lab Sample ID: 240-51073-8 MS

Matrix: Solid | Lab File ID: 50526025.D

Analysis Method: 8270D | Date Collected: 05/20/2015 00:00

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 29.99(g) | Date Analyzed: 05/26/2015 17:29

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182251 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 506 | | 7.8 | 0.89 |
| 208-96-8 | Acenaphthylene | 490 | | 7.8 | 0.41 |
| 120-12-7 | Anthracene | 518 | | 7.8 | 0.91 |
| 56-55-3 | Benzo[a]anthracene | 548 | | 7.8 | 0.74 |
| 50-32-8 | Benzo[a]pyrene | 647 | | 7.8 | 0.75 |
| 205-99-2 | Benzo[b]fluoranthene | 627 | | 7.8 | 0.69 |
| 191-24-2 | Benzo[g,h,i]perylene | 725 | | 7.8 | 0.41 |
| 207-08-9 | Benzo[k]fluoranthene | 621 | | 7.8 | 0.80 |
| 218-01-9 | Chrysene | 589 | | 7.8 | 1.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 657 | | 7.8 | 0.77 |
| 206-44-0 | Fluoranthene | 593 | | 7.8 | 0.65 |
| 86-73-7 | Fluorene | 504 | | 7.8 | 0.62 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 707 | | 7.8 | 0.41 |
| 91-20-3 | Naphthalene | 490 | | 7.8 | 0.96 |
| 85-01-8 | Phenanthrene | 534 | | 7.8 | 0.86 |
| 129-00-0 | Pyrene | 611 | | 7.8 | 0.52 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 66 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 68 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 68 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 68 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 65 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 64 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51073-1

SDG No.:

Client Sample ID: H-DUP01 MSD | Lab Sample ID: 240-51073-8 MSD

Matrix: Solid | Lab File ID: 50526026.D

Analysis Method: 8270D | Date Collected: 05/20/2015 00:00

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30.47(g) | Date Analyzed: 05/26/2015 17:54

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 14.7 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182251 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 507 | | 7.7 | 0.88 |
| 208-96-8 | Acenaphthylene | 501 | | 7.7 | 0.40 |
| 120-12-7 | Anthracene | 528 | | 7.7 | 0.90 |
| 56-55-3 | Benzo[a]anthracene | 579 | | 7.7 | 0.73 |
| 50-32-8 | Benzo[a]pyrene | 656 | | 7.7 | 0.74 |
| 205-99-2 | Benzo[b]fluoranthene | 621 | | 7.7 | 0.68 |
| 191-24-2 | Benzo[g,h,i]perylene | 758 | | 7.7 | 0.40 |
| 207-08-9 | Benzo[k]fluoranthene | 647 | | 7.7 | 0.79 |
| 218-01-9 | Chrysene | 629 | | 7.7 | 1.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 684 | | 7.7 | 0.76 |
| 206-44-0 | Fluoranthene | 614 | | 7.7 | 0.64 |
| 86-73-7 | Fluorene | 501 | | 7.7 | 0.61 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 718 | | 7.7 | 0.40 |
| 91-20-3 | Naphthalene | 506 | | 7.7 | 0.95 |
| 85-01-8 | Phenanthrene | 540 | | 7.7 | 0.84 |
| 129-00-0 | Pyrene | 634 | | 7.7 | 0.51 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 70 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 71 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 69 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 71 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 64 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 64 | | 19-110 |

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Instrument ID: A4HP9  Start Date: 05/19/2015 15:52

Analysis Batch Number: 181541  End Date: 05/19/2015 22:28

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| DFTPP 240-181541/1 | | 05/19/2015 15:52 | 1 | 50519001.D | RXI-5SILMS 0.45(mm) |
| STD5 240-181541/2 IC | | 05/19/2015 16:13 | 1 | 50519002.D | RXI-5SILMS 0.45(mm) |
| STD4 240-181541/3 IC | | 05/19/2015 16:38 | 1 | 50519003.D | RXI-5SILMS 0.45(mm) |
| STD3 240-181541/4 IC | | 05/19/2015 17:03 | 1 | 50519004.D | RXI-5SILMS 0.45(mm) |
| STD2 240-181541/5 IC | | 05/19/2015 17:28 | 1 | 50519005.D | RXI-5SILMS 0.45(mm) |
| STD1 240-181541/6 IC | | 05/19/2015 17:53 | 1 | 50519006.D | RXI-5SILMS 0.45(mm) |
| STD9 240-181541/7 IC | | 05/19/2015 18:18 | 1 | 50519007.D | RXI-5SILMS 0.45(mm) |
| STD8 240-181541/8 IC | | 05/19/2015 18:43 | 1 | 50519008.D | RXI-5SILMS 0.45(mm) |
| STD7 240-181541/9 IC | | 05/19/2015 19:08 | 1 | 50519009.D | RXI-5SILMS 0.45(mm) |
| STD6 240-181541/10 ICIS | | 05/19/2015 19:33 | 1 | 50519010.D | RXI-5SILMS 0.45(mm) |
| ICV 240-181541/11 | | 05/19/2015 19:58 | 1 | 50519011.D | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/19/2015 21:13 | 200 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/19/2015 21:39 | 100 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/19/2015 22:03 | 50 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/19/2015 22:28 | 50 | | RXI-5SILMS 0.45(mm) |

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Instrument ID: A4HP9 Start Date: 05/24/2015 08:58

Analysis Batch Number: 182204 End Date: 05/24/2015 18:51

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| DFTPP 240-182204/1 | | 05/24/2015 08:58 | 1 | 50524001.D | RXI-5SILMS 0.45(mm) |
| CCV 240-182204/2 CCVIS | | 05/24/2015 09:19 | 1 | 50524002.D | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 10:56 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 11:21 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 13:25 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 13:50 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 14:40 | 1 | | RXI-5SILMS 0.45(mm) |
| MB 240-182098/17-A | | 05/24/2015 15:55 | 1 | 50524018.D | RXI-5SILMS 0.45(mm) |
| LCS 240-182098/18-A | | 05/24/2015 16:20 | 1 | 50524019.D | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 16:45 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 17:11 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 17:36 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 18:01 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 18:26 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 18:51 | 1 | | RXI-5SILMS 0.45(mm) |

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Instrument ID: A4HP9  Start Date: 05/26/2015 07:30

Analysis Batch Number: 182251  End Date: 05/26/2015 17:54

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| DFTPP 240-182251/1 | | 05/26/2015 07:30 | 1 | 50526001.D | RXI-5SILMS 0.45(mm) |
| CCV 240-182251/2 CCVIS | | 05/26/2015 07:52 | 1 | 50526002.D | RXI-5SILMS 0.45(mm) |
| 240-51073-1 | H-US-A-1-1 | 05/26/2015 14:08 | 1 | 50526017.D | RXI-5SILMS 0.45(mm) |
| 240-51073-2 | H-US-A-2-1 | 05/26/2015 14:33 | 1 | 50526018.D | RXI-5SILMS 0.45(mm) |
| 240-51073-3 | H-US-A-3-1 | 05/26/2015 14:58 | 1 | 50526019.D | RXI-5SILMS 0.45(mm) |
| 240-51073-4 | H-US-A-4-1 | 05/26/2015 15:23 | 1 | 50526020.D | RXI-5SILMS 0.45(mm) |
| 240-51073-5 | H-UB-A-1-2 | 05/26/2015 15:48 | 1 | 50526021.D | RXI-5SILMS 0.45(mm) |
| 240-51073-6 | H-UB-A-2-2 | 05/26/2015 16:14 | 1 | 50526022.D | RXI-5SILMS 0.45(mm) |
| 240-51073-7 | H-UB-A-3-2 | 05/26/2015 16:39 | 1 | 50526023.D | RXI-5SILMS 0.45(mm) |
| 240-51073-8 | H-DUP01 | 05/26/2015 17:04 | 1 | 50526024.D | RXI-5SILMS 0.45(mm) |
| 240-51073-8 MS | H-DUP01 MS | 05/26/2015 17:29 | 1 | 50526025.D | RXI-5SILMS 0.45(mm) |
| 240-51073-8 MSD | H-DUP01 MSD | 05/26/2015 17:54 | 1 | 50526026.D | RXI-5SILMS 0.45(mm) |

# GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Batch Number: 182098  Batch Start Date: 05/22/15 12:31  Batch Analyst: Earle, Steve

Batch Method: 3550C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | exBENZALDEHYD 00022 | EXBNASPIKE 00042 | EXBNASURR W 00022 | |
|---|---|---|---|---|---|---|---|---|---|
| 240-51073-B-1 | H-US-A-1-1 | 3550C, 8270D | T | 29.83 g | 2 mL | | | 1 mL | |
| 240-51073-B-2 | H-US-A-2-1 | 3550C, 8270D | T | 29.58 g | 2 mL | | | 1 mL | |
| 240-51073-B-3 | H-US-A-3-1 | 3550C, 8270D | T | 30.45 g | 2 mL | | | 1 mL | |
| 240-51073-B-4 | H-US-A-4-1 | 3550C, 8270D | T | 30.21 g | 2 mL | | | 1 mL | |
| 240-51073-B-5 | H-UB-A-1-2 | 3550C, 8270D | T | 29.96 g | 2 mL | | | 1 mL | |
| 240-51073-B-6 | H-UB-A-2-2 | 3550C, 8270D | T | 30.09 g | 2 mL | | | 1 mL | |
| 240-51073-B-7 | H-UB-A-3-2 | 3550C, 8270D | T | 29.67 g | 2 mL | | | 1 mL | |
| 240-51073-B-8 | H-DUP01 | 3550C, 8270D | T | 29.93 g | 2 mL | | | 1 mL | |
| 240-51073-B-8 MS | H-DUP01 | 3550C, 8270D | T | 29.99 g | 2 mL | 1 mL | 1 mL | 1 mL | |
| 240-51073-B-8 MSD | H-DUP01 | 3550C, 8270D | T | 30.47 g | 2 mL | 1 mL | 1 mL | 1 mL | |
| MB 240-182098/17 | | 3550C, 8270D | | 30 g | 2 mL | | | 1 mL | |
| LCS 240-182098/18 | | 3550C, 8270D | | 30 g | 2 mL | 1 mL | 1 mL | 1 mL | |

| Batch Notes | |
|---|---|
| Balance ID | 1339912 |
| Na2SO4 Lot Number | 1942695 |
| Prep Solvent Lot # | 2002048 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton  Job Number: 240-51073-1

SDG No.:

Project: MRC Soil Remediation (Block H)

| Client Sample ID | Lab Sample ID |
|---|---|
| H-US-A-1-1 | 240-51073-1 |
| H-US-A-2-1 | 240-51073-2 |
| H-US-A-3-1 | 240-51073-3 |
| H-US-A-4-1 | 240-51073-4 |
| H-UB-A-1-2 | 240-51073-5 |
| H-UB-A-2-2 | 240-51073-6 |
| H-UB-A-3-2 | 240-51073-7 |
| H-DUP01 | 240-51073-8 |

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-51073-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 01/28/2010 09:24

| Analyte | Wavelength/ Mass | RL (%) | |
|---|---|---|---|
| Percent Moisture | | 0.1 | |
| Percent Solids | | 0.1 | |

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton  Job Number: 240-51073-1

SDG Number:

Matrix: Solid  Instrument ID: NOEQUIP

Method: Moisture  XRL Date: 01/28/2010 09:24

| Analyte | Wavelength/ Mass | XRL (mg/L) | |
|---|---|---|---|
| Percent Moisture | | 10 | |
| Percent Solids | | 10 | |

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 05/22/2015 17:23 End Date: 05/22/2015 17:23

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | % Sol | Moist | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| 240-51073-1 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-51073-2 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-51073-3 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-51073-4 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-51073-5 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-51073-6 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-51073-7 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-51073-8 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-50885-A-1 DU | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-51073-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 05/22/2015 17:23 End Date: 05/22/2015 17:23

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | % Sol | Moist | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |

Prep Types

T = Total/NA

# GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton  Job No.: 240-51073-1

SDG No.:

Batch Number: 182160  Batch Start Date: 05/22/15 17:23  Batch Analyst: Eikelberry, Nicholas

Batch Method: Moisture  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | DishWeight | SampleMassWet | SampleMassDry | | | |
|---|---|---|---|---|---|---|---|---|---|
| 240-51073-A-1 | H-US-A-1-1 | Moisture | T | 4.2418 g | 13.4609 g | 11.9941 g | | | |
| 240-51073-A-2 | H-US-A-2-1 | Moisture | T | 4.2418 g | 15.4668 g | 13.8243 g | | | |
| 240-51073-A-3 | H-US-A-3-1 | Moisture | T | 4.2418 g | 18.1127 g | 15.1481 g | | | |
| 240-51073-A-4 | H-US-A-4-1 | Moisture | T | 4.2418 g | 13.4903 g | 11.7838 g | | | |
| 240-51073-A-5 | H-UB-A-1-2 | Moisture | T | 4.2418 g | 17.8401 g | 15.7530 g | | | |
| 240-51073-A-6 | H-UB-A-2-2 | Moisture | T | 4.2418 g | 12.3595 g | 10.9978 g | | | |
| 240-51073-A-7 | H-UB-A-3-2 | Moisture | T | 4.2418 g | 14.5035 g | 12.7278 g | | | |
| 240-51073-A-8 | H-DUP01 | Moisture | T | 4.2418 g | 10.5467 g | 9.6185 g | | | |
| 240-50885-A-1 DU | | Moisture | T | 4.2418 g | 12.1893 g | 8.0850 g | | | |

| Batch Notes | |
|---|---|
| Balance ID | B047 No Unit |
| Date samples were placed in the oven | 5/22/15 |
| Oven Temp when samples are put in oven | 103.1 Degrees C |
| Time samples were place in the oven | 17:40 |
| Date samples were removed from oven | 5/26/15 |
| Oven Temp when samples removed from oven | 103.3 Degrees C |
| Time Samples were removed from oven | 04:30 |
| Oven ID | 002 |
| ID number of the thermometer | Tempguard Box C #6 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Shipping and Receiving Documents

TestAmerica Laboratories, Inc.

# CHAIN OF CUSTODY
# AND
# RECEIVING DOCUMENTS

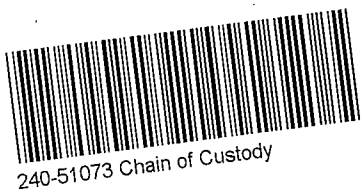




4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

## CHAIN OF CUSTODY RECORD

1,8/C0,6

| PROJECT NO.: | SITE NAME: |
|---|---|
| 112IC07483 | MAL Sp.1 Remediation (Block H) |

SAMPLERS (SIGNATURE): JOSH MULLIS

| STATION NO. | DATE | TIME | COMP | GRAB | STATION LOCATION | NO. OF CON-TAINERS | PAH (8270D) | | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5/20 | 1408 | X | | H-VS-A-1-1 | 1 | X | | | | | | ★3 DAY TAT |
| | | 1345 | X | | H-VS-A-2-1 | 1 | X | | | | | | ★TESTAMERICA |
| | | 1347 | X | | H-VS-A-3-1 | 1 | X | | | | | | NORTH CANTON, OH ★ |
| | | 1352 | X | | H-VS-A-4-1 | 1 | X | | | | | | |
| | | 1401 | | X | H-VB-A-1-2 | 1 | X | | | | | | |
| | | 1358 | | X | H-VB-A-2-2 | 1 | X | | | | | | |
| | | 1356 | | X | H-VB-A-3-2 | 1 | X | | | | | | |
| | | — | X | | H-DUP01 | 1 | X | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | 5/20/15 | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY(SIGNATURE): | RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY(SIGNATURE): |
|---|---|---|---|---|---|
| | 5/20 1545 | | | | |
| RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY (SIGNATURE): | RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY(SIGNATURE): |
| | 5-20 (BCD) | 5-22-15 930 | | | |
| RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED FOR LABORATORY BY (SIGNATURE): | DATE / TIME: | REMARKS: | |
| | | | | | |

Order No. 70440 (0693)

**TestAmerica Canton Sample Receipt Form/Narrative** Login # : 51073
**Canton Facility**

Client MRC Site Name _____ Cooler unpacked by:

Cooler Received on 5-22-15 Opened on 5-22-15

FedEx: 1st Grd ~~Exp~~ UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

**Receipt After-hours:** Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box ~~Client Cooler~~ Box Other _____

Packing material used: ~~Bubble~~ Wrap Foam Plastic Bag None Other _____

COOLANT: ~~Wet Ice~~ Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

~~IR GUN# A (CF +4.0 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C ☐ See Multiple Cooler Form

~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. 1.8 °C Corrected Cooler Temp. 0.6 °C

| | | |
|---|---|---|
| 2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 | ~~Yes~~ | No |
| -Were custody seals on the outside of the cooler(s) signed & dated? | ~~Yes~~ | No NA |
| -Were custody seals on the bottle(s)? | Yes | ~~No~~ |
| 3. Shippers' packing slip attached to the cooler(s)? | ~~Yes~~ | No |
| 4. Did custody papers accompany the sample(s)? | ~~Yes~~ | No |
| 5. Were the custody papers relinquished & signed in the appropriate place? | ~~Yes~~ | No |
| 6. Was/were the sampler(s) clearly identified on the COC? | Yes | ~~No~~ |
| 7. Did all bottles arrive in good condition (Unbroken)? | ~~Yes~~ | No |
| 8. Could all bottle labels be reconciled with the COC? | ~~Yes~~ | No |
| 9. Were correct bottle(s) used for the test(s) indicated? | ~~Yes~~ | No |
| 10. Sufficient quantity received to perform indicated analyses? | ~~Yes~~ | No |
| 11. Were sample(s) at the correct pH upon receipt? | Yes | No ~~NA~~ pH Strip Lot# HC432654 |
| 12. Were VOAs on the COC? | Yes | ~~No~~ |
| 13. Were air bubbles >6 mm in any VOA vials? | Yes | No ~~NA~~ |
| 14. Was a trip blank present in the cooler(s)? Trip Blank Lot # _____ | Yes | ~~No~~ |

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

**14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES** Samples processed by:

**15. SAMPLE CONDITION**

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

**16. SAMPLE PRESERVATION**

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

Job Number: 240-51061-1

Job Description: MRC Soil Remediation (Block H)

For:
Tetra Tech, Inc.
Foster Plaza 7
661 Anderson Drive
Pittsburgh, PA 15220-2745

Attention: Mr. Scott Nesbit



Approved for release.
John McFadden
Project Manager I
5/27/2015 1:53 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
05/27/2015

cc: Tony Apanavage
Samantha Brenner
Kelly Carper
Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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# CASE NARRATIVE

## Client: Tetra Tech, Inc.

## Project: MRC Soil Remediation (Block H)

## Report Number: 240-51061-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

**RECEIPT**

The samples were received on 5/22/2015 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6º C.

**SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)**

Samples H-VS-B-1-1 (240-51061-1), H-VS-B-2-1 (240-51061-2), H-VS-B-4-1 (240-51061-3), H-VS-B-3-1 (240-51061-4), H-VB-B-1-2 (240-51061-5) and H-VB-B-2-2 (240-51061-6) were analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The samples were prepared on 05/22/2015 and analyzed on 05/24/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**PERCENT SOLIDS**

Samples H-VS-B-1-1 (240-51061-1), H-VS-B-2-1 (240-51061-2), H-VS-B-4-1 (240-51061-3), H-VS-B-3-1 (240-51061-4), H-VB-B-1-2 (240-51061-5) and H-VB-B-2-2 (240-51061-6) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 05/22/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 181541

Lab Sample ID: STD4 240-181541/3 IC Client Sample ID:

Date Analyzed: 05/19/15 16:38 Lab File ID: 50519003.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzoic acid | 7.21 | Poor Chromatography | ulmanm | 05/19/15 17:08 |
| 4-Chloroaniline | 7.57 | Poor Chromatography | ulmanm | 05/19/15 17:08 |
| 2,4-Dinitrophenol | 9.05 | Poor Chromatography | ulmanm | 05/19/15 17:08 |

Lab Sample ID: STD2 240-181541/5 IC Client Sample ID:

Date Analyzed: 05/19/15 17:28 Lab File ID: 50519005.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzoic acid | 7.20 | Poor Chromatography | ulmanm | 05/19/15 17:57 |
| Indeno[1,2,3-cd]pyrene | 16.43 | Poor Chromatography | ulmanm | 05/19/15 17:57 |

Lab Sample ID: STD1 240-181541/6 IC Client Sample ID:

Date Analyzed: 05/19/15 17:53 Lab File ID: 50519006.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 16.43 | Poor Chromatography | ulmanm | 05/19/15 18:21 |
| Dibenz(a,h)anthracene | 16.44 | Poor Chromatography | ulmanm | 05/19/15 18:21 |
| Benzo[g,h,i]perylene | 17.05 | Poor Chromatography | ulmanm | 05/19/15 18:21 |

Lab Sample ID: STD9 240-181541/7 IC Client Sample ID:

Date Analyzed: 05/19/15 18:18 Lab File ID: 50519007.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 4-Chloroaniline | 7.57 | Poor Chromatography | ulmanm | 05/19/15 19:02 |
| Caprolactam | 7.86 | Poor Chromatography | ulmanm | 05/19/15 19:02 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 181541

Lab Sample ID: STD8 240-181541/8 IC Client Sample ID:

Date Analyzed: 05/19/15 18:43 Lab File ID: 50519008.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Caprolactam | 7.85 | Poor Chromatography | ulmanm | 05/19/15 19:10 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 182204

Lab Sample ID: CCV 240-182204/2 CCVIS Client Sample ID:

Date Analyzed: 05/24/15 09:19 Lab File ID: 50524002.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,4-Dioxane | 2.99 | Poor Chromatography | ulmanm | 05/24/15 10:05 |

Lab Sample ID: 240-51061-2 Client Sample ID: H-VS-B-2-1

Date Analyzed: 05/24/15 17:11 Lab File ID: 50524021.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[k]fluoranthene | 13.78 | Poor Chromatography | ulmanm | 05/26/15 11:36 |
| Indeno[1,2,3-cd]pyrene | 16.22 | Poor Chromatography | ulmanm | 05/26/15 11:36 |
| Benzo[g,h,i]perylene | 16.82 | Poor Chromatography | ulmanm | 05/26/15 11:36 |

# SAMPLE SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-51061-1

| Lab Sample ID | Client Sample ID | Client Matrix | Date/Time Sampled | Date/Time Received |
|---|---|---|---|---|
| 240-51061-1 | H-VS-B-1-1 | Solid | 05/20/2015 1623 | 05/22/2015 0930 |
| 240-51061-2 | H-VS-B-2-1 | Solid | 05/20/2015 1626 | 05/22/2015 0930 |
| 240-51061-3 | H-VS-B-4-1 | Solid | 05/20/2015 1632 | 05/22/2015 0930 |
| 240-51061-4 | H-VS-B-3-1 | Solid | 05/21/2015 0910 | 05/22/2015 0930 |
| 240-51061-5 | H-VB-B-1-2 | Solid | 05/21/2015 0915 | 05/22/2015 0930 |
| 240-51061-6 | H-VB-B-2-2 | Solid | 05/21/2015 0920 | 05/22/2015 0930 |

# EXECUTIVE SUMMARY - Detections

Client: Tetra Tech, Inc. Job Number: 240-51061-1

| Lab Sample ID / Analyte | Client Sample ID | Result | Qualifier | Reporting Limit | Units | Method |
|---|---|---|---|---|---|---|
| **240-51061-1** | **H-VS-B-1-1** | | | | | |
| Percent Solids | | 89 | | 0.10 | % | Moisture |
| Percent Moisture | | 11 | | 0.10 | % | Moisture |
| **240-51061-2** | **H-VS-B-2-1** | | | | | |
| Anthracene | | 4.4 | J | 7.5 | ug/Kg | 8270D |
| Benzo[a]anthracene | | 15 | | 7.5 | ug/Kg | 8270D |
| Benzo[a]pyrene | | 22 | | 7.5 | ug/Kg | 8270D |
| Benzo[b]fluoranthene | | 21 | | 7.5 | ug/Kg | 8270D |
| Benzo[g,h,i]perylene | | 17 | | 7.5 | ug/Kg | 8270D |
| Benzo[k]fluoranthene | | 8.3 | | 7.5 | ug/Kg | 8270D |
| Chrysene | | 21 | | 7.5 | ug/Kg | 8270D |
| Fluoranthene | | 24 | | 7.5 | ug/Kg | 8270D |
| Indeno[1,2,3-cd]pyrene | | 13 | | 7.5 | ug/Kg | 8270D |
| Phenanthrene | | 11 | | 7.5 | ug/Kg | 8270D |
| Pyrene | | 42 | | 7.5 | ug/Kg | 8270D |
| Percent Solids | | 88 | | 0.10 | % | Moisture |
| Percent Moisture | | 12 | | 0.10 | % | Moisture |
| **240-51061-3** | **H-VS-B-4-1** | | | | | |
| Chrysene | | 3.8 | J | 7.7 | ug/Kg | 8270D |
| Fluoranthene | | 5.1 | J | 7.7 | ug/Kg | 8270D |
| Phenanthrene | | 6.3 | J | 7.7 | ug/Kg | 8270D |
| Pyrene | | 7.9 | | 7.7 | ug/Kg | 8270D |
| Percent Solids | | 86 | | 0.10 | % | Moisture |
| Percent Moisture | | 14 | | 0.10 | % | Moisture |
| **240-51061-4** | **H-VS-B-3-1** | | | | | |
| Fluoranthene | | 4.3 | J | 7.5 | ug/Kg | 8270D |
| Pyrene | | 6.4 | J | 7.5 | ug/Kg | 8270D |
| Percent Solids | | 89 | | 0.10 | % | Moisture |
| Percent Moisture | | 11 | | 0.10 | % | Moisture |
| **240-51061-5** | **H-VB-B-1-2** | | | | | |
| Pyrene | | 4.7 | J | 8.2 | ug/Kg | 8270D |
| Percent Solids | | 81 | | 0.10 | % | Moisture |
| Percent Moisture | | 19 | | 0.10 | % | Moisture |

# EXECUTIVE SUMMARY - Detections

Client: Tetra Tech, Inc. Job Number: 240-51061-1

| Lab Sample ID / Analyte | Client Sample ID | Result | Qualifier | Reporting Limit | Units | Method |
|---|---|---|---|---|---|---|
| **240-51061-6** | **H-VB-B-2-2** | | | | | |
| Benzo[a]anthracene | | 4.5 | J | 8.1 | ug/Kg | 8270D |
| Fluoranthene | | 5.7 | J | 8.1 | ug/Kg | 8270D |
| Phenanthrene | | 4.9 | J | 8.1 | ug/Kg | 8270D |
| Pyrene | | 9.2 | | 8.1 | ug/Kg | 8270D |
| Percent Solids | | 81 | | 0.10 | % | Moisture |
| Percent Moisture | | 19 | | 0.10 | % | Moisture |

# METHOD SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-51061-1

| Description | Lab Location | Method | Preparation Method |
|---|---|---|---|
| **Matrix: Solid** | | | |
| Semivolatile Organic Compounds (GC/MS) | TAL CAN | SW846 8270D | |
| Ultrasonic Extraction | TAL CAN | | SW846 3550C |
| Percent Moisture | TAL CAN | EPA Moisture | |

**Lab References:**

TAL CAN = TestAmerica Canton

**Method References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

# METHOD / ANALYST SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-51061-1

| Method | Analyst | Analyst ID |
|---|---|---|
| SW846 8270D | Ulman, Mark | MRU |
| EPA Moisture | Eikelberry, Nicholas | NJE |

Client: Tetra Tech, Inc. Job Number: 240-51061-1

**Client Sample ID:** **H-VS-B-1-1**

Lab Sample ID: 240-51061-1 Date Sampled: 05/20/2015 1623
Client Matrix: Solid % Moisture: 11.1 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182204 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50524020.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 30.43 g |
| Analysis Date: | 05/24/2015 1645 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.84 | U | 0.84 | 7.4 |
| Acenaphthylene | | 0.39 | U | 0.39 | 7.4 |
| Anthracene | | 0.86 | U | 0.86 | 7.4 |
| Benzo[a]anthracene | | 0.70 | U | 0.70 | 7.4 |
| Benzo[a]pyrene | | 0.71 | U | 0.71 | 7.4 |
| Benzo[b]fluoranthene | | 0.65 | U | 0.65 | 7.4 |
| Benzo[g,h,i]perylene | | 0.39 | U | 0.39 | 7.4 |
| Benzo[k]fluoranthene | | 0.75 | U | 0.75 | 7.4 |
| Chrysene | | 1.2 | U | 1.2 | 7.4 |
| Dibenz(a,h)anthracene | | 0.73 | U | 0.73 | 7.4 |
| Fluoranthene | | 0.61 | U | 0.61 | 7.4 |
| Fluorene | | 0.59 | U | 0.59 | 7.4 |
| Indeno[1,2,3-cd]pyrene | | 0.39 | U | 0.39 | 7.4 |
| Naphthalene | | 0.91 | U | 0.91 | 7.4 |
| Phenanthrene | | 0.81 | U | 0.81 | 7.4 |
| Pyrene | | 0.49 | U | 0.49 | 7.4 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 74 | | 34 - 110 |
| Phenol-d5 (Surr) | 75 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 69 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 75 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 72 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 69 | | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51061-1

**Client Sample ID: H-VS-B-2-1**

Lab Sample ID: 240-51061-2 Date Sampled: 05/20/2015 1626
Client Matrix: Solid % Moisture: 11.5 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182204 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50524021.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 30.19 g |
| Analysis Date: | 05/24/2015 1711 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.85 | U | 0.85 | 7.5 |
| Acenaphthylene | | 0.39 | U | 0.39 | 7.5 |
| Anthracene | | 4.4 | J | 0.88 | 7.5 |
| Benzo[a]anthracene | | 15 | | 0.71 | 7.5 |
| Benzo[a]pyrene | | 22 | | 0.72 | 7.5 |
| Benzo[b]fluoranthene | | 21 | | 0.66 | 7.5 |
| Benzo[g,h,i]perylene | | 17 | | 0.39 | 7.5 |
| Benzo[k]fluoranthene | | 8.3 | | 0.76 | 7.5 |
| Chrysene | | 21 | | 1.2 | 7.5 |
| Dibenz(a,h)anthracene | | 0.74 | U | 0.74 | 7.5 |
| Fluoranthene | | 24 | | 0.62 | 7.5 |
| Fluorene | | 0.60 | U | 0.60 | 7.5 |
| Indeno[1,2,3-cd]pyrene | | 13 | | 0.39 | 7.5 |
| Naphthalene | | 0.92 | U | 0.92 | 7.5 |
| Phenanthrene | | 11 | | 0.82 | 7.5 |
| Pyrene | | 42 | | 0.49 | 7.5 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 69 | | 34 - 110 |
| Phenol-d5 (Surr) | 72 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 68 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 72 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 68 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 65 | | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51061-1

**Client Sample ID:** **H-VS-B-4-1**

Lab Sample ID: 240-51061-3 Date Sampled: 05/20/2015 1632
Client Matrix: Solid % Moisture: 13.6 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182204 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50524022.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 30.11 g |
| Analysis Date: | 05/24/2015 1736 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.88 | U | 0.88 | 7.7 |
| Acenaphthylene | | 0.40 | U | 0.40 | 7.7 |
| Anthracene | | 0.90 | U | 0.90 | 7.7 |
| Benzo[a]anthracene | | 0.73 | U | 0.73 | 7.7 |
| Benzo[a]pyrene | | 0.74 | U | 0.74 | 7.7 |
| Benzo[b]fluoranthene | | 0.68 | U | 0.68 | 7.7 |
| Benzo[g,h,i]perylene | | 0.40 | U | 0.40 | 7.7 |
| Benzo[k]fluoranthene | | 0.78 | U | 0.78 | 7.7 |
| Chrysene | | 3.8 | J | 1.3 | 7.7 |
| Dibenz(a,h)anthracene | | 0.76 | U | 0.76 | 7.7 |
| Fluoranthene | | 5.1 | J | 0.63 | 7.7 |
| Fluorene | | 0.61 | U | 0.61 | 7.7 |
| Indeno[1,2,3-cd]pyrene | | 0.40 | U | 0.40 | 7.7 |
| Naphthalene | | 0.95 | U | 0.95 | 7.7 |
| Phenanthrene | | 6.3 | J | 0.84 | 7.7 |
| Pyrene | | 7.9 | | 0.51 | 7.7 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 69 | | 34 - 110 |
| Phenol-d5 (Surr) | 72 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 68 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 73 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 71 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 67 | | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51061-1

**Client Sample ID:** **H-VS-B-3-1**

Lab Sample ID: 240-51061-4 Date Sampled: 05/21/2015 0910
Client Matrix: Solid % Moisture: 11.3 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182204 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50524023.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 29.95 g |
| Analysis Date: | 05/24/2015 1801 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.86 | U | 0.86 | 7.5 |
| Acenaphthylene | | 0.40 | U | 0.40 | 7.5 |
| Anthracene | | 0.88 | U | 0.88 | 7.5 |
| Benzo[a]anthracene | | 0.71 | U | 0.71 | 7.5 |
| Benzo[a]pyrene | | 0.72 | U | 0.72 | 7.5 |
| Benzo[b]fluoranthene | | 0.67 | U | 0.67 | 7.5 |
| Benzo[g,h,i]perylene | | 0.40 | U | 0.40 | 7.5 |
| Benzo[k]fluoranthene | | 0.77 | U | 0.77 | 7.5 |
| Chrysene | | 1.2 | U | 1.2 | 7.5 |
| Dibenz(a,h)anthracene | | 0.75 | U | 0.75 | 7.5 |
| Fluoranthene | | 4.3 | J | 0.62 | 7.5 |
| Fluorene | | 0.60 | U | 0.60 | 7.5 |
| Indeno[1,2,3-cd]pyrene | | 0.40 | U | 0.40 | 7.5 |
| Naphthalene | | 0.93 | U | 0.93 | 7.5 |
| Phenanthrene | | 0.82 | U | 0.82 | 7.5 |
| Pyrene | | 6.4 | J | 0.50 | 7.5 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 69 | | 34 - 110 |
| Phenol-d5 (Surr) | 68 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 62 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 68 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 65 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 62 | | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51061-1

**Client Sample ID: H-VB-B-1-2**

Lab Sample ID: 240-51061-5 Date Sampled: 05/21/2015 0915
Client Matrix: Solid % Moisture: 19.4 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182204 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50524024.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 30.18 g |
| Analysis Date: | 05/24/2015 1826 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.94 | U | 0.94 | 8.2 |
| Acenaphthylene | | 0.43 | U | 0.43 | 8.2 |
| Anthracene | | 0.96 | U | 0.96 | 8.2 |
| Benzo[a]anthracene | | 0.78 | U | 0.78 | 8.2 |
| Benzo[a]pyrene | | 0.79 | U | 0.79 | 8.2 |
| Benzo[b]fluoranthene | | 0.73 | U | 0.73 | 8.2 |
| Benzo[g,h,i]perylene | | 0.43 | U | 0.43 | 8.2 |
| Benzo[k]fluoranthene | | 0.84 | U | 0.84 | 8.2 |
| Chrysene | | 1.4 | U | 1.4 | 8.2 |
| Dibenz(a,h)anthracene | | 0.81 | U | 0.81 | 8.2 |
| Fluoranthene | | 0.68 | U | 0.68 | 8.2 |
| Fluorene | | 0.65 | U | 0.65 | 8.2 |
| Indeno[1,2,3-cd]pyrene | | 0.43 | U | 0.43 | 8.2 |
| Naphthalene | | 1.0 | U | 1.0 | 8.2 |
| Phenanthrene | | 0.90 | U | 0.90 | 8.2 |
| Pyrene | | 4.7 | J | 0.54 | 8.2 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 70 | | 34 - 110 |
| Phenol-d5 (Surr) | 71 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 63 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 72 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 66 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 66 | | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51061-1

**Client Sample ID: H-VB-B-2-2**

Lab Sample ID: 240-51061-6 Date Sampled: 05/21/2015 0920
Client Matrix: Solid % Moisture: 18.5 Date Received: 05/22/2015 0930

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-182204 | Instrument ID: | A4HP9 |
| Prep Method: | 3550C | Prep Batch: | 240-182098 | Lab File ID: | 50524025.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 30.34 g |
| Analysis Date: | 05/24/2015 1851 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Acenaphthene | | 0.92 | U | 0.92 | 8.1 |
| Acenaphthylene | | 0.42 | U | 0.42 | 8.1 |
| Anthracene | | 0.95 | U | 0.95 | 8.1 |
| Benzo[a]anthracene | | 4.5 | J | 0.76 | 8.1 |
| Benzo[a]pyrene | | 0.78 | U | 0.78 | 8.1 |
| Benzo[b]fluoranthene | | 0.72 | U | 0.72 | 8.1 |
| Benzo[g,h,i]perylene | | 0.42 | U | 0.42 | 8.1 |
| Benzo[k]fluoranthene | | 0.83 | U | 0.83 | 8.1 |
| Chrysene | | 1.3 | U | 1.3 | 8.1 |
| Dibenz(a,h)anthracene | | 0.80 | U | 0.80 | 8.1 |
| Fluoranthene | | 5.7 | J | 0.67 | 8.1 |
| Fluorene | | 0.64 | U | 0.64 | 8.1 |
| Indeno[1,2,3-cd]pyrene | | 0.42 | U | 0.42 | 8.1 |
| Naphthalene | | 0.99 | U | 0.99 | 8.1 |
| Phenanthrene | | 4.9 | J | 0.89 | 8.1 |
| Pyrene | | 9.2 | | 0.53 | 8.1 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 68 | | 34 - 110 |
| Phenol-d5 (Surr) | 70 | | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 63 | | 24 - 110 |
| 2-Fluorophenol (Surr) | 70 | | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 64 | | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 62 | | 19 - 110 |

**General Chemistry**

**Client Sample ID:** **H-VS-B-1-1**

Lab Sample ID: 240-51061-1 Date Sampled: 05/20/2015 1623
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 89 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 11 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

**General Chemistry**

**Client Sample ID:** **H-VS-B-2-1**

Lab Sample ID: 240-51061-2 Date Sampled: 05/20/2015 1626
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 88 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 12 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

**General Chemistry**

**Client Sample ID:** **H-VS-B-4-1**

Lab Sample ID: 240-51061-3 Date Sampled: 05/20/2015 1632
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 86 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 14 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

**General Chemistry**

**Client Sample ID:** **H-VS-B-3-1**

Lab Sample ID: 240-51061-4 Date Sampled: 05/21/2015 0910
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 89 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 11 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

**General Chemistry**

**Client Sample ID:** **H-VB-B-1-2**

Lab Sample ID: 240-51061-5 Date Sampled: 05/21/2015 0915
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 81 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 19 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

**General Chemistry**

**Client Sample ID:** **H-VB-B-2-2**

Lab Sample ID: 240-51061-6 Date Sampled: 05/21/2015 0920
Client Matrix: Solid Date Received: 05/22/2015 0930

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 81 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |
| Percent Moisture | 19 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-182160 | Analysis Date: 05/22/2015 1723 | | | | | | DryWt Corrected: N |

Client: Tetra Tech, Inc. Job Number: 240-51061-1

## Surrogate Recovery Report

**8270D Semivolatile Organic Compounds (GC/MS)**

**Client Matrix: Solid**

| Lab Sample ID | Client Sample ID | 2FP %Rec | PHL %Rec | NBZ %Rec | FBP %Rec | TBP %Rec | TPH %Rec |
|---|---|---|---|---|---|---|---|
| 240-51061-1 | H-VS-B-1-1 | 75 | 75 | 69 | 72 | 69 | 74 |
| 240-51061-2 | H-VS-B-2-1 | 72 | 72 | 68 | 68 | 65 | 69 |
| 240-51061-3 | H-VS-B-4-1 | 73 | 72 | 68 | 71 | 67 | 69 |
| 240-51061-4 | H-VS-B-3-1 | 68 | 68 | 62 | 65 | 62 | 69 |
| 240-51061-5 | H-VB-B-1-2 | 72 | 71 | 63 | 66 | 66 | 70 |
| 240-51061-6 | H-VB-B-2-2 | 70 | 70 | 63 | 64 | 62 | 68 |
| MB 240-182098/17-A | | 77 | 78 | 70 | 73 | 59 | 75 |
| LCS 240-182098/18-A | | 77 | 77 | 77 | 73 | 71 | 75 |

| Surrogate | Acceptance Limits |
|---|---|
| 2FP = 2-Fluorophenol (Surr) | 31-110 |
| PHL = Phenol-d5 (Surr) | 28-110 |
| NBZ = Nitrobenzene-d5 (Surr) | 24-110 |
| FBP = 2-Fluorobiphenyl (Surr) | 27-110 |
| TBP = 2,4,6-Tribromophenol (Surr) | 19-110 |
| TPH = Terphenyl-d14 (Surr) | 34-110 |

Client: Tetra Tech, Inc. Job Number: 240-51061-1

**Method Blank - Batch: 240-182098**

**Method: 8270D**
**Preparation: 3550C**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-182098/17-A | Analysis Batch: | 240-182204 | Instrument ID: | A4HP9 |
| Client Matrix: | Solid | Prep Batch: | 240-182098 | Lab File ID: | 50524018.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30 g |
| Analysis Date: | 05/24/2015 1555 | Units: | ug/Kg | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | | |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| Acenaphthene | 0.76 | U | 0.76 | 6.7 |
| Acenaphthylene | 0.35 | U | 0.35 | 6.7 |
| Anthracene | 0.78 | U | 0.78 | 6.7 |
| Benzo[a]anthracene | 0.63 | U | 0.63 | 6.7 |
| Benzo[a]pyrene | 0.64 | U | 0.64 | 6.7 |
| Benzo[b]fluoranthene | 0.59 | U | 0.59 | 6.7 |
| Benzo[g,h,i]perylene | 0.35 | U | 0.35 | 6.7 |
| Benzo[k]fluoranthene | 0.68 | U | 0.68 | 6.7 |
| Chrysene | 1.1 | U | 1.1 | 6.7 |
| Dibenz(a,h)anthracene | 0.66 | U | 0.66 | 6.7 |
| Fluoranthene | 0.55 | U | 0.55 | 6.7 |
| Fluorene | 0.53 | U | 0.53 | 6.7 |
| Indeno[1,2,3-cd]pyrene | 0.35 | U | 0.35 | 6.7 |
| Naphthalene | 0.82 | U | 0.82 | 6.7 |
| Phenanthrene | 0.73 | U | 0.73 | 6.7 |
| Pyrene | 0.44 | U | 0.44 | 6.7 |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| Terphenyl-d14 (Surr) | 75 | 34 - 110 |
| Phenol-d5 (Surr) | 78 | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 70 | 24 - 110 |
| 2-Fluorophenol (Surr) | 77 | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 73 | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 59 | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51061-1

**Lab Control Sample - Batch: 240-182098**

**Method: 8270D**
**Preparation: 3550C**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-182098/18-A | Analysis Batch: | 240-182204 | Instrument ID: | A4HP9 |
| Client Matrix: | Solid | Prep Batch: | 240-182098 | Lab File ID: | 50524019.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30 g |
| Analysis Date: | 05/24/2015 1620 | Units: | ug/Kg | Final Weight/Volume: | 2 mL |
| Prep Date: | 05/22/2015 1231 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | | |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| Acenaphthene | 667 | 477 | 72 | 49 - 110 | |
| Acenaphthylene | 667 | 466 | 70 | 49 - 110 | |
| Anthracene | 667 | 480 | 72 | 48 - 110 | |
| Benzo[a]anthracene | 667 | 491 | 74 | 48 - 110 | |
| Benzo[a]pyrene | 667 | 589 | 88 | 44 - 110 | |
| Benzo[b]fluoranthene | 667 | 560 | 84 | 47 - 110 | |
| Benzo[g,h,i]perylene | 667 | 643 | 96 | 50 - 110 | |
| Benzo[k]fluoranthene | 667 | 606 | 91 | 38 - 110 | |
| Chrysene | 667 | 528 | 79 | 51 - 110 | |
| Dibenz(a,h)anthracene | 667 | 612 | 92 | 46 - 110 | |
| Fluoranthene | 667 | 534 | 80 | 48 - 110 | |
| Fluorene | 667 | 472 | 71 | 51 - 110 | |
| Indeno[1,2,3-cd]pyrene | 667 | 642 | 96 | 47 - 110 | |
| Naphthalene | 667 | 479 | 72 | 49 - 110 | |
| Phenanthrene | 667 | 483 | 72 | 49 - 110 | |
| Pyrene | 667 | 528 | 79 | 46 - 110 | |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| Terphenyl-d14 (Surr) | 75 | 34 - 110 |
| Phenol-d5 (Surr) | 77 | 28 - 110 |
| Nitrobenzene-d5 (Surr) | 77 | 24 - 110 |
| 2-Fluorophenol (Surr) | 77 | 31 - 110 |
| 2-Fluorobiphenyl (Surr) | 73 | 27 - 110 |
| 2,4,6-Tribromophenol (Surr) | 71 | 19 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-51061-1

**Duplicate - Batch: 240-182160**

**Method: Moisture**
**Preparation: N/A**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | 240-50885-A-1 DU | Analysis Batch: | 240-182160 | Instrument ID: | No Equipment Assigned |
| Client Matrix: | Solid | Prep Batch: | N/A | Lab File ID: | N/A |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | |
| Analysis Date: | 05/22/2015 1723 | Units: | % | Final Weight/Volume: | |
| Prep Date: | N/A | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Sample Result/Qual | Result | RPD | Limit | Qual |
|---|---|---|---|---|---|
| Percent Solids | 48 | 48 | 0 | 20 | |
| Percent Moisture | 52 | 52 | 0 | 20 | |

# DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc. Job Number: 240-51061-1

| Lab Section | Qualifier | Description |
|---|---|---|
| GC/MS Semi VOA | | |
| | U | Indicates the analyte was analyzed for but not detected. |
| | J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |

Client: Tetra Tech, Inc. Job Number: 240-51061-1

## QC Association Summary

| Lab Sample ID | Client Sample ID | Report Basis | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| **GC/MS Semi VOA** | | | | | |
| **Prep Batch: 240-182098** | | | | | |
| LCS 240-182098/18-A | Lab Control Sample | T | Solid | 3550C | |
| MB 240-182098/17-A | Method Blank | T | Solid | 3550C | |
| 240-51061-1 | H-VS-B-1-1 | T | Solid | 3550C | |
| 240-51061-2 | H-VS-B-2-1 | T | Solid | 3550C | |
| 240-51061-3 | H-VS-B-4-1 | T | Solid | 3550C | |
| 240-51061-4 | H-VS-B-3-1 | T | Solid | 3550C | |
| 240-51061-5 | H-VB-B-1-2 | T | Solid | 3550C | |
| 240-51061-6 | H-VB-B-2-2 | T | Solid | 3550C | |
| **Analysis Batch:240-182204** | | | | | |
| LCS 240-182098/18-A | Lab Control Sample | T | Solid | 8270D | 240-182098 |
| MB 240-182098/17-A | Method Blank | T | Solid | 8270D | 240-182098 |
| 240-51061-1 | H-VS-B-1-1 | T | Solid | 8270D | 240-182098 |
| 240-51061-2 | H-VS-B-2-1 | T | Solid | 8270D | 240-182098 |
| 240-51061-3 | H-VS-B-4-1 | T | Solid | 8270D | 240-182098 |
| 240-51061-4 | H-VS-B-3-1 | T | Solid | 8270D | 240-182098 |
| 240-51061-5 | H-VB-B-1-2 | T | Solid | 8270D | 240-182098 |
| 240-51061-6 | H-VB-B-2-2 | T | Solid | 8270D | 240-182098 |

**Report Basis**
T = Total

**General Chemistry**

| Lab Sample ID | Client Sample ID | Report Basis | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| **Analysis Batch:240-182160** | | | | | |
| 240-50885-A-1 DU | Duplicate | T | Solid | Moisture | |
| 240-51061-1 | H-VS-B-1-1 | T | Solid | Moisture | |
| 240-51061-2 | H-VS-B-2-1 | T | Solid | Moisture | |
| 240-51061-3 | H-VS-B-4-1 | T | Solid | Moisture | |
| 240-51061-4 | H-VS-B-3-1 | T | Solid | Moisture | |
| 240-51061-5 | H-VB-B-1-2 | T | Solid | Moisture | |
| 240-51061-6 | H-VB-B-2-2 | T | Solid | Moisture | |

**Report Basis**
T = Total

Client: Tetra Tech, Inc. Job Number: 240-51061-1

## Laboratory Chronicle

**Lab ID: 240-51061-1** **Client ID: H-VS-B-1-1**

Sample Date/Time: 05/20/2015 16:23 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51061-B-1-A | | 240-182204 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51061-B-1-A | | 240-182204 | 240-182098 | 05/24/2015 16:45 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51061-A-1 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab ID: 240-51061-2** **Client ID: H-VS-B-2-1**

Sample Date/Time: 05/20/2015 16:26 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51061-B-2-A | | 240-182204 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51061-B-2-A | | 240-182204 | 240-182098 | 05/24/2015 17:11 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51061-A-2 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab ID: 240-51061-3** **Client ID: H-VS-B-4-1**

Sample Date/Time: 05/20/2015 16:32 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51061-B-3-A | | 240-182204 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51061-B-3-A | | 240-182204 | 240-182098 | 05/24/2015 17:36 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51061-A-3 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab ID: 240-51061-4** **Client ID: H-VS-B-3-1**

Sample Date/Time: 05/21/2015 09:10 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51061-B-4-A | | 240-182204 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51061-B-4-A | | 240-182204 | 240-182098 | 05/24/2015 18:01 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51061-A-4 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab ID: 240-51061-5** **Client ID: H-VB-B-1-2**

Sample Date/Time: 05/21/2015 09:15 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51061-B-5-A | | 240-182204 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51061-B-5-A | | 240-182204 | 240-182098 | 05/24/2015 18:26 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51061-A-5 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

Client: Tetra Tech, Inc. Job Number: 240-51061-1

## Laboratory Chronicle

**Lab ID: 240-51061-6** **Client ID: H-VB-B-2-2**

Sample Date/Time: 05/21/2015 09:20 Received Date/Time: 05/22/2015 09:30

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | 240-51061-B-6-A | | 240-182204 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | 240-51061-B-6-A | | 240-182204 | 240-182098 | 05/24/2015 18:51 | 1 | TAL CAN | MRU |
| A:Moisture | 240-51061-A-6 | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab ID: MB** **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | MB 240-182098/17-A | | 240-182204 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | MB 240-182098/17-A | | 240-182204 | 240-182098 | 05/24/2015 15:55 | 1 | TAL CAN | MRU |

**Lab ID: LCS** **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:3550C | LCS 240-182098/18-A | | 240-182204 | 240-182098 | 05/22/2015 12:31 | 1 | TAL CAN | SDE |
| A:8270D | LCS 240-182098/18-A | | 240-182204 | 240-182098 | 05/24/2015 16:20 | 1 | TAL CAN | MRU |

**Lab ID: DU** **Client ID: N/A**

Sample Date/Time: 05/18/2015 10:15 Received Date/Time: 05/19/2015 08:50

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| A:Moisture | 240-50885-A-1 DU | | 240-182160 | | 05/22/2015 17:23 | 1 | TAL CAN | NJE |

**Lab References:**
TAL CAN = TestAmerica Canton

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **exBENZALDEHYD_00022** | 06/10/16 | 05/14/15 | MEOH, Lot 0000085233 | 200 mL | EXLIST1_S11_00001 | 4 mL | Atrazine | 40 ug/mL |
| | | | | | | | Benzaldehyde | 40 ug/mL |
| | | | | | | | Caprolactam | 40 ug/mL |
| .EXLIST1_S11_00001 | 08/31/16 | | Restek, Lot A0108989 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| **EXBNASPIKE_00042** | 06/10/16 | 05/11/15 | MEOH, Lot 0000085233 | 200 mL | EXLIST1_S1_00001 | 4 mL | 1,1'-Biphenyl | 20 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 20 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 20 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 20 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,4-Dioxane | 20 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 20 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 20 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 20 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 20 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 20 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 20 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 20 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 40 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 20 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 20 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 20 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 20 ug/mL |
| | | | | | | | 2-Chlorophenol | 20 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 20 ug/mL |
| | | | | | | | 2-Methylphenol | 20 ug/mL |
| | | | | | | | 2-Nitroaniline | 20 ug/mL |
| | | | | | | | 2-Nitrophenol | 20 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 20 ug/mL |
| | | | | | | | 3-Methylphenol | 10 ug/mL |
| | | | | | | | 3-Nitroaniline | 20 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 40 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 20 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 20 ug/mL |
| | | | | | | | 4-Chloroaniline | 20 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 20 ug/mL |
| | | | | | | | 4-Methylphenol | 10 ug/mL |
| | | | | | | | 4-Nitroaniline | 20 ug/mL |
| | | | | | | | 4-Nitrophenol | 40 ug/mL |
| | | | | | | | Acenaphthene | 20 ug/mL |
| | | | | | | | Acenaphthylene | 20 ug/mL |
| | | | | | | | Acetophenone | 20 ug/mL |
| | | | | | | | Aniline | 20 ug/mL |
| | | | | | | | Anthracene | 20 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Azobenzene | 20 ug/mL |
| | | | | | | | Benzo[a]anthracene | 20 ug/mL |
| | | | | | | | Benzo[a]pyrene | 20 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 20 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 20 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 20 ug/mL |
| | | | | | | | Benzyl alcohol | 20 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 20 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 20 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 20 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 20 ug/mL |
| | | | | | | | Carbazole | 20 ug/mL |
| | | | | | | | Chrysene | 20 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 20 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 20 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 20 ug/mL |
| | | | | | | | Dibenzofuran | 20 ug/mL |
| | | | | | | | Diethyl phthalate | 20 ug/mL |
| | | | | | | | Dimethyl phthalate | 20 ug/mL |
| | | | | | | | Fluoranthene | 20 ug/mL |
| | | | | | | | Fluorene | 20 ug/mL |
| | | | | | | | Hexachlorobenzene | 20 ug/mL |
| | | | | | | | Hexachlorobutadiene | 20 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 20 ug/mL |
| | | | | | | | Hexachloroethane | 20 ug/mL |
| | | | | | | | Hexadecane | 20 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 20 ug/mL |
| | | | | | | | Isophorone | 20 ug/mL |
| | | | | | | | n-Decane | 20 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 20 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 20 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 40 ug/mL |
| | | | | | | | n-Octadecane | 20 ug/mL |
| | | | | | | | Naphthalene | 20 ug/mL |
| | | | | | | | Nitrobenzene | 20 ug/mL |
| | | | | | | | Pentachlorophenol | 40 ug/mL |
| | | | | | | | Phenanthrene | 20 ug/mL |
| | | | | | | | Phenol | 20 ug/mL |
| | | | | | | | Pyrene | 20 ug/mL |
| | | | | | | | Pyridine | 20 ug/mL |
| | | | | | EXLIST1_S10_00001 | 4 mL | Benzoic acid | 40 ug/mL |
| | | | | | | | Indene | 40 ug/mL |
| | | | | | EXLIST1_S9_00001 | 4 mL | 3,3'-Dichlorobenzidine | 40 ug/mL |
| | | | | | | | Benzidine | 40 ug/mL |
| .EXLIST1_S1_00001 | 09/30/16 | | Restek, Lot A0109703 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Methylphenol | 500 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Methylphenol | 500 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| .EXLIST1_S10_00001 | 08/31/16 | | Restek, Lot A0108988 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| .EXLIST1_S9_00001 | 07/31/16 | | Restek, Lot A0108709 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| **EXBNASURR W_00022** | 06/10/16 | 04/18/15 | MEOH, Lot 85233 | 2000 mL | SMLIST1 SURR_00003 | 8 mL | 2,4,6-Tribromophenol (Surr) | 20 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 20 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 20 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 20 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 20 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 20 ug/mL |
| .SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L1 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1PAH ST_00004 | 2 uL | 1,1'-Biphenyl | 0.1 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 0.1 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 0.1 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 0.1 ug/mL |
| | | | | | | | Acenaphthene | 0.1 ug/mL |
| | | | | | | | Acenaphthylene | 0.1 ug/mL |
| | | | | | | | Anthracene | 0.1 ug/mL |
| | | | | | | | Benzo[a]anthracene | 0.1 ug/mL |
| | | | | | | | Benzo[a]pyrene | 0.1 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 0.1 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 0.1 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 0.1 ug/mL |
| | | | | | | | Chrysene | 0.1 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 0.1 ug/mL |
| | | | | | | | Dibenzofuran | 0.1 ug/mL |
| | | | | | | | Fluoranthene | 0.1 ug/mL |
| | | | | | | | Fluorene | 0.1 ug/mL |
| | | | | | | | Hexachlorobenzene | 0.1 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 0.1 ug/mL |
| | | | | | | | Naphthalene | 0.1 ug/mL |
| | | | | | | | Phenanthrene | 0.1 ug/mL |
| | | | | | | | Pyrene | 0.1 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 0.1 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 0.1 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 0.1 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | Restek, Lot A0101020 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1PAH ST_00004 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 3 mL | SMLIST1 PAH_00004 | 300 uL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 60 uL | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 PAH_00004 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L2 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 10 uL | 1,1'-Biphenyl | 0.5 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 0.5 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 0.5 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,4-Dioxane | 0.5 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 0.5 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 0.5 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 0.5 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 0.5 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 0.5 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 0.5 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 0.5 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 1 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 0.5 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 0.5 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 0.5 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 0.5 ug/mL |
| | | | | | | | 2-Chlorophenol | 0.5 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 0.5 ug/mL |
| | | | | | | | 2-Methylphenol | 0.5 ug/mL |
| | | | | | | | 2-Nitroaniline | 0.5 ug/mL |
| | | | | | | | 2-Nitrophenol | 0.5 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 0.5 ug/mL |
| | | | | | | | 3-Nitroaniline | 0.5 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 1 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 0.5 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 0.5 ug/mL |
| | | | | | | | 4-Chloroaniline | 0.5 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 0.5 ug/mL |
| | | | | | | | 4-Nitroaniline | 0.5 ug/mL |
| | | | | | | | 4-Nitrophenol | 1 ug/mL |
| | | | | | | | Acenaphthene | 0.5 ug/mL |
| | | | | | | | Acenaphthylene | 0.5 ug/mL |
| | | | | | | | Acetophenone | 0.5 ug/mL |
| | | | | | | | Aniline | 0.5 ug/mL |
| | | | | | | | Anthracene | 0.5 ug/mL |
| | | | | | | | Azobenzene | 0.5 ug/mL |
| | | | | | | | Benzo[a]anthracene | 0.5 ug/mL |
| | | | | | | | Benzo[a]pyrene | 0.5 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 0.5 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 0.5 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 0.5 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzyl alcohol | 0.5 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 0.5 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 0.5 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 0.5 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 0.5 ug/mL |
| | | | | | | | Carbazole | 0.5 ug/mL |
| | | | | | | | Chrysene | 0.5 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 0.5 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 0.5 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 0.5 ug/mL |
| | | | | | | | Dibenzofuran | 0.5 ug/mL |
| | | | | | | | Diethyl phthalate | 0.5 ug/mL |
| | | | | | | | Dimethyl phthalate | 0.5 ug/mL |
| | | | | | | | Fluoranthene | 0.5 ug/mL |
| | | | | | | | Fluorene | 0.5 ug/mL |
| | | | | | | | Hexachlorobenzene | 0.5 ug/mL |
| | | | | | | | Hexachlorobutadiene | 0.5 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 0.5 ug/mL |
| | | | | | | | Hexachloroethane | 0.5 ug/mL |
| | | | | | | | Hexadecane | 0.5 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 0.5 ug/mL |
| | | | | | | | Isophorone | 0.5 ug/mL |
| | | | | | | | n-Decane | 0.5 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 0.5 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 0.5 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 1 ug/mL |
| | | | | | | | n-Octadecane | 0.5 ug/mL |
| | | | | | | | Naphthalene | 0.5 ug/mL |
| | | | | | | | Nitrobenzene | 0.5 ug/mL |
| | | | | | | | Pentachlorophenol | 1 ug/mL |
| | | | | | | | Phenanthrene | 0.5 ug/mL |
| | | | | | | | Phenol | 0.5 ug/mL |
| | | | | | | | Pyrene | 0.5 ug/mL |
| | | | | | | | Pyridine | 0.5 ug/mL |
| | | | | | | | Benzoic acid | 1 ug/mL |
| | | | | | | | Indene | 1 ug/mL |
| | | | | | | | Atrazine | 1 ug/mL |
| | | | | | | | Benzaldehyde | 1 ug/mL |
| | | | | | | | Caprolactam | 1 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 1 ug/mL |
| | | | | | | | Benzidine | 1 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 0.5 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 0.5 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 0.5 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 0.5 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 0.5 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 0.5 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L3 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 20 uL | 1,1'-Biphenyl | 1 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1 ug/mL |
| | | | | | | | 1,4-Dioxane | 1 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1 ug/mL |
| | | | | | | | 2-Chlorophenol | 1 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1 ug/mL |
| | | | | | | | 2-Methylphenol | 1 ug/mL |
| | | | | | | | 2-Nitroaniline | 1 ug/mL |
| | | | | | | | 2-Nitrophenol | 1 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1 ug/mL |
| | | | | | | | 3-Nitroaniline | 1 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1 ug/mL |
| | | | | | | | 4-Chloroaniline | 1 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1 ug/mL |
| | | | | | | | 4-Nitroaniline | 1 ug/mL |
| | | | | | | | 4-Nitrophenol | 2 ug/mL |
| | | | | | | | Acenaphthene | 1 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Acenaphthylene | 1 ug/mL |
| | | | | | | | Acetophenone | 1 ug/mL |
| | | | | | | | Aniline | 1 ug/mL |
| | | | | | | | Anthracene | 1 ug/mL |
| | | | | | | | Azobenzene | 1 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1 ug/mL |
| | | | | | | | Benzyl alcohol | 1 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1 ug/mL |
| | | | | | | | Carbazole | 1 ug/mL |
| | | | | | | | Chrysene | 1 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1 ug/mL |
| | | | | | | | Dibenzofuran | 1 ug/mL |
| | | | | | | | Diethyl phthalate | 1 ug/mL |
| | | | | | | | Dimethyl phthalate | 1 ug/mL |
| | | | | | | | Fluoranthene | 1 ug/mL |
| | | | | | | | Fluorene | 1 ug/mL |
| | | | | | | | Hexachlorobenzene | 1 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1 ug/mL |
| | | | | | | | Hexachloroethane | 1 ug/mL |
| | | | | | | | Hexadecane | 1 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1 ug/mL |
| | | | | | | | Isophorone | 1 ug/mL |
| | | | | | | | n-Decane | 1 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2 ug/mL |
| | | | | | | | n-Octadecane | 1 ug/mL |
| | | | | | | | Naphthalene | 1 ug/mL |
| | | | | | | | Nitrobenzene | 1 ug/mL |
| | | | | | | | Pentachlorophenol | 2 ug/mL |
| | | | | | | | Phenanthrene | 1 ug/mL |
| | | | | | | | Phenol | 1 ug/mL |
| | | | | | | | Pyrene | 1 ug/mL |
| | | | | | | | Pyridine | 1 ug/mL |
| | | | | | | | Benzoic acid | 2 ug/mL |
| | | | | | | | Indene | 2 ug/mL |
| | | | | | | | Atrazine | 2 ug/mL |
| | | | | | | | Benzaldehyde | 2 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Caprolactam | 2 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 2 ug/mL |
| | | | | | | | Benzidine | 2 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 1 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 1 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 1 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 1 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 1 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 1 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | Restek, Lot A0101020 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L4 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 40 uL | 1,1'-Biphenyl | 2 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 2 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 2 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 2 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2 ug/mL |
| | | | | | | | 1,4-Dioxane | 2 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 2 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 2 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 2 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 2 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 2 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 2 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 2 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 4 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 2 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 2 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 2 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 2 ug/mL |
| | | | | | | | 2-Chlorophenol | 2 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 2 ug/mL |
| | | | | | | | 2-Methylphenol | 2 ug/mL |
| | | | | | | | 2-Nitroaniline | 2 ug/mL |
| | | | | | | | 2-Nitrophenol | 2 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 3 & 4 Methylphenol | 2 ug/mL |
| | | | | | | | 3-Nitroaniline | 2 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 4 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 2 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 2 ug/mL |
| | | | | | | | 4-Chloroaniline | 2 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 2 ug/mL |
| | | | | | | | 4-Nitroaniline | 2 ug/mL |
| | | | | | | | 4-Nitrophenol | 4 ug/mL |
| | | | | | | | Acenaphthene | 2 ug/mL |
| | | | | | | | Acenaphthylene | 2 ug/mL |
| | | | | | | | Acetophenone | 2 ug/mL |
| | | | | | | | Aniline | 2 ug/mL |
| | | | | | | | Anthracene | 2 ug/mL |
| | | | | | | | Azobenzene | 2 ug/mL |
| | | | | | | | Benzo[a]anthracene | 2 ug/mL |
| | | | | | | | Benzo[a]pyrene | 2 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 2 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 2 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 2 ug/mL |
| | | | | | | | Benzyl alcohol | 2 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 2 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 2 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 2 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 2 ug/mL |
| | | | | | | | Carbazole | 2 ug/mL |
| | | | | | | | Chrysene | 2 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 2 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 2 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 2 ug/mL |
| | | | | | | | Dibenzofuran | 2 ug/mL |
| | | | | | | | Diethyl phthalate | 2 ug/mL |
| | | | | | | | Dimethyl phthalate | 2 ug/mL |
| | | | | | | | Fluoranthene | 2 ug/mL |
| | | | | | | | Fluorene | 2 ug/mL |
| | | | | | | | Hexachlorobenzene | 2 ug/mL |
| | | | | | | | Hexachlorobutadiene | 2 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 2 ug/mL |
| | | | | | | | Hexachloroethane | 2 ug/mL |
| | | | | | | | Hexadecane | 2 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 2 ug/mL |
| | | | | | | | Isophorone | 2 ug/mL |
| | | | | | | | n-Decane | 2 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 2 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 2 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 4 ug/mL |
| | | | | | | | n-Octadecane | 2 ug/mL |
| | | | | | | | Naphthalene | 2 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Nitrobenzene | 2 ug/mL |
| | | | | | | | Pentachlorophenol | 4 ug/mL |
| | | | | | | | Phenanthrene | 2 ug/mL |
| | | | | | | | Phenol | 2 ug/mL |
| | | | | | | | Pyrene | 2 ug/mL |
| | | | | | | | Pyridine | 2 ug/mL |
| | | | | | | | Benzoic acid | 4 ug/mL |
| | | | | | | | Indene | 4 ug/mL |
| | | | | | | | Atrazine | 4 ug/mL |
| | | | | | | | Benzaldehyde | 4 ug/mL |
| | | | | | | | Caprolactam | 4 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 4 ug/mL |
| | | | | | | | Benzidine | 4 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 2 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 2 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 2 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 2 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 2 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 2 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L5 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 100 uL | 1,1'-Biphenyl | 5 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 5 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 5 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 5 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 5 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 5 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 5 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 5 ug/mL |
| | | | | | | | 1,4-Dioxane | 5 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 5 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 5 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 5 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 5 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 5 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 5 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 5 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,4-Dinitrophenol | 10 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 5 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 5 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 5 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 5 ug/mL |
| | | | | | | | 2-Chlorophenol | 5 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 5 ug/mL |
| | | | | | | | 2-Methylphenol | 5 ug/mL |
| | | | | | | | 2-Nitroaniline | 5 ug/mL |
| | | | | | | | 2-Nitrophenol | 5 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 5 ug/mL |
| | | | | | | | 3-Nitroaniline | 5 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 10 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 5 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 5 ug/mL |
| | | | | | | | 4-Chloroaniline | 5 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 5 ug/mL |
| | | | | | | | 4-Nitroaniline | 5 ug/mL |
| | | | | | | | 4-Nitrophenol | 10 ug/mL |
| | | | | | | | Acenaphthene | 5 ug/mL |
| | | | | | | | Acenaphthylene | 5 ug/mL |
| | | | | | | | Acetophenone | 5 ug/mL |
| | | | | | | | Aniline | 5 ug/mL |
| | | | | | | | Anthracene | 5 ug/mL |
| | | | | | | | Azobenzene | 5 ug/mL |
| | | | | | | | Benzo[a]anthracene | 5 ug/mL |
| | | | | | | | Benzo[a]pyrene | 5 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 5 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 5 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 5 ug/mL |
| | | | | | | | Benzyl alcohol | 5 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 5 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 5 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 5 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 5 ug/mL |
| | | | | | | | Carbazole | 5 ug/mL |
| | | | | | | | Chrysene | 5 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 5 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 5 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 5 ug/mL |
| | | | | | | | Dibenzofuran | 5 ug/mL |
| | | | | | | | Diethyl phthalate | 5 ug/mL |
| | | | | | | | Dimethyl phthalate | 5 ug/mL |
| | | | | | | | Fluoranthene | 5 ug/mL |
| | | | | | | | Fluorene | 5 ug/mL |
| | | | | | | | Hexachlorobenzene | 5 ug/mL |
| | | | | | | | Hexachlorobutadiene | 5 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 5 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Hexachloroethane | 5 ug/mL |
| | | | | | | | Hexadecane | 5 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 5 ug/mL |
| | | | | | | | Isophorone | 5 ug/mL |
| | | | | | | | n-Decane | 5 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 5 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 5 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 10 ug/mL |
| | | | | | | | n-Octadecane | 5 ug/mL |
| | | | | | | | Naphthalene | 5 ug/mL |
| | | | | | | | Nitrobenzene | 5 ug/mL |
| | | | | | | | Pentachlorophenol | 10 ug/mL |
| | | | | | | | Phenanthrene | 5 ug/mL |
| | | | | | | | Phenol | 5 ug/mL |
| | | | | | | | Pyrene | 5 ug/mL |
| | | | | | | | Pyridine | 5 ug/mL |
| | | | | | | | Benzoic acid | 10 ug/mL |
| | | | | | | | Indene | 10 ug/mL |
| | | | | | | | Atrazine | 10 ug/mL |
| | | | | | | | Benzaldehyde | 10 ug/mL |
| | | | | | | | Caprolactam | 10 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 10 ug/mL |
| | | | | | | | Benzidine | 10 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 5 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L6 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 200 uL | 1,1'-Biphenyl | 10 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 10 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 10 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 10 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 10 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 10 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,3-Dinitrobenzene | 10 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 10 ug/mL |
| | | | | | | | 1,4-Dioxane | 10 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 10 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 10 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 10 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 10 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 10 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 10 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 10 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 20 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 10 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 10 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 10 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 10 ug/mL |
| | | | | | | | 2-Chlorophenol | 10 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 10 ug/mL |
| | | | | | | | 2-Methylphenol | 10 ug/mL |
| | | | | | | | 2-Nitroaniline | 10 ug/mL |
| | | | | | | | 2-Nitrophenol | 10 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 10 ug/mL |
| | | | | | | | 3-Nitroaniline | 10 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 20 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 10 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 10 ug/mL |
| | | | | | | | 4-Chloroaniline | 10 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 10 ug/mL |
| | | | | | | | 4-Nitroaniline | 10 ug/mL |
| | | | | | | | 4-Nitrophenol | 20 ug/mL |
| | | | | | | | Acenaphthene | 10 ug/mL |
| | | | | | | | Acenaphthylene | 10 ug/mL |
| | | | | | | | Acetophenone | 10 ug/mL |
| | | | | | | | Aniline | 10 ug/mL |
| | | | | | | | Anthracene | 10 ug/mL |
| | | | | | | | Azobenzene | 10 ug/mL |
| | | | | | | | Benzo[a]anthracene | 10 ug/mL |
| | | | | | | | Benzo[a]pyrene | 10 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 10 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 10 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 10 ug/mL |
| | | | | | | | Benzyl alcohol | 10 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 10 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 10 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 10 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 10 ug/mL |
| | | | | | | | Carbazole | 10 ug/mL |
| | | | | | | | Chrysene | 10 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 10 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Di-n-octyl phthalate | 10 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 10 ug/mL |
| | | | | | | | Dibenzofuran | 10 ug/mL |
| | | | | | | | Diethyl phthalate | 10 ug/mL |
| | | | | | | | Dimethyl phthalate | 10 ug/mL |
| | | | | | | | Fluoranthene | 10 ug/mL |
| | | | | | | | Fluorene | 10 ug/mL |
| | | | | | | | Hexachlorobenzene | 10 ug/mL |
| | | | | | | | Hexachlorobutadiene | 10 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 10 ug/mL |
| | | | | | | | Hexachloroethane | 10 ug/mL |
| | | | | | | | Hexadecane | 10 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 10 ug/mL |
| | | | | | | | Isophorone | 10 ug/mL |
| | | | | | | | n-Decane | 10 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 10 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 10 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 20 ug/mL |
| | | | | | | | n-Octadecane | 10 ug/mL |
| | | | | | | | Naphthalene | 10 ug/mL |
| | | | | | | | Nitrobenzene | 10 ug/mL |
| | | | | | | | Pentachlorophenol | 20 ug/mL |
| | | | | | | | Phenanthrene | 10 ug/mL |
| | | | | | | | Phenol | 10 ug/mL |
| | | | | | | | Pyrene | 10 ug/mL |
| | | | | | | | Pyridine | 10 ug/mL |
| | | | | | | | Benzoic acid | 20 ug/mL |
| | | | | | | | Indene | 20 ug/mL |
| | | | | | | | Atrazine | 20 ug/mL |
| | | | | | | | Benzaldehyde | 20 ug/mL |
| | | | | | | | Caprolactam | 20 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 20 ug/mL |
| | | | | | | | Benzidine | 20 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 10 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 10 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 10 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 10 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 10 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 10 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | Restek, Lot A0101020 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L7 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 300 uL | 1,1'-Biphenyl | 15 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 15 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 15 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 15 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 15 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 15 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 15 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 15 ug/mL |
| | | | | | | | 1,4-Dioxane | 15 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 15 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 15 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 15 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 15 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 15 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 15 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 15 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 30 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 15 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 15 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 15 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 15 ug/mL |
| | | | | | | | 2-Chlorophenol | 15 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 15 ug/mL |
| | | | | | | | 2-Methylphenol | 15 ug/mL |
| | | | | | | | 2-Nitroaniline | 15 ug/mL |
| | | | | | | | 2-Nitrophenol | 15 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 15 ug/mL |
| | | | | | | | 3-Nitroaniline | 15 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 30 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 15 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 15 ug/mL |
| | | | | | | | 4-Chloroaniline | 15 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 15 ug/mL |
| | | | | | | | 4-Nitroaniline | 15 ug/mL |
| | | | | | | | 4-Nitrophenol | 30 ug/mL |
| | | | | | | | Acenaphthene | 15 ug/mL |
| | | | | | | | Acenaphthylene | 15 ug/mL |
| | | | | | | | Acetophenone | 15 ug/mL |
| | | | | | | | Aniline | 15 ug/mL |
| | | | | | | | Anthracene | 15 ug/mL |
| | | | | | | | Azobenzene | 15 ug/mL |
| | | | | | | | Benzo[a]anthracene | 15 ug/mL |
| | | | | | | | Benzo[a]pyrene | 15 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 15 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzo[g,h,i]perylene | 15 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 15 ug/mL |
| | | | | | | | Benzyl alcohol | 15 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 15 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 15 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 15 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 15 ug/mL |
| | | | | | | | Carbazole | 15 ug/mL |
| | | | | | | | Chrysene | 15 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 15 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 15 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 15 ug/mL |
| | | | | | | | Dibenzofuran | 15 ug/mL |
| | | | | | | | Diethyl phthalate | 15 ug/mL |
| | | | | | | | Dimethyl phthalate | 15 ug/mL |
| | | | | | | | Fluoranthene | 15 ug/mL |
| | | | | | | | Fluorene | 15 ug/mL |
| | | | | | | | Hexachlorobenzene | 15 ug/mL |
| | | | | | | | Hexachlorobutadiene | 15 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 15 ug/mL |
| | | | | | | | Hexachloroethane | 15 ug/mL |
| | | | | | | | Hexadecane | 15 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 15 ug/mL |
| | | | | | | | Isophorone | 15 ug/mL |
| | | | | | | | n-Decane | 15 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 15 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 15 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 30 ug/mL |
| | | | | | | | n-Octadecane | 15 ug/mL |
| | | | | | | | Naphthalene | 15 ug/mL |
| | | | | | | | Nitrobenzene | 15 ug/mL |
| | | | | | | | Pentachlorophenol | 30 ug/mL |
| | | | | | | | Phenanthrene | 15 ug/mL |
| | | | | | | | Phenol | 15 ug/mL |
| | | | | | | | Pyrene | 15 ug/mL |
| | | | | | | | Pyridine | 15 ug/mL |
| | | | | | | | Benzoic acid | 30 ug/mL |
| | | | | | | | Indene | 30 ug/mL |
| | | | | | | | Atrazine | 30 ug/mL |
| | | | | | | | Benzaldehyde | 30 ug/mL |
| | | | | | | | Caprolactam | 30 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 30 ug/mL |
| | | | | | | | Benzidine | 30 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 15 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 15 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 15 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 15 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 15 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Terphenyl-d14 (Surr) | 15 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L8 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 400 uL | 1,1'-Biphenyl | 20 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 20 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 20 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 20 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 20 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,4-Dioxane | 20 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 20 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 20 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 20 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 20 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 20 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 20 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 20 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 40 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 20 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 20 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 20 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 20 ug/mL |
| | | | | | | | 2-Chlorophenol | 20 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 20 ug/mL |
| | | | | | | | 2-Methylphenol | 20 ug/mL |
| | | | | | | | 2-Nitroaniline | 20 ug/mL |
| | | | | | | | 2-Nitrophenol | 20 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 20 ug/mL |
| | | | | | | | 3-Nitroaniline | 20 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 40 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 20 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 20 ug/mL |
| | | | | | | | 4-Chloroaniline | 20 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 20 ug/mL |
| | | | | | | | 4-Nitroaniline | 20 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4-Nitrophenol | 40 ug/mL |
| | | | | | | | Acenaphthene | 20 ug/mL |
| | | | | | | | Acenaphthylene | 20 ug/mL |
| | | | | | | | Acetophenone | 20 ug/mL |
| | | | | | | | Aniline | 20 ug/mL |
| | | | | | | | Anthracene | 20 ug/mL |
| | | | | | | | Azobenzene | 20 ug/mL |
| | | | | | | | Benzo[a]anthracene | 20 ug/mL |
| | | | | | | | Benzo[a]pyrene | 20 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 20 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 20 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 20 ug/mL |
| | | | | | | | Benzyl alcohol | 20 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 20 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 20 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 20 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 20 ug/mL |
| | | | | | | | Carbazole | 20 ug/mL |
| | | | | | | | Chrysene | 20 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 20 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 20 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 20 ug/mL |
| | | | | | | | Dibenzofuran | 20 ug/mL |
| | | | | | | | Diethyl phthalate | 20 ug/mL |
| | | | | | | | Dimethyl phthalate | 20 ug/mL |
| | | | | | | | Fluoranthene | 20 ug/mL |
| | | | | | | | Fluorene | 20 ug/mL |
| | | | | | | | Hexachlorobenzene | 20 ug/mL |
| | | | | | | | Hexachlorobutadiene | 20 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 20 ug/mL |
| | | | | | | | Hexachloroethane | 20 ug/mL |
| | | | | | | | Hexadecane | 20 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 20 ug/mL |
| | | | | | | | Isophorone | 20 ug/mL |
| | | | | | | | n-Decane | 20 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 20 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 20 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 40 ug/mL |
| | | | | | | | n-Octadecane | 20 ug/mL |
| | | | | | | | Naphthalene | 20 ug/mL |
| | | | | | | | Nitrobenzene | 20 ug/mL |
| | | | | | | | Pentachlorophenol | 40 ug/mL |
| | | | | | | | Phenanthrene | 20 ug/mL |
| | | | | | | | Phenol | 20 ug/mL |
| | | | | | | | Pyrene | 20 ug/mL |
| | | | | | | | Pyridine | 20 ug/mL |
| | | | | | | | Benzoic acid | 40 ug/mL |
| | | | | | | | Indene | 40 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Atrazine | 40 ug/mL |
| | | | | | | | Benzaldehyde | 40 ug/mL |
| | | | | | | | Caprolactam | 40 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 40 ug/mL |
| | | | | | | | Benzidine | 40 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 20 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 20 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 20 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 20 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 20 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 20 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L9 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 500 uL | 1,1'-Biphenyl | 25 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 25 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 25 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 25 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 25 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 25 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 25 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 25 ug/mL |
| | | | | | | | 1,4-Dioxane | 25 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 25 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 25 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 25 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 25 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 25 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 25 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 25 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 50 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 25 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 25 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 25 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 25 ug/mL |
| | | | | | | | 2-Chlorophenol | 25 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 25 ug/mL |
| | | | | | | | 2-Methylphenol | 25 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Nitroaniline | 25 ug/mL |
| | | | | | | | 2-Nitrophenol | 25 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 25 ug/mL |
| | | | | | | | 3-Nitroaniline | 25 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 50 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 25 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 25 ug/mL |
| | | | | | | | 4-Chloroaniline | 25 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 25 ug/mL |
| | | | | | | | 4-Nitroaniline | 25 ug/mL |
| | | | | | | | 4-Nitrophenol | 50 ug/mL |
| | | | | | | | Acenaphthene | 25 ug/mL |
| | | | | | | | Acenaphthylene | 25 ug/mL |
| | | | | | | | Acetophenone | 25 ug/mL |
| | | | | | | | Aniline | 25 ug/mL |
| | | | | | | | Anthracene | 25 ug/mL |
| | | | | | | | Azobenzene | 25 ug/mL |
| | | | | | | | Benzo[a]anthracene | 25 ug/mL |
| | | | | | | | Benzo[a]pyrene | 25 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 25 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 25 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 25 ug/mL |
| | | | | | | | Benzyl alcohol | 25 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 25 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 25 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 25 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 25 ug/mL |
| | | | | | | | Carbazole | 25 ug/mL |
| | | | | | | | Chrysene | 25 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 25 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 25 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 25 ug/mL |
| | | | | | | | Dibenzofuran | 25 ug/mL |
| | | | | | | | Diethyl phthalate | 25 ug/mL |
| | | | | | | | Dimethyl phthalate | 25 ug/mL |
| | | | | | | | Fluoranthene | 25 ug/mL |
| | | | | | | | Fluorene | 25 ug/mL |
| | | | | | | | Hexachlorobenzene | 25 ug/mL |
| | | | | | | | Hexachlorobutadiene | 25 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 25 ug/mL |
| | | | | | | | Hexachloroethane | 25 ug/mL |
| | | | | | | | Hexadecane | 25 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 25 ug/mL |
| | | | | | | | Isophorone | 25 ug/mL |
| | | | | | | | n-Decane | 25 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 25 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 25 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 50 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | n-Octadecane | 25 ug/mL |
| | | | | | | | Naphthalene | 25 ug/mL |
| | | | | | | | Nitrobenzene | 25 ug/mL |
| | | | | | | | Pentachlorophenol | 50 ug/mL |
| | | | | | | | Phenanthrene | 25 ug/mL |
| | | | | | | | Phenol | 25 ug/mL |
| | | | | | | | Pyrene | 25 ug/mL |
| | | | | | | | Pyridine | 25 ug/mL |
| | | | | | | | Benzoic acid | 50 ug/mL |
| | | | | | | | Indene | 50 ug/mL |
| | | | | | | | Atrazine | 50 ug/mL |
| | | | | | | | Benzaldehyde | 50 ug/mL |
| | | | | | | | Caprolactam | 50 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 50 ug/mL |
| | | | | | | | Benzidine | 50 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 25 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 25 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 25 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 25 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 25 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 25 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 SS W_00004** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMLIST1 SS ST_00004 | 200 uL | Acenaphthene | 10 ug/mL |
| | | | | | | | Acenaphthylene | 10 ug/mL |
| | | | | | | | Anthracene | 10 ug/mL |
| | | | | | | | Benzo[a]anthracene | 10 ug/mL |
| | | | | | | | Benzo[a]pyrene | 10 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 10 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 10 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 10 ug/mL |
| | | | | | | | Chrysene | 10 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 10 ug/mL |
| | | | | | | | Fluoranthene | 10 ug/mL |
| | | | | | | | Fluorene | 10 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 10 ug/mL |
| | | | | | | | Naphthalene | 10 ug/mL |
| | | | | | | | Phenanthrene | 10 ug/mL |
| | | | | | | | Pyrene | 10 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 10 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 10 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 10 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 10 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Phenol-d5 (Surr) | 10 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 10 ug/mL |
| .SMLIST1 SS ST_00004 | 06/30/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 SS S1_00004 | 1 mL | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | SMLIST1SS SUR_00002 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 SS S1_00004 | 06/30/16 | | Restek, Lot A0107697 | | (Purchased Reagent) | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| ..SMLIST1SS SUR_00002 | 09/30/18 | | Restek, Lot A092712 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |

# Certification Summary

Client: Tetra Tech, Inc. TestAmerica Job ID: 240-51061-1
Project/Site: MRC Soil Remediation (Block H)

| Laboratory | Authority | Program | EPA Region | Certification ID |
|---|---|---|---|---|
| TestAmerica Canton | California | State Program | 9 | 2927 |
| TestAmerica Canton | Connecticut | State Program | 1 | PH-0590 |
| TestAmerica Canton | Florida | NELAP | 4 | E87225 |
| TestAmerica Canton | Georgia | State Program | 4 | N/A |
| TestAmerica Canton | Illinois | NELAP | 5 | 200004 |
| TestAmerica Canton | Kansas | NELAP | 7 | E-10336 |
| TestAmerica Canton | Kentucky (UST) | State Program | 4 | 58 |
| TestAmerica Canton | Kentucky (WW) | State Program | 4 | 98016 |
| TestAmerica Canton | L-A-B | DoD ELAP | | L2315 |
| TestAmerica Canton | Minnesota | NELAP | 5 | 039-999-348 |
| TestAmerica Canton | Nevada | State Program | 9 | OH-000482008A |
| TestAmerica Canton | New Jersey | NELAP | 2 | OH001 |
| TestAmerica Canton | New York | NELAP | 2 | 10975 |
| TestAmerica Canton | Ohio VAP | State Program | 5 | CL0024 |
| TestAmerica Canton | Oregon | NELAP | 10 | 4062 |
| TestAmerica Canton | Pennsylvania | NELAP | 3 | 68-00340 |
| TestAmerica Canton | Texas | NELAP | 6 | |
| TestAmerica Canton | USDA | Federal | | P330-13-00319 |
| TestAmerica Canton | Virginia | NELAP | 3 | 460175 |
| TestAmerica Canton | Washington | State Program | 10 | C971 |
| TestAmerica Canton | West Virginia DEP | State Program | 3 | 210 |
| TestAmerica Canton | Wisconsin | State Program | 5 | 999518190 |

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

# Method 8270D

## Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Matrix: Solid  Level: Low

GC Column (1): RXI-5SILMS  ID: 0.45(mm)

| Client Sample ID | Lab Sample ID | 2FP # | PHL # | NBZ # | FBP # | TBP # | TPH # |
|---|---|---|---|---|---|---|---|
| H-VS-B-1-1 | 240-51061-1 | 75 | 75 | 69 | 72 | 69 | 74 |
| H-VS-B-2-1 | 240-51061-2 | 72 | 72 | 68 | 68 | 65 | 69 |
| H-VS-B-4-1 | 240-51061-3 | 73 | 72 | 68 | 71 | 67 | 69 |
| H-VS-B-3-1 | 240-51061-4 | 68 | 68 | 62 | 65 | 62 | 69 |
| H-VB-B-1-2 | 240-51061-5 | 72 | 71 | 63 | 66 | 66 | 70 |
| H-VB-B-2-2 | 240-51061-6 | 70 | 70 | 63 | 64 | 62 | 68 |
| | MB 240-182098/17-A | 77 | 78 | 70 | 73 | 59 | 75 |
| | LCS 240-182098/18-A | 77 | 77 | 77 | 73 | 71 | 75 |

| | QC LIMITS |
|---|---|
| 2FP = 2-Fluorophenol (Surr) | 31-110 |
| PHL = Phenol-d5 (Surr) | 28-110 |
| NBZ = Nitrobenzene-d5 (Surr) | 24-110 |
| FBP = 2-Fluorobiphenyl (Surr) | 27-110 |
| TBP = 2,4,6-Tribromophenol (Surr) | 19-110 |
| TPH = Terphenyl-d14 (Surr) | 34-110 |

# Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50524019.D

Lab ID: LCS 240-182098/18-A Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | LCS CONCENTRATION (ug/Kg) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Acenaphthene | 667 | 477 | 72 | 49-110 | |
| Acenaphthylene | 667 | 466 | 70 | 49-110 | |
| Anthracene | 667 | 480 | 72 | 48-110 | |
| Benzo[a]anthracene | 667 | 491 | 74 | 48-110 | |
| Benzo[a]pyrene | 667 | 589 | 88 | 44-110 | |
| Benzo[b]fluoranthene | 667 | 560 | 84 | 47-110 | |
| Benzo[g,h,i]perylene | 667 | 643 | 96 | 50-110 | |
| Benzo[k]fluoranthene | 667 | 606 | 91 | 38-110 | |
| Chrysene | 667 | 528 | 79 | 51-110 | |
| Dibenz(a,h)anthracene | 667 | 612 | 92 | 46-110 | |
| Fluoranthene | 667 | 534 | 80 | 48-110 | |
| Fluorene | 667 | 472 | 71 | 51-110 | |
| Indeno[1,2,3-cd]pyrene | 667 | 642 | 96 | 47-110 | |
| Naphthalene | 667 | 479 | 72 | 49-110 | |
| Phenanthrene | 667 | 483 | 72 | 49-110 | |
| Pyrene | 667 | 528 | 79 | 46-110 | |

# Column to be used to flag recovery and RPD values

FORM III 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Lab File ID: 50524018.D  Lab Sample ID: MB 240-182098/17-A

Matrix: Solid  Date Extracted: 05/22/2015 12:31

Instrument ID: A4HP9  Date Analyzed: 05/24/2015 15:55

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| | LCS 240-182098/18-A | 50524019.D | 05/24/2015 16:20 |
| H-VS-B-1-1 | 240-51061-1 | 50524020.D | 05/24/2015 16:45 |
| H-VS-B-2-1 | 240-51061-2 | 50524021.D | 05/24/2015 17:11 |
| H-VS-B-4-1 | 240-51061-3 | 50524022.D | 05/24/2015 17:36 |
| H-VS-B-3-1 | 240-51061-4 | 50524023.D | 05/24/2015 18:01 |
| H-VB-B-1-2 | 240-51061-5 | 50524024.D | 05/24/2015 18:26 |
| H-VB-B-2-2 | 240-51061-6 | 50524025.D | 05/24/2015 18:51 |

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

Lab File ID: 50519001.D DFTPP Injection Date: 05/19/2015

Instrument ID: A4HP9 DFTPP Injection Time: 15:52

Analysis Batch No.: 181541

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30.0- 80.0% of mass 198 | 50.2 | |
| 68 | Less than 2.0% of mass 69 | 0.0 | (0.0)1 |
| 69 | Mass 69 relative abundance | 49.8 | |
| 70 | Less than 2.0% of mass 69 | 0.1 | (0.2)1 |
| 127 | 25.0 - 75.0% of mass 198 | 52.5 | |
| 197 | Less than 1.0% of mass 198 | 0.0 | |
| 198 | Base Peak, 100% relative abundance | 100.0 | |
| 199 | 5.0 to 9.0% of mass 198 | 6.5 | |
| 275 | 10.0- 30.0% of mass 198 | 17.1 | |
| 365 | Greater than 0.75% of mass 198 | 1.7 | |
| 441 | Present, but less than mass 443 | 10.5 | |
| 442 | 40.0 - 110.0% of mass 198 | 62.4 | |
| 443 | 15.0 - 24.0% of mass 442 | 12.0 | (19.3)2 |

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | STD5 240-181541/2 | 50519002.D | 05/19/2015 | 16:13 |
| | STD4 240-181541/3 | 50519003.D | 05/19/2015 | 16:38 |
| | STD3 240-181541/4 | 50519004.D | 05/19/2015 | 17:03 |
| | STD2 240-181541/5 | 50519005.D | 05/19/2015 | 17:28 |
| | STD1 240-181541/6 | 50519006.D | 05/19/2015 | 17:53 |
| | STD9 240-181541/7 | 50519007.D | 05/19/2015 | 18:18 |
| | STD8 240-181541/8 | 50519008.D | 05/19/2015 | 18:43 |
| | STD7 240-181541/9 | 50519009.D | 05/19/2015 | 19:08 |
| | STD6 240-181541/10 | 50519010.D | 05/19/2015 | 19:33 |
| | ICV 240-181541/11 | 50519011.D | 05/19/2015 | 19:58 |

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

Lab File ID: 50524001.D DFTPP Injection Date: 05/24/2015

Instrument ID: A4HP9 DFTPP Injection Time: 08:58

Analysis Batch No.: 182204

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30.0- 80.0% of mass 198 | 49.2 | |
| 68 | Less than 2.0% of mass 69 | 0.0 | (0.0)1 |
| 69 | Mass 69 relative abundance | 47.2 | |
| 70 | Less than 2.0% of mass 69 | 0.2 | (0.3)1 |
| 127 | 25.0 - 75.0% of mass 198 | 54.0 | |
| 197 | Less than 1.0% of mass 198 | 0.0 | |
| 198 | Base Peak, 100% relative abundance | 100.0 | |
| 199 | 5.0 to 9.0% of mass 198 | 6.5 | |
| 275 | 10.0- 30.0% of mass 198 | 17.3 | |
| 365 | Greater than 0.75% of mass 198 | 1.6 | |
| 441 | Present, but less than mass 443 | 9.9 | |
| 442 | 40.0 - 110.0% of mass 198 | 56.5 | |
| 443 | 15.0 - 24.0% of mass 442 | 10.9 | (19.4)2 |

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | CCV 240-182204/2 | 50524002.D | 05/24/2015 | 09:19 |
| | MB 240-182098/17-A | 50524018.D | 05/24/2015 | 15:55 |
| | LCS 240-182098/18-A | 50524019.D | 05/24/2015 | 16:20 |
| H-VS-B-1-1 | 240-51061-1 | 50524020.D | 05/24/2015 | 16:45 |
| H-VS-B-2-1 | 240-51061-2 | 50524021.D | 05/24/2015 | 17:11 |
| H-VS-B-4-1 | 240-51061-3 | 50524022.D | 05/24/2015 | 17:36 |
| H-VS-B-3-1 | 240-51061-4 | 50524023.D | 05/24/2015 | 18:01 |
| H-VB-B-1-2 | 240-51061-5 | 50524024.D | 05/24/2015 | 18:26 |
| H-VB-B-2-2 | 240-51061-6 | 50524025.D | 05/24/2015 | 18:51 |

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

Sample No.: STD6 240-181541/10 Date Analyzed: 05/19/2015 19:33

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50519010.D Heated Purge: (Y/N) N

Calibration ID: 28569

| | | DCB | | NPT | | ANT | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 193601 | 6.41 | 821091 | 7.53 | 384100 | 9.04 |
| UPPER LIMIT | | 387202 | 6.91 | 1642182 | 8.03 | 768200 | 9.54 |
| LOWER LIMIT | | 96801 | 5.91 | 410546 | 7.03 | 192050 | 8.54 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 240-181541/11 | | 185978 | 6.42 | 801807 | 7.53 | 376179 | 9.04 |
| CCV 240-182204/2 CCVIS | | 227740 | 6.37 | 951162 | 7.48 | 428019 | 8.99 |

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Sample No.: STD6 240-181541/10  Date Analyzed: 05/19/2015 19:33

Instrument ID: A4HP9  GC Column: RXI-5SILMS  ID: 0.45(mm)

Lab File ID (Standard): 50519010.D  Heated Purge: (Y/N) N

Calibration ID: 28569

| | | PHN | | CRY | | PRY | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 530433 | 10.31 | 495913 | 12.63 | 357574 | 14.45 |
| UPPER LIMIT | | 1060866 | 10.81 | 991826 | 13.13 | 715148 | 14.95 |
| LOWER LIMIT | | 265217 | 9.81 | 247957 | 12.13 | 178787 | 13.95 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 240-181541/11 | | 519420 | 10.32 | 490052 | 12.63 | 347707 | 14.44 |
| CCV 240-182204/2 CCVIS | | 638945 | 10.26 | 561273 | 12.55 | 441142 | 14.31 |

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Sample No.: CCV 240-182204/2  Date Analyzed: 05/24/2015 09:19

Instrument ID: A4HP9  GC Column: RXI-5SILMS  ID: 0.45(mm)

Lab File ID (Standard): 50524002.D  Heated Purge: (Y/N) N

Calibration ID: 28569

| | | DCB | | NPT | | ANT | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 227740 | 6.37 | 951162 | 7.48 | 428019 | 8.99 |
| UPPER LIMIT | | 455480 | 6.87 | 1902324 | 7.98 | 856038 | 9.49 |
| LOWER LIMIT | | 113870 | 5.87 | 475581 | 6.98 | 214010 | 8.49 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| MB 240-182098/17-A | | 197586 | 6.37 | 843653 | 7.48 | 412024 | 8.99 |
| LCS 240-182098/18-A | | 201927 | 6.36 | 864458 | 7.48 | 420531 | 8.99 |
| 240-51061-1 | H-VS-B-1-1 | 198147 | 6.37 | 835961 | 7.48 | 403336 | 8.99 |
| 240-51061-2 | H-VS-B-2-1 | 211384 | 6.36 | 887922 | 7.48 | 431687 | 8.98 |
| 240-51061-3 | H-VS-B-4-1 | 217388 | 6.37 | 896085 | 7.48 | 428752 | 8.98 |
| 240-51061-4 | H-VS-B-3-1 | 216446 | 6.37 | 891484 | 7.48 | 436076 | 8.98 |
| 240-51061-5 | H-VB-B-1-2 | 203903 | 6.37 | 878587 | 7.48 | 416007 | 8.98 |
| 240-51061-6 | H-VB-B-2-2 | 204188 | 6.36 | 870569 | 7.48 | 424723 | 8.99 |

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Sample No.: CCV 240-182204/2  Date Analyzed: 05/24/2015 09:19

Instrument ID: A4HP9  GC Column: RXI-5SILMS  ID: 0.45(mm)

Lab File ID (Standard): 50524002.D  Heated Purge: (Y/N) N

Calibration ID: 28569

| | | PHN | | CRY | | PRY | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 638945 | 10.26 | 561273 | 12.55 | 441142 | 14.31 |
| UPPER LIMIT | | 1277890 | 10.76 | 1122546 | 13.05 | 882284 | 14.81 |
| LOWER LIMIT | | 319473 | 9.76 | 280637 | 12.05 | 220571 | 13.81 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| MB 240-182098/17-A | | 633737 | 10.26 | 522854 | 12.54 | 344862 | 14.30 |
| LCS 240-182098/18-A | | 622299 | 10.26 | 542983 | 12.54 | 368945 | 14.30 |
| 240-51061-1 | H-VS-B-1-1 | 640010 | 10.26 | 522985 | 12.54 | 336819 | 14.31 |
| 240-51061-2 | H-VS-B-2-1 | 669249 | 10.25 | 538658 | 12.54 | 369200 | 14.30 |
| 240-51061-3 | H-VS-B-4-1 | 674416 | 10.25 | 562599 | 12.54 | 367266 | 14.30 |
| 240-51061-4 | H-VS-B-3-1 | 676394 | 10.25 | 549357 | 12.54 | 364390 | 14.30 |
| 240-51061-5 | H-VB-B-1-2 | 660539 | 10.25 | 529508 | 12.54 | 350521 | 14.30 |
| 240-51061-6 | H-VB-B-2-2 | 662188 | 10.25 | 537692 | 12.54 | 348673 | 14.30 |

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51061-1

SDG No.:

Client Sample ID: H-VS-B-1-1 | Lab Sample ID: 240-51061-1

Matrix: Solid | Lab File ID: 50524020.D

Analysis Method: 8270D | Date Collected: 05/20/2015 16:23

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30.43(g) | Date Analyzed: 05/24/2015 16:45

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 11.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182204 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.84 | U | 7.4 | 0.84 |
| 208-96-8 | Acenaphthylene | 0.39 | U | 7.4 | 0.39 |
| 120-12-7 | Anthracene | 0.86 | U | 7.4 | 0.86 |
| 56-55-3 | Benzo[a]anthracene | 0.70 | U | 7.4 | 0.70 |
| 50-32-8 | Benzo[a]pyrene | 0.71 | U | 7.4 | 0.71 |
| 205-99-2 | Benzo[b]fluoranthene | 0.65 | U | 7.4 | 0.65 |
| 191-24-2 | Benzo[g,h,i]perylene | 0.39 | U | 7.4 | 0.39 |
| 207-08-9 | Benzo[k]fluoranthene | 0.75 | U | 7.4 | 0.75 |
| 218-01-9 | Chrysene | 1.2 | U | 7.4 | 1.2 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.73 | U | 7.4 | 0.73 |
| 206-44-0 | Fluoranthene | 0.61 | U | 7.4 | 0.61 |
| 86-73-7 | Fluorene | 0.59 | U | 7.4 | 0.59 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 0.39 | U | 7.4 | 0.39 |
| 91-20-3 | Naphthalene | 0.91 | U | 7.4 | 0.91 |
| 85-01-8 | Phenanthrene | 0.81 | U | 7.4 | 0.81 |
| 129-00-0 | Pyrene | 0.49 | U | 7.4 | 0.49 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 74 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 75 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 69 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 75 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 72 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 69 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51061-1

SDG No.:

Client Sample ID: H-VS-B-2-1 | Lab Sample ID: 240-51061-2

Matrix: Solid | Lab File ID: 50524021.D

Analysis Method: 8270D | Date Collected: 05/20/2015 16:26

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30.19(g) | Date Analyzed: 05/24/2015 17:11

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 11.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182204 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.85 | U | 7.5 | 0.85 |
| 208-96-8 | Acenaphthylene | 0.39 | U | 7.5 | 0.39 |
| 120-12-7 | Anthracene | 4.4 | J | 7.5 | 0.88 |
| 56-55-3 | Benzo[a]anthracene | 15 | | 7.5 | 0.71 |
| 50-32-8 | Benzo[a]pyrene | 22 | | 7.5 | 0.72 |
| 205-99-2 | Benzo[b]fluoranthene | 21 | | 7.5 | 0.66 |
| 191-24-2 | Benzo[g,h,i]perylene | 17 | | 7.5 | 0.39 |
| 207-08-9 | Benzo[k]fluoranthene | 8.3 | | 7.5 | 0.76 |
| 218-01-9 | Chrysene | 21 | | 7.5 | 1.2 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.74 | U | 7.5 | 0.74 |
| 206-44-0 | Fluoranthene | 24 | | 7.5 | 0.62 |
| 86-73-7 | Fluorene | 0.60 | U | 7.5 | 0.60 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 13 | | 7.5 | 0.39 |
| 91-20-3 | Naphthalene | 0.92 | U | 7.5 | 0.92 |
| 85-01-8 | Phenanthrene | 11 | | 7.5 | 0.82 |
| 129-00-0 | Pyrene | 42 | | 7.5 | 0.49 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 69 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 72 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 68 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 72 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 68 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 65 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51061-1

SDG No.:

Client Sample ID: H-VS-B-4-1 | Lab Sample ID: 240-51061-3

Matrix: Solid | Lab File ID: 50524022.D

Analysis Method: 8270D | Date Collected: 05/20/2015 16:32

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30.11(g) | Date Analyzed: 05/24/2015 17:36

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 13.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182204 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.88 | U | 7.7 | 0.88 |
| 208-96-8 | Acenaphthylene | 0.40 | U | 7.7 | 0.40 |
| 120-12-7 | Anthracene | 0.90 | U | 7.7 | 0.90 |
| 56-55-3 | Benzo[a]anthracene | 0.73 | U | 7.7 | 0.73 |
| 50-32-8 | Benzo[a]pyrene | 0.74 | U | 7.7 | 0.74 |
| 205-99-2 | Benzo[b]fluoranthene | 0.68 | U | 7.7 | 0.68 |
| 191-24-2 | Benzo[g,h,i]perylene | 0.40 | U | 7.7 | 0.40 |
| 207-08-9 | Benzo[k]fluoranthene | 0.78 | U | 7.7 | 0.78 |
| 218-01-9 | Chrysene | 3.8 | J | 7.7 | 1.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.76 | U | 7.7 | 0.76 |
| 206-44-0 | Fluoranthene | 5.1 | J | 7.7 | 0.63 |
| 86-73-7 | Fluorene | 0.61 | U | 7.7 | 0.61 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 0.40 | U | 7.7 | 0.40 |
| 91-20-3 | Naphthalene | 0.95 | U | 7.7 | 0.95 |
| 85-01-8 | Phenanthrene | 6.3 | J | 7.7 | 0.84 |
| 129-00-0 | Pyrene | 7.9 | | 7.7 | 0.51 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 69 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 72 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 68 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 73 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 71 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 67 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51061-1

SDG No.:

Client Sample ID: H-VS-B-3-1 | Lab Sample ID: 240-51061-4

Matrix: Solid | Lab File ID: 50524023.D

Analysis Method: 8270D | Date Collected: 05/21/2015 09:10

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 29.95(g) | Date Analyzed: 05/24/2015 18:01

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 11.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182204 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.86 | U | 7.5 | 0.86 |
| 208-96-8 | Acenaphthylene | 0.40 | U | 7.5 | 0.40 |
| 120-12-7 | Anthracene | 0.88 | U | 7.5 | 0.88 |
| 56-55-3 | Benzo[a]anthracene | 0.71 | U | 7.5 | 0.71 |
| 50-32-8 | Benzo[a]pyrene | 0.72 | U | 7.5 | 0.72 |
| 205-99-2 | Benzo[b]fluoranthene | 0.67 | U | 7.5 | 0.67 |
| 191-24-2 | Benzo[g,h,i]perylene | 0.40 | U | 7.5 | 0.40 |
| 207-08-9 | Benzo[k]fluoranthene | 0.77 | U | 7.5 | 0.77 |
| 218-01-9 | Chrysene | 1.2 | U | 7.5 | 1.2 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.75 | U | 7.5 | 0.75 |
| 206-44-0 | Fluoranthene | 4.3 | J | 7.5 | 0.62 |
| 86-73-7 | Fluorene | 0.60 | U | 7.5 | 0.60 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 0.40 | U | 7.5 | 0.40 |
| 91-20-3 | Naphthalene | 0.93 | U | 7.5 | 0.93 |
| 85-01-8 | Phenanthrene | 0.82 | U | 7.5 | 0.82 |
| 129-00-0 | Pyrene | 6.4 | J | 7.5 | 0.50 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 69 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 68 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 62 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 68 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 65 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 62 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51061-1

SDG No.:

Client Sample ID: H-VB-B-1-2 | Lab Sample ID: 240-51061-5

Matrix: Solid | Lab File ID: 50524024.D

Analysis Method: 8270D | Date Collected: 05/21/2015 09:15

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30.18(g) | Date Analyzed: 05/24/2015 18:26

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 19.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182204 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.94 | U | 8.2 | 0.94 |
| 208-96-8 | Acenaphthylene | 0.43 | U | 8.2 | 0.43 |
| 120-12-7 | Anthracene | 0.96 | U | 8.2 | 0.96 |
| 56-55-3 | Benzo[a]anthracene | 0.78 | U | 8.2 | 0.78 |
| 50-32-8 | Benzo[a]pyrene | 0.79 | U | 8.2 | 0.79 |
| 205-99-2 | Benzo[b]fluoranthene | 0.73 | U | 8.2 | 0.73 |
| 191-24-2 | Benzo[g,h,i]perylene | 0.43 | U | 8.2 | 0.43 |
| 207-08-9 | Benzo[k]fluoranthene | 0.84 | U | 8.2 | 0.84 |
| 218-01-9 | Chrysene | 1.4 | U | 8.2 | 1.4 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.81 | U | 8.2 | 0.81 |
| 206-44-0 | Fluoranthene | 0.68 | U | 8.2 | 0.68 |
| 86-73-7 | Fluorene | 0.65 | U | 8.2 | 0.65 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 0.43 | U | 8.2 | 0.43 |
| 91-20-3 | Naphthalene | 1.0 | U | 8.2 | 1.0 |
| 85-01-8 | Phenanthrene | 0.90 | U | 8.2 | 0.90 |
| 129-00-0 | Pyrene | 4.7 | J | 8.2 | 0.54 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 70 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 71 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 63 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 72 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 66 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 66 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51061-1

SDG No.:

Client Sample ID: H-VB-B-2-2 | Lab Sample ID: 240-51061-6

Matrix: Solid | Lab File ID: 50524025.D

Analysis Method: 8270D | Date Collected: 05/21/2015 09:20

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30.34(g) | Date Analyzed: 05/24/2015 18:51

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 18.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182204 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.92 | U | 8.1 | 0.92 |
| 208-96-8 | Acenaphthylene | 0.42 | U | 8.1 | 0.42 |
| 120-12-7 | Anthracene | 0.95 | U | 8.1 | 0.95 |
| 56-55-3 | Benzo[a]anthracene | 4.5 | J | 8.1 | 0.76 |
| 50-32-8 | Benzo[a]pyrene | 0.78 | U | 8.1 | 0.78 |
| 205-99-2 | Benzo[b]fluoranthene | 0.72 | U | 8.1 | 0.72 |
| 191-24-2 | Benzo[g,h,i]perylene | 0.42 | U | 8.1 | 0.42 |
| 207-08-9 | Benzo[k]fluoranthene | 0.83 | U | 8.1 | 0.83 |
| 218-01-9 | Chrysene | 1.3 | U | 8.1 | 1.3 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.80 | U | 8.1 | 0.80 |
| 206-44-0 | Fluoranthene | 5.7 | J | 8.1 | 0.67 |
| 86-73-7 | Fluorene | 0.64 | U | 8.1 | 0.64 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 0.42 | U | 8.1 | 0.42 |
| 91-20-3 | Naphthalene | 0.99 | U | 8.1 | 0.99 |
| 85-01-8 | Phenanthrene | 4.9 | J | 8.1 | 0.89 |
| 129-00-0 | Pyrene | 9.2 | | 8.1 | 0.53 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 68 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 70 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 63 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 70 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 64 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 62 | | 19-110 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton  Job No.: 240-51061-1  Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9  GC Column: RXI-5SILMS  ID: 0.45(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13  Calibration End Date: 05/19/2015 19:33  Calibration ID: 28569

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-181541/6 | 50519006.D |
| Level 2 | STD2 240-181541/5 | 50519005.D |
| Level 3 | STD3 240-181541/4 | 50519004.D |
| Level 4 | STD4 240-181541/3 | 50519003.D |
| Level 5 | STD5 240-181541/2 | 50519002.D |
| Level 6 | STD6 240-181541/10 | 50519010.D |
| Level 7 | STD7 240-181541/9 | 50519009.D |
| Level 8 | STD8 240-181541/8 | 50519008.D |
| Level 9 | STD9 240-181541/7 | 50519007.D |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 1,4-Dioxane | 0.9036 | 0.8928<br>0.9199 | 0.8324<br>0.8887 | 0.9650<br>0.9115 | 0.9191 | Ave | | 0.9041 | | | | 4.1 | | 20.0 | | | |
| N-Nitrosodimethylamine | 1.3840 | 1.4220<br>1.3760 | 1.4073<br>1.3564 | 1.4484<br>1.3802 | 1.3973 | Ave | | 1.3964 | | | | 2.1 | | 20.0 | | | |
| Pyridine | 2.4156 | 2.3195<br>2.4350 | 2.4287<br>2.3192 | 2.5699<br>2.4261 | 2.4265 | Ave | | 2.4176 | | | | 3.2 | | 20.0 | | | |
| Benzaldehyde | 1.3314 | 1.6346<br>1.3131 | 1.6235<br>1.2017 | 1.6280<br>1.1863 | 1.5252 | Ave | | 1.4305 | | | 0.0100 | 13.5 | | 20.0 | | | |
| Phenol | 2.5022 | 2.7530<br>2.4310 | 2.7433<br>2.2478 | 2.7828<br>2.2989 | 2.6477 | Ave | | 2.5508 | | | 0.8000 | 8.3 | | 20.0 | | | |
| Aniline | 3.0790 | 3.2327<br>3.0110 | 3.3080<br>2.8381 | 3.3576<br>2.8828 | 3.2156 | Ave | | 3.1156 | | | | 6.2 | | 20.0 | | | |
| Bis(2-chloroethyl)ether | 1.9859 | 2.0888<br>1.9600 | 2.1211<br>1.7796 | 2.1194<br>1.9018 | 2.1170 | Ave | | 2.0092 | | | 0.7000 | 6.2 | | 20.0 | | | |
| 2-Chlorophenol | 1.6102 | 1.6039<br>1.5763 | 1.5825<br>1.5172 | 1.6330<br>1.5318 | 1.5937 | Ave | | 1.5811 | | | 0.8000 | 2.5 | | 20.0 | | | |
| n-Decane | 2.2518 | 2.3524<br>2.1845 | 2.5161<br>2.0576 | 2.4989<br>2.0953 | 2.4429 | Ave | | 2.2999 | | | | 7.8 | | 20.0 | | | |
| 1,3-Dichlorobenzene | 1.5793 | 1.6288<br>1.5334 | 1.5848<br>1.4552 | 1.6181<br>1.4677 | 1.4935 | Ave | | 1.5451 | | | | 4.4 | | 20.0 | | | |
| 1,4-Dichlorobenzene | 1.6150 | 1.6152<br>1.5546 | 1.6713<br>1.4626 | 1.5829<br>1.4532 | 1.5449 | Ave | | 1.5625 | | | | 4.8 | | 20.0 | | | |
| Benzyl alcohol | 1.2761 | 1.3455<br>1.2479 | 1.3302<br>1.1704 | 1.3619<br>1.2002 | 1.3141 | Ave | | 1.2808 | | | | 5.4 | | 20.0 | | | |
| 1,2-Dichlorobenzene | 1.5319 | 1.5668<br>1.4836 | 1.5407<br>1.3886 | 1.5085<br>1.4134 | 1.4592 | Ave | | 1.4866 | | | | 4.2 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-51061-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 2-Methylphenol | 1.7458 | 1.7985<br>1.6873 | 1.8540<br>1.5902 | 1.8102<br>1.6212 | 1.7989 | Ave | | 1.7383 | | | 0.7000 | 5.5 | | 20.0 | | | |
| bis (2-chloroisopropyl) ether | 2.5928 | 2.7533<br>2.5252 | 2.7073<br>2.3984 | 2.7657<br>2.4662 | 2.6843 | Ave | | 2.6116 | | | | 5.3 | | 20.0 | | | |
| Indene | 2.6567 | 3.0391<br>2.4352 | 3.1252<br>2.1916 | 3.0650<br>2.1183 | 2.9077 | Ave | | 2.6923 | | | | 15.0 | | 20.0 | | | |
| 3 & 4 Methylphenol | 1.8303 | 1.9404<br>1.7500 | 1.9416<br>1.6587 | 1.9620<br>1.6856 | 1.9169 | Ave | | 1.8357 | | | | 6.7 | | 20.0 | | | |
| N-Nitrosodi-n-propylamine | 1.2154 | 1.2671<br>1.1450 | 1.2644<br>1.0825 | 1.3130<br>1.0829 | 1.2542 | Ave | | 1.2030 | | | 0.5000 | 7.4 | | 20.0 | | | |
| Acetophenone | 2.2686 | 2.3538<br>2.1825 | 2.4932<br>2.0194 | 2.4745<br>2.0669 | 2.3478 | Ave | | 2.2758 | | | 0.0100 | 7.7 | | 20.0 | | | |
| Hexachloroethane | 0.6336 | 0.6684<br>0.6179 | 0.6870<br>0.5949 | 0.6524<br>0.5925 | 0.6486 | Ave | | 0.6369 | | | 0.3000 | 5.3 | | 20.0 | | | |
| Nitrobenzene | 0.4296 | 0.4264<br>0.4270 | 0.4305<br>0.4064 | 0.4449<br>0.4102 | 0.4370 | Ave | | 0.4265 | | | 0.2000 | 3.0 | | 20.0 | | | |
| Isophorone | 0.7863 | 0.8375<br>0.7683 | 0.8705<br>0.7334 | 0.8591<br>0.7293 | 0.8117 | Ave | | 0.7995 | | | 0.4000 | 6.8 | | 20.0 | | | |
| 2-Nitrophenol | 0.1732 | 0.1664<br>0.1728 | 0.1718<br>0.1641 | 0.1859<br>0.1627 | 0.1752 | Ave | | 0.1715 | | | 0.1000 | 4.3 | | 20.0 | | | |
| 2,4-Dimethylphenol | 0.3598 | 0.3852<br>0.3438 | 0.4059<br>0.3308 | 0.3870<br>0.3203 | 0.3711 | Ave | | 0.3630 | | | 0.2000 | 8.2 | | 20.0 | | | |
| Benzoic acid | 0.2103 | 0.1495<br>0.2207 | 0.1964<br>0.2204 | 0.1907<br>0.2163 | 0.2013 | Ave | | 0.2007 | | | | 11.7 | | 20.0 | | | |
| Bis(2-chloroethoxy)methane | 0.5112 | 0.5409<br>0.5001 | 0.5675<br>0.4695 | 0.5522<br>0.4600 | 0.5399 | Ave | | 0.5177 | | | 0.3000 | 7.6 | | 20.0 | | | |
| 2,4-Dichlorophenol | 0.2542 | 0.2640<br>0.2496 | 0.2560<br>0.2413 | 0.2518<br>0.2383 | 0.2394 | Ave | | 0.2493 | | | 0.2000 | 3.6 | | 20.0 | | | |
| 1,2,4-Trichlorobenzene | 0.2549 | 0.2671<br>0.2557 | 0.2655<br>0.2428 | 0.2636<br>0.2396 | 0.2490 | Ave | | 0.2548 | | | | 4.1 | | 20.0 | | | |
| Naphthalene | 1.1358<br>1.0409 | 1.1284<br>1.0070 | 1.1222<br>0.9560 | 1.1041<br>0.9365 | 1.0713 | Ave | | 1.0558 | | | 0.7000 | 7.1 | | 20.0 | | | |
| 4-Chloroaniline | 0.4749 | 0.5185<br>0.4672 | 0.4881<br>0.4585 | 0.5067<br>0.4557 | 0.4992 | Ave | | 0.4836 | | | 0.0100 | 4.8 | | 20.0 | | | |
| 2,6-Dichlorophenol | 0.2472 | 0.2422<br>0.2398 | 0.2496<br>0.2293 | 0.2501<br>0.2261 | 0.2377 | Ave | | 0.2403 | | | | 3.7 | | 20.0 | | | |
| Hexachlorobutadiene | 0.1070 | 0.1075<br>0.1076 | 0.1082<br>0.1036 | 0.1092<br>0.1013 | 0.0993 | Ave | | 0.1055 | | | 0.0100 | 3.4 | | 20.0 | | | |
| Caprolactam | 0.1184 | 0.1302<br>0.1163 | 0.1310<br>0.1125 | 0.1279<br>0.1124 | 0.1164 | Ave | | 0.1206 | | | 0.0100 | 6.5 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-51061-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 4-Chloro-3-methylphenol | 0.3214 | 0.3328<br>0.3118 | 0.3465<br>0.3033 | 0.3324<br>0.2950 | 0.3200 | Ave | | 0.3204 | | | 0.2000 | 5.3 | | 20.0 | | | |
| 2-Methylnaphthalene | 0.7233<br>0.6402 | 0.6767<br>0.6190 | 0.6730<br>0.5793 | 0.6751<br>0.5649 | 0.6401 | Ave | | 0.6435 | | | 0.4000 | 7.8 | | 20.0 | | | |
| 1-Methylnaphthalene | 0.6059<br>0.5584 | 0.5979<br>0.5464 | 0.5830<br>0.5099 | 0.5827<br>0.5075 | 0.5426 | Ave | | 0.5594 | | | | 6.4 | | 20.0 | | | |
| Hexachlorocyclopentadiene | 0.2216 | 0.2241<br>0.2307 | 0.2508<br>0.2286 | 0.2359<br>0.2264 | 0.2502 | Ave | | 0.2335 | | | 0.0500 | 4.8 | | 20.0 | | | |
| 1,2,4,5-Tetrachlorobenzene | 0.3963 | 0.4546<br>0.3863 | 0.4169<br>0.3634 | 0.4243<br>0.3490 | 0.4192 | Ave | | 0.4013 | | | 0.0100 | 8.6 | | 20.0 | | | |
| 2,4,6-Trichlorophenol | 0.3265 | 0.3096<br>0.3311 | 0.3365<br>0.3208 | 0.3436<br>0.3207 | 0.3317 | Ave | | 0.3276 | | | 0.2000 | 3.2 | | 20.0 | | | |
| 2,4,5-Trichlorophenol | 0.3560 | 0.3399<br>0.3488 | 0.3513<br>0.3324 | 0.3468<br>0.3230 | 0.3420 | Ave | | 0.3425 | | | 0.2000 | 3.1 | | 20.0 | | | |
| 1,1'-Biphenyl | 1.7463<br>1.4825 | 1.6365<br>1.4570 | 1.5991<br>1.3745 | 1.5708<br>1.3364 | 1.5473 | Ave | | 1.5278 | | | 0.0100 | 8.5 | | 20.0 | | | |
| 2-Chloronaphthalene | 1.2365<br>1.1097 | 1.1402<br>1.1016 | 1.2332<br>1.0431 | 1.1387<br>1.0210 | 1.1211 | Ave | | 1.1272 | | | 0.8000 | 6.5 | | 20.0 | | | |
| 2-Nitroaniline | 0.4421 | 0.4124<br>0.4584 | 0.4345<br>0.4381 | 0.4516<br>0.4457 | 0.4681 | Ave | | 0.4439 | | | 0.0100 | 3.8 | | 20.0 | | | |
| Dimethyl phthalate | 1.1745 | 1.1490<br>1.1432 | 1.2182<br>1.1175 | 1.1562<br>1.0826 | 1.1538 | Ave | | 1.1494 | | | 0.0100 | 3.4 | | 20.0 | | | |
| 1,3-Dinitrobenzene | 0.1968 | 0.1478<br>0.2062 | 0.1623<br>0.2044 | 0.1647<br>0.2042 | 0.1941 | Ave | | 0.1850 | | | | 12.5 | | 20.0 | | | |
| 2,6-Dinitrotoluene | 0.2742 | 0.2092<br>0.2852 | 0.2436<br>0.2710 | 0.2598<br>0.2746 | 0.2579 | Ave | | 0.2594 | | | | 9.2 | | 20.0 | | | |
| Acenaphthylene | 2.2036<br>1.9316 | 1.9932<br>1.8871 | 2.0495<br>1.7960 | 2.0489<br>1.7326 | 1.9536 | Ave | | 1.9551 | | | 0.9000 | 7.3 | | 20.0 | | | |
| 3-Nitroaniline | 0.4033 | 0.3358<br>0.3840 | 0.3728<br>0.3835 | 0.3908<br>0.3771 | 0.4056 | Ave | | 0.3816 | | | 0.0100 | 5.7 | | 20.0 | | | |
| 2,4-Dinitrophenol | 0.1219 | +++++<br>0.1349 | 0.0974<br>0.1327 | 0.1164<br>0.1396 | 0.1369 | Ave | | 0.1257 | | | 0.0100 | 12.0 | | 20.0 | | | |
| Acenaphthene | 1.2564<br>1.0877 | 1.2219<br>1.0411 | 1.2389<br>0.9640 | 1.2025<br>0.9262 | 1.1687 | Ave | | 1.1230 | | | 0.9000 | 11.0 | | 20.0 | | | |
| 4-Nitrophenol | 0.1155 | 0.1082<br>0.1234 | 0.1244<br>0.1205 | 0.1212<br>0.1212 | 0.1134 | Ave | | 0.1185 | | | | 4.7 | | 20.0 | | | |
| 2,4-Dinitrotoluene | 0.3374 | 0.2591<br>0.3380 | 0.2946<br>0.3362 | 0.3348<br>0.3348 | 0.3468 | Ave | | 0.3227 | | | 0.2000 | 9.3 | | 20.0 | | | |
| Dibenzofuran | 1.6225<br>1.5238 | 1.5869<br>1.4750 | 1.6226<br>1.4183 | 1.5489<br>1.3750 | 1.5322 | Ave | | 1.5228 | | | 0.8000 | 5.7 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-51061-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 2,3,4,6-Tetrachlorophenol | 0.2548 | 0.2550<br>0.2396 | 0.2541<br>0.2265 | 0.2521<br>0.2240 | 0.2502 | Ave | | 0.2445 | | | 0.0100 | 5.3 | | 20.0 | | | |
| Diethyl phthalate | 1.0858 | 1.2661<br>0.9999 | 1.2427<br>0.9391 | 1.2336<br>0.8897 | 1.2021 | Ave | | 1.1074 | | | 0.0100 | 13.5 | | 20.0 | | | |
| Hexadecane | 1.1899 | 1.3496<br>1.1218 | 1.4099<br>1.0574 | 1.3645<br>0.9964 | 1.3829 | Ave | | 1.2340 | | | | 13.2 | | 20.0 | | | |
| 4-Chlorophenyl phenyl ether | 0.4950 | 0.5189<br>0.4832 | 0.5273<br>0.4763 | 0.5167<br>0.4712 | 0.4965 | Ave | | 0.4981 | | | 0.4000 | 4.2 | | 20.0 | | | |
| 4-Nitroaniline | 0.3223 | 0.2997<br>0.3357 | 0.3206<br>0.3399 | 0.3524<br>0.3501 | 0.3161 | Ave | | 0.3296 | | | 0.0100 | 5.5 | | 20.0 | | | |
| Fluorene | 1.3603<br>1.2307 | 1.3053<br>1.1820 | 1.3090<br>1.1120 | 1.2895<br>1.0811 | 1.2603 | Ave | | 1.2367 | | | 0.9000 | 7.6 | | 20.0 | | | |
| 4,6-Dinitro-2-methylphenol | 0.0984 | 0.0678<br>0.1050 | 0.0739<br>0.1042 | 0.0911<br>0.1067 | 0.0927 | Ave | | 0.0925 | | | 0.0100 | 15.8 | | 20.0 | | | |
| N-Nitrosodiphenylamine | 0.5929 | 0.5565<br>0.5505 | 0.5758<br>0.4914 | 0.5686<br>0.4590 | 0.5626 | Ave | | 0.5447 | | | 0.0100 | 8.4 | | 20.0 | | | |
| 1,2-Diphenylhydrazine(as Azobenzene) | 1.2529 | 1.1553<br>1.2311 | 1.2129<br>1.1588 | 1.2156<br>1.1213 | 1.1833 | Ave | | 1.1927 | | | | 3.6 | | 20.0 | | | |
| Azobenzene | 1.2527 | 1.1659<br>1.2317 | 1.2129<br>1.1588 | 1.2147<br>1.1212 | 1.1833 | Ave | | 1.1927 | | | | 3.6 | | 20.0 | | | |
| 4-Bromophenyl phenyl ether | 0.1772 | 0.1583<br>0.1782 | 0.1657<br>0.1699 | 0.1658<br>0.1630 | 0.1613 | Ave | | 0.1674 | | | 0.1000 | 4.3 | | 20.0 | | | |
| Hexachlorobenzene | 0.1529<br>0.1603 | 0.1501<br>0.1494 | 0.1603<br>0.1357 | 0.1608<br>0.1301 | 0.1557 | Ave | | 0.1506 | | | 0.1000 | 7.3 | | 20.0 | | | |
| Atrazine | 0.1588 | 0.1604<br>0.1472 | 0.1712<br>0.1342 | 0.1540<br>0.1164 | 0.1438 | Ave | | 0.1482 | | | 0.0100 | 11.6 | | 20.0 | | | |
| n-Octadecane | 0.8877 | 0.8851<br>0.8514 | 0.8994<br>0.7725 | 0.9206<br>0.7128 | 0.8966 | Ave | | 0.8533 | | | | 8.5 | | 20.0 | | | |
| Pentachlorophenol | 0.1142 | 0.1095<br>0.1126 | 0.1056<br>0.1061 | 0.1097<br>0.1022 | 0.1136 | Ave | | 0.1092 | | | 0.0500 | 3.9 | | 20.0 | | | |
| Phenanthrene | 1.2206<br>1.1473 | 1.1676<br>1.1478 | 1.2082<br>1.0741 | 1.1826<br>1.0403 | 1.1163 | Ave | | 1.1450 | | | 0.7000 | 5.2 | | 20.0 | | | |
| Anthracene | 1.2450<br>1.1757 | 1.1627<br>1.1507 | 1.2312<br>1.0832 | 1.1891<br>1.0585 | 1.1380 | Ave | | 1.1593 | | | 0.7000 | 5.3 | | 20.0 | | | |
| Carbazole | 1.0866 | 1.0467<br>1.0982 | 1.1042<br>1.0483 | 1.0332<br>1.0327 | 0.9151 | Ave | | 1.0456 | | | 0.0100 | 5.7 | | 20.0 | | | |
| Di-n-butyl phthalate | 1.3842 | 1.2629<br>1.3583 | 1.2162<br>1.2956 | 1.0608<br>1.1522 | 1.1007 | Ave | | 1.2289 | | | 0.0100 | 9.6 | | 20.0 | | | |
| Fluoranthene | 1.0702<br>1.0739 | 1.0007<br>1.0617 | 1.0330<br>1.0156 | 0.8851<br>0.9374 | 0.8646 | Ave | | 0.9936 | | | 0.6000 | 8.0 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton  Job No.: 240-51061-1  Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9  GC Column: RXI-5SILMS  ID: 0.45(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13  Calibration End Date: 05/19/2015 19:33  Calibration ID: 28569

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Benzidine | 0.7195 | 0.4659<br>0.8060 | 0.4950<br>0.7453 | 0.6094<br>0.7274 | 0.7127 | Ave | | 0.6601 | | | | 18.7 | | 20.0 | | | |
| Pyrene | 1.4882<br>1.2107 | 1.2287<br>1.2563 | 1.3146<br>1.1256 | 1.1401<br>1.0285 | 1.1193 | Ave | | 1.2124 | | | 0.6000 | 11.1 | | 20.0 | | | |
| Butyl benzyl phthalate | 0.6661 | 0.6545<br>0.6868 | 0.6812<br>0.6470 | 0.6955<br>0.6373 | 0.6186 | Ave | | 0.6609 | | | 0.0100 | 4.0 | | 20.0 | | | |
| Bis(2-ethylhexyl) phthalate | 0.9305 | 0.9509<br>0.9522 | 0.9286<br>0.9041 | 0.9172<br>0.9073 | 0.9026 | Ave | | 0.9242 | | | 0.0100 | 2.2 | | 20.0 | | | |
| 3,3'-Dichlorobenzidine | 0.3488 | 0.3083<br>0.3654 | 0.3422<br>0.3431 | 0.3653<br>0.3370 | 0.3698 | Ave | | 0.3475 | | | 0.0100 | 5.8 | | 20.0 | | | |
| Benzo[a]anthracene | 1.2551<br>1.1113 | 1.1370<br>1.1451 | 1.1777<br>1.0796 | 1.1398<br>1.0556 | 1.0686 | Ave | | 1.1300 | | | 0.8000 | 5.5 | | 20.0 | | | |
| Chrysene | 1.0753<br>1.0452 | 1.0299<br>1.0516 | 1.0378<br>0.9927 | 1.0326<br>0.9852 | 1.0017 | Ave | | 1.0280 | | | 0.7000 | 2.9 | | 20.0 | | | |
| Di-n-octyl phthalate | 2.2096 | 1.8812<br>2.1308 | 2.1822<br>2.1487 | 2.1616<br>2.0895 | 2.0486 | Ave | | 2.1065 | | | 0.0100 | 5.0 | | 20.0 | | | |
| Benzo[b]fluoranthene | 1.1716<br>1.3043 | 1.0938<br>1.3098 | 1.2233<br>1.2855 | 1.2408<br>1.2473 | 1.2292 | Ave | | 1.2340 | | | 0.7000 | 5.5 | | 20.0 | | | |
| Benzo[k]fluoranthene | 1.3447<br>1.3450 | 1.0891<br>1.2602 | 1.2965<br>1.2712 | 1.2618<br>1.2671 | 1.1933 | Ave | | 1.2588 | | | 0.7000 | 6.3 | | 20.0 | | | |
| Benzo[a]pyrene | 1.1341<br>1.2615 | 1.0802<br>1.2211 | 1.1676<br>1.2351 | 1.1626<br>1.2207 | 1.1516 | Ave | | 1.1816 | | | 0.7000 | 4.9 | | 20.0 | | | |
| Indeno[1,2,3-cd]pyrene | 1.1222<br>1.1388 | 0.9885<br>1.1466 | 1.0897<br>1.1432 | 1.0972<br>1.1276 | 1.0655 | Ave | | 1.1021 | | | 0.5000 | 4.6 | | 20.0 | | | |
| Dibenz(a,h)anthracene | 1.0227<br>0.9494 | 0.7889<br>0.9548 | 0.8965<br>0.9576 | 0.9116<br>0.9557 | 0.9059 | Ave | | 0.9270 | | | 0.4000 | 6.9 | | 20.0 | | | |
| Benzo[g,h,i]perylene | 1.1182<br>0.9082 | 0.8289<br>0.8934 | 0.9433<br>0.8861 | 0.9553<br>0.8782 | 0.8637 | Ave | | 0.9195 | | | 0.5000 | 9.1 | | 20.0 | | | |
| 2-Fluorophenol (Surr) | 1.7624 | 1.7144<br>1.7032 | 1.7922<br>1.6394 | 1.7839<br>1.6830 | 1.7510 | Ave | | 1.7287 | | | | 3.1 | | 20.0 | | | |
| Phenol-d5 (Surr) | 2.3175 | 2.3936<br>2.2539 | 2.4917<br>2.1240 | 2.5025<br>2.1564 | 2.4400 | Ave | | 2.3350 | | | | 6.3 | | 20.0 | | | |
| Nitrobenzene-d5 (Surr) | 0.4194<br>0.4105 | 0.4011<br>0.4031 | 0.4413<br>0.3867 | 0.4218<br>0.3889 | 0.4149 | Ave | | 0.4097 | | | | 4.2 | | 20.0 | | | |
| 2-Fluorobiphenyl (Surr) | 1.1333<br>1.1325 | 1.1972<br>1.1268 | 1.2161<br>1.0714 | 1.1833<br>1.0516 | 1.1526 | Ave | | 1.1405 | | | | 4.8 | | 20.0 | | | |
| 2,4,6-Tribromophenol (Surr) | 0.1077 | 0.0909<br>0.1008 | 0.1214<br>0.0976 | 0.1106<br>0.0987 | 0.1117 | Ave | | 0.1049 | | | | 9.3 | | 20.0 | | | |
| Terphenyl-d14 (Surr) | 0.8804<br>0.7315 | 0.7776<br>0.7627 | 0.8097<br>0.7196 | 0.7828<br>0.7025 | 0.7419 | Ave | | 0.7676 | | | | 7.0 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-51061-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-181541/6 | 50519006.D |
| Level 2 | STD2 240-181541/5 | 50519005.D |
| Level 3 | STD3 240-181541/4 | 50519004.D |
| Level 4 | STD4 240-181541/3 | 50519003.D |
| Level 5 | STD5 240-181541/2 | 50519002.D |
| Level 6 | STD6 240-181541/10 | 50519010.D |
| Level 7 | STD7 240-181541/9 | 50519009.D |
| Level 8 | STD8 240-181541/8 | 50519008.D |
| Level 9 | STD9 240-181541/7 | 50519007.D |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 1,4-Dioxane | DCB | Ave | 437349 | 25364<br>678748 | 44490<br>875415 | 94888<br>1071779 | 204428 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| N-Nitrosodimethylamine | DCB | Ave | 669858 | 40397<br>1015299 | 75213<br>1336166 | 142419<br>1622853 | 310805 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Pyridine | DCB | Ave | 1169135 | 65894<br>1796760 | 129804<br>2284580 | 252683<br>2852686 | 539720 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzaldehyde | DCB | Ave | 1288765 | 92873<br>1937862 | 173546<br>2367472 | 320146<br>2789876 | 678500 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Phenol | DCB | Ave | 1211072 | 78210<br>1793803 | 146621<br>2214218 | 273616<br>2703136 | 588905 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Aniline | DCB | Ave | 1490234 | 91835<br>2221782 | 176801<br>2795756 | 330134<br>3389742 | 715240 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Bis(2-chloroethyl)ether | DCB | Ave | 961174 | 59339<br>1446236 | 113368<br>1753057 | 208390<br>2236160 | 470877 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Chlorophenol | DCB | Ave | 779327 | 45563<br>1163143 | 84578<br>1494525 | 160561<br>1801164 | 354483 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| n-Decane | DCB | Ave | 1089874 | 66829<br>1611919 | 134475<br>2026918 | 245704<br>2463707 | 543351 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,3-Dichlorobenzene | DCB | Ave | 764399 | 46273<br>1131497 | 84704<br>1433496 | 159098<br>1725766 | 332181 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,4-Dichlorobenzene | DCB | Ave | 781643 | 45886<br>1147110 | 89326<br>1440764 | 155636<br>1708760 | 343627 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzyl alcohol | DCB | Ave | 617657 | 38224<br>920785 | 71097<br>1152906 | 133907<br>1411267 | 292290 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,2-Dichlorobenzene | DCB | Ave | 741420 | 44510<br>1094726 | 82346<br>1367873 | 148325<br>1661946 | 324559 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Methylphenol | DCB | Ave | 844971 | 51093<br>1245014 | 99088<br>1566475 | 177989<br>1906240 | 400110 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-51061-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| bis (2-chloroisopropyl) ether | DCB | Ave | 1254906 | 78218<br>1863294 | 144698<br>2362564 | 271936<br>2899809 | 597059 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Indene | DCB | Ave | 2571685 | 172671<br>3593725 | 334061<br>4317768 | 602742<br>4981628 | 1293487 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| 3 & 4 Methylphenol | DCB | Ave | 885883 | 55124<br>1291298 | 103773<br>1633917 | 192913<br>1981943 | 426360 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| N-Nitrosodi-n-propylamine | DCB | Ave | 588267 | 35995<br>844874 | 67577<br>1066310 | 129098<br>1273279 | 278969 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Acetophenone | DCB | Ave | 1098028 | 66868<br>1610414 | 133252<br>1989235 | 243307<br>2430314 | 522214 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexachloroethane | DCB | Ave | 306655 | 18988<br>455911 | 36720<br>586054 | 64152<br>696636 | 144274 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Nitrobenzene | NPT | Ave | 881849 | 51212<br>1311835 | 95445<br>1641533 | 186218<br>2033115 | 414662 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Isophorone | NPT | Ave | 1613983 | 100598<br>2360460 | 193006<br>2962105 | 359605<br>3614192 | 770147 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Nitrophenol | NPT | Ave | 355489 | 19987<br>530972 | 38093<br>662613 | 77803<br>806348 | 166221 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4-Dimethylphenol | NPT | Ave | 738605 | 46270<br>1056425 | 90003<br>1335910 | 161993<br>1587377 | 352124 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzoic acid | NPT | Ave | 863566 | 35924<br>1356259 | 87082<br>1780038 | 159687<br>2143463 | 381956 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Bis(2-chloroethoxy)methane | NPT | Ave | 1049423 | 64968<br>1536607 | 125830<br>1896177 | 231164<br>2279697 | 512274 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4-Dichlorophenol | NPT | Ave | 521888 | 31714<br>767012 | 56758<br>974522 | 105402<br>1181230 | 227101 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,2,4-Trichlorobenzene | NPT | Ave | 523332 | 32082<br>785634 | 58869<br>980805 | 110342<br>1187259 | 236219 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Naphthalene | NPT | Ave | 26175<br>2136740 | 135538<br>3093857 | 248799<br>3860979 | 462181<br>4641347 | 1016506 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4-Chloroaniline | NPT | Ave | 974799 | 62283<br>1435601 | 108219<br>1851876 | 212116<br>2258200 | 473689 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,6-Dichlorophenol | NPT | Ave | 507422 | 29093<br>736882 | 55344<br>926144 | 104704<br>1120596 | 225522 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexachlorobutadiene | NPT | Ave | 219736 | 12907<br>330747 | 23984<br>418372 | 45722<br>502094 | 94180 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Caprolactam | NPT | Ave | 485955 | 31284<br>714615 | 58108<br>908745 | 107044<br>1114386 | 220881 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| 4-Chloro-3-methylphenol | NPT | Ave | 659774 | 39974<br>957931 | 76821<br>1224897 | 139154<br>1461983 | 303610 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Methylnaphthalene | NPT | Ave | 16668<br>1314168 | 81278<br>1901792 | 149220<br>2339575 | 282595<br>2799718 | 607347 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-51061-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 1-Methylnaphthalene | NPT | Ave | 13963<br>1146338 | 71814<br>1678815 | 129268<br>2059588 | 243897<br>2515213 | 514799 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexachlorocyclopentadiene | ANT | Ave | <br>212762 | 12378<br>325359 | 25499<br>423785 | 45693<br>513405 | 105131 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,2,4,5-Tetrachlorobenzene | ANT | Ave | <br>380570 | 25110<br>544673 | 42396<br>673702 | 82170<br>791502 | 176143 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4,6-Trichlorophenol | ANT | Ave | <br>313555 | 17101<br>466876 | 34212<br>594742 | 66538<br>727392 | 139400 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4,5-Trichlorophenol | ANT | Ave | <br>341863 | 18774<br>491813 | 35718<br>616169 | 67151<br>732446 | 143689 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,1'-Biphenyl | ANT | Ave | 18690<br>1423587 | 90391<br>2054434 | 162604<br>2547893 | 304189<br>3030624 | 650189 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Chloronaphthalene | ANT | Ave | 13234<br>1065581 | 62981<br>1553379 | 125393<br>1933553 | 220516<br>2315459 | 471083 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Nitroaniline | ANT | Ave | <br>424554 | 22782<br>646434 | 44185<br>812162 | 87460<br>1010730 | 196699 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Dimethyl phthalate | ANT | Ave | <br>1127807 | 63464<br>1612061 | 123874<br>2071500 | 223899<br>2455040 | 484839 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,3-Dinitrobenzene | ANT | Ave | <br>188957 | 8162<br>290742 | 16504<br>378878 | 31887<br>463022 | 81563 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,6-Dinitrotoluene | ANT | Ave | <br>263284 | 11553<br>402112 | 24768<br>502298 | 50315<br>622795 | 108364 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Acenaphthylene | ANT | Ave | 23584<br>1854837 | 110097<br>2660914 | 208398<br>3329215 | 396781<br>3929079 | 820907 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 3-Nitroaniline | ANT | Ave | <br>387312 | 18551<br>541482 | 37904<br>710843 | 75673<br>855276 | 170449 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4-Dinitrophenol | ANT | Ave | <br>234052 | +++++<br>380406 | 19800<br>491793 | 45069<br>633352 | 115054 | <br>20.0 | +++++<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Acenaphthene | ANT | Ave | 13447<br>1044451 | 67492<br>1467981 | 125974<br>1786900 | 232880<br>2100351 | 491073 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4-Nitrophenol | ANT | Ave | <br>221858 | 11950<br>347906 | 25305<br>446826 | 46954<br>549567 | 95320 | <br>20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| 2,4-Dinitrotoluene | ANT | Ave | <br>323966 | 14309<br>476601 | 29955<br>623273 | 64835<br>759144 | 145743 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Dibenzofuran | ANT | Ave | 17365<br>1463274 | 87656<br>2079939 | 164987<br>2629085 | 299961<br>3118196 | 643835 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,3,4,6-Tetrachlorophenol | ANT | Ave | <br>244625 | 14086<br>337863 | 25839<br>419830 | 48826<br>507877 | 105136 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Diethyl phthalate | ANT | Ave | <br>1042627 | 69934<br>1409993 | 126358<br>1740846 | 238903<br>2017617 | 505129 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexadecane | ANT | Ave | <br>1142639 | 74545<br>1581821 | 143363<br>1960160 | 264237<br>2259625 | 581090 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-51061-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 4-Chlorophenyl phenyl ether | ANT | Ave | 475305 | 28661<br>681360 | 53622<br>882962 | 100068<br>1068616 | 208618 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4-Nitroaniline | ANT | Ave | 309515 | 16553<br>473334 | 32596<br>630108 | 68243<br>794049 | 132812 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Fluorene | ANT | Ave | 14558<br>1181824 | 72097<br>1666768 | 133104<br>2061385 | 249715<br>2451718 | 529582 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4,6-Dinitro-2-methylphenol | PHN | Ave | 260936 | 11899<br>405092 | 23262<br>534950 | 54056<br>679391 | 121257 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| N-Nitrosodiphenylamine | PHN | Ave | 1572390 | 97621<br>2124595 | 181291<br>2522749 | 337256<br>2923625 | 736340 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| 1,2-Diphenylhydrazine(as Azobenzene) | PHN | Ave | 1661459 | 101336<br>2375637 | 190959<br>2974105 | 360513<br>3571295 | 774349 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Azobenzene | PHN | Ave | 1661218 | 102265<br>2376771 | 190959<br>2974105 | 360241<br>3570851 | 774337 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4-Bromophenyl phenyl ether | PHN | Ave | 234984 | 13887<br>343776 | 26083<br>436145 | 49164<br>519173 | 105534 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexachlorobenzene | PHN | Ave | 2527<br>212572 | 13163<br>288366 | 25236<br>348354 | 47698<br>414202 | 101917 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Atrazine | PHN | Ave | 421103 | 28138<br>568041 | 53920<br>688971 | 91321<br>741214 | 188174 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| n-Octadecane | PHN | Ave | 1177228 | 77632<br>1642987 | 141592<br>1982679 | 273014<br>2270229 | 586714 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Pentachlorophenol | PHN | Ave | 302897 | 19206<br>434512 | 33264<br>544703 | 65051<br>650714 | 148629 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Phenanthrene | PHN | Ave | 20170<br>1521407 | 102409<br>2214926 | 190217<br>2756919 | 350742<br>3313239 | 730477 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Anthracene | PHN | Ave | 20574<br>1559011 | 101984<br>2220409 | 193839<br>2780135 | 352653<br>3371126 | 744643 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Carbazole | PHN | Ave | 1440872 | 91808<br>2119100 | 173843<br>2690566 | 306434<br>3289131 | 598785 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Di-n-butyl phthalate | PHN | Ave | 1835603 | 110775<br>2621017 | 191477<br>3325383 | 314595<br>3669607 | 720235 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Fluoranthene | PHN | Ave | 17685<br>1424022 | 87776<br>2048812 | 162631<br>2606595 | 262494<br>2985416 | 565744 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzidine | CRY | Ave | 1784002 | 65114<br>2739703 | 123801<br>3487416 | 288393<br>4141330 | 738111 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Pyrene | CRY | Ave | 18857<br>1501041 | 85863<br>2135077 | 164389<br>2633606 | 269764<br>2927703 | 579633 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Butyl benzyl phthalate | CRY | Ave | 825808 | 45739<br>1167212 | 85180<br>1513714 | 164563<br>1814087 | 320324 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Bis(2-ethylhexyl) phthalate | CRY | Ave | 1153610 | 66449<br>1618266 | 116125<br>2115270 | 217021<br>2582603 | 467391 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-51061-1 Analy Batch No.: 181541

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 05/19/2015 16:13 Calibration End Date: 05/19/2015 19:33 Calibration ID: 28569

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 3,3'-Dichlorobenzidine | CRY | Ave | 864928 | 43091<br>1241902 | 85573<br>1605282 | 172869<br>1918417 | 382988 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Benzo[a]anthracene | CRY | Ave | 15904<br>1377712 | 79454<br>1946133 | 147267<br>2526054 | 269698<br>3004851 | 553364 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Chrysene | CRY | Ave | 13625<br>1295782 | 71968<br>1787198 | 129774<br>2322624 | 244325<br>2804425 | 518744 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Di-n-octyl phthalate | PRY | Ave | 1975272 | 105077<br>2825727 | 204936<br>3755074 | 376499<br>4542762 | 796268 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzo[b]fluoranthene | PRY | Ave | 11750<br>1165964 | 61094<br>1737025 | 114882<br>2246526 | 216121<br>2711635 | 477789 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzo[k]fluoranthene | PRY | Ave | 13486<br>1202344 | 60833<br>1671236 | 121761<br>2221648 | 219773<br>2754757 | 463824 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzo[a]pyrene | PRY | Ave | 11374<br>1127677 | 60333<br>1619343 | 109650<br>2158506 | 202504<br>2653884 | 447611 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Indeno[1,2,3-cd]pyrene | PRY | Ave | 11254<br>1018010 | 55215<br>1520587 | 102340<br>1997854 | 191100<br>2451465 | 414135 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Dibenz(a,h)anthracene | PRY | Ave | 10257<br>848666 | 44066<br>1266277 | 84196<br>1673591 | 158778<br>2077789 | 352115 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzo[g,h,i]perylene | PRY | Ave | 11214<br>811837 | 46299<br>1184787 | 88587<br>1548497 | 166390<br>1909196 | 335726 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Fluorophenol (Surr) | DCB | Ave | 853026 | 48704<br>1256749 | 95785<br>1614882 | 175400<br>1978977 | 389474 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Phenol-d5 (Surr) | DCB | Ave | 1121676 | 67998<br>1663125 | 133174<br>2092284 | 246062<br>2535617 | 542727 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Nitrobenzene-d5 (Surr) | NPT | Ave | 9666<br>842627 | 48176<br>1238638 | 97850<br>1561937 | 176561<br>1927158 | 393620 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Fluorobiphenyl (Surr) | ANT | Ave | 12129<br>1087462 | 66127<br>1588839 | 123659<br>1985989 | 229145<br>2384803 | 484320 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4,6-Tribromophenol (Surr) | ANT | Ave | 103401 | 5021<br>142204 | 12341<br>180881 | 21411<br>223852 | 46949 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Terphenyl-d14 (Surr) | CRY | Ave | 11156<br>906899 | 54340<br>1296265 | 101250<br>1683742 | 185228<br>1999755 | 384196 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

Curve Type Legend:
Ave = Average ISTD

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

Lab Sample ID (1): CCV 240-182204/2 CCVIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 05/24/2015 09:19

| ANALYTE | RT | RESOLUTION (%) |
|---|---|---|
| 2-Fluorophenol (Surr) | 5.15 | 100.0 |
| Phenol-d5 (Surr) | 6.00 | 100.0 |
| Nitrobenzene-d5 (Surr) | 6.84 | 100.0 |
| Naphthalene | 7.50 | 100.0 |
| 2-Fluorobiphenyl (Surr) | 8.39 | 100.0 |
| Acenaphthylene | 8.87 | 100.0 |
| Acenaphthene | 9.02 | 100.0 |
| Fluorene | 9.46 | 100.0 |
| 2,4,6-Tribromophenol (Surr) | 9.66 | 100.0 |
| Phenanthrene | 10.28 | 100.0 |
| Anthracene | 10.32 | 100.0 |
| Fluoranthene | 11.30 | 100.0 |
| Pyrene | 11.50 | 100.0 |
| Terphenyl-d14 (Surr) | 11.58 | 100.0 |
| Benzo[a]anthracene | 12.54 | 100.0 |
| Chrysene | 12.58 | 100.0 |
| Benzo[b]fluoranthene | 13.76 | 30.30 |
| Benzo[k]fluoranthene | 13.80 | 100.0 |
| Benzo[a]pyrene | 14.23 | 100.0 |
| Indeno[1,2,3-cd]pyrene | 16.24 | 100.0 |
| Dibenz(a,h)anthracene | 16.25 | 100.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

Lab Sample ID: ICV 240-181541/11 Calibration Date: 05/19/2015 19:58

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50519011.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | Ave | 0.9041 | 0.9054 | | 10.0 | 10.0 | 0.1 | 30.0 |
| N-Nitrosodimethylamine | Ave | 1.396 | 1.187 | | 8.50 | 10.0 | -15.0 | 30.0 |
| Pyridine | Ave | 2.418 | 2.428 | | 10.0 | 10.0 | 0.4 | 30.0 |
| Benzaldehyde | Ave | 1.430 | 1.394 | 0.0100 | 19.5 | 20.0 | -2.5 | 30.0 |
| Phenol | Ave | 2.551 | 2.460 | 0.8000 | 9.64 | 10.0 | -3.6 | 30.0 |
| Aniline | Ave | 3.116 | 3.029 | | 9.72 | 10.0 | -2.8 | 30.0 |
| Bis(2-chloroethyl)ether | Ave | 2.009 | 1.980 | 0.7000 | 9.85 | 10.0 | -1.5 | 30.0 |
| 2-Chlorophenol | Ave | 1.581 | 1.582 | 0.8000 | 10.0 | 10.0 | 0.0 | 30.0 |
| n-Decane | Ave | 2.300 | 2.213 | | 9.62 | 10.0 | -3.8 | 30.0 |
| 1,3-Dichlorobenzene | Ave | 1.545 | 1.560 | | 10.1 | 10.0 | 1.0 | 30.0 |
| 1,4-Dichlorobenzene | Ave | 1.562 | 1.566 | | 10.0 | 10.0 | 0.2 | 30.0 |
| Benzyl alcohol | Ave | 1.281 | 1.275 | | 9.96 | 10.0 | -0.4 | 30.0 |
| 1,2-Dichlorobenzene | Ave | 1.487 | 1.493 | | 10.0 | 10.0 | 0.4 | 30.0 |
| 2-Methylphenol | Ave | 1.738 | 1.785 | 0.7000 | 10.3 | 10.0 | 2.7 | 30.0 |
| bis (2-chloroisopropyl) ether | Ave | 2.612 | 2.567 | | 9.83 | 10.0 | -1.7 | 30.0 |
| Indene | Ave | 2.692 | 2.672 | | 19.8 | 20.0 | -0.8 | 30.0 |
| 3 & 4 Methylphenol | Ave | 1.836 | 1.834 | | 9.99 | 10.0 | -0.0 | 30.0 |
| N-Nitrosodi-n-propylamine | Ave | 1.203 | 1.175 | 0.5000 | 9.77 | 10.0 | -2.3 | 30.0 |
| Acetophenone | Ave | 2.276 | 2.225 | 0.0100 | 9.78 | 10.0 | -2.2 | 30.0 |
| Hexachloroethane | Ave | 0.6369 | 0.6315 | 0.3000 | 9.91 | 10.0 | -0.9 | 30.0 |
| Nitrobenzene | Ave | 0.4265 | 0.4128 | 0.2000 | 9.68 | 10.0 | -3.2 | 30.0 |
| Isophorone | Ave | 0.7995 | 0.7856 | 0.4000 | 9.83 | 10.0 | -1.7 | 30.0 |
| 2-Nitrophenol | Ave | 0.1715 | 0.1659 | 0.1000 | 9.67 | 10.0 | -3.3 | 30.0 |
| 2,4-Dimethylphenol | Ave | 0.3630 | 0.3462 | 0.2000 | 9.54 | 10.0 | -4.6 | 30.0 |
| Benzoic acid | Ave | 0.2007 | 0.2153 | | 21.5 | 20.0 | 7.3 | 30.0 |
| Bis(2-chloroethoxy)methane | Ave | 0.5177 | 0.4966 | 0.3000 | 9.59 | 10.0 | -4.1 | 30.0 |
| 2,4-Dichlorophenol | Ave | 0.2493 | 0.2423 | 0.2000 | 9.72 | 10.0 | -2.8 | 30.0 |
| 1,2,4-Trichlorobenzene | Ave | 0.2548 | 0.2536 | | 9.95 | 10.0 | -0.5 | 30.0 |
| Naphthalene | Ave | 1.056 | 1.035 | 0.7000 | 9.80 | 10.0 | -2.0 | 30.0 |
| 4-Chloroaniline | Ave | 0.4836 | 0.4673 | 0.0100 | 9.66 | 10.0 | -3.4 | 30.0 |
| 2,6-Dichlorophenol | Ave | 0.2403 | 0.2391 | | 9.95 | 10.0 | -0.5 | 30.0 |
| Hexachlorobutadiene | Ave | 0.1055 | 0.1043 | 0.0100 | 9.89 | 10.0 | -1.1 | 30.0 |
| Caprolactam | Ave | 0.1206 | 0.1185 | 0.0100 | 19.6 | 20.0 | -1.8 | 30.0 |
| 4-Chloro-3-methylphenol | Ave | 0.3204 | 0.3110 | 0.2000 | 9.71 | 10.0 | -2.9 | 30.0 |
| 2-Methylnaphthalene | Ave | 0.6435 | 0.5990 | 0.4000 | 9.31 | 10.0 | -6.9 | 30.0 |
| 1-Methylnaphthalene | Ave | 0.5594 | 0.5641 | | 10.1 | 10.0 | 0.8 | 30.0 |
| Hexachlorocyclopentadiene | Ave | 0.2335 | 0.2198 | 0.0500 | 9.41 | 10.0 | -5.9 | 30.0 |
| 1,2,4,5-Tetrachlorobenzene | Ave | 0.4013 | 0.3799 | 0.0100 | 9.47 | 10.0 | -5.3 | 30.0 |
| 2,4,6-Trichlorophenol | Ave | 0.3276 | 0.3227 | 0.2000 | 9.85 | 10.0 | -1.5 | 30.0 |
| 2,4,5-Trichlorophenol | Ave | 0.3425 | 0.3412 | 0.2000 | 9.96 | 10.0 | -0.4 | 30.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Lab Sample ID: ICV 240-181541/11  Calibration Date: 05/19/2015 19:58

Instrument ID: A4HP9  Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS  ID: 0.45(mm)  Calib End Date: 05/19/2015 19:33

Lab File ID: 50519011.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | Ave | 1.528 | 1.461 | 0.0100 | 9.56 | 10.0 | -4.4 | 30.0 |
| 2-Chloronaphthalene | Ave | 1.127 | 1.079 | 0.8000 | 9.57 | 10.0 | -4.3 | 30.0 |
| 2-Nitroaniline | Ave | 0.4439 | 0.4270 | 0.0100 | 9.62 | 10.0 | -3.8 | 30.0 |
| Dimethyl phthalate | Ave | 1.149 | 1.127 | 0.0100 | 9.81 | 10.0 | -1.9 | 30.0 |
| 1,3-Dinitrobenzene | Ave | 0.1850 | 0.1852 | | 10.0 | 10.0 | 0.0 | 30.0 |
| 2,6-Dinitrotoluene | Ave | 0.2594 | 0.2674 | | 10.3 | 10.0 | 3.1 | 30.0 |
| Acenaphthylene | Ave | 1.955 | 1.803 | 0.9000 | 9.22 | 10.0 | -7.8 | 30.0 |
| 3-Nitroaniline | Ave | 0.3816 | 0.3845 | 0.0100 | 10.1 | 10.0 | 0.7 | 30.0 |
| 2,4-Dinitrophenol | Ave | 0.1257 | 0.1127 | 0.0100 | 17.9 | 20.0 | -10.3 | 30.0 |
| 4-Nitrophenol | Ave | 0.1185 | 0.1108 | | 18.7 | 20.0 | -6.5 | 30.0 |
| Acenaphthene | Ave | 1.123 | 1.080 | 0.9000 | 9.62 | 10.0 | -3.8 | 30.0 |
| 2,4-Dinitrotoluene | Ave | 0.3227 | 0.3269 | 0.2000 | 10.1 | 10.0 | 1.3 | 30.0 |
| Dibenzofuran | Ave | 1.523 | 1.432 | 0.8000 | 9.40 | 10.0 | -6.0 | 30.0 |
| 2,3,4,6-Tetrachlorophenol | Ave | 0.2445 | 0.2379 | 0.0100 | 9.73 | 10.0 | -2.7 | 30.0 |
| Diethyl phthalate | Ave | 1.107 | 1.052 | 0.0100 | 9.50 | 10.0 | -5.0 | 30.0 |
| Hexadecane | Ave | 1.234 | 1.167 | | 9.46 | 10.0 | -5.4 | 30.0 |
| 4-Chlorophenyl phenyl ether | Ave | 0.4981 | 0.4688 | 0.4000 | 9.41 | 10.0 | -5.9 | 30.0 |
| 4-Nitroaniline | Ave | 0.3296 | 0.3075 | 0.0100 | 9.33 | 10.0 | -6.7 | 30.0 |
| Fluorene | Ave | 1.237 | 1.155 | 0.9000 | 9.34 | 10.0 | -6.6 | 30.0 |
| 4,6-Dinitro-2-methylphenol | Ave | 0.0925 | 0.0932 | 0.0100 | 20.2 | 20.0 | 0.8 | 30.0 |
| N-Nitrosodiphenylamine | Ave | 0.5447 | 0.5685 | 0.0100 | 20.9 | 20.0 | 4.4 | 30.0 |
| 1,2-Diphenylhydrazine(as Azobenzene) | Ave | 1.191 | 1.277 | | 10.7 | 10.0 | 7.2 | 30.0 |
| Azobenzene | Ave | 1.193 | 1.277 | | 10.7 | 10.0 | 7.0 | 30.0 |
| 4-Bromophenyl phenyl ether | Ave | 0.1674 | 0.1740 | 0.1000 | 10.4 | 10.0 | 3.9 | 30.0 |
| Atrazine | Ave | 0.1482 | 0.1532 | 0.0100 | 20.7 | 20.0 | 3.3 | 30.0 |
| Hexachlorobenzene | Ave | 0.1506 | 0.1518 | 0.1000 | 10.1 | 10.0 | 0.8 | 30.0 |
| n-Octadecane | Ave | 0.8533 | 0.8589 | | 10.1 | 10.0 | 0.7 | 30.0 |
| Pentachlorophenol | Ave | 0.1092 | 0.1129 | 0.0500 | 20.7 | 20.0 | 3.4 | 30.0 |
| Phenanthrene | Ave | 1.145 | 1.081 | 0.7000 | 9.44 | 10.0 | -5.6 | 30.0 |
| Anthracene | Ave | 1.159 | 1.131 | 0.7000 | 9.75 | 10.0 | -2.5 | 30.0 |
| Carbazole | Ave | 1.046 | 1.021 | 0.0100 | 9.76 | 10.0 | -2.4 | 30.0 |
| Di-n-butyl phthalate | Ave | 1.229 | 1.343 | 0.0100 | 10.9 | 10.0 | 9.3 | 30.0 |
| Fluoranthene | Ave | 0.9936 | 1.015 | 0.6000 | 10.2 | 10.0 | 2.2 | 30.0 |
| Benzidine | Ave | 0.6601 | 0.6002 | | 18.2 | 20.0 | -9.1 | 30.0 |
| Pyrene | Ave | 1.212 | 1.117 | 0.6000 | 9.21 | 10.0 | -7.9 | 30.0 |
| Butyl benzyl phthalate | Ave | 0.6609 | 0.6396 | 0.0100 | 9.68 | 10.0 | -3.2 | 30.0 |
| Bis(2-ethylhexyl) phthalate | Ave | 0.9242 | 0.8756 | 0.0100 | 9.47 | 10.0 | -5.3 | 30.0 |
| 3,3'-Dichlorobenzidine | Ave | 0.3475 | 0.3233 | 0.0100 | 18.6 | 20.0 | -7.0 | 30.0 |
| Benzo[a]anthracene | Ave | 1.130 | 1.054 | 0.8000 | 9.33 | 10.0 | -6.7 | 30.0 |
| Chrysene | Ave | 1.028 | 1.064 | 0.7000 | 10.3 | 10.0 | 3.5 | 30.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Lab Sample ID: ICV 240-181541/11  Calibration Date: 05/19/2015 19:58

Instrument ID: A4HP9  Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS  ID: 0.45(mm)  Calib End Date: 05/19/2015 19:33

Lab File ID: 50519011.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Di-n-octyl phthalate | Ave | 2.107 | 2.158 | 0.0100 | 10.2 | 10.0 | 2.4 | 30.0 |
| Benzo[b]fluoranthene | Ave | 1.234 | 1.214 | 0.7000 | 9.83 | 10.0 | -1.7 | 30.0 |
| Benzo[k]fluoranthene | Ave | 1.259 | 1.300 | 0.7000 | 10.3 | 10.0 | 3.2 | 30.0 |
| Benzo[a]pyrene | Ave | 1.182 | 1.199 | 0.7000 | 10.1 | 10.0 | 1.5 | 30.0 |
| Indeno[1,2,3-cd]pyrene | Ave | 1.102 | 1.076 | 0.5000 | 9.76 | 10.0 | -2.4 | 30.0 |
| Dibenz(a,h)anthracene | Ave | 0.9270 | 0.9027 | 0.4000 | 9.74 | 10.0 | -2.6 | 30.0 |
| Benzo[g,h,i]perylene | Ave | 0.9195 | 0.8512 | 0.5000 | 9.26 | 10.0 | -7.4 | 30.0 |
| 2-Fluorophenol (Surr) | Ave | 1.729 | 1.923 | | 11.1 | 10.0 | 11.2 | 30.0 |
| Phenol-d5 (Surr) | Ave | 2.335 | 2.596 | | 11.1 | 10.0 | 11.2 | 30.0 |
| Nitrobenzene-d5 (Surr) | Ave | 0.4097 | 0.4442 | | 10.8 | 10.0 | 8.4 | 30.0 |
| 2-Fluorobiphenyl (Surr) | Ave | 1.141 | 1.243 | | 10.9 | 10.0 | 9.0 | 30.0 |
| 2,4,6-Tribromophenol (Surr) | Ave | 0.1049 | 0.1158 | | 11.0 | 10.0 | 10.3 | 30.0 |
| Terphenyl-d14 (Surr) | Ave | 0.7676 | 0.7679 | | 10.0 | 10.0 | 0.0 | 30.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

Lab Sample ID: CCV 240-182204/2 Calibration Date: 05/24/2015 09:19

Instrument ID: A4HP9 Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 05/19/2015 19:33

Lab File ID: 50524002.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | Ave | 0.9041 | 0.9037 | | 10.0 | 10.0 | -0.0 | 20.0 |
| N-Nitrosodimethylamine | Ave | 1.396 | 1.369 | | 9.80 | 10.0 | -2.0 | 20.0 |
| Pyridine | Ave | 2.418 | 2.459 | | 10.2 | 10.0 | 1.7 | 20.0 |
| Benzaldehyde | Ave | 1.430 | 1.333 | 0.0100 | 18.6 | 20.0 | -6.8 | 20.0 |
| Phenol | Ave | 2.551 | 2.433 | 0.8000 | 9.54 | 10.0 | -4.6 | 20.0 |
| Aniline | Ave | 3.116 | 3.008 | | 9.65 | 10.0 | -3.5 | 20.0 |
| Bis(2-chloroethyl)ether | Ave | 2.009 | 2.125 | 0.7000 | 10.6 | 10.0 | 5.8 | 20.0 |
| 2-Chlorophenol | Ave | 1.581 | 1.610 | 0.8000 | 10.2 | 10.0 | 1.8 | 20.0 |
| n-Decane | Ave | 2.300 | 2.183 | | 9.49 | 10.0 | -5.1 | 20.0 |
| 1,3-Dichlorobenzene | Ave | 1.545 | 1.587 | | 10.3 | 10.0 | 2.7 | 20.0 |
| 1,4-Dichlorobenzene | Ave | 1.562 | 1.592 | | 10.2 | 10.0 | 1.9 | 20.0 |
| Benzyl alcohol | Ave | 1.281 | 1.252 | | 9.78 | 10.0 | -2.2 | 20.0 |
| 1,2-Dichlorobenzene | Ave | 1.487 | 1.526 | | 10.3 | 10.0 | 2.6 | 20.0 |
| 2-Methylphenol | Ave | 1.738 | 1.743 | 0.7000 | 10.0 | 10.0 | 0.3 | 20.0 |
| bis (2-chloroisopropyl) ether | Ave | 2.612 | 2.559 | | 9.80 | 10.0 | -2.0 | 20.0 |
| Indene | Ave | 2.692 | 2.522 | | 18.7 | 20.0 | -6.3 | 20.0 |
| 3 & 4 Methylphenol | Ave | 1.836 | 1.779 | | 9.69 | 10.0 | -3.1 | 20.0 |
| N-Nitrosodi-n-propylamine | Ave | 1.203 | 1.150 | 0.5000 | 9.56 | 10.0 | -4.4 | 20.0 |
| Acetophenone | Ave | 2.276 | 2.250 | 0.0100 | 9.89 | 10.0 | -1.1 | 20.0 |
| Hexachloroethane | Ave | 0.6369 | 0.6362 | 0.3000 | 9.99 | 10.0 | -0.1 | 20.0 |
| Nitrobenzene | Ave | 0.4265 | 0.4448 | 0.2000 | 10.4 | 10.0 | 4.3 | 20.0 |
| Isophorone | Ave | 0.7995 | 0.7812 | 0.4000 | 9.77 | 10.0 | -2.3 | 20.0 |
| 2-Nitrophenol | Ave | 0.1715 | 0.1772 | 0.1000 | 10.3 | 10.0 | 3.3 | 20.0 |
| 2,4-Dimethylphenol | Ave | 0.3630 | 0.3561 | 0.2000 | 9.81 | 10.0 | -1.9 | 20.0 |
| Benzoic acid | Ave | 0.2007 | 0.2116 | | 21.1 | 20.0 | 5.4 | 20.0 |
| Bis(2-chloroethoxy)methane | Ave | 0.5177 | 0.5062 | 0.3000 | 9.78 | 10.0 | -2.2 | 20.0 |
| 2,4-Dichlorophenol | Ave | 0.2493 | 0.2464 | 0.2000 | 9.88 | 10.0 | -1.2 | 20.0 |
| 1,2,4-Trichlorobenzene | Ave | 0.2548 | 0.2544 | | 9.99 | 10.0 | -0.1 | 20.0 |
| Naphthalene | Ave | 1.056 | 1.035 | 0.7000 | 9.80 | 10.0 | -2.0 | 20.0 |
| 4-Chloroaniline | Ave | 0.4836 | 0.4787 | 0.0100 | 9.90 | 10.0 | -1.0 | 20.0 |
| 2,6-Dichlorophenol | Ave | 0.2403 | 0.2447 | | 10.2 | 10.0 | 1.9 | 20.0 |
| Hexachlorobutadiene | Ave | 0.1055 | 0.1074 | 0.0100 | 10.2 | 10.0 | 1.8 | 20.0 |
| Caprolactam | Ave | 0.1206 | 0.1193 | 0.0100 | 19.8 | 20.0 | -1.1 | 20.0 |
| 4-Chloro-3-methylphenol | Ave | 0.3204 | 0.3122 | 0.2000 | 9.74 | 10.0 | -2.6 | 20.0 |
| 2-Methylnaphthalene | Ave | 0.6435 | 0.6116 | 0.4000 | 9.50 | 10.0 | -5.0 | 20.0 |
| 1-Methylnaphthalene | Ave | 0.5594 | 0.5442 | | 9.73 | 10.0 | -2.7 | 20.0 |
| Hexachlorocyclopentadiene | Ave | 0.2335 | 0.2309 | 0.0500 | 9.89 | 10.0 | -1.1 | 20.0 |
| 1,2,4,5-Tetrachlorobenzene | Ave | 0.4013 | 0.3846 | 0.0100 | 9.58 | 10.0 | -4.2 | 20.0 |
| 2,4,6-Trichlorophenol | Ave | 0.3276 | 0.3316 | 0.2000 | 10.1 | 10.0 | 1.2 | 20.0 |
| 2,4,5-Trichlorophenol | Ave | 0.3425 | 0.3493 | 0.2000 | 10.2 | 10.0 | 2.0 | 20.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Lab Sample ID: CCV 240-182204/2  Calibration Date: 05/24/2015 09:19

Instrument ID: A4HP9  Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS  ID: 0.45(mm)  Calib End Date: 05/19/2015 19:33

Lab File ID: 50524002.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,1'-Biphenyl | Ave | 1.528 | 1.466 | 0.0100 | 9.59 | 10.0 | -4.1 | 20.0 |
| 2-Chloronaphthalene | Ave | 1.127 | 1.102 | 0.8000 | 9.77 | 10.0 | -2.3 | 20.0 |
| 2-Nitroaniline | Ave | 0.4439 | 0.4656 | 0.0100 | 10.5 | 10.0 | 4.9 | 20.0 |
| Dimethyl phthalate | Ave | 1.149 | 1.191 | 0.0100 | 10.4 | 10.0 | 3.6 | 20.0 |
| 1,3-Dinitrobenzene | Ave | 0.1850 | 0.2142 | | 11.6 | 10.0 | 15.8 | 20.0 |
| 2,6-Dinitrotoluene | Ave | 0.2594 | 0.2994 | | 11.5 | 10.0 | 15.4 | 20.0 |
| Acenaphthylene | Ave | 1.955 | 1.907 | 0.9000 | 9.75 | 10.0 | -2.5 | 20.0 |
| 3-Nitroaniline | Ave | 0.3816 | 0.3964 | 0.0100 | 10.4 | 10.0 | 3.9 | 20.0 |
| 2,4-Dinitrophenol | Ave | 0.1257 | 0.1480 | 0.0100 | 23.6 | 20.0 | 17.8 | 20.0 |
| Acenaphthene | Ave | 1.123 | 1.071 | 0.9000 | 9.54 | 10.0 | -4.6 | 20.0 |
| 4-Nitrophenol | Ave | 0.1185 | 0.1436 | | 24.2 | 20.0 | 21.2* | 20.0 |
| 2,4-Dinitrotoluene | Ave | 0.3227 | 0.3682 | 0.2000 | 11.4 | 10.0 | 14.1 | 20.0 |
| Dibenzofuran | Ave | 1.523 | 1.520 | 0.8000 | 9.98 | 10.0 | -0.2 | 20.0 |
| 2,3,4,6-Tetrachlorophenol | Ave | 0.2445 | 0.2438 | 0.0100 | 9.97 | 10.0 | -0.3 | 20.0 |
| Diethyl phthalate | Ave | 1.107 | 1.068 | 0.0100 | 9.65 | 10.0 | -3.5 | 20.0 |
| Hexadecane | Ave | 1.234 | 1.119 | | 9.07 | 10.0 | -9.3 | 20.0 |
| 4-Chlorophenyl phenyl ether | Ave | 0.4981 | 0.4841 | 0.4000 | 9.72 | 10.0 | -2.8 | 20.0 |
| 4-Nitroaniline | Ave | 0.3296 | 0.3738 | 0.0100 | 11.3 | 10.0 | 13.4 | 20.0 |
| Fluorene | Ave | 1.237 | 1.184 | 0.9000 | 9.57 | 10.0 | -4.3 | 20.0 |
| 4,6-Dinitro-2-methylphenol | Ave | 0.0925 | 0.1098 | 0.0100 | 23.8 | 20.0 | 18.8 | 20.0 |
| N-Nitrosodiphenylamine | Ave | 0.5447 | 0.4951 | 0.0100 | 18.2 | 20.0 | -9.1 | 20.0 |
| 1,2-Diphenylhydrazine(as Azobenzene) | Ave | 1.191 | 1.183 | | 9.92 | 10.0 | -0.7 | 20.0 |
| Azobenzene | Ave | 1.193 | 1.184 | | 9.92 | 10.0 | -0.8 | 20.0 |
| 4-Bromophenyl phenyl ether | Ave | 0.1674 | 0.1644 | 0.1000 | 9.82 | 10.0 | -1.8 | 20.0 |
| Hexachlorobenzene | Ave | 0.1506 | 0.1342 | 0.1000 | 8.91 | 10.0 | -10.9 | 20.0 |
| Atrazine | Ave | 0.1482 | 0.1448 | 0.0100 | 19.5 | 20.0 | -2.3 | 20.0 |
| n-Octadecane | Ave | 0.8533 | 0.7530 | | 8.82 | 10.0 | -11.8 | 20.0 |
| Pentachlorophenol | Ave | 0.1092 | 0.1023 | 0.0500 | 18.7 | 20.0 | -6.3 | 20.0 |
| Phenanthrene | Ave | 1.145 | 1.081 | 0.7000 | 9.44 | 10.0 | -5.6 | 20.0 |
| Anthracene | Ave | 1.159 | 1.105 | 0.7000 | 9.53 | 10.0 | -4.7 | 20.0 |
| Carbazole | Ave | 1.046 | 1.066 | 0.0100 | 10.2 | 10.0 | 2.0 | 20.0 |
| Di-n-butyl phthalate | Ave | 1.229 | 1.378 | 0.0100 | 11.2 | 10.0 | 12.1 | 20.0 |
| Fluoranthene | Ave | 0.9936 | 1.046 | 0.6000 | 10.5 | 10.0 | 5.2 | 20.0 |
| Benzidine | Ave | 0.6601 | 0.6970 | | 21.1 | 20.0 | 5.6 | 20.0 |
| Pyrene | Ave | 1.212 | 1.230 | 0.6000 | 10.1 | 10.0 | 1.4 | 20.0 |
| Butyl benzyl phthalate | Ave | 0.6609 | 0.7164 | 0.0100 | 10.8 | 10.0 | 8.4 | 20.0 |
| Bis(2-ethylhexyl) phthalate | Ave | 0.9242 | 1.025 | 0.0100 | 11.1 | 10.0 | 10.9 | 20.0 |
| 3,3'-Dichlorobenzidine | Ave | 0.3475 | 0.3427 | 0.0100 | 19.7 | 20.0 | -1.4 | 20.0 |
| Benzo[a]anthracene | Ave | 1.130 | 1.101 | 0.8000 | 9.75 | 10.0 | -2.5 | 20.0 |
| Chrysene | Ave | 1.028 | 1.052 | 0.7000 | 10.2 | 10.0 | 2.3 | 20.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Lab Sample ID: CCV 240-182204/2  Calibration Date: 05/24/2015 09:19

Instrument ID: A4HP9  Calib Start Date: 05/19/2015 16:13

GC Column: RXI-5SILMS  ID: 0.45(mm)  Calib End Date: 05/19/2015 19:33

Lab File ID: 50524002.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Di-n-octyl phthalate | Ave | 2.107 | 2.268 | 0.0100 | 10.8 | 10.0 | 7.7 | 20.0 |
| Benzo[b]fluoranthene | Ave | 1.234 | 1.206 | 0.7000 | 9.77 | 10.0 | -2.3 | 20.0 |
| Benzo[k]fluoranthene | Ave | 1.259 | 1.342 | 0.7000 | 10.7 | 10.0 | 6.6 | 20.0 |
| Benzo[a]pyrene | Ave | 1.182 | 1.217 | 0.7000 | 10.3 | 10.0 | 3.0 | 20.0 |
| Indeno[1,2,3-cd]pyrene | Ave | 1.102 | 1.195 | 0.5000 | 10.8 | 10.0 | 8.5 | 20.0 |
| Dibenz(a,h)anthracene | Ave | 0.9270 | 0.9811 | 0.4000 | 10.6 | 10.0 | 5.8 | 20.0 |
| Benzo[g,h,i]perylene | Ave | 0.9195 | 0.9867 | 0.5000 | 10.7 | 10.0 | 7.3 | 20.0 |
| 2-Fluorophenol (Surr) | Ave | 1.729 | 1.778 | | 10.3 | 10.0 | 2.8 | 20.0 |
| Phenol-d5 (Surr) | Ave | 2.335 | 2.294 | | 9.83 | 10.0 | -1.7 | 20.0 |
| Nitrobenzene-d5 (Surr) | Ave | 0.4097 | 0.4253 | | 10.4 | 10.0 | 3.8 | 20.0 |
| 2-Fluorobiphenyl (Surr) | Ave | 1.141 | 1.134 | | 9.94 | 10.0 | -0.6 | 20.0 |
| 2,4,6-Tribromophenol (Surr) | Ave | 0.1049 | 0.1022 | | 9.74 | 10.0 | -2.6 | 20.0 |
| Terphenyl-d14 (Surr) | Ave | 0.7676 | 0.7396 | | 9.63 | 10.0 | -3.7 | 20.0 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51061-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-182098/17-A

Matrix: Solid | Lab File ID: 50524018.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30(g) | Date Analyzed: 05/24/2015 15:55

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182204 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 0.76 | U | 6.7 | 0.76 |
| 208-96-8 | Acenaphthylene | 0.35 | U | 6.7 | 0.35 |
| 120-12-7 | Anthracene | 0.78 | U | 6.7 | 0.78 |
| 56-55-3 | Benzo[a]anthracene | 0.63 | U | 6.7 | 0.63 |
| 50-32-8 | Benzo[a]pyrene | 0.64 | U | 6.7 | 0.64 |
| 205-99-2 | Benzo[b]fluoranthene | 0.59 | U | 6.7 | 0.59 |
| 191-24-2 | Benzo[g,h,i]perylene | 0.35 | U | 6.7 | 0.35 |
| 207-08-9 | Benzo[k]fluoranthene | 0.68 | U | 6.7 | 0.68 |
| 218-01-9 | Chrysene | 1.1 | U | 6.7 | 1.1 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.66 | U | 6.7 | 0.66 |
| 206-44-0 | Fluoranthene | 0.55 | U | 6.7 | 0.55 |
| 86-73-7 | Fluorene | 0.53 | U | 6.7 | 0.53 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 0.35 | U | 6.7 | 0.35 |
| 91-20-3 | Naphthalene | 0.82 | U | 6.7 | 0.82 |
| 85-01-8 | Phenanthrene | 0.73 | U | 6.7 | 0.73 |
| 129-00-0 | Pyrene | 0.44 | U | 6.7 | 0.44 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 75 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 78 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 70 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 77 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 73 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 59 | | 19-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-51061-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-182098/18-A

Matrix: Solid | Lab File ID: 50524019.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 05/22/2015 12:31

Sample wt/vol: 30(g) | Date Analyzed: 05/24/2015 16:20

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 182204 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 83-32-9 | Acenaphthene | 477 | | 6.7 | 0.76 |
| 208-96-8 | Acenaphthylene | 466 | | 6.7 | 0.35 |
| 120-12-7 | Anthracene | 480 | | 6.7 | 0.78 |
| 56-55-3 | Benzo[a]anthracene | 491 | | 6.7 | 0.63 |
| 50-32-8 | Benzo[a]pyrene | 589 | | 6.7 | 0.64 |
| 205-99-2 | Benzo[b]fluoranthene | 560 | | 6.7 | 0.59 |
| 191-24-2 | Benzo[g,h,i]perylene | 643 | | 6.7 | 0.35 |
| 207-08-9 | Benzo[k]fluoranthene | 606 | | 6.7 | 0.68 |
| 218-01-9 | Chrysene | 528 | | 6.7 | 1.1 |
| 53-70-3 | Dibenz(a,h)anthracene | 612 | | 6.7 | 0.66 |
| 206-44-0 | Fluoranthene | 534 | | 6.7 | 0.55 |
| 86-73-7 | Fluorene | 472 | | 6.7 | 0.53 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 642 | | 6.7 | 0.35 |
| 91-20-3 | Naphthalene | 479 | | 6.7 | 0.82 |
| 85-01-8 | Phenanthrene | 483 | | 6.7 | 0.73 |
| 129-00-0 | Pyrene | 528 | | 6.7 | 0.44 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 75 | | 34-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 77 | | 28-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 77 | | 24-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 77 | | 31-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 73 | | 27-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 71 | | 19-110 |

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Instrument ID: A4HP9  Start Date: 05/19/2015 15:52

Analysis Batch Number: 181541  End Date: 05/19/2015 22:28

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| DFTPP 240-181541/1 | | 05/19/2015 15:52 | 1 | 50519001.D | RXI-5SILMS 0.45(mm) |
| STD5 240-181541/2 IC | | 05/19/2015 16:13 | 1 | 50519002.D | RXI-5SILMS 0.45(mm) |
| STD4 240-181541/3 IC | | 05/19/2015 16:38 | 1 | 50519003.D | RXI-5SILMS 0.45(mm) |
| STD3 240-181541/4 IC | | 05/19/2015 17:03 | 1 | 50519004.D | RXI-5SILMS 0.45(mm) |
| STD2 240-181541/5 IC | | 05/19/2015 17:28 | 1 | 50519005.D | RXI-5SILMS 0.45(mm) |
| STD1 240-181541/6 IC | | 05/19/2015 17:53 | 1 | 50519006.D | RXI-5SILMS 0.45(mm) |
| STD9 240-181541/7 IC | | 05/19/2015 18:18 | 1 | 50519007.D | RXI-5SILMS 0.45(mm) |
| STD8 240-181541/8 IC | | 05/19/2015 18:43 | 1 | 50519008.D | RXI-5SILMS 0.45(mm) |
| STD7 240-181541/9 IC | | 05/19/2015 19:08 | 1 | 50519009.D | RXI-5SILMS 0.45(mm) |
| STD6 240-181541/10 ICIS | | 05/19/2015 19:33 | 1 | 50519010.D | RXI-5SILMS 0.45(mm) |
| ICV 240-181541/11 | | 05/19/2015 19:58 | 1 | 50519011.D | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/19/2015 21:13 | 200 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/19/2015 21:39 | 100 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/19/2015 22:03 | 50 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/19/2015 22:28 | 50 | | RXI-5SILMS 0.45(mm) |

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Instrument ID: A4HP9  Start Date: 05/24/2015 08:58

Analysis Batch Number: 182204  End Date: 05/24/2015 18:51

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| DFTPP 240-182204/1 | | 05/24/2015 08:58 | 1 | 50524001.D | RXI-5SILMS 0.45(mm) |
| CCV 240-182204/2 CCVIS | | 05/24/2015 09:19 | 1 | 50524002.D | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 10:56 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 11:21 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 13:25 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 13:50 | 1 | | RXI-5SILMS 0.45(mm) |
| ZZZZZ | | 05/24/2015 14:40 | 1 | | RXI-5SILMS 0.45(mm) |
| MB 240-182098/17-A | | 05/24/2015 15:55 | 1 | 50524018.D | RXI-5SILMS 0.45(mm) |
| LCS 240-182098/18-A | | 05/24/2015 16:20 | 1 | 50524019.D | RXI-5SILMS 0.45(mm) |
| 240-51061-1 | H-VS-B-1-1 | 05/24/2015 16:45 | 1 | 50524020.D | RXI-5SILMS 0.45(mm) |
| 240-51061-2 | H-VS-B-2-1 | 05/24/2015 17:11 | 1 | 50524021.D | RXI-5SILMS 0.45(mm) |
| 240-51061-3 | H-VS-B-4-1 | 05/24/2015 17:36 | 1 | 50524022.D | RXI-5SILMS 0.45(mm) |
| 240-51061-4 | H-VS-B-3-1 | 05/24/2015 18:01 | 1 | 50524023.D | RXI-5SILMS 0.45(mm) |
| 240-51061-5 | H-VB-B-1-2 | 05/24/2015 18:26 | 1 | 50524024.D | RXI-5SILMS 0.45(mm) |
| 240-51061-6 | H-VB-B-2-2 | 05/24/2015 18:51 | 1 | 50524025.D | RXI-5SILMS 0.45(mm) |

# GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Batch Number: 182098  Batch Start Date: 05/22/15 12:31  Batch Analyst: Earle, Steve

Batch Method: 3550C  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | exBENZALDEHYD 00022 | EXBNASPIKE 00042 | EXBNASURR W 00022 | |
|---|---|---|---|---|---|---|---|---|---|
| 240-51061-B-1 | H-VS-B-1-1 | 3550C, 8270D | T | 30.43 g | 2 mL | | | 1 mL | |
| 240-51061-B-2 | H-VS-B-2-1 | 3550C, 8270D | T | 30.19 g | 2 mL | | | 1 mL | |
| 240-51061-B-3 | H-VS-B-4-1 | 3550C, 8270D | T | 30.11 g | 2 mL | | | 1 mL | |
| 240-51061-B-4 | H-VS-B-3-1 | 3550C, 8270D | T | 29.95 g | 2 mL | | | 1 mL | |
| 240-51061-B-5 | H-VB-B-1-2 | 3550C, 8270D | T | 30.18 g | 2 mL | | | 1 mL | |
| 240-51061-B-6 | H-VB-B-2-2 | 3550C, 8270D | T | 30.34 g | 2 mL | | | 1 mL | |
| MB 240-182098/17 | | 3550C, 8270D | | 30 g | 2 mL | | | 1 mL | |
| LCS 240-182098/18 | | 3550C, 8270D | | 30 g | 2 mL | 1 mL | 1 mL | 1 mL | |

| Batch Notes | |
|---|---|
| Balance ID | 1339912 |
| Na2SO4 Lot Number | 1942695 |
| Prep Solvent Lot # | 2002048 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton  Job Number: 240-51061-1

SDG No.:

Project: MRC Soil Remediation (Block H)

| Client Sample ID | Lab Sample ID |
|---|---|
| H-VS-B-1-1 | 240-51061-1 |
| H-VS-B-2-1 | 240-51061-2 |
| H-VS-B-4-1 | 240-51061-3 |
| H-VS-B-3-1 | 240-51061-4 |
| H-VB-B-1-2 | 240-51061-5 |
| H-VB-B-2-2 | 240-51061-6 |

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-51061-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 01/28/2010 09:24

| Analyte | Wavelength/ Mass | RL (%) | |
|---|---|---|---|
| Percent Moisture | | 0.1 | |
| Percent Solids | | 0.1 | |

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton  Job Number: 240-51061-1

SDG Number:

Matrix: Solid  Instrument ID: NOEQUIP

Method: Moisture  XRL Date: 01/28/2010 09:24

| Analyte | Wavelength/ Mass | XRL (mg/L) | |
|---|---|---|---|
| Percent Moisture | | 10 | |
| Percent Solids | | 10 | |

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 05/22/2015 17:23 End Date: 05/22/2015 17:23

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | % Sol | Moist | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| 240-50885-A-1 DU | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| 240-51061-1 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-51061-2 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-51061-3 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-51061-4 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-51061-5 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| 240-51061-6 | 1 | T | 17:23 | X | X | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-51061-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 05/22/2015 17:23 End Date: 05/22/2015 17:23

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | % Sol | Moist | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |

Prep Types

T = Total/NA

# GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton  Job No.: 240-51061-1

SDG No.:

Batch Number: 182160  Batch Start Date: 05/22/15 17:23  Batch Analyst: Eikelberry, Nicholas

Batch Method: Moisture  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | DishWeight | SampleMassWet | SampleMassDry | | | |
|---|---|---|---|---|---|---|---|---|---|
| 240-50885-A-1 DU | | Moisture | T | 4.2418 g | 12.1893 g | 8.0850 g | | | |
| 240-51061-A-1 | H-VS-B-1-1 | Moisture | T | 4.2418 g | 13.3127 g | 12.3102 g | | | |
| 240-51061-A-2 | H-VS-B-2-1 | Moisture | T | 4.2418 g | 11.1145 g | 10.3238 g | | | |
| 240-51061-A-3 | H-VS-B-4-1 | Moisture | T | 4.2418 g | 13.0559 g | 11.8541 g | | | |
| 240-51061-A-4 | H-VS-B-3-1 | Moisture | T | 4.2418 g | 14.8525 g | 13.6505 g | | | |
| 240-51061-A-5 | H-VB-B-1-2 | Moisture | T | 4.2418 g | 10.1338 g | 8.9909 g | | | |
| 240-51061-A-6 | H-VB-B-2-2 | Moisture | T | 4.2418 g | 10.8116 g | 9.5960 g | | | |

| Batch Notes | |
|---|---|
| Balance ID | B047 No Unit |
| Date samples were placed in the oven | 5/22/15 |
| Oven Temp when samples are put in oven | 103.1 Degrees C |
| Time samples were place in the oven | 17:40 |
| Date samples were removed from oven | 5/26/15 |
| Oven Temp when samples removed from oven | 103.3 Degrees C |
| Time Samples were removed from oven | 04:30 |
| Oven ID | 002 |
| ID number of the thermometer | Tempguard Box C #6 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Shipping and Receiving Documents

TestAmerica Laboratories, Inc.

# CHAIN OF CUSTODY
# AND
# RECEIVING DOCUMENTS

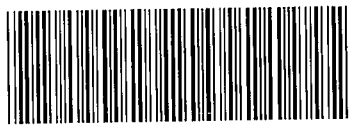

240-51061 Chain of Custody



4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

## CHAIN OF CUSTODY RECORD

2.8 / Cl, 6

| PROJECT NO.: | SITE NAME: |
|---|---|
| 112IC07483 | MRC Soil Remediation (Block H) |

SAMPLERS (SIGNATURE): JOSH MULLIS

| STATION NO. | DATE | TIME | COMP | GRAB | STATION LOCATION SAMPLE ID | NO. OF CON-TAINERS | PAH (8270D) | | | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 5/20 | 1623 | X | | H-VS-B-1-1 | 1 | X | | | | | | | ★ 3 DAY TAT ★ |
| 1 | 5/20 | 1626 | X | | H-VS-B-2-1 | 1 | X | | | | | | | ★ TESTAMERICA |
| 1 | 5/20 | 1632 | X | | JAM H-VS-B-4-1 | 1 | X | | | | | | | NORTH CANTON ★ |
| 1 | 5/21 | 0910 | X | JRS | H-VS-B-3-1 | 1 | X | | | | | | | |
| 1 | 5/21 | 0915 | | X | H-VB-B-1-2 | 1 | X | | | | | | | |
| | 5/21 | 0920 | | X | H-VB-B-2-2 | 1 | X | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

5/21/15

| RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY(SIGNATURE): | RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY(SIGNATURE): |
|---|---|---|---|---|---|
| | 5/21 1545 | | | 5-21-2015 1705 | |
| RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY (SIGNATURE): 5-22-15 930 | RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED BY(SIGNATURE): |
| RELINQUISHED BY (SIGNATURE): | DATE / TIME: | RECEIVED FOR LABORATORY BY (SIGNATURE): | DATE / TIME: | REMARKS: | |

Order No. 70440 (0693)

**TestAmerica Canton Sample Receipt Form/Narrative** Login # : 51091
**Canton Facility**

Client MRC Site Name _____ Cooler unpacked by:

Cooler Received on 5-22-15 Opened on 5-22-15

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

**Receipt After-hours:** Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

~~IR GUN# A (CF +4.0 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C ☐ See Multiple Cooler Form

~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. 2.8 °C Corrected Cooler Temp. 1.6 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s)? Yes ~~No~~
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the sampler(s) clearly identified on the COC? Yes ~~No~~ JS
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC432654
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

**14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES** Samples processed by:

**15. SAMPLE CONDITION**

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

**16. SAMPLE PRESERVATION**

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

# APPENDIX G—POST-EXCAVATION RESIDUAL-RISK ANALYSIS

**TECHNICAL MEMORANDUM**

**POST-EXCAVATION RISK ANALYSIS FOR TAX BLOCK H SOILS**

**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**

**MIDDLE RIVER, MARYLAND**

**NOVEMBER 2015**

## 1.0 Introduction

This memorandum provides the results of the risk analysis for the concentrations of chemicals of potential concern (COPC) remaining in soils after the implementation of the remedial action (soil excavation) in Block H. The remedial action was completed in May 2015 in accordance with the remedial action plan prepared for Block H. The soil excavation was necessary because risk estimates for Block H presented in the *Human Health Risk Assessment (HHRA) for Blocks D, E, F, G, and H Soils, Lockheed Martin Middle River Complex, 2323 Eastern Boulevard, Middle River, Maryland* (Tetra Tech, 2012) for a hypothetical industrial worker population exceeded risk management benchmarks established by the Maryland Department of the Environment (MDE). The MDE cumulative cancer risk management benchmark is $1 \times 10^{-5}$ (i.e., a one in one-hundred thousand excess chance of developing cancer). The MDE cumulative non-cancer risk benchmark is a hazard index of 1. Potential adverse non-carcinogenic health effects may occur if the hazard index (calculated on a target organ specific basis) exceeds one. The overall objective of this post-excavation analysis is to demonstrate that with the excavation of soils from the removal areas, the risk assessment of the final exposure point concentrations (EPCs) for the COPC from all remaining soils in Block H result in industrial worker cancer and non-cancer risk estimates less than MDE risk management benchmarks.

The 2012 HHRA indicated that the group of polycyclic aromatic hydrocarbons (PAHs) typically evaluated as benzo(a)pyrene equivalents (BaPEqs) were the predominant chemicals of concern (COCs) for an industrial worker hypothetically exposed to soils in Block H. The remedial action plan and associated residual risk assessment recommended that surface soils at locations SB-604D, SB-282A, and SB-282D be excavated (to a depth of 2 feet below ground surface [bgs]) so that risk estimates for an industrial worker exposed to Block H surface soils would not exceed the MDE risk management benchmarks. In addition surface soils at SB-282, which is adjacent to SB-282A and SB-282D were also excavated. The locations recommended for remediation are depicted on Figure 1 (i.e., within Block H sub-areas A and B) and the associated concentrations are in Table 2-1 of the residual risk analysis (an appendix to the remedial action plan, included as Attachment A of this document). The remedial action plan and residual risk analysis also

present the remedial goals established for BaPEq and the rationale for each location (and depth) recommended for excavation.

The following sections briefly discuss the post-excavation (i.e., confirmation) soils data and present the results of the final Block H risk assessment of the post excavation soils dataset for Block H (i.e., the updated HHRA). The post-excavation soils dataset is defined as all data for the side-wall confirmation soil samples collected in 2015 as well as historical surface soil data for all locations not excavated. The original surface soil data for locations SB-604D, SB-282, SB-282A, and SB-282D [i.e., the excavated soils] have been replaced with chemical concentrations from the replacement backfill soil in the post-excavation soils dataset. The reader is referred to Section 4 of the Block H construction completion report for detailed description of the soil excavation and post excavation soil sampling conducted in Block H.

## 2.0 Analytical Results for Post Excavation Soil Samples

Post excavation soils samples were collected from Block H sub-area A (addressing surficial contamination at locations SB-282, SB-282A, and SB-282D) and Block H sub-area B (addressing surficial contamination at location SB-604D), and analyzed for PAHs using United States Environmental Protection Agency (USEPA) SW-846 Method 8270D. Four side-wall and three floor (or excavation base) samples were collected from Block H sub-area A. Four side-wall and two base samples were collected from Block H sub-area B. The side-wall samples were composites of soils from the side-walls of the excavation. The base samples were grab samples from the floor of the excavation (2 feet bgs). Sample locations are depicted on Figure 2. All data collected were validated in accordance with USEPA Region 3 protocols and found acceptable for use in the human health risk assessment (Attachment B).

Analytical results for the post excavation samples are in Table A and B for Block H sub-areas A and B, respectively. None of the calculated BaPEq concentrations exceed the remedial goal established in the remedial action plan for an industrial worker exposed to soils (2,900 micrograms per kilogram [µg/kg], representing the $1 \times 10^{-5}$ cancer risk level). In fact, none exceed the risk-based concentration representing the $1 \times 10^{-6}$ cancer risk level for an industrial worker exposed to soils (290 µg/kg). Benzo(a)pyrene and dibenzo(a,h)anthracene were the only target analyte PAHs detected at a concentration exceeding the USEPA residential regional screening level (RSL) representing the $1 \times 10^{-6}$ cancer risk level (Table C).

## 3.0 Risk Assessment of Block H Post Excavation Soils Dataset

The risk assessment of the post-excavation soils dataset for Block H was conducted using the USEPA and MDE methodologies presented in the 2012 HHRA, updated as necessary based on recent USEPA risk assessment guidance documents. The reader is referred to the 2012 HHRA for a detailed explanation of the risk assessment process and all equations used to calculate exposure dose and risk.

The updated HHRA results are presented in USEPA Risk Assessment for Superfund (RAGS) Part D format tables in Attachment C. The chemicals highlighted in Table D were selected as COPCs because their maximum detected concentration exceeded current RSL(s) for residential exposures to soils. The exposure assessment assumptions (e.g., days per year exposed) are those presented in the Office of Solid Waste and Emergency Response (OSWER) Directive 9200.1-120, *Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors*. (USEPA, 2014) or other USEPA references specified in Attachment D. The EPCs were calculated using the current version of the USEPA's Pro-UCL software (Version 5.0.00). The toxicity criteria (e.g., cancer slope factors, reference doses) used to estimate cancer and non-cancer risks are those in the June 2015 RSL table published by USEPA.

The results of the risk assessment of the post-excavation surface soils dataset for Block H are in Table E. The cancer and non-cancer risk estimates do not exceed the MDE cumulative risk management benchmarks (i.e., an excess lifetime cancer risk of $1 \times 10^{-5}$ or a total target organ specific hazard index of 1). The cumulative risk estimates do not include estimates for arsenic because the maximum detected arsenic concentration in the post-excavation soil samples (6.1 mg/kg) was less than the Middle River Complex background value (12 mg/kg) documented in the approved remedial action plan for Block B (see background concentrations for arsenic in soils in Appendix I of the Tetra Tech, 2009). However, the cumulative risk estimates do include risk estimates for all other COPCs identified in the 2012 HHRA so that the reader can compare pre-excavation soil risk estimates to post-excavation soil risk estimates. It should be noted that the COPC list for the 2012 HHRA was not specific to Block H. It was a global COPC list, based on chemical concentrations detected in *all* of the tax blocks evaluated in the 2012 HHRA (i.e., Blocks D, E, F, G, and H).

The maximum BaPEq concentration detected in the post-excavation surface soil data set for Block H (620 µg/kg) does not exceed the remedial goal established in the remedial action plan.

## 4.0 Summary and Conclusions

The soil remediation for Block H consisted of the excavation of soils (to a depth of 2 feet bgs) at sub-areas A and B within the tax block. The BaPEq concentrations detected in the side-wall and base post-excavation soil samples did not exceed the remedial goal established in the remedial action plan. The cancer and non-cancer risk estimates calculated for the post-excavation soils dataset for Block H do not exceed MDE cumulative risk management benchmarks verifying that risk reduction has been achieved for site closure under current and future industrial site use. The soil remediation at Block H has been completed successfully.

# FIGURES

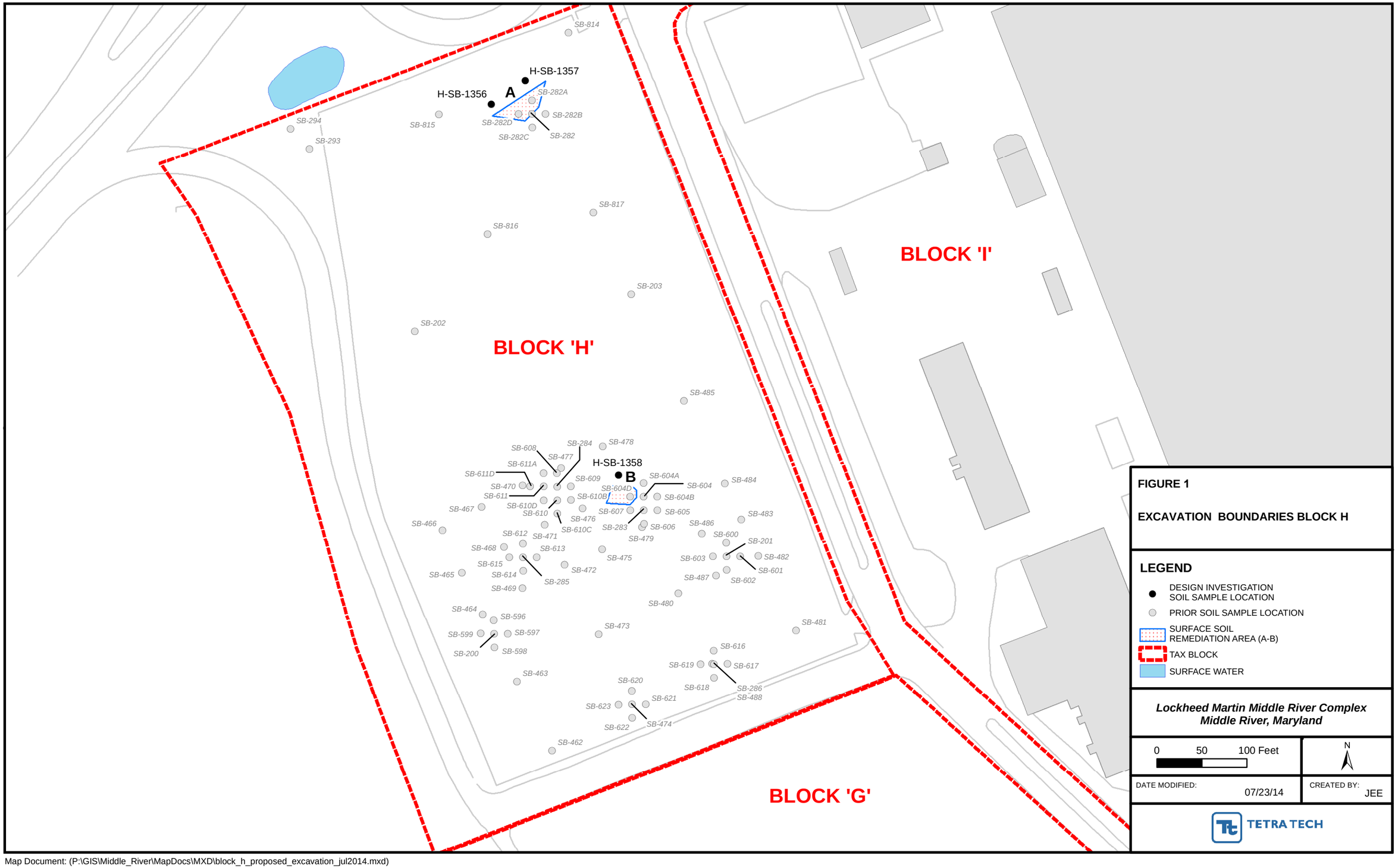


**FIGURE 1**

**EXCAVATION BOUNDARIES BLOCK H**

**LEGEND**

- DESIGN INVESTIGATION SOIL SAMPLE LOCATION
- PRIOR SOIL SAMPLE LOCATION
- SURFACE SOIL REMEDIATION AREA (A-B)
- TAX BLOCK
- SURFACE WATER

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

0 50 100 Feet

N

DATE MODIFIED: 07/23/14

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Middle_River\MapDocs\MXD\block_h_proposed_excavation_jul2014.mxd)
07/23/14 -- JEE

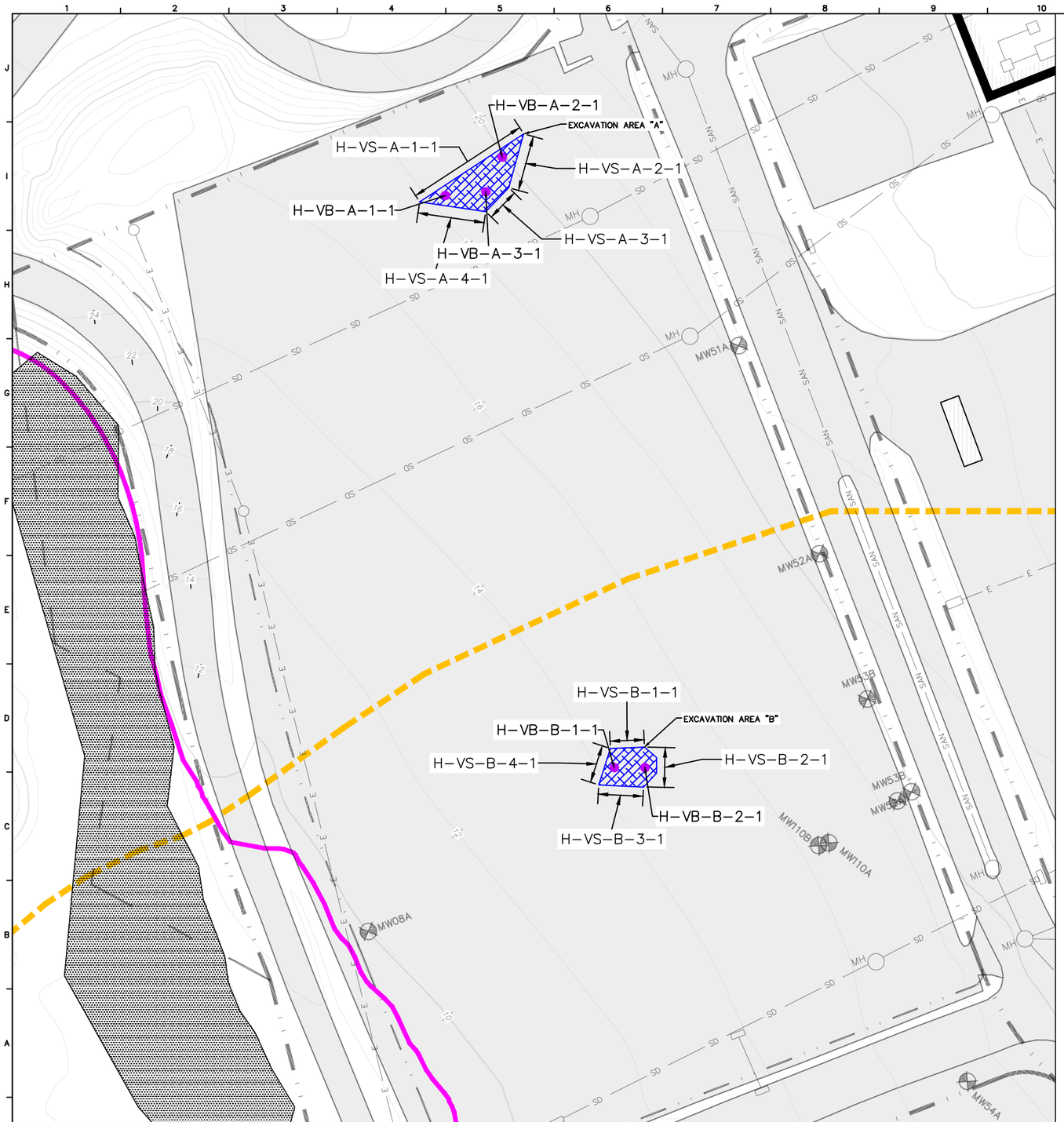


LEGEND:

- VERIFICATION SIDEWALL SAMPLE LOCATION
- VERIFICATION BASE SAMPLE LOCATION
- EXCAVATION BOUNDARY 2-FOOT DEPTH
- DELINEATED WETLAND AREA
- ASPHALT PAVEMENT
- CONTOUR LINE
- BLOCK BOUNDARY
- CRITICAL AREA LINE
- 100-FT FLOOD PLAIN LINE
- SD — STORM DRAIN
- SAN — SANITARY SEWER
- MH — MANHOLE
- MW — MONITORING WELL

GENERAL NOTES:
1. EXCAVATION BOUNDARIES BASED ON 100% SOIL REMEDIAL ACTION DESIGN (TETRA TECH INC., 2015)
2. SIDEWALL VERIFICATION SAMPLES WERE COLLECTED EVERY 100-FEET.
3. BASE VERIFICATION SAMPLES WERE COLLECTED EVERY 625 SQUARE FOOT.

TETRA TECH
www.tetratech.com
20251 CENTURY BLVD
GERMANTOWN, MD 20874
T: (301) 528-5552 | F: (301) 528-3000

STATE OF MARYLAND — SCOTT I. SAMUEL — No. 29015 — PROFESSIONAL ENGINEER

| MARK | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

LOCKHEED MARTIN
MIDDLE RIVER COMPLEX

SOIL REMEDIAL ACTION
VERIFICATION SAMPLE LOCATIONS
BLOCK H

| | |
|---|---|
| DATE: | 10/02/2015 |
| PROJECT NO.: | 112IC07483 |
| DESIGNED BY: | ISG |
| DRAWN BY: | ISG |
| CHECKED BY: | SAN |
| SHEET: | 1 OF 1 |

COPYRIGHT TETRA TECH INC.

FIGURE 2

K:\CADD\MRC\112IC07483\Construction Completion\AS BUILT FIGURES.dwg IVANNA.GOLDSBERRY 10/2/2015 10:36:25 AM

# TABLES

**Table A**
**Summary of Soil Verification Samples - Block H Area A**
**Post Excavation Residual Risk Analysis for Block H**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| NSAMPLE<br>LAB ID<br>SAMPLE DATE<br>DUPLICATE SAMPLE | **Residential RSL[1]** | **Industrial RSL[1]** | **RG** | **H-VB-A-1-2<br>240-51073-5<br>05/20/2015<br>--** | **H-VB-A-2-2<br>240-51073-6<br>05/20/2015<br>--** | **H-VB-A-3-2<br>240-51073-7<br>05/20/2015<br>--** | **H-VS-A-1-1<br>240-51073-1<br>05/20/2015<br>--** | **H-VS-A-2-1<br>240-51073-2<br>05/20/2015<br>--** | **H-DUP01<br>240-51073-8<br>05/20/2015<br>H-VS-A-2-1** | **H-VS-A-3-1<br>240-51073-3<br>05/20/2015<br>--** | **H-VS-A-4-1<br>240-51073-4<br>05/20/2015<br>--** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAH (UG/KG)** | | | | | | | | | | | |
| ACENAPHTHYLENE | 360,000 N[2] | 4,500,000 N[2] | - | 0.41 U | 0.42 U | 0.43 U | 0.42 U | 0.42 U | 4.9 J | 0.44 U | 0.43 U |
| ANTHRACENE | 1,800,000 N | 23,000,000 N | - | 0.92 U | 0.93 U | 14 | 0.93 U | 0.93 U | 10 | 0.98 U | 0.95 U |
| BENZO(A)PYRENE EQUIVALENTS-1/2 NON-DETECT[3] | 16 C | 290 C | 2,900 | 0.76 U | 0.77 U | **82** | 0.77 U | **74** | **167** | **40** | **42** |
| BENZO(A)PYRENE EQUIVALENTS-POSITIVE RESULTS[4] | 16 C | 290 C | 2,900 | 0.76 U | 0.77 U | **82** | 0.77 U | **74** | **167** | **39** | **42** |
| BENZO(A)ANTHRACENE | 160 C | 2,900 C | NA[5] | 0.75 U | 0.75 U | 60 | 0.75 U | 21 J | 57 J | 17 | 22 |
| BENZO(A)PYRENE | 16 C | 290 C | NA[5] | 0.76 U | 0.77 U | **55** | 0.77 U | **52 J** | **120 J** | **32** | **34** |
| BENZO(B)FLUORANTHENE | 160 C | 2,900 C | NA[5] | 0.7 U | 0.71 U | 66 | 0.71 U | 39 J | 93 J | 33 | 30 |
| BENZO(G,H,I)PERYLENE | 180,000 N[6] | 2,300,000 N[6] | - | 0.41 U | 0.42 U | 48 | 0.42 U | 54 J | 130 J | 34 | 32 |
| BENZO(K)FLUORANTHENE | 1,600 C | 29,000 C | NA[5] | 0.8 U | 0.81 U | 22 | 0.81 U | 33 J | 70 J | 14 | 22 |
| CHRYSENE | 16,000 C | 290,000 C | NA[5] | 1.3 U | 1.3 U | 75 | 1.3 U | 35 J | 76 J | 23 | 33 |
| DIBENZO(A,H)ANTHRACENE | 16 C | 290 C | NA[5] | 0.78 U | 0.79 U | 11 | 0.79 U | 12 J | **22 J** | 0.83 U | 0.8 U |
| FLUORANTHENE | 240,000 N | 3,000,000 N | - | 4.5 J | 0.66 U | 110 | 0.66 U | 19 J | 55 J | 15 | 25 |
| INDENO(1,2,3-CD)PYRENE | 160 C | 2,900 C | NA[5] | 0.41 U | 0.42 U | 36 | 0.42 U | 36 J | 89 J | 22 | 23 |
| PHENANTHRENE | 180,000 N[6] | 2,300,000 N[6] | - | 0.86 U | 0.87 U | 110 | 0.87 U | 5.2 J | 20 | 7.8 J | 12 |
| PYRENE | 180,000 N | 2,300,000 N | - | 6.6 J | 0.53 U | 160 | 4.6 J | 52 J | 140 J | 39 | 58 |

Notes:

**Bolded results exceed the Residential RSL.**

No results exceed the Industrial RSL or the RG.

[1] USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, June 2015. The noncarcinogenic values (denoted with a "N" flag) correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag).

[2] Value is for acenaphthene.

[3] Calculated using one-half the detection limit for non-detected results.

[4] Calculated using a value of zero for non-detected results.

[5] cPAHs have been used in calculating the benzo(a)pyrene equivalents and therefore are not screened against the RG.

U: Non-detect

J: Estimated result

RG: remedial goal

RSL Regional Screening Level

USEPA United States Environmental Protection Agency

--: No Duplicate collected

**Table B**
**Summary of Soil Verification Samples - Block H Area B**
**Post Excavation Residual Risk Analysis for Block H**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| SAMPLE NAME<br>LAB ID<br>SAMPLE DATE<br>DUPLICATE SAMPLE | **Residential RSL[(1)]** | **Industrial RSL[(1)]** | **RG** | **H-VB-B-1-2<br>240-51061-5<br>05/21/2015<br>--** | **H-VB-B-2-2<br>240-51061-6<br>05/21/2015<br>--** | **H-VS-B-1-1<br>240-51061-1<br>05/20/2015<br>--** | **H-VS-B-2-1<br>240-51061-2<br>05/20/2015<br>--** | **H-VS-B-3-1<br>240-51061-4<br>05/21/2015<br>--** | **H-VS-B-4-1<br>240-51061-3<br>05/20/2015<br>--** |
|---|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| ANTHRACENE | 1,800,000 N | 23,000,000 N | - | 0.96 U | 0.95 U | 0.86 U | 4.4 J | 0.88 U | 0.9 U |
| BENZO(A)PYRENE EQUIVALENTS-1/2 NON-DETECT[(2)] | 16 C | 290 C | 2,900 | 0.79 U | 1.3 | 0.71 U | **27** | 0.72 U | 0.85 |
| BENZO(A)PYRENE EQUIVALENTS-POSITIVE RESULTS[(3)] | 16 C | 290 C | 2,900 | 0.79 U | 0.45 | 0.71 U | **27** | 0.72 U | 0.0038 |
| BENZO(A)ANTHRACENE | 160 C | 2,900 C | NA[(4)] | 0.78 U | 4.5 J | 0.7 U | 15 | 0.71 U | 0.73 U |
| BENZO(A)PYRENE | 16 C | 290 C | NA[(4)] | 0.79 U | 0.78 U | 0.71 U | **22** | 0.72 U | 0.74 U |
| BENZO(B)FLUORANTHENE | 160 C | 2,900 C | NA[(4)] | 0.73 U | 0.72 U | 0.65 U | 21 | 0.67 U | 0.68 U |
| BENZO(G,H,I)PERYLENE | 180,000 N[(5)] | 2,300,000 N[(5)] | - | 0.43 U | 0.42 U | 0.39 U | 17 | 0.4 U | 0.4 U |
| BENZO(K)FLUORANTHENE | 1,600 C | 29,000 C | NA[(4)] | 0.84 U | 0.83 U | 0.75 U | 8.3 | 0.77 U | 0.78 U |
| CHRYSENE | 16,000 C | 290,000 C | NA[(4)] | 1.4 U | 1.3 U | 1.2 U | 21 | 1.2 U | 3.8 J |
| DIBENZO(A,H)ANTHRACENE | 16 C | 290 C | NA[(4)] | 0.81 U | 0.8 U | 0.73 U | 0.74 U | 0.75 U | 0.76 U |
| FLUORANTHENE | 240,000 N | 3,000,000 N | - | 0.68 U | 5.7 J | 0.61 U | 24 | 4.3 J | 5.1 J |
| INDENO(1,2,3-CD)PYRENE | 160 C | 2,900 C | NA[(4)] | 0.43 U | 0.42 U | 0.39 U | 13 | 0.4 U | 0.4 U |
| PHENANTHRENE | 180,000 N[(5)] | 2,300,000 N[(5)] | - | 0.9 U | 4.9 J | 0.81 U | 11 | 0.82 U | 6.3 J |
| PYRENE | 180,000 N | 2,300,000 N | - | 4.7 J | 9.2 | 0.49 U | 42 | 6.4 J | 7.9 |

Notes:

**Bolded results exceed the Residential RSL.**

No results exceed the Industrial RSL or the RG.

[(1)]USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, June 2015. The noncarcinogenic values (denoted with a "N" flag) correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag).

[(2)] Calculated using one-half the detection limit for non-detected results.

[(3)] Calculated using a value of zero for non-detected results.

[(4)] cPAHs have been used in calculating the benzo(a)pyrene equivalents and therefore are not screened against the RG.

[(5)] Value is for pyrene.

NA: Not applicable

U: Non-detect

J: Estimated result

RG: remedial goal

--: no duplicate sample collected

RSL Regional Screening Level

USEPA United States Environmental Protection Agency

**Table C**
**Target Analyte List of PAHs for Post Excavation Soil Samples**
**Post Excavation Residual Risk Analysis for Block H**
**Lockheed Martin Corporation Middle River Complex**
**Middle River, Maryland**


| Analyte | Is this PAH used in the calculation of the BaPeq (per USEPA guidance)? | Was this PAH detected in the post excavation soil samples at concentrations exceeding USEPA RSLs for industrial workers?[1] |
|---|---|---|
| Acenaphthene[2] | No | No |
| Acenaphthylene | No | No |
| Anthracene | No | No |
| Benzo(a)anthracene | Yes | No |
| Benzo(a)pyrene | Yes | No |
| Benzo(b)fluoranthene | Yes | No |
| Benzo(g,h,i)perylene | No | No |
| Benzo(k)fluoranthene | Yes | No |
| Chrysene | Yes | No |
| Dibenzo(a,h)anthracene | Yes | No |
| Fluoranthene | No | No |
| Fluorene[2] | No | No |
| Indeno(1,2,3-cd)pyrene | Yes | No |
| Naphthalene[2] | No | No |
| Phenanthrene | No | No |
| Pyrene | No | No |

Notes:

[1] - The most current RSLs were published in June 2015 and represent the $1 \times 10^{-6}$ cancer risk level for for carcinogens or a hazard index of 0.1 for non-carcinogens.

[2] - The target analyte was not detected in post-excavation soil samples

**TABLE D**
**OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT WITH SURFACE SOIL - BLOCK H SOILS REMEDIATION**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


**Scenario Timeframe: Current/Future**
**Medium: Surface Soil**
**Exposure Medium: Surface Soil**

| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | Range of Background Concentrations[4] | USEPA RSL - Residential Soil[5] | Potential ARAR/TBC | Potential ARAR/TBC Source | COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Block H | **Volatile Organic Compounds** | | | | | | | | | | | | | | |
| | 526-73-8 | 1,2,3-Trimethylbenzene | 0.4 J | 0.4 J | ug/kg | SB-284-0102 | 1/7 | 0.4 - 0.4 | 0.4 | NA | 4,900 N | NA | NA | No | BSL |
| | 78-93-3 | 2-Butanone | 4 J | 29.4 | ug/kg | SB-201-SS | 6/7 | 4 - 29.4 | 29.4 | NA | 2,700,000 N | NA | NA | No | BSL |
| | 67-64-1 | Acetone | 39 L | 210 J | ug/kg | SB-201-SS | 8/9 | 39 - 210 | 210 | NA | 6,100,000 N | NA | NA | No | BSL |
| | 75-15-0 | Carbon Disulfide | 1.7 J | 3 J | ug/kg | SB-202-SS, SB-286-0102 | 6/11 | 1.7 - 3 | 3 | NA | 77,000 N | NA | NA | No | BSL |
| | 74-87-3 | Chloromethane | 3 J | 3 J | ug/kg | SB-284-0102 | 1/11 | 3 - 3 | 3 | NA | 11,000 N | NA | NA | No | BSL |
| | 100-41-4 | Ethylbenzene | 0.31 J | 1.5 J | ug/kg | SB-201-SS | 2/11 | 0.31 - 1.5 | 1.5 | NA | 5,800 C | NA | NA | No | BSL |
| | 75-09-2 | Methylene Chloride | 2.9 J | 4.9 J | ug/kg | SB-202-SS | 3/11 | 2.9 - 4.9 | 4.9 | NA | 35,000 N | NA | NA | No | BSL |
| | 91-20-3 | Naphthalene | 2 J | 180 J | ug/kg | SB-284-0102 | 4/11 | 2 - 180 | 180 | NA | 3,800 C | NA | NA | No | BSL |
| | 104-51-8 | N-Butylbenzene | 0.9 J | 0.9 J | ug/kg | SB-284-0102 | 1/11 | 0.9 - 0.9 | 0.9 | NA | 390,000 N | NA | NA | No | BSL |
| | 75-65-0 | Tertiary-Butyl Alcohol | 5 J | 7 J | ug/kg | SB-201-SS | 2/5 | 5 - 7 | 7 | NA | NA | NA | NA | No | NTX |
| | 108-88-3 | Toluene | 7.8 | 13.3 | ug/kg | SB-202-SS | 3/11 | 7.8 - 13.3 | 13.3 | NA | 490,000 N | NA | NA | No | BSL |
| | 79-01-6 | Trichloroethene | 2.9 | 4.8 | ug/kg | SB-202-SS | 3/11 | 2.9 - 4.8 | 4.8 | NA | 410 N | NA | NA | No | BSL |
| | **Semivolatile Organic Compounds** | | | | | | | | | | | | | | |
| | 65-85-0 | Benzoic Acid | 67.4 J | 723 J | ug/kg | SB-201-SS | 3/11 | 67.4 - 723 | 723 | NA | 25,000,000 N | NA | NA | No | BSL |
| | 132-64-9 | Dibenzofuran | 27 J | 27 J | ug/kg | SB-200-SS | 1/11 | 27 - 27 | 27 | NA | 7,300 N | NA | NA | No | BSL |
| | 84-74-2 | di-n-Butyl Phthalate | 31 J | 31 J | ug/kg | SB-203-SS | 1/11 | 31 - 31 | 31 | NA | 630,000 N | NA | NA | No | BSL |
| | **Polynuclear Aromatic Hydrocarbons** | | | | | | | | | | | | | | |
| | 90-12-0 | 1-Methylnaphthalene | 10 | 210 J | ug/kg | SB-284-0102 | 2/14 | 10 - 210 | 210 | NA | 18,000 C | NA | NA | No | BSL |
| | 91-57-6 | 2-Methylnaphthalene | 11 | 180 J | ug/kg | SB-284-0102 | 2/14 | 11 - 180 | 180 | NA | 24,000 N | NA | NA | No | BSL |
| | 83-32-9 | Acenaphthene | 5.7 J | 130 J | ug/kg | SB-283-0102 | 5/27 | 5.7 - 130 | 130 | NA | 360,000 N | NA | NA | No | BSL |
| | 120-12-7 | Anthracene | 3.9 J | 283 | ug/kg | SB-200-SS | 9/27 | 3.9 - 283 | 283 | NA | 1,800,000 N | NA | NA | No | BSL |
| | -- | **Bap Equivalent-Halfnd** | 9 | 616 | ug/kg | H-SB-611D-1 | 36/61 | 9 - 616.36 | 616 | NA | **16 C** | NA | NA | **Yes** | ASL |
| | -- | **Bap Equivalent-Pos** | 9 | 616 | ug/kg | H-SB-611D-1 | 36/61 | 9 - 616.36 | 616 | NA | **16 C** | NA | NA | **Yes** | ASL |
| | 56-55-3 | **Benzo(a)anthracene** | 8 | 372 | ug/kg | SB-200-SS | 25/41 | 8 - 372 | 372 | NA | **160 C** | NA | NA | **Yes** | ASL |
| | 50-32-8 | **Benzo(a)pyrene** | 7.7 | 440 | ug/kg | H-SB-611D-1 | 39/68 | 7.7 - 440 | 440 | NA | **16 C** | NA | NA | **Yes** | ASL |
| | 205-99-2 | **Benzo(b)fluoranthene** | 8.9 | 390 | ug/kg | H-SB-611D-1 | 25/41 | 8.9 - 390 | 390 | NA | **160 C** | NA | NA | **Yes** | ASL |
| | 191-24-2 | Benzo(g,h,i)perylene | 13 | 180 J | ug/kg | SB-283-0102 | 9/27 | 13 - 180 | 180 | NA | 180,000 N[7] | NA | NA | No | BSL |
| | 207-08-9 | Benzo(k)fluoranthene | 4.2 | 284 | ug/kg | SB-200-SS | 24/41 | 4.2 - 284 | 284 | NA | 1,600 C | NA | NA | No | BSL |
| | 218-01-9 | Chrysene | 3.8 J | 420 | ug/kg | SB-283-0102 | 26/41 | 3.8 - 420 | 420 | NA | 16,000 C | NA | NA | No | BSL |
| | 53-70-3 | **Dibenzo(a,h)anthracene** | 12 J | 81 | ug/kg | H-SB-611D-1 | 4/41 | 12 - 81 | 81 | NA | **16 C** | NA | NA | **Yes** | ASL |
| | 206-44-0 | Fluoranthene | 4.3 J | 840 | ug/kg | SB-200-SS | 14/27 | 4.3 - 840 | 840 | NA | 240,000 N | NA | NA | No | BSL |
| | 86-73-7 | Fluorene | 7.9 | 180 J | ug/kg | SB-283-0102 | 6/27 | 7.9 - 180 | 180 | NA | 240,000 N | NA | NA | No | BSL |
| | 193-39-5 | **Indeno(1,2,3-cd)pyrene** | 8.4 | 220 | ug/kg | H-SB-611D-1 | 17/41 | 8.4 - 220 | 220 | NA | **160 C** | NA | NA | **Yes** | ASL |
| | 91-20-3 | Naphthalene | 5 J | 239 | ug/kg | SB-200-SS | 4/27 | 5 - 239 | 239 | NA | 3,800 C | NA | NA | No | BSL |
| | 85-01-8 | Phenanthrene | 5.2 J | 1,020 | ug/kg | SB-200-SS | 13/27 | 5.2 - 1020 | 1020 | NA | 180,000 N[7] | NA | NA | No | BSL |
| | 129-00-0 | Pyrene | 4.6 J | 970 | ug/kg | SB-283-0102 | 18/27 | 4.6 - 970 | 970 | NA | 180,000 N | NA | NA | No | BSL |
| | **Metals** | | | | | | | | | | | | | | |
| | 7440-36-0 | Antimony | 0.6 | 1 | mg/kg | SB-201-SS, SB-203-SS | 4/11 | 0.6 - 1 | 1 | NA | 3.1 N | NA | NA | No | BSL |
| | 7440-38-2 | **Arsenic** | 0.4 J | 6 | mg/kg | SB-201-SS | 6/11 | 0.4 - 6 | 6.1 | NA | **0.68 C** | NA | NA | **Yes** | ASL |
| | 7440-39-3 | Barium | 2.6 J | 74 | mg/kg | SB-201-SS | 11/11 | 2.6 - 74 | 74 | NA | 1,500 N | NA | NA | No | BSL |
| | 7440-41-7 | Beryllium | 0.23 | 1.4 | mg/kg | SB-201-SS | 9/11 | 0.23 - 1.4 | 1.4 | NA | 16 N | NA | NA | No | BSL |
| | 7440-43-9 | Cadmium | 0.06 | 0.5 | mg/kg | SB-201-SS | 4/11 | 0.06 - 0.5 | 0.5 | NA | 7.1 N | NA | NA | No | BSL |
| | 7440-47-3 | Chromium | 7.8 | 30.7 | mg/kg | SB-286-0102 | 11/11 | 7.8 - 30.7 | 30.7 | NA | 12,000 N[8] | NA | NA | No | BSL |
| | 7440-48-4 | **Cobalt** | 0.054 J | 19.7 | mg/kg | SB-201-SS | 11/11 | 0.054 - 19.7 | 19.7 | NA | **2.3 N** | NA | NA | **Yes** | ASL |

**TABLE D**
**OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN - DIRECT CONTACT WITH SURFACE SOIL - BLOCK H SOILS REMEDIATION**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


**Scenario Timeframe: Current/Future**
**Medium: Surface Soil**
**Exposure Medium: Surface Soil**

| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | Range of Background Concentrations[4] | USEPA RSL - Residential Soil[5] | Potential ARAR/TBC | Potential ARAR/TBC Source | COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Block H | **Metals (Continued)** | | | | | | | - | | | | | | | |
| | 7440-50-8 | Copper | 1.1 J | 13.6 | mg/kg | SB-285-0102 | 11/11 | 1.1 - 13.6 | 13.6 | NA | 310 N | NA | NA | No | BSL |
| | 7439-92-1 | Lead | 0.39 J | 18 | mg/kg | SB-201-SS | 11/11 | 0.39 - 18 | 18 | NA | 400 | NA | NA | No | BSL |
| | 7439-97-6 | Mercury | 0.01 | 1.14 L | mg/kg | SB-201-SS | 24/48 | 0.01 - 1.14 | 1.14 | NA | 2.3 N[9] | NA | NA | No | BSL |
| | 7439-98-7 | Molybdenum | 0.13 J | 0.55 K | mg/kg | SB-294-0001 | 7/11 | 0.13 - 0.55 | 0.55 | NA | 39 N | NA | NA | No | BSL |
| | 7440-02-0 | Nickel | 0.21 J | 15 | mg/kg | SB-285-0102 | 11/11 | 0.21 - 15 | 15 | NA | 150 N | NA | NA | No | BSL |
| | 7782-49-2 | Selenium | 2 | 2 | mg/kg | SB-202-SS | 1/11 | 2 - 2 | 2 | NA | 39 N | NA | NA | No | BSL |
| | 7440-22-4 | Silver | 0.41 L | 0.41 L | mg/kg | SB-293-0102 | 1/11 | 0.41 - 0.41 | 0.41 | NA | 39 N | NA | NA | No | BSL |
| | 7440-62-2 | Vanadium | 13.1 | 37.9 | mg/kg | SB-285-0102 | 11/11 | 13.1 - 37.9 | 37.9 | NA | 39 N | NA | NA | No | BSL |
| | 7440-66-6 | Zinc | 1.3 J | 45 | mg/kg | SB-201-SS | 11/11 | 1.3 - 45 | 45 | NA | 2,300 N | NA | NA | No | BSL |

**Footnotes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations.
2 - Values presented are sample-specific quantitation limits.
3 - The maximum detected concentration is used for screening purposes.
4 - No background data are available.
5 - United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites (June 2015). Values correspond to a cancer risk level of 1E-06 or a hazard quotient (HQ) of 0.1.
6 - The chemical is selected as a COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
7 - Value is for pyrene.
8 - Value is for trivalent chromium.
9 - Value is for mercuric chloride (and other mercury salts).

**Definitions:**
ARAR/TBC = Applicable or Relevant and Appropriate Requirements To Be Considered
C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
N = Noncarcinogen
NA = Not Applicable/Not Available
**Rationale Codes:**
For selection as a COPC:
ASL = Above Screening Level
For elimination as a COPC:
BSL = Below COPC Screening Level NTX = No toxicity criteria

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC for the post-excavation soils dataset except that the ***post-soil excavation risk estimates do not include arsenic*** because the maximum detected arsenic concentrations is less than the background (12 mg/kg).

The chemicals highlighted in yellow are ***additional COPCs*** identified in the original 2012 risk assessment for the tax blocks soils as a whole (i.e., the COPC list for the 2012 risk assessment was not tax block specific; it selected COPCs across all of the tax blocks).
The post soils excavation risk assessment evaluated these chemicals as well as those shaded as described above so that the reader could compare post-soil excavation risk estimates to pre-soil excavation risk estimates and to verify that risk reduction has been achieved for site closure.
The pre- and post-soils excavation risk assessments also evaluated chromium assuming that the hexavalent chromium was present at 5 percent of the total chromium concentration.

| | | | |
|---|---|---|---|
| H-SB-1356-1-2 | H-SB-282RE-1 | SB-472-0102 | H-SB-602-1 |
| H-SB-1356-SS | H-SB-282RE-2 | SB-473-0102 | H-SB-602-2 |
| H-SB-1357-1-2 | SB-282-0102 | SB-474-0102 | H-SB-603-1 |
| H-SB-1357-SS | H-SB-282REB-1 | SB-475-0102 | H-SB-603-2 |
| H-SB-1358-1-2 | H-SB-282REC-1 | SB-476-0102 | H-SB-604A-1 |
| H-SB-1358-SS | SB-283-0102 | SB-477-0102 | H-SB-604B-1 |
| H-VS-A-1-1 | SB-284-0102 | SB-478-0102 | H-SB-610B-1 |
| H-VS-A-2-1 | SB-285-0102 | SB-479-0102 | H-SB-610C-1 |
| H-VS-A-2-1-D | SB-286-0102 | SB-480-0102 | H-SB-610D-1 |
| H-VS-A-3-1 | SB-293-0102 | SB-481-0102 | H-SB-611A-1 |
| H-VS-A-4-1 | SB-294-0001 | SB-482-0102 | H-SB-611D-1 |
| H-VS-B-1-1 | SB-462-0102 | SB-483-0102 | H-SB-814-SS |
| H-VS-B-2-1 | SB-463-0102 | SB-484-0102 | H-SB-815-SS |
| H-VS-B-3-1 | SB-464-0102 | SB-485-0102 | H-SB-816-SS |
| H-VS-B-4-1 | SB-465-0102 | SB-486-0102 | H-SB-816-SS-D |
| SB-200-SS | SB-466-0102 | SB-487-0102 | H-SB-817-SS |
| H-SB-201RE-1 | SB-467-0102 | SB-488-0102 | |
| H-SB-201RE-2 | SB-468-0102 | H-SB-600-1 | |
| SB-201-SS | SB-469-0102 | H-SB-600-2 | |
| SB-202-SS | SB-470-0102 | H-SB-601-1 | |
| SB-203-SS | SB-471-0102 | H-SB-601-2 | |

**TABLE E**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - REASONABLE MAXIMUM EXPOSURES**
**BLOCK H SOILS REMEDIATION**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks $> 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-5}$ and $\leq 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-6}$ and $\leq 10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Industrial Workers | Surface Soil | Incidental Ingestion | 7E-07 | -- | -- | -- | 0.02 | -- |
| | | Dermal Contact | 1E-06 | -- | -- | -- | 0.01 | -- |
| | | Inhalation | 9E-09 | -- | -- | -- | 0.0001 | -- |
| | | Total | 2E-06 | -- | -- | -- | 0.03 | -- |

# ATTACHMENTS

# Attachment A

## Table 2-1

## Summary of Residual Risk Analysis Results - Tax Block H
## Lockheed Martin, Middle River Complex
## Middle River, Maryland

| Location | BaPeq Concentration (µg/kg) | Industrial - Recommended for Removal | Comments |
|---|---|---|---|
| **Surface Soil (See detailed Table B-1)** | | | |
| SB-604D | 46,000 | X | Necessary to meet industrial preliminary remedial goals |
| SB-282A | 24,000 | X | Necessary to meet industrial preliminary remedial goals |
| SB-282D | 21,000 | X | Necessary to meet industrial preliminary remedial goals |
| Three of the 66 sampling locations (4.5 percent) and 3 of 72 samples (4.2 percent ) recommended for removal for the industrial land use scenario. The desired remedial goal for the BaPeqs is 2.9 mg/kg for industrial exposures. The residual site 95% UCL would be 0.136 mg/kg. | | | |
| **Samples located near samples identified for removal to meet cleanup goals for Industrial workers.** | | | |
| SB-282 | 170 | X | Added due to proximity of SB-282A and SB-282D |
| **Subsurface Soil (See detailed Table B-2)** | | | |
| No samples need to be removed to achieve industrial preliminary remedial goals | | | |

Only sampling locations located in the vadose zone are included in the tables. Depth to groundwater is 7 feet at Block H.

# Attachment B

# Human Health Risk Assessment for Blocks D, E, F, G, and H Soils Lockheed Martin Middle River Complex 2323 Eastern Boulevard Middle River, Maryland

Prepared for:

Lockheed Martin Corporation

Prepared by:

Tetra Tech, Inc.

December 2013

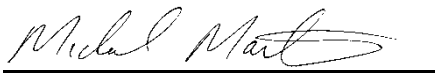

Michael Martin, P.G.
Regional Manager



Lee Ann Sinagoga
Project Manager

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# ACRONYMS

| | |
|---|---|
| ACM | asbestos-containing material |
| ADAF | age-dependent adjustment factor |
| AST | above-ground storage tank |
| ASTDR | (federal) Agency for Toxic Substances and Disease Registry |
| ASTM | American Society for Testing and Materials |
| ATC | anticipated typical concentration |
| BaPEq | benzo(a)pyrene equivalent |
| bgs | below ground surface |
| BTEX | benzene, toluene, ethylbenzene, and total xylenes |
| Cal/EPA | California Environmental Protection Agency |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| COC | chemicals of concern |
| COPC | chemicals of potential concern |
| CSM | conceptual site-model |
| CTE | central-tendency exposure |
| DAF | dilution-attenuation factor |
| DPT | direct-push technology |
| DRO | diesel-range organics |
| Eh | redox potential relative to the Standard Hydrogen Electrode |
| EM | electromagnetic |
| EPA | U. S. Environmental Protection Agency |
| EPC | exposure-point concentration |
| EPH | extractable petroleum hydrocarbons |
| ESA | environmental site assessment |
| EU | exposure unit |
| FAQ | frequently asked question |
| Fl/PY | fluoranthene/pyrene |
| FS | feasibility study |
| GPR | ground-penetrating radar |
| GPS | global positioning system |
| GRO | gasoline-range organics |
| HASP | health and safety plan |

| | |
|---|---|
| HEAST | *Health Effects Assessment Summary Tables* |
| HHRA | human health risk assessment |
| HI | hazard index |
| HQ | hazard quotient |
| IEUBK | integrated exposure-uptake biokinetic |
| ILCR | incremental lifetime-cancer risk |
| IUR | inhalation-unit risk |
| Lockheed Martin | Lockheed Martin Corporation |
| MADEP | Massachusetts Department of Environmental Protection |
| MCL | maximum contaminant level |
| MDE | Maryland Department of the Environment |
| µg/dL | microgram(s) per deciliter |
| mg/kg | milligram(s) per kilogram |
| MRAS | Middle River Aircraft Systems |
| MRC | Middle River Complex |
| MRL | Minimal Risk Level |
| MS2 | Mission Systems & Sensors |
| MSA | Martin State Airport |
| NPDES | National Pollutant Discharge Elimination System |
| OPPTS | Office of Prevention, Pesticides, and Toxic Substances |
| ORNL | Oak Ridge National Laboratory |
| OSWER | Office of Solid Waste and Emergency Response |
| PAHs | polycyclic aromatic-hydrocarbons |
| PCBs | polychlorinated biphenyls |
| PCE | tetrachloroethene |
| PEF | particulate emissions factor |
| pH | a measure of hydrogen ion concentration |
| PP | polypropylene |
| PPRTV | Provisional Peer Reviewed Toxicity Value |
| PRG | preliminary remediation goal |
| *RAGS* | (USEPA) *Risk Assessment Guidance for Superfund* |
| RCRA | Resource Conservation and Recovery Act |
| REC | Recognized Environmental Condition |
| RfC | reference concentration |
| RfD | reference dose |
| RGO | Remedial goal option |
| RME | reasonable maximum exposure |

| | |
|---|---|
| RSL | regional screening-level |
| SB | surface soil |
| SS | subsurface soil |
| SDWA | Safe Drinking Water Act |
| SQL | sample quantitation-limit |
| SSL | soil-screening level |
| STP | sewage treatment plant |
| SVOC | semivolatile organic compound |
| TCE | trichloroethene |
| TEC | threshold-effects concentrations |
| TEF | toxicity-equivalence factor |
| Tetra Tech | Tetra Tech, Inc. |
| TRW | Technical Review Workgroup |
| UCL | upper confidence-limit |
| USDA | United States Department of Agriculture |
| USEPA | United States Environmental Protection Agency |
| UST | underground storage tank |
| VOC | volatile organic compounds |
| VPH | volatile petroleum hydrocarbons |

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# Executive Summary

On behalf of Lockheed Martin Corporation, Tetra Tech, Inc. has prepared this human health risk assessment of detected concentrations of chemicals in soil at a number of tax blocks (specifically, Blocks D, E, F, G, and H) at Lockheed Martin's Middle River Complex in Middle River, Maryland. This human health risk assessment is an update to the risk evaluations in the May 2006 *Site Characterization Report* (Tetra Tech, 2006b) and is based on the environmental data presented therein as well as on the significant volume of data collected during the 2007, 2009, and 2010 investigations to further characterize the nature and extent of impacts to soil in these tax blocks. The objective of this report is to determine if the detected chemical concentrations in soil pose a significant threat to potential human receptors under current and/or future land uses. Potential risks to human receptors are estimated on the assumption that no actions will be taken to control contaminant releases.

Primary guidance sources used to prepare this report include the Maryland Department of the Environment *Cleanup Standards for Soil and Groundwater* (State of Maryland, 2008) and *Voluntary Cleanup Program Guidance* (State of Maryland, 2006). Current guidance and reports published by U.S. Environmental Protection Agency and U.S. Environmental Protection Agency Region 3 were also considered in preparing the human health risk assessment. Risk estimates provided herein are based on analytical data collected during the following environmental investigations:

- Phase II site investigation (fall/winter 2003)
- site-wide Phase II investigation (2004)
- Phase II soil investigation (summer 2005)
- additional soil characterization (fall 2007)
- supplemental soil and storm-drain-sediment characterization (Block E fall 2008)
- final soil delineation (Blocks D, F, G, and H fall 2009)
- data gap investigation (fall 2010)

Current and potential/hypothetical future land uses suggest the following potential receptors could be exposed to impacted soils at the Middle River Complex:

- construction workers
- industrial workers
- commercial land-use receptors
- child, adolescent, and adult recreational users
- future child, adolescent, and adult residents

Consequently, cancer and non-cancer risk estimates were calculated for these receptors using reasonable maximum exposure assumptions and assuming that human exposure may occur via incidental ingestion, dermal contact, and inhalation exposure routes.

Cancer risk estimates are presented in terms of incremental lifetime-cancer risks; the non-cancer risks are presented in terms of hazard indices. The cancer and non-cancer risk estimates were interpreted using the Maryland Department of the Environment cancer risk benchmark ($1\times10^{-5}$ [i.e., a one-in-100,000 probability of developing cancer]) for cumulative risk and the U.S. Environmental Protection Agency's target cancer risk range ($1\times10^{-4}$ to $1\times10^{-6}$); hazard indices are evaluated using a value of 1.0 (adverse non-cancer health effects are not anticipated when the estimated hazard index is equal to or less than 1). As shown on Table ES-1, the following chemicals of concern were identified for surface and subsurface soils in each of the tax blocks based on a comparison of the cancer and non-cancer risk estimates to the Maryland Department of the Environment risk benchmarks.

The chemicals of concern listed in Table ES-1 will be further evaluated in the response action plans being prepared for the tax block soils. Additionally, although a refined evaluation conducted for diesel range organics and gasoline range organics did not indicate that they are major contributors to risk, detected diesel range organics concentrations at two locations in Block E soil exceed a risk-based concentration calculated for the industrial worker. Therefore, diesel range organics are also retained as chemicals of concern for Block E soil.

**Table ES-1**

**Summary of Chemicals of Concern Identified for Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| Tax block | Acreage | Do risk estimates for current/future construction workers exceed risk benchmarks? (chemicals of concern[1]) | Do risk estimates for hypothetical future full-time industrial workers exceed risk benchmarks? (chemicals of concern[1]) | Do risk estimates for current/future commercial receptors exceed risk benchmarks? (chemicals of concern[1]) | Do risk estimates for current/future recreational users exceed risk benchmarks? (chemicals of concern[1]) | Do risk estimates for hypothetical future resident exceed risk benchmarks? (chemicals of concern[1]) | Recommendation |
|---|---|---|---|---|---|---|---|
| Block D | 12.76 | No | No | Yes (BaPEq, As[2], CrVI[3]) | Yes (BaPEq, As[2], CrVI[3]) | Yes (BaPEq, As[2], CrVI[3]) | MDE response action plan |
| Block E | 15.97 | Yes (PCBs) | Yes (PCBs, BaPEq, 124-TCB, 123-TCB, 14-DCB, DRO[5]) | Yes (PCBs, BaPEq, As[2], 124-TCB, CrVI[3]) | Yes (PCBs, BaPEq, As[2], 123-TCB, 124-TCB, CrVI[3]) | Yes (PCBs, BaPEq, As[2], 123-TCB, 124-TCB, CrVI[3], 14-DCB) | MDE response action plan |
| Block F | 11.94 | No | Yes (BaPEq, Nap) | Yes (BaPEq, As[2], CrVI[3]) | Yes (BaPEq, As[2], CrVI[3], Nap) | Yes (BaPEq, As[2], CrVI[3], Nap) | MDE response action plan |
| Block G | 13.46 | No | Yes (BaPEq, As) | Yes (BaPEq, As[2], CrVI[3]) | Yes (BaPEq, As[2], CrVI[3]) | Yes (BaPEq, As, CrVI[3], Co[4]) | MDE response action plan |
| Block H | 7.88 | No | Yes (BaPEq) | Yes (BaPEq, As[2], CrVI[3]) | Yes (BaPEq, As[2], CrVI[3]) | Yes (BaPEq, As[2], CrVI[3]) | MDE response action plan |

[1] BaPEq (benzo(a)pyrene equivalents); arsenic (As); hexavalent chromium (CrVI); diesel range organics (DRO); polychlorinated biphenyls (PCBs); 1,2,3-trichlorobenzene (123-TCB); 1,2,4-trichlorobenzene (124-TCB); 1,4-dichlorobenzene (14-DCB); naphthalene (Nap); cobalt (Co).

[2] Arsenic concentrations likely represent background concentrations.

[3] The limited amount of available hexavalent chromium data for the tax block soils suggests that low concentrations only (typically less than 1 mg/kg) are present. Reported concentrations do not exceed U.S. Environmental Protection Agency (USEPA) regional screening-level (RSL) for the industrial worker. Reported concentrations for by far most soil samples are also less than the USEPA RSL for the hypothetical future resident if the USEPA RSL were to be set at the $1\times10^{-5}$ cancer risk level.

[4] Isolated elevated detections only.

[5] DRO was selected as a COC for Block E based on an additional evaluation.

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# Section 1
# Introduction

On behalf of Lockheed Martin Corporation (Lockheed Martin), Tetra Tech, Inc. (Tetra Tech) has prepared this human health risk assessment (HHRA) of detected concentrations of chemicals in soil at a number of tax blocks (specifically, Blocks D, E, F, G, and H) at Lockheed Martin Corporation's Middle River Complex (MRC), Middle River, Maryland (see Figure 2-1). The human health risk assessment is an update to the risk evaluations presented in the May 2006 *Site Characterization Report* (Tetra Tech, 2006b) and is based on the environmental data presented therein as well as on data collected during the 2007, 2009, and 2010 investigations to further characterize the nature and extent of soil impacts in the tax blocks. The objective of this report is to determine if the chemical concentrations detected in soil pose a significant threat to potential human receptors under current and/or future land uses. Potential risks to human receptors are estimated on the assumption that no actions will be taken to control contaminant releases.

This report is organized as follows:

Section 1—Introduction: Presents the objective of the human health risk assessment and the report organization

Section 2—Site Overview: Briefly describes the facility, its history, and physical conditions, including each tax block. It also identifies recognized environmental conditions (RECs) in each tax block and briefly summarizes the environmental investigations to determine the nature and extent of soil contamination in the tax blocks.

Section 3—Human Health Risk Assessment General Methodology: Presents the approach and protocols used in the human health risk assessment for soil, including identification of chemicals of potential concern (COPC) in soils, exposure assessment, toxicity assessment, and characterization of risk and uncertainty. A "global" set of chemicals of potential concern for soils in the tax blocks is also presented. These chemicals of potential concern are evaluated quantitatively in the human health risk assessment.

Section 4—Risk Characterization Results: Provides the risk characterization results, recommendations, and conclusions for each tax block. Chemicals of concern (COC) for soil are identified in each tax block based on the risk characterization results. These chemicals of

concern are then recommended for further evaluation in the feasibility study (FS) that will be prepared for the tax block soil.

Section 5—Uncertainty Analysis: Presents the uncertainty analysis component of the human health risk assessment, including a summary of uncertainties inherent in the risk assessment and a discussion of how they may affect the quantitative risk estimates and conclusions of the risk analysis.

Section 6—Remedial Goal Options: Presents remedial goal options (also often referred to as preliminary remediation goals [PRGs]) for the chemicals of concern.

Appendix A provides data summary tables for each tax block. Appendix B presents historical aerial photographs from 1938–2005. Appendix C presents Maryland background data for arsenic. Appendix D provides all of the detailed human health risk assessment tables, spreadsheets, and figures. Appendix E provides the location-by-location risk characterization results tables and associated maps for each tax block.

# Section 2
# Site Background

## 2.1 SITE DESCRIPTION

The Middle River Complex (MRC), part of the Chesapeake Industrial Park, is at 2323 Eastern Boulevard in Middle River, Maryland, approximately 11.5 miles northeast of downtown Baltimore. The MRC covers approximately 180 acres and consists of 12 main buildings. The property includes an active industrial area and yard, perimeter parking lots, an athletic field, a vacant concrete lot, a trailer and parts storage lot, and numerous grassy green spaces along the perimeter. Locked chain-link fences surround all exterior lots and the main industrial area. The MRC is bounded by Eastern Boulevard (Route 150) to the north, Dark Head Cove to the south, Cow Pen Creek to the west, and Martin State Airport (MSA) to the east. The location of the MRC is shown in Figure 2-1.

Lockheed Martin Corporation (Lockheed Martin) activities at the site are primarily facility and building management and maintenance. The main tenant at the site, Middle River Aircraft Systems (MRAS), a subsidiary of General Electric Company, designs, manufactures, fabricates, tests, overhauls, repairs, and maintains aeronautical structures, parts, and components for military and commercial applications. Lockheed Martin Mission Systems & Sensors—Littoral Ships & Systems (a Lockheed Martin business segment) conducts engineering activities, and fabricates, assembles, tests, and otherwise supports vertical-launch systems). A subsidiary of Lockheed Martin, Applied NanoStructured Solutions LLC, also occupies a portion of MRC, engaging in research and design of nanotechnology applications. Historically, the property has been used for aircraft and missile-launching systems design, development, and sales.

## 2.2 LAND USE

The MRC is an industrial facility within the broader Chesapeake Industrial Park. The area surrounding the property primarily consists of commercial, industrial, and residential establishments. Six other facilities, comprising the remainder of the Chesapeake Industrial Park,

lie adjacent to the MRC. These include Tilley Chemical Company, Inc. (a distributor of food- and pharmaceutical-chemicals for the personal care and other industries), North American Electric (an industrial and commercial electrical contractor), Johnson and Towers (a heavy-duty diesel equipment, truck, and boat repair and maintenance company), ACE Logistics (a warehouse, packaging, and shipping provider), Poly-Seal Corp. (a producer of flexible packaging for various items), Exxon (a gasoline filling station and convenience store), and the Middle River Post Office. Residential developments lie on the opposite shores of Cow Pen Creek, Dark Head Cove, and Dark Head Creek, as well as north of Eastern Boulevard (Route 150). The MRC is comprised of several tax blocks. Figure 2-2 presents the MRC tax block layout.

### 2.2.1 Block D

Block D, consisting of 12.76 acres, is in the southeastern portion of the MRC. Block D is bounded to the north by Dark Head Cove Road and Johnson and Towers, to the east by Wilson Point Road, MSA, and Dark Head Cove, and to the west by Former Building D (now known as Block E). Block D (along with the adjacent portion of Block F) comprises Recognized Environmental Condition (REC) #6. Limited information in the Phase I environmental site assessment (ESA), MRC records and historical aerial photographs suggests that a portion of Parking Lot No. 6 and the waterfront was backfilled between 1938 and 1949, raising the topography to its current elevations and extending the MRC's property to its current layout. During filling, a steel bulkhead was constructed and a 100-foot-wide swath of the cove along the bulkhead was proposed for dredging. Dredging was completed as planned to lower the bottom of Dark Head Cove near the shoreline to eight feet below sea level. Dredging and filling facilitated use of the creek as an anchor basin. After the shoreline was reconstructed, Parking Lot No. 6 was paved with asphalt.

No structures are known to have ever stood on this asphalt parking lot, which is today surrounded on all sides by a chain-link fence. Locked gates stand along Dark Head Cove Road, Chesapeake Park Plaza, and the Block F Waterfront Lot. Access is restricted to authorized personnel. The pavement is in poor condition, with widespread cracking and visible subsoil.

### 2.2.2 Block E

Block E (comprised of Block E and E Lot 3) consists of 15.97 acres in the southern portion of the MRC. Block E is bounded on the north by the industrial portion of the MRC (Block I), to the east by Parking Lot No. 6 (Block D), to the south by the Waterfront Lot (Block F), and to the west by the Tilley Chemical Company. Block E consists of the three RECs: Former Building D (REC #1), Product Pipeline (REC #2), and the Former 500,000-gallon above-ground storage tank (AST) and associated tanks (REC #3).

Former Building D (REC #1) encompasses approximately half of the Block E area. Although Building D was demolished in the early 1970s, the building's foundation and ground floor slab remain. The floor slab consists of concrete slabs with ceramic tiles overlaying the concrete in several locations, with construction or expansion joints and associated cracking between the slabs.

The Product Pipeline (REC #2) is a 1,815-foot long, 2-inch-diameter pipe running underground from the former 500,000–gallon fuel oil AST (REC #3) to the MRC's Power Plant (in Block I). The pipeline once supplied fuel oil to the Power House. It coincides with a drainage ditch running along the western and southern boundary of Block E. A small portion of the pipeline has been removed, but most of the run was abandoned in place.

The former 500,000-gallon AST and associated tanks (REC #3) were in a grassy shoulder in the southwestern portion of Block E near the Fire Pump Building. The 500,000-gallon AST was surrounded by a shallow, grassy, earthen berm. A large water tower and Fire Pump Building were adjacent to the AST. Block E is bounded on all four sides by a chain-link fence. Several unlocked interior gates stand in the northeastern corner of the unit, allowing MRC employees unrestricted access from the active industrial portion of the MRC.

### 2.2.3 Block F

Block F, consisting of 11.94 acres, is in the southern portion of the MRC. It is bounded to the north by the Former Building D (Block E), the Tilley Chemical Company, and North American Electric, to the east by Parking Lot No. 6 (Block D) and Dark Head Cove, to the south by Dark Head Cove, and to the west by Cow Pen Creek. Block F consists of RECs #4, #5, #6, and #13. The Boat Launch Area (REC #4) and the Former Aviation Fuel underground storage tanks (USTs) (REC #5) are primarily covered by a concrete tarmac that defines the boundary of

REC #4. The seven USTs comprising REC #5 lie under the north-central portion of the concrete tarmac. No other structures are on the site. A chain-link fence runs along the northern edge of REC #4, along Chesapeake Park Plaza, prohibiting unauthorized access to these two RECs. Access for vehicles and personnel is through a locked gate in the fence.

The concrete tarmac is composed of smaller concrete slabs in relatively good condition, with some minor cracking and potholes developing in a few locations. Grass and soil were observed in many of the slab joints. A grassy strip of land is along the southeastern edge of REC #4, separating the southeastern portion of the tarmac from a steel bulkhead along Dark Head Cove.

The Waterfront Lot portion of Block F comprises only a portion of REC #6. Parking Lot No. 6 (Block D) is also part of REC #6. Historical information obtained during the Phase I ESA suggests that the area was backfilled to raise its elevation, to facilitate construction of a bulkhead along the waterfront of Dark Head Cove. The Waterfront Lot is a well-manicured, grassy strip of land between Chesapeake Park Plaza and Dark Head Cove. It has several trees and the grass appears in good condition. A steel bulkhead bounds the unit along most of its border with Dark Head Cove.

The Former Boat Dock Area (REC #13) is an open, relatively flat, grassy parcel of land. A chain-link fence runs along Chesapeake Park Plaza, limiting unauthorized access. Neither the boundary with North American Electric nor with the Boat Launch Area (REC #4) is fenced. Vehicle and personnel access is through a locked gate along Chesapeake Park Plaza at REC #4.

The Former Boat Dock Area (REC #13) is covered with a well-maintained grass lawn, with shrubs and trees growing thickly along the Cow Pen Creek shoreline. The REC has several trees. Although no structures are currently on the site, the severely degraded remnants of several walkways, parking areas, and a few foundations are still evident.

### 2.2.4 Block G

Block G consists of 13.46 acres in the southwestern portion of the MRC on the southern side of Chesapeake Park Plaza. It is bounded on the north by Parking Lot No. 2 (Block H), to the east by Chesapeake Park Plaza, to the south by North American Electric, Inc., and to the west by Cow Pen Creek. Block G has two RECs identified during a historical research investigation: REC #11 (Former Sewage Treatment Plant [STP]/Wind-Tunnel Test Building/Vibration-Test Building) and

REC #12 (the southern portion of Parking Lot No. 3). The remaining portion of Parking Lot No. 3 is also included in Block G. Figure 2-2 shows the locations of the RECs and all tax blocks at the MRC.

A former STP that consisted of five structures and two USTs (the Wind-Tunnel Test Building, the Vibration-Test Building, two fuel oil USTs immediately west of the test buildings, an unidentified structure near the STP, and the Hydraulic and Fuel-Test Building) occupied the area now defined as REC #11. Except for storm-drain Outfall V and the foundations of the former test buildings, no structures now stand on REC #11. The foundations of the former STP have mostly been removed, but the footprint of the former STP is still evident in a 1986 aerial photograph, judging from variations in grass color. REC #11 is currently an open, grassy area between Chesapeake Park Plaza and Cow Pen Creek with some remnants of building slab foundations. A chain-link fence along the REC's northern and eastern perimeter prohibits unauthorized access; however, the REC is unfenced along its southern perimeter, which is shared with North American Electric, Inc. A locked gate along Chesapeake Park Plaza provides vehicle access.

Parking Lot No. 3 is a flat parcel of land currently leased for truck-trailer storage. A chain-link fence surrounding the parking lot on all sides prohibits unauthorized access. A locked gate off of Chesapeake Park Plaza allows access to the southern portion of the parking lot.

### 2.2.5 Block H

Block H, consisting of 7.88 acres, is in the northwestern portion of the MRC. Block H is bounded to the north by Eastern Boulevard (Route 150), to the east by the industrial portion of the MRC (Block I), to the south by Parking Lot No. 3 (Block G), and to the west by Cow Pen Creek. Block H consists of Parking Lot No. 2, which has been used primarily as an employee parking lot. The parking lot is paved with asphalt and a grassy strip of land lies between the paved portion of the block and Cow Pen Creek. Access to the parking lot is from Chesapeake Park Plaza. Historical aerial photographs indicate that Parking Lot No. 2 was constructed before 1954. It remains in use today for employee parking. No structures are known to have ever stood on this asphalt parking area.

## 2.3 PHYSICAL SETTING

### 2.3.1 Physiography

The site lies within the Western Shore of the Coastal Plain Physiographic Province. Coastal Plain topography is generally characterized by low relief. The MRC's topography slopes gently, ranging from sea level to approximately 32-feet above mean sea level. The topography slopes from Eastern Boulevard to the southwest and south toward Cow Pen Creek and Dark Head Cove.

### 2.3.2 Hydrology

The MRC lies at the junction of Cow Pen Creek and Dark Head Cove. Both are tidal surface water bodies that feed into Dark Head Creek, a tributary to Middle River, which is a tributary to Chesapeake Bay. The facility lies approximately 3.2 miles upstream of Chesapeake Bay. No surface water bodies lie within or cross the MRC.

MRC maintains a State of Maryland National Pollutant Discharge Elimination System (NPDES) permit (state discharge permit No.: 00-DP-0298, NPDES permit No.: MD0002852) issued by Maryland Department of the Environment (MDE) Industrial Discharge Permits Division, Water Management Administration (Earth Tech, 2003). MRAS generates sanitary and process wastewater and is categorized as an "Industrial User." The facility pre-treats and discharges its wastewater under the "Industrial-User Discharge Permit" (permit No.: WWDP#1390) issued to MRAS by the Baltimore County Department of Public Works, Bureau of Utilities (Earth Tech, 2003). The permit authorizes the facility to discharge its processed and sanitary wastewater from seven permitted discharge points (i.e., outfalls).

### 2.3.3 Soils

Soils underlying the MRC have been mapped by the United States Department of Agriculture (USDA) Soil Conservation Service as Mattapex-Urban Land Complex and Sassafras-Urban Land Complex. Mattapex-Urban Land soils consist of deep, well-drained, silty soils, the original texture of which has been disturbed, graded over, or otherwise altered before construction. Sassafras-Urban Land soils consist of deep, well-drained, sandy soils, the original texture of which has been disturbed, graded over, or otherwise altered before construction (USDA, 1993). MRC site assessments, however, indicate that a high percentage of these soils contain a very high clay and silt content, with poor surface drainage.

### 2.3.4 Geology

Geologic maps of Baltimore County show that the MRC is underlain by the Potomac Group, a Cretaceous-age interbedded gravel, sand, silt, and clay unit ranging in thickness from 0–800 feet. The Potomac Group is composed of three units: the Raritan and Patapsco Formations, the Arundel Clay, and the Patuxent Formation. The Raritan and Patapsco Formations range up to 400 feet thick and are composed of a gray, brown, and red variegated silt and clay unit with lenticular lenses of sand and few gravels. The Arundel Clay is composed of dark gray and maroon lignitic-clays ranging from 25–200 feet thick. The Patuxent Formation is described as a white or light-gray to orange-brown, moderately sorted sand unit with quartz gravels, silts, and clays ranging up to 250 feet thick (Reinhardt, 1977).

The geologic map of the Middle River-quadrangle maps the entire survey area as either the clay or sand facies of the Patapsco Formation. The sands are more concentrated on the peninsulas east of MSA and in areas north of Eastern Boulevard, whereas all of the peninsulas (except for the Wilson Point Road area) west of the airport are mapped as belonging to the clay facies. The Arundel Clay is mapped as outcropping northwest of the MRC facility (Reinhardt, 1977).

Lithologic logging of soils beneath the MRC (conducted during extensive site characterization) has identified a very heterogeneous substrate. The underlying soils are composed primarily of silty sands, fine-grained to medium-grained sands, silty clays, clayey silts, and plastic clay, with the primary lithology being clay to silty clay. Sand lenses were encountered but in general do not appear to be continuous beneath the facility. Shallow groundwater tends to flow in the more sandy lenses toward the surface water bodies, and the water table is generally a subdued representation of the surface topography.

## 2.4 PREVIOUS INVESTIGATIONS

Investigations associated with the MRC have been conducted since 2003 and include UST closures and abandonments, soil excavations, Phase I ESAs, and Phase II investigations.

### 2.4.1 Phase I Environmental Assessment (2003)

A Phase I ESA of the MRC was conducted in accordance with American Society for Testing and Materials (ASTM) standard E 1527 in February 2003. The Phase I ESA consisted of a historical

review of the facility (i.e., a review of facility documents, aerial photographs, and city directories), a review of federal, state, and local agency databases, interviews with site personnel, and a site visit. The Phase I ESA identified 13 specific RECs associated with the MRC. In addition to the 13 RECs, the Phase I ESA also recommended further investigation into the facility's historical site activities to identify other potential environmental concerns at the facility and creation of an operation and maintenance plan to address asbestos-containing materials (ACMs) and lead paint (Earth Tech, 2003).

### 2.4.2 Phase II Investigation (Fall/Winter 2003)

A Phase II investigation consisting of soil and groundwater sampling and a geophysical survey was conducted on seven of the 13 RECs identified in the Phase I ESA. The fall 2003 Phase II investigation sought to determine and evaluate environmental baseline conditions for the entire MRC. Geophysical surveys were conducted to find evidence of buried USTs, utilities, or metallic debris in the subsurface underlying the RECs.

The Phase II investigation determined baseline conditions by identifying and evaluating potential contaminants in the underlying environmental media. Six of the seven RECs investigated are in the southern portion of the MRC. The RECs investigated include Former Building D (REC #1), the Product Pipeline (REC #2), the former 500,000-gallon AST and associated tanks (REC #3), the Boat Launch Area (REC #4), seven former aviation fuel USTs (REC #5), and potential fill areas along the waterfront lot and Parking Lot No. 6 (REC #6). REC #7 consists of the five existing on-site groundwater-monitoring wells.

Thirty-two soil borings were completed on the exterior areas using direct-push technology (DPT). The completed soil borings were either adjacent to known contaminant-source areas (RECs #2, #3, and #5) or spaced throughout a REC if the potential source(s) were unknown or multiple sources were suspected (RECs #1, #4, and #6). Subsurface soil samples were collected in 30 of 32 borings, primarily from the 5–10 foot below ground surface (bgs) soil intervals. Groundwater grab samples were collected from 23 groundwater sampling points installed using a DPT hydro-punch sampler. One background soil boring, designated SB-34, was completed adjacent to the facility's athletic field, an area that, based on available historical aerial photographs, was used solely for recreational activities since the facility's construction in the late

1930s. All five existing monitoring wells, installed previously at several UST areas, were purged and sampled using low-flow techniques.

The soil and groundwater samples collected were submitted for targeted analyses if the source was known (e.g., UST and pipeline) or for a full suite of analyses if multiple sources were suspected or no information about possible contaminants was known. Full-suite analyses consisted of analysis for gasoline-range organics (GRO), diesel-range-organics-extended (DRO-extended), volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and priority-pollutant metals. Analytical results identified inorganic and organic compounds (in soil and groundwater obtained from all seven RECs) at concentrations above screening levels that were appropriate for use in 2003. Sampling locations are shown in Figures 2-3 through 2-9. Data relevant to the human health risk assessment (HHRA) that were collected during the 2003 investigation are in Appendix A.

As part of the Phase II investigation, a reconnaissance-level electromagnetic (EM) survey of REC #6 (Waterfront Lot/Parking Lot No. 6) evaluated whether waste disposal, buried drums, or other metallic debris were in the fill material. Portions of the site were further delineated wherever the survey indicated an anomaly. Nine anomalies were identified throughout the survey area.

Ground-penetrating radar (GPR) scanning results found eight of these anomalies, which are associated with utilities (primarily storm drains). GPR imaging of the remaining anomaly, designated Anomaly 6, did not identify a definitive source and was not considered consistent with any known possible subsurface metallic objects or utilities. Anomaly 6, approximately 300 feet long by 40 feet wide, is near the center of Parking Lot No. 6 and runs mostly northwest to southeast in a linear trend. The results of the geophysical survey are presented in the *Site Characterization Report* (Tetra Tech, 2006b). Evaluation of these data compelled further investigation at all seven RECs to characterize exceedances of inorganic and organic constituents and address identified data gaps.

### 2.4.3 Historical Survey (2004)

Tetra Tech conducted a historical investigation of the MRC in the summer of 2004 to address the lack of historical information that had been identified in the Phase I ESA (Earth Tech, February 2003). The historical survey reviewed MRC maps (e.g., as-builts,

construction plans, and plot maps), interviewed Lockheed Martin and tenant personnel, and documented site visits. The investigation identified 18 additional RECs along the facility perimeter, in the active industrial yard, and in Buildings A, B, and C (Block I). The additional RECs include a former STP, an incinerator, several plating shops, a possible historical debris storage lot, abandoned USTs, and areas associated with several environmental investigations (e.g., an area of lead removal at the Die Storage Unit and an area of elevated chromium concentrations in groundwater adjacent to Building A) (Tetra Tech, 2004). Figure 2-2 shows all of the RECs. Appendix B presents historical aerial photographs taken from 1938-2005.

### 2.4.4 Site-Wide Phase II Investigation (2004)

The site-wide Phase II investigation further investigated environmental concerns, including analytical results, identified at RECs investigated during the 2003 Phase II investigation and the historical research survey, and also sought to address possible data gaps (Tetra Tech, 2004). All 31 RECs were investigated during the 2004 site-wide Phase II investigation, including geophysical surveys of five areas, a soil- and groundwater-sampling program, and radiological surficial-media sampling at REC #1. A reconnaissance-level EM survey of REC #7 (Existing Monitoring Wells—MW-5 location), REC #8 (Abandoned 25,000-Gallon Fuel-Oil UST), RECs #9 and #28 (Former 2,000-Gallon Waste-Oil UST), REC #11 (Former STP/Wind-Tunnel Test Building/Vibration-Test Building), and REC #14 (Building A Northwest-Corner Pump Island) was conducted. The geophysical surveys looked for evidence of buried USTs, utilities, or metallic debris in the subsurface underlying the five RECs. Results of the survey were used to place final sampling locations.

One-hundred twenty-three soil borings were carried out in the exterior portions of the facility, using a DPT drill rig. Thirteen of the 123 borings were completed to a maximum depth of 4 feet bgs to collect and lithologically characterize surface soil samples. The remaining 110 borings were completed to the top of the local water-bearing zone. Boring depths range from 15–40 feet bgs unless groundwater was encountered. Refusal of several borings was encountered due to reinforced concrete pavement, concrete rubble in the subsurface soil, and unknown obstructions.

Geophysical survey results from RECs #8 and #11 led to inclusion of an additional 18 soil borings (eight soil borings for REC #8 and #10 for REC #11) to the investigation. The additional soil borings were specifically located to investigate soil and groundwater quality in the

immediate vicinity of the identified anomalies. Strict sample handling procedures were followed throughout the investigation. Upon collection, samples were collected in appropriate laboratory-certified-clean sample containers supplied by the labs. Proper custody procedures were followed throughout all phases of sample collection and handling. A completed chain-of-custody form accompanied each shipment of samples to the laboratory to ensure accountability for the samples from the time of collection to the time they were analyzed.

Analyses were performed on a REC-specific basis. Target analyses for benzene, toluene, ethylbenzene, and total xylene (BTEX) compounds, naphthalene, GRO, DRO, VOCs, hexavalent chromium, PCBs, pesticides, priority-pollutant metals, and gamma spectroscopy were conducted in suspected source areas. Emergent chemicals of concern, including perchlorate and hexavalent chromium, were also analyzed. Sampling locations are shown in Figures 2-3 through 2-9. Data relevant to the HHRA that were collected during the 2004 investigation are in Appendix A.

### 2.4.5 Phase II Soil Investigation (Summer 2005)

The Phase II soil investigation continued in the summer of 2005 to provide both a baseline characterization of areas without identified RECs (primarily Blocks A, B, and H) as well as data to further delineate possible contaminants that had been identified in specific RECs during previous investigations. Thirty soil borings were completed in areas with no identified RECs (SB-194 through SB-223) in the upper 10 feet of soil (at 0–1 feet, -5, and -10 foot bgs). Forty-five soil borings were completed to provide additional characterization at seven previously investigated RECs (RECs #1, #4, #6, #11, #12, #13, and #26). In addition to the borings referenced above, another issue was identified during the 2004 investigation that necessitated additional characterization. One background sample (SB-34A-SS), collected from the baseball field in Block B, had a reported lead concentration of 370 milligrams per kilogram (mg/kg). Although the reported concentration was below the appropriate 2005 screening level, the concentration was sufficiently elevated to warrant further investigation. Consequently, eight surface soil samples (designated SB-224-SS through SB-231-SS) were collected from 0–1 foot below grade around the previous sampling location and across the ball field to ensure that lead and other elevated metals were not a problem in this area.

Soil borings were completed using DPT or a stainless-steel hand auger (if required). After lithologic logging and field screening, soil from the designated sampling intervals was collected

and immediately placed in appropriate sample containers. The collected sample jars were labeled and placed on ice pending delivery to the analytical laboratory. All samples were analyzed for VOCs, SVOCs, total priority-pollutant metals, PCBs, BTEX-N, GRO, DRO-extended, mercury speciation (if elevated concentrations of mercury were detected), and hexavalent chromium. Sampling locations are shown in Figures 2-3 through 2-9. Data relevant to the HHRA that were collected during the summer 2005 investigation are in Appendix A.

### 2.4.6 Geophysical Survey/Soil Investigation (Fall 2005)

A geophysical survey and subsequent sampling provided more certainty regarding environmental conditions of areas associated with the MRC having no known or suspected contamination due to storage, management, or disposal of hazardous constituents. The fall 2005 investigation was designed to identify and characterize any anomalous geophysical responses not associated with known subsurface features (e.g., underground utilities, underground storage tanks) in the accessible (surveyable) portions of the survey areas. To that end, a geophysical survey was performed, followed by sampling and analysis of anomalies not associated with known subsurface features.

EM survey techniques screened the areas identified below (approximately 55 acres) and identified anomalous EM responses. Global positioning system (GPS) technology provided location information for EM data points. Identified anomalies were further evaluated using GPR. The following areas were surveyed:

- Block A and Block A Lot 2 in their entirety—approximately 14.3 acres
- Block B in its entirety—approximately 18.4 acres
- Block F (only the area west of the boat launch ramp)—approximately 6 acres
- Block G as accessible—approximately eight of the 13.5 acres are surveyable due to the high density of stored tractor trailers
- Lot H in its entirety—approximately 7.9 acres

Following the geophysical survey, any anomalies that could not be resolved as being associated with known features (primarily utilities) were sampled for soil contamination at multiple depths using DPT. Two locations were also sampled for groundwater at or near the water table. In

general, soil samples were collected from depths of 5 and 10 feet bgs unless more specific data on the depth to the target area was ascertained.

Following the EM survey of a given area, EM anomalies were further evaluated using GPR. The investigation depth was approximately 10–15 feet. Numerous more closely spaced and variously oriented profiles were scanned to accurately determine the footprint outline of each anomaly. Footprint outlines were defined and marked in the field. Results of the geophysical survey are reported in the *Site Characterization Report* (Tetra Tech, 2006b)

Soil borings were positioned to evaluate geophysical anomalies not associated with known subsurface features and were completed using a Geoprobe® system. Soil from the designated sampling intervals was collected and immediately placed in the appropriate sample containers. The collected sample jars were labeled and placed on ice pending delivery to the analytical laboratory. The laboratory analyses of soil and groundwater samples include analysis for VOCs, SVOC, total priority-pollutant metals, dissolved priority-pollutant metals (groundwater only), PCBs, GRO, and DRO-extended. Sampling locations are shown in Figures 2-3 through 2-9. Data relevant to the HHRA that were collected during the fall 2005 investigation are presented in Appendix A.

### 2.4.7 Site Characterization Report (May 2006)

The *Site Characterization Report* (Tetra Tech, 2006b) was prepared from the fall of 2005 through May 2006 summarizing data collected in all media through 2005. It included screening of the chemicals detected in soil against natural background concentrations. It also included an HHRA identifying potential adverse human health effects resulting from exposure to the detected chemicals for a number of current and hypothetical use scenarios.

The HHRA identified a number of chemicals of potential concern (COPC) by comparing maximum concentrations to appropriate 2006 screening levels. COPC detected in soil samples include metals, polycyclic aromatic-hydrocarbons (PAHs) (expressed as benzo(a)pyrene equivalents [BaPEq]; see Section 3 for calculation methodology), SVOCs, PCBs, and total petroleum hydrocarbons (TPH)-DRO, and -GRO. Results of the site-specific HHRA helped determine which COPC are the principal contributors to risk. COPC were evaluated from the perspective of prevailing background concentrations and potential adverse human health effects.

### 2.4.8 Additional Soil Characterization (Fall 2007)

An additional field investigation in the fall of 2007 sought to confirm previous results and refine the limits of COPC (identified in the *Site Characterization Report*) greater than potential cleanup goals. The objective of the fall 2007 investigation was to obtain sufficient soil data to delineate areas of concern in Blocks B, D, E, F, G, and H. To that end, a DPT soil characterization was executed to best define the boundaries of COPC, as defined in the *Site Characterization Report* (Tetra Tech, 2006b). Characterization was completed both laterally and vertically (as determined by the depth to groundwater).

Two-hundred-fifty borings were advanced during the 2007 additional field investigation. Soil borings were advanced to a maximum depth of 9 feet bgs. Samples were collected at two-foot increments (e.g. surface, 2–3, 5–6, 8–9 feet bgs) to a total depth of 9 feet bgs. Concrete coring was required in Blocks E and F. Continuous soil samples were collected in each boring using a 1.5-inch, 4-foot long stainless-steel macro-core sampler fitted with a disposable acetate-liner. Samples were screened in the field for lithologic description, visual observations, and then shipped to the laboratory for analysis. The samplers were analyzed for block-specific COPC including SVOCs, metals, PCBs, and TPH (GRO and DRO) compounds. Sampling locations are shown in Figures 2-3 through 2-9. Data relevant to the HHRA that were collected during fall 2007 investigation are in Appendix A.

### 2.4.9 Final Soil Delineation (Blocks D, F, G, and H Fall 2009)

The final delineation effort consisted of two tiers of sampling in pursuit of two goals: (1) to fill data gaps to refine estimated depths of soil impacts and (2) to allow for iterative sampling to expand the investigation area outward laterally. The sampling strategy described below advanced 385 soil borings in Blocks D, F, G, and H. No soil borings were advanced in Block E during this event. The data are presented in individual data reports for each block. Samples collected during the fall 2009 event were analyzed for block-specific COPC identified in previous studies. PAHs are the COC analyzed for throughout all blocks; PCBs (Block F), arsenic (Block G), mercury (Blocks F and H), and TPH-GRO and -DRO (Block G) were analyzed for in samples from areas of concern for that particular constituent.

The first tier of delineation sampling ("Inner Tier") collected samples from existing isolated locations where BaPEq concentrations had been calculated for samples with non-detects or less than detection limit results for BaPEq. BaPEq concentrations were calculated using USEPA's *ProUCL* software in combination with USEPA's toxicity-equivalency factors (TEF) for PAHs exceeding the screening level. Some soil data from these previous borings, therefore, exceed the screening level due to the conservative assumption that PAHs may be present above screening levels but below quantitation limits. During Inner Tier sampling, soil in the area of these borings was resampled and analyzed with a lower quantitation limit. The target quantitation limit for PAHs is 6.7 µg/kg. The BaPEq concentration from the resulting Inner Tier data was then calculated and the new BaPEq concentration was compared to the screening level.

The Inner Tier also produced samples from existing isolated sampling locations where the vertical profile did not satisfy the project objective of two clean intervals spaced at one-foot increments beneath the sample exhibiting a screening-level exceedance. In sampling locations that did not satisfy the project depth requirement, the existing location was resampled, starting below the depth of the original screening-level exceedance to define the vertical extent, along with four satellite locations. The Inner Tier sampling sought to verify the clean margin based on resampling data by collecting it from more evenly spaced depth intervals.

If Inner Tier samples exceeded screening levels, an Outer Tier location was sampled to a depth defined by the clean margin of the Inner Tier. The second tier of delineation sampling ("Outer Tier") consists of a round of borings extending outward laterally from the impacted area defined by the results of the previous tier of sampling. Samples from Outer Tier borings were collected and analyzed at two-foot intervals.

In some instances a second round of Outer Tier samples was also collected. The final delineation sampling used DPT drilling, with disposable acetate-lined core samplers. All data were considered when determining the location and depth for vertical and horizontal delineations. In some cases the limit defined by COC with concentrations above screening levels was sufficiently delineated in one or both directions such that the full scope of Inner and/or Outer Tier sampling was not necessary.

Block B characterization was deemed complete during the 2009 final delineation sampling and remediation was undertaken in fall 2010. Block B is therefore not included in this risk assessment. Sampling locations are shown in Figure 2-3 and Figures 2-5 through 2-9. Data relevant to the HHRA that were collected during the fall 2009 investigation are in Appendix A.

### 2.4.10 Data Gap Investigation (Fall 2010)

The objective of the data-gap soil sampling is to define with greater accuracy the vertical and lateral boundaries of soil with COPC concentrations above potential cleanup goals by collecting soil samples at locations to fill identified data gaps. A DPT drill rig advanced 82 soil borings in each block that had remaining data gaps. Soil samples were collected from each boring at two-foot intervals to a maximum depth of 15 feet. bgs using a 1.5-inch-diameter, 4-foot long stainless-steel macro-core sampler fitted with a disposable acetate-liner.

The data are presented in separate data reports for each block. Samples collected during this event were analyzed for block-specific COC. PAHs are the COC analyzed for throughout Blocks D, F, G, and H. Block F samples were analyzed for mercury. Block E samples were analyzed for PCBs.

A subset of samples was also analyzed for alkyl-PAHs to determine if the source of the impacted area is of pyrogenic or petrogenic in nature. Samples from the panhandle area of Block D were analyzed for VOCs, SVOCs and 1,4-dioxane, TPH-GRO and -DRO, total metals, hexavalent chromium, and pesticides/PCB. Samples from the area near SB-833 in Block E were also analyzed for TPH-GRO and -DRO, VOCs, SVOCs, and total metals. Sampling locations are shown in Figures 2-3 through 2-9. Data relevant to the HHRA that were collected during the fall 2010 investigation are in Appendix A.

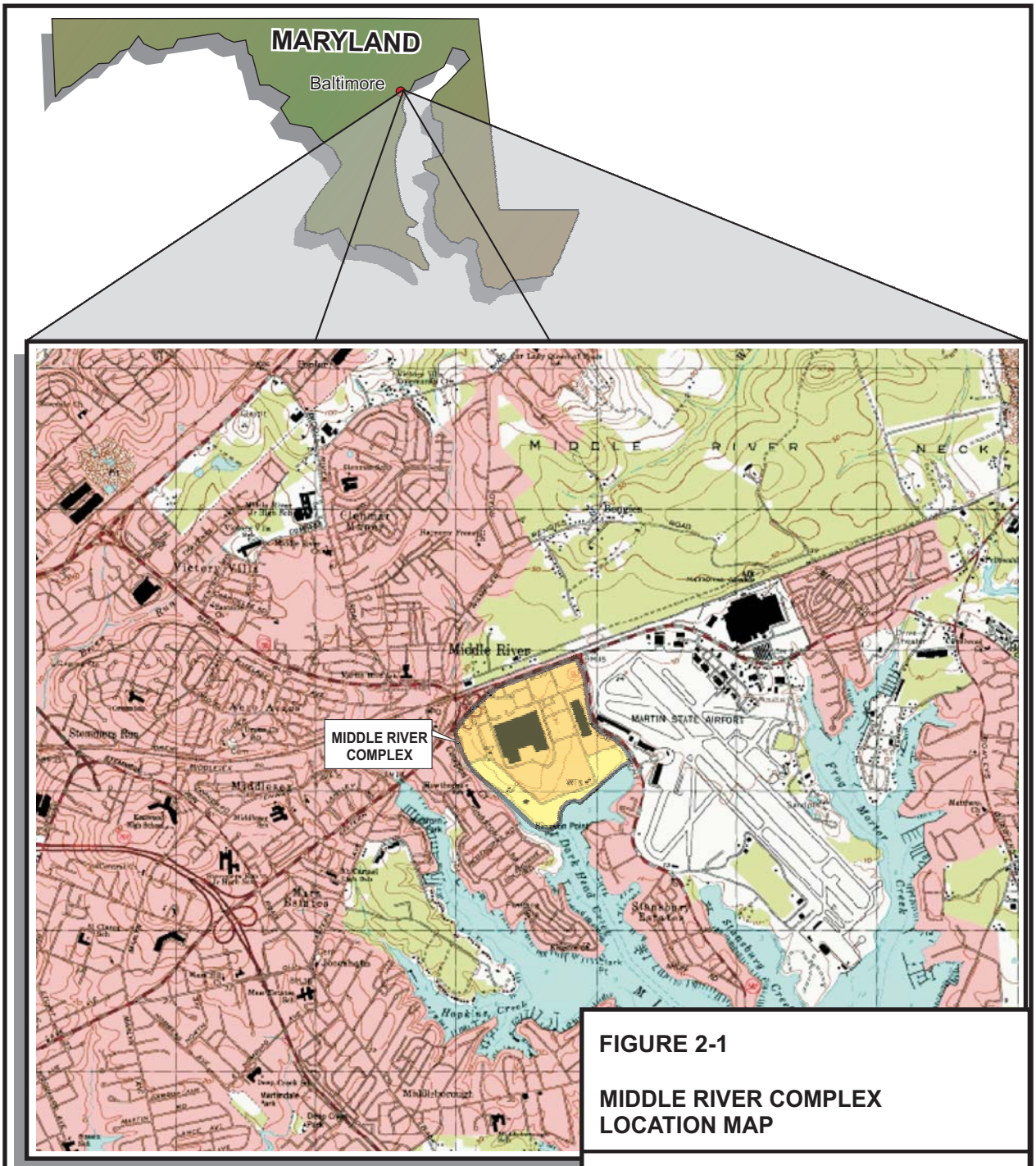


**FIGURE 2-1**

**MIDDLE RIVER COMPLEX LOCATION MAP**

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

| | |
|---|---|
| *NOT TO SCALE* | N |
| DATE MODIFIED: 7/29/09 | CREATED BY: MP |

**Tetra Tech, Inc.**

K:\GProject\middle_river\graphics\Middle River Complex Loc Map_Revised.cdr

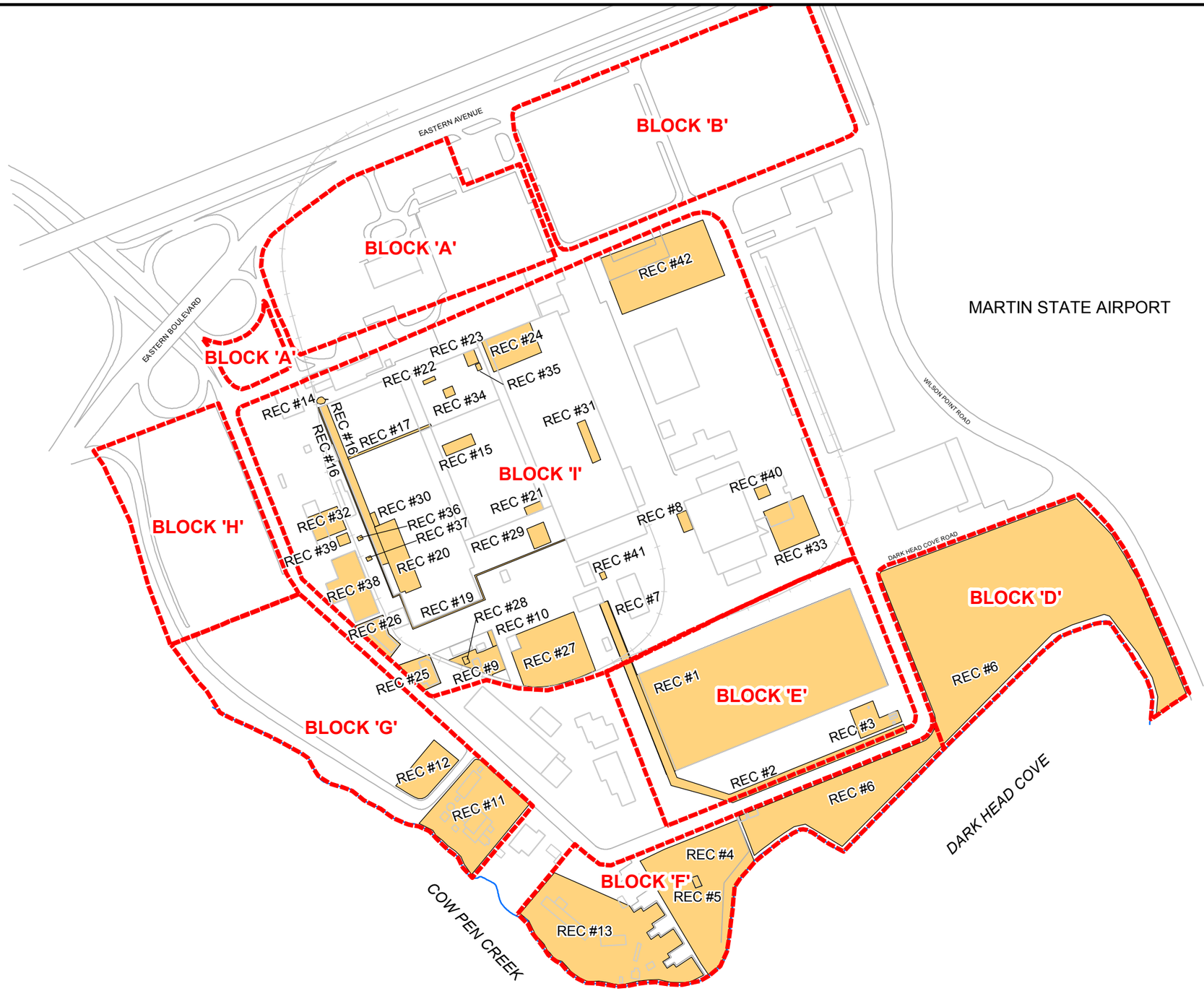


**FIGURE 2-2**

**MIDDLE RIVER COMPLEX**
**TAX BLOCKS**

**LEGEND**

- REC
- TAX BLOCK
- STRUCTURE
- RAILROAD TRACKS

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

0 120 240 480 Feet

N

DATE MODIFIED: 1/12/11

CREATED BY: LR

Tetra Tech, Inc.

K:\GProject\middle_river\Maps\draft response action plan\Block B\Tax Blocks.mxd

Map Document: (K:\GProject\middle_river\Maps\GPS SOIL BORING LOC\Final RAP figures\Final RAP_Comments\Block D Soil Sampling Locations_ figure 2-3 1 06 11.mxd)
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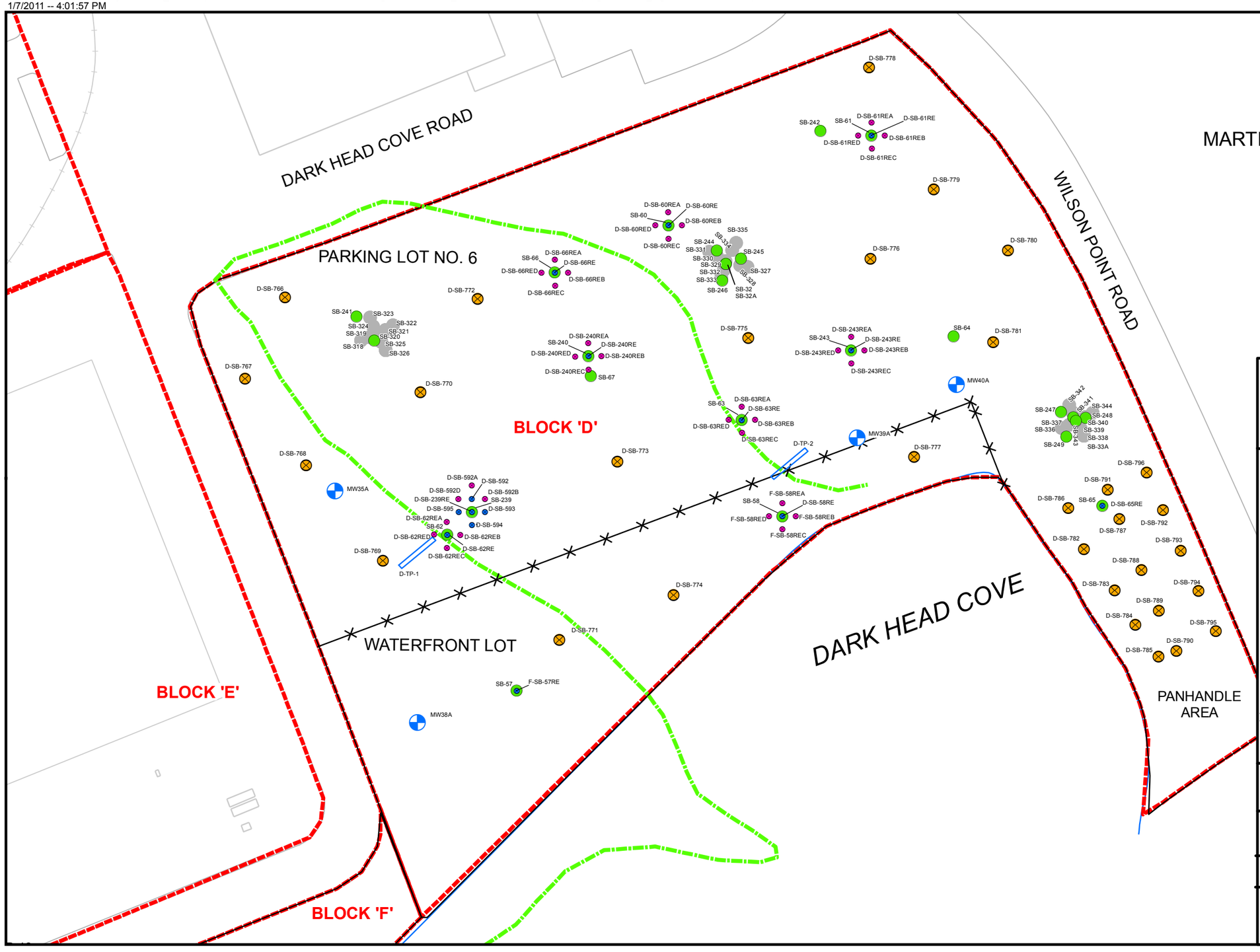


**FIGURE 2-3**

**SOIL SAMPLING LOCATIONS FOR BLOCK D**

**LEGEND**

- GROUNDWATER MONITORING WELL
- PREVIOUS SOIL SAMPLE LOCATION
- FALL 2007 SOIL SAMPLE LOCATION
- VERTICAL (INNER TIER) DELINEATION SAMPLE (SEPTEMBER/OCTOBER 2009)
- LATERAL (OUTER TIER) DELINEATION SAMPLE (OCTOBER 2009)
- 2010 SOIL SAMPLE LOCATION
- 2010 TEST PIT LOCATION
- TAX BLOCK
- FENCE
- PRE- 1950 SHORELINE

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

0 30 60 120 Feet

N

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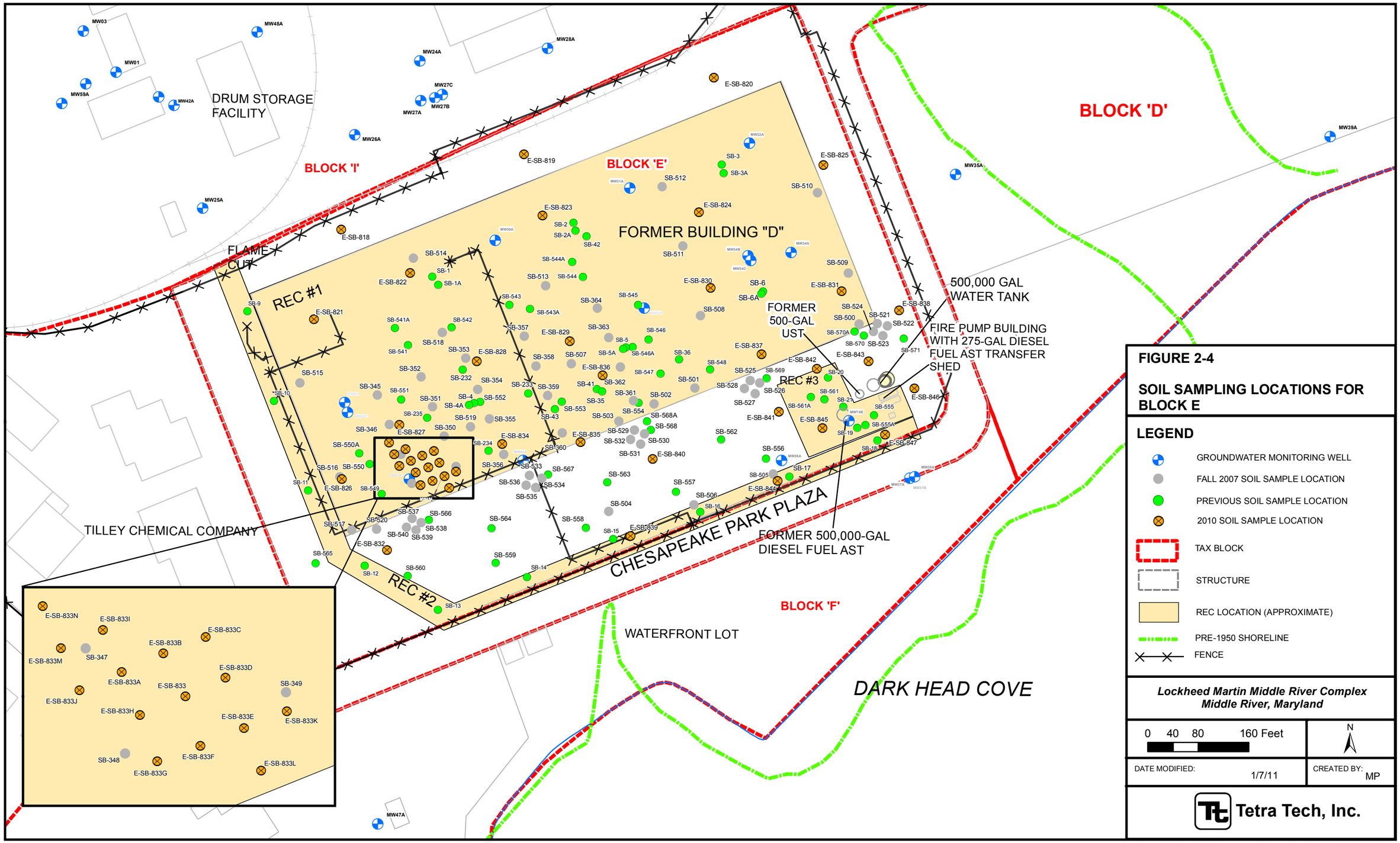
DRUM STORAGE FACILITY
BLOCK 'I'
BLOCK 'E'
BLOCK 'D'
BLOCK 'F'
FORMER BUILDING "D"
REC #1
REC #2
REC #3
FLAME CUT
FORMER 500-GAL UST
500,000 GAL WATER TANK
FIRE PUMP BUILDING WITH 275-GAL DIESEL FUEL AST TRANSFER SHED
FORMER 500,000-GAL DIESEL FUEL AST
CHESAPEAKE PARK PLAZA
TILLEY CHEMICAL COMPANY
WATERFRONT LOT
DARK HEAD COVE
MW03
MW48A
MW01
MW59A
MW42A
MW24A
MW28A
MW27C
MW27A
MW27B
MW26A
MW25A
MW32A
MW31A
MW30A
MW34B
MW34C
MW34A
MW35A
MW39A
MW36A
MW38A
MW37A
MW37B
MW74B
MW47A
E-SB-820
E-SB-819
E-SB-818
E-SB-823
E-SB-824
E-SB-825
E-SB-822
E-SB-821
E-SB-829
E-SB-828
E-SB-836
E-SB-830
E-SB-831
E-SB-838
E-SB-837
E-SB-843
E-SB-842
E-SB-846
E-SB-841
E-SB-845
E-SB-847
E-SB-827
E-SB-834
E-SB-835
E-SB-840
E-SB-826
E-SB-844
E-SB-839
E-SB-832
E-SB-833N
E-SB-833I
E-SB-833C
E-SB-833B
E-SB-833M
E-SB-833D
E-SB-833A
E-SB-833
E-SB-833J
E-SB-833H
E-SB-833E
E-SB-833K
E-SB-833F
E-SB-833G
E-SB-833L
SB-347
SB-348
SB-349
SB-1
SB-1A
SB-2
SB-2A
SB-3
SB-3A
SB-4
SB-4A
SB-5
SB-5A
SB-6
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SB-542
SB-543
SB-543A
SB-544
SB-544A
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SB-569
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SB-570A
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SB-501
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SB-235
SB-549
SB-550
SB-4
SB-4A
SB-5
SB-5A
SB-36
SB-41
SB-43
SB-35
SB-362
SB-361
SB-502
SB-568A
SB-568
SB-530
SB-531
SB-840
SB-562
SB-556
SB-505
SB-17
SB-557
SB-506
SB-16
SB-504
SB-558
SB-15
SB-559
SB-14
SB-564
SB-560
SB-13
SB-12
SB-565
SB-517
SB-537
SB-566
SB-538
SB-539
SB-540
SB-11
SB-516
SB-550A
SB-346
SB-350
SB-519
SB-355
SB-235
SB-551
SB-345
SB-541
SB-518
SB-353
SB-352
SB-232
SB-354
SB-515
SB-10
SB-9
SB-541A
SB-542
SB-543
SB-543A
SB-357
SB-363
SB-546
SB-5
SB-546A
SB-547
SB-548
SB-501
SB-528
SB-525
SB-569
SB-20
SB-526
SB-527
SB-561
SB-561A
SB-21
SB-555
SB-555A
SB-19
SB-18

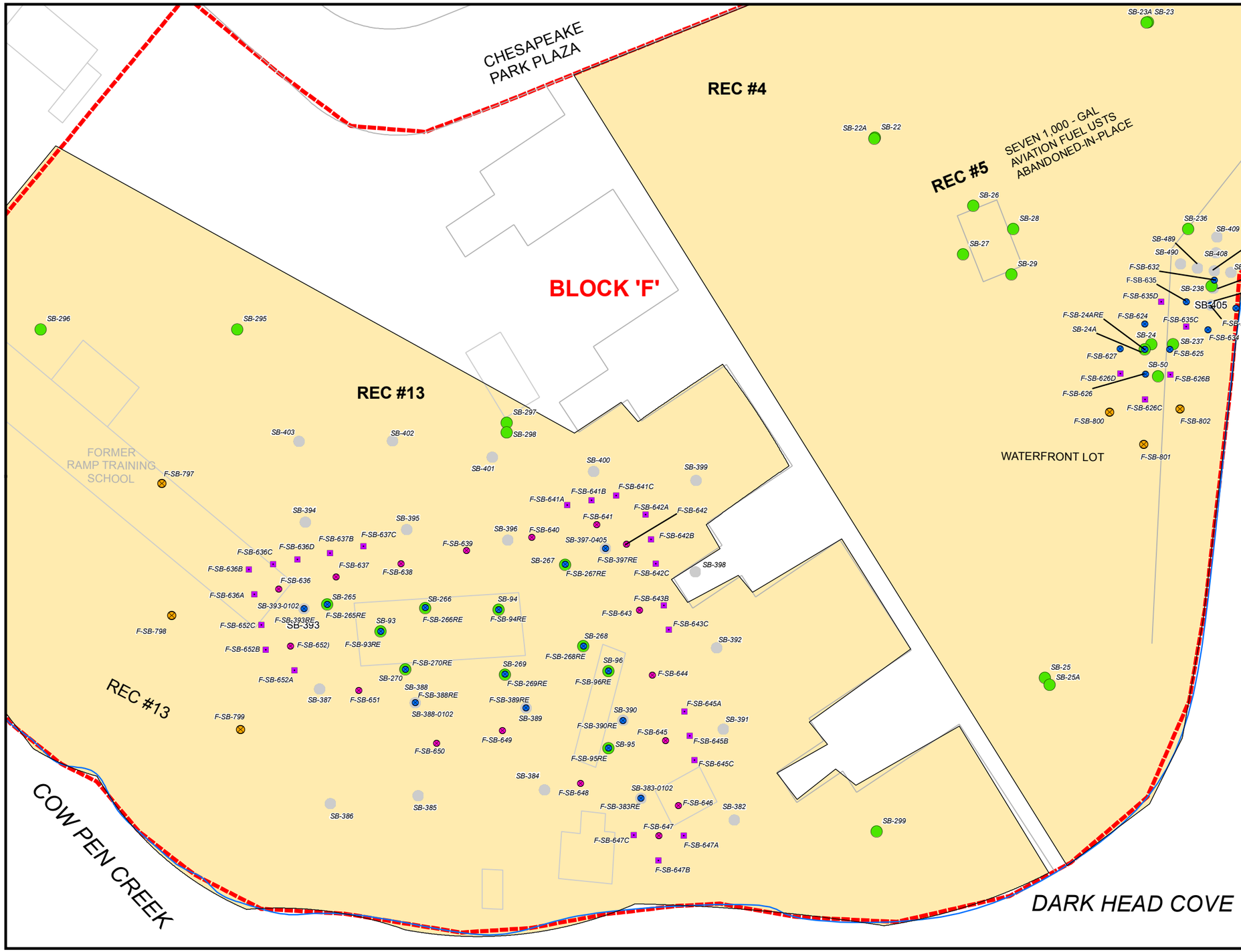


**FIGURE 2-5**

**SOIL SAMPLING LOCATIONS FOR BLOCK F (1 OF 2)**

**LEGEND**

- PREVIOUS SOIL SAMPLE LOCATION
- FALL 2007 SOIL SAMPLE LOCATION
- VERTICAL (INNER TIER) DELINEATION SAMPLE (SEPTEMBER/OCTOBER 2009)
- LATERAL (OUTER TIER) DELINEATION SAMPLE (OCTOBER 2009)
- SECOND ROUND LATERAL (OUTER TIER) DELINEATION SAMPLE (NOVEMBER 2009)
- 2010 SOIL SAMPLE LOCATION
- TAX BLOCK
- STRUCTURE
- REC LOCATION APPROXIMATE

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

0 20 40 80 Feet

N

DATE MODIFIED: 1/7/11

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Tetra Tech, Inc.

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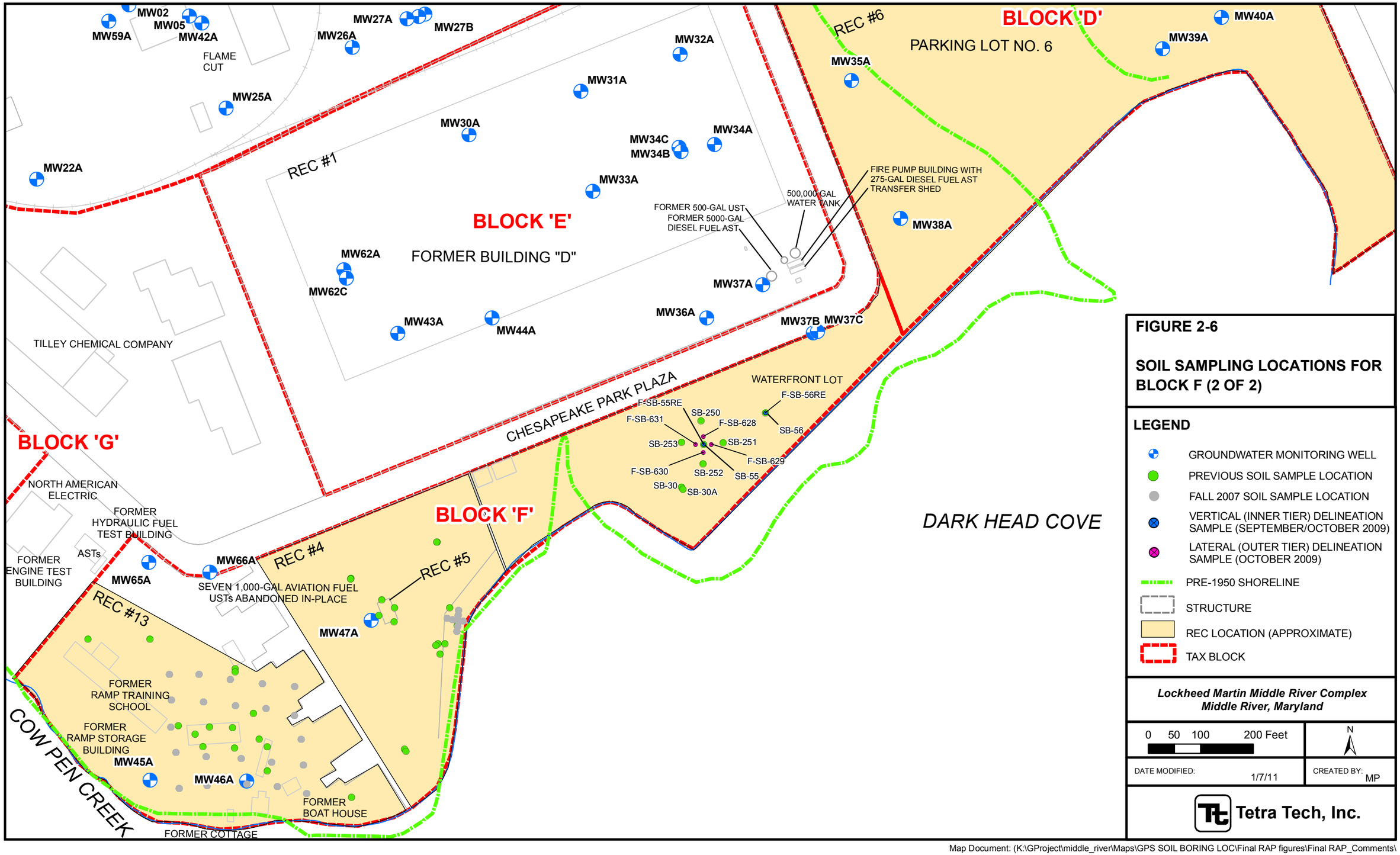


**FIGURE 2-6**

**SOIL SAMPLING LOCATIONS FOR BLOCK F (2 OF 2)**

**LEGEND**

- GROUNDWATER MONITORING WELL
- PREVIOUS SOIL SAMPLE LOCATION
- FALL 2007 SOIL SAMPLE LOCATION
- VERTICAL (INNER TIER) DELINEATION SAMPLE (SEPTEMBER/OCTOBER 2009)
- LATERAL (OUTER TIER) DELINEATION SAMPLE (OCTOBER 2009)
- PRE-1950 SHORELINE
- STRUCTURE
- REC LOCATION (APPROXIMATE)
- TAX BLOCK

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

0 50 100 200 Feet

N

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Block G Soil Sample Locations 1 of 2_figure 2-7 1 07 11.mxd) 1/7/2011 -- 4:33:54 PM

PARKING LOT NO. 2

PARKING LOT NO. 3

BLOCK 'G'

G-SB-813
G-SB-803
G-SB-804
G-SB-810
G-SB-805
G-SB-811
G-SB-806
G-SB-812
G-SB-807
G-SB-809
G-SB-808

SB-455
SB-442
SB-761A
SB-761D
SB-761
SB-761B
SB-761C
SB-443
SB-673
SB-199RE
SB-676
SB-674
SB-675
SB-199
SB-454
SB-762A
SB-762D
SB-762B
SB-762
SB-762C
G-TP-1
SB-441
SB-689
SB-441RE
SB-692
SB-690
SB-691
SB-198
SB-669
SB-198RE
SB-672
SB-670
SB-671D
SB-671
SB-671B
SB-671C
SB-444
SB-763A
SB-763D
SB-763B
SB-693A
SB-763
SB-763C
SB-693D
SB-693B
SB-696
SB-694
SB-453RE
SB-695
SB-440
SB-764A
G-TP-2
SB-764
SB-665
SB-668
SB-197
SB-666
SB-764B
SB-764D
SB-197RE
SB-667
SB-764C
SB-445
SB-452
SB-765A
SB-765D
SB-765
SB-765B
SB-765C
SB-657A
SB-657D
SB-657
SB-657B
SB-195
SB-195RE
SB-660
SB-658
SB-658B
SB-446
SB-659D
SB-659
SB-658C
SB-659C
SB-439
SB-196
SB-661
SB-662A
SB-662B
SB-664
SB-662
SB-196RE
SB-663
SB-662C
SB-438
SB-653A
SB-653D
SB-653
SB-653B
SB-194
SB-194RE
SB-656D
SB-656
SB-654
SB-654B
SB-654C
SB-656C
SB-655
SB-685
SB-437RE
SB-437
SB-688
SB-686
SB-687
SB-254
BaPEq 227 (0.5')

**FIGURE 2-7**

**SOIL SAMPLING LOCATIONS FOR BLOCK G (1 OF 2)**

**LEGEND**

- PREVIOUS SOIL SAMPLE LOCATION
- FALL 2007 SOIL SAMPLE LOCATION
- 2009 VERTICAL (INNER TIER) DELINEATION SAMPLE
- 2009 LATERAL (OUTER TIER) DELINEATION SAMPLE
- 2009 SECOND ROUND LATERAL DELINEATION SAMPLE
- 2010 SOIL SAMPLE LOCATION
- 2010 TEST PIT LOCATION
- TAX BLOCK
- STRUCTURE
- REC LOCATION APPROXIMATE

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

0 25 50 100 Feet

N

DATE MODIFIED: 1/7/11

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Block G Soil Sample Locations 2 of 2_figure 2-8 1 07 11.mxd) 1/7/2011 -- 4:42:24 PM

FOR LOCATIONS WITHIN BLOCK G SEE FIGURE 2-7

**BLOCK 'G'**

PARKING LOT NO. 3

REC #12

REC #11

COW PEN CREEK

2,000 GALLON FUEL OIL UST

10,000 GALLON FUEL OIL UST

# FIGURE 2-8

## SOIL SAMPLING LOCATIONS FOR BLOCK G (2 OF 2)

## LEGEND

- PREVIOUS SOIL SAMPLE LOCATION
- FALL 2007 SOIL SAMPLE LOCATION
- VERTICAL (INNER TIER) DELINEATION SAMPLE (SEPTEMBER/OCTOBER/NOVEMBER 2009)
- LATERAL (OUTER TIER) DELINEATION SAMPLE (OCTOBER/NOVEMBER 2009)
- SECOND ROUND LATERAL (OUTER TIER) DELINEATION SAMPLE (NOVEMBER 2009)
- TAX BLOCK
- STRUCTURE
- REC LOCATION APPROXIMATE

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

0 20 40 80 Feet

N

DATE MODIFIED: 1/7/11

CREATED BY: MP

Tetra Tech, Inc.

EASTERN BOULEVARD

COW PEN CREEK

CHESAPEAKE PARK PLAZA

PARKING LOT NO. 2

BLOCK 'H'

BLOCK 'I'

BLOCK 'G'

PARKING LOT NO. 3

H-SB-814
H-SB-815
H-SB-816
H-SB-817
SB-294
SB-293
SB-202
SB-203
SB-485
SB-282RE
SB-282REA
SB-282RED
SB-282REB
SB-282REC
SB-478
SB-477
SB-284RE
SB-611A
SB-608
SB-609
SB-470
SB-611
SB-611D
SB-284
SB-610B
SB-610D
SB-610
SB-610C
SB-471
SB-604A
SB-604D
SB-604
SB-604B
SB-283RE
SB-607
SB-283
SB-605
SB-606
SB-479
SB-484
SB-467
SB-476
SB-466
SB-483
SB-486
SB-612
SB-285RE
SB-468
SB-615
SB-285
SB-613
SB-614
SB-465
SB-472
SB-475
SB-469
SB-600
SB-201RE
SB-603
SB-601
SB-201
SB-482
SB-602
SB-487
SB-480
SB-464
SB-596
SB-200RE
SB-599
SB-597
SB-200
SB-598
SB-473
SB-481
SB-286RE
SB-616
SB-619
SB-286
SB-617
SB-488
SB-618
SB-463
SB-474RE
SB-620
SB-623
SB-621
SB-474
SB-622
SB-462

**FIGURE 2-9**

**SOIL SAMPLING LOCATIONS FOR BLOCK H**

**LEGEND**

- PREVIOUS SOIL SAMPLE LOCATION
- FALL 2007 SOIL SAMPLE LOCATION
- VERTICAL (INNER TIER) DELINEATION SAMPLE
- LATERAL (OUTER TIER) DELINEATION SAMPLE
- 2010 SOIL SAMPLE LOCATION
- TAX BLOCK
- STRUCTURE

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

0 40 80 160 Feet

N

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Block H Soil Sampling Locations_ figure 2-9 1 07 11.mxd) 1/7/2011 -- 5:17:36 PM

# Section 3
# Human Health Risk Assessment: General Methodology

Section 3 provides the general methodologies used to develop tax-block-specific risk assessments for exposure to impacted soil. Primary guidance sources used to prepare this human health risk basement (HHRA) include the Maryland Department of the Environment (MDE) *Cleanup Standards for Soil and Groundwater* (State of Maryland, 2008) and *Voluntary Cleanup Program Guidance* (State of Maryland, 2006). Current guidance and reports published by the U.S. Environmental Protection Agency (USEPA) and USEPA Region 3 were also considered in preparing the HHRA:

- *Soil Screening Guidance: Technical Background Document* (USEPA, 1996a)
- *Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites* (USEPA, 2002a)
- *Exposure Factors Handbook*. Office of Research and Development, National Center for Environmental Assessment, Washington, D.C. EPA/600/P-95/002Fa (USEPA, 1997a)
- *Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure-Factors*. OSWER Directive 9285.6 03, OSWER, Washington, D.C. (USEPA, 1991)
- Distribution of *Preliminary Review Draft: Superfund's Standard Default Exposure-Factors for Central-Tendency and Reasonable Maximum Exposure*. OSWER, Washington, D.C. (USEPA, 1993a)
- *Calculating Upper Confidence-Limits for Exposure-Point Concentrations at Hazardous Waste Sites*. Office of Emergency and Remedial Response, Washington, D.C. OSWER 9285.6-10 (USEPA, 2002b)
- *Risk Assessment Guidance for Superfund (RAGS), Volume I: Human Health Evaluation Manual (Part A)* (USEPA, 1989)

- *Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment), Final*. Office of Superfund Remediation and Technology Innovation, Washington, D.C. 20460 EPA/540/R/99/005, OSWER 9285.7-02EP; PB99-963312 (USEPA, 2004a).

- *Guidelines for Carcinogen Risk Assessment*. EPA/630/P-03/001B. March 2005 (USEPA 2005a)

- *Supplemental Guidance for Assessing Susceptibility from Early Life Exposure to Carcinogens*. EPA/630/R-03/003F (USEPA, 2005b)

- *Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part F, Supplemental Guidance for Inhalation Risk Assessment), Final*. Office of Superfund Remediation and Technology Innovation, Washington, D.C. 20460 EPA-540-R-070-002, OSWER 9285.7-82 (USEPA, 2009a).

- *Updated Dermal Exposure Guidance* (USEPA Region 3, 2003a)

The risk assessment protocols in the following technical documents, which were prepared for Lockheed Martin Corporation (Lockheed Martin) sites at Martin State Airport (MSA) site as well as for the Middle River Complex (MRC), were also considered:

- *Revised Human Health Risk Assessment, MSA, Middle River, Maryland*. Prepared for Lockheed Martin Corporation (Tetra Tech, 2006a)

- *Site Characterization Report, Lockheed Martin MRC, 2323 Eastern Boulevard, Middle River, Maryland* (Tetra Tech, 2006b)

The HHRA for the tax block soils is structured and reported according to the guidelines in the *RAGS, Human Health Evaluation Manual, Part D: Standardized Planning, Reporting, and Review of Superfund Risk Assessments* (*RAGS Part D*) (USEPA, 2001). The HHRA consists of the following six components (see *RAGS* Sections 1 through 6 for a more complete discussion):

- data evaluation
- exposure assessment
- toxicity assessment
- risk characterization
- uncertainty analysis
- development of remedial goal options

## 3.1 DATA EVALUATION METHODOLOGY

The first step of the baseline HHRA, data evaluation, is a medium-specific task that begins with compilation of relevant analytical data and concludes with the selection of chemicals of potential

concern (COPC) to be evaluated in subsequent step of the assessment. First, the data available for the relevant study area(s) are reviewed in terms of data quality; only validated data are used in the assessment. Environmental samples selected for HHRA are summarized in the tables presented in Appendix A. Second, a medium-specific list of COPC (used to quantitatively and/or qualitatively determine potential human health risks) was selected based on a toxicity screen (i.e., a comparison of site contaminant concentrations to conservative toxicity-screening values).

### 3.1.1 Data Evaluated in the HHRA

Validated data collected during the following environmental investigations were used to assess risks to potential human receptors:

- Phase II site investigation (fall/winter 2003)
- site-wide Phase II investigation (2004)
- Phase II soil investigation (summer 2005)
- additional soil characterization (fall 2007)
- supplemental soil and storm-drain-sediment characterization (Block E fall 2008)
- final soil delineation (Block D, F, G, and H fall 2009)
- data gap investigation (fall 2010)

Environmental samples specifically evaluated in the HHRA are listed in Tables 3-1 through 3-15 (and Appendix A):

- *Tables 3-1 through 3-5*: Soil samples collected in the 0–2 feet below grade interval for each of the five tax blocks (collected in 2004–2010). These samples are considered surface soil samples for the purposes of the HHRA.
- *Tables 3-6 through 3-10*: Soil samples collected at depths greater than two feet below grade but less than or equal to 10 feet below grade (collected in 2003–2010) are considered shallow subsurface-soil samples for the purposes of the HHRA. Typically, subsurface soil data are evaluated to a depth of 10–15 (the depth to which human receptors could reasonably be exposed) or to the zone of saturation. The depth to groundwater in the study area is within 10 feet below grade. To be conservative, subsurface soil data from 2–10 feet below grade were included in the quantitative risk evaluation. Data for these samples are assumed to represent conditions in the unsaturated (vadose) zone and upper saturated-zone soils. The uncertainty analysis (see Section 5)

discusses uncertainty associated with potential saturated-zone samples included in the quantitative risk evaluation.

- *Tables 3-11 through 3-15*: Soil samples collected at depths greater than 10 feet below grade (collected in 2004 through 2010) are considered deep subsurface-soil samples for the purposes of the HHRA. We assume that direct contact with the deeper saturated-zone soils (i.e., soil samples greater than 10 feet below grade) is very unlikely; therefore, this HHRA does not quantitatively evaluate direct-contact exposure to deeper saturated-zone soils. The uncertainty analysis (see Section 5) presents a qualitative evaluation of contaminants detected in saturated-zone soils.

Fixed-base analytical results (i.e., results from a fixed-base laboratory and not from field analytical results) from field investigations for target analytes were used in the quantitative risk evaluation. Field measurements and data regarded as rejected (i.e., that were qualified as "R" during data validation) were not used in the quantitative risk assessment. If a chemical was not detected in an environmental medium but its reported detection limits (sample quantitation-limits [SQLs]) for the environmental samples exceeded the COPC toxicity screening-levels, that chemical is qualitatively discussed in the uncertainty analysis section.

### 3.1.2 Selection of Chemicals of Potential Concern

Selecting COPC is a qualitative screening process to limit the number of chemicals quantitatively evaluated in the baseline HHRA to those site-related constituents that dominate overall potential risks. Screening by risk-based concentrations focuses the risk assessment on meaningful chemicals and exposure routes. In general, a chemical was selected as a COPC in the HHRA and retained for further quantitative-risk evaluation if the maximum detection in a soil data set exceeded the lowest risk-based screening concentration. Chemicals eliminated from further evaluation are assumed to present minimal risks to potential human receptors. Tables summarizing the selection of COPC are included in the risk assessment and referenced in the following text.

#### 3.1.2.1 Derivation of Screening Criteria

The primary COPC screening criteria for the study area soils were derived from MDE's *Cleanup Levels for Soil and Groundwater* (State of Maryland, 2008) and USEPA Regional Screening Levels (RSLs) developed by the U.S. Department of Energy's Oak Ridge National Laboratory (ORNL) on behalf of USEPA (USEPA, 2010a). The more conservative of these values were used to select COPC. These risk-based concentrations are based on exposure pathways for which generally accepted methods, models, and assumptions have been developed (i.e., ingestion,

dermal contact, inhalation) for specific land uses (residential, industrial). They do not consider effects on groundwater or ecological receptors. The COPC screening levels used in the HHRA to evaluate soil data are listed in Table 3-16 and defined in the following narrative.

***Screening levels for all parameters except lead—***Screening levels to select COPC for direct human-contact exposures to surface and subsurface soil are based on the following criteria:

- *Interim Final Guidance from the State of Maryland, Department of the Environment, Cleanup Standards for Soil and Groundwater* (State of Maryland, 2008)
- *Regional Screening-Levels for Residential Soil* (USEPA, 2010a)
- "Generic Soil-Screening Levels ($SSL_{air}$) for Transfers from Soil to Air" (published on the USEPA Web site: http://rais.ornl.gov/epa/ssl1.shtml)

COPC screening levels from the MDE cleanup standards correspond to a systemic hazard quotient (HQ) of 0.1 for noncarcinogens or an incremental lifetime cancer-risk (ILCR) of $1\times10^{-6}$ (i.e., a one in a million probability) for carcinogens. In contrast, USEPA RSLs are based on an HQ of 1 for noncarcinogens and an ILCR of $1\times10^{-6}$ for carcinogens. USEPA RSLs for noncarcinogens are based on an HQ of 1, so COPC screening-levels based on USEPA RSLs were adjusted to correspond to a systemic HQ of 0.1 for noncarcinogens to account for the potential cumulative effects of several chemicals affecting the same target organ or producing the same adverse noncarcinogenic effect. Soil-screening levels derived from both of these sources were used for direct-contact COPC selection. As noted above, the more conservative of the available values were used for COPC selection.

The $SSL_{air}$ values for chemical migration from soil to outside air (published online by USEPA and ORNL at http://rais.ornl.gov/epa/ssl1.shtml) were also used to select COPC for surface and subsurface soils. These values are more recent than those in the 1996 and 2002 soil-screening level (SSL) guidance documents (USEPA, 1996a and USEPA, 2002a). The $SSLs_{air}$ values are based on an HQ of 1; however, the COPC screening values were adjusted to be based on an HQ of 0.1.

Maximum chemical concentrations in soil were also compared to MDE cleanup levels for groundwater protection (as published in State of Maryland, 2008) as well as to federal SSLs for groundwater protection, which are designed to protect groundwater at most sites (as published in

the USEPA RSL table). These groundwater-protection SSLs allow an initial qualitative evaluation of the potential for chemical migration from soil to groundwater. MDE cleanup levels for groundwater protection are based on a dilution-attenuation factor (DAF) of 20, whereas federal SSLs for groundwater protection are based on a DAF of 1. Chemicals with concentrations exceeding MDE groundwater protection criteria or the SSLs' criteria may potentially migrate from soil to groundwater in sufficient quantities to pose groundwater quality problems. Chemicals detected at concentrations exceeding MDE groundwater protection criterion or the federal SSL for groundwater protection, but at concentrations less than COPC screening levels for direct-contact risk, will not be evaluated quantitatively in the HHRA. However, these chemicals will be further evaluated qualitatively using the approach presented in Section 3.4.3.

***Screening levels for lead—***Guidance from the USEPA Office of Prevention, Pesticides, and Toxic Substances (OPPTS) and Office of Solid Waste and Emergency Response (OSWER) recommend 400 mg/kg as the screening level for lead impacted soil in a residential setting where children are frequently present (USEPA, 1994). To be conservative, 400 mg/kg was used as the screening level to select COPC for soil. However, guidance from the USEPA Technical Review Workgroup for Lead indicates that "a reasonable screening level for soil lead at commercial/industrial (i.e., non-residential) sites is 800 mg/kg" for a typical non-contact intensive worker (2010b); 800 mg/kg is also the current USEPA RSL for soils (2010a), assuming an industrial land use scenario.

#### 3.1.2.2 Decision Rules for Establishing Chemicals of Potential Concern

The following decision rules were used to select COPC for tax block soils:

- A chemical detected in soil was selected as a COPC for the HHRA if the maximum detected chemical concentration exceeds its relevant screening level for soils.
- Surrogate COPC screening levels were used for some chemicals. For example, risk-based COPC screening levels are not currently available for some chemicals [e.g., acenaphthylene, benzo(g,h,i)perylene, phenanthrene] that have been detected in study area soils due to the lack of toxicity criteria. In screening COPC, acenaphthene was used as a surrogate for acenaphthylene; pyrene was used as a surrogate for benzo(g,h,i)perylene and phenanthrene.

- Some chemicals (e.g., naphthalene) are reported in both the VOC and SVOC fractions. The maximum detected concentration was evaluated for purposes of COPC selection.

- Per current USEPA guidance (USEPA, 1993b), cancer risk estimates for benzo(a)pyrene and six other PAHs (benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene) were calculated in terms of benzo(a)pyrene equivalent concentrations (BaPEq) that are calculated using USEPA-recommended toxicity equivalency factors (TEFs). TEFs are based on the potency of each of these PAH compounds relative to that of benzo(a)pyrene. TEFs are used to convert each individual PAH concentration into an equivalent concentration of benzo(a)pyrene. The sum of these equivalent concentrations for the six other PAHs and benzo(a)pyrene is the BaPEq concentration. Exposure-point concentrations (EPC) for these PAHs were derived using benzo(a)pyrene equivalent concentrations calculated for each sample.

  BaPEq are calculated two ways: (1) the BaPEq-½-non-detect value is calculated using one-half of the detection limit to represent non-detect results in the calculation, and (2) the BaPEq positive-results value is calculated using a value of zero to represent non-detect PAH results. In either BaPEq calculation, if none of the PAHs were detected in a sample, then the sample quantitation-limit for benzo(a)pyrene is used as the equivalent concentration for that sample. Values for both BaPEq calculations are presented in the COPC-selection tables.

  Both values calculated for BaPEq are similar; therefore, the BaPEq-½-non-detect values were used in the risk assessment, since these values are slightly more conservative due to the incorporation of non-detects. Using one-half of the detection limit for non-detects recognizes that the concentration of a PAH in a specific sample may be greater than zero even though the result is considered non-detected (i.e., the PAH may be present at a concentration between zero and the sample-quantitation limit). The fact that the BaPEq results for both the ½-non-detect and positive-results-only calculations are similar indicates that elevated detection limits are not resulting in biased-high BaPEq results for the ½-non-detect calculation.

- For PCBs, individual Aroclors were compared to screening criteria for individual Aroclors. Total Aroclor concentrations were determined on a sample-specific basis by summing individual detected Aroclor concentrations. These results are presented in the COPC selection tables where applicable.

### 3.1.3 COPC Selected for the HHRA

COPC for the tax blocks were selected for surface and subsurface soil using the COPC screening levels described in the preceding narrative. COPC selection was based on samples from all blocks (i.e., Blocks D, E, F, G, and H) combined to produce a list of “global” COPC. Global COPC were further evaluated on a block-specific basis as part of the quantitative risk assessment based on whether the COPC were detected in a specific block, consistent with the global COPC

screening process. Using the global COPC screening process avoids having to evaluate and assign surrogate concentration values (e.g., SQLs) to global COPC that were never detected in the block considered. A discussion of the chemicals identified as global COPC and the rationale for their selection as global COPC is provided in the following subsections. Global COPC-selection tables for surface and subsurface soil are presented in Tables 3-17 through 3-20. Global COPC-selection for the deep subsurface soils (not evaluated quantitatively in the HHRA) is presented in Table 3-21. Chemicals retained as global COPC for the tax blocks are presented in Table 3-22. The *RAGS Part D* tables for COPC selection are in Appendix D.

#### 3.1.3.1 Surface Soil (0–2 Feet Below Grade)

Thirty VOCs, 12 SVOCs, 17 PAHs, three pesticides, three PCBs, 19 metals, petroleum hydrocarbon compounds, methyl mercury, and hexavalent chromium were detected in the surface soil samples listed in Tables 3-1 through 3-5. A comparison of the maximum detected surface soil concentrations to screening levels (based on MDE cleanup levels, RSLs, and $SSLs_{air}$) is presented in Table 3-17. The following chemicals were detected in surface soils at maximum concentrations exceeding the direct-contact risk-based COPC screening-levels and were retained as COPC for surface soil:

- ***VOCs:*** 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, and 1,4-dichlorobenzene
- ***PAHs:*** benzo(a)pyrene equivalents, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(b+k)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene
- ***PCBs:*** Aroclor-1254, Aroclor-1260, and total Aroclor
- ***Metals:*** antimony, arsenic, cadmium, cobalt, iron, lead, manganese, mercury, molybdenum, nickel, and vanadium
- ***Petroleum hydrocarbons:*** DRO and GRO
- ***Miscellaneous parameters:*** hexavalent chromium

No COPC screening levels based on MDE cleanup standards or USEPA RSLs are available for 1,2,3-trimethylbenzene, n-butylbenzene, tertiary-butyl alcohol, di-n-octyl-phthalate, dimethyl phthalate, and the TPH ranges TPH C09-C36 and TPH C10-C32. Chemicals lacking screening criteria were qualitatively evaluated in the uncertainty analysis (see Section 5).

Also in Table 3-17, the maximum detected surface soil concentrations are compared to USEPA SSLs for chemical migration from soil to outdoor air. Concentrations reported for all chemicals except 1,2,4-trichlorobenzene are less than USEPA SSLs for soil to air. Since the maximum detected concentration of this chemical exceeds the SSL for contaminant migration from soil to air, receptor exposure through inhalation of fugitive dusts and VOCs was evaluated.

A comparison of the maximum detected surface soil concentrations to USEPA SSLs for chemical migration from soil to groundwater is presented in Table 3-18. The following chemicals were detected in surface soil at maximum concentrations exceeding the COPC screening-levels for migration from soil to groundwater and were retained as global COPC for surface soil in the tax blocks:

- ***VOCs:*** 1,1-dichloroethane, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, benzene, ethylbenzene, methylene chloride, naphthalene, tetrachloroethene, and trichloroethene
- ***SVOCs:*** carbazole and dibenzofuran
- ***PAHs:*** 1-methylnaphthalene, 2-methylnaphthalene, benzo(a)pyrene equivalents, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(b+k)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene
- ***Pesticides/PCBs:*** Aroclor-1242, Aroclor-1254, Aroclor-1260, beta-BHC, and total Aroclor
- ***Metals:*** antimony, arsenic, cadmium, cobalt, copper, iron, lead, manganese, molybdenum, nickel, selenium, and silver
- ***Miscellaneous parameters:*** hexavalent chromium

The potential for chemical migration from soils to groundwater is more fully evaluated in Section 4.

#### 3.1.3.2 Shallow Subsurface soil (Greater than 2–10 Feet Below Grade)

Thirty-six VOCs, 11 SVOCs, 18 PAHs, two pesticides, two PCBs, 19 metals, petroleum hydrocarbons, methyl mercury, and hexavalent chromium were detected in the shallow subsurface soil samples listed in Tables 3-6 through 3-10. A comparison of the maximum detected subsurface soil concentrations to screening levels (based on MDE cleanup levels and

USEPA RSLs) is presented in Table 3-19. The following chemicals were detected in shallow subsurface soils at maximum concentrations exceeding the direct-contact risk-based COPC screening-levels and were retained as global COPC for shallow subsurface soil:

- ***VOCs:*** 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, and naphthalene
- ***PAHs:*** benzo(a)pyrene equivalents, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene
- ***PCBs:*** Aroclor-1254, Aroclor-1260, and total Aroclor
- ***Metals:*** arsenic, cobalt, iron, lead, manganese, mercury, and vanadium
- ***Petroleum hydrocarbons:*** DRO and GRO
- ***Miscellaneous parameters:*** hexavalent chromium

No COPC screening levels based on MDE cleanup standards or USEPA RSLs are available for 1,2,3-trimethylbenzene, 4-isopropyltoluene, n-butylbenzene, sec-butylbenzene, tertiary-butyl alcohol, di-n-octyl phthalate, dimethyl phthalate, TPH C09-C36, and TPH C10-C32. Chemicals lacking screening criteria were qualitatively evaluated in the uncertainty analysis (see Section 5). Table 3-19 also compares the maximum detected shallow subsurface-soil concentrations to the USEPA SSLs for chemical migration from soil to air. Concentrations reported for 1,2,4-trichlorobenzene, naphthalene (analyzed as a VOC), and naphthalene (analyzed as PAH) exceed USEPA SSLs for soil to air. Consequently, receptor exposure through inhalation of fugitive dusts and VOCs was evaluated.

Table 3-20 compares the maximum detected shallow–subsurface soil concentrations to MDE cleanup goals for groundwater protection and to USEPA SSLs for chemical migration from soil to groundwater. The following chemicals were detected in subsurface soil at maximum concentrations exceeding COPC screening-levels for migration from soil to groundwater and were retained as global COPC for subsurface soil in the tax blocks:

- ***VOCs:*** 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,3-dichlorobenzene, 1,4-dichlorobenzene, acetone, benzene, carbon tetrachloride, chlorobenzene, ethylbenzene, m+p-xylenes,

methylene chloride, naphthalene, tetrachloroethene (PCE), total xylenes, trichloroethene (TCE), and vinyl chloride

- ***SVOCs:*** carbazole, dibenzofuran, and n-nitrosodiphenylamine
- ***PAHs:*** 1-methylnaphthalene, 2-methylnaphthalene, acenaphthene, benzo(a)pyrene equivalents, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and naphthalene
- ***Pesticides/PCBs:*** Aroclor-1254, Aroclor-1260, beta-BHC, and total Aroclor
- ***Metals:*** antimony, arsenic, cobalt, copper, iron, lead, manganese, nickel, selenium, and silver
- ***Miscellaneous parameters:*** hexavalent chromium

A more refined evaluation of the potential for chemical migration from soils to groundwater is provided in Section 4.

#### 3.1.3.3 Deep Subsurface Soil (Greater than 10 Feet Below Grade)

The HHRA for the tax block soils assumes that direct human-contact with deep subsurface soils is very unlikely. Therefore, risk estimates are not presented for direct contact with this medium. However, to be complete, Table 3-21 compares the maximum detected concentrations to the direct-contact COPC selection-criteria for soils. The maximum detected concentrations are not compared to USEPA SSLs for groundwater protection because the deep subsurface soils are in the saturated-soil zone. Any remediation of COPC in this zone would be based on contamination actually observed in groundwater, and not on contamination detected in deep, saturated soils.

Twenty-one VOCs, three SVOCs, 18 PAHs, one PCB (Aroclor-1260), 19 metals, petroleum hydrocarbons, and hexavalent chromium were detected in the deep subsurface soils. The following chemicals were detected at concentrations exceeding direct-contact COPC screening-levels:

- ***PAHs:*** benzo(a)pyrene equivalents, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene
- ***PCBs:*** Aroclor-1260
- ***Metals:*** arsenic, cobalt, iron, manganese, and vanadium

- ***Miscellaneous parameters:*** hexavalent chromium

The uncertainty analysis (Section 5) contains a more detailed qualitative evaluation of the global COPC selected for deep subsurface soil.

#### 3.1.3.4 Summary

Table 3-22 summarizes the chemicals retained as global COPC for surface and subsurface soils at the tax blocks. *RAGS Part D* tables for COPC selection are included in Appendix D.

## 3.2 EXPOSURE ASSESSMENT METHODOLOGY

The exposure assessment component of an HHRA defines and evaluates, either quantitatively or qualitatively, the type and magnitude of human exposure to the chemicals at or migrating from a site. It is designed to depict the site's physical setting, to identify potentially exposed populations and applicable exposure pathways, to calculate concentrations of COPC to which receptors might be exposed, and to estimate chemical intakes under the identified exposure scenarios. Actual or potential exposures at a site depend on the most likely pathways of contaminant release and transport, as well as on patterns of human activity. A complete exposure pathway has four components: a source of chemicals that can be released to the environment, a route of contaminant transport through an environmental medium, an exposure or contact point for a human receptor, and an exposure route.

### 3.2.1 Conceptual Site Model

The HHRA includes a conceptual site-model (CSM) that identifies the exposure pathways by which human receptors may come in contact with study area soils. The CSM depicts the relationships among the following elements of a *complete* exposure pathway (i.e., a pathway that potentially results in human exposure and is evaluated [qualitatively or quantitatively] in an HHRA):

- site sources of contamination
- contaminant release mechanisms and transport/migration pathways
- exposure routes
- potential receptors

These CSM elements establish the manner and degree to which a potential receptor may be exposed to chemicals present at a site. The degree of risk incurred by a potential receptor varies

according to the means and duration of exposure and the specific chemical to which the receptor is exposed. An exposure, however long in duration, does not necessarily result in a regulatorily "unacceptable" health or environmental risk, although risks generally increase with increased frequency and/or duration of exposure.

Sources of possible contamination are discussed in Section 3.2.1.1. Sections 3.2.1.2 and 3.2.1.3 discuss contaminant release mechanisms and transport and migration pathways. Section 3.2.1.4 and Table 3-23 provide a site-specific summary of potential receptors and exposure pathways to be evaluated for the tax blocks. A summary of the exposure routes (addressed quantitatively for each human receptor) is provided in Table 3-24. Figure 3-1 illustrates the CSM for the tax blocks' HHRA.

### 3.2.1.1 Site Sources of Contamination

Tax Blocks D, E, F, G, and H share several common characteristics. For example, no surface water bodies cross or emanate and no wetlands have been identified in or around any of the Blocks. Additionally, excluding areas immediately adjacent to Cow Pen Creek and Dark Head Cove, surface water runoff discharges from the site via storm drains. Lockheed Martin maintains a State of Maryland NPDES permit (state discharge permit No.: 00-DP-0298, NPDES No.: MD0002852), issued by the MDE Industrial Discharge Permits Division, Water Management Administration. The permit covers storm-water discharge from the entire property rather than from individual tenants (Tetra Tech, 2006).

Finally, soil data collected from each block indicate that past activities have released contaminants to the surrounding environment. MRC site assessments indicate that a high percentage of site soils contain a very high clay and silt content, with poor surface drainage. The results of previous investigations are summarized in Section 2. See Section 2.3.3 for a detailed discussion of soil types at the MRC. Site-specific information for each block follows.

***Block D*** is in the southeastern portion of MRC and is bounded by Wilson Point Road to the east, Chesapeake Park Plaza to the west, Dark Head Cove Road to the north, and Dark Head Cove to the south. PAH contamination in the soil at Block D may be associated with the asphalt paving or motor oil dripping from cars, or an alternative source such as urban fill may also be present, since elevated concentrations are found at depth. Detected concentrations of several metals, DRO, GRO, PAHs (represented as the BaPEq), and Aroclor-1260 in surface soil exceed their

respective screening criteria. In subsurface soil, BaPEq constituents, naphthalene, Aroclor-1260, several metals, DRO, and GRO were detected at levels exceeding screening criteria.

***Block E*** is in the southern portion of MRC and is bounded by Chesapeake Park Plaza to the east and south, Tilley Chemical Company to the west, and Block I to the north. Soil data collected from REC #1 (Former Building D) in Tax Block E indicate that past activities have released contaminants to the surrounding environment. Contamination may be the result of historical industrial operations in Former Building D, from the former UST or product line, or from use of the building foundation for storage or management of PCB-containing materials. Detected concentrations of 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,4-dichlorobenzene, BaPEq constituents, Aroclor-1254, Aroclor-1260, several metals, DRO, and GRO in surface soil exceed soil-screening criteria. In subsurface soil, 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, BaPEq constituents, naphthalene, Aroclor-1254, Aroclor-1260, several metals, DRO, and GRO exceed their respective screening criteria.

***Block F*** is in the southern most portion of the MRC and is bounded by Chesapeake Park Plaza to the north, North American Electric, Inc., to the north-northwest, Cow Pen Creek to the west-southwest, and Dark Head Cove to the south-southeast. Block F has four RECs: REC #4 (Boat Launch Area), REC #5 (Former Aviation Fuel USTs), a portion of REC #6 (Waterfront Lot), and REC #13 (Former Boat Dock Area). RECs #4 and #5 are covered by a concrete tarmac forming the REC #4 boundary. REC #5 consists of seven USTs underneath the north central portion of the tarmac. REC #6 (Waterfront Lot) is a well-manicured, grassy strip between Chesapeake Park Plaza and Parking Lot No. 6 along the shore of Dark Head Cove. REC #13 (Former Boat Dock Area) is an open, relatively flat grassy parcel of land. REC #13 is covered with a well-maintained grass lawn with shrubs and trees growing thickly along the Cow Pen Creek shoreline. Severely degraded remnants of several walkways, parking areas, and a few foundations are still evident (Tetra Tech, 2006b). The topography and concrete tarmac at REC #4 most likely results in surface water runoff in this area discharging directly to Dark Head Cove as overland sheet-flow. Surface water runoff from the grassy areas will generally infiltrate into the underlying soil or discharge to Dark Head Cove or Cow Pen Creek as overland sheet flow.

Block F soil data indicate that past activities have released contaminants to the surrounding environment. Block F impacts may be the result of historical activities. Detected concentrations of BaPEq constituents, Aroclor-1254, Aroclor-1260, several metals, DRO, and GRO in surface soil exceed their respective screening criteria. In subsurface soil, BaPEq constituents, naphthalene, Aroclor-1260, several metals, DRO, and GRO also exceed their respective screening criteria.

***Block G*** is in the southwestern portion of the MRC, bounded by Chesapeake Park Plaza to the east, Cow Pen Creek to the west, North American Electric, Inc. to the south, and Block H to the north. Block G has two RECs: REC #11 (Former STP/Wind-Tunnel Test Building/Vibration-Test Building) and REC #12 (Southern Portion of Lot 3). The remaining portion of Parking Lot No. 3 is also included in Block G. Currently, REC #11 is an open, grassy area between Chesapeake Park Plaza and Cow Pen Creek, REC #12 is a gravel lot, and Parking Lot No. 3 is a flat parcel of land used for truck-trailer storage (Tetra Tech, 2006b).

Block G soil data indicate that past activities have released contaminants to the surrounding environment. Contamination may be the result of historical industrial operations that took place in this area, from USTs suspected to have been at this site or from items that may have been stored in Block G. Detected concentrations of BaPEq constituents, Aroclor-1254, Aroclor-1260, several metals, DRO, and GRO in surface soil exceed their respective screening criteria. In subsurface soil, BaPEq constituents, naphthalene, Aroclor-1260, several metals, DRO, and GRO likewise exceed their respective screening criteria.

***Block H***, in the northwestern portion of the MRC, is bounded to the north by Eastern Boulevard, to the east by the industrial portion of the MRC (Block I), to the south by Parking Lot No. 3 (Block G), and to the west by Cow Pen Creek. Site soils consist of a heterogeneous mix of silty sands, fine-grained to medium-grained sands, and silty clay. The topography and the asphalt paving make it likely that surface water runoff in this area would discharge to Cow Pen Creek as overland sheet flow. Surface water runoff from the grassy areas will generally infiltrate the underlying soil or discharge to Cow Pen Creek as overland sheet flow.

Block H soil data indicate that past activities have released contaminants to the surrounding environment. Detected concentrations of BaPEq constituents, several metals, DRO, and GRO in

surface soil exceed their respective screening criteria. In subsurface soil, BaPEq constituents, naphthalene, DRO, and GRO likewise exceed their respective screening criteria.

#### 3.2.1.2 Potential Contaminant Release Mechanisms and Transport Pathways

Chemicals may migrate within an environmental medium (e.g., soil) or migrate to another environmental medium (e.g., air) once released. This section discusses potential contaminant release mechanisms and transport pathways. Potential contaminant release mechanisms and transport pathways are nearly identical for Tax Blocks D, E, F, G, and H. For example, soil data collected in each Block indicate that past activities have released contaminants to the surrounding environment.

Contaminants in surface soil could migrate to air through wind erosion or through volatile emissions. Subsurface soil is not currently exposed in any of the tax blocks; however, if future construction were to bring subsurface soil to the surface, contaminants in subsurface soil could be transported into the air through wind erosion or through volatile emissions. Finally, at each tax block, contaminants can migrate from both surface and subsurface soil to groundwater through leaching of chemicals in the soil. Chemical migration from soil to groundwater for each block was evaluated and the results of those evaluations are in Section 4.

The primary differences in potential contaminant release mechanisms and transport pathways for the tax blocks relate to overland runoff and erosion. As previously mentioned, excluding areas immediately adjacent to Cow Pen Creek and Dark Head Creek, surface water runoff discharges from these sites via storm drains for which Lockheed Martin maintains a Maryland NPDES permit. Following are descriptions of overland runoff and erosion per tax block. Overland runoff and erosion can only be potential migration pathways if contaminated soil is disturbed and exposed.

***Block D—***If the parking lot was removed, overland runoff and erosion at the site could be a significant contaminant transport mechanism due to the site topography, which gently slopes from Eastern Boulevard to the southwest and south toward Cow Pen Creek and Dark Head Cove.

***Block E—***Surface soil contaminants are not expected to be transported to surface water bodies (i.e., Dark Head Cove or Cow Pen Creek) through overland runoff and erosion because of the distance between Block E and surface water bodies, the generally low relief site topography, and

because (apart from the foundations slabs and remnants of Former Building D) much of the site is vegetated, which facilitates infiltration and evapo-transpiration. Infiltration is therefore expected to dominate surface runoff.

***Block F—***Surface water runoff from the concrete tarmac of REC #4 would most likely discharge directly to Dark Head Cove as overland sheet flow. Surface water runoff from the grassy areas will generally infiltrate into the underlying soil or discharge to Dark Head Cove or Cow Pen Creek as overland sheet flow.

***Block G—***Overland runoff at the site may be a significant contaminant transport mechanism due to drainage systems and because Cow Pen Creek borders Block G. However, those drainage systems are permitted through NPDES. In vegetated areas, which facilitate infiltration and evapo-transpiration, infiltration is expected.

***Block H—***Overland runoff at the site may be a significant contaminant transport mechanism if contaminated soils become exposed, due to the topography of the site and asphalt paving.

#### 3.2.1.3 Fate and Transport of Primary Site COPC in Soil

Brief overviews of the fate and transport of metals, PAHs, and PCBs in soil follow:

***Metals—***The fate and transport of inorganics (metals) are controlled mainly by the mobility of soil particles and their dissolution into water present in the immediate environment. Metals do not undergo the sort of degradation reactions that most organic chemicals do; therefore, they are considered persistent. The major fate mechanisms for metals are adsorption to the soil matrix and bioaccumulation.

The mobility of metals is influenced primarily by their physical and chemical properties, in combination with the physical and chemical characteristics of the soil matrix. Factors that help predict the mobility of inorganic species are the soil/pore water pH (a measure of hydrogen ion concentration), soil/pore-water Eh (redox potential relative to the Standard Hydrogen Electrode), and cation-exchange capacity. The mobility of metals generally increases with decreasing soil pH and cation-exchange capacity.

***PAHs*** are fairly immobile chemicals in the environment. PAHs are large molecules with low solubilities, vapor pressures, and Henry's Law constants, and have high partitioning coefficients. PAHs in soil are much more likely to bind to soil and be transported via mass-transport mechanisms than through dissolution. These compounds, when found in the surface soil, generally do not migrate vertically to a great extent. Instead, they are more likely to adhere to soil particles and be removed from the site via surface water runoff and erosional processes, especially in the absence of pavement or if erosion controls are absent or not functioning properly.

***PCBs*** are considered very persistent organic chemicals with a great affinity for particulates and organic matter (i.e., soil). However, PCBs may be mobilized via particulate transport due to erosion of contaminated surface soil. Site surfaces are mostly covered with impermeable materials where PCBs are located, so PCBs are likely not currently mobilized via particulate transport because they will not be exposed to surface water runoff.

#### 3.2.1.4 Potential Current and Future Receptors of Concern and Exposure Pathways

Current land use in the MRC area is commercial/industrial and expected to remain so for the foreseeable future. However, a small portion of Block D, the Block D panhandle area, may be considered for donation to the community. Potential land use scenarios for the donated Block D panhandle area could include recreational land use. Note that this HHRA evaluated the entire Block D area as a whole. The area surrounding the MRC consists of suburban developments, industrial/commercial developments, and woodlands. Groundwater is not currently used as a source of potable or industrial water at the site, and such use is not anticipated. This HHRA considers receptor exposure under non-residential (e.g., industrial, recreational) land use scenarios. Although the site is unlikely to be used for residential purposes, residential land uses are also evaluated.

Current and/or potential/hypothetical future land uses suggest the following potential receptors could be exposed to impacted environmental media at the MRC:

- *Construction workers*—Construction workers are plausible on-site adult receptors under current and future land uses. Construction workers could be exposed to chemicals in surface and subsurface soils (0–2 feet below grade and 2–10 feet below grade, respectively) through incidental ingestion and dermal contact, and through inhalation of airborne contaminants emanating from soil. Groundwater in the study area is within approximately

10 feet of the ground surface. Direct contact with the deeper (saturated-zone) soils is assumed limited and, thus, direct contact with soils deeper than approximately 10 feet bgs will not be evaluated quantitatively. Such soils (i.e., the saturated-zone soils) will be evaluated qualitatively in the uncertainty analysis.

- *Industrial workers*—Industrial workers are plausible on-site adult receptors under current and future land uses. These receptors could be directly exposed to chemicals in surface soils (0–2 feet below grade) through incidental ingestion, dermal contact, and inhalation of airborne particulates and vapors emitted from the soil. Industrial-worker exposure to subsurface soil (2–10 feet below grade) is unlikely. Exposure to subsurface soil via incidental ingestion, dermal contact, and inhalation will, however, be evaluated for this receptor to aid in risk management decisions because future construction could potentially bring subsurface soils to the surface. This receptor is expected to be exposed to soils equally as often (but less intensely) than the construction worker.

- *Commercial land use receptors*—Commercial land use receptors (adults, adolescents, small children) include members of the general public, workers, and other expected users working at or patronizing a commercial facility. Commercial facilities include shopping centers, retail businesses, vehicle service stations, medical offices, hotels, office space, religious institutions, and restaurants. Such receptors may be exposed to possibly impacted surface soils (0-2 feet below grade) through incidental ingestion, dermal contact, and inhalation of chemicals emitted from soil to the air. To aid in future risk management decisions, we assumed that these receptors could also be exposed to contaminants in subsurface soil (2-10 feet below grade) because future construction could redistribute subsurface soil to the surface.

- *Child, adolescent, and adult recreational users*—Recreational users are potential receptors of study area contaminants. A recreational user may be exposed to possibly impacted surface soils (0–2 feet below grade) through incidental ingestion, dermal contact, and inhalation of chemicals emitted from soil to the air. To aid in future risk management decisions, recreational users were evaluated for risks to subsurface soil (2-10 feet below grade) because future construction could redistribute subsurface soil to the surface.

- *Future child, adolescent, and adult residents*—The hypothetical future residential scenario is typically evaluated in a risk assessment to facilitate risk management decisions. We assume that a hypothetical resident may be exposed to chemicals in surface soils (0–2 feet below grade) through ingestion, dermal contact, and inhalation of chemicals emitted from soil to air. To aid in risk management decisions, hypothetical residents will also be evaluated for risks posed by exposure to subsurface soil (2–10 feet below grade), since future construction could potentially redistribute subsurface soil to the surface.

### 3.2.2 Central-Tendency Exposure versus Reasonable Maximum Exposure

Traditionally, exposures evaluated in an HHRA were based on the concept of a reasonable maximum exposure (RME), defined as “the maximum exposure that is reasonably expected to occur at a site” (USEPA, 1989). Subsequent risk assessment guidance (USEPA, 1992) stipulates

the need address an average case or central-tendency exposure (CTE). However, in this HHRA, only the RME scenario was evaluated because the RME scenario is designed to estimate the reasonable maximum exposure likely to occur, is more conservative than the CTE scenario, and is typically the basis of risk management decision-making.

### 3.2.3 Exposure-Point Concentrations

EPC, calculated for COPC only (both site-related and naturally occurring) are estimates of chemical concentrations in an exposure unit (EU); EPCs are used to estimate exposure intakes. An EU is the area over which receptor activity is expected. The following paragraphs discuss the EUs that will be evaluated in the HHRA, and the guidelines for calculating EPCs.

Each tax block was evaluated as a single EU. However, hypothetical future residential and industrial worker exposures to impacted soils were also evaluated on a location-by-location basis to determine if a tax block has any significant contaminant "hot spots." The additional evaluation for the industrial worker was done because the future land use for the study area is most likely to be commercial/industrial. The additional evaluation for the hypothetical resident was conducted because this is the most sensitive and restrictive receptor (e.g., at some sites, exposure units as small as 0.25 acre have been selected for this receptor). The results of the location-by-location risk assessment are discussed in Section 4. The following guidelines were used to calculate EPCs for COPC concentrations in each tax block (or sub-area of a tax block):

- For soil data sets containing at least five samples, the 95% upper confidence-limit (UCL) on the arithmetic mean, which is based on the distribution of the data set, was selected as the EPC unless the UCL value exceeded the maximum detected concentration. In this case, the maximum detected concentration was used as the EPC. The maximum concentration was also used as the EPC if an insufficient number of detections (i.e., less than four positive detections in a data set) to calculate a 95% UCL were obtained, in accordance with USEPA guidance (USEPA, 2010c). Note that MDE guidance (State of Maryland, 2008) typically requires at least 10 samples to calculate UCLs. EPCs evaluated in the HHRA were based on data sets that included 10 or more samples for all COPC. The only exceptions are for cobalt and vanadium in Block G surface soil, and DRO in Block H subsurface soil. Uncertainty associated with the EPCs used for these parameters is discussed in Section 5.2. EPCs were calculated according to USEPA's *Calculating Upper Confidence-Limits for Exposure-Point Concentrations at Hazardous Waste Sites* (USEPA, 2002b) and using USEPA's *ProUCL* software (USEPA, 2010c).

- The sample quantitation-limit was used as an input for non-detects in USEPA's *ProUCL* software to calculate the 95% UCL in accordance with *ProUCL* guidance (USEPA, 2010c). Duplicates were averaged to calculate the EPC for COPC in soils in the study area.

- Naphthalene was selected as a global COPC for subsurface soil in both the VOC and PAH fractions. EPCs were calculated for naphthalene results included in both fractions. The greater EPC for naphthalene (in either the VOC or PAH fraction) was included in the quantitative risk assessment for each specific block. Uncertainty associated with this method is discussed in the uncertainty analysis.

In accordance with USEPA's *Integrated Exposure Uptake Biokinetic (IEUBK) Model* (USEPA, 1994, 2009b) and their Technical Review Workgroup's (TRW) *Adult Lead Model* (USEPA, 2003b), average lead concentrations were used to estimate blood-lead levels resulting from exposure to lead. This is because the first step in the model calculations is to develop a central estimate of blood-lead concentrations, which requires an "appropriate average concentration" for an individual. Table 3-25 summarizes EPCs used in this HHRA.

Tables 3-1 through 3-10 list the samples used to calculate EPCs, except for some BaPEq constituents results from a few historical samples. Several sampling locations were resampled for BaPEq constituents because historical sampling results had elevated detection limits for these compounds. The uncertainty analysis discusses the samples affected, the methodology for selecting sampling results, and the uncertainty associated with these particular BaPEq sampling results. The *RAGS Part D* tables for the EPCs are in Appendix D.

### 3.2.4 Chemical Intake Estimation

Methodologies and techniques for estimating exposure intakes are presented in this section. Intakes for the potential receptor groups identified were calculated using current MDE and USEPA risk assessment guidance and are presented in the risk assessment spreadsheets (see Appendix D). Exposure assumptions are presented in the *RAGS Part D* Table 4s and in Table 3-26.

Noncarcinogenic intakes are typically estimated using the concept of an average annual exposure. Carcinogenic intakes are calculated as an incremental lifetime-exposure, which assumes a life expectancy of 70 years. The exposure assumptions reflect current MDE guidance (State of Maryland, 2008). Most of the exposure assumptions used to estimate chemical intakes are based on default assumptions described in the MDE (State of Maryland, 2008) guidance

document, the primary guidance used to develop exposure assumptions. Several USEPA guidance documents (e.g., USEPA, 1989, 1991, 1993a, 1997a, 2004a) were also consulted, as necessary. The following paragraphs discuss receptor-specific exposure assumptions used in the risk assessment.

#### 3.2.4.1 Incidental Ingestion of Soil

Direct physical contact with soil in the study area may result in the incidental ingestion of chemicals. Chemical intakes for the incidental ingestion of soil are estimated as follows (USEPA, 1989):

$$\text{Intake} = \frac{(C_s)(IR)(FI)(EF)(ED)(CF)}{(BW)(AT)}$$

where:

| | | |
|---|---|---|
| Intake | = | chemical intake from soil (mg/kg/day) |
| $C_s$ | = | chemical concentration in soil (mg/kg) |
| IR | = | ingestion rate (mg/day) |
| FI | = | fraction ingested from contaminated source (dimensionless) |
| EF | = | exposure frequency (days/yr) |
| ED | = | exposure duration (yr) |
| CF | = | conversion factor ($1\times10^{-6}$ kg/mg) |
| BW | = | body weight (kg) |
| AT | = | averaging time (days)<br>for noncarcinogens, AT = ED×365 days/yr<br>for carcinogens, AT = 70 yr×365 days/yr |

Most of the exposure assumptions used to estimate chemical intakes from incidental ingestion of soil are based on default assumptions described in the MDE guidance. They are summarized in Table 3-26. The following paragraph briefly discusses the receptor-specific exposure assumptions (for incidental ingestion of soil) used in the HHRA.

The exposure frequency assumptions selected consider anticipated receptor activities at the study area. We assume that construction workers assigned to future excavation projects in the study area would be exposed to soil for 250 days a year for one year. We also assume that the site recreational user would be exposed for 250 days/year, and that child/adolescent commercial receptors would be exposed 132 days/year (State of Maryland, 2008).

#### 3.2.4.2 Dermal Contact with Soil

Direct physical contact with soil may result in dermal absorption of chemicals. Exposure associated with dermal contact with soil is estimated as follows (USEPA, 2004a):

$$\text{Intake} = \frac{(C_s)(SA)(AF)(ABS)(CF)(EF)(ED)}{(BW)(AT)}$$

where:

| | | |
|---|---|---|
| Intake | = | amount of chemical absorbed during contact with soil (mg/kg/day) |
| $C_s$ | = | chemical concentration in soil/sediment (mg/kg) |
| SA | = | skin surface area available for contact ($cm^2$) |
| AF | = | skin adherence factor ($mg/cm^2$-event) |
| ABS | = | absorption factor (dimensionless) |
| CF | = | conversion factor ($1\times10^{-6}$ kg/mg) |
| EF | = | exposure frequency (days/year) |
| ED | = | exposure duration (year) |
| BW | = | body weight (kg) |
| AT | = | averaging time (days)<br>for noncarcinogens, AT = ED×365 days/year<br>for carcinogens, AT = 70 years×365 days/year |

Most of the exposure assumptions used to estimate chemical intakes from dermal contact with soil are based on the default assumptions described in the standard MDE guidance. They are summarized in Table 3-26. The following paragraph briefly discusses the receptor-specific exposure assumptions (for dermal contact with soil) used in the HHRA. The same exposure

frequencies and durations recommended for evaluating incidental ingestion of soil are used to estimate chemical intakes for dermal contact with soil.

The exposed skin surfaces of the body available for dermal contact with soils are determined on a receptor-specific basis, since they correspond with assumed human activities and clothing worn during exposure events. All of the skin surface areas presented in Table 3-26 are based on MDE default values, and most of these are also USEPA default values. For adolescent receptors, the skin surface area available for soil contact is set at 4,320 $cm^2$ (based on Maryland guidance; see State of Maryland, 2008).

For chemicals identified as COPC in soil, the chemical specific dermal absorption factors in *RAGS Part E* were used to evaluate the COPC for soil. USEPA Region 3 dermal guidance (USEPA Region 3, 2003a) was consulted if chemical specific absorption factors are not available in *RAGS Part* E. Dermal-absorption factors used in this risk assessment are presented in Table 3-27.

#### 3.2.4.3 Inhalation of Air Containing Fugitive Dust/Volatiles Emitted from Soil

Intakes of both particulates and vapors/gases are calculated using the same equation, as follows (USEPA, 2009a):

$$EC = \frac{(C_{air})(ET)(EF)(ED)}{AT \times 24\ hrs/day}$$

where:

| | | |
|---|---|---|
| EC | = | exposure concentration ($mg/m^3$) |
| $C_{air}$ | = | concentration of chemical in air ($mg/m^3$) |
| ET | = | exposure time (hours/day) |
| EF | = | exposure frequency (days/yr) |
| ED | = | exposure duration (yr) |
| AT | = | averaging time (days)<br>for noncarcinogens, AT = ED×365 days/year<br>for carcinogens, AT = 70 years×365 days/year |

Most of the exposure assumptions used to estimate chemical intakes from inhalation of fugitive dusts/volatile emissions from surface and subsurface soils are based on default assumptions described in the Maryland guidance or the standard USEPA guidance and are summarized in Table 3-26. The same exposure frequencies and durations used to estimate incidental ingestion of soil intakes are used to estimate exposure via inhalation of fugitive dust/volatile emissions for surface and subsurface soils.

The concentrations of chemicals in air resulting from emissions from soil are developed following procedures presented in USEPA *Soil Screening Guidance* (USEPA, 2002a). The chemical concentration in air is calculated from:

$$C_{air} = C_{soil} \times \left[ \frac{1}{PEF} + \frac{1}{VF} \right]$$

where:

$C_{air}$ = chemical concentration in air, mg/$m^3$

$C_s$ = chemical concentration in soil, mg/kg

PEF = particulate emission factor, $m^3$/kg

VF = volatilization factor, $m^3$/kg

The particulate emissions factor (PEF) relates the concentration of the chemical in soil to the concentration of dust particles in air. A PEF value of $3.23 \times 10^{+9}$ $m^3$/kg was obtained from USEPA's soil-screening Web site (http://rais.ornl.gov/epa/ssl1.shtml). This is the default value for Philadelphia, Pennsylvania, which is the closest city to the MRC listed on the web site. A separate PEF is used for the construction scenario because air emissions resulting from fugitive dust emissions at non-construction settings differ from dust emissions generated by construction. The PEF for construction workers ($1.43 \times 10^{+6}$ $m^3$/kg) was calculated using the equations presented in the supplemental SSL guidance document (USEPA, 2002a). Sample calculations showing how the PEFs were calculated are presented in Appendix D.

Ambient air concentrations resulting from the volatilization of COPC from soil are chemical dependent and are calculated using the following equation from USEPA's soil-screening guidance:

$$VF = \frac{Q/C \times (3.14 \times D_a \times T)^{0.5} \times 10^{-4} \ (m^2 / cm^2)}{(2 \times \rho_b \times D_a)}$$

and

$$D_a = \frac{[(\theta_a^{10/3} \times D_i \times H' + \theta_w^{10/3} \times D_w)/n^2]}{\rho_b \times K_d + \theta_w + \theta_a \times H'}$$

where:

VF = volatilization factor ($m^3$-air/kg-soil)

Q/C = inverse of the mean concentration at the center of source ($gm/m^2$-sec per $kg/m^3$)

$D_a$ = apparent diffusivity, chemical specific, ($cm^2$/sec)

T = exposure interval, exposure-specific, (sec)

$\rho_b$ = dry bulk-soil-particle density ($g/cm^3$)

$\theta_a$ = air-filled-soil porosity ($L_{air}/L_{soil}$)

$D_i$ = diffusivity in air, chemical specific, ($cm^2$/sec)

n = total soil porosity ($L_{pore}/L_{soil}$)

$\theta_w$ = water-filled-soil porosity ($L_{air}/L_{soil}$)

$D_w$ = diffusivity in water, chemical specific, ($cm^2$/sec)

$K_d$ = soil-water-partition coefficient, chemical specific

H’ = dimensionless Henry’s Law constant, chemical specific

Chemical properties were obtained from the current USEPA RSL table and are presented in Table 3-28. Input assumptions for the calculation of VF are in Table 3-29.

### 3.2.4.4 Assessing Cancer Risks from Early Life Exposures

USEPA's *Supplemental Guidance for Assessing Susceptibility from Early Life Exposure to Carcinogens* (USEPA, 2005b) recommends adjusting the toxicity of carcinogenic chemicals that act mutagenically when evaluating early life exposures to such contaminants. The guidance recommends using age-dependent adjustment factors (ADAFs) in concert with age-specific exposure estimates when assessing cancer risks. Absent chemical specific data, the supplemental guidance recommends the following default adjustments, which reflect that cancer risks are generally higher from early life exposures than from similar exposures later in life:

- for exposures before two years of age (i.e., spanning a two-year interval from the first day of birth until a child's second birthday), a 10-fold adjustment
- for exposures between age two and less than 16 years of age (i.e., spanning a 14-year time interval from a child's second birthday until their sixteenth birthday), a three-fold adjustment
- for exposures after reaching 16 years of age, no adjustment

These adjustments were applied using the same method as that used by USEPA to develop the RSLs. Children will be evaluated in two age groups: ages 0–2 and 2–6 years old. Adolescents will be evaluated as two age groups: 6–16 and 16–18 years old. Adults (except for the adult commercial receptor, industrial worker, and construction worker) will be evaluated as one age group (18–30 years old). (For the adult commercial and industrial receptors, the MDE default exposure-duration of 25 years was used. A one-year exposure duration was used for the construction worker. No ADAFs are applied to these receptors.) Using this approach, the intakes for child and adolescent commercial receptors; child, adolescent, and adult recreational users; and hypothetical child, adolescent, and adult residents are calculated as follows:

$$\text{Intake}_{\text{Child}} = \text{Intake}_{(\text{ages 0—2 years})} \times 10 + \text{Intake}_{(\text{ages 2—6 years})} \times 3$$

$$\text{Intake}_{\text{Adolescent}} = \text{Intake}_{(\text{age 6—16 years})} \times 3 + \text{Intake}_{(\text{age 16—18 years})} \times 1$$

$$\text{Intake}_{\text{Adult}} = \text{Intake}_{(\text{ages 18—30 years})} \times 1$$

This approach is used only for chemicals identified as mutagenic in the USEPA RSL screening table (e.g., BaPEq constituents, hexavalent chromium).

Risks to receptors involving different age groups are sums of the cancer risks calculated for individual children, adolescents, and adult receptors. Therefore, lifelong cancer risks from chemicals that act via the mutagenic pathway are assessed through the lifelong recreational user, lifelong commercial receptor, and lifelong resident receptor scenarios. Note that "lifelong" cancer risks for commercial receptors were evaluated by summing the child and adolescent receptors only, since the MDE default exposure duration of 25 years was used for the adult commercial receptor, as explained above.

#### 3.2.4.5 Exposure to Lead

The equations and methodology presented in the previous section cannot be used to evaluate exposure to lead because of the absence of published dose-response parameters. Thus, exposure to lead was assessed using the following models:

- the latest version of USEPA's *IEUBK Model for Lead*, (USEPA, 2009b), a model typically used to evaluate lead exposure assuming a residential land use scenario
- USEPA's *TRW Model for Lead* (USEPA, January 2003b; model version date: 06/21/2009), a model typically used to evaluate lead exposure assuming a non-residential land use scenario

The IEUBK model for lead (USEPA, 1994, 2009b) is designed to estimate blood levels of lead in children under seven, based on either default or site-specific input values for air, drinking water, diet, dust, and soil exposure. Studies indicate that infants and young children are extremely susceptible to adverse effects from exposure to lead. Considerable behavioral and developmental impairments have been noted in children with elevated blood lead levels. The threshold for toxic effects from this chemical is believed to be in the range of 10–15 micrograms per deciliter (µg/dL). Blood lead levels greater than 10 µg/dL are considered a "concern."

The IEUBK model for lead is used to address exposure to lead in children when detected soil concentrations exceed the OSWER soil screening level of 400 mg/kg for residential land use (USEPA, 1994). Average chemical concentrations, as well as default parameters for some input parameters, are used in the evaluation. Lead concentrations in soil data sets for each tax block are evaluated qualitatively in Section 4 to determine if using the IEUBK model would be necessary in the HHRA.

Non-residential adult exposures to lead in soil are evaluated using USEPA's TRW model for lead (USEPA, 2003a, 2009c). In this model, adult exposure to lead in soil is addressed by evaluating the relationship between lead concentration in site soil and the blood lead concentration in the developing fetuses of adult women. The adult lead model generates a spreadsheet for each exposure scenario evaluated (i.e., industrial, recreational). The spreadsheet output is the probability that blood lead concentrations in the fetus will exceed 10 µg/dL. That probability is calculated in accordance with the following USEPA guidelines:

- *Use of the TRW Interim Adult Lead Methodology in Risk Assessment* (USEPA, 1999)
- *Frequently Asked Questions (FAQs) on the Adult Lead Model* (USEPA, 2010b)

Lead concentrations in soil data sets for each tax block are evaluated qualitatively in Section 4 to determine if using the adult lead model would be necessary in the HHRA.

No models are currently available to evaluate periodic exposure of adolescent receptors to lead. Therefore, the results of the IEUBK model for children are used to qualitatively assess this receptor's exposure risk. If the evaluation in Section 4 determines that using the IEUBK model for lead is necessary for the study area, a qualitative discussion for adolescent exposures to lead in soil will assert that potential adverse effects from exposure to lead are expected to be of lesser magnitude for adolescent receptors than for young children.

#### 3.2.4.6 Summary of Exposure Parameters

Table 3-26 summarizes exposure input-parameters for all exposure pathways for identified potential receptor groups in the study area. In general, standard default parameters from MDE guidance (State of Maryland, 2008) or USEPA guidance (e.g., USEPA, 1989, 1991, 1997a, 2004a), which combine mid-range and upper-end exposure factors, were used to assess RME conditions. Central-tendency exposure was not assessed in this HHRA.

## 3.3 TOXICITY ASSESSMENT

The toxicity assessment seeks to identify potential adverse health effects in exposed populations. Quantitative estimates of the relationship between the magnitude and type of exposures and the severity or probability of human health effects are defined for the identified constituents of concern (see Tables 3-30 through 3-33). Quantitative toxicity values determined during this

component of the risk assessment are integrated with exposure-assessment outputs to characterize the potential occurrence of adverse health effects for each receptor group.

The reference dose (RfD) is the toxicity value used to evaluate noncarcinogenic health effects for ingestion and dermal exposures. The reference concentration (RfC) is used to evaluate noncarcinogenic health effects for inhalation exposures. The RfD and RfC estimate a daily exposure level for a human population that is unlikely to pose an appreciable risk during a portion or for all of a human lifetime. It is based on a review of animal and/or human toxicity data with adjustments for various data uncertainties. Carcinogenic effects are quantified using the cancer slope-factor (CSF) for ingestion and dermal exposures, and using inhalation-unit risks (IURs) for inhalation exposure that are plausible upper-bound estimates of the probability of developing cancer per unit intake of the chemical over a lifetime. These are typically based on dose-response data from human and/or animal studies.

### 3.3.1 Toxicity Criteria for Oral and Inhalation Exposures

Oral RfDs and CSFs and inhalation RfCs and IURs used in the risk assessment of the study area were obtained from the following primary USEPA sources (USEPA, 2003c):

- ***IRIS*—**USEPA's "Integrated Risk Information System" online database
- ***USEPA's* Provisional Peer Reviewed Toxicity Values *(PPRTVs)*—**USEPA's Office of Research and Development/National Center for Environmental Assessment (NCEA) Superfund Health Risk Technical Support Center develops chemical specific PPRTVs when requested by USEPA's Superfund program
- ***Other toxicity values*—**These sources include, but are not limited to, California Environmental Protection Agency (Cal/EPA) toxicity values, federal Agency for Toxic Substances and Disease Registry (ATSDR) values, and USEPA's *Annual Health Effects Assessment Summary Tables* (HEAST) (USEPA, 1997b)

Although toxicity criteria can be found in several toxicological sources, USEPA's *IRIS* online database is the preferred source of toxicity values. This database is continuously updated and its values are verified by USEPA.

### 3.3.2 Toxicity Criteria for Dermal Exposure

RfDs and CSFs in the scientific literature are typically expressed as "administered" (i.e., not absorbed) doses. Therefore, these values are considered inappropriate for estimating risks

associated with dermal exposures without adjustment to account for incomplete absorption. Oral dose-response parameters based on administered doses must be adjusted to absorbed doses before they can be compared to estimated dermal-exposure intakes.

When oral absorption is essentially complete (i.e., 100%), an absorbed dose is equivalent to the administered dose, so no toxicity adjustment is necessary. Conversely, when the gastrointestinal absorption of a chemical is poor (e.g., 1%), the absorbed dose is smaller than the administered dose; thus, toxicity factors based on absorbed dose should be adjusted to account for the difference in the absorbed dose relative to the administered dose. USEPA (2004a) recommends a 50% absorption cut-off to reflect the intrinsic variability in analyzing absorption studies. Therefore, the adjustment from administered to absorbed dose was only performed when the chemical specific gastrointestinal-absorption efficiency was less than 50%. The adjustment from administered to absorbed dose was made using chemical specific gastrointestinal-absorption efficiencies published in numerous sources of guidance (e.g., USEPA 2004a [the primary reference], *IRIS*, ATSDR toxicological profiles, etc.), using the following equations:

$$RfD_{dermal} = (RfD_{oral})(ABS_{GI})$$

$$CSF_{dermal} = (CSF_{oral}) \ / \ (ABS_{GI})$$

where:

| | | |
|---|---|---|
| $ABS_{GI}$ | = | absorption efficiency in the gastrointestinal tract |
| $RfD_{dermal}$ | = | reference dose for dermal exposures |
| $RfD_{oral}$ | = | reference dose for oral exposures |
| $CSF_{dermal}$ | = | cancer slope-factor for dermal exposures |
| $CSF_{oral}$ | = | cancer slope-factor of oral exposures |

As noted, the preceding adjustment of the oral-toxicity criteria (i.e., reference doses, cancer slope-factors) is necessary so that the dermal route of exposure may be quantitatively evaluated in the baseline risk assessment. Further explanation of this procedure and its necessity are presented in Appendix A of USEPA *RAGS Part A.*

### 3.3.3 Inhalation Toxicity Values for Construction Workers

Under the guidelines established by the Superfund program, exposures to construction workers of one year or less are classified as subchronic exposures. Risks for noncarcinogenic effects associated with subchronic exposures should incorporate toxicity values for subchronic and not chronic effects. Table 3-31 displays the available subchronic RfCs that were used for the construction worker. Uncertainty associated with the lack of subchronic RfCs for many chemicals is discussed in Section 5.3.

### 3.3.4 Chromium Toxicity

Toxicity criteria are available for different forms of chromium, which is considered more toxic in the hexavalent state. In the USEPA's most recent RSL table, hexavalent chromium is listed as a carcinogen that has been determined to act "mutagenically" and the corresponding RSL for residential soil is less than 1 mg/kg. USEPA's *Guidelines for Carcinogen Risk Assessment* (USEPA, 2005a) and *Supplemental Guidance on Assessing Susceptibility from Early Life Exposure to Carcinogens* (USEPA, 2005b) specify the use of ADAFs for carcinogens, such as chromium, that act mutagenically. In contrast, the RSL for residential soil for trivalent chromium (not listed as a carcinogen/mutagen) is 120,000 mg/kg. The following table provides the number of hexavalent chromium and total chromium samples collected for each block:

| Tax block | Medium | Number of hexavalent chromium results | Number of total chromium results |
|---|---|---|---|
| Block D | SS | 15 | 29 |
| | SB | 60 | 90 |
| Block E | SS | 0 | 29 |
| | SB | 0 | 54 |
| Block F | SS | 8 | 32 |
| | SB | 2 | 35 |
| Block G | SS | 0 | 14 |
| | SB | 5 | 24 |
| Block H | SS | 1 | 11 |
| | SB | 5 | 22 |

The table shows that a limited number of environmental samples collected for Tax Blocks E, F, G, and H were analyzed for hexavalent chromium. However, a number of samples from Block D were also analyzed for hexavalent chromium. Hexavalent chromium was selected as a COPC for surface soil and subsurface soil.

The limited number of hexavalent chromium results available for the tax blocks led to risks associated with chromium being assessed under the assumption that 5% of the reported total chromium result in soil can be attributed to hexavalent chromium. This assumption is based on the available analytical results of total and hexavalent chromium concentrations in study area soil. Using 5% of the total chromium concentration as the hexavalent chromium concentration is conservative, since available hexavalent chromium results in the study area soil indicate that hexavalent chromium, when detected, is most often much less than 5% of the total chromium result in soil.

As discussed in the uncertainty section, this overestimates the risks of exposure to chromium, but does not affect overall HHRA conclusions. No chemical-specific ADAFs have been derived for hexavalent chromium; therefore, the following default ADAFs were used: 10 for ages 0–2, 3 for ages 2–16, and 1 (no adjustment) for ages 16–70. These ADAFs were used to evaluate exposures to hexavalent chromium for commercial receptors, recreational users, and hypothetical residents using the approach presented in Section 3.2.4.4.

### 3.3.5 Toxicity of PCBs

The HHRA for PCBs was conducted per the guidance presented in USEPA's *PCBs: Cancer Dose Response Assessment and Application to Environmental Mixtures* (National Center for Environmental Assessment, Office of Research and Development, USEPA, Washington, D.C., EPA/600/P-96/001F, September 1996b). This guidance presents a tiered approach to assessing the risks of PCBs. A range of CSFs for PCBs is presented for use in HHRA according to criteria that consider the environmental media under investigation, the type of exposure, and the anticipated persistence, bioaccumulation potential, and toxicity of PCB homologues/congeners detected in the samples.

### 3.3.6 Toxicity Criteria for the Carcinogenic Effects of PAHs

Limited toxicity values are available to evaluate the potential carcinogenic effects from exposure to PAHs. Benzo(a)pyrene is the most extensively studied PAH and the USEPA has published a cancer slope factor for this PAH in its Integrated Risk Information System (USEPA, 1993b). However, cancer slope factors have not been published in IRIS for other PAH compounds. Alternatively, for a sub-set of related PAH chemicals (benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a)anthracene, indeno(1,2,3-cd)pyrene), USEPA recommends that risk evaluations be conducted using the toxicity-equivalency factors (TEFs) that are used by the Agency to relate the potency of each of these PAHs to that of benzo(a)pyrene (USEPA, 1993b). Specifically, the TEFs are used to convert the individual PAH concentrations into an equivalent concentration of benzo(a)pyrene, referred to as the benzo(a)pyrene equivalent concentration (BaPEq). For example, the TEF currently used by the USEPA to develop the screening levels presented for chrysene in the USEPA Regional Screening Level table is 0.001 (USEPA, 2011, USEPA, 1993). Consequently, if the detected chrysene concentration in a sediment sample is 10,000 µg/kg, the benzo(a)pyrene equivalent concentration is 10 µg/kg. If benzo(a)pyrene and chrysene were the only PAHs detected in a sample and each was detected at 10,000 µg/kg, the associated benzo(a)pyrene equivalent concentration (based on positive detections only) would be 10,010 µg/kg (10,000 µg/kg for benzo(a)pyrene and 10 µg/kg for chrysene). This equivalent concentration, calculated for each sample, is then further evaluated in the risk assessment.

As discussed above, USEPA's *Guidelines for Carcinogen Risk Assessment* (USEPA, 2005a) and *Supplemental Guidance for Assessing Susceptibility from Early Life Exposure to Carcinogens* (USEPA, 2005b) specify the use of ADAFs for carcinogens that act mutagenically. BaPEq constituents are included in the group of chemicals determined to act mutagenically. No chemical specific ADAFs have been derived for BaPEq; therefore, the following default ADAFs were used: 10 for ages 0–2, 3 for ages 2–16, and 1 (no adjustment) for ages 16–70. These ADAFs are used to evaluate exposures to BaPEq for commercial receptors, recreational users, and hypothetical residents using the approach presented in Section 3.2.4.4.

## 3.4 RISK CHARACTERIZATION

This section presents the methodology used to characterize risk. Potential risks (noncarcinogenic and carcinogenic) for human receptors from exposures (as outlined in the exposure assessment) are quantitatively determined in Section 4.

### 3.4.1 Quantitative Analysis of Constituents Other Than Lead

Quantitative estimates of risk for chemicals other than lead are calculated according to risk assessment methods outlined in USEPA guidance (USEPA, 1989). Lifetime cancer risks are expressed in the form of dimensionless probabilities referred to as ILCRs, based on CSFs and IURs. Noncarcinogenic risk estimates are presented in the form of HQs, which are determined by comparing intakes against published RfDs and RfCs. ILCR estimates for ingestion and dermal exposures were generated for each COPC using estimated exposure intakes and published CSFs, as follows:

$$\text{ILCR} = (\text{Estimated Exposure Intake})(\text{CSF})$$

If the equation above produces an ILCR greater than 0.01, the following equation was used:

$$\text{ILCR} = 1\text{-}[\exp(\text{-Estimated Exposure Intake})(\text{CSF})]$$

ILCR estimates of inhalation exposures are generated for each COPC using estimated exposure concentrations and published IURs, as follows:

$$\text{ILCR} = (\text{IUR})(\text{Exposure Concentration})(1000\ \mu\text{g/mg})$$

An ILCR of $1\times10^{-6}$ indicates that the exposed receptor has a one in a million chance of developing cancer under the defined exposure scenario. Alternatively, such a risk may be interpreted as representing one additional case of cancer in an exposed population of one million persons.

Noncarcinogenic risks will be assessed using the concept of HQs and hazard indices (HIs). The HQ for a COPC is the ratio of the estimated intake to the RfD, and is calculated for ingestion and dermal exposures as follows:

$$\text{HQ} = (\text{Estimated Exposure Intake})/(\text{RfD})$$

For inhalation exposures, the HQ is calculated as follows:

$$HQ = (\text{Exposure Concentration})/(\text{RfC})$$

An HI was generated by summing the individual HQs for all COPC. The HI is not a mathematical prediction of the severity of toxic effects and therefore is not a true probabilistic "risk;" it is simply a numerical indicator of the possibility of the occurrence of noncarcinogenic (threshold) effects.

### 3.4.2 Interpretation of Risk Assessment Results

To interpret the quantitative risk estimates and aid risk managers in determining the need for remediation, quantitative risk estimates are compared to typical MDE and USEPA risk benchmarks. Calculated ILCRs are interpreted using the MDE risk benchmark ($1\times10^{-5}$) for cumulative risk and USEPA's target cancer-risk range ($1\times10^{-4}$ to $1\times10^{-6}$); HIs are evaluated using a value of 1.0. Current USEPA policy regarding lead exposures is to limit the childhood risk of exceeding a 10 µg/dL blood lead level to 5%.

USEPA defines the range of $1\times10^{-4}$ to $1\times10^{-6}$ as the ILCR target range for hazardous waste facilities addressed under the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and Resource Conservation and Recovery Act (RCRA). Individual or cumulative ILCRs greater than $1\times10^{-4}$ are generally considered "unacceptable" by USEPA. Risk management decisions are necessary when the ILCR is within $1\times10^{-4}$ to $1\times10^{-6}$. USEPA typically does not require remediation when the cumulative ILCR is less than $1\times10^{-6}$. Similarly, cumulative ILCRs greater than $1\times10^{-5}$ are generally considered "unacceptable" by MDE; remediation may or may not be necessary when the cumulative ILCR exceeds $1\times10^{-5}$.

An HI exceeding unity (1.0) indicates that noncarcinogenic health risks may be associated with exposure. If an HI exceeds unity, target-organ effects associated with exposure to COPC are considered. Only those HQs for chemicals affecting the same target organ(s) or exhibiting similar critical effect(s) are regarded as truly additive. Consequently, the cumulative HI could exceed 1.0, but no adverse health effects would be anticipated unless the COPC affect the same target organ or exhibit the same critical effect (i.e., unless target-organ/critical-effect-specific HIs exceed 1).

As a general guideline, a "no further action" recommendation is forwarded to MDE whenever the cancer risk estimates and total HIs (estimated on a target-organ/target-effect basis) for receptors of concern are less than $1\times10^{-5}$ and 1, respectively, and when risks associated with lead exposure are below the USEPA risk benchmark. Otherwise, in most cases, the need for remedial action (including institutional controls) will be evaluated in a feasibility study (FS). However, the $1\times10^{-5}$ risk benchmark should not be viewed as a discrete limit. Risks slightly greater than $1\times10^{-5}$ may be considered "acceptable" (i.e., protective) if justified by site-specific conditions, including any uncertainties about the nature and extent of contamination and associated risks. Consequently, a "no further action" recommendation may be forwarded to MDE risk managers for review and discussion when the $1\times10^{-5}$ risk benchmark is exceeded. Those reviews and discussions may affect the analyses in the FS. The following factors were considered in making this determination:

- the magnitude of the media-specific risk estimates
- significant uncertainties in the baseline HHRA that would overestimate baseline risk assessment results
- significant uncertainties in EPC estimates that would overestimate baseline risk assessment results

### 3.4.3 Refined Evaluation of Chemical Migration from Soils to Groundwater

COPC for migration from soils to groundwater were selected as detailed in Section 3.1. However, a more refined evaluation of the potential for such migration is included in Section 4 and is based on the following considerations:

- Does the maximum detected soil concentration exceed the groundwater-protection screening criterion at a DAF of 20?
- Does the mean of positive detections in soil exceed the groundwater-protection screening criterion at a DAF of 20?
- What is the frequency of detections exceeding the groundwater-protection screening criterion at a DAF of 20?
- Was the chemical selected as a COPC in groundwater?

- Does the maximum concentration in groundwater exceed the federal Safe Drinking Water Act (SDWA) maximum contaminant level (MCL)?

- What is the frequency of detections in groundwater exceeding the MDE screening level for groundwater or the USEPA RSL for tap water (based on an ILCR of $1\times10^{-6}$ or an HI of 1)?

- What is the frequency of detections in groundwater exceeding 10 times the USEPA RSL for tap water (based on an ILCR of $1\times10^{-6}$ or an HI of 1)?

These factors are considered when selecting COC for groundwater protection. Chemicals selected as COPC for migration from soil to groundwater in the initial screening were not retained as COC if any of the following was true:

- The maximum soil concentration is less than the groundwater-protection criteria based on a DAF of 20.

  ***Rationale*:** As mentioned previously, a DAF of 1 is conservative; a DAF of 20 is assumed more accurate at most sites. Note that the MDE groundwater-protection criteria are based on a DAF of 20 and the USEPA SSLs for groundwater protection are based on a DAF of 1. The USEPA SSLs were adjusted (i.e., multiplied by 20) for this evaluation.

- The frequency of detections greater than the groundwater-protection screening-criterion at a DAF of 20 is less than 5% (when at least 20 samples are included in the data set and no contamination "hot spot" is present). A "hot spot" is defined as a concentration that exceeds twice the screening criterion at a DAF of 20.

  ***Rationale*:** Chemicals are unlikely to pose risks to water quality through leaching from soil to groundwater if they are detected infrequently (i.e., less than 5%) in soil.

- The chemical was not selected as a COPC in groundwater.

  ***Rationale*:** If a chemical was not selected as a COPC in site groundwater, the data do not indicate that water quality has been adversely affected. This is an important consideration, because the contamination events in the study area are presumed to have occurred more than 40 years ago. Thus, given the passage of time, groundwater concentrations likely reflect the potential for chemical migration from soils to groundwater.

- The maximum concentration in groundwater is less than the SDWA MCL.

  ***Rationale*:** SDWA MCLs are federally enforceable drinking-water standards. Concentrations of chemicals in groundwater less than their corresponding SDWA MCLs indicate that groundwater has not been adversely affected.

- The frequency of detections greater than the MDE groundwater screening-level or the USEPA tap water RSL is less than 5% (when at least 20 samples are included in the data

set and no contamination “hot spot” is present). A “hot spot” is defined as a concentration twice the MDE groundwater screening-level or USEPA tap water RSL.

***Rationale*:** Chemicals are unlikely to pose risks to water quality through leaching from soil to groundwater if they are detected infrequently (i.e., less than 5%) in groundwater.

**Table 3-1**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Site-Wide Phase II Investigation Samples (2004)** | | | |
| SB-031 | SB-31A-SS | 0 | 0 |
| SB-032 | SB-32A-SS | 0 | 0 |
| SB-033 | SB-33A-SS | 0 | 0 |
| SB-057 | SB-57-SS | 0 | 0 |
| SB-058 | SB-58-SS | 0 | 0 |
| SB-059 | SB-59-SS | 0 | 0 |
| SB-060 | SB-60-SS | 0 | 0 |
| SB-061 | SB-61-SS | 0 | 0 |
| SB-062 | SB-62-SS | 0 | 0 |
| SB-063 | SB-63-SS | 0 | 0 |
| SB-064 | SB-64-SS | 0 | 0 |
| SB-065 | SB-65-SS | 0 | 0 |
| SB-066 | SB-66-SS | 0 | 0 |
| SB-067 | SB-67-SS | 0 | 0 |
| **Phase II Soil Investigation Samples (Summer 2005)** | | | |
| SB-239 | SB-239-SS[6] | 0.5 | 0.5 |
| SB-239 | SB-239-SS[12] | 1 | 1 |
| SB-239 | SB-239-SS[18] | 1.5 | 1.5 |
| SB-240 | SB-240-SS[6] | 0.5 | 0.5 |
| SB-240 | SB-240-SS[12] | 1 | 1 |
| SB-240 | SB-240-SS[18] | 1.5 | 1.5 |
| SB-241 | SB-241-SS[6] | 0.5 | 0.5 |
| SB-241 | SB-241-SS[12] | 1 | 1 |
| SB-241 | SB-241-SS[18] | 1.5 | 1.5 |
| SB-242 | SB-242-SS[6] | 0.5 | 0.5 |
| SB-242 | SB-242-SS[12] | 1 | 1 |
| SB-242 | SB-242-SS[18] | 1.5 | 1.5 |
| SB-243 | SB-243-SS[6] | 0.5 | 0.5 |
| SB-243 | SB-243-SS[12] | 1 | 1 |
| SB-243 | SB-243-SS[18] | 1.5 | 1.5 |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-057 | F-SB-57RE-1 | 1 | 1 |
| SB-057 | F-SB-57RE-2 | 2 | 2 |
| SB-057 | F-SB-57RE-2-D | 2 | 2 |
| SB-058 | F-SB-58RE-1 | 1 | 1 |
| SB-058 | F-SB-58RE-2 | 2 | 2 |
| SB-058A | F-SB-58REA-2 | 2 | 2 |
| SB-058A | F-SB-58REA-2-D | 2 | 2 |
| SB-058B | F-SB-58REB-2 | 2 | 2 |
| SB-058C | F-SB-58REC-2 | 2 | 2 |
| SB-058D | F-SB-58RED-2 | 2 | 2 |
| SB-060 | D-SB-60RE-1 | 1 | 1 |
| SB-060 | D-SB-60RE-2 | 2 | 2 |
| SB-060A | D-SB-60REA-1 | 1 | 1 |

**Table 3-1**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-060B | D-SB-60REB-1 | 1 | 1 |
| SB-060C | D-SB-60REC-1 | 1 | 1 |
| SB-060D | D-SB-60RED-1 | 1 | 1 |
| SB-061 | D-SB-61RE-1 | 1 | 1 |
| SB-061 | D-SB-61RE-2 | 2 | 2 |
| SB-061 | D-SB-61RE-2-D | 2 | 2 |
| SB-061A | D-SB-61REA-1 | 1 | 1 |
| SB-061B | D-SB-61REB-1 | 1 | 1 |
| SB-061C | D-SB-61REC-1 | 1 | 1 |
| SB-061D | D-SB-61RED-1 | 1 | 1 |
| SB-062 | D-SB-62RE-1 | 1 | 1 |
| SB-062 | D-SB-62RE-2 | 2 | 2 |
| SB-062A | D-SB-62REA-1 | 1 | 1 |
| SB-062B | D-SB-62REB-1 | 1 | 1 |
| SB-062C | D-SB-62REC-1 | 1 | 1 |
| SB-062D | D-SB-62RED-1 | 1 | 1 |
| SB-063 | D-SB-63RE-1 | 1 | 1 |
| SB-063 | D-SB-63RE-2 | 2 | 2 |
| SB-063 | D-SB-63RE-2-D | 2 | 2 |
| SB-063A | D-SB-63REA-2 | 2 | 2 |
| SB-063B | D-SB-63REB-2 | 2 | 2 |
| SB-063C | D-SB-63REC-2 | 2 | 2 |
| SB-063D | D-SB-63RED-2 | 2 | 2 |
| SB-065 | D-SB-65RE-1 | 1 | 1 |
| SB-065 | D-SB-65RE-2 | 2 | 2 |
| SB-066 | D-SB-66RE-1 | 1 | 1 |
| SB-066 | D-SB-66RE-2 | 2 | 2 |
| SB-066A | D-SB-66REA-2 | 2 | 2 |
| SB-066B | D-SB-66REB-2 | 2 | 2 |
| SB-066C | D-SB-66REC-2 | 2 | 2 |
| SB-066D | D-SB-66RED-2 | 2 | 2 |
| SB-239 | D-SB-239RE-2 | 2 | 2 |
| SB-239 | D-SB-239RE-2-D | 2 | 2 |
| SB-240 | D-SB-240RE-1 | 1 | 1 |
| SB-240 | D-SB-240RE-2 | 2 | 2 |
| SB-240A | D-SB-240REA-1 | 1 | 1 |
| SB-240B | D-SB-240REB-1 | 1 | 1 |
| SB-240C | D-SB-240REC-1 | 1 | 1 |
| SB-240D | D-SB-240RED-1 | 1 | 1 |
| SB-243 | D-SB-243RE-1 | 1 | 1 |
| SB-243 | D-SB-243RE-2 | 2 | 2 |
| SB-243A | D-SB-243REA-2 | 2 | 2 |
| SB-243B | D-SB-243REB-2 | 2 | 2 |
| SB-243C | D-SB-243REC-2 | 2 | 2 |
| SB-243D | D-SB-243RED-2 | 2 | 2 |

**Table 3-1**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-592 | D-SB-592-2 | 2 | 2 |
| SB-592A | D-SB-592A-2 | 2 | 2 |
| SB-592B | D-SB-592B-2 | 2 | 2 |
| SB-592D | D-SB-592D-2 | 2 | 2 |
| SB-593 | D-SB-593-2 | 2 | 2 |
| SB-594 | D-SB-594-2 | 2 | 2 |
| SB-595 | D-SB-595-2 | 2 | 2 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-766 | D-SB-766-SS | 0 | 1 |
| SB-767 | D-SS-767-01 | 0 | 1 |
| SB-768 | D-SS-768-01 | 0 | 1 |
| SB-769 | D-SS-769-01 | 0 | 1 |
| SB-770 | D-SS-770-01 | 0 | 1 |
| SB-771 | D-SB-771-SS | 0 | 1 |
| SB-772 | D-SS-772-01 | 0 | 1 |
| SB-773 | D-SS-773-01 | 0 | 1 |
| SB-774 | D-SB-774-SS | 0 | 1 |
| SB-775 | D-SS-775-01 | 0 | 1 |
| SB-776 | D-SS-776-01 | 0 | 1 |
| SB-777 | D-SB-777-SS | 0 | 1 |
| SB-778 | D-SS-778-01 | 0 | 1 |
| SB-779 | D-SS-779-01 | 0 | 1 |
| SB-780 | D-SS-780-01 | 0 | 1 |
| SB-781 | D-SS-781-01 | 0 | 1 |
| SB-782 | D-SS-782-01 | 0 | 1 |
| SB-783 | D-SS-783-01 | 0 | 1 |
| SB-784 | D-SS-784-01 | 0 | 1 |
| SB-785 | D-SS-785-01 | 0 | 1 |
| SB-786 | D-SS-786-01 | 0 | 1 |
| SB-787 | D-SS-787-01 | 0 | 1 |
| SB-788 | D-SB-788-SS | 0 | 1 |
| SB-789 | D-SB-789-SS | 0 | 1 |
| SB-790 | D-SB-790-SS | 0 | 1 |
| SB-791 | D-SB-791-SS | 0 | 1 |
| SB-792 | D-SB-792-SS | 0 | 1 |
| SB-793 | D-SB-793-SS | 0 | 1 |
| SB-794 | D-SB-794-SS | 0 | 1 |
| SB-795 | D-SB-795-SS | 0 | 1 |
| SB-796 | D-SB-796-SS | 0 | 1 |

**Table 3-2**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Site-Wide Phase II Investigation Samples (2004)** | | | |
| SB-001 | SB-1A-SS | 0 | 0 |
| SB-002 | SB-2A-01 | 1 | 1 |
| SB-003 | SB-3A-SS | 0 | 0 |
| SB-004 | SB-4A-SS | 0 | 0 |
| SB-005 | SB-5A-SS | 0 | 0 |
| SB-006 | SB-6A-SS | 0 | 0 |
| SB-035 | SB-35-SS | 0 | 0 |
| SB-036 | SB-36-SS | 0 | 0 |
| SB-041 | SB-41S-SS | 0 | 0 |
| SB-042 | SB-42S-SS | 0 | 0 |
| SB-169 | SB-169-SS | 0 | 0 |
| **Phase II Soil Investigation Samples (Summer 2005)** | | | |
| SB-004 | SB-04B-01 | 1 | 1 |
| SB-232 | SB-232-SS | 0 | 0 |
| SB-232 | SB-232-01 | 1 | 1 |
| SB-233 | SB-233-SS | 0 | 0 |
| SB-233 | SB-233-01 | 1 | 1 |
| SB-234 | SB-234-SS | 0 | 0 |
| SB-234 | SB-234-01 | 1 | 1 |
| SB-235 | SB-235-SS | 0 | 0 |
| SB-235 | SB-235-01 | 1 | 1 |
| **Additional Soil Characterization Samples (Fall 2007)** | | | |
| SB-345 | SB-345-0001 | 0 | 1 |
| SB-346 | SB-346-0001 | 0 | 1 |
| SB-347 | SB-347-0001 | 0 | 1 |
| SB-348 | SB-348-0001 | 0 | 1 |
| SB-349 | SB-349-0001 | 0 | 1 |
| SB-350 | SB-350-0001 | 0 | 1 |
| SB-351 | SB-351-0001 | 0 | 1 |
| SB-352 | SB-352-0001 | 0 | 1 |
| SB-353 | SB-353-0001 | 0 | 1 |
| SB-354 | SB-354-0001 | 0 | 1 |
| SB-355 | SB-355-0001 | 0 | 1 |
| SB-356 | SB-356-0001 | 0 | 1 |
| SB-357 | SB-357-0001 | 0 | 1 |
| SB-358 | SB-358-0001 | 0 | 1 |
| SB-359 | SB-359-0001 | 0 | 1 |
| SB-360 | SB-360-0001 | 0 | 1 |
| SB-361 | SB-361-0001 | 0 | 1 |
| SB-362 | SB-362-0001 | 0 | 1 |
| SB-363 | SB-363-0001 | 0 | 1 |
| SB-364 | SB-364-0001 | 0 | 1 |
| SB-500 | SB-500-0001 | 0 | 1 |
| SB-501 | SB-501-0001 | 0 | 1 |

**Table 3-2**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-502 | SB-502-0001 | 0 | 1 |
| SB-503 | SB-503-0001 | 0 | 1 |
| SB-503 | SB-503-0001-D | 0 | 1 |
| SB-504 | SB-504-0001 | 0 | 1 |
| SB-505 | SB-505-0001 | 0 | 1 |
| SB-506 | SB-506-0001 | 0 | 1 |
| SB-506 | SB-506-0001-D | 0 | 1 |
| SB-507 | SB-507-0001 | 0 | 1 |
| SB-508 | SB-508-0001 | 0 | 1 |
| SB-509 | SB-509-0001 | 0 | 1 |
| SB-510 | SB-510-0001 | 0 | 1 |
| SB-511 | SB-511-0001 | 0 | 1 |
| SB-512 | SB-512-0001 | 0 | 1 |
| SB-513 | SB-513-0001 | 0 | 1 |
| SB-514 | SB-514-0001 | 0 | 1 |
| SB-515 | SB-515-0001 | 0 | 1 |
| SB-516 | SB-516-0001 | 0 | 1 |
| SB-517 | SB-517-0001 | 0 | 1 |
| SB-518 | SB-518-0001 | 0 | 1 |
| SB-519 | SB-519-0001 | 0 | 1 |
| SB-520 | SB-520-0001 | 0 | 1 |
| SB-521 | SB-521-0001 | 0 | 1 |
| SB-522 | SB-522-0001 | 0 | 1 |
| SB-523 | SB-523-0001 | 0 | 1 |
| SB-524 | SB-524-0001 | 0 | 1 |
| SB-525 | SB-525-0001 | 0 | 1 |
| SB-526 | SB-526-0001 | 0 | 1 |
| SB-527 | SB-527-0001 | 0 | 1 |
| SB-528 | SB-528-0001 | 0 | 1 |
| SB-529 | SB-529-0001 | 0 | 1 |
| SB-530 | SB-530-0001 | 0 | 1 |
| SB-531 | SB-531-0001 | 0 | 1 |
| SB-532 | SB-532-0001 | 0 | 1 |
| SB-533 | SB-533-0001 | 0 | 1 |
| SB-534 | SB-534-0001 | 0 | 1 |
| SB-535 | SB-535-0001 | 0 | 1 |
| SB-536 | SB-536-0001 | 0 | 1 |
| SB-537 | SB-537-0001 | 0 | 1 |
| SB-538 | SB-538-0001 | 0 | 1 |
| SB-539 | SB-539-0001 | 0 | 1 |
| SB-540 | SB-540-0001 | 0 | 1 |
| **Supplemental Soil Investigation Samples (Fall 2008)** | | | |
| SB-541 | SB-541-SS0-0.5 | 0 | 0.5 |
| SB-541 | SB-541-SS0.5-1 | 0.5 | 1 |
| SB-541 | SB-541-2 | 2 | 2 |

**Table 3-2**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-541A | SB-541A-SS[SJ] | 0 | 0 |
| SB-541A | SB-541A-SS0-0.5 | 0 | 0.5 |
| SB-541A | SB-541A-SS0.5-1 | 0.5 | 1 |
| SB-542 | SB-542-SS0-0.5 | 0 | 0.5 |
| SB-542 | SB-542-SS0.5-1 | 0.5 | 1 |
| SB-542 | SB-542-2 | 2 | 2 |
| SB-543 | SB-543-SS0-0.5 | 0 | 0.5 |
| SB-543 | SB-543-SS0.5-1 | 0.5 | 1 |
| SB-543 | SB-543-2 | 2 | 2 |
| SB-543A | SB-543A-SS[SJ] | 0 | 0 |
| SB-543A | SB-543A-SS0-0.5 | 0 | 0.5 |
| SB-543A | SB-543A-SS0.5-1 | 0.5 | 1 |
| SB-543A | SB-543A-2 | 2 | 2 |
| SB-544 | SB-544-SS0-0.5 | 0 | 0.5 |
| SB-544 | SB-544-SS0.5-1 | 0.5 | 1 |
| SB-544 | SB-544-2 | 2 | 2 |
| SB-544A | SB-544A-SS[SJ] | 0 | 0 |
| SB-544A | SB-544A-SS0-0.5 | 0 | 0.5 |
| SB-544A | SB-544A-SS0.5-1 | 0.5 | 1 |
| SB-545 | SB-545-SS0-0.5 | 0 | 0.5 |
| SB-545 | SB-545-SS0.5-1 | 0.5 | 1 |
| SB-546 | SB-546-SS0-0.5 | 0 | 0.5 |
| SB-546 | SB-546-SS0-0.5-D | 0 | 0.5 |
| SB-546 | SB-546-SS0.5-1-D | 0.5 | 1 |
| SB-546 | SB-546-SS0.5-1 | 0.5 | 1 |
| SB-546 | SB-546-2 | 2 | 2 |
| SB-546 | SB-546-2-D | 2 | 2 |
| SB-546A | SB-546A-SS[SJ] | 0 | 0 |
| SB-546A | SB-546A-SS0-0.5 | 0 | 0.5 |
| SB-546A | SB-546A-SS0.5-1 | 0.5 | 1 |
| SB-547 | SB-547-SS0-0.5 | 0 | 0.5 |
| SB-547 | SB-547-SS0.5-1 | 0.5 | 1 |
| SB-547 | SB-547-2 | 2 | 2 |
| SB-548 | SB-548-SS0-0.5 | 0 | 0.5 |
| SB-548 | SB-548-SS0-0.5-D | 0 | 0.5 |
| SB-548 | SB-548-SS0.5-1-D | 0.5 | 1 |
| SB-548 | SB-548-SS0.5-1 | 0.5 | 1 |
| SB-548 | SB-548-2 | 2 | 2 |
| SB-548 | SB-548-2-D | 2 | 2 |
| SB-549 | SB-549-SS0-0.5 | 0 | 0.5 |
| SB-549 | SB-549-SS0.5-1 | 0.5 | 1 |
| SB-549 | SB-549-2 | 2 | 2 |
| SB-549 | SB-549-2-D | 2 | 2 |
| SB-550 | SB-550-SS0-0.5 | 0 | 0.5 |
| SB-550 | SB-550-SS0.5-1 | 0.5 | 1 |

**Table 3-2**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-550 | SB-550-2 | 2 | 2 |
| SB-550A | SB-550A-SS[SJ] | 0 | 0 |
| SB-550A | SB-550A-SS0-0.5 | 0 | 0.5 |
| SB-550A | SB-550A-SS0.5-1 | 0.5 | 1 |
| SB-550A | SB-550A-2 | 2 | 2 |
| SB-551 | SB-551-SS0-0.5 | 0 | 0.5 |
| SB-551 | SB-551-SS0.5-1 | 0.5 | 1 |
| SB-551 | SB-551-2 | 2 | 2 |
| SB-552 | SB-552-SS0-0.5 | 0 | 0.5 |
| SB-552 | SB-552-SS0.5-1 | 0.5 | 1 |
| SB-552 | SB-552-2 | 2 | 2 |
| SB-553 | SB-553-SS0.5-1 | 0.5 | 1 |
| SB-553 | SB-553-2 | 2 | 2 |
| SB-554 | SB-554-SS0.5-1 | 0.5 | 1 |
| SB-554 | SB-554-2 | 2 | 2 |
| SB-555 | SB-555-SS0-0.5 | 0 | 0.5 |
| SB-555 | SB-555-SS0.5-1 | 0.5 | 1 |
| SB-555 | SB-555-2 | 2 | 2 |
| SB-556 | SB-556-SS0-0.5 | 0 | 0.5 |
| SB-556 | SB-556-SS0.5-1 | 0.5 | 1 |
| SB-556 | SB-556-2 | 2 | 2 |
| SB-557 | SB-557-SS0-0.5 | 0 | 0.5 |
| SB-557 | SB-557-SS0.5-1 | 0.5 | 1 |
| SB-557 | SB-557-2 | 2 | 2 |
| SB-558 | SB-558-SS0-0.5 | 0 | 0.5 |
| SB-558 | SB-558-SS0.5-1 | 0.5 | 1 |
| SB-558 | SB-558-2 | 2 | 2 |
| SB-559 | SB-559-SS0-0.5 | 0 | 0.5 |
| SB-559 | SB-559-SS0.5-1 | 0.5 | 1 |
| SB-559 | SB-559-2 | 2 | 2 |
| SB-560 | SB-560-SS0-0.5 | 0 | 0.5 |
| SB-560 | SB-560-SS0.5-1 | 0.5 | 1 |
| SB-560 | SB-560-2 | 2 | 2 |
| SB-561 | SB-561-SS0-0.5 | 0 | 0.5 |
| SB-561 | SB-561-SS0.5-1 | 0.5 | 1 |
| SB-561 | SB-561-2 | 2 | 2 |
| SB-562 | SB-562-SS0-0.5 | 0 | 0.5 |
| SB-562 | SB-562-SS0.5-1 | 0.5 | 1 |
| SB-562 | SB-562-2 | 2 | 2 |
| SB-563 | SB-563-SS0-0.5 | 0 | 0.5 |
| SB-563 | SB-563-SS0.5-1 | 0.5 | 1 |
| SB-563 | SB-563-2 | 2 | 2 |
| SB-564 | SB-564-SS0-0.5 | 0 | 0.5 |
| SB-564 | SB-564-SS0.5-1 | 0.5 | 1 |
| SB-564 | SB-564-2 | 2 | 2 |

**Table 3-2**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-565 | SB-565-SS0-0.5 | 0 | 0.5 |
| SB-565 | SB-565-SS0.5-1 | 0.5 | 1 |
| SB-565 | SB-565-2 | 2 | 2 |
| SB-566 | SB-566-SS0-0.5 | 0 | 0.5 |
| SB-566 | SB-566-SS0.5-1 | 0.5 | 1 |
| SB-566 | SB-566-2 | 2 | 2 |
| SB-567 | SB-567-SS0-0.5 | 0 | 0.5 |
| SB-567 | SB-567-SS0.5-1 | 0.5 | 1 |
| SB-567 | SB-567-2 | 2 | 2 |
| SB-568 | SB-568-SS0-0.5 | 0 | 0.5 |
| SB-568 | SB-568-SS0.5-1 | 0.5 | 1 |
| SB-568 | SB-568-2 | 2 | 2 |
| SB-569 | SB-569-SS0-0.5 | 0 | 0.5 |
| SB-569 | SB-569-SS0.5-1 | 0.5 | 1 |
| SB-569 | SB-569-2 | 2 | 2 |
| SB-570 | SB-570-SS0-0.5 | 0 | 0.5 |
| SB-570 | SB-570-SS0.5-1 | 0.5 | 1 |
| SB-570 | SB-570-2 | 2 | 2 |
| SB-571 | SB-571-SS0-0.5 | 0 | 0.5 |
| SB-571 | SB-571-SS0.5-1 | 0.5 | 1 |
| SB-571 | SB-571-2 | 2 | 2 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-818 | E-SB-818-SS | 0 | 1 |
| SB-819 | E-SB-819-SS | 0 | 1 |
| SB-820 | E-SB-820-SS | 0 | 1 |
| SB-821 | E-SB-821-SS | 0 | 1 |
| SB-822 | E-SB-822-SS | 0 | 1 |
| SB-823 | E-SB-823-SS | 0 | 1 |
| SB-824 | E-SB-824-SS | 0 | 1 |
| SB-825 | E-SB-825-SS | 0 | 1 |
| SB-827 | E-SB-827-SS | 0 | 1 |
| SB-828 | E-SB-828-SS | 0 | 1 |
| SB-829 | E-SB-829-SS | 0 | 1 |
| SB-830 | E-SB-830-SS | 0 | 1 |
| SB-831 | E-SB-831-SS | 0 | 1 |
| SB-832 | E-SB-832-SS | 0 | 1 |
| SB-833 | E-SB-833-SS | 0 | 1 |
| SB-833A | E-SB-833A-02 | 2 | 2 |
| SB-833B | E-SB-833B-02 | 2 | 2 |
| SB-833C | E-SB-833C-02 | 2 | 2 |
| SB-833D | E-SB-833D-02 | 2 | 2 |
| SB-833E | E-SB-833E-02 | 2 | 2 |
| SB-833F | E-SB-833F-02 | 2 | 2 |
| SB-833G | E-SB-833G-02 | 2 | 2 |
| SB-833H | E-SB-833H-02 | 2 | 2 |

**Table 3-2**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-833J | E-SB-833J-02 | 2 | 2 |
| SB-833K | E-SB-833K-02 | 2 | 2 |
| SB-833L | E-SB-833L-02 | 2 | 2 |
| SB-833M | E-SB-833M-02 | 2 | 2 |
| SB-833N | E-SB-833N-02 | 2 | 2 |
| SB-834 | E-SB-834-SS | 0 | 1 |
| SB-835 | E-SB-835-SS | 0 | 1 |
| SB-836 | E-SB-836-SS | 0 | 1 |
| SB-837 | E-SB-837-SS | 0 | 1 |
| SB-838 | E-SB-838-SS | 0 | 1 |
| SB-839 | E-SB-839-SS | 0 | 1 |
| SB-840 | E-SB-840-SS | 0 | 1 |
| SB-841 | E-SB-841-SS | 0 | 1 |
| SB-842 | E-SB-842-SS | 0 | 1 |
| SB-843 | E-SB-843-SS | 0 | 1 |
| SB-844 | E-SB-844-SS | 0 | 1 |
| SB-845 | E-SB-845-SS | 0 | 1 |
| SB-846 | E-SB-846-SS | 0 | 1 |
| SB-847 | E-SB-847-SS | 0 | 1 |

**Table 3-3**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Site-Wide Phase II Investigation Samples (2004)** | | | |
| SB-022 | SB-22A-SS | 0 | 1 |
| SB-023 | SB-23A-SS | 0 | 1 |
| SB-024 | SB-24A-SS | 0 | 1 |
| SB-025 | SB-25A-SS | 0 | 1 |
| SB-030 | SB-30A-SS | 0 | 1 |
| SB-050 | SB-50-SS | 0 | 1 |
| SB-055 | SB-55-SS | 0 | 1 |
| SB-056 | SB-56-SS | 0 | 1 |
| SB-093 | SB-93-SS | 0 | 1 |
| SB-094 | SB-94-SS | 0 | 1 |
| SB-095 | SB-95-SS | 0 | 1 |
| SB-096 | SB-96-SS | 0 | 1 |
| **Phase II Soil Investigation Samples (Summer 2005)** | | | |
| SB-236 | SB-236-SS | 0 | 1 |
| SB-236 | SB-236-01 | 1 | 2 |
| SB-237 | SB-237-SS | 0 | 1 |
| SB-237 | SB-237-01 | 1 | 2 |
| SB-238 | SB-238-SS | 0 | 1 |
| SB-238 | SB-238-01 | 1 | 2 |
| SB-250 | SB-250-SS | 0 | 1 |
| SB-250 | SB-250-02 | 1 | 2 |
| SB-251 | SB-251-SS | 0 | 1 |
| SB-251 | SB-251-02 | 1 | 2 |
| SB-252 | SB-252-SS | 0 | 1 |
| SB-252 | SB-252-02 | 1 | 2 |
| SB-253 | SB-253-SS | 0 | 1 |
| SB-253 | SB-253-02 | 1 | 2 |
| SB-265 | SB-265-SS | 0 | 1 |
| SB-265 | SB-265-02 | 1 | 2 |
| SB-266 | SB-266-SS | 0 | 1 |
| SB-266 | SB-266-02 | 1 | 2 |
| SB-267 | SB-267-SS | 0 | 1 |
| SB-267 | SB-267-02 | 1 | 2 |
| SB-268 | SB-268-SS | 0 | 1 |
| SB-268 | SB-268-02 | 1 | 2 |
| SB-269 | SB-269-SS | 0 | 1 |
| SB-269 | SB-269-02 | 1 | 2 |
| SB-270 | SB-270-SS | 0 | 1 |
| SB-270 | SB-270-02 | 1 | 2 |
| **Additional Soil Characterization Samples (Fall 2007)** | | | |
| SB-382 | SB-382-0102 | 1 | 2 |
| SB-383 | SB-383-0102 | 1 | 2 |
| SB-384 | SB-384-0102 | 1 | 2 |

**Table 3-3**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-385 | SB-385-0102 | 1 | 2 |
| SB-386 | SB-386-0102 | 1 | 2 |
| SB-387 | SB-387-0102 | 1 | 2 |
| SB-388 | SB-388-0102 | 1 | 2 |
| SB-389 | SB-389-0102 | 1 | 2 |
| SB-390 | SB-390-0102 | 1 | 2 |
| SB-391 | SB-391-0102 | 1 | 2 |
| SB-392 | SB-392-0102 | 1 | 2 |
| SB-393 | SB-393-0102 | 1 | 2 |
| SB-394 | SB-394-0102 | 1 | 2 |
| SB-395 | SB-395-0102 | 1 | 2 |
| SB-396 | SB-396-0102 | 1 | 2 |
| SB-397 | SB-397-0102 | 1 | 2 |
| SB-398 | SB-398-0102 | 1 | 2 |
| SB-399 | SB-399-0102 | 1 | 2 |
| SB-400 | SB-400-0102 | 1 | 2 |
| SB-401 | SB-401-0102 | 1 | 2 |
| SB-402 | SB-402-0102 | 1 | 2 |
| SB-403 | SB-403-0102 | 1 | 2 |
| SB-404 | SB-404-0102 | 1 | 2 |
| SB-405 | SB-405-0102 | 1 | 2 |
| SB-406 | SB-406-0102 | 1 | 2 |
| SB-407 | SB-407-0102 | 1 | 2 |
| SB-408 | SB-408-0102 | 1 | 2 |
| SB-409 | SB-409-0102 | 1 | 2 |
| SB-489 | SB-489-0102 | 1 | 2 |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-024A | F-SB-24ARE-1 | 1 | 1 |
| SB-024A | F-SB-24ARE-2 | 2 | 2 |
| SB-056 | F-SB-56RE-1 | 1 | 1 |
| SB-056 | F-SB-56RE-2 | 2 | 2 |
| SB-093 | F-SB-93RE-1 | 1 | 1 |
| SB-093 | F-SB-93RE-2 | 2 | 2 |
| SB-094 | F-SB-94RE-1 | 1 | 1 |
| SB-094 | F-SB-94RE-2 | 2 | 2 |
| SB-095 | F-SB-95RE-1 | 1 | 1 |
| SB-095 | F-SB-95RE-2 | 2 | 2 |
| SB-096 | F-SB-96RE-1 | 1 | 1 |
| SB-096 | F-SB-96RE-2 | 2 | 2 |
| SB-624 | F-SB-624-1 | 1 | 1 |
| SB-624 | F-SB-624-2 | 2 | 2 |
| SB-625 | F-SB-625-1 | 1 | 1 |
| SB-625 | F-SB-625-2 | 2 | 2 |
| SB-626 | F-SB-626-1 | 1 | 1 |

**Table 3-3**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-626 | F-SB-626-2 | 2 | 2 |
| SB-626B | F-SB-626B-(1-4) | 1 | 4 |
| SB-626C | F-SB-626C-1 | 1 | 1 |
| SB-626D | F-SB-626D-1 | 1 | 1 |
| SB-627 | F-SB-627-1 | 1 | 1 |
| SB-627 | F-SB-627-2 | 2 | 2 |
| SB-635C | F-SB-635C-1 | 1 | 1 |
| SB-635D | F-SB-635D-1 | 1 | 1 |
| SB-636 | F-SB-636-1 | 1 | 1 |
| SB-636A | F-SB-636A-1 | 1 | 1 |
| SB-636B | F-SB-636B-1 | 1 | 1 |
| SB-636C | F-SB-636C-1 | 1 | 1 |
| SB-636D | F-SB-636D-1 | 1 | 1 |
| SB-637 | F-SB-637-1 | 1 | 1 |
| SB-637B | F-SB-637B-1 | 1 | 1 |
| SB-637C | F-SB-637C-1 | 1 | 1 |
| SB-638 | F-SB-638-1 | 1 | 1 |
| SB-639 | F-SB-639-1 | 1 | 1 |
| SB-640 | F-SB-640-1 | 1 | 1 |
| SB-641 | F-SB-641-1 | 1 | 1 |
| SB-641A | F-SB-641A-1 | 1 | 1 |
| SB-641B | F-SB-641B-1 | 1 | 1 |
| SB-641C | F-SB-641C-1 | 1 | 1 |
| SB-642 | F-SB-642-1 | 1 | 1 |
| SB-642A | F-SB-642A-1 | 1 | 1 |
| SB-642B | F-SB-642B-1 | 1 | 1 |
| SB-642C | F-SB-642C-1 | 1 | 1 |
| SB-643 | F-SB-643-1 | 1 | 1 |
| SB-643B | F-SB-643B-1 | 1 | 1 |
| SB-643C | F-SB-643C-1 | 1 | 1 |
| SB-644 | F-SB-644-1 | 1 | 1 |
| SB-645 | F-SB-645-1 | 1 | 1 |
| SB-645A | F-SB-645A-1 | 1 | 1 |
| SB-645B | F-SB-645B-1 | 1 | 1 |
| SB-645C | F-SB-645C-1 | 1 | 1 |
| SB-646 | F-SB-646-1 | 1 | 1 |
| SB-647 | F-SB-647-1 | 1 | 1 |
| SB-647A | F-SB-647A-1 | 1 | 1 |
| SB-647B | F-SB-647B-1 | 1 | 1 |
| SB-647C | F-SB-647C-1 | 1 | 1 |
| SB-648 | F-SB-648-1 | 1 | 1 |
| SB-649 | F-SB-649-1 | 1 | 1 |
| SB-650 | F-SB-650-1 | 1 | 1 |
| SB-651 | F-SB-651-1 | 1 | 1 |

**Table 3-3**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-652 | F-SB-652-1 | 1 | 1 |
| SB-652A | F-SB-652A-1 | 1 | 1 |
| SB-652B | F-SB-652B-1 | 1 | 1 |
| SB-652C | F-SB-652C-1 | 1 | 1 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-797 | F-SB-797-SS | 1 | 1 |
| SB-798 | F-SB-798-SS | 1 | 1 |
| SB-799 | F-SB-799-SS | 1 | 1 |
| SB-800 | F-SB-800-SS | 1 | 1 |
| SB-801 | F-SB-801-SS | 1 | 1 |
| SB-802 | F-SB-802-SS | 1 | 1 |

**Table 3-4**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Site-Wide Phase II Investigation Samples (2004)** | | | |
| SB-081 | SB-81-SS | 0 | 0 |
| SB-082 | SB-82-SS | 0 | 0 |
| SB-083 | SB-83-SS | 0 | 0 |
| SB-084 | SB-84-SS | 0 | 0 |
| SB-085 | SB-85-SS | 0 | 0 |
| SB-086 | SB-86-SS | 0 | 0 |
| SB-091 | SB-91-SS | 0 | 0 |
| SB-092 | SB-92-SS | 0 | 0 |
| SB-183 | SB-183-SS | 0 | 0 |
| **Phase II Soil Investigation Samples (Summer 2005)** | | | |
| SB-194 | SB-194-SS | 0 | 1 |
| SB-195 | SB-195-SS | 0 | 1 |
| SB-196 | SB-196-SS | 0 | 1 |
| SB-197 | SB-197-SS | 0 | 1 |
| SB-198 | SB-198-SS | 0 | 1 |
| SB-199 | SB-199-SS | 0 | 1 |
| SB-254 | SB-254-SS [6] | 0.5 | 0.5 |
| SB-254 | SB-254-SS [12] | 1 | 1 |
| SB-254 | SB-254-SS [18] | 1.5 | 1.5 |
| SB-255 | SB-255-SS [6] | 0.5 | 0.5 |
| SB-255 | SB-255-SS [12] | 1 | 1 |
| SB-255 | SB-255-SS [18] | 1.5 | 1.5 |
| SB-256 | SB-256-SS [6] | 0.5 | 0.5 |
| SB-256 | SB-256-SS [12] | 1 | 1 |
| SB-256 | SB-256-SS [18] | 1.5 | 1.5 |
| SB-257 | SB-257-SS [6] | 0.5 | 0.5 |
| SB-257 | SB-257-SS [12] | 1 | 1 |
| SB-257 | SB-257-SS [18] | 1.5 | 1.5 |
| SB-258 | SB-258-SS [6] | 0.5 | 0.5 |
| SB-258 | SB-258-SS [12] | 1 | 1 |
| SB-258 | SB-258-SS [18] | 1.5 | 1.5 |
| SB-259 | SB-259-SS [6] | 0.5 | 0.5 |
| SB-259 | SB-259-SS [12] | 1 | 1 |
| SB-259 | SB-259-SS [18] | 1.5 | 1.5 |
| SB-260 | SB-260-SS [6] | 0.5 | 0.5 |
| SB-260 | SB-260-SS [12] | 1 | 1 |
| SB-260 | SB-260-SS [18] | 1.5 | 1.5 |
| SB-261 | SB-261-SS [6] | 0.5 | 0.5 |
| SB-261 | SB-261-SS [12] | 1 | 1 |
| SB-261 | SB-261-SS [18] | 1.5 | 1.5 |
| **Additional Soil CharacterizationSamples (Fall 2007)** | | | |
| SB-410 | SB-410-0102 | 1 | 2 |
| SB-411 | SB-411-0102 | 1 | 2 |
| SB-412 | SB-412-0102 | 1 | 2 |

**Table 3-4**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-413 | SB-413-0102 | 1 | 2 |
| SB-414 | SB-414-0102 | 1 | 2 |
| SB-415 | SB-415-0102 | 1 | 2 |
| SB-416 | SB-416-0102 | 1 | 2 |
| SB-417 | SB-417-0102 | 1 | 2 |
| SB-418 | SB-418-0102 | 1 | 2 |
| SB-419 | SB-419-0102 | 1 | 2 |
| SB-420 | SB-420-0102 | 1 | 2 |
| SB-421 | SB-421-0102 | 1 | 2 |
| SB-422 | SB-422-0102 | 1 | 2 |
| SB-423 | SB-423-0102 | 1 | 2 |
| SB-424 | SB-424-0102 | 1 | 2 |
| SB-425 | SB-425-0102 | 1 | 2 |
| SB-426 | SB-426-0102 | 1 | 2 |
| SB-427 | SB-427-0102 | 1 | 2 |
| SB-428 | SB-428-0102 | 1 | 2 |
| SB-429 | SB-429-0102 | 1 | 2 |
| SB-430 | SB-430-0102 | 1 | 2 |
| SB-431 | SB-431-0102 | 1 | 2 |
| SB-432 | SB-432-0102 | 1 | 2 |
| SB-433 | SB-433-0102 | 1 | 2 |
| SB-434 | SB-434-0102 | 1 | 2 |
| SB-435 | SB-435-0102 | 1 | 2 |
| SB-436 | SB-436-0102 | 1 | 2 |
| SB-437 | SB-437-0102 | 1 | 2 |
| SB-438 | SB-438-0102 | 1 | 2 |
| SB-439 | SB-439-0102 | 1 | 2 |
| SB-440 | SB-440-0102 | 1 | 2 |
| SB-441 | SB-441-0102 | 1 | 2 |
| SB-442 | SB-442-0102 | 1 | 2 |
| SB-443 | SB-443-0102 | 1 | 2 |
| SB-444 | SB-444-0102 | 1 | 2 |
| SB-445 | SB-445-0102 | 1 | 2 |
| SB-446 | SB-446-0102 | 1 | 2 |
| SB-447 | SB-447-0102 | 1 | 2 |
| SB-448 | SB-448-0102 | 1 | 2 |
| SB-449 | SB-449-0102 | 1 | 2 |
| SB-450 | SB-450-0102 | 1 | 2 |
| SB-451 | SB-451-0102 | 1 | 2 |
| SB-452 | SB-452-0102 | 1 | 2 |
| SB-453 | SB-453-0102 | 1 | 2 |
| SB-454 | SB-454-0102 | 1 | 2 |
| SB-455 | SB-455-0102 | 1 | 2 |
| SB-456 | SB-456-0102 | 1 | 2 |
| SB-457 | SB-457-0000 | 0 | 0 |

**Table 3-4**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-457 | SB-457-0102 | 1 | 2 |
| SB-458 | SB-458-0000 | 0 | 0 |
| SB-458 | SB-458-0102 | 1 | 2 |
| SB-459 | SB-459-0000 | 0 | 0 |
| SB-459 | SB-459-0102 | 1 | 2 |
| SB-460 | SB-460-0000 | 0 | 0 |
| SB-460 | SB-460-0102 | 1 | 2 |
| SB-461 | SB-461-0000 | 0 | 0 |
| SB-461 | SB-461-0102 | 1 | 2 |
| SB-494 | SB-494-0000 | 0 | 0 |
| SB-494 | SB-494-0102 | 1 | 2 |
| SB-495 | SB-495-0000 | 0 | 0 |
| SB-495 | SB-495-0102 | 1 | 2 |
| SB-496 | SB-496-0000 | 0 | 0 |
| SB-496 | SB-496-0102 | 1 | 2 |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-091 | G-SB-91RE-1 | 1 | 1 |
| SB-091 | G-SB-91RE-2 | 2 | 2 |
| SB-091A | G-SB-91REA-1 | 1 | 1 |
| SB-091B | G-SB-91REB-1 | 1 | 1 |
| SB-091C | G-SB-91REC-1 | 1 | 1 |
| SB-092 | G-SB-92RE-1 | 1 | 1 |
| SB-092 | G-SB-92RE-2 | 2 | 2 |
| SB-092C | G-SB-92REC-1 | 1 | 1 |
| SB-092D | G-SB-92RED-1 | 1 | 1 |
| SB-092D | G-SB-92RED-1-D | 1 | 1 |
| SB-194 | G-SB-194RE-1 | 1 | 1 |
| SB-194 | G-SB-194RE-2 | 2 | 2 |
| SB-198 | G-SB-198RE-1 | 1 | 1 |
| SB-198 | G-SB-198RE-2 | 2 | 2 |
| SB-254 | G-SB-254RE-1 | 1 | 1 |
| SB-254 | G-SB-254RE-2 | 2 | 2 |
| SB-255 | G-SB-255RE-1 | 1 | 1 |
| SB-255 | G-SB-255RE-2 | 2 | 2 |
| SB-257RE | G-SB-257RE-1 | 1 | 1 |
| SB-257RE | G-SB-257RE-2 | 2 | 2 |
| SB-653 | G-SB-653-1 | 1 | 1 |
| SB-653 | G-SB-653-2 | 2 | 2 |
| SB-653A | G-SB-653A-1 | 1 | 1 |
| SB-653B | G-SB-653B-1 | 1 | 1 |
| SB-653D | G-SB-653D-1 | 1 | 1 |
| SB-654 | G-SB-654-1 | 1 | 1 |
| SB-654 | G-SB-654-2 | 2 | 2 |
| SB-654B | G-SB-654B-1 | 1 | 1 |
| SB-654C | G-SB-654C-1 | 1 | 1 |

**Table 3-4**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-655 | G-SB-655-1 | 1 | 1 |
| SB-655 | G-SB-655-2 | 2 | 2 |
| SB-656 | G-SB-656-1 | 1 | 1 |
| SB-656 | G-SB-656-2 | 2 | 2 |
| SB-656C | G-SB-656C-2 | 2 | 2 |
| SB-656D | G-SB-656D-2 | 2 | 2 |
| SB-657A | G-SB-657A-1 | 1 | 1 |
| SB-657B | G-SB-657B-1 | 1 | 1 |
| SB-657D | G-SB-657D-1 | 1 | 1 |
| SB-658B | G-SB-658B-1 | 1 | 1 |
| SB-658C | G-SB-658C-1 | 1 | 1 |
| SB-659C | G-SB-659C-1 | 1 | 1 |
| SB-659D | G-SB-659D-1 | 1 | 1 |
| SB-662A | G-SB-662A-1 | 1 | 1 |
| SB-662B | G-SB-662B-1 | 1 | 1 |
| SB-662C | G-SB-662C-1 | 1 | 1 |
| SB-669 | G-SB-669-1 | 1 | 1 |
| SB-669 | G-SB-669-2 | 2 | 2 |
| SB-670 | G-SB-670-1 | 1 | 1 |
| SB-670 | G-SB-670-2 | 2 | 2 |
| SB-671 | G-SB-671-1 | 1 | 1 |
| SB-671 | G-SB-671-2 | 2 | 2 |
| SB-671 | G-SB-671-2-D | 2 | 2 |
| SB-671B | G-SB-671B-1 | 1 | 1 |
| SB-671C | G-SB-671C-1 | 1 | 1 |
| SB-671D | G-SB-671D-1 | 1 | 1 |
| SB-672 | G-SB-672-1 | 1 | 1 |
| SB-672 | G-SB-672-2 | 2 | 2 |
| SB-677 | G-SB-677-1 | 1 | 1 |
| SB-677 | G-SB-677-1-D | 1 | 1 |
| SB-677 | G-SB-677-2 | 2 | 2 |
| SB-677A | G-SB-677A-1 | 1 | 1 |
| SB-677B | G-SB-677B-1 | 1 | 1 |
| SB-677D | G-SB-677D-1 | 1 | 1 |
| SB-678 | G-SB-678-1 | 1 | 1 |
| SB-678 | G-SB-678-2 | 2 | 2 |
| SB-678B | G-SB-678B-1 | 1 | 1 |
| SB-678C | G-SB-678C-1 | 1 | 1 |
| SB-679 | G-SB-679-1 | 1 | 1 |
| SB-679 | G-SB-679-2 | 2 | 2 |
| SB-679C | G-SB-679C-1 | 1 | 1 |
| SB-679D | G-SB-679D-1 | 1 | 1 |
| SB-680 | G-SB-680-1 | 1 | 1 |
| SB-680 | G-SB-680-2 | 2 | 2 |
| SB-680D | G-SB-680D-1 | 1 | 1 |

**Table 3-4**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-680D | G-SB-680D-1-D | 1 | 1 |
| SB-693A | G-SB-693A-2 | 2 | 2 |
| SB-693A | G-SB-693B-2 | 2 | 2 |
| SB-693D | G-SB-693D-2 | 2 | 2 |
| SB-734 | G-SB-734-0-4 | 0 | 4 |
| SB-735 | G-SB-735-1 | 1 | 1 |
| SB-735A | G-SB-735A-1 | 1 | 1 |
| SB-735B | G-SB-735B-1 | 1 | 1 |
| SB-735C | G-SB-735C-1 | 1 | 1 |
| SB-736 | G-SB-736-1 | 1 | 1 |
| SB-736B | G-SB-736B-1 | 1 | 1 |
| SB-736C | G-SB-736C-1 | 1 | 1 |
| SB-737 | G-SB-737-1 | 1 | 1 |
| SB-738 | G-SB-738-2 | 2 | 2 |
| SB-738 | G-SB-738-2-D | 2 | 2 |
| SB-739 | G-SB-739-2 | 2 | 2 |
| SB-740 | G-SB-740-2 | 2 | 2 |
| SB-741 | G-SB-741-2 | 2 | 2 |
| SB-742 | G-SB-742-2 | 2 | 2 |
| SB-743 | G-SB-743-2 | 2 | 2 |
| SB-744 | G-SB-744-2 | 2 | 2 |
| SB-745 | G-SB-745-2 | 2 | 2 |
| SB-745A | G-SB-745A-2 | 2 | 2 |
| SB-745B | G-SB-745B-2 | 2 | 2 |
| SB-745C | G-SB-745C-2 | 2 | 2 |
| SB-746 | G-SB-746-2 | 2 | 2 |
| SB-747 | G-SB-747-2 | 2 | 2 |
| SB-747 | G-SB-747-2-D | 2 | 2 |
| SB-748 | G-SB-748-2 | 2 | 2 |
| SB-749 | G-SB-749-2 | 2 | 2 |
| SB-750 | G-SB-750-2 | 2 | 2 |
| SB-751 | G-SB-751-2 | 2 | 2 |
| SB-752 | G-SB-752-2 | 2 | 2 |
| SB-753 | G-SB-753-2 | 2 | 2 |
| SB-754 | G-SB-754-2 | 2 | 2 |
| SB-755 | G-SB-755-2 | 2 | 2 |
| SB-756 | G-SB-756-2 | 2 | 2 |
| SB-757 | G-SB-757-2 | 2 | 2 |
| SB-758 | G-SB-758-2 | 2 | 2 |
| SB-759 | G-SB-759-1 | 1 | 1 |
| SB-760 | G-SB-760-1 | 1 | 1 |
| SB-761 | G-SB-761-1 | 1 | 1 |
| SB-761A | G-SB-761A-1 | 1 | 1 |
| SB-761B | G-SB-761B-1 | 1 | 1 |
| SB-761C | G-SB-761C-1 | 1 | 1 |

**Table 3-4**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-761D | G-SB-761D-1 | 1 | 1 |
| SB-762 | G-SB-762-1 | 1 | 1 |
| SB-762A | G-SB-762A-1 | 1 | 1 |
| SB-762B | G-SB-762B-1 | 1 | 1 |
| SB-762C | G-SB-762C-1 | 1 | 1 |
| SB-762D | G-SB-762D-1 | 1 | 1 |
| SB-763 | G-SB-763-1 | 1 | 1 |
| SB-763A | G-SB-763A-1 | 1 | 1 |
| SB-763B | G-SB-763B-1 | 1 | 1 |
| SB-763C | G-SB-763C-1 | 1 | 1 |
| SB-763D | G-SB-763D-1 | 1 | 1 |
| SB-764 | G-SB-764-1 | 1 | 1 |
| SB-764A | G-SB-764A-1 | 1 | 1 |
| SB-764B | G-SB-764B-1 | 1 | 1 |
| SB-764C | G-SB-764C-1 | 1 | 1 |
| SB-764D | G-SB-764D-1 | 1 | 1 |
| SB-765 | G-SB-765-1 | 1 | 1 |
| SB-765A | G-SB-765A-1 | 1 | 1 |
| SB-765B | G-SB-765B-1 | 1 | 1 |
| SB-765C | G-SB-765C-1 | 1 | 1 |
| SB-765D | G-SB-765D-1 | 1 | 1 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-803 | G-SB-803-SS | 0 | 1 |
| SB-804 | G-SB-804-SS | 0 | 1 |
| SB-805 | G-SB-805-SS | 0 | 1 |
| SB-806 | G-SB-806-SS | 0 | 1 |
| SB-807 | G-SB-807-SS | 0 | 1 |
| SB-808 | G-SB-808-SS | 0 | 1 |
| SB-809 | G-SB-809-SS | 0 | 1 |
| SB-810 | G-SB-810-SS | 0 | 1 |
| SB-811 | G-SB-811-SS | 0 | 1 |
| SB-812 | G-SB-812-SS | 0 | 1 |
| SB-813 | G-SB-813-SS | 0 | 1 |
| **Data Gap Investigation Test Pit Samples (Fall 2010)** | | | |
| G-TP-1 | G-TP-1-3-1-2 | 1 | 2 |
| G-TP-1 | G-TP-1-4-1-2 | 1 | 2 |
| G-TP-2 | G-TP-2-1-1-3 | 1 | 3 |
| G-TP-2 | G-TP-2-2-1-3 | 1 | 3 |
| G-TP-2 | G-TP-2-4-1-3 | 1 | 3 |
| G-TP-2 | G-TP-2-6-1-2 | 1 | 2 |
| G-TP-2 | G-TP-2-7-1-2 | 1 | 2 |

**Table 3-5**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block H**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Phase II Soil Investigation Samples (Summer 2005)** | | | |
| SB-200 | SB-200-SS | 0 | 1 |
| SB-201 | SB-201-SS | 0 | 1 |
| SB-202 | SB-202-SS | 0 | 1 |
| SB-203 | SB-203-SS | 0 | 1 |
| SB-282 | SB-282-0102 | 1 | 2 |
| SB-283 | SB-283-0102 | 1 | 2 |
| SB-284 | SB-284-0102 | 1 | 2 |
| SB-285 | SB-285-0102 | 1 | 2 |
| SB-286 | SB-286-0102 | 1 | 2 |
| SB-293 | SB-293-0102 | 1 | 2 |
| SB-294 | SB-294-0001 | 0 | 1 |
| **Additional Soil Characterization Samples (Fall 2007)** | | | |
| SB-462 | SB-462-0102 | 1 | 2 |
| SB-463 | SB-463-0102 | 1 | 2 |
| SB-464 | SB-464-0102 | 1 | 2 |
| SB-465 | SB-465-0102 | 1 | 2 |
| SB-466 | SB-466-0102 | 1 | 2 |
| SB-467 | SB-467-0102 | 1 | 2 |
| SB-468 | SB-468-0102 | 1 | 2 |
| SB-469 | SB-469-0102 | 1 | 2 |
| SB-470 | SB-470-0102 | 1 | 2 |
| SB-471 | SB-471-0102 | 1 | 2 |
| SB-472 | SB-472-0102 | 1 | 2 |
| SB-473 | SB-473-0102 | 1 | 2 |
| SB-474 | SB-474-0102 | 1 | 2 |
| SB-475 | SB-475-0102 | 1 | 2 |
| SB-476 | SB-476-0102 | 1 | 2 |
| SB-477 | SB-477-0102 | 1 | 2 |
| SB-478 | SB-478-0102 | 1 | 2 |
| SB-479 | SB-479-0102 | 1 | 2 |
| SB-480 | SB-480-0102 | 1 | 2 |
| SB-481 | SB-481-0102 | 1 | 2 |
| SB-482 | SB-482-0102 | 1 | 2 |
| SB-483 | SB-483-0102 | 1 | 2 |
| SB-484 | SB-484-0102 | 1 | 2 |
| SB-485 | SB-485-0102 | 1 | 2 |
| SB-486 | SB-486-0102 | 1 | 2 |
| SB-487 | SB-487-0102 | 1 | 2 |
| SB-488 | SB-488-0102 | 1 | 2 |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-201RE | H-SB-201RE-1 | 1 | 1 |
| SB-201RE | H-SB-201RE-2 | 2 | 2 |
| SB-282 | H-SB-282RE-1 | 1 | 1 |

**Table 3-5**

**Surface Soil (0-2 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block H**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-282 | H-SB-282RE-2 | 2 | 2 |
| SB-282A | H-SB-282REA-1 | 1 | 1 |
| SB-282B | H-SB-282REB-1 | 1 | 1 |
| SB-282C | H-SB-282REC-1 | 1 | 1 |
| SB-282D | H-SB-282RED-1 | 1 | 1 |
| SB-600 | H-SB-600-1 | 1 | 1 |
| SB-600 | H-SB-600-2 | 2 | 2 |
| SB-601 | H-SB-601-1 | 1 | 1 |
| SB-601 | H-SB-601-2 | 2 | 2 |
| SB-602 | H-SB-602-1 | 1 | 1 |
| SB-602 | H-SB-602-2 | 2 | 2 |
| SB-603 | H-SB-603-1 | 1 | 1 |
| SB-603 | H-SB-603-2 | 2 | 2 |
| SB-604A | H-SB-604A-1 | 1 | 1 |
| SB-604B | H-SB-604B-1 | 1 | 1 |
| SB-604D | H-SB-604D-1 | 1 | 1 |
| SB-610B | H-SB-610B-1 | 1 | 1 |
| SB-610C | H-SB-610C-1 | 1 | 1 |
| SB-610D | H-SB-610D-1 | 1 | 1 |
| SB-611A | H-SB-611A-1 | 1 | 1 |
| SB-611D | H-SB-611D-1 | 1 | 1 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-814 | H-SB-814-SS | 1 | 1 |
| SB-815 | H-SB-815-SS | 1 | 1 |
| SB-816 | H-SB-816-SS | 1 | 1 |
| SB-816 | H-SB-816-SS-D | 1 | 1 |
| SB-817 | H-SB-817-SS | 1 | 1 |

**Table 3-6**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Phase II Site Investigation Samples (Fall/Winter 2003)** | | | |
| SB-031 | SB-31-05 | 5 | 5 |
| SB-032 | SB-32-05 | 5 | 5 |
| SB-033 | SB-33-05 | 5 | 5 |
| **Site-Wide Phase II Investigation Samples (2004)** | | | |
| SB-057 | SB-57-05 | 5 | 5 |
| SB-057 | SB-57-10 | 10 | 10 |
| SB-058 | SB-58-05 | 5 | 5 |
| SB-058 | SB-58-10 | 10 | 10 |
| SB-059 | SB-59-05 | 5 | 5 |
| SB-059 | SB-59-10 | 10 | 10 |
| SB-060 | SB-60-05 | 5 | 5 |
| SB-060 | SB-60-10 | 10 | 10 |
| SB-061 | SB-61-05 | 5 | 5 |
| SB-061 | SB-61-10 | 10 | 10 |
| SB-062 | SB-62-05 | 5 | 5 |
| SB-062 | SB-62-10 | 10 | 10 |
| SB-063 | SB-63-05 | 5 | 5 |
| SB-063 | SB-63-10 | 10 | 10 |
| SB-064 | SB-64-05 | 5 | 5 |
| SB-065 | SB-65-05 | 5 | 5 |
| SB-065 | SB-65-10 | 10 | 10 |
| SB-066 | SB-66-05 | 5 | 5 |
| SB-066 | SB-66-10 | 10 | 10 |
| SB-067 | SB-67-05 | 5 | 5 |
| SB-067 | SB-67-10 | 10 | 10 |
| **Phase II Soil Investigation Samples (Summer 2005)** | | | |
| SB-244 | SB-244-05 | 5 | 5 |
| SB-244 | SB-244-10 | 10 | 10 |
| SB-245 | SB-245-05 | 5 | 5 |
| SB-245 | SB-245-10 | 10 | 10 |
| SB-246 | SB-246-05 | 5 | 5 |
| SB-246 | SB-246-10 | 10 | 10 |
| SB-247 | SB-247-05 | 5 | 5 |
| SB-247 | SB-247-10 | 10 | 10 |
| SB-248 | SB-248-05 | 5 | 5 |
| SB-248 | SB-248-10 | 10 | 10 |
| SB-249 | SB-249-05 | 5 | 5 |
| SB-249 | SB-249-10 | 10 | 10 |
| **Additional Soil Characterization Samples (Fall 2007)** | | | |
| SB-318 | SB-318-0203 | 2 | 3 |
| SB-318 | SB-318-0506 | 5 | 6 |
| SB-318 | SB-318-0809 | 8 | 9 |
| SB-319 | SB-319-0203 | 2 | 3 |

**Table 3-6**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-319 | SB-319-0506 | 5 | 6 |
| SB-319 | SB-319-0809 | 8 | 9 |
| SB-320 | SB-320-0203 | 2 | 3 |
| SB-320 | SB-320-0506 | 5 | 6 |
| SB-320 | SB-320-0809 | 8 | 9 |
| SB-321 | SB-321-0203 | 2 | 3 |
| SB-321 | SB-321-0506 | 5 | 6 |
| SB-321 | SB-321-0809 | 8 | 9 |
| SB-322 | SB-322-0203 | 2 | 3 |
| SB-322 | SB-322-0506 | 5 | 6 |
| SB-322 | SB-322-0809 | 8 | 9 |
| SB-323 | SB-323-0203 | 2 | 3 |
| SB-323 | SB-323-0506 | 5 | 6 |
| SB-323 | SB-323-0809 | 8 | 9 |
| SB-324 | SB-324-0203 | 2 | 3 |
| SB-324 | SB-324-0506 | 5 | 6 |
| SB-324 | SB-324-0809 | 8 | 9 |
| SB-325 | SB-325-0203 | 2 | 3 |
| SB-325 | SB-325-0506 | 5 | 6 |
| SB-325 | SB-325-0809 | 8 | 9 |
| SB-326 | SB-326-0203 | 2 | 3 |
| SB-326 | SB-326-0506 | 5 | 6 |
| SB-326 | SB-326-0809 | 8 | 9 |
| SB-327 | SB-327-0203 | 2 | 3 |
| SB-327 | SB-327-0506 | 5 | 6 |
| SB-327 | SB-327-0809 | 8 | 9 |
| SB-328 | SB-328-0203 | 2 | 3 |
| SB-328 | SB-328-0506 | 5 | 6 |
| SB-328 | SB-328-0809 | 8 | 9 |
| SB-329 | SB-329-0203 | 2 | 3 |
| SB-329 | SB-329-0506 | 5 | 6 |
| SB-329 | SB-329-0809 | 8 | 9 |
| SB-330 | SB-330-0203 | 2 | 3 |
| SB-330 | SB-330-0506 | 5 | 6 |
| SB-330 | SB-330-0809 | 8 | 9 |
| SB-331 | SB-331-0203 | 2 | 3 |
| SB-331 | SB-331-0506 | 5 | 6 |
| SB-331 | SB-331-0809 | 8 | 9 |
| SB-332 | SB-332-0203 | 2 | 3 |
| SB-332 | SB-332-0506 | 5 | 6 |
| SB-332 | SB-332-0809 | 8 | 9 |
| SB-333 | SB-333-0203 | 2 | 3 |
| SB-333 | SB-333-0506 | 5 | 6 |
| SB-333 | SB-333-0809 | 8 | 9 |

**Table 3-6**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-334 | SB-334-0203 | 2 | 3 |
| SB-334 | SB-334-0506 | 5 | 6 |
| SB-334 | SB-334-0809 | 8 | 9 |
| SB-335 | SB-335-0203 | 2 | 3 |
| SB-335 | SB-335-0506 | 5 | 6 |
| SB-335 | SB-335-0809 | 8 | 9 |
| SB-336 | SB-336-0203 | 2 | 3 |
| SB-336 | SB-336-0506 | 5 | 6 |
| SB-336 | SB-336-0809 | 8 | 9 |
| SB-337 | SB-337-0203 | 2 | 3 |
| SB-337 | SB-337-0506 | 5 | 6 |
| SB-337 | SB-337-0809 | 8 | 9 |
| SB-338 | SB-338-0203 | 2 | 3 |
| SB-338 | SB-338-0506 | 5 | 6 |
| SB-338 | SB-338-0809 | 8 | 9 |
| SB-339 | SB-339-0203 | 2 | 3 |
| SB-339 | SB-339-0506 | 5 | 6 |
| SB-339 | SB-339-0809 | 8 | 9 |
| SB-340 | SB-340-0203 | 2 | 3 |
| SB-340 | SB-340-0506 | 5 | 6 |
| SB-340 | SB-340-0809 | 8 | 9 |
| SB-341 | SB-341-0203 | 2 | 3 |
| SB-341 | SB-341-0506 | 5 | 6 |
| SB-341 | SB-341-0809 | 8 | 9 |
| SB-342 | SB-342-0203 | 2 | 3 |
| SB-342 | SB-342-0506 | 5 | 6 |
| SB-342 | SB-342-0809 | 8 | 9 |
| SB-343 | SB-343-0203 | 2 | 3 |
| SB-343 | SB-343-0506 | 5 | 6 |
| SB-343 | SB-343-0809 | 8 | 9 |
| SB-344 | SB-344-0203 | 2 | 3 |
| SB-344 | SB-344-0506 | 5 | 6 |
| SB-344 | SB-344-0809 | 8 | 9 |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-057 | F-SB-57RE-3 | 3 | 3 |
| SB-057 | F-SB-57RE-4 | 4 | 4 |
| SB-057 | F-SB-57RE-5 | 5 | 5 |
| SB-057 | F-SB-57RE-6 | 6 | 6 |
| SB-057 | F-SB-57RE-7 | 7 | 7 |
| SB-057 | F-SB-57RE-8 | 8 | 8 |
| SB-057 | F-SB-57RE-9 | 9 | 9 |
| SB-057 | F-SB-57RE-10 | 10 | 10 |
| SB-058 | F-SB-58RE-3 | 3 | 3 |
| SB-058 | F-SB-58RE-4 | 4 | 4 |

**Table 3-6**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-058 | F-SB-58RE-5 | 5 | 5 |
| SB-058 | F-SB-58RE-6 | 6 | 6 |
| SB-058 | F-SB-58RE-7 | 7 | 7 |
| SB-058 | F-SB-58RE-8 | 8 | 8 |
| SB-058 | F-SB-58RE-8-D | 8 | 8 |
| SB-058 | F-SB-58RE-9 | 9 | 9 |
| SB-058 | F-SB-58RE-10 | 10 | 10 |
| SB-058A | F-SB-58REA-4 | 4 | 4 |
| SB-058A | F-SB-58REA-6 | 6 | 6 |
| SB-058A | F-SB-58REA-8 | 8 | 8 |
| SB-058A | F-SB-58REA-10 | 10 | 10 |
| SB-058B | F-SB-58REB-4 | 4 | 4 |
| SB-058B | F-SB-58REB-4-D | 4 | 4 |
| SB-058B | F-SB-58REB-6 | 6 | 6 |
| SB-058B | F-SB-58REB-8 | 8 | 8 |
| SB-058B | F-SB-58REB-10 | 10 | 10 |
| SB-058C | F-SB-58REC-4 | 4 | 4 |
| SB-058C | F-SB-58REC-6 | 6 | 6 |
| SB-058C | F-SB-58REC-8 | 8 | 8 |
| SB-058C | F-SB-58REC-10 | 10 | 10 |
| SB-058D | F-SB-58RED-4 | 4 | 4 |
| SB-058D | F-SB-58RED-6 | 6 | 6 |
| SB-058D | F-SB-58RED-8 | 8 | 8 |
| SB-058D | F-SB-58RED-10 | 10 | 10 |
| SB-060 | D-SB-60RE-3 | 3 | 3 |
| SB-060 | D-SB-60RE-4 | 4 | 4 |
| SB-060 | D-SB-60RE-5 | 5 | 5 |
| SB-060 | D-SB-60RE-6 | 6 | 6 |
| SB-060 | D-SB-60RE-7 | 7 | 7 |
| SB-060 | D-SB-60RE-8 | 8 | 8 |
| SB-060 | D-SB-60RE-8-D | 8 | 8 |
| SB-060 | D-SB-60RE-9 | 9 | 9 |
| SB-060 | D-SB-60RE-10 | 10 | 10 |
| SB-060A | D-SB-60REA-3 | 3 | 3 |
| SB-060A | D-SB-60REA-3-D | 3 | 3 |
| SB-060A | D-SB-60REA-5 | 5 | 5 |
| SB-060A | D-SB-60REA-7 | 7 | 7 |
| SB-060B | D-SB-60REB-3 | 3 | 3 |
| SB-060B | D-SB-60REB-5 | 5 | 5 |
| SB-060B | D-SB-60REB-7 | 7 | 7 |
| SB-060C | D-SB-60REC-3 | 3 | 3 |
| SB-060C | D-SB-60REC-5 | 5 | 5 |
| SB-060C | D-SB-60REC-7 | 7 | 7 |
| SB-060D | D-SB-60RED-3 | 3 | 3 |

**Table 3-6**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-060D | D-SB-60RED-5 | 5 | 5 |
| SB-060D | D-SB-60RED-7 | 7 | 7 |
| SB-060D | D-SB-60RED-7-D | 7 | 7 |
| SB-061 | D-SB-61RE-3 | 3 | 3 |
| SB-061 | D-SB-61RE-4 | 4 | 4 |
| SB-061 | D-SB-61RE-5 | 5 | 5 |
| SB-061 | D-SB-61RE-6 | 6 | 6 |
| SB-061 | D-SB-61RE-7 | 7 | 7 |
| SB-061 | D-SB-61RE-8 | 8 | 8 |
| SB-061 | D-SB-61RE-9 | 9 | 9 |
| SB-061 | D-SB-61RE-10 | 10 | 10 |
| SB-061A | D-SB-61REA-3 | 3 | 3 |
| SB-061A | D-SB-61REA-3-D | 3 | 3 |
| SB-061A | D-SB-61REA-5 | 5 | 5 |
| SB-061A | D-SB-61REA-7 | 7 | 7 |
| SB-061A | D-SB-61REA-9 | 9 | 9 |
| SB-061B | D-SB-61REB-3 | 3 | 3 |
| SB-061B | D-SB-61REB-5 | 5 | 5 |
| SB-061B | D-SB-61REB-7 | 7 | 7 |
| SB-061B | D-SB-61REB-9 | 9 | 9 |
| SB-061C | D-SB-61REC-3 | 3 | 3 |
| SB-061C | D-SB-61REC-5 | 5 | 5 |
| SB-061C | D-SB-61REC-7 | 7 | 7 |
| SB-061C | D-SB-61REC-9 | 9 | 9 |
| SB-061D | D-SB-61RED-3 | 3 | 3 |
| SB-061D | D-SB-61RED-5 | 5 | 5 |
| SB-061D | D-SB-61RED-7 | 7 | 7 |
| SB-061D | D-SB-61RED-9 | 9 | 9 |
| SB-062 | D-SB-62RE-3 | 3 | 3 |
| SB-062 | D-SB-62RE-4 | 4 | 4 |
| SB-062 | D-SB-62RE-5 | 5 | 5 |
| SB-062 | D-SB-62RE-6 | 6 | 6 |
| SB-062 | D-SB-62RE-7 | 7 | 7 |
| SB-062 | D-SB-62RE-8 | 8 | 8 |
| SB-062 | D-SB-62RE-9 | 9 | 9 |
| SB-062 | D-SB-62RE-10 | 10 | 10 |
| SB-062A | D-SB-62REA-3 | 3 | 3 |
| SB-062A | D-SB-62REA-5 | 5 | 5 |
| SB-062A | D-SB-62REA-7 | 7 | 7 |
| SB-062A | D-SB-62REA-9 | 9 | 9 |
| SB-062B | D-SB-62REB-3 | 3 | 3 |
| SB-062B | D-SB-62REB-5 | 5 | 5 |
| SB-062B | D-SB-62REB-7 | 7 | 7 |
| SB-062B | D-SB-62REB-7-D | 7 | 7 |

**Table 3-6**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-062B | D-SB-62REB-9 | 9 | 9 |
| SB-062C | D-SB-62REC-3 | 3 | 3 |
| SB-062C | D-SB-62REC-5 | 5 | 5 |
| SB-062C | D-SB-62REC-7 | 7 | 7 |
| SB-062C | D-SB-62REC-9 | 9 | 9 |
| SB-062D | D-SB-62RED-5 | 5 | 5 |
| SB-062D | D-SB-62RED-7 | 7 | 7 |
| SB-062D | D-SB-62RED-9 | 9 | 9 |
| SB-063 | D-SB-63RE-3 | 3 | 3 |
| SB-063 | D-SB-63RE-4 | 4 | 4 |
| SB-063 | D-SB-63RE-5 | 5 | 5 |
| SB-063 | D-SB-63RE-6 | 6 | 6 |
| SB-063 | D-SB-63RE-7 | 7 | 7 |
| SB-063 | D-SB-63RE-8 | 8 | 8 |
| SB-063 | D-SB-63RE-9 | 9 | 9 |
| SB-063 | D-SB-63RE-10 | 10 | 10 |
| SB-063A | D-SB-63REA-4 | 4 | 4 |
| SB-063A | D-SB-63REA-6 | 6 | 6 |
| SB-063B | D-SB-63REB-4 | 4 | 4 |
| SB-063B | D-SB-63REB-6 | 6 | 6 |
| SB-063C | D-SB-63REC-4 | 4 | 4 |
| SB-063C | D-SB-63REC-6 | 6 | 6 |
| SB-063D | D-SB-63RED-4 | 4 | 4 |
| SB-063D | D-SB-63RED-6 | 6 | 6 |
| SB-065 | D-SB-65RE-3 | 3 | 3 |
| SB-065 | D-SB-65RE-5 | 5 | 5 |
| SB-065 | D-SB-65RE-5-D | 5 | 5 |
| SB-065 | D-SB-65RE-6 | 6 | 6 |
| SB-065 | D-SB-65RE-7 | 7 | 7 |
| SB-065 | D-SB-65RE-8 | 8 | 8 |
| SB-065 | D-SB-65RE-9 | 9 | 9 |
| SB-065 | D-SB-65RE-10 | 10 | 10 |
| SB-066 | D-SB-66RE-3 | 3 | 3 |
| SB-066 | D-SB-66RE-4 | 4 | 4 |
| SB-066 | D-SB-66RE-5 | 5 | 5 |
| SB-066 | D-SB-66RE-6 | 6 | 6 |
| SB-066 | D-SB-66RE-7 | 7 | 7 |
| SB-066 | D-SB-66RE-8 | 8 | 8 |
| SB-066 | D-SB-66RE-8-D | 8 | 8 |
| SB-066A | D-SB-66REA-4 | 4 | 4 |
| SB-066B | D-SB-66REB-4 | 4 | 4 |
| SB-066C | D-SB-66REC-4 | 4 | 4 |
| SB-066D | D-SB-66RED-3 | 3 | 3 |
| SB-066D | D-SB-66RED-4 | 4 | 4 |

**Table 3-6**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-066D | D-SB-66RED-4-D | 4 | 4 |
| SB-239 | D-SB-239RE-3 | 3 | 3 |
| SB-239 | D-SB-239RE-4 | 4 | 4 |
| SB-239 | D-SB-239RE-5 | 5 | 5 |
| SB-239 | D-SB-239RE-6 | 6 | 6 |
| SB-239 | D-SB-239RE-7 | 7 | 7 |
| SB-239 | D-SB-239RE-8 | 8 | 8 |
| SB-239 | D-SB-239RE-9 | 9 | 9 |
| SB-239 | D-SB-239RE-10 | 10 | 10 |
| SB-240 | D-SB-240RE-3 | 3 | 3 |
| SB-240 | D-SB-240RE-4 | 4 | 4 |
| SB-240 | D-SB-240RE-6 | 6 | 6 |
| SB-240 | D-SB-240RE-7 | 7 | 7 |
| SB-240 | D-SB-240RE-8 | 8 | 8 |
| SB-240 | D-SB-240RE-8-D | 8 | 8 |
| SB-240 | D-SB-240RE-10 | 10 | 10 |
| SB-240A | D-SB-240REA-3 | 3 | 3 |
| SB-240A | D-SB-240REA-5 | 5 | 5 |
| SB-240A | D-SB-240REA-7 | 7 | 7 |
| SB-240A | D-SB-240REA-7-D | 7 | 7 |
| SB-240A | D-SB-240REA-9 | 9 | 9 |
| SB-240B | D-SB-240REB-3 | 3 | 3 |
| SB-240B | D-SB-240REB-5 | 5 | 5 |
| SB-240B | D-SB-240REB-7 | 7 | 7 |
| SB-240B | D-SB-240REB-9 | 9 | 9 |
| SB-240C | D-SB-240REC-3 | 3 | 3 |
| SB-240C | D-SB-240REC-3-D | 3 | 3 |
| SB-240C | D-SB-240REC-5 | 5 | 5 |
| SB-240C | D-SB-240REC-7 | 7 | 7 |
| SB-240C | D-SB-240REC-9 | 9 | 9 |
| SB-240D | D-SB-240RED-3 | 3 | 3 |
| SB-240D | D-SB-240RED-5 | 5 | 5 |
| SB-240D | D-SB-240RED-7 | 7 | 7 |
| SB-240D | D-SB-240RED-9 | 9 | 9 |
| SB-243 | D-SB-243RE-3 | 3 | 3 |
| SB-243 | D-SB-243RE-4 | 4 | 4 |
| SB-243 | D-SB-243RE-5 | 5 | 5 |
| SB-243 | D-SB-243RE-6 | 6 | 6 |
| SB-243 | D-SB-243RE-7 | 7 | 7 |
| SB-243 | D-SB-243RE-8 | 8 | 8 |
| SB-243 | D-SB-243RE-8-D | 8 | 8 |
| SB-243 | D-SB-243RE-9 | 9 | 9 |
| SB-243 | D-SB-243RE-10 | 10 | 10 |
| SB-243A | D-SB-243REA-4 | 4 | 4 |

**Table 3-6**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-243B | D-SB-243REB-4 | 4 | 4 |
| SB-243C | D-SB-243REC-4 | 4 | 4 |
| SB-243D | D-SB-243RED-4 | 4 | 4 |
| SB-243D | D-SB-243RED-4-D | 4 | 4 |
| SB-592 | D-SB-592-3 | 3 | 3 |
| SB-592 | D-SB-592-4 | 4 | 4 |
| SB-592 | D-SB-592-5 | 5 | 5 |
| SB-592 | D-SB-592-6 | 6 | 6 |
| SB-592 | D-SB-592-9 | 9 | 9 |
| SB-592 | D-SB-592-10 | 10 | 10 |
| SB-592 | D-SB-592-10-D | 10 | 10 |
| SB-592A | D-SB-592A-4 | 4 | 4 |
| SB-592A | D-SB-592A-6 | 6 | 6 |
| SB-592A | D-SB-592A-8 | 8 | 8 |
| SB-592B | D-SB-592B-4 | 4 | 4 |
| SB-592B | D-SB-592B-6 | 6 | 6 |
| SB-592B | D-SB-592B-6-D | 6 | 6 |
| SB-592B | D-SB-592B-8 | 8 | 8 |
| SB-592D | D-SB-592D-4 | 4 | 4 |
| SB-592D | D-SB-592D-6 | 6 | 6 |
| SB-592D | D-SB-592D-8 | 8 | 8 |
| SB-593 | D-SB-593-3 | 3 | 3 |
| SB-594 | D-SB-594-3 | 3 | 3 |
| SB-595 | D-SB-595-3 | 3 | 3 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-766 | D-SB-766-03 | 3 | 3 |
| SB-766 | D-SB-766-05 | 5 | 5 |
| SB-766 | D-SB-766-07 | 7 | 7 |
| SB-766 | D-SB-766-09 | 9 | 9 |
| SB-767 | D-SB-767-03 | 3 | 3 |
| SB-767 | D-SB-767-05 | 5 | 5 |
| SB-767 | D-SB-767-07 | 7 | 7 |
| SB-767 | D-SB-767-09 | 9 | 9 |
| SB-768 | D-SB-768-03 | 3 | 3 |
| SB-768 | D-SB-768-05 | 5 | 5 |
| SB-768 | D-SB-768-07 | 7 | 7 |
| SB-768 | D-SB-768-09 | 9 | 9 |
| SB-769 | D-SB-769-03 | 3 | 3 |
| SB-769 | D-SB-769-05 | 5 | 5 |
| SB-769 | D-SB-769-07 | 7 | 7 |
| SB-769 | D-SB-769-09 | 9 | 9 |
| SB-770 | D-SB-770-03 | 3 | 3 |
| SB-770 | D-SB-770-05 | 5 | 5 |
| SB-770 | D-SB-770-07 | 7 | 7 |

**Table 3-6**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-770 | D-SB-770-09 | 9 | 9 |
| SB-771 | D-SB-771-03 | 3 | 3 |
| SB-771 | D-SB-771-05 | 5 | 5 |
| SB-771 | D-SB-771-07 | 7 | 7 |
| SB-771 | D-SB-771-09 | 9 | 9 |
| SB-772 | D-SB-772-03 | 3 | 3 |
| SB-772 | D-SB-772-05 | 5 | 5 |
| SB-772 | D-SB-772-07 | 7 | 7 |
| SB-772 | D-SB-772-09 | 9 | 9 |
| SB-773 | D-SB-773-03 | 3 | 3 |
| SB-773 | D-SB-773-05 | 5 | 5 |
| SB-773 | D-SB-773-05-D | 5 | 5 |
| SB-773 | D-SB-773-09 | 9 | 9 |
| SB-774 | D-SB-774-03 | 3 | 3 |
| SB-774 | D-SB-774-05 | 5 | 5 |
| SB-774 | D-SB-774-07 | 7 | 7 |
| SB-774 | D-SB-774-09 | 9 | 9 |
| SB-775 | D-SB-775-03 | 3 | 3 |
| SB-775 | D-SB-775-05 | 5 | 5 |
| SB-775 | D-SB-775-07 | 7 | 7 |
| SB-775 | D-SB-775-09 | 9 | 9 |
| SB-776 | D-SB-776-03 | 3 | 3 |
| SB-776 | D-SB-776-05 | 5 | 5 |
| SB-776 | D-SB-776-07 | 7 | 7 |
| SB-776 | D-SB-776-09 | 9 | 9 |
| SB-776 | D-SB-776-09-D | 9 | 9 |
| SB-777 | D-SB-777-03 | 3 | 3 |
| SB-777 | D-SB-777-05 | 5 | 5 |
| SB-777 | D-SB-777-07 | 7 | 7 |
| SB-777 | D-SB-777-09 | 9 | 9 |
| SB-778 | D-SB-778-03 | 3 | 3 |
| SB-778 | D-SB-778-05 | 5 | 5 |
| SB-778 | D-SB-778-07 | 7 | 7 |
| SB-778 | D-SB-778-09 | 9 | 9 |
| SB-779 | D-SB-779-03 | 3 | 3 |
| SB-779 | D-SB-779-05 | 5 | 5 |
| SB-779 | D-SB-779-07 | 7 | 7 |
| SB-779 | D-SB-779-09 | 9 | 9 |
| SB-780 | D-SB-780-03 | 3 | 3 |
| SB-780 | D-SB-780-05 | 5 | 5 |
| SB-780 | D-SB-780-07 | 7 | 7 |
| SB-780 | D-SB-780-09 | 9 | 9 |
| SB-781 | D-SB-781-03 | 3 | 3 |
| SB-781 | D-SB-781-05 | 5 | 5 |

**Table 3-6**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-781 | D-SB-781-07 | 7 | 7 |
| SB-781 | D-SB-781-09 | 9 | 9 |
| SB-782 | D-SB-782-03 | 3 | 3 |
| SB-782 | D-SB-782-05 | 5 | 5 |
| SB-782 | D-SB-782-07 | 7 | 7 |
| SB-782 | D-SB-782-09 | 9 | 9 |
| SB-783 | D-SB-783-03 | 3 | 3 |
| SB-783 | D-SB-783-05 | 5 | 5 |
| SB-783 | D-SB-783-07 | 7 | 7 |
| SB-783 | D-SB-783-09 | 9 | 9 |
| SB-784 | D-SB-784-03 | 3 | 3 |
| SB-784 | D-SB-784-05 | 5 | 5 |
| SB-784 | D-SB-784-07 | 7 | 7 |
| SB-784 | D-SB-784-09 | 9 | 9 |
| SB-785 | D-SB-785-03 | 3 | 3 |
| SB-785 | D-SB-785-05 | 5 | 5 |
| SB-785 | D-SB-785-07 | 7 | 7 |
| SB-785 | D-SB-785-09 | 9 | 9 |
| SB-786 | D-SB-786-03 | 3 | 3 |
| SB-786 | D-SB-786-05 | 5 | 5 |
| SB-786 | D-SB-786-07 | 7 | 7 |
| SB-786 | D-SB-786-09 | 9 | 9 |
| SB-787 | D-SB-787-03 | 3 | 3 |
| SB-787 | D-SB-787-05 | 5 | 5 |
| SB-787 | D-SB-787-07 | 7 | 7 |
| SB-787 | D-SB-787-09 | 9 | 9 |
| SB-788 | D-SB-788-03 | 3 | 3 |
| SB-788 | D-SB-788-05 | 5 | 5 |
| SB-788 | D-SB-788-07 | 7 | 7 |
| SB-788 | D-SB-788-09 | 9 | 9 |
| SB-789 | D-SB-789-03 | 3 | 3 |
| SB-789 | D-SB-789-05 | 5 | 5 |
| SB-789 | D-SB-789-07 | 7 | 7 |
| SB-789 | D-SB-789-09 | 9 | 9 |
| SB-790 | D-SB-790-03 | 3 | 3 |
| SB-790 | D-SB-790-05 | 5 | 5 |
| SB-790 | D-SB-790-07 | 7 | 7 |
| SB-790 | D-SB-790-09 | 9 | 9 |
| SB-791 | D-SB-791-03 | 3 | 3 |
| SB-791 | D-SB-791-05 | 5 | 5 |
| SB-791 | D-SB-791-07 | 7 | 7 |
| SB-791 | D-SB-791-09 | 9 | 9 |
| SB-792 | D-SB-792-03 | 3 | 3 |
| SB-792 | D-SB-792-05 | 5 | 5 |

**Table 3-6**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-792 | D-SB-792-07 | 7 | 7 |
| SB-792 | D-SB-792-09 | 9 | 9 |
| SB-793 | D-SB-793-03 | 3 | 3 |
| SB-793 | D-SB-793-05 | 5 | 5 |
| SB-793 | D-SB-793-07 | 7 | 7 |
| SB-793 | D-SB-793-09 | 9 | 9 |
| SB-794 | D-SB-794-03 | 3 | 3 |
| SB-794 | D-SB-794-05 | 5 | 5 |
| SB-794 | D-SB-794-07 | 7 | 7 |
| SB-794 | D-SB-794-09 | 9 | 9 |
| SB-795 | D-SB-795-03 | 3 | 3 |
| SB-795 | D-SB-795-05 | 5 | 5 |
| SB-795 | D-SB-795-07 | 7 | 7 |
| SB-795 | D-SB-795-09 | 9 | 9 |
| SB-796 | D-SB-796-03 | 3 | 3 |
| SB-796 | D-SB-796-05 | 5 | 5 |
| SB-796 | D-SB-796-07 | 7 | 7 |
| SB-796 | D-SB-796-09 | 9 | 9 |

**Table 3-7**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Phase II Site Investigation Samples (Fall/Winter 2003)** | | | |
| SB-001 | SB-1-05 | 5 | 5 |
| SB-001 | SB-1-10 | 10 | 10 |
| SB-002 | SB-2-05 | 5 | 5 |
| SB-002 | SB-2-10 | 10 | 10 |
| SB-003 | SB-3-05 | 5 | 5 |
| SB-003 | SB-3-10 | 10 | 10 |
| SB-004 | SB-4-05 | 5 | 5 |
| SB-004 | SB-4-10 | 10 | 10 |
| SB-005 | SB-5-05 | 5 | 5 |
| SB-005 | SB-5-10 | 10 | 10 |
| SB-006 | SB-6-05 | 5 | 5 |
| SB-006 | SB-6-10 | 10 | 10 |
| SB-009 | SB-9-05 | 5 | 5 |
| SB-010 | SB-10-05 | 5 | 5 |
| SB-011 | SB-11-05 | 5 | 5 |
| SB-012 | SB-12-05 | 5 | 5 |
| SB-013 | SB-13-05 | 5 | 5 |
| SB-014 | SB-14-05 | 5 | 5 |
| SB-015 | SB-15-05 | 5 | 5 |
| SB-016 | SB-16-05 | 5 | 5 |
| SB-017 | SB-17-05 | 5 | 5 |
| SB-018 | SB-18-05 | 5 | 5 |
| SB-019 | SB-19-05 | 5 | 5 |
| SB-019 | SB-19-10 | 10 | 10 |
| SB-020 | SB-20-05 | 5 | 5 |
| SB-020 | SB-20-10 | 10 | 10 |
| SB-021 | SB-21-05 | 5 | 5 |
| SB-021 | SB-21-10 | 10 | 10 |
| **Site-Wide Phase II Investigation Samples (2004)** | | | |
| SB-035 | SB-35-04 | 4 | 4 |
| SB-036 | SB-36-05 | 5 | 5 |
| **LMC MRC Groundwater Study Samples (May 2005)** | | | |
| MRC-MW43A | MRC-MW43[0910] | 9 | 10 |
| **Additional Soil Characterization Samples (Fall 2007)** | | | |
| SB-500 | SB-500-0406 | 4 | 6 |
| SB-500 | SB-500-0810 | 8 | 10 |
| SB-501 | SB-501-0406 | 4 | 6 |
| SB-501 | SB-501-0810 | 8 | 10 |
| SB-502 | SB-502-0406 | 4 | 6 |
| SB-502 | SB-502-0810 | 8 | 10 |
| SB-503 | SB-503-0406 | 4 | 6 |
| SB-504 | SB-504-0406 | 4 | 6 |
| SB-504 | SB-504-0810 | 8 | 10 |
| SB-505 | SB-505-0406 | 4 | 6 |
| SB-505 | SB-505-0810 | 8 | 10 |

**Table 3-7**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-506 | SB-506-0406 | 4 | 6 |
| SB-506 | SB-506-0810 | 8 | 10 |
| SB-507 | SB-507-0406 | 4 | 6 |
| SB-507 | SB-507-0810 | 8 | 10 |
| SB-508 | SB-508-0406 | 4 | 6 |
| SB-508 | SB-508-0406-D | 4 | 6 |
| SB-508 | SB-508-0810 | 8 | 10 |
| SB-509 | SB-509-0406 | 4 | 6 |
| SB-509 | SB-509-0810 | 8 | 10 |
| SB-510 | SB-510-0406 | 4 | 6 |
| SB-510 | SB-510-0810 | 8 | 10 |
| SB-510 | SB-510-0810-D | 8 | 10 |
| SB-511 | SB-511-0406 | 4 | 6 |
| SB-511 | SB-511-0810 | 8 | 10 |
| SB-512 | SB-512-0406 | 4 | 6 |
| SB-512 | SB-512-0810 | 8 | 10 |
| SB-512 | SB-512-0810-D | 8 | 10 |
| SB-513 | SB-513-0406 | 4 | 6 |
| SB-513 | SB-513-0810 | 8 | 10 |
| SB-514 | SB-514-0406 | 4 | 6 |
| SB-514 | SB-514-0810 | 8 | 10 |
| SB-514 | SB-514-0810-D | 8 | 10 |
| SB-515 | SB-515-0406 | 4 | 6 |
| SB-515 | SB-515-0810 | 8 | 10 |
| SB-517 | SB-517-0406 | 4 | 6 |
| SB-517 | SB-517-0810 | 8 | 10 |
| SB-518 | SB-518-0406 | 4 | 6 |
| SB-518 | SB-518-0810 | 8 | 10 |
| SB-519 | SB-519-0406 | 4 | 6 |
| SB-519 | SB-519-0810 | 8 | 10 |
| SB-520 | SB-520-0406 | 4 | 6 |
| SB-520 | SB-520-0810 | 8 | 10 |
| **Supplemental Soil Investigation Samples (Fall 2008)** | | | |
| SB-541A | SB-541A-4 | 4 | 4 |
| SB-542 | SB-542-3 | 3 | 3 |
| SB-542 | SB-542-4 | 4 | 4 |
| SB-543A | SB-543A-3 | 3 | 3 |
| SB-543A | SB-543A-4 | 4 | 4 |
| SB-545 | SB-545-4 | 4 | 4 |
| SB-547 | SB-547-3 | 3 | 3 |
| SB-547 | SB-547-4 | 4 | 4 |
| SB-548 | SB-548-3 | 3 | 3 |
| SB-548 | SB-548-4 | 4 | 4 |
| SB-550A | SB-550A-3 | 3 | 3 |
| SB-550A | SB-550A-4 | 4 | 4 |
| SB-554 | SB-554-3 | 3 | 3 |

**Table 3-7**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-554 | SB-554-4 | 4 | 4 |
| SB-555 | SB-555-4 | 4 | 4 |
| SB-555 | SB-555-6 | 6 | 6 |
| SB-555 | SB-555-8 | 8 | 8 |
| SB-555A | SB-555A-10 | 10 | 10 |
| SB-556 | SB-556-4 | 4 | 4 |
| SB-556 | SB-556-6 | 6 | 6 |
| SB-556 | SB-556-8 | 8 | 8 |
| SB-557 | SB-557-4 | 4 | 4 |
| SB-557 | SB-557-6 | 6 | 6 |
| SB-557 | SB-557-8 | 8 | 8 |
| SB-558 | SB-558-4 | 4 | 4 |
| SB-558 | SB-558-6 | 6 | 6 |
| SB-558 | SB-558-8 | 8 | 8 |
| SB-559 | SB-559-4 | 4 | 4 |
| SB-559 | SB-559-6 | 6 | 6 |
| SB-559 | SB-559-8 | 8 | 8 |
| SB-560 | SB-560-4 | 4 | 4 |
| SB-561 | SB-561-4 | 4 | 4 |
| SB-561 | SB-561-6 | 6 | 6 |
| SB-561 | SB-561-8 | 8 | 8 |
| SB-561A | SB-561A-6 | 6 | 6 |
| SB-561A | SB-561A-8 | 8 | 8 |
| SB-562 | SB-562-4 | 4 | 4 |
| SB-562 | SB-562-6 | 6 | 6 |
| SB-562 | SB-562-8 | 8 | 8 |
| SB-563 | SB-563-4 | 4 | 4 |
| SB-563 | SB-563-6 | 6 | 6 |
| SB-563 | SB-563-8 | 8 | 8 |
| SB-564 | SB-564-4 | 4 | 4 |
| SB-565 | SB-565-4 | 4 | 4 |
| SB-566 | SB-566-4 | 4 | 4 |
| SB-566 | SB-566-6 | 6 | 6 |
| SB-566 | SB-566-8 | 8 | 8 |
| SB-567 | SB-567-4 | 4 | 4 |
| SB-568 | SB-568-4 | 4 | 4 |
| SB-568 | SB-568-4-D | 4 | 4 |
| SB-568 | SB-568-6 | 6 | 6 |
| SB-568 | SB-568-8 | 8 | 8 |
| SB-568A | SB-568A-6 | 6 | 6 |
| SB-568A | SB-568A-8 | 8 | 8 |
| SB-568A | SB-568A-10 | 10 | 10 |
| SB-569 | SB-569-4 | 4 | 4 |
| SB-569 | SB-569-6 | 6 | 6 |
| SB-569 | SB-569-8 | 8 | 8 |
| SB-570 | SB-570-4 | 4 | 4 |

**Table 3-7**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-570 | SB-570-6 | 6 | 6 |
| SB-570 | SB-570-8 | 8 | 8 |
| SB-570A | SB-570A-6 | 6 | 6 |
| SB-570A | SB-570A-8 | 8 | 8 |
| SB-570A | SB-570A-10 | 10 | 10 |
| SB-571 | SB-571-4 | 4 | 4 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-818 | E-SB-818-03 | 3 | 3 |
| SB-818 | E-SB-818-05 | 5 | 5 |
| SB-818 | E-SB-818-07 | 7 | 7 |
| SB-818 | E-SB-818-09 | 9 | 9 |
| SB-819 | E-SB-819-03 | 3 | 3 |
| SB-819 | E-SB-819-05 | 5 | 5 |
| SB-819 | E-SB-819-07 | 7 | 7 |
| SB-819 | E-SB-819-07-D | 7 | 7 |
| SB-819 | E-SB-819-09 | 9 | 9 |
| SB-820 | E-SB-820-03 | 3 | 3 |
| SB-820 | E-SB-820-05 | 5 | 5 |
| SB-820 | E-SB-820-07 | 7 | 7 |
| SB-820 | E-SB-820-09 | 9 | 9 |
| SB-821 | E-SB-821-03 | 3 | 3 |
| SB-821 | E-SB-821-05 | 5 | 5 |
| SB-821 | E-SB-821-07 | 7 | 7 |
| SB-821 | E-SB-821-09 | 9 | 9 |
| SB-821 | E-SB-821-09-D | 9 | 9 |
| SB-822 | E-SB-822-03 | 3 | 3 |
| SB-822 | E-SB-822-05 | 5 | 5 |
| SB-822 | E-SB-822-05-D | 5 | 5 |
| SB-822 | E-SB-822-07 | 7 | 7 |
| SB-822 | E-SB-822-09 | 9 | 9 |
| SB-823 | E-SB-823-05 | 5 | 5 |
| SB-823 | E-SB-823-07 | 7 | 7 |
| SB-824 | E-SB-824-03 | 3 | 3 |
| SB-824 | E-SB-824-05 | 5 | 5 |
| SB-824 | E-SB-824-07 | 7 | 7 |
| SB-824 | E-SB-824-07-D | 7 | 7 |
| SB-824 | E-SB-824-09 | 9 | 9 |
| SB-825 | E-SB-825-03 | 3 | 3 |
| SB-825 | E-SB-825-05 | 5 | 5 |
| SB-825 | E-SB-825-07 | 7 | 7 |
| SB-825 | E-SB-825-09 | 9 | 9 |
| SB-826 | E-SB-826-05 | 5 | 5 |
| SB-826 | E-SB-826-07 | 7 | 7 |
| SB-826 | E-SB-826-09 | 9 | 9 |
| SB-826 | E-SB-826-09-D | 9 | 9 |
| SB-827 | E-SB-827-03 | 3 | 3 |

**Table 3-7**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-827 | E-SB-827-05 | 5 | 5 |
| SB-827 | E-SB-827-07 | 7 | 7 |
| SB-827 | E-SB-827-09 | 9 | 9 |
| SB-828 | E-SB-828-03 | 3 | 3 |
| SB-828 | E-SB-828-09 | 9 | 9 |
| SB-829 | E-SB-829-03 | 3 | 3 |
| SB-829 | E-SB-829-05 | 5 | 5 |
| SB-829 | E-SB-829-07 | 7 | 7 |
| SB-829 | E-SB-829-09 | 9 | 9 |
| SB-830 | E-SB-830-03 | 3 | 3 |
| SB-830 | E-SB-830-05 | 5 | 5 |
| SB-830 | E-SB-830-07 | 7 | 7 |
| SB-830 | E-SB-830-09 | 9 | 9 |
| SB-831 | E-SB-831-03 | 3 | 3 |
| SB-831 | E-SB-831-05 | 5 | 5 |
| SB-831 | E-SB-831-07 | 7 | 7 |
| SB-831 | E-SB-831-09 | 9 | 9 |
| SB-832 | E-SB-832-05 | 5 | 5 |
| SB-832 | E-SB-832-07 | 7 | 7 |
| SB-832 | E-SB-832-09 | 9 | 9 |
| SB-833 | E-SB-833-03 | 3 | 3 |
| SB-833 | E-SB-833-05 | 5 | 5 |
| SB-833 | E-SB-833-07 | 7 | 7 |
| SB-833 | E-SB-833-09 | 9 | 9 |
| SB-833A | E-SB-833A-06 | 6 | 6 |
| SB-833A | E-SB-833A-10 | 10 | 10 |
| SB-833B | E-SB-833B-04 | 4 | 4 |
| SB-833B | E-SB-833B-06 | 6 | 6 |
| SB-833B | E-SB-833B-08 | 8 | 8 |
| SB-833B | E-SB-833B-10 | 10 | 10 |
| SB-833C | E-SB-833C-04 | 4 | 4 |
| SB-833C | E-SB-833C-06 | 6 | 6 |
| SB-833C | E-SB-833C-08 | 8 | 8 |
| SB-833C | E-SB-833C-10 | 10 | 10 |
| SB-833D | E-SB-833D-04 | 4 | 4 |
| SB-833D | E-SB-833D-06 | 6 | 6 |
| SB-833D | E-SB-833D-08 | 8 | 8 |
| SB-833D | E-SB-833D-10 | 10 | 10 |
| SB-833E | E-SB-833E-06 | 6 | 6 |
| SB-833E | E-SB-833E-10 | 10 | 10 |
| SB-833F | E-SB-833F-04 | 4 | 4 |
| SB-833F | E-SB-833F-06 | 6 | 6 |
| SB-833F | E-SB-833F-08 | 8 | 8 |
| SB-833F | E-SB-833F-10 | 10 | 10 |
| SB-833G | E-SB-833G-06 | 6 | 6 |
| SB-833G | E-SB-833G-08 | 8 | 8 |

**Table 3-7**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-833G | E-SB-833G-10 | 10 | 10 |
| SB-833H | E-SB-833H-06 | 6 | 6 |
| SB-833H | E-SB-833H-08 | 8 | 8 |
| SB-833H | E-SB-833H-10 | 10 | 10 |
| SB-833I | E-SB-833I-08 | 8 | 8 |
| SB-833I | E-SB-833I-10 | 10 | 10 |
| SB-833J | E-SB-833J-04 | 4 | 4 |
| SB-833J | E-SB-833J-06 | 6 | 6 |
| SB-833J | E-SB-833J-08 | 8 | 8 |
| SB-833J | E-SB-833J-10 | 10 | 10 |
| SB-833K | E-SB-833K-06 | 6 | 6 |
| SB-833K | E-SB-833K-08 | 8 | 8 |
| SB-833K | E-SB-833K-10 | 10 | 10 |
| SB-833L | E-SB-833L-04 | 4 | 4 |
| SB-833L | E-SB-833L-06 | 6 | 6 |
| SB-833L | E-SB-833L-08 | 8 | 8 |
| SB-833M | E-SB-833M-04 | 4 | 4 |
| SB-833M | E-SB-833M-06 | 6 | 6 |
| SB-833M | E-SB-833M-08 | 8 | 8 |
| SB-833M | E-SB-833M-10 | 10 | 10 |
| SB-833N | E-SB-833N-04 | 4 | 4 |
| SB-833N | E-SB-833N-06 | 6 | 6 |
| SB-833N | E-SB-833N-08 | 8 | 8 |
| SB-833N | E-SB-833N-10 | 10 | 10 |
| SB-834 | E-SB-834-05 | 5 | 5 |
| SB-834 | E-SB-834-07 | 7 | 7 |
| SB-834 | E-SB-834-09 | 9 | 9 |
| SB-835 | E-SB-835-03 | 3 | 3 |
| SB-835 | E-SB-835-05 | 5 | 5 |
| SB-835 | E-SB-835-07 | 7 | 7 |
| SB-835 | E-SB-835-09 | 9 | 9 |
| SB-836 | E-SB-836-03 | 3 | 3 |
| SB-836 | E-SB-836-05 | 5 | 5 |
| SB-836 | E-SB-836-07 | 7 | 7 |
| SB-836 | E-SB-836-09 | 9 | 9 |
| SB-837 | E-SB-837-03 | 3 | 3 |
| SB-837 | E-SB-837-05 | 5 | 5 |
| SB-837 | E-SB-837-07 | 7 | 7 |
| SB-837 | E-SB-837-09 | 9 | 9 |
| SB-838 | E-SB-838-3 | 3 | 3 |
| SB-838 | E-SB-838-5 | 5 | 5 |
| SB-838 | E-SB-838-7 | 7 | 7 |
| SB-838 | E-SB-838-9 | 9 | 9 |
| SB-839 | E-SB-839-03 | 3 | 3 |
| SB-839 | E-SB-839-05 | 5 | 5 |
| SB-839 | E-SB-839-07 | 7 | 7 |

**Table 3-7**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-839 | E-SB-839-09 | 9 | 9 |
| SB-840 | E-SB-840-03 | 3 | 3 |
| SB-840 | E-SB-840-05 | 5 | 5 |
| SB-840 | E-SB-840-05-D | 5 | 5 |
| SB-840 | E-SB-840-07 | 7 | 7 |
| SB-840 | E-SB-840-09 | 9 | 9 |
| SB-841 | E-SB-841-03 | 3 | 3 |
| SB-841 | E-SB-841-05 | 5 | 5 |
| SB-841 | E-SB-841-07 | 7 | 7 |
| SB-841 | E-SB-841-09 | 9 | 9 |
| SB-842 | E-SB-842-3 | 3 | 3 |
| SB-842 | E-SB-842-5 | 5 | 5 |
| SB-842 | E-SB-842-7 | 7 | 7 |
| SB-842 | E-SB-842-9 | 9 | 9 |
| SB-843 | E-SB-843-03 | 3 | 3 |
| SB-843 | E-SB-843-05 | 5 | 5 |
| SB-843 | E-SB-843-07 | 7 | 7 |
| SB-843 | E-SB-843-09 | 9 | 9 |
| SB-844 | E-SB-844-03 | 3 | 3 |
| SB-844 | E-SB-844-05 | 5 | 5 |
| SB-844 | E-SB-844-07 | 7 | 7 |
| SB-844 | E-SB-844-09 | 9 | 9 |
| SB-845 | E-SB-845-03 | 3 | 3 |
| SB-845 | E-SB-845-05 | 5 | 5 |
| SB-845 | E-SB-845-07 | 7 | 7 |
| SB-845 | E-SB-845-09 | 9 | 9 |
| SB-846 | E-SB-846-03 | 3 | 3 |
| SB-846 | E-SB-846-05 | 5 | 5 |
| SB-846 | E-SB-846-07 | 7 | 7 |
| SB-846 | E-SB-846-09 | 9 | 9 |
| SB-847 | E-SB-847-03 | 3 | 3 |
| SB-847 | E-SB-847-05 | 5 | 5 |
| SB-847 | E-SB-847-07 | 7 | 7 |
| SB-847 | E-SB-847-09 | 9 | 9 |

**Table 3-8**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Phase II Site Investigation Samples (Fall/Winter 2003)** | | | |
| SB-022 | SB-22-05 | 5 | 5 |
| SB-022 | SB-22-10 | 10 | 10 |
| SB-023 | SB-23-05 | 5 | 5 |
| SB-023 | SB-23-10 | 10 | 10 |
| SB-024 | SB-24-05 | 5 | 5 |
| SB-024 | SB-24-10 | 10 | 10 |
| SB-025 | SB-25-05 | 5 | 5 |
| SB-025 | SB-25-10 | 10 | 10 |
| SB-026 | SB-26-10 | 10 | 10 |
| SB-027 | SB-27-10 | 10 | 10 |
| SB-028 | SB-28-10 | 10 | 10 |
| SB-029 | SB-29-10 | 10 | 10 |
| SB-030 | SB-30-05 | 5 | 5 |
| **Site-Wide Phase II Investigation Samples (2004)** | | | |
| SB-050 | SB-50-05 | 5 | 5 |
| SB-050 | SB-50-10 | 10 | 10 |
| SB-055 | SB-55-05 | 5 | 5 |
| SB-055 | SB-55-10 | 10 | 10 |
| SB-056 | SB-56-05 | 5 | 5 |
| SB-056 | SB-56-10 | 10 | 10 |
| SB-093 | SB-93-05 | 5 | 5 |
| SB-093 | SB-93-10 | 10 | 10 |
| SB-094 | SB-94-05 | 5 | 5 |
| SB-094 | SB-94-10 | 10 | 10 |
| SB-095 | SB-95-05 | 5 | 5 |
| SB-095 | SB-95-10 | 10 | 10 |
| SB-096 | SB-96-05 | 5 | 5 |
| SB-096 | SB-96-10 | 10 | 10 |
| **LMC MRC Groundwater Study Samples (May 2005)** | | | |
| MRC-MW46A | MRC-MW46[0910] | 9 | 10 |
| **Phase II Soil Investigation Samples (Summer 2005)** | | | |
| SB-236 | SB-236-05 | 5 | 5 |
| SB-237 | SB-237-05 | 5 | 5 |
| SB-238 | SB-238-05 | 5 | 5 |
| SB-295 | SB-295-0405 | 4 | 5 |
| SB-295 | SB-295-0910 | 9 | 10 |
| SB-296 | SB-296-0405 | 4 | 5 |
| SB-296 | SB-296-0910 | 9 | 10 |
| SB-297 | SB-297-0405 | 4 | 5 |
| SB-297 | SB-297-0910 | 9 | 10 |
| SB-298 | SB-298-0405 | 4 | 5 |
| SB-298 | SB-298-0910 | 9 | 10 |
| SB-299 | SB-299-0405 | 4 | 5 |

**Table 3-8**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-299 | SB-299-0910 | 9 | 10 |
| **Additional Soil Characterization Samples (Fall 2007)** | | | |
| SB-382 | SB-382-0203 | 2 | 3 |
| SB-382 | SB-382-0405 | 4 | 5 |
| SB-382 | SB-382-0708 | 7 | 8 |
| SB-383 | SB-383-0203 | 2 | 3 |
| SB-383 | SB-383-0405 | 4 | 5 |
| SB-383 | SB-383-0708 | 7 | 8 |
| SB-384 | SB-384-0203 | 2 | 3 |
| SB-384 | SB-384-0405 | 4 | 5 |
| SB-384 | SB-384-0708 | 7 | 8 |
| SB-385 | SB-385-0203 | 2 | 3 |
| SB-385 | SB-385-0405 | 4 | 5 |
| SB-385 | SB-385-0708 | 7 | 8 |
| SB-386 | SB-386-0203 | 2 | 3 |
| SB-386 | SB-386-0405 | 4 | 5 |
| SB-386 | SB-386-0708 | 7 | 8 |
| SB-387 | SB-387-0203 | 2 | 3 |
| SB-387 | SB-387-0405 | 4 | 5 |
| SB-387 | SB-387-0708 | 7 | 8 |
| SB-388 | SB-388-0203 | 2 | 3 |
| SB-388 | SB-388-0405 | 4 | 5 |
| SB-388 | SB-388-0708 | 7 | 8 |
| SB-389 | SB-389-0203 | 2 | 3 |
| SB-389 | SB-389-0405 | 4 | 5 |
| SB-389 | SB-389-0708 | 7 | 8 |
| SB-390 | SB-390-0203 | 2 | 3 |
| SB-390 | SB-390-0405 | 4 | 5 |
| SB-390 | SB-390-0708 | 7 | 8 |
| SB-391 | SB-391-0203 | 2 | 3 |
| SB-391 | SB-391-0405 | 4 | 5 |
| SB-391 | SB-391-0708 | 7 | 8 |
| SB-392 | SB-392-0203 | 2 | 3 |
| SB-392 | SB-392-0405 | 4 | 5 |
| SB-392 | SB-392-0708 | 7 | 8 |
| SB-393 | SB-393-0203 | 2 | 3 |
| SB-393 | SB-393-0405 | 4 | 5 |
| SB-393 | SB-393-0708 | 7 | 8 |
| SB-394 | SB-394-0203 | 2 | 3 |
| SB-394 | SB-394-0405 | 4 | 5 |
| SB-394 | SB-394-0708 | 7 | 8 |
| SB-395 | SB-395-0203 | 2 | 3 |
| SB-395 | SB-395-0405 | 4 | 5 |
| SB-395 | SB-395-0708 | 7 | 8 |

**Table 3-8**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-396 | SB-396-0203 | 2 | 3 |
| SB-396 | SB-396-0405 | 4 | 5 |
| SB-396 | SB-396-0708 | 7 | 8 |
| SB-397 | SB-397-0203 | 2 | 3 |
| SB-397 | SB-397-0405 | 4 | 5 |
| SB-397 | SB-397-0708 | 7 | 8 |
| SB-398 | SB-398-0203 | 2 | 3 |
| SB-398 | SB-398-0405 | 4 | 5 |
| SB-398 | SB-398-0708 | 7 | 8 |
| SB-399 | SB-399-0203 | 2 | 3 |
| SB-399 | SB-399-0405 | 4 | 5 |
| SB-399 | SB-399-0708 | 7 | 8 |
| SB-400 | SB-400-0203 | 2 | 3 |
| SB-400 | SB-400-0405 | 4 | 5 |
| SB-400 | SB-400-0708 | 7 | 8 |
| SB-401 | SB-401-0203 | 2 | 3 |
| SB-401 | SB-401-0405 | 4 | 5 |
| SB-401 | SB-401-0708 | 7 | 8 |
| SB-402 | SB-402-0203 | 2 | 3 |
| SB-402 | SB-402-0405 | 4 | 5 |
| SB-402 | SB-402-0708 | 7 | 8 |
| SB-403 | SB-403-0203 | 2 | 3 |
| SB-403 | SB-403-0405 | 4 | 5 |
| SB-403 | SB-403-0708 | 7 | 8 |
| SB-404 | SB-404-0203 | 2 | 3 |
| SB-404 | SB-404-0405 | 4 | 5 |
| SB-404 | SB-404-0708 | 7 | 8 |
| SB-405 | SB-405-0203 | 2 | 3 |
| SB-405 | SB-405-0405 | 4 | 5 |
| SB-405 | SB-405-0708 | 7 | 8 |
| SB-406 | SB-406-0203 | 2 | 3 |
| SB-406 | SB-406-0405 | 4 | 5 |
| SB-406 | SB-406-0708 | 7 | 8 |
| SB-407 | SB-407-0203 | 2 | 3 |
| SB-407 | SB-407-0405 | 4 | 5 |
| SB-407 | SB-407-0708 | 7 | 8 |
| SB-408 | SB-408-0203 | 2 | 3 |
| SB-408 | SB-408-0405 | 4 | 5 |
| SB-408 | SB-408-0708 | 7 | 8 |
| SB-409 | SB-409-0203 | 2 | 3 |
| SB-409 | SB-409-0405 | 4 | 5 |
| SB-409 | SB-409-0708 | 7 | 8 |
| SB-489 | SB-489-0203 | 2 | 3 |
| SB-489 | SB-489-0405 | 4 | 5 |

**Table 3-8**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-489 | SB-489-0708 | 7 | 8 |
| SB-490 | SB-490-0405 | 4 | 5 |
| SB-490 | SB-490-0708 | 7 | 8 |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-024A | F-SB-24ARE-3 | 3 | 3 |
| SB-024A | F-SB-24ARE-4 | 4 | 4 |
| SB-024A | F-SB-24ARE-5 | 5 | 5 |
| SB-055 | F-SB-55RE-10 | 10 | 10 |
| SB-056 | F-SB-56RE-3 | 3 | 3 |
| SB-056 | F-SB-56RE-4 | 4 | 4 |
| SB-056 | F-SB-56RE-5 | 5 | 5 |
| SB-056 | F-SB-56RE-6 | 6 | 6 |
| SB-056 | F-SB-56RE-7 | 7 | 7 |
| SB-056 | F-SB-56RE-8 | 8 | 8 |
| SB-056 | F-SB-56RE-9 | 9 | 9 |
| SB-056 | F-SB-56RE-10 | 10 | 10 |
| SB-093 | F-SB-93RE-3 | 3 | 3 |
| SB-093 | F-SB-93RE-4 | 4 | 4 |
| SB-093 | F-SB-93RE-5 | 5 | 5 |
| SB-093 | F-SB-93RE-6 | 6 | 6 |
| SB-093 | F-SB-93RE-7 | 7 | 7 |
| SB-093 | F-SB-93RE-8 | 8 | 8 |
| SB-093 | F-SB-93RE-9 | 9 | 9 |
| SB-093 | F-SB-93RE-10 | 10 | 10 |
| SB-094 | F-SB-94RE-3 | 3 | 3 |
| SB-094 | F-SB-94RE-4 | 4 | 4 |
| SB-094 | F-SB-94RE-5 | 5 | 5 |
| SB-094 | F-SB-94RE-6 | 6 | 6 |
| SB-094 | F-SB-94RE-7 | 7 | 7 |
| SB-094 | F-SB-94RE-8 | 8 | 8 |
| SB-094 | F-SB-94RE-9 | 9 | 9 |
| SB-094 | F-SB-94RE-10 | 10 | 10 |
| SB-095 | F-SB-95RE-3 | 3 | 3 |
| SB-095 | F-SB-95RE-4 | 4 | 4 |
| SB-095 | F-SB-95RE-5 | 5 | 5 |
| SB-095 | F-SB-95RE-6 | 6 | 6 |
| SB-095 | F-SB-95RE-7 | 7 | 7 |
| SB-095 | F-SB-95RE-8 | 8 | 8 |
| SB-095 | F-SB-95RE-9 | 9 | 9 |
| SB-095 | F-SB-95RE-10 | 10 | 10 |
| SB-096 | F-SB-96RE-3 | 3 | 3 |
| SB-096 | F-SB-96RE-4 | 4 | 4 |
| SB-096 | F-SB-96RE-5 | 5 | 5 |
| SB-096 | F-SB-96RE-6 | 6 | 6 |

**Table 3-8**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-096 | F-SB-96RE-7 | 7 | 7 |
| SB-096 | F-SB-96RE-8 | 8 | 8 |
| SB-096 | F-SB-96RE-9 | 9 | 9 |
| SB-096 | F-SB-96RE-10 | 10 | 10 |
| SB-265RE | F-SB-265RE-3 | 3 | 3 |
| SB-265RE | F-SB-265RE-4 | 4 | 4 |
| SB-266RE | F-SB-266RE-3 | 3 | 3 |
| SB-266RE | F-SB-266RE-4 | 4 | 4 |
| SB-267RE | F-SB-267RE-3 | 3 | 3 |
| SB-267RE | F-SB-267RE-4 | 4 | 4 |
| SB-268RE | F-SB-268RE-3 | 3 | 3 |
| SB-268RE | F-SB-268RE-4 | 4 | 4 |
| SB-268RE | F-SB-268RE-5 | 5 | 5 |
| SB-268RE | F-SB-268RE-6 | 6 | 6 |
| SB-268RE | F-SB-268RE-7 | 7 | 7 |
| SB-268RE | F-SB-268RE-7-D | 7 | 7 |
| SB-268RE | F-SB-268RE-8 | 8 | 8 |
| SB-268RE | F-SB-268RE-9 | 9 | 9 |
| SB-268RE | F-SB-268RE-10 | 10 | 10 |
| SB-269RE | F-SB-269RE-3 | 3 | 3 |
| SB-269RE | F-SB-269RE-4 | 4 | 4 |
| SB-270RE | F-SB-270RE-3 | 3 | 3 |
| SB-270RE | F-SB-270RE-4 | 4 | 4 |
| SB-383 | F-SB-383RE-3 | 3 | 3 |
| SB-383 | F-SB-383RE-4 | 4 | 4 |
| SB-388 | F-SB-388RE-3 | 3 | 3 |
| SB-388 | F-SB-388RE-4 | 4 | 4 |
| SB-388 | F-SB-388RE-5 | 5 | 5 |
| SB-389 | F-SB-389RE-3 | 3 | 3 |
| SB-389 | F-SB-389RE-4 | 4 | 4 |
| SB-390 | F-SB-390RE-6 | 6 | 6 |
| SB-390 | F-SB-390RE-7 | 7 | 7 |
| SB-393 | F-SB-393RE-3 | 3 | 3 |
| SB-393 | F-SB-393RE-4 | 4 | 4 |
| SB-393 | F-SB-393RE-5 | 5 | 5 |
| SB-393 | F-SB-393RE-5-D | 5 | 5 |
| SB-393 | F-SB-393RE-6 | 6 | 6 |
| SB-393 | F-SB-393RE-7 | 7 | 7 |
| SB-397 | F-SB-397RE-6 | 6 | 6 |
| SB-397 | F-SB-397RE-7 | 7 | 7 |
| SB-405 | F-SB-405RE-9 | 9 | 9 |
| SB-405 | F-SB-405RE-10 | 10 | 10 |
| SB-626 | F-SB-626-3 | 3 | 3 |
| SB-626 | F-SB-626-4 | 4 | 4 |

**Table 3-8**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-626 | F-SB-626-5 | 5 | 5 |
| SB-626C | F-SB-626C-3 | 3 | 3 |
| SB-626D | F-SB-626D-3 | 3 | 3 |
| SB-626D | F-SB-626D-3-D | 3 | 3 |
| SB-628 | F-SB-628-10 | 10 | 10 |
| SB-629 | F-SB-629-10 | 10 | 10 |
| SB-630 | F-SB-630-10 | 10 | 10 |
| SB-631 | F-SB-631-10 | 10 | 10 |
| SB-632 | F-SB-632-9 | 9 | 9 |
| SB-632 | F-SB-632-10 | 10 | 10 |
| SB-633 | F-SB-633-9 | 9 | 9 |
| SB-633 | F-SB-633-10 | 10 | 10 |
| SB-634 | F-SB-634-9 | 9 | 9 |
| SB-634 | F-SB-634-10 | 10 | 10 |
| SB-635 | F-SB-635-9 | 9 | 9 |
| SB-635 | F-SB-635-10 | 10 | 10 |
| SB-635 | F-SB-635-10-D | 10 | 10 |
| SB-635C | F-SB-635C-3 | 3 | 3 |
| SB-635C | F-SB-635C-5 | 5 | 5 |
| SB-635C | F-SB-635C-7 | 7 | 7 |
| SB-635C | F-SB-635C-7-D | 7 | 7 |
| SB-635D | F-SB-635D-5 | 5 | 5 |
| SB-635D | F-SB-635D-7 | 7 | 7 |
| SB-635D | F-SB-635D-9 | 9 | 9 |
| SB-636 | F-SB-636-3 | 3 | 3 |
| SB-636 | F-SB-636-3-D | 3 | 3 |
| SB-636 | F-SB-636-5 | 5 | 5 |
| SB-636 | F-SB-636-7 | 7 | 7 |
| SB-636 | F-SB-636-9 | 9 | 9 |
| SB-636A | F-SB-636A-3 | 3 | 3 |
| SB-636A | F-SB-636A-5 | 5 | 5 |
| SB-636A | F-SB-636A-7 | 7 | 7 |
| SB-636A | F-SB-636A-7-D | 7 | 7 |
| SB-636B | F-SB-636B-3 | 3 | 3 |
| SB-636B | F-SB-636B-5 | 5 | 5 |
| SB-636B | F-SB-636B-7 | 7 | 7 |
| SB-636C | F-SB-636C-3 | 3 | 3 |
| SB-636C | F-SB-636C-5 | 5 | 5 |
| SB-636C | F-SB-636C-7 | 7 | 7 |
| SB-636D | F-SB-636D-3 | 3 | 3 |
| SB-636D | F-SB-636D-5 | 5 | 5 |
| SB-636D | F-SB-636D-7 | 7 | 7 |
| SB-637 | F-SB-637-3 | 3 | 3 |
| SB-637 | F-SB-637-5 | 5 | 5 |

**Table 3-8**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-637B | F-SB-637B-3 | 3 | 3 |
| SB-637B | F-SB-637B-5 | 5 | 5 |
| SB-637B | F-SB-637B-5-D | 5 | 5 |
| SB-637C | F-SB-637C-3 | 3 | 3 |
| SB-637C | F-SB-637C-5 | 5 | 5 |
| SB-638 | F-SB-638-3 | 3 | 3 |
| SB-638 | F-SB-638-3-D | 3 | 3 |
| SB-638 | F-SB-638-5 | 5 | 5 |
| SB-639 | F-SB-639-3 | 3 | 3 |
| SB-639 | F-SB-639-5 | 5 | 5 |
| SB-640 | F-SB-640-3 | 3 | 3 |
| SB-640 | F-SB-640-5 | 5 | 5 |
| SB-641 | F-SB-641-3 | 3 | 3 |
| SB-641 | F-SB-641-5 | 5 | 5 |
| SB-641A | F-SB-641A-3 | 3 | 3 |
| SB-641B | F-SB-641B-3 | 3 | 3 |
| SB-641C | F-SB-641C-3 | 3 | 3 |
| SB-642 | F-SB-642-3 | 3 | 3 |
| SB-642 | F-SB-642-3-D | 3 | 3 |
| SB-642 | F-SB-642-5 | 5 | 5 |
| SB-642 | F-SB-642-7 | 7 | 7 |
| SB-642 | F-SB-642-9 | 9 | 9 |
| SB-642A | F-SB-642A-3 | 3 | 3 |
| SB-642A | F-SB-642A-5 | 5 | 5 |
| SB-642A | F-SB-642A-7 | 7 | 7 |
| SB-642A | F-SB-642A-9 | 9 | 9 |
| SB-642B | F-SB-642B-3 | 3 | 3 |
| SB-642B | F-SB-642B-5 | 5 | 5 |
| SB-642B | F-SB-642B-7 | 7 | 7 |
| SB-642B | F-SB-642B-9 | 9 | 9 |
| SB-642C | F-SB-642C-3 | 3 | 3 |
| SB-642C | F-SB-642C-5 | 5 | 5 |
| SB-642C | F-SB-642C-7 | 7 | 7 |
| SB-642C | F-SB-642C-7-D | 7 | 7 |
| SB-642C | F-SB-642C-9 | 9 | 9 |
| SB-643 | F-SB-643-3 | 3 | 3 |
| SB-643 | F-SB-643-5 | 5 | 5 |
| SB-643 | F-SB-643-7 | 7 | 7 |
| SB-643 | F-SB-643-9 | 9 | 9 |
| SB-643B | F-SB-643B-3 | 3 | 3 |
| SB-643B | F-SB-643B-5 | 5 | 5 |
| SB-643B | F-SB-643B-7 | 7 | 7 |
| SB-643B | F-SB-643B-7-D | 7 | 7 |
| SB-643B | F-SB-643B-9 | 9 | 9 |

**Table 3-8**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-643C | F-SB-643C-3 | 3 | 3 |
| SB-643C | F-SB-643C-5 | 5 | 5 |
| SB-643C | F-SB-643C-7 | 7 | 7 |
| SB-643C | F-SB-643C-9 | 9 | 9 |
| SB-644 | F-SB-644-3 | 3 | 3 |
| SB-644 | F-SB-644-3-D | 3 | 3 |
| SB-644 | F-SB-644-5 | 5 | 5 |
| SB-644 | F-SB-644-7 | 7 | 7 |
| SB-644 | F-SB-644-9 | 9 | 9 |
| SB-645 | F-SB-645-3 | 3 | 3 |
| SB-645 | F-SB-645-5 | 5 | 5 |
| SB-645 | F-SB-645-7 | 7 | 7 |
| SB-645A | F-SB-645A-3 | 3 | 3 |
| SB-645B | F-SB-645B-3 | 3 | 3 |
| SB-645B | F-SB-645B-3-D | 3 | 3 |
| SB-645C | F-SB-645C-3 | 3 | 3 |
| SB-646 | F-SB-646-3 | 3 | 3 |
| SB-646 | F-SB-646-3-D | 3 | 3 |
| SB-646 | F-SB-646-5 | 5 | 5 |
| SB-646 | F-SB-646-7 | 7 | 7 |
| SB-647 | F-SB-647-3 | 3 | 3 |
| SB-647 | F-SB-647-5 | 5 | 5 |
| SB-647 | F-SB-647-7 | 7 | 7 |
| SB-647A | F-SB-647A-3 | 3 | 3 |
| SB-647B | F-SB-647B-3 | 3 | 3 |
| SB-647C | F-SB-647C-3 | 3 | 3 |
| SB-648 | F-SB-648-3 | 3 | 3 |
| SB-648 | F-SB-648-5 | 5 | 5 |
| SB-648 | F-SB-648-7 | 7 | 7 |
| SB-649 | F-SB-649-3 | 3 | 3 |
| SB-649 | F-SB-649-5 | 5 | 5 |
| SB-650 | F-SB-650-3 | 3 | 3 |
| SB-650 | F-SB-650-3-D | 3 | 3 |
| SB-650 | F-SB-650-5 | 5 | 5 |
| SB-651 | F-SB-651-3 | 3 | 3 |
| SB-651 | F-SB-651-5 | 5 | 5 |
| SB-652 | F-SB-652-3 | 3 | 3 |
| SB-652 | F-SB-652-5 | 5 | 5 |
| SB-652 | F-SB-652-7 | 7 | 7 |
| SB-652 | F-SB-652-9 | 9 | 9 |
| SB-652A | F-SB-652A-3 | 3 | 3 |
| SB-652A | F-SB-652A-5 | 5 | 5 |
| SB-652A | F-SB-652A-7 | 7 | 7 |
| SB-652B | F-SB-652B-3 | 3 | 3 |

**Table 3-8**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-652B | F-SB-652B-5 | 5 | 5 |
| SB-652B | F-SB-652B-7 | 7 | 7 |
| SB-652C | F-SB-652C-3 | 3 | 3 |
| SB-652C | F-SB-652C-5 | 5 | 5 |
| SB-652C | F-SB-652C-7 | 7 | 7 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-797 | F-SB-797-03 | 3 | 3 |
| SB-797 | F-SB-797-05 | 5 | 5 |
| SB-798 | F-SB-798-03 | 3 | 3 |
| SB-798 | F-SB-798-03-D | 3 | 3 |
| SB-798 | F-SB-798-05 | 5 | 5 |
| SB-799 | F-SB-799-03 | 3 | 3 |
| SB-799 | F-SB-799-05 | 5 | 5 |
| SB-800 | F-SB-800-03 | 3 | 3 |
| SB-800 | F-SB-800-05 | 5 | 5 |
| SB-800 | F-SB-800-05-D | 5 | 5 |
| SB-801 | F-SB-801-03 | 3 | 3 |
| SB-801 | F-SB-801-05 | 5 | 5 |
| SB-802 | F-SB-802-03 | 3 | 3 |
| SB-802 | F-SB-802-05 | 5 | 5 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Site-Wide Phase II Investigation Samples (2004)** | | | |
| SB-081 | SB-81-05 | 5 | 5 |
| SB-082 | SB-82-05 | 5 | 5 |
| SB-083 | SB-83-05 | 5 | 5 |
| SB-084 | SB-84-05 | 5 | 5 |
| SB-085 | SB-85-05 | 5 | 5 |
| SB-085 | SB-85-10 | 10 | 10 |
| SB-086 | SB-86-05 | 5 | 5 |
| SB-086 | SB-86-10 | 10 | 10 |
| SB-087 | SB-87-05 | 5 | 5 |
| SB-088 | SB-88-05 | 5 | 5 |
| SB-089 | SB-89-05 | 5 | 5 |
| SB-090 | SB-90-05 | 5 | 5 |
| SB-091 | SB-91-05 | 5 | 5 |
| SB-092 | SB-92-04 | 4 | 4 |
| SB-181 | SB-181-05 | 5 | 5 |
| SB-182 | SB-182-05 | 5 | 5 |
| SB-184 | SB-184-05 | 5 | 5 |
| SB-185 | SB-185-05 | 5 | 5 |
| SB-186 | SB-186-05 | 5 | 5 |
| SB-187 | SB-187-05 | 5 | 5 |
| SB-188 | SB-188-05 | 5 | 5 |
| SB-189 | SB-189-05 | 5 | 5 |
| SB-190 | SB-190-05 | 5 | 5 |
| SB-191 | SB-191-05 | 5 | 5 |
| SB-192 | SB-192-05 | 5 | 5 |
| **Phase II Soil Investigation Samples (Summer 2005)** | | | |
| SB-194 | SB-194-05 | 5 | 5 |
| SB-194 | SB-194-10 | 10 | 10 |
| SB-195 | SB-195-05 | 5 | 5 |
| SB-195 | SB-195-10 | 10 | 10 |
| SB-196 | SB-196-05 | 5 | 5 |
| SB-196 | SB-196-10 | 10 | 10 |
| SB-197 | SB-197-05 | 5 | 5 |
| SB-197 | SB-197-10 | 10 | 10 |
| SB-198 | SB-198-05 | 5 | 5 |
| SB-198 | SB-198-10 | 10 | 10 |
| SB-199 | SB-199-05 | 5 | 5 |
| SB-199 | SB-199-10 | 10 | 10 |
| SB-262 | SB-262-05 | 5 | 5 |
| SB-262 | SB-262-10 | 10 | 10 |
| SB-263 | SB-263-05 | 5 | 5 |
| SB-263 | SB-263-10 | 10 | 10 |
| SB-264 | SB-264-05 | 5 | 5 |
| SB-264 | SB-264-10 | 10 | 10 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **ISCO Pilot Study Samples (November 2007)** | | | |
| OW-5 | OW-5-4 | 4 | 4 |
| OW-5 | OW-5-6 | 6 | 6 |
| **Additional Soil Characterization Samples (Fall 2007)[(2)]** | | | |
| SB-410 | SB-410-0203 | 2 | 3 |
| SB-410 | SB-410-0304 | 3 | 4 |
| SB-410 | SB-410-0506 | 5 | 6 |
| SB-410 | SB-410-0708 | 7 | 8 |
| SB-411 | SB-411-0203 | 2 | 3 |
| SB-411 | SB-411-0304 | 3 | 4 |
| SB-411 | SB-411-0506 | 5 | 6 |
| SB-411 | SB-411-0708 | 7 | 8 |
| SB-412 | SB-412-0203 | 2 | 3 |
| SB-412 | SB-412-0304 | 3 | 4 |
| SB-412 | SB-412-0506 | 5 | 6 |
| SB-412 | SB-412-0708 | 7 | 8 |
| SB-413 | SB-413-0203 | 2 | 3 |
| SB-413 | SB-413-0304 | 3 | 4 |
| SB-413 | SB-413-0506 | 5 | 6 |
| SB-413 | SB-413-0708 | 7 | 8 |
| SB-414 | SB-414-0203 | 2 | 3 |
| SB-414 | SB-414-0304 | 3 | 4 |
| SB-414 | SB-414-0506 | 5 | 6 |
| SB-414 | SB-414-0708 | 7 | 8 |
| SB-415 | SB-415-0203 | 2 | 3 |
| SB-415 | SB-415-0304 | 3 | 4 |
| SB-415 | SB-415-0506 | 5 | 6 |
| SB-415 | SB-415-0708 | 7 | 8 |
| SB-416 | SB-416-0203 | 2 | 3 |
| SB-416 | SB-416-0304 | 3 | 4 |
| SB-416 | SB-416-0506 | 5 | 6 |
| SB-416 | SB-416-0708 | 7 | 8 |
| SB-417 | SB-417-0203 | 2 | 3 |
| SB-417 | SB-417-0304 | 3 | 4 |
| SB-417 | SB-417-0506 | 5 | 6 |
| SB-417 | SB-417-0708 | 7 | 8 |
| SB-418 | SB-418-0203 | 2 | 3 |
| SB-418 | SB-418-0304 | 3 | 4 |
| SB-418 | SB-418-0506 | 5 | 6 |
| SB-418 | SB-418-0708 | 7 | 8 |
| SB-419 | SB-419-0203 | 2 | 3 |
| SB-419 | SB-419-0304 | 3 | 4 |
| SB-419 | SB-419-0506 | 5 | 6 |
| SB-419 | SB-419-0708 | 7 | 8 |
| SB-420 | SB-420-0203 | 2 | 3 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-420 | SB-420-0304 | 3 | 4 |
| SB-420 | SB-420-0506 | 5 | 6 |
| SB-420 | SB-420-0708 | 7 | 8 |
| SB-421 | SB-421-0203 | 2 | 3 |
| SB-421 | SB-421-0304 | 3 | 4 |
| SB-421 | SB-421-0506 | 5 | 6 |
| SB-421 | SB-421-0708 | 7 | 8 |
| SB-422 | SB-422-0203 | 2 | 3 |
| SB-422 | SB-422-0304 | 3 | 4 |
| SB-422 | SB-422-0506 | 5 | 6 |
| SB-422 | SB-422-0708 | 7 | 8 |
| SB-423 | SB-423-0203 | 2 | 3 |
| SB-423 | SB-423-0304 | 3 | 4 |
| SB-423 | SB-423-0506 | 5 | 6 |
| SB-423 | SB-423-0708 | 7 | 8 |
| SB-424 | SB-424-0203 | 2 | 3 |
| SB-424 | SB-424-0304 | 3 | 4 |
| SB-424 | SB-424-0506 | 5 | 6 |
| SB-424 | SB-424-0708 | 7 | 8 |
| SB-425 | SB-425-0203 | 2 | 3 |
| SB-425 | SB-425-0304 | 3 | 4 |
| SB-425 | SB-425-0506 | 5 | 6 |
| SB-425 | SB-425-0708 | 7 | 8 |
| SB-426 | SB-426-0203 | 2 | 3 |
| SB-426 | SB-426-0304 | 3 | 4 |
| SB-426 | SB-426-0506 | 5 | 6 |
| SB-426 | SB-426-0708 | 7 | 8 |
| SB-427 | SB-427-0203 | 2 | 3 |
| SB-427 | SB-427-0304 | 3 | 4 |
| SB-427 | SB-427-0506 | 5 | 6 |
| SB-427 | SB-427-0708 | 7 | 8 |
| SB-428 | SB-428-0203 | 2 | 3 |
| SB-428 | SB-428-0304 | 3 | 4 |
| SB-428 | SB-428-0506 | 5 | 6 |
| SB-428 | SB-428-0708 | 7 | 8 |
| SB-429 | SB-429-0203 | 2 | 3 |
| SB-429 | SB-429-0304 | 3 | 4 |
| SB-429 | SB-429-0506 | 5 | 6 |
| SB-429 | SB-429-0708 | 7 | 8 |
| SB-430 | SB-430-0203 | 2 | 3 |
| SB-430 | SB-430-0304 | 3 | 4 |
| SB-430 | SB-430-0506 | 5 | 6 |
| SB-430 | SB-430-0708 | 7 | 8 |
| SB-431 | SB-431-0203 | 2 | 3 |
| SB-431 | SB-431-0304 | 3 | 4 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-431 | SB-431-0506 | 5 | 6 |
| SB-431 | SB-431-0708 | 7 | 8 |
| SB-432 | SB-432-0203 | 2 | 3 |
| SB-432 | SB-432-0304 | 3 | 4 |
| SB-432 | SB-432-0506 | 5 | 6 |
| SB-432 | SB-432-0708 | 7 | 8 |
| SB-433 | SB-433-0203 | 2 | 3 |
| SB-433 | SB-433-0304 | 3 | 4 |
| SB-433 | SB-433-0506 | 5 | 6 |
| SB-433 | SB-433-0708 | 7 | 8 |
| SB-434 | SB-434-0203 | 2 | 3 |
| SB-434 | SB-434-0304 | 3 | 4 |
| SB-434 | SB-434-0506 | 5 | 6 |
| SB-434 | SB-434-0708 | 7 | 8 |
| SB-435 | SB-435-0203 | 2 | 3 |
| SB-435 | SB-435-0304 | 3 | 4 |
| SB-435 | SB-435-0506 | 5 | 6 |
| SB-435 | SB-435-0708 | 7 | 8 |
| SB-436 | SB-436-0203 | 2 | 3 |
| SB-436 | SB-436-0304 | 3 | 4 |
| SB-436 | SB-436-0506 | 5 | 6 |
| SB-436 | SB-436-0708 | 7 | 8 |
| SB-437 | SB-437-0203 | 2 | 3 |
| SB-437 | SB-437-0304 | 3 | 4 |
| SB-437 | SB-437-0506 | 5 | 6 |
| SB-437 | SB-437-0708 | 7 | 8 |
| SB-438 | SB-438-0203 | 2 | 3 |
| SB-438 | SB-438-0304 | 3 | 4 |
| SB-438 | SB-438-0506 | 5 | 6 |
| SB-438 | SB-438-0708 | 7 | 8 |
| SB-439 | SB-439-0203 | 2 | 3 |
| SB-439 | SB-439-0304 | 3 | 4 |
| SB-439 | SB-439-0506 | 5 | 6 |
| SB-439 | SB-439-0708 | 7 | 8 |
| SB-440 | SB-440-0203 | 2 | 3 |
| SB-440 | SB-440-0304 | 3 | 4 |
| SB-440 | SB-440-0506 | 5 | 6 |
| SB-441 | SB-441-0203 | 2 | 3 |
| SB-441 | SB-441-0304 | 3 | 4 |
| SB-441 | SB-441-0506 | 5 | 6 |
| SB-441 | SB-441-0708 | 7 | 8 |
| SB-442 | SB-442-0203 | 2 | 3 |
| SB-442 | SB-442-0304 | 3 | 4 |
| SB-442 | SB-442-0506 | 5 | 6 |
| SB-442 | SB-442-0708 | 7 | 8 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-443 | SB-443-0203 | 2 | 3 |
| SB-443 | SB-443-0304 | 3 | 4 |
| SB-443 | SB-443-0506 | 5 | 6 |
| SB-443 | SB-443-0708 | 7 | 8 |
| SB-444 | SB-444-0203 | 2 | 3 |
| SB-444 | SB-444-0304 | 3 | 4 |
| SB-444 | SB-444-0506 | 5 | 6 |
| SB-444 | SB-444-0708 | 7 | 8 |
| SB-445 | SB-445-0203 | 2 | 3 |
| SB-445 | SB-445-0304 | 3 | 4 |
| SB-445 | SB-445-0506 | 5 | 6 |
| SB-445 | SB-445-0708 | 7 | 8 |
| SB-446 | SB-446-0203 | 2 | 3 |
| SB-446 | SB-446-0304 | 3 | 4 |
| SB-446 | SB-446-0506 | 5 | 6 |
| SB-446 | SB-446-0708 | 7 | 8 |
| SB-447 | SB-447-0203 | 2 | 3 |
| SB-448 | SB-448-0203 | 2 | 3 |
| SB-448 | SB-448-0304 | 3 | 4 |
| SB-448 | SB-448-0506 | 5 | 6 |
| SB-448 | SB-448-0708 | 7 | 8 |
| SB-449 | SB-449-0203 | 2 | 3 |
| SB-449 | SB-449-0304 | 3 | 4 |
| SB-449 | SB-449-0506 | 5 | 6 |
| SB-449 | SB-449-0708 | 7 | 8 |
| SB-450 | SB-450-0203 | 2 | 3 |
| SB-450 | SB-450-0304 | 3 | 4 |
| SB-450 | SB-450-0506 | 5 | 6 |
| SB-450 | SB-450-0708 | 7 | 8 |
| SB-451 | SB-451-0203 | 2 | 3 |
| SB-451 | SB-451-0304 | 3 | 4 |
| SB-451 | SB-451-0506 | 5 | 6 |
| SB-451 | SB-451-0708 | 7 | 8 |
| SB-452 | SB-452-0203 | 2 | 3 |
| SB-452 | SB-452-0304 | 3 | 4 |
| SB-452 | SB-452-0506 | 5 | 6 |
| SB-452 | SB-452-0708 | 7 | 8 |
| SB-453 | SB-453-0203 | 2 | 3 |
| SB-453 | SB-453-0304 | 3 | 4 |
| SB-453 | SB-453-0506 | 5 | 6 |
| SB-453 | SB-453-0708 | 7 | 8 |
| SB-454 | SB-454-0203 | 2 | 3 |
| SB-454 | SB-454-0304 | 3 | 4 |
| SB-454 | SB-454-0506 | 5 | 6 |
| SB-454 | SB-454-0708 | 7 | 8 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-455 | SB-455-0203 | 2 | 3 |
| SB-455 | SB-455-0304 | 3 | 4 |
| SB-455 | SB-455-0506 | 5 | 6 |
| SB-455 | SB-455-0708 | 7 | 8 |
| SB-456 | SB-456-0203 | 2 | 3 |
| SB-456 | SB-456-0304 | 3 | 4 |
| SB-456 | SB-456-0506 | 5 | 6 |
| SB-456 | SB-456-0708 | 7 | 8 |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-091 | G-SB-91RE-3 | 3 | 3 |
| SB-091 | G-SB-91RE-5 | 5 | 5 |
| SB-091 | G-SB-91RE-6 | 6 | 6 |
| SB-091 | G-SB-91RE-7 | 7 | 7 |
| SB-091 | G-SB-91RE-8 | 8 | 8 |
| SB-091 | G-SB-91RE-8-D | 8 | 8 |
| SB-091 | G-SB-91RE-9 | 9 | 9 |
| SB-091 | G-SB-91RE-10 | 10 | 10 |
| SB-091A | G-SB-91REA-3 | 3 | 3 |
| SB-091A | G-SB-91REA-5 | 5 | 5 |
| SB-091A | G-SB-91REA-7 | 7 | 7 |
| SB-091A | G-SB-91REA-7-D | 7 | 7 |
| SB-091A | G-SB-91REA-9 | 9 | 9 |
| SB-091B | G-SB-91REB-3 | 3 | 3 |
| SB-091B | G-SB-91REB-5 | 5 | 5 |
| SB-091B | G-SB-91REB-7 | 7 | 7 |
| SB-091B | G-SB-91REB-9 | 9 | 9 |
| SB-091C | G-SB-91REC-3 | 3 | 3 |
| SB-091C | G-SB-91REC-5 | 5 | 5 |
| SB-091C | G-SB-91REC-7 | 7 | 7 |
| SB-091C | G-SB-91REC-9 | 9 | 9 |
| SB-092 | G-SB-92RE-3 | 3 | 3 |
| SB-092 | G-SB-92RE-4 | 4 | 4 |
| SB-092 | G-SB-92RE-5 | 5 | 5 |
| SB-092 | G-SB-92RE-6 | 6 | 6 |
| SB-092 | G-SB-92RE-7 | 7 | 7 |
| SB-092 | G-SB-92RE-7-D | 7 | 7 |
| SB-092 | G-SB-92RE-8 | 8 | 8 |
| SB-092 | G-SB-92RE-9 | 9 | 9 |
| SB-092 | G-SB-92RE-10 | 10 | 10 |
| SB-092C | G-SB-92REC-3 | 3 | 3 |
| SB-092C | G-SB-92REC-5 | 5 | 5 |
| SB-092C | G-SB-92REC-7 | 7 | 7 |
| SB-092C | G-SB-92REC-9 | 9 | 9 |
| SB-092D | G-SB-92RED-3 | 3 | 3 |
| SB-092D | G-SB-92RED-5 | 5 | 5 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-092D | G-SB-92RED-7 | 7 | 7 |
| SB-092D | G-SB-92RED-9 | 9 | 9 |
| SB-194 | G-SB-194RE-3 | 3 | 3 |
| SB-194 | G-SB-194RE-4 | 4 | 4 |
| SB-194 | G-SB-194RE-5 | 5 | 5 |
| SB-196 | G-SB-196RE-6 | 6 | 6 |
| SB-196 | G-SB-196RE-7 | 7 | 7 |
| SB-196 | G-SB-196RE-7-D | 7 | 7 |
| SB-196 | G-SB-196RE-8 | 8 | 8 |
| SB-196 | G-SB-196RE-9 | 9 | 9 |
| SB-196 | G-SB-196RE-10 | 10 | 10 |
| SB-197 | G-SB-197RE-6 | 6 | 6 |
| SB-197 | G-SB-197RE-6-D | 6 | 6 |
| SB-197 | G-SB-197RE-7 | 7 | 7 |
| SB-198 | G-SB-198RE-3 | 3 | 3 |
| SB-198 | G-SB-198RE-4 | 4 | 4 |
| SB-198 | G-SB-198RE-5 | 5 | 5 |
| SB-198 | G-SB-198RE-6 | 6 | 6 |
| SB-198 | G-SB-198RE-7 | 7 | 7 |
| SB-198 | G-SB-198RE-8 | 8 | 8 |
| SB-198 | G-SB-198RE-9 | 9 | 9 |
| SB-199 | G-SB-199RE-6 | 6 | 6 |
| SB-199 | G-SB-199RE-7 | 7 | 7 |
| SB-255 | G-SB-255RE-3 | 3 | 3 |
| SB-255 | G-SB-255RE-4 | 4 | 4 |
| SB-255 | G-SB-255RE-5 | 5 | 5 |
| SB-424 | G-SB-424RE-5 | 5 | 5 |
| SB-424 | G-SB-424RE-5-D | 5 | 5 |
| SB-424 | G-SB-424RE-6 | 6 | 6 |
| SB-437 | G-SB-437RE-3 | 3 | 3 |
| SB-437 | G-SB-437RE-4 | 4 | 4 |
| SB-441 | G-SB-441RE-7 | 7 | 7 |
| SB-441 | G-SB-441RE-8 | 8 | 8 |
| SB-453 | G-SB-453RE-5 | 5 | 5 |
| SB-453 | G-SB-453RE-6 | 6 | 6 |
| SB-456 | G-SB-456RE-9 | 9 | 9 |
| SB-456 | G-SB-456RE-10 | 10 | 10 |
| SB-457 | G-SB-457RE-3 | 3 | 3 |
| SB-457 | G-SB-457RE-4 | 4 | 4 |
| SB-653 | G-SB-653-3 | 3 | 3 |
| SB-653 | G-SB-653-5 | 5 | 5 |
| SB-653 | G-SB-653-6 | 6 | 6 |
| SB-653 | G-SB-653-7 | 7 | 7 |
| SB-653 | G-SB-653-8 | 8 | 8 |
| SB-653 | G-SB-653-9 | 9 | 9 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-653 | G-SB-653-9-D | 9 | 9 |
| SB-653A | G-SB-653A-3 | 3 | 3 |
| SB-653A | G-SB-653A-5 | 5 | 5 |
| SB-653A | G-SB-653A-7 | 7 | 7 |
| SB-653B | G-SB-653B-3 | 3 | 3 |
| SB-653B | G-SB-653B-5 | 5 | 5 |
| SB-653B | G-SB-653B-7 | 7 | 7 |
| SB-653D | G-SB-653D-3 | 3 | 3 |
| SB-653D | G-SB-653D-5 | 5 | 5 |
| SB-653D | G-SB-653D-7 | 7 | 7 |
| SB-654 | G-SB-654-3 | 3 | 3 |
| SB-654 | G-SB-654-5 | 5 | 5 |
| SB-654B | G-SB-654B-3 | 3 | 3 |
| SB-654B | G-SB-654B-5 | 5 | 5 |
| SB-654C | G-SB-654C-3 | 3 | 3 |
| SB-654C | G-SB-654C-5 | 5 | 5 |
| SB-656 | G-SB-656-3 | 3 | 3 |
| SB-656 | G-SB-656-5 | 5 | 5 |
| SB-656 | G-SB-656-6 | 6 | 6 |
| SB-656 | G-SB-656-7 | 7 | 7 |
| SB-656 | G-SB-656-8 | 8 | 8 |
| SB-656 | G-SB-656-9 | 9 | 9 |
| SB-656C | G-SB-656C-4 | 4 | 4 |
| SB-656C | G-SB-656C-6 | 6 | 6 |
| SB-656C | G-SB-656C-8 | 8 | 8 |
| SB-656C | G-SB-656C-8-D | 8 | 8 |
| SB-656D | G-SB-656D-4 | 4 | 4 |
| SB-656D | G-SB-656D-6 | 6 | 6 |
| SB-656D | G-SB-656D-8 | 8 | 8 |
| SB-657A | G-SB-657A-3 | 3 | 3 |
| SB-657A | G-SB-657A-5 | 5 | 5 |
| SB-657A | G-SB-657A-5-D | 5 | 5 |
| SB-657A | G-SB-657A-7 | 7 | 7 |
| SB-657A | G-SB-657A-9 | 9 | 9 |
| SB-657B | G-SB-657B-3 | 3 | 3 |
| SB-657B | G-SB-657B-5 | 5 | 5 |
| SB-657B | G-SB-657B-5-D | 5 | 5 |
| SB-657B | G-SB-657B-7 | 7 | 7 |
| SB-657B | G-SB-657B-9 | 9 | 9 |
| SB-657D | G-SB-657D-3 | 3 | 3 |
| SB-657D | G-SB-657D-5 | 5 | 5 |
| SB-657D | G-SB-657D-7 | 7 | 7 |
| SB-657D | G-SB-657D-9 | 9 | 9 |
| SB-658B | G-SB-658B-3 | 3 | 3 |
| SB-658B | G-SB-658B-5 | 5 | 5 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-658B | G-SB-658B-7 | 7 | 7 |
| SB-658B | G-SB-658B-9 | 9 | 9 |
| SB-658C | G-SB-658C-3 | 3 | 3 |
| SB-658C | G-SB-658C-5 | 5 | 5 |
| SB-658C | G-SB-658C-7 | 7 | 7 |
| SB-658C | G-SB-658C-9 | 9 | 9 |
| SB-659C | G-SB-659C-3 | 3 | 3 |
| SB-659C | G-SB-659C-5 | 5 | 5 |
| SB-659C | G-SB-659C-7 | 7 | 7 |
| SB-659C | G-SB-659C-9 | 9 | 9 |
| SB-659D | G-SB-659D-3 | 3 | 3 |
| SB-659D | G-SB-659D-5 | 5 | 5 |
| SB-659D | G-SB-659D-7 | 7 | 7 |
| SB-659D | G-SB-659D-7-D | 7 | 7 |
| SB-659D | G-SB-659D-9 | 9 | 9 |
| SB-661 | G-SB-661-6 | 6 | 6 |
| SB-661 | G-SB-661-7 | 7 | 7 |
| SB-662 | G-SB-662-6 | 6 | 6 |
| SB-662 | G-SB-662-7 | 7 | 7 |
| SB-662 | G-SB-662-8 | 8 | 8 |
| SB-662 | G-SB-662-9 | 9 | 9 |
| SB-662 | G-SB-662-10 | 10 | 10 |
| SB-662A | G-SB-662A-3 | 3 | 3 |
| SB-662A | G-SB-662A-5 | 5 | 5 |
| SB-662A | G-SB-662A-7 | 7 | 7 |
| SB-662A | G-SB-662A-9 | 9 | 9 |
| SB-662B | G-SB-662B-3 | 3 | 3 |
| SB-662B | G-SB-662B-5 | 5 | 5 |
| SB-662B | G-SB-662B-7 | 7 | 7 |
| SB-662B | G-SB-662B-7-D | 7 | 7 |
| SB-662B | G-SB-662B-9 | 9 | 9 |
| SB-662C | G-SB-662C-3 | 3 | 3 |
| SB-662C | G-SB-662C-5 | 5 | 5 |
| SB-662C | G-SB-662C-7 | 7 | 7 |
| SB-662C | G-SB-662C-9 | 9 | 9 |
| SB-663 | G-SB-663-6 | 6 | 6 |
| SB-663 | G-SB-663-6-D | 6 | 6 |
| SB-663 | G-SB-663-7 | 7 | 7 |
| SB-664 | G-SB-664-6 | 6 | 6 |
| SB-664 | G-SB-664-7 | 7 | 7 |
| SB-665 | G-SB-665-6 | 6 | 6 |
| SB-665 | G-SB-665-7 | 7 | 7 |
| SB-666 | G-SB-666-6 | 6 | 6 |
| SB-666 | G-SB-666-7 | 7 | 7 |
| SB-667 | G-SB-667-6 | 6 | 6 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-667 | G-SB-667-7 | 7 | 7 |
| SB-668 | G-SB-668-6 | 6 | 6 |
| SB-668 | G-SB-668-7 | 7 | 7 |
| SB-671 | G-SB-671-3 | 3 | 3 |
| SB-671 | G-SB-671-4 | 4 | 4 |
| SB-671 | G-SB-671-5 | 5 | 5 |
| SB-671 | G-SB-671-6 | 6 | 6 |
| SB-671 | G-SB-671-7 | 7 | 7 |
| SB-671 | G-SB-671-7-D | 7 | 7 |
| SB-671 | G-SB-671-8 | 8 | 8 |
| SB-671 | G-SB-671-9 | 9 | 9 |
| SB-671 | G-SB-671RE-10 | 10 | 10 |
| SB-671B | G-SB-671B-3 | 3 | 3 |
| SB-671B | G-SB-671B-5 | 5 | 5 |
| SB-671B | G-SB-671B-7 | 7 | 7 |
| SB-671B | G-SB-671B-9 | 9 | 9 |
| SB-671C | G-SB-671C-3 | 3 | 3 |
| SB-671C | G-SB-671C-5 | 5 | 5 |
| SB-671C | G-SB-671C-7 | 7 | 7 |
| SB-671C | G-SB-671C-7-D | 7 | 7 |
| SB-671C | G-SB-671C-9 | 9 | 9 |
| SB-671D | G-SB-671D-3 | 3 | 3 |
| SB-671D | G-SB-671D-5 | 5 | 5 |
| SB-671D | G-SB-671D-7 | 7 | 7 |
| SB-671D | G-SB-671D-9 | 9 | 9 |
| SB-673 | G-SB-673-6 | 6 | 6 |
| SB-673 | G-SB-673-7 | 7 | 7 |
| SB-674 | G-SB-674-6 | 6 | 6 |
| SB-674 | G-SB-674-7 | 7 | 7 |
| SB-675 | G-SB-675-6 | 6 | 6 |
| SB-675 | G-SB-675-7 | 7 | 7 |
| SB-676 | G-SB-676-6 | 6 | 6 |
| SB-676 | G-SB-676-7 | 7 | 7 |
| SB-677 | G-SB-677-3 | 3 | 3 |
| SB-677 | G-SB-677-4 | 4 | 4 |
| SB-677 | G-SB-677-5 | 5 | 5 |
| SB-677 | G-SB-677-6 | 6 | 6 |
| SB-677 | G-SB-677-7 | 7 | 7 |
| SB-677 | G-SB-677-8 | 8 | 8 |
| SB-677 | G-SB-677-9 | 9 | 9 |
| SB-677A | G-SB-677A-3 | 3 | 3 |
| SB-677A | G-SB-677A-5 | 5 | 5 |
| SB-677A | G-SB-677A-7 | 7 | 7 |
| SB-677A | G-SB-677A-9 | 9 | 9 |
| SB-677B | G-SB-677B-3 | 3 | 3 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-677B | G-SB-677B-5 | 5 | 5 |
| SB-677B | G-SB-677B-7 | 7 | 7 |
| SB-677B | G-SB-677B-9 | 9 | 9 |
| SB-677B | G-SB-677B-9-D | 9 | 9 |
| SB-677D | G-SB-677D-3 | 3 | 3 |
| SB-677D | G-SB-677D-5 | 5 | 5 |
| SB-677D | G-SB-677D-7 | 7 | 7 |
| SB-677D | G-SB-677D-9 | 9 | 9 |
| SB-678 | G-SB-678-3 | 3 | 3 |
| SB-678 | G-SB-678-4 | 4 | 4 |
| SB-678 | G-SB-678-5 | 5 | 5 |
| SB-678 | G-SB-678-6 | 6 | 6 |
| SB-678 | G-SB-678-7 | 7 | 7 |
| SB-678 | G-SB-678-8 | 8 | 8 |
| SB-678 | G-SB-678-8-D | 8 | 8 |
| SB-678 | G-SB-678-9 | 9 | 9 |
| SB-678B | G-SB-678B-3 | 3 | 3 |
| SB-678B | G-SB-678B-3-D | 3 | 3 |
| SB-678B | G-SB-678B-5 | 5 | 5 |
| SB-678B | G-SB-678B-7 | 7 | 7 |
| SB-678B | G-SB-678B-9 | 9 | 9 |
| SB-678C | G-SB-678C-3 | 3 | 3 |
| SB-678C | G-SB-678C-5 | 5 | 5 |
| SB-678C | G-SB-678C-7 | 7 | 7 |
| SB-678C | G-SB-678C-9 | 9 | 9 |
| SB-679 | G-SB-679-3 | 3 | 3 |
| SB-679 | G-SB-679-4 | 4 | 4 |
| SB-679 | G-SB-679-5 | 5 | 5 |
| SB-679 | G-SB-679-6 | 6 | 6 |
| SB-679 | G-SB-679-7 | 7 | 7 |
| SB-679 | G-SB-679-8 | 8 | 8 |
| SB-679 | G-SB-679-9 | 9 | 9 |
| SB-679C | G-SB-679C-3 | 3 | 3 |
| SB-679C | G-SB-679C-5 | 5 | 5 |
| SB-679C | G-SB-679C-7 | 7 | 7 |
| SB-679C | G-SB-679C-9 | 9 | 9 |
| SB-679C | G-SB-679C-9-D | 9 | 9 |
| SB-679D | G-SB-679D-3 | 3 | 3 |
| SB-679D | G-SB-679D-5 | 5 | 5 |
| SB-679D | G-SB-679D-7 | 7 | 7 |
| SB-679D | G-SB-679D-9 | 9 | 9 |
| SB-680 | G-SB-680-3 | 3 | 3 |
| SB-680 | G-SB-680-4 | 4 | 4 |
| SB-680 | G-SB-680-5 | 5 | 5 |
| SB-680 | G-SB-680-6 | 6 | 6 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-680 | G-SB-680-7 | 7 | 7 |
| SB-680 | G-SB-680-8 | 8 | 8 |
| SB-680 | G-SB-680-9 | 9 | 9 |
| SB-680D | G-SB-680D-3 | 3 | 3 |
| SB-680D | G-SB-680D-7 | 7 | 7 |
| SB-680D | G-SB-680D-9 | 9 | 9 |
| SB-681 | G-SB-681-5 | 5 | 5 |
| SB-681 | G-SB-681-6 | 6 | 6 |
| SB-682 | G-SB-682-5 | 5 | 5 |
| SB-682 | G-SB-682-6 | 6 | 6 |
| SB-683 | G-SB-683-5 | 5 | 5 |
| SB-683 | G-SB-683-6 | 6 | 6 |
| SB-684 | G-SB-684-5 | 5 | 5 |
| SB-684 | G-SB-684-5-D | 5 | 5 |
| SB-684 | G-SB-684-6 | 6 | 6 |
| SB-685 | G-SB-685-3 | 3 | 3 |
| SB-685 | G-SB-685-4 | 4 | 4 |
| SB-685 | G-SB-685-4-D | 4 | 4 |
| SB-686 | G-SB-686-3 | 3 | 3 |
| SB-686 | G-SB-686-4 | 4 | 4 |
| SB-687 | G-SB-687-3 | 3 | 3 |
| SB-687 | G-SB-687-4 | 4 | 4 |
| SB-688 | G-SB-688-3 | 3 | 3 |
| SB-688 | G-SB-688-4 | 4 | 4 |
| SB-689 | G-SB-689-7 | 7 | 7 |
| SB-689 | G-SB-689-8 | 8 | 8 |
| SB-690 | G-SB-690-7 | 7 | 7 |
| SB-690 | G-SB-690-7-D | 7 | 7 |
| SB-690 | G-SB-690-8 | 8 | 8 |
| SB-691 | G-SB-691-7 | 7 | 7 |
| SB-691 | G-SB-691-8 | 8 | 8 |
| SB-692 | G-SB-692-7 | 7 | 7 |
| SB-692 | G-SB-692-8 | 8 | 8 |
| SB-693 | G-SB-693-5 | 5 | 5 |
| SB-693 | G-SB-693-6 | 6 | 6 |
| SB-693 | G-SB-693-7 | 7 | 7 |
| SB-693 | G-SB-693-8 | 8 | 8 |
| SB-693 | G-SB-693-9 | 9 | 9 |
| SB-693A | G-SB-693A-4 | 4 | 4 |
| SB-693A | G-SB-693A-6 | 6 | 6 |
| SB-693A | G-SB-693A-8 | 8 | 8 |
| SB-693B | G-SB-693B-4 | 4 | 4 |
| SB-693B | G-SB-693B-6 | 6 | 6 |
| SB-693B | G-SB-693B-8 | 8 | 8 |
| SB-693D | G-SB-693D-4 | 4 | 4 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-693D | G-SB-693D-6 | 6 | 6 |
| SB-693D | G-SB-693D-8 | 8 | 8 |
| SB-693D | G-SB-693D-8-D | 8 | 8 |
| SB-694 | G-SB-694-5 | 5 | 5 |
| SB-694 | G-SB-694-6 | 6 | 6 |
| SB-695 | G-SB-695-5 | 5 | 5 |
| SB-695 | G-SB-695-5-D | 5 | 5 |
| SB-695 | G-SB-695-6 | 6 | 6 |
| SB-696 | G-SB-696-5 | 5 | 5 |
| SB-696 | G-SB-696-6 | 6 | 6 |
| SB-697 | G-SB-697-9 | 9 | 9 |
| SB-697 | G-SB-697-10 | 10 | 10 |
| SB-698 | G-SB-698-9 | 9 | 9 |
| SB-698 | G-SB-698-10 | 10 | 10 |
| SB-699 | G-SB-699-3 | 3 | 3 |
| SB-699 | G-SB-699-4 | 4 | 4 |
| SB-700 | G-SB-700-3 | 3 | 3 |
| SB-700 | G-SB-700-4 | 4 | 4 |
| SB-701 | G-SB-701-3 | 3 | 3 |
| SB-701 | G-SB-701-4 | 4 | 4 |
| SB-702 | G-SB-702-3 | 3 | 3 |
| SB-702 | G-SB-702-4 | 4 | 4 |
| SB-703 | G-SB-703-7 | 7 | 7 |
| SB-703 | G-SB-703-8 | 8 | 8 |
| SB-704 | G-SB-704-3 | 3 | 3 |
| SB-704 | G-SB-704-4 | 4 | 4 |
| SB-704 | G-SB-704-5 | 5 | 5 |
| SB-704 | G-SB-704-6 | 6 | 6 |
| SB-704 | G-SB-704-7 | 7 | 7 |
| SB-704 | G-SB-704-8 | 8 | 8 |
| SB-704 | G-SB-704-9 | 9 | 9 |
| SB-704 | G-SB-704-10 | 10 | 10 |
| SB-705 | G-SB-705-3 | 3 | 3 |
| SB-705 | G-SB-705-4 | 4 | 4 |
| SB-706 | G-SB-706-3 | 3 | 3 |
| SB-706 | G-SB-706-4 | 4 | 4 |
| SB-706 | G-SB-706-5 | 5 | 5 |
| SB-706 | G-SB-706-6 | 6 | 6 |
| SB-706 | G-SB-706-6-D | 6 | 6 |
| SB-706 | G-SB-706-7 | 7 | 7 |
| SB-706 | G-SB-706-8 | 8 | 8 |
| SB-706 | G-SB-706-9 | 9 | 9 |
| SB-706 | G-SB-706-10 | 10 | 10 |
| SB-707 | G-SB-707-3 | 3 | 3 |
| SB-707 | G-SB-707-4 | 4 | 4 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-708 | G-SB-708-3 | 3 | 3 |
| SB-708 | G-SB-708-4 | 4 | 4 |
| SB-708 | G-SB-708-5 | 5 | 5 |
| SB-708 | G-SB-708-6 | 6 | 6 |
| SB-708 | G-SB-708-7 | 7 | 7 |
| SB-709 | G-SB-709-3 | 3 | 3 |
| SB-709 | G-SB-709-4 | 4 | 4 |
| SB-710 | G-SB-710-3 | 3 | 3 |
| SB-710 | G-SB-710-4 | 4 | 4 |
| SB-710 | G-SB-710-4-D | 4 | 4 |
| SB-712 | G-SB-712-3 | 3 | 3 |
| SB-712 | G-SB-712-4 | 4 | 4 |
| SB-713 | G-SB-713-3 | 3 | 3 |
| SB-713 | G-SB-713-4 | 4 | 4 |
| SB-714 | G-SB-714-3 | 3 | 3 |
| SB-714 | G-SB-714-4 | 4 | 4 |
| SB-714 | G-SB-714-5 | 5 | 5 |
| SB-714 | G-SB-714-6 | 6 | 6 |
| SB-714 | G-SB-714-6-D | 6 | 6 |
| SB-714 | G-SB-714-7 | 7 | 7 |
| SB-715 | G-SB-715-3 | 3 | 3 |
| SB-715 | G-SB-715-4 | 4 | 4 |
| SB-716 | G-SB-716-3 | 3 | 3 |
| SB-716 | G-SB-716-5 | 5 | 5 |
| SB-716 | G-SB-716-6 | 6 | 6 |
| SB-716 | G-SB-716-7 | 7 | 7 |
| SB-716 | G-SB-716-8 | 8 | 8 |
| SB-716 | G-SB-716-9 | 9 | 9 |
| SB-716 | G-SB-716-10 | 10 | 10 |
| SB-717 | G-SB-717-3 | 3 | 3 |
| SB-717 | G-SB-717-4 | 4 | 4 |
| SB-718 | G-SB-718-3 | 3 | 3 |
| SB-718 | G-SB-718-4 | 4 | 4 |
| SB-719 | G-SB-719-3 | 3 | 3 |
| SB-719 | G-SB-719-4 | 4 | 4 |
| SB-720 | G-SB-720-3 | 3 | 3 |
| SB-720 | G-SB-720-4 | 4 | 4 |
| SB-720 | G-SB-720-5 | 5 | 5 |
| SB-720 | G-SB-720-6 | 6 | 6 |
| SB-720 | G-SB-720-7 | 7 | 7 |
| SB-721 | G-SB-721-3 | 3 | 3 |
| SB-721 | G-SB-721-4 | 4 | 4 |
| SB-721 | G-SB-721-5 | 5 | 5 |
| SB-721 | G-SB-721-6 | 6 | 6 |
| SB-721 | G-SB-721-7 | 7 | 7 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-722 | G-SB-722-3 | 3 | 3 |
| SB-722 | G-SB-722-4 | 4 | 4 |
| SB-723 | G-SB-723-3 | 3 | 3 |
| SB-723 | G-SB-723-3-D | 3 | 3 |
| SB-723 | G-SB-723-4 | 4 | 4 |
| SB-724 | G-SB-724-3 | 3 | 3 |
| SB-724 | G-SB-724-4 | 4 | 4 |
| SB-724 | G-SB-724-6 | 6 | 6 |
| SB-724 | G-SB-724-7 | 7 | 7 |
| SB-725 | G-SB-725-3 | 3 | 3 |
| SB-725 | G-SB-725-4 | 4 | 4 |
| SB-726 | G-SB-726-3 | 3 | 3 |
| SB-726 | G-SB-726-4 | 4 | 4 |
| SB-726 | G-SB-726-5 | 5 | 5 |
| SB-726 | G-SB-726-6 | 6 | 6 |
| SB-726 | G-SB-726-7 | 7 | 7 |
| SB-726 | G-SB-726-8 | 8 | 8 |
| SB-726 | G-SB-726-9 | 9 | 9 |
| SB-726 | G-SB-726-10 | 10 | 10 |
| SB-727 | G-SB-727-3 | 3 | 3 |
| SB-727 | G-SB-727-4 | 4 | 4 |
| SB-727 | G-SB-727-5 | 5 | 5 |
| SB-727 | G-SB-727-6 | 6 | 6 |
| SB-727 | G-SB-727-7 | 7 | 7 |
| SB-728 | G-SB-728-3 | 3 | 3 |
| SB-728 | G-SB-728-4 | 4 | 4 |
| SB-728 | G-SB-728-5 | 5 | 5 |
| SB-728 | G-SB-728-6 | 6 | 6 |
| SB-728 | G-SB-728-7 | 7 | 7 |
| SB-729 | G-SB-729-3 | 3 | 3 |
| SB-729 | G-SB-729-4 | 4 | 4 |
| SB-729 | G-SB-729-5 | 5 | 5 |
| SB-729 | G-SB-729-6 | 6 | 6 |
| SB-729 | G-SB-729-7 | 7 | 7 |
| SB-730 | G-SB-730-4 | 4 | 4 |
| SB-730 | G-SB-730-5 | 5 | 5 |
| SB-731 | G-SB-731-3 | 3 | 3 |
| SB-731 | G-SB-731-4 | 4 | 4 |
| SB-732 | G-SB-732-3 | 3 | 3 |
| SB-732 | G-SB-732-4 | 4 | 4 |
| SB-732 | G-SB-732-5 | 5 | 5 |
| SB-732 | G-SB-732-6 | 6 | 6 |
| SB-732 | G-SB-732-7 | 7 | 7 |
| SB-733 | G-SB-733-3 | 3 | 3 |
| SB-733 | G-SB-733-4 | 4 | 4 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-734 | G-SB-734-6 | 6 | 6 |
| SB-734 | G-SB-734-7 | 7 | 7 |
| SB-735 | G-SB-735-3 | 3 | 3 |
| SB-735 | G-SB-735-5 | 5 | 5 |
| SB-735 | G-SB-735-5-D | 5 | 5 |
| SB-735 | G-SB-735-7 | 7 | 7 |
| SB-735 | G-SB-735-9 | 9 | 9 |
| SB-735A | G-SB-735A-3 | 3 | 3 |
| SB-735A | G-SB-735A-5 | 5 | 5 |
| SB-735A | G-SB-735A-9 | 9 | 9 |
| SB-735B | G-SB-735B-3 | 3 | 3 |
| SB-735B | G-SB-735B-5 | 5 | 5 |
| SB-735B | G-SB-735B-7 | 7 | 7 |
| SB-735B | G-SB-735B-7-D | 7 | 7 |
| SB-735B | G-SB-735B-9 | 9 | 9 |
| SB-735C | G-SB-735C-3 | 3 | 3 |
| SB-735C | G-SB-735C-5 | 5 | 5 |
| SB-735C | G-SB-735C-7 | 7 | 7 |
| SB-736 | G-SB-736-3 | 3 | 3 |
| SB-736B | G-SB-736B-3 | 3 | 3 |
| SB-736B | G-SB-736B-5 | 5 | 5 |
| SB-736B | G-SB-736B-7 | 7 | 7 |
| SB-736B | G-SB-736B-9 | 9 | 9 |
| SB-736C | G-SB-736C-3 | 3 | 3 |
| SB-736C | G-SB-736C-5 | 5 | 5 |
| SB-736C | G-SB-736C-7 | 7 | 7 |
| SB-736C | G-SB-736C-9 | 9 | 9 |
| SB-737 | G-SB-737-3 | 3 | 3 |
| SB-737 | G-SB-737-5 | 5 | 5 |
| SB-737 | G-SB-737-7 | 7 | 7 |
| SB-738 | G-SB-738-4 | 4 | 4 |
| SB-738 | G-SB-738-6 | 6 | 6 |
| SB-738 | G-SB-738-8 | 8 | 8 |
| SB-739 | G-SB-739-4 | 4 | 4 |
| SB-739 | G-SB-739-6 | 6 | 6 |
| SB-739 | G-SB-739-8 | 8 | 8 |
| SB-740 | G-SB-740-4 | 4 | 4 |
| SB-740 | G-SB-740-6 | 6 | 6 |
| SB-740 | G-SB-740-8 | 8 | 8 |
| SB-741 | G-SB-741-4 | 4 | 4 |
| SB-741 | G-SB-741-6 | 6 | 6 |
| SB-741 | G-SB-741-8 | 8 | 8 |
| SB-742 | G-SB-742-4 | 4 | 4 |
| SB-742 | G-SB-742-6 | 6 | 6 |
| SB-742 | G-SB-742-8 | 8 | 8 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-743 | G-SB-743-4 | 4 | 4 |
| SB-743 | G-SB-743-6 | 6 | 6 |
| SB-743 | G-SB-743-8 | 8 | 8 |
| SB-744 | G-SB-744-4 | 4 | 4 |
| SB-744 | G-SB-744-6 | 6 | 6 |
| SB-744 | G-SB-744-8 | 8 | 8 |
| SB-745 | G-SB-745-4 | 4 | 4 |
| SB-745 | G-SB-745-4-D | 4 | 4 |
| SB-745 | G-SB-745-6 | 6 | 6 |
| SB-745 | G-SB-745-8 | 8 | 8 |
| SB-745A | G-SB-745A-4 | 4 | 4 |
| SB-745B | G-SB-745B-4 | 4 | 4 |
| SB-745C | G-SB-745C-4 | 4 | 4 |
| SB-746 | G-SB-746-4 | 4 | 4 |
| SB-746 | G-SB-746-6 | 6 | 6 |
| SB-746 | G-SB-746-8 | 8 | 8 |
| SB-747 | G-SB-747-4 | 4 | 4 |
| SB-747 | G-SB-747-6 | 6 | 6 |
| SB-747 | G-SB-747-8 | 8 | 8 |
| SB-748 | G-SB-748-4 | 4 | 4 |
| SB-748 | G-SB-748-6 | 6 | 6 |
| SB-748 | G-SB-748-8 | 8 | 8 |
| SB-749 | G-SB-749-4 | 4 | 4 |
| SB-749 | G-SB-749-6 | 6 | 6 |
| SB-750 | G-SB-750-4 | 4 | 4 |
| SB-750 | G-SB-750-6 | 6 | 6 |
| SB-751 | G-SB-751-4 | 4 | 4 |
| SB-751 | G-SB-751-6 | 6 | 6 |
| SB-752 | G-SB-752-4 | 4 | 4 |
| SB-752 | G-SB-752-6 | 6 | 6 |
| SB-752 | G-SB-752-6-D | 6 | 6 |
| SB-753 | G-SB-753-4 | 4 | 4 |
| SB-753 | G-SB-753-6 | 6 | 6 |
| SB-754 | G-SB-754-4 | 4 | 4 |
| SB-754 | G-SB-754-6 | 6 | 6 |
| SB-755 | G-SB-755-4 | 4 | 4 |
| SB-755 | G-SB-755-6 | 6 | 6 |
| SB-755 | G-SB-755-6-D | 6 | 6 |
| SB-756 | G-SB-756-4 | 4 | 4 |
| SB-756 | G-SB-756-6 | 6 | 6 |
| SB-757 | G-SB-757-4 | 4 | 4 |
| SB-757 | G-SB-757-6 | 6 | 6 |
| SB-758 | G-SB-758-4 | 4 | 4 |
| SB-758 | G-SB-758-6 | 6 | 6 |
| SB-759 | G-SB-759-3 | 3 | 3 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-759 | G-SB-759-5 | 5 | 5 |
| SB-759 | G-SB-759-7 | 7 | 7 |
| SB-760 | G-SB-760-3 | 3 | 3 |
| SB-760 | G-SB-760-5 | 5 | 5 |
| SB-760 | G-SB-760-7 | 7 | 7 |
| SB-761 | G-SB-761-3 | 3 | 3 |
| SB-761 | G-SB-761-5 | 5 | 5 |
| SB-761 | G-SB-761-7 | 7 | 7 |
| SB-761 | G-SB-761-9 | 9 | 9 |
| SB-761A | G-SB-761A-3 | 3 | 3 |
| SB-761A | G-SB-761A-5 | 5 | 5 |
| SB-761A | G-SB-761A-7 | 7 | 7 |
| SB-761A | G-SB-761A-9 | 9 | 9 |
| SB-761B | G-SB-761B-3 | 3 | 3 |
| SB-761B | G-SB-761B-3-D | 3 | 3 |
| SB-761B | G-SB-761B-5 | 5 | 5 |
| SB-761B | G-SB-761B-7 | 7 | 7 |
| SB-761B | G-SB-761B-9 | 9 | 9 |
| SB-761C | G-SB-761C-3 | 3 | 3 |
| SB-761C | G-SB-761C-5 | 5 | 5 |
| SB-761C | G-SB-761C-7 | 7 | 7 |
| SB-761C | G-SB-761C-9 | 9 | 9 |
| SB-761D | G-SB-761D-3 | 3 | 3 |
| SB-761D | G-SB-761D-5 | 5 | 5 |
| SB-761D | G-SB-761D-7 | 7 | 7 |
| SB-761D | G-SB-761D-7-D | 7 | 7 |
| SB-761D | G-SB-761D-9 | 9 | 9 |
| SB-762 | G-SB-762-3 | 3 | 3 |
| SB-762 | G-SB-762-5 | 5 | 5 |
| SB-762 | G-SB-762-7 | 7 | 7 |
| SB-762 | G-SB-762-9 | 9 | 9 |
| SB-762A | G-SB-762A-3 | 3 | 3 |
| SB-762A | G-SB-762A-5 | 5 | 5 |
| SB-762A | G-SB-762A-7 | 7 | 7 |
| SB-762A | G-SB-762A-9 | 9 | 9 |
| SB-762B | G-SB-762B-3 | 3 | 3 |
| SB-762B | G-SB-762B-5 | 5 | 5 |
| SB-762B | G-SB-762B-7 | 7 | 7 |
| SB-762B | G-SB-762B-9 | 9 | 9 |
| SB-762C | G-SB-762C-3 | 3 | 3 |
| SB-762C | G-SB-762C-5 | 5 | 5 |
| SB-762C | G-SB-762C-7 | 7 | 7 |
| SB-762D | G-SB-762D-3 | 3 | 3 |
| SB-762D | G-SB-762D-5 | 5 | 5 |
| SB-762D | G-SB-762D-7 | 7 | 7 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-762D | G-SB-762D-7-D | 7 | 7 |
| SB-762D | G-SB-762D-9 | 9 | 9 |
| SB-763 | G-SB-763-3 | 3 | 3 |
| SB-763 | G-SB-763-3-D | 3 | 3 |
| SB-763 | G-SB-763-5 | 5 | 5 |
| SB-763 | G-SB-763-7 | 7 | 7 |
| SB-763 | G-SB-763-9 | 9 | 9 |
| SB-763A | G-SB-763A-3 | 3 | 3 |
| SB-763A | G-SB-763A-5 | 5 | 5 |
| SB-763A | G-SB-763A-7 | 7 | 7 |
| SB-763A | G-SB-763A-9 | 9 | 9 |
| SB-763B | G-SB-763B-3 | 3 | 3 |
| SB-763B | G-SB-763B-5 | 5 | 5 |
| SB-763B | G-SB-763B-7 | 7 | 7 |
| SB-763B | G-SB-763B-9 | 9 | 9 |
| SB-763C | G-SB-763C-3 | 3 | 3 |
| SB-763C | G-SB-763C-5 | 5 | 5 |
| SB-763C | G-SB-763C-7 | 7 | 7 |
| SB-763C | G-SB-763C-9 | 9 | 9 |
| SB-763D | G-SB-763D-3 | 3 | 3 |
| SB-763D | G-SB-763D-5 | 5 | 5 |
| SB-763D | G-SB-763D-7 | 7 | 7 |
| SB-763D | G-SB-763D-7-D | 7 | 7 |
| SB-763D | G-SB-763D-9 | 9 | 9 |
| SB-764 | G-SB-764-3 | 3 | 3 |
| SB-764 | G-SB-764-5 | 5 | 5 |
| SB-764 | G-SB-764-5-D | 5 | 5 |
| SB-764 | G-SB-764-7 | 7 | 7 |
| SB-764 | G-SB-764-9 | 9 | 9 |
| SB-764A | G-SB-764A-3 | 3 | 3 |
| SB-764A | G-SB-764A-5 | 5 | 5 |
| SB-764A | G-SB-764A-7 | 7 | 7 |
| SB-764A | G-SB-764A-9 | 9 | 9 |
| SB-764B | G-SB-764B-3 | 3 | 3 |
| SB-764B | G-SB-764B-5 | 5 | 5 |
| SB-764B | G-SB-764B-5-D | 5 | 5 |
| SB-764C | G-SB-764C-3 | 3 | 3 |
| SB-764C | G-SB-764C-5 | 5 | 5 |
| SB-764C | G-SB-764C-7 | 7 | 7 |
| SB-764C | G-SB-764C-9 | 9 | 9 |
| SB-764D | G-SB-764D-3 | 3 | 3 |
| SB-764D | G-SB-764D-3-D | 3 | 3 |
| SB-764D | G-SB-764D-5 | 5 | 5 |
| SB-764D | G-SB-764D-7 | 7 | 7 |
| SB-764D | G-SB-764D-9 | 9 | 9 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-765 | G-SB-765-3 | 3 | 3 |
| SB-765 | G-SB-765-5 | 5 | 5 |
| SB-765 | G-SB-765-7 | 7 | 7 |
| SB-765 | G-SB-765-9 | 9 | 9 |
| SB-765A | G-SB-765A-3 | 3 | 3 |
| SB-765A | G-SB-765A-5 | 5 | 5 |
| SB-765A | G-SB-765A-7 | 7 | 7 |
| SB-765B | G-SB-765B-3 | 3 | 3 |
| SB-765B | G-SB-765B-5 | 5 | 5 |
| SB-765B | G-SB-765B-7 | 7 | 7 |
| SB-765C | G-SB-765C-3 | 3 | 3 |
| SB-765C | G-SB-765C-5 | 5 | 5 |
| SB-765C | G-SB-765C-7 | 7 | 7 |
| SB-765D | G-SB-765D-3 | 3 | 3 |
| SB-765D | G-SB-765D-5 | 5 | 5 |
| SB-765D | G-SB-765D-7 | 7 | 7 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-803 | G-SB-803-03 | 3 | 3 |
| SB-803 | G-SB-803-05 | 5 | 5 |
| SB-803 | G-SB-803-07 | 7 | 7 |
| SB-803 | G-SB-803-09 | 9 | 9 |
| SB-804 | G-SB-804-03 | 3 | 3 |
| SB-804 | G-SB-804-05 | 5 | 5 |
| SB-804 | G-SB-804-07 | 7 | 7 |
| SB-804 | G-SB-804-09 | 9 | 9 |
| SB-805 | G-SB-805-07 | 7 | 7 |
| SB-805 | G-SB-805-09 | 9 | 9 |
| SB-806 | G-SB-806-03 | 3 | 3 |
| SB-806 | G-SB-806-05 | 5 | 5 |
| SB-806 | G-SB-806-07 | 7 | 7 |
| SB-806 | G-SB-806-07-D | 7 | 7 |
| SB-806 | G-SB-806-09 | 9 | 9 |
| SB-807 | G-SB-807-03 | 3 | 3 |
| SB-807 | G-SB-807-03-D | 3 | 3 |
| SB-807 | G-SB-807-05 | 5 | 5 |
| SB-807 | G-SB-807-07 | 7 | 7 |
| SB-807 | G-SB-807-09 | 9 | 9 |
| SB-808 | G-SB-808-03 | 3 | 3 |
| SB-808 | G-SB-808-05 | 5 | 5 |
| SB-808 | G-SB-808-07 | 7 | 7 |
| SB-808 | G-SB-808-09 | 9 | 9 |
| SB-809 | G-SB-809-03 | 3 | 3 |
| SB-809 | G-SB-809-05 | 5 | 5 |
| SB-809 | G-SB-809-07 | 7 | 7 |
| SB-809 | G-SB-809-09 | 9 | 9 |

**Table 3-9**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-810 | G-SB-810-03 | 3 | 3 |
| SB-810 | G-SB-810-05 | 5 | 5 |
| SB-810 | G-SB-810-07 | 7 | 7 |
| SB-810 | G-SB-810-09 | 9 | 9 |
| SB-811 | G-SB-811-05 | 5 | 5 |
| SB-811 | G-SB-811-07 | 7 | 7 |
| SB-811 | G-SB-811-07-D | 7 | 7 |
| SB-811 | G-SB-811-09 | 9 | 9 |
| SB-812 | G-SB-812-03 | 3 | 3 |
| SB-812 | G-SB-812-05 | 5 | 5 |
| SB-812 | G-SB-812-07 | 7 | 7 |
| SB-812 | G-SB-812-09 | 9 | 9 |
| SB-813 | G-SB-813-03 | 3 | 3 |
| SB-813 | G-SB-813-05 | 5 | 5 |
| SB-813 | G-SB-813-07 | 7 | 7 |
| SB-813 | G-SB-813-09 | 9 | 9 |
| **Data Gap Investigation Test Pit Samples (Fall 2010)** | | | |
| G-TP-1 | G-TP-1-5-2-3 | 2 | 3 |
| G-TP-1 | G-TP-1-6-2-3 | 2 | 3 |
| G-TP-1 | G-TP-1-7-5-7 | 5 | 7 |
| G-TP-1 | G-TP-1-8-5-7 | 5 | 7 |
| G-TP-1 | G-TP-1-1-7-8 | 7 | 8 |
| G-TP-1 | G-TP-1-2-7-8 | 7 | 8 |
| G-TP-2 | G-TP-2-8-5-6 | 5 | 6 |
| G-TP-2 | G-TP-2-9-5-6 | 5 | 6 |
| G-TP-2 | G-TP-2-3-6-7 | 6 | 7 |

**Table 3-10**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block H**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **LMC MRC Groundwater Study Samples (May 2005)** | | | |
| MRC-MW08A | MRC-MW08[0809] | 8 | 9 |
| **Phase II Soil Investigation Samples (Summer 2005)** | | | |
| SB-200 | SB-200-05 | 5 | 5 |
| SB-200 | SB-200-10 | 10 | 10 |
| SB-201 | SB-201-05 | 5 | 5 |
| SB-201 | SB-201-10 | 10 | 10 |
| SB-202 | SB-202-05 | 5 | 5 |
| SB-202 | SB-202-10 | 10 | 10 |
| SB-203 | SB-203-05 | 5 | 5 |
| SB-203 | SB-203-10 | 10 | 10 |
| SB-282 | SB-282-0405 | 4 | 5 |
| SB-282 | SB-282-0910 | 9 | 10 |
| SB-283 | SB-283-0405 | 4 | 5 |
| SB-283 | SB-283-0910 | 9 | 10 |
| SB-284 | SB-284-0405 | 4 | 5 |
| SB-284 | SB-284-0910 | 9 | 10 |
| SB-285 | SB-285-0405 | 4 | 5 |
| SB-285 | SB-285-0910 | 9 | 10 |
| SB-286 | SB-286-0405 | 4 | 5 |
| SB-286 | SB-286-0910 | 9 | 10 |
| SB-293 | SB-293-0405 | 4 | 5 |
| SB-293 | SB-293-0910 | 9 | 10 |
| SB-294 | SB-294-0405 | 4 | 5 |
| SB-294 | SB-294-0910 | 9 | 10 |
| **Additional Soil Characterization Samples (Fall 2007)** | | | |
| SB-462 | SB-462-0203 | 2 | 3 |
| SB-462 | SB-462-0304 | 3 | 4 |
| SB-462 | SB-462-0506 | 5 | 6 |
| SB-462 | SB-462-0708 | 7 | 8 |
| SB-463 | SB-463-0203 | 2 | 3 |
| SB-463 | SB-463-0304 | 3 | 4 |
| SB-463 | SB-463-0506 | 5 | 6 |
| SB-463 | SB-463-0708 | 7 | 8 |
| SB-464 | SB-464-0203 | 2 | 3 |
| SB-464 | SB-464-0304 | 3 | 4 |
| SB-464 | SB-464-0506 | 5 | 6 |
| SB-464 | SB-464-0708 | 7 | 8 |
| SB-465 | SB-465-0203 | 2 | 3 |
| SB-465 | SB-465-0304 | 3 | 4 |
| SB-465 | SB-465-0506 | 5 | 6 |
| SB-465 | SB-465-0708 | 7 | 8 |
| SB-466 | SB-466-0203 | 2 | 3 |
| SB-466 | SB-466-0304 | 3 | 4 |
| SB-466 | SB-466-0506 | 5 | 6 |

**Table 3-10**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block H**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-466 | SB-466-0708 | 7 | 8 |
| SB-467 | SB-467-0203 | 2 | 3 |
| SB-467 | SB-467-0304 | 3 | 4 |
| SB-467 | SB-467-0506 | 5 | 6 |
| SB-467 | SB-467-0708 | 7 | 8 |
| SB-468 | SB-468-0203 | 2 | 3 |
| SB-468 | SB-468-0304 | 3 | 4 |
| SB-468 | SB-468-0506 | 5 | 6 |
| SB-468 | SB-468-0708 | 7 | 8 |
| SB-469 | SB-469-0203 | 2 | 3 |
| SB-469 | SB-469-0304 | 3 | 4 |
| SB-469 | SB-469-0506 | 5 | 6 |
| SB-469 | SB-469-0708 | 7 | 8 |
| SB-470 | SB-470-0203 | 2 | 3 |
| SB-470 | SB-470-0304 | 3 | 4 |
| SB-470 | SB-470-0506 | 5 | 6 |
| SB-470 | SB-470-0708 | 7 | 8 |
| SB-471 | SB-471-0203 | 2 | 3 |
| SB-471 | SB-471-0304 | 3 | 4 |
| SB-471 | SB-471-0506 | 5 | 6 |
| SB-471 | SB-471-0708 | 7 | 8 |
| SB-472 | SB-472-0203 | 2 | 3 |
| SB-472 | SB-472-0304 | 3 | 4 |
| SB-472 | SB-472-0506 | 5 | 6 |
| SB-472 | SB-472-0708 | 7 | 8 |
| SB-473 | SB-473-0203 | 2 | 3 |
| SB-473 | SB-473-0304 | 3 | 4 |
| SB-473 | SB-473-0506 | 5 | 6 |
| SB-473 | SB-473-0708 | 7 | 8 |
| SB-474 | SB-474-0203 | 2 | 3 |
| SB-474 | SB-474-0304 | 3 | 4 |
| SB-474 | SB-474-0506 | 5 | 6 |
| SB-474 | SB-474-0708 | 7 | 8 |
| SB-475 | SB-475-0203 | 2 | 3 |
| SB-475 | SB-475-0304 | 3 | 4 |
| SB-475 | SB-475-0506 | 5 | 6 |
| SB-475 | SB-475-0708 | 7 | 8 |
| SB-476 | SB-476-0203 | 2 | 3 |
| SB-476 | SB-476-0304 | 3 | 4 |
| SB-476 | SB-476-0506 | 5 | 6 |
| SB-476 | SB-476-0708 | 7 | 8 |
| SB-477 | SB-477-0203 | 2 | 3 |
| SB-477 | SB-477-0304 | 3 | 4 |
| SB-477 | SB-477-0506 | 5 | 6 |
| SB-477 | SB-477-0708 | 7 | 8 |

**Table 3-10**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block H**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-478 | SB-478-0203 | 2 | 3 |
| SB-478 | SB-478-0304 | 3 | 4 |
| SB-478 | SB-478-0506 | 5 | 6 |
| SB-478 | SB-478-0708 | 7 | 8 |
| SB-479 | SB-479-0203 | 2 | 3 |
| SB-479 | SB-479-0304 | 3 | 4 |
| SB-479 | SB-479-0506 | 5 | 6 |
| SB-479 | SB-479-0708 | 7 | 8 |
| SB-480 | SB-480-0203 | 2 | 3 |
| SB-480 | SB-480-0304 | 3 | 4 |
| SB-480 | SB-480-0506 | 5 | 6 |
| SB-480 | SB-480-0708 | 7 | 8 |
| SB-481 | SB-481-0203 | 2 | 3 |
| SB-481 | SB-481-0304 | 3 | 4 |
| SB-481 | SB-481-0506 | 5 | 6 |
| SB-481 | SB-481-0708 | 7 | 8 |
| SB-482 | SB-482-0203 | 2 | 3 |
| SB-482 | SB-482-0304 | 3 | 4 |
| SB-482 | SB-482-0506 | 5 | 6 |
| SB-482 | SB-482-0708 | 7 | 8 |
| SB-483 | SB-483-0203 | 2 | 3 |
| SB-483 | SB-483-0304 | 3 | 4 |
| SB-483 | SB-483-0506 | 5 | 6 |
| SB-483 | SB-483-0708 | 7 | 8 |
| SB-484 | SB-484-0203 | 2 | 3 |
| SB-484 | SB-484-0304 | 3 | 4 |
| SB-484 | SB-484-0506 | 5 | 6 |
| SB-484 | SB-484-0708 | 7 | 8 |
| SB-485 | SB-485-0203 | 2 | 3 |
| SB-485 | SB-485-0304 | 3 | 4 |
| SB-485 | SB-485-0506 | 5 | 6 |
| SB-485 | SB-485-0708 | 7 | 8 |
| SB-486 | SB-486-0203 | 2 | 3 |
| SB-486 | SB-486-0304 | 3 | 4 |
| SB-486 | SB-486-0506 | 5 | 6 |
| SB-486 | SB-486-0708 | 7 | 8 |
| SB-487 | SB-487-0203 | 2 | 3 |
| SB-487 | SB-487-0304 | 3 | 4 |
| SB-487 | SB-487-0506 | 5 | 6 |
| SB-487 | SB-487-0708 | 7 | 8 |
| SB-488 | SB-488-0203 | 2 | 3 |
| SB-488 | SB-488-0304 | 3 | 4 |
| SB-488 | SB-488-0506 | 5 | 6 |
| SB-488 | SB-488-0708 | 7 | 8 |

**Table 3-10**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block H**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-282 | H-SB-282RE-3 | 3 | 3 |
| SB-282 | H-SB-282RE-4 | 4 | 4 |
| SB-282 | H-SB-282RE-5 | 5 | 5 |
| SB-282 | H-SB-282RE-6 | 6 | 6 |
| SB-282 | H-SB-282RE-7 | 7 | 7 |
| SB-282 | H-SB-282RE-7-D | 7 | 7 |
| SB-282 | H-SB-282RE-8 | 8 | 8 |
| SB-282 | H-SB-282RE-9 | 9 | 9 |
| SB-282 | H-SB-282RE-10 | 10 | 10 |
| SB-282A | H-SB-282REA-3 | 3 | 3 |
| SB-282A | H-SB-282REA-5 | 5 | 5 |
| SB-282A | H-SB-282REA-7 | 7 | 7 |
| SB-282A | H-SB-282REA-9 | 9 | 9 |
| SB-282A | H-SB-282REA-9-D | 9 | 9 |
| SB-282B | H-SB-282REB-3 | 3 | 3 |
| SB-282B | H-SB-282REB-5 | 5 | 5 |
| SB-282B | H-SB-282REB-7 | 7 | 7 |
| SB-282B | H-SB-282REB-9 | 9 | 9 |
| SB-282C | H-SB-282REC-3 | 3 | 3 |
| SB-282C | H-SB-282REC-5 | 5 | 5 |
| SB-282C | H-SB-282REC-7 | 7 | 7 |
| SB-282C | H-SB-282REC-9 | 9 | 9 |
| SB-282C | H-SB-282REC-9-D | 9 | 9 |
| SB-282D | H-SB-282RED-3 | 3 | 3 |
| SB-282D | H-SB-282RED-5 | 5 | 5 |
| SB-282D | H-SB-282RED-7 | 7 | 7 |
| SB-282D | H-SB-282RED-9 | 9 | 9 |
| SB-283 | H-SB-283RE-3 | 3 | 3 |
| SB-283 | H-SB-283RE-4 | 4 | 4 |
| SB-284 | H-SB-284RE-3 | 3 | 3 |
| SB-284 | H-SB-284RE-4 | 4 | 4 |
| SB-474 | H-SB-474RE-5 | 5 | 5 |
| SB-474 | H-SB-474RE-6 | 6 | 6 |
| SB-604 | H-SB-604-3 | 3 | 3 |
| SB-604 | H-SB-604-4 | 4 | 4 |
| SB-604 | H-SB-604-5 | 5 | 5 |
| SB-604 | H-SB-604-6 | 6 | 6 |
| SB-604 | H-SB-604-7 | 7 | 7 |
| SB-604A | H-SB-604A-3 | 3 | 3 |
| SB-604A | H-SB-604A-5 | 5 | 5 |
| SB-604A | H-SB-604A-7 | 7 | 7 |
| SB-604B | H-SB-604B-3 | 3 | 3 |
| SB-604B | H-SB-604B-5 | 5 | 5 |
| SB-604B | H-SB-604B-7 | 7 | 7 |

**Table 3-10**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block H**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-604D | H-SB-604D-3 | 3 | 3 |
| SB-604D | H-SB-604D-3-D | 3 | 3 |
| SB-604D | H-SB-604D-5 | 5 | 5 |
| SB-604D | H-SB-604D-7 | 7 | 7 |
| SB-605 | H-SB-605-3 | 3 | 3 |
| SB-605 | H-SB-605-4 | 4 | 4 |
| SB-606 | H-SB-606-3 | 3 | 3 |
| SB-606 | H-SB-606-4 | 4 | 4 |
| SB-607 | H-SB-607-3 | 3 | 3 |
| SB-607 | H-SB-607-4 | 4 | 4 |
| SB-608 | H-SB-608-3 | 3 | 3 |
| SB-608 | H-SB-608-4 | 4 | 4 |
| SB-608 | H-SB-608-4-D | 4 | 4 |
| SB-609 | H-SB-609-3 | 3 | 3 |
| SB-609 | H-SB-609-4 | 4 | 4 |
| SB-610 | H-SB-610-3 | 3 | 3 |
| SB-610 | H-SB-610-4 | 4 | 4 |
| SB-610 | H-SB-610-5 | 5 | 5 |
| SB-610 | H-SB-610-6 | 6 | 6 |
| SB-610 | H-SB-610-7 | 7 | 7 |
| SB-610B | H-SB-610B-3 | 3 | 3 |
| SB-610B | H-SB-610B-5 | 5 | 5 |
| SB-610B | H-SB-610B-5-D | 5 | 5 |
| SB-610C | H-SB-610C-3 | 3 | 3 |
| SB-610C | H-SB-610C-5 | 5 | 5 |
| SB-610D | H-SB-610D-3 | 3 | 3 |
| SB-610D | H-SB-610D-5 | 5 | 5 |
| SB-611 | H-SB-611-3 | 3 | 3 |
| SB-611 | H-SB-611-4 | 4 | 4 |
| SB-611 | H-SB-611-5 | 5 | 5 |
| SB-611 | H-SB-611-6 | 6 | 6 |
| SB-611 | H-SB-611-7 | 7 | 7 |
| SB-611A | H-SB-611A-3 | 3 | 3 |
| SB-611A | H-SB-611A-5 | 5 | 5 |
| SB-611D | H-SB-611D-3 | 3 | 3 |
| SB-611D | H-SB-611D-5 | 5 | 5 |
| SB-611D | H-SB-611D-5-D | 5 | 5 |
| SB-614 | H-SB-614-10 | 10 | 10 |
| SB-620 | H-SB-620-5 | 5 | 5 |
| SB-620 | H-SB-620-6 | 6 | 6 |
| SB-620 | H-SB-620-6-D | 6 | 6 |
| SB-621 | H-SB-621-5 | 5 | 5 |
| SB-621 | H-SB-621-6 | 6 | 6 |
| SB-622 | H-SB-622-5 | 5 | 5 |
| SB-622 | H-SB-622-6 | 6 | 6 |

**Table 3-10**

**Subsurface Soil (2-10 ft.) Samples Used in the Human Health Risk Assessment - Tax Block Soils**
**Block H**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-623 | H-SB-623-5 | 5 | 5 |
| SB-623 | H-SB-623-6 | 6 | 6 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-814 | H-SB-814-03 | 3 | 3 |
| SB-814 | H-SB-814-05 | 5 | 5 |
| SB-814 | H-SB-814-07 | 7 | 7 |
| SB-814 | H-SB-814-09 | 9 | 9 |
| SB-815 | H-SB-815-03 | 3 | 3 |
| SB-815 | H-SB-815-05 | 5 | 5 |
| SB-815 | H-SB-815-07 | 7 | 7 |
| SB-815 | H-SB-815-09 | 9 | 9 |
| SB-816 | H-SB-816-03 | 3 | 3 |
| SB-816 | H-SB-816-03-D | 3 | 3 |
| SB-816 | H-SB-816-05 | 5 | 5 |
| SB-816 | H-SB-816-07 | 7 | 7 |
| SB-816 | H-SB-816-09 | 9 | 9 |
| SB-817 | H-SB-817-03 | 3 | 3 |
| SB-817 | H-SB-817-05 | 5 | 5 |
| SB-817 | H-SB-817-07 | 7 | 7 |
| SB-817 | H-SB-817-07-D | 7 | 7 |
| SB-817 | H-SB-817-09 | 9 | 9 |

**Table 3-11**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Site-Wide Phase II Investigation Samples (2004)** | | | |
| SB-057 | SB-57-15 | 15 | 15 |
| SB-058 | SB-58-15 | 15 | 15 |
| SB-058 | SB-58-20 | 20 | 20 |
| SB-059 | SB-59-15 | 15 | 15 |
| SB-062 | SB-62-15 | 15 | 15 |
| SB-065 | SB-65-15 | 15 | 15 |
| SB-065 | SB-65-20 | 20 | 20 |
| SB-067 | SB-67-15 | 15 | 15 |
| SB-067 | SB-67-20 | 20 | 20 |
| SB-067 | SB-67-25 | 25 | 25 |
| **LMC MRC Groundwater Study Samples (May 2005)** | | | |
| MRC-MW40A | MRC-MW40[1214] | 12 | 14 |
| **Phase II Soil Investigation Samples (Summer 2005)** | | | |
| SB-244 | SB-244-15 | 15 | 15 |
| SB-245 | SB-245-15 | 15 | 15 |
| SB-246 | SB-246-15 | 15 | 15 |
| SB-247 | SB-247-15 | 15 | 15 |
| SB-248 | SB-248-15 | 15 | 15 |
| SB-249 | SB-249-15 | 15 | 15 |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-057 | F-SB-57RE-11 | 11 | 11 |
| SB-057 | F-SB-57RE-12 | 12 | 12 |
| SB-057 | F-SB-57RE-13 | 13 | 13 |
| SB-057 | F-SB-57RE-14 | 14 | 14 |
| SB-057 | F-SB-57RE-15 | 15 | 15 |
| SB-058 | F-SB-58RE-11 | 11 | 11 |
| SB-058 | F-SB-58RE-12 | 12 | 12 |
| SB-058 | F-SB-58RE-13 | 13 | 13 |
| SB-058 | F-SB-58RE-14 | 14 | 14 |
| SB-058 | F-SB-58RE-15 | 15 | 15 |
| SB-058A | F-SB-58REA-12 | 12 | 12 |
| SB-058A | F-SB-58REA-14 | 14 | 14 |
| SB-058B | F-SB-58REB-12 | 12 | 12 |
| SB-058B | F-SB-58REB-14 | 14 | 14 |
| SB-058C | F-SB-58REC-12 | 12 | 12 |
| SB-058C | F-SB-58REC-14 | 14 | 14 |
| SB-058D | F-SB-58RED-12 | 12 | 12 |
| SB-058D | F-SB-58RED-14 | 14 | 14 |
| SB-060 | D-SB-60RE-11 | 11 | 11 |
| SB-060 | D-SB-60RE-12 | 12 | 12 |
| SB-060 | D-SB-60RE-13 | 13 | 13 |
| SB-060 | D-SB-60RE-14 | 14 | 14 |
| SB-060 | D-SB-60RE-15 | 15 | 15 |
| SB-061 | D-SB-61RE-11 | 11 | 11 |

**Table 3-11**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-061 | D-SB-61RE-12 | 12 | 12 |
| SB-061 | D-SB-61RE-13 | 13 | 13 |
| SB-061 | D-SB-61RE-14 | 14 | 14 |
| SB-061 | D-SB-61RE-15 | 15 | 15 |
| SB-061A | D-SB-61REA-11 | 11 | 11 |
| SB-061A | D-SB-61REA-13 | 13 | 13 |
| SB-061A | D-SB-61REA-15 | 15 | 15 |
| SB-061B | D-SB-61REB-11 | 11 | 11 |
| SB-061B | D-SB-61REB-13 | 13 | 13 |
| SB-061B | D-SB-61REB-15 | 15 | 15 |
| SB-061C | D-SB-61REC-11 | 11 | 11 |
| SB-061C | D-SB-61REC-13 | 13 | 13 |
| SB-061C | D-SB-61REC-15 | 15 | 15 |
| SB-061D | D-SB-61RED-11 | 11 | 11 |
| SB-061D | D-SB-61RED-13 | 13 | 13 |
| SB-061D | D-SB-61RED-15 | 15 | 15 |
| SB-062 | D-SB-62RE-11 | 11 | 11 |
| SB-062 | D-SB-62RE-12 | 12 | 12 |
| SB-062 | D-SB-62RE-13 | 13 | 13 |
| SB-062 | D-SB-62RE-14 | 14 | 14 |
| SB-062 | D-SB-62RE-15 | 15 | 15 |
| SB-062A | D-SB-62REA-11 | 11 | 11 |
| SB-062A | D-SB-62REA-11-D | 11 | 11 |
| SB-062A | D-SB-62REA-13 | 13 | 13 |
| SB-062A | D-SB-62REA-15 | 15 | 15 |
| SB-062B | D-SB-62REB-11 | 11 | 11 |
| SB-062B | D-SB-62REB-13 | 13 | 13 |
| SB-062B | D-SB-62REB-15 | 15 | 15 |
| SB-062C | D-SB-62REC-11 | 11 | 11 |
| SB-062C | D-SB-62REC-13 | 13 | 13 |
| SB-062C | D-SB-62REC-15 | 15 | 15 |
| SB-062D | D-SB-62RED-11 | 11 | 11 |
| SB-062D | D-SB-62RED-13 | 13 | 13 |
| SB-062D | D-SB-62RED-15 | 15 | 15 |
| SB-063 | D-SB-63RE-11 | 11 | 11 |
| SB-063 | D-SB-63RE-12 | 12 | 12 |
| SB-063 | D-SB-63RE-13 | 13 | 13 |
| SB-063 | D-SB-63RE-14 | 14 | 14 |
| SB-063 | D-SB-63RE-15 | 15 | 15 |
| SB-065 | D-SB-65RE-11 | 11 | 11 |
| SB-065 | D-SB-65RE-12 | 12 | 12 |
| SB-065 | D-SB-65RE-13 | 13 | 13 |
| SB-065 | D-SB-65RE-14 | 14 | 14 |
| SB-065 | D-SB-65RE-15 | 15 | 15 |
| SB-066 | D-SB-66RE-11 | 11 | 11 |

**Table 3-11**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-066 | D-SB-66RE-12 | 12 | 12 |
| SB-066 | D-SB-66RE-15 | 15 | 15 |
| SB-239 | D-SB-239RE-11 | 11 | 11 |
| SB-239 | D-SB-239RE-12 | 12 | 12 |
| SB-240 | D-SB-240RE-11 | 11 | 11 |
| SB-240 | D-SB-240RE-12 | 12 | 12 |
| SB-240 | D-SB-240RE-13 | 13 | 13 |
| SB-240 | D-SB-240RE-14 | 14 | 14 |
| SB-240 | D-SB-240RE-15 | 15 | 15 |
| SB-240A | D-SB-240REA-11 | 11 | 11 |
| SB-240A | D-SB-240REA-13 | 13 | 13 |
| SB-240A | D-SB-240REA-15 | 15 | 15 |
| SB-240B | D-SB-240REB-11 | 11 | 11 |
| SB-240B | D-SB-240REB-13 | 13 | 13 |
| SB-240C | D-SB-240REC-11 | 11 | 11 |
| SB-240C | D-SB-240REC-13 | 13 | 13 |
| SB-240C | D-SB-240REC-15 | 15 | 15 |
| SB-240D | D-SB-240RED-11 | 11 | 11 |
| SB-240D | D-SB-240RED-11-D | 11 | 11 |
| SB-240D | D-SB-240RED-13 | 13 | 13 |
| SB-240D | D-SB-240RED-15 | 15 | 15 |
| SB-243 | D-SB-243RE-11 | 11 | 11 |
| SB-243 | D-SB-243RE-12 | 12 | 12 |
| SB-243 | D-SB-243RE-13 | 13 | 13 |
| SB-243 | D-SB-243RE-14 | 14 | 14 |
| SB-243 | D-SB-243RE-15 | 15 | 15 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-766 | D-SB-766-11 | 11 | 11 |
| SB-766 | D-SB-766-13 | 13 | 13 |
| SB-766 | D-SB-766-15 | 15 | 15 |
| SB-767 | D-SB-767-11 | 11 | 11 |
| SB-767 | D-SB-767-13 | 13 | 13 |
| SB-767 | D-SB-767-15 | 15 | 15 |
| SB-768 | D-SB-768-11 | 11 | 11 |
| SB-768 | D-SB-768-13 | 13 | 13 |
| SB-768 | D-SB-768-15 | 15 | 15 |
| SB-769 | D-SB-769-11 | 11 | 11 |
| SB-769 | D-SB-769-13 | 13 | 13 |
| SB-769 | D-SB-769-15 | 15 | 15 |
| SB-770 | D-SB-770-13 | 13 | 13 |
| SB-770 | D-SB-770-15 | 15 | 15 |
| SB-771 | D-SB-771-11 | 11 | 11 |
| SB-771 | D-SB-771-13 | 13 | 13 |
| SB-771 | D-SB-771-15 | 15 | 15 |
| SB-772 | D-SB-772-11 | 11 | 11 |

**Table 3-11**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-772 | D-SB-772-13 | 13 | 13 |
| SB-772 | D-SB-772-15 | 15 | 15 |
| SB-773 | D-SB-773-11 | 11 | 11 |
| SB-773 | D-SB-773-13 | 13 | 13 |
| SB-773 | D-SB-773-15 | 15 | 15 |
| SB-774 | D-SB-774-11 | 11 | 11 |
| SB-774 | D-SB-774-13 | 13 | 13 |
| SB-774 | D-SB-774-15 | 15 | 15 |
| SB-774 | D-SB-774-15-D | 15 | 15 |
| SB-775 | D-SB-775-11 | 11 | 11 |
| SB-775 | D-SB-775-13 | 13 | 13 |
| SB-775 | D-SB-775-15 | 15 | 15 |
| SB-776 | D-SB-776-11 | 11 | 11 |
| SB-776 | D-SB-776-13 | 13 | 13 |
| SB-776 | D-SB-776-15 | 15 | 15 |
| SB-777 | D-SB-777-11 | 11 | 11 |
| SB-777 | D-SB-777-13 | 13 | 13 |
| SB-777 | D-SB-777-15 | 15 | 15 |
| SB-778 | D-SB-778-11 | 11 | 11 |
| SB-778 | D-SB-778-13 | 13 | 13 |
| SB-778 | D-SB-778-15 | 15 | 15 |
| SB-779 | D-SB-779-11 | 11 | 11 |
| SB-779 | D-SB-779-13 | 13 | 13 |
| SB-779 | D-SB-779-15 | 15 | 15 |
| SB-780 | D-SB-780-11 | 11 | 11 |
| SB-780 | D-SB-780-13 | 13 | 13 |
| SB-780 | D-SB-780-15 | 15 | 15 |
| SB-781 | D-SB-781-11 | 11 | 11 |
| SB-781 | D-SB-781-13 | 13 | 13 |
| SB-781 | D-SB-781-15 | 15 | 15 |
| SB-782 | D-SB-782-11 | 11 | 11 |
| SB-782 | D-SB-782-13 | 13 | 13 |
| SB-782 | D-SB-782-15 | 15 | 15 |
| SB-783 | D-SB-783-11 | 11 | 11 |
| SB-783 | D-SB-783-13 | 13 | 13 |
| SB-783 | D-SB-783-15 | 15 | 15 |
| SB-784 | D-SB-784-11 | 11 | 11 |
| SB-784 | D-SB-784-13 | 13 | 13 |
| SB-784 | D-SB-784-15 | 15 | 15 |
| SB-785 | D-SB-785-11 | 11 | 11 |
| SB-785 | D-SB-785-13 | 13 | 13 |
| SB-785 | D-SB-785-15 | 15 | 15 |
| SB-786 | D-SB-786-11 | 11 | 11 |
| SB-786 | D-SB-786-13 | 13 | 13 |
| SB-786 | D-SB-786-15 | 15 | 15 |

**Table 3-11**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Block D**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-787 | D-SB-787-11 | 11 | 11 |
| SB-787 | D-SB-787-13 | 13 | 13 |
| SB-787 | D-SB-787-15 | 15 | 15 |
| SB-788 | D-SB-788-11 | 11 | 11 |
| SB-788 | D-SB-788-13 | 13 | 13 |
| SB-788 | D-SB-788-15 | 15 | 15 |
| SB-789 | D-SB-789-11 | 11 | 11 |
| SB-789 | D-SB-789-13 | 13 | 13 |
| SB-789 | D-SB-789-15 | 15 | 15 |
| SB-790 | D-SB-790-11 | 11 | 11 |
| SB-790 | D-SB-790-13 | 13 | 13 |
| SB-790 | D-SB-790-15 | 15 | 15 |
| SB-791 | D-SB-791-11 | 11 | 11 |
| SB-791 | D-SB-791-13 | 13 | 13 |
| SB-791 | D-SB-791-15 | 15 | 15 |
| SB-792 | D-SB-792-11 | 11 | 11 |
| SB-792 | D-SB-792-13 | 13 | 13 |
| SB-792 | D-SB-792-15 | 15 | 15 |
| SB-793 | D-SB-793-11 | 11 | 11 |
| SB-793 | D-SB-793-13 | 13 | 13 |
| SB-793 | D-SB-793-15 | 15 | 15 |
| SB-794 | D-SB-794-11 | 11 | 11 |
| SB-794 | D-SB-794-13 | 13 | 13 |
| SB-794 | D-SB-794-15 | 15 | 15 |
| SB-795 | D-SB-795-11 | 11 | 11 |
| SB-795 | D-SB-795-13 | 13 | 13 |
| SB-795 | D-SB-795-15 | 15 | 15 |
| SB-796 | D-SB-796-11 | 11 | 11 |
| SB-796 | D-SB-796-13 | 13 | 13 |
| SB-796 | D-SB-796-15 | 15 | 15 |

**Table 3-12**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Additional Soil Characterization Samples (Fall 2007)** | | | |
| SB-503 | SB-503-1012 | 10 | 12 |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-555A | SB-555A-12 | 12 | 12 |
| SB-555A | SB-555A-14 | 14 | 14 |
| SB-555A | SB-555A-16 | 16 | 16 |
| SB-570A | SB-570A-12 | 12 | 12 |
| SB-570A | SB-570A-14 | 14 | 14 |
| SB-570A | SB-570A-16 | 16 | 16 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-818 | E-SB-818-11 | 11 | 11 |
| SB-818 | E-SB-818-13 | 13 | 13 |
| SB-818 | E-SB-818-15 | 15 | 15 |
| SB-819 | E-SB-819-11 | 11 | 11 |
| SB-819 | E-SB-819-13 | 13 | 13 |
| SB-819 | E-SB-819-15 | 15 | 15 |
| SB-820 | E-SB-820-11 | 11 | 11 |
| SB-820 | E-SB-820-13 | 13 | 13 |
| SB-820 | E-SB-820-15 | 15 | 15 |
| SB-821 | E-SB-821-11 | 11 | 11 |
| SB-821 | E-SB-821-13 | 13 | 13 |
| SB-821 | E-SB-821-15 | 15 | 15 |
| SB-822 | E-SB-822-11 | 11 | 11 |
| SB-822 | E-SB-822-13 | 13 | 13 |
| SB-822 | E-SB-822-15 | 15 | 15 |
| SB-824 | E-SB-824-11 | 11 | 11 |
| SB-824 | E-SB-824-13 | 13 | 13 |
| SB-824 | E-SB-824-15 | 15 | 15 |
| SB-825 | E-SB-825-11 | 11 | 11 |
| SB-825 | E-SB-825-13 | 13 | 13 |
| SB-825 | E-SB-825-15 | 15 | 15 |
| SB-826 | E-SB-826-11 | 11 | 11 |
| SB-826 | E-SB-826-13 | 13 | 13 |
| SB-826 | E-SB-826-15 | 15 | 15 |
| SB-827 | E-SB-827-11 | 11 | 11 |
| SB-827 | E-SB-827-13 | 13 | 13 |
| SB-827 | E-SB-827-15 | 15 | 15 |
| SB-828 | E-SB-828-11 | 11 | 11 |
| SB-828 | E-SB-828-13 | 13 | 13 |
| SB-828 | E-SB-828-15 | 15 | 15 |
| SB-829 | E-SB-829-11 | 11 | 11 |
| SB-829 | E-SB-829-13 | 13 | 13 |
| SB-829 | E-SB-829-15 | 15 | 15 |
| SB-830 | E-SB-830-11 | 11 | 11 |
| SB-830 | E-SB-830-11-D | 11 | 11 |

**Table 3-12**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-830 | E-SB-830-13 | 13 | 13 |
| SB-830 | E-SB-830-15 | 15 | 15 |
| SB-831 | E-SB-831-11 | 11 | 11 |
| SB-831 | E-SB-831-13 | 13 | 13 |
| SB-831 | E-SB-831-15 | 15 | 15 |
| SB-831 | E-SB-831-15-D | 15 | 15 |
| SB-832 | E-SB-832-11 | 11 | 11 |
| SB-832 | E-SB-832-13 | 13 | 13 |
| SB-832 | E-SB-832-15 | 15 | 15 |
| SB-833 | E-SB-833-11 | 11 | 11 |
| SB-834 | E-SB-834-11 | 11 | 11 |
| SB-834 | E-SB-834-13 | 13 | 13 |
| SB-834 | E-SB-834-15 | 15 | 15 |
| SB-835 | E-SB-835-11 | 11 | 11 |
| SB-835 | E-SB-835-13 | 13 | 13 |
| SB-835 | E-SB-835-15 | 15 | 15 |
| SB-836 | E-SB-836-11 | 11 | 11 |
| SB-836 | E-SB-836-13 | 13 | 13 |
| SB-836 | E-SB-836-15 | 15 | 15 |
| SB-837 | E-SB-837-11 | 11 | 11 |
| SB-837 | E-SB-837-13 | 13 | 13 |
| SB-837 | E-SB-837-13-D | 13 | 13 |
| SB-837 | E-SB-837-15 | 15 | 15 |
| SB-838 | E-SB-838-11 | 11 | 11 |
| SB-838 | E-SB-838-13 | 13 | 13 |
| SB-838 | E-SB-838-15 | 15 | 15 |
| SB-839 | E-SB-839-11 | 11 | 11 |
| SB-839 | E-SB-839-13 | 13 | 13 |
| SB-839 | E-SB-839-15 | 15 | 15 |
| SB-840 | E-SB-840-11 | 11 | 11 |
| SB-840 | E-SB-840-13 | 13 | 13 |
| SB-840 | E-SB-840-15 | 15 | 15 |
| SB-841 | E-SB-841-11 | 11 | 11 |
| SB-841 | E-SB-841-13 | 13 | 13 |
| SB-841 | E-SB-841-15 | 15 | 15 |
| SB-842 | E-SB-842-11 | 11 | 11 |
| SB-842 | E-SB-842-11-D | 11 | 11 |
| SB-842 | E-SB-842-13 | 13 | 13 |
| SB-842 | E-SB-842-15 | 15 | 15 |
| SB-843 | E-SB-843-11 | 11 | 11 |
| SB-843 | E-SB-843-11-D | 11 | 11 |
| SB-843 | E-SB-843-13 | 13 | 13 |
| SB-843 | E-SB-843-15 | 15 | 15 |
| SB-844 | E-SB-844-11 | 11 | 11 |
| SB-844 | E-SB-844-13 | 13 | 13 |

**Table 3-12**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Tax Block Soils**
**Block E**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-844 | E-SB-844-15 | 15 | 15 |
| SB-845 | E-SB-845-11 | 11 | 11 |
| SB-845 | E-SB-845-13 | 13 | 13 |
| SB-845 | E-SB-845-15 | 15 | 15 |
| SB-846 | E-SB-846-11 | 11 | 11 |
| SB-846 | E-SB-846-13 | 13 | 13 |
| SB-846 | E-SB-846-15 | 15 | 15 |
| SB-847 | E-SB-847-11 | 11 | 11 |
| SB-847 | E-SB-847-13 | 13 | 13 |
| SB-847 | E-SB-847-15 | 15 | 15 |
| SB-847 | E-SB-847-15-D | 15 | 15 |

**Table 3-13**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Site-Wide Phase II Investigation Samples (2004)** | | | |
| SB-056 | SB-56-15 | 15 | 15 |
| SB-093 | SB-93-15 | 15 | 15 |
| SB-094 | SB-94-15 | 15 | 15 |
| SB-096 | SB-96-15 | 15 | 15 |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-055 | F-SB-55RE-11 | 11 | 11 |
| SB-056 | F-SB-56RE-11 | 11 | 11 |
| SB-056 | F-SB-56RE-12 | 12 | 12 |
| SB-056 | F-SB-56RE-13 | 13 | 13 |
| SB-056 | F-SB-56RE-13-D | 13 | 13 |
| SB-056 | F-SB-56RE-14 | 14 | 14 |
| SB-056 | F-SB-56RE-15 | 15 | 15 |
| SB-093 | F-SB-93RE-11 | 11 | 11 |
| SB-093 | F-SB-93RE-12 | 12 | 12 |
| SB-093 | F-SB-93RE-13 | 13 | 13 |
| SB-093 | F-SB-93RE-14 | 14 | 14 |
| SB-094 | F-SB-94RE-11 | 11 | 11 |
| SB-094 | F-SB-94RE-12 | 12 | 12 |
| SB-094 | F-SB-94RE-12-D | 12 | 12 |
| SB-094 | F-SB-94RE-13 | 13 | 13 |
| SB-094 | F-SB-94RE-14 | 14 | 14 |
| SB-094 | F-SB-94RE-15 | 15 | 15 |
| SB-095 | F-SB-95RE-11 | 11 | 11 |
| SB-095 | F-SB-95RE-12 | 12 | 12 |
| SB-095 | F-SB-95RE-13 | 13 | 13 |
| SB-095 | F-SB-95RE-13-D | 13 | 13 |
| SB-095 | F-SB-95RE-14 | 14 | 14 |
| SB-095 | F-SB-95RE-15 | 15 | 15 |
| SB-096 | F-SB-96RE-11 | 11 | 11 |
| SB-096 | F-SB-96RE-11-D | 11 | 11 |
| SB-096 | F-SB-96RE-12 | 12 | 12 |
| SB-096 | F-SB-96RE-13 | 13 | 13 |
| SB-096 | F-SB-96RE-14 | 14 | 14 |
| SB-096 | F-SB-96RE-15 | 15 | 15 |
| SB-268RE | F-SB-268RE-11 | 11 | 11 |
| SB-268RE | F-SB-268RE-12 | 12 | 12 |
| SB-268RE | F-SB-268RE-13 | 13 | 13 |
| SB-268RE | F-SB-268RE-14 | 14 | 14 |
| SB-268RE | F-SB-268RE-15 | 15 | 15 |
| SB-405 | F-SB-405RE-11 | 11 | 11 |
| SB-405 | F-SB-405RE-12 | 12 | 12 |
| SB-405 | F-SB-405RE-13 | 13 | 13 |
| SB-405 | F-SB-405RE-13-D | 13 | 13 |
| SB-628 | F-SB-628-11 | 11 | 11 |

**Table 3-13**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Tax Block Soils**
**Block F**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-629 | F-SB-629-11 | 11 | 11 |
| SB-630 | F-SB-630-11 | 11 | 11 |
| SB-631 | F-SB-631-11 | 11 | 11 |
| SB-635 | F-SB-635-11 | 11 | 11 |
| SB-635 | F-SB-635-12 | 12 | 12 |
| SB-635 | F-SB-635-13 | 13 | 13 |
| SB-635C | F-SB-635C-11 | 11 | 11 |
| SB-635D | F-SB-635D-11 | 11 | 11 |
| SB-642 | F-SB-642-11 | 11 | 11 |
| SB-642 | F-SB-642-13 | 13 | 13 |
| SB-642 | F-SB-642-15 | 15 | 15 |
| SB-642A | F-SB-642A-11 | 11 | 11 |
| SB-642A | F-SB-642A-13 | 13 | 13 |
| SB-642A | F-SB-642A-15 | 15 | 15 |
| SB-642B | F-SB-642B-11 | 11 | 11 |
| SB-642B | F-SB-642B-13 | 13 | 13 |
| SB-642B | F-SB-642B-15 | 15 | 15 |
| SB-642C | F-SB-642C-11 | 11 | 11 |
| SB-642C | F-SB-642C-13 | 13 | 13 |
| SB-642C | F-SB-642C-15 | 15 | 15 |
| SB-643 | F-SB-643-11 | 11 | 11 |
| SB-643 | F-SB-643-13 | 13 | 13 |
| SB-643 | F-SB-643-15 | 15 | 15 |
| SB-643B | F-SB-643B-11 | 11 | 11 |
| SB-643B | F-SB-643B-13 | 13 | 13 |
| SB-643B | F-SB-643B-15 | 15 | 15 |
| SB-643C | F-SB-643C-11 | 11 | 11 |
| SB-643C | F-SB-643C-13 | 13 | 13 |
| SB-643C | F-SB-643C-15 | 15 | 15 |
| SB-644 | F-SB-644-11 | 11 | 11 |
| SB-644 | F-SB-644-13 | 13 | 13 |
| SB-644 | F-SB-644-15 | 15 | 15 |

**Table 3-14**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Site-Wide Phase II Investigation Samples (2004)** | | | |
| SB-085 | SB-85-12 | 12 | 12 |
| SB-086 | SB-86-12 | 12 | 12 |
| **LMC MRC Groundwater Study Samples (May 2005)** | | | |
| MRC-MW12A | MRC-MW12 (1213) | 12 | 13 |
| **ISCO Pilot Study Samples (November 2007)** | | | |
| OW-4 | OW-4-26 | 26 | 26 |
| OW-4 | OW-4-30 | 30 | 30 |
| OW-6 | OW-6-20 | 20 | 20 |
| OW-6 | OW-6-30 | 30 | 30 |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-091 | G-SB-91RE-11 | 11 | 11 |
| SB-091 | G-SB-91RE-12 | 12 | 12 |
| SB-091 | G-SB-91RE-13 | 13 | 13 |
| SB-091 | G-SB-91RE-14 | 14 | 14 |
| SB-091 | G-SB-91RE-15 | 15 | 15 |
| SB-091A | G-SB-91REA-11 | 11 | 11 |
| SB-091A | G-SB-91REA-13 | 13 | 13 |
| SB-091A | G-SB-91REA-15 | 15 | 15 |
| SB-091B | G-SB-91REB-11 | 11 | 11 |
| SB-091B | G-SB-91REB-13 | 13 | 13 |
| SB-091B | G-SB-91REB-15 | 15 | 15 |
| SB-091C | G-SB-91REC-11 | 11 | 11 |
| SB-091C | G-SB-91REC-13 | 13 | 13 |
| SB-091C | G-SB-91REC-15 | 15 | 15 |
| SB-091C | G-SB-91REC-15-D | 15 | 15 |
| SB-092 | G-SB-92RE-11 | 11 | 11 |
| SB-092 | G-SB-92RE-12 | 12 | 12 |
| SB-092 | G-SB-92RE-13 | 13 | 13 |
| SB-092 | G-SB-92RE-14 | 14 | 14 |
| SB-092 | G-SB-92RE-15 | 15 | 15 |
| SB-092C | G-SB-92REC-11 | 11 | 11 |
| SB-092C | G-SB-92REC-13 | 13 | 13 |
| SB-092C | G-SB-92REC-15 | 15 | 15 |
| SB-092D | G-SB-92RED-11 | 11 | 11 |
| SB-092D | G-SB-92RED-13 | 13 | 13 |
| SB-092D | G-SB-92RED-15 | 15 | 15 |
| SB-195 | G-SB-195RE-11 | 11 | 11 |
| SB-195 | G-SB-195RE-12 | 12 | 12 |
| SB-195 | G-SB-195RE-13 | 13 | 13 |
| SB-195 | G-SB-195RE-14 | 14 | 14 |
| SB-195 | G-SB-195RE-15 | 15 | 15 |
| SB-196 | G-SB-196RE-11 | 11 | 11 |
| SB-196 | G-SB-196RE-12 | 12 | 12 |
| SB-196 | G-SB-196RE-13 | 13 | 13 |

**Table 3-14**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-657 | G-SB-657-11 | 11 | 11 |
| SB-657 | G-SB-657-11-D | 11 | 11 |
| SB-657 | G-SB-657-12 | 12 | 12 |
| SB-657 | G-SB-657-13 | 13 | 13 |
| SB-657 | G-SB-657-14 | 14 | 14 |
| SB-657 | G-SB-657-15 | 15 | 15 |
| SB-657A | G-SB-657A-11 | 11 | 11 |
| SB-657A | G-SB-657A-13 | 13 | 13 |
| SB-657A | G-SB-657A-15 | 15 | 15 |
| SB-657B | G-SB-657B-11 | 11 | 11 |
| SB-657B | G-SB-657B-13 | 13 | 13 |
| SB-657B | G-SB-657B-15 | 15 | 15 |
| SB-657D | G-SB-657D-11 | 11 | 11 |
| SB-657D | G-SB-657D-13 | 13 | 13 |
| SB-657D | G-SB-657D-15 | 15 | 15 |
| SB-658 | G-SB-658-11 | 11 | 11 |
| SB-658 | G-SB-658-11-D | 11 | 11 |
| SB-658 | G-SB-658-12 | 12 | 12 |
| SB-658 | G-SB-658-13 | 13 | 13 |
| SB-658 | G-SB-658-14 | 14 | 14 |
| SB-658 | G-SB-658-15 | 15 | 15 |
| SB-658B | G-SB-658B-11 | 11 | 11 |
| SB-658B | G-SB-658B-15 | 15 | 15 |
| SB-658C | G-SB-658C-11 | 11 | 11 |
| SB-658C | G-SB-658C-13 | 13 | 13 |
| SB-658C | G-SB-658C-13-D | 13 | 13 |
| SB-658C | G-SB-658C-15 | 15 | 15 |
| SB-659 | G-SB-659-11 | 11 | 11 |
| SB-659 | G-SB-659-12 | 12 | 12 |
| SB-659 | G-SB-659-13 | 13 | 13 |
| SB-659 | G-SB-659-14 | 14 | 14 |
| SB-659 | G-SB-659-15 | 15 | 15 |
| SB-659C | G-SB-659C-11 | 11 | 11 |
| SB-659C | G-SB-659C-13 | 13 | 13 |
| SB-659C | G-SB-659C-15 | 15 | 15 |
| SB-659D | G-SB-659D-11 | 11 | 11 |
| SB-659D | G-SB-659D-13 | 13 | 13 |
| SB-659D | G-SB-659D-15 | 15 | 15 |
| SB-660 | G-SB-660-11 | 11 | 11 |
| SB-660 | G-SB-660-12 | 12 | 12 |
| SB-662 | G-SB-662-11 | 11 | 11 |
| SB-662 | G-SB-662-12 | 12 | 12 |
| SB-662 | G-SB-662-13 | 13 | 13 |
| SB-662A | G-SB-662A-11 | 11 | 11 |
| SB-662B | G-SB-662B-11 | 11 | 11 |

**Table 3-14**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-662C | G-SB-662C-11 | 11 | 11 |
| SB-671 | G-SB-671RE-11 | 11 | 11 |
| SB-671 | G-SB-671RE-12 | 12 | 12 |
| SB-671 | G-SB-671RE-13 | 13 | 13 |
| SB-671B | G-SB-671B-11 | 11 | 11 |
| SB-671C | G-SB-671C-11 | 11 | 11 |
| SB-671D | G-SB-671D-11 | 11 | 11 |
| SB-704 | G-SB-704-11 | 11 | 11 |
| SB-704 | G-SB-704-12 | 12 | 12 |
| SB-704 | G-SB-704-15 | 15 | 15 |
| SB-706 | G-SB-706-11 | 11 | 11 |
| SB-706 | G-SB-706-12 | 12 | 12 |
| SB-706 | G-SB-706-13 | 13 | 13 |
| SB-706 | G-SB-706-14 | 14 | 14 |
| SB-706 | G-SB-706-15 | 15 | 15 |
| SB-716 | G-SB-716-11 | 11 | 11 |
| SB-716 | G-SB-716-12 | 12 | 12 |
| SB-716 | G-SB-716-15 | 15 | 15 |
| SB-726 | G-SB-726-11 | 11 | 11 |
| SB-726 | G-SB-726-12 | 12 | 12 |
| SB-726 | G-SB-726-13 | 13 | 13 |
| SB-726 | G-SB-726-14 | 14 | 14 |
| SB-726 | G-SB-726-15 | 15 | 15 |
| SB-726 | G-SB-726-15-D | 15 | 15 |
| SB-735 | G-SB-735-11 | 11 | 11 |
| SB-735B | G-SB-735B-11 | 11 | 11 |
| SB-735C | G-SB-735C-11 | 11 | 11 |
| SB-736B | G-SB-736B-11 | 11 | 11 |
| SB-736C | G-SB-736C-11 | 11 | 11 |
| SB-736C | G-SB-736C-11-D | 11 | 11 |
| SB-761 | G-SB-761-11 | 11 | 11 |
| SB-761 | G-SB-761-13 | 13 | 13 |
| SB-761 | G-SB-761-15 | 15 | 15 |
| SB-761 | G-SB-761-15-D | 15 | 15 |
| SB-761A | G-SB-761A-11 | 11 | 11 |
| SB-761A | G-SB-761A-13 | 13 | 13 |
| SB-761A | G-SB-761A-15 | 15 | 15 |
| SB-761B | G-SB-761B-11 | 11 | 11 |
| SB-761B | G-SB-761B-15 | 15 | 15 |
| SB-761C | G-SB-761C-11 | 11 | 11 |
| SB-761C | G-SB-761C-15 | 15 | 15 |
| SB-761D | G-SB-761D-11 | 11 | 11 |
| SB-761D | G-SB-761D-13 | 13 | 13 |
| SB-761D | G-SB-761D-15 | 15 | 15 |
| SB-762 | G-SB-762-11 | 11 | 11 |

**Table 3-14**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-762 | G-SB-762-13 | 13 | 13 |
| SB-762 | G-SB-762-15 | 15 | 15 |
| SB-762A | G-SB-762A-11 | 11 | 11 |
| SB-762A | G-SB-762A-13 | 13 | 13 |
| SB-762A | G-SB-762A-15 | 15 | 15 |
| SB-762B | G-SB-762B-11 | 11 | 11 |
| SB-762B | G-SB-762B-11-D | 11 | 11 |
| SB-762B | G-SB-762B-13 | 13 | 13 |
| SB-762B | G-SB-762B-15 | 15 | 15 |
| SB-762D | G-SB-762D-11 | 11 | 11 |
| SB-762D | G-SB-762D-13 | 13 | 13 |
| SB-762D | G-SB-762D-15 | 15 | 15 |
| SB-763 | G-SB-763-11 | 11 | 11 |
| SB-763 | G-SB-763-13 | 13 | 13 |
| SB-763 | G-SB-763-15 | 15 | 15 |
| SB-763A | G-SB-763A-11 | 11 | 11 |
| SB-763A | G-SB-763A-13 | 13 | 13 |
| SB-763A | G-SB-763A-15 | 15 | 15 |
| SB-763B | G-SB-763B-11 | 11 | 11 |
| SB-763B | G-SB-763B-13 | 13 | 13 |
| SB-763B | G-SB-763B-15 | 15 | 15 |
| SB-763C | G-SB-763C-11 | 11 | 11 |
| SB-763C | G-SB-763C-13 | 13 | 13 |
| SB-763C | G-SB-763C-15 | 15 | 15 |
| SB-763D | G-SB-763D-11 | 11 | 11 |
| SB-763D | G-SB-763D-13 | 13 | 13 |
| SB-763D | G-SB-763D-15 | 15 | 15 |
| SB-764 | G-SB-764-11 | 11 | 11 |
| SB-764 | G-SB-764-13 | 13 | 13 |
| SB-764 | G-SB-764-15 | 15 | 15 |
| SB-764A | G-SB-764A-11 | 11 | 11 |
| SB-764C | G-SB-764C-11 | 11 | 11 |
| SB-764D | G-SB-764D-11 | 11 | 11 |
| SB-765 | G-SB-765-11 | 11 | 11 |
| SB-765 | G-SB-765-13 | 13 | 13 |
| SB-765 | G-SB-765-15 | 15 | 15 |
| **Deep Groundwater Investigation (May 2010)** | | | |
| MRC-MW95D | MRC-MW95D-SO-214 | 214 | 214 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-803 | G-SB-803-11 | 11 | 11 |
| SB-803 | G-SB-803-13 | 13 | 13 |
| SB-803 | G-SB-803-15 | 15 | 15 |
| SB-804 | G-SB-804-11 | 11 | 11 |
| SB-804 | G-SB-804-13 | 13 | 13 |
| SB-804 | G-SB-804-15 | 15 | 15 |

**Table 3-14**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Tax Block Soils**
**Block G**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-805 | G-SB-805-11 | 11 | 11 |
| SB-805 | G-SB-805-13 | 13 | 13 |
| SB-805 | G-SB-805-15 | 15 | 15 |
| SB-806 | G-SB-806-11 | 11 | 11 |
| SB-806 | G-SB-806-15 | 15 | 15 |
| SB-807 | G-SB-807-11 | 11 | 11 |
| SB-807 | G-SB-807-13 | 13 | 13 |
| SB-807 | G-SB-807-15 | 15 | 15 |
| SB-808 | G-SB-808-11 | 11 | 11 |
| SB-808 | G-SB-808-13 | 13 | 13 |
| SB-808 | G-SB-808-15 | 15 | 15 |
| SB-809 | G-SB-809-11 | 11 | 11 |
| SB-809 | G-SB-809-13 | 13 | 13 |
| SB-809 | G-SB-809-15 | 15 | 15 |
| SB-810 | G-SB-810-11 | 11 | 11 |
| SB-810 | G-SB-810-13 | 13 | 13 |
| SB-810 | G-SB-810-15 | 15 | 15 |
| SB-811 | G-SB-811-11 | 11 | 11 |
| SB-811 | G-SB-811-13 | 13 | 13 |
| SB-811 | G-SB-811-15 | 15 | 15 |
| SB-812 | G-SB-812-11 | 11 | 11 |
| SB-812 | G-SB-812-15 | 15 | 15 |
| SB-813 | G-SB-813-11 | 11 | 11 |
| SB-813 | G-SB-813-13 | 13 | 13 |
| SB-813 | G-SB-813-15 | 15 | 15 |
| SB-813 | G-SB-813-15-D | 15 | 15 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| G-TP-2 | G-TP-2-5-13-14 | 13 | 14 |

**Table 3-15**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Tax Block Soils**
**Block H**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| **Final Soil Delineation Samples (Fall 2009)** | | | |
| SB-200RE | H-SB-200RE-11 | 11 | 11 |
| SB-200RE | H-SB-200RE-12 | 12 | 12 |
| SB-200RE | H-SB-200RE-13 | 13 | 13 |
| SB-200RE | H-SB-200RE-14 | 14 | 14 |
| SB-200RE | H-SB-200RE-15 | 15 | 15 |
| SB-282 | H-SB-282RE-11 | 11 | 11 |
| SB-282 | H-SB-282RE-12 | 12 | 12 |
| SB-282 | H-SB-282RE-13 | 13 | 13 |
| SB-282 | H-SB-282RE-14 | 14 | 14 |
| SB-282 | H-SB-282RE-15 | 15 | 15 |
| SB-282A | H-SB-282REA-11 | 11 | 11 |
| SB-282A | H-SB-282REA-13 | 13 | 13 |
| SB-282A | H-SB-282REA-15 | 15 | 15 |
| SB-282B | H-SB-282REB-11 | 11 | 11 |
| SB-282B | H-SB-282REB-13 | 13 | 13 |
| SB-282B | H-SB-282REB-15 | 15 | 15 |
| SB-282C | H-SB-282REC-11 | 11 | 11 |
| SB-282C | H-SB-282REC-13 | 13 | 13 |
| SB-282C | H-SB-282REC-15 | 15 | 15 |
| SB-282D | H-SB-282RED-11 | 11 | 11 |
| SB-282D | H-SB-282RED-13 | 13 | 13 |
| SB-282D | H-SB-282RED-15 | 15 | 15 |
| SB-285 | H-SB-285RE-11 | 11 | 11 |
| SB-285 | H-SB-285RE-12 | 12 | 12 |
| SB-286RE | H-SB-286RE-11 | 11 | 11 |
| SB-286RE | H-SB-286RE-12 | 12 | 12 |
| SB-286RE | H-SB-286RE-15 | 15 | 15 |
| SB-596 | H-SB-596-11 | 11 | 11 |
| SB-596 | H-SB-596-12 | 12 | 12 |
| SB-597 | H-SB-597-11 | 11 | 11 |
| SB-597 | H-SB-597-12 | 12 | 12 |
| SB-598 | H-SB-598-11 | 11 | 11 |
| SB-598 | H-SB-598-12 | 12 | 12 |
| SB-599 | H-SB-599-11 | 11 | 11 |
| SB-599 | H-SB-599-12 | 12 | 12 |
| SB-612 | H-SB-612-11 | 11 | 11 |
| SB-612 | H-SB-612-11-D | 11 | 11 |
| SB-612 | H-SB-612-12 | 12 | 12 |
| SB-613 | H-SB-613-11 | 11 | 11 |
| SB-613 | H-SB-613-12 | 12 | 12 |
| SB-614 | H-SB-614-11 | 11 | 11 |
| SB-614 | H-SB-614-12 | 12 | 12 |
| SB-615 | H-SB-615-11 | 11 | 11 |
| SB-615 | H-SB-615-12 | 12 | 12 |

**Table 3-15**

**Subsurface Soil (>10 ft.) Samples - Not Used in Human Health Risk Assessment - Tax Block Soils**
**Block H**
**LMC Middle River Complex, Middle River, Maryland**


| Location Identifier | Sample Identifier | Depth (feet) | |
|---|---|---|---|
| | | Top | Bottom |
| SB-616 | H-SB-616-11 | 11 | 11 |
| SB-616 | H-SB-616-11-D | 11 | 11 |
| SB-616 | H-SB-616-12 | 12 | 12 |
| SB-617 | H-SB-617-11 | 11 | 11 |
| SB-617 | H-SB-617-11-D | 11 | 11 |
| SB-617 | H-SB-617-12 | 12 | 12 |
| SB-618 | H-SB-618-11 | 11 | 11 |
| SB-618 | H-SB-618-12 | 12 | 12 |
| SB-619 | H-SB-619-11 | 11 | 11 |
| SB-619 | H-SB-619-12 | 12 | 12 |
| **Data Gap Investigation Samples (Fall 2010)** | | | |
| SB-814 | H-SB-814-11 | 11 | 11 |
| SB-814 | H-SB-814-13 | 13 | 13 |
| SB-814 | H-SB-814-15 | 15 | 15 |
| SB-815 | H-SB-815-11 | 11 | 11 |
| SB-815 | H-SB-815-13 | 13 | 13 |
| SB-815 | H-SB-815-15 | 15 | 15 |
| SB-816 | H-SB-816-11 | 11 | 11 |
| SB-817 | H-SB-817-11 | 11 | 11 |
| SB-817 | H-SB-817-13 | 13 | 13 |
| SB-817 | H-SB-817-15 | 15 | 15 |

**Table 3-16**

**Human Health Screening Criteria for Soil - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| CAS No. | Chemical | MDE Cleanup Standards[1] | | USEPA Regional Screening Levels[2] | | USEPA Soil Screening Levels[3] |
|---|---|---|---|---|---|---|
| | | Residential Soil (mg/kg) | Groundwater Protection (mg/kg) | Residential Soil (mg/kg) | Protection of Groundwater (mg/kg) | Residential Soil to Air (mg/kg) |
| **Volatile Organic Compounds** | | | | | | |
| 71-55-6 | 1,1,1-TRICHLOROETHANE | 16000 | NA [4] | 8700 N | NA [4] | 1,200 sat |
| 75-34-3 | 1,1-DICHLOROETHANE | 1600 | 5.1 | 3.3 C | 0.00069 | 1,200 N |
| 75-35-4 | 1,1-DICHLOROETHENE | 390 | 2.9 | 240 N | 0.12 | 290 N |
| 87-61-6 | 1,2,3-TRICHLOROBENZENE | NA | NA | 49 N | 0.087 | NA |
| 526-73-8 | 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA |
| 120-82-1 | 1,2,4-TRICHLOROBENZENE | 78 | 2.4 | 62 N[5] | 0.0068 | 180 N |
| 95-63-6 | 1,2,4-TRIMETHYLBENZENE | NA | NA | 62 N | 0.021 | 120 N |
| 95-50-1 | 1,2-DICHLOROBENZENE | 700 | 4.6 | 1900 N | 0.36 | 600 sat |
| 107-06-2 | 1,2-DICHLOROETHANE | 7 | 0.001 | 0.43 C | 0.000042 | 0.36 C |
| 108-67-8 | 1,3,5-TRIMETHYLBENZENE | NA | NA | 780 N | 0.52 | 72 N |
| 541-73-1 | 1,3-DICHLOROBENZENE | 23 | 0.29 | NA | NA | NA |
| 106-46-7 | 1,4-DICHLOROBENZENE | 27 | 0.0042 | 2.4 C | 0.00041 | 11,000 N |
| 78-93-3 | 2-BUTANONE | 4700 | 29 | 28000 N | 1.5 | 24,000 sat |
| 99-87-6 | 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA |
| 67-64-1 | ACETONE | 7000 | 22 | 61000 N | 4.5 | NA |
| 71-43-2 | BENZENE | 12 | 0.0019 | 1.1 C | 0.00021 | 1 C |
| 74-83-9 | BROMOMETHANE | 11 | 0.041 | 7.3 N | 0.0022 | 9 N |
| 75-15-0 | CARBON DISULFIDE | 780 | 19 | 820 N | 0.31 | 720 sat |
| 56-23-5 | CARBON TETRACHLORIDE | 4.9 | 0.0021 | 0.61 C | 0.00017 | 0.33 C |
| 108-90-7 | CHLOROBENZENE | 160 | 0.68 | 290 N | 0.062 | 130 N |
| 74-87-3 | CHLOROMETHANE | NA | 0.93 | 120 N | 0.049 | 2 C |
| 156-59-2 | CIS-1,2-DICHLOROETHENE | 78 | NA | 160 N | 0.021 | NA |
| 100-41-4 | ETHYLBENZENE | 780 | 15 | 5.4 C | 0.0017 | 400 sat |
| 98-82-8 | ISOPROPYLBENZENE | 780 | 64 | 2100 N | 1.1 | 850 sat |
| TTNUS054 | M+P-XYLENES | 1600 [6] | 3 [6] | 630 N[7] | 0.2 [7] | 700 N[7] |
| 75-09-2 | METHYLENE CHLORIDE | 85 | 0.019 | 11 C | 0.0012 | 13 C |
| 91-20-3 | NAPHTHALENE | 160 | 0.15 | 3.6 C | 0.00047 | 170 N |
| 104-51-8 | N-BUTYLBENZENE | NA | NA | NA | NA | NA |
| 103-65-1 | N-PROPYLBENZENE | NA | NA | 3400 N | 2.5 | NA |
| 95-47-6 | O-XYLENE | 1600 [6] | 3 [6] | 3800 N | 1.2 | NA |
| 135-98-8 | SEC-BUTYLBENZENE | NA | NA | NA | NA | NA |
| 100-42-5 | STYRENE | 1600 | NA [4] | 6300 N | NA [4] | 1500 sat |
| 994-05-8 | TERT-AMYL METHYL ETHER | NA | NA [4] | NA | NA [4] | NA |
| 75-65-0 | TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA |
| 127-18-4 | TETRACHLOROETHENE | 1.2 | 0.0047 | 0.55 C | 0.000049 | 10 C |
| 108-88-3 | TOLUENE | 630 | 27 | 5000 N | 1.6 | 650 sat |
| 1330-20-7 | TOTAL XYLENES | 1600 [6] | 3 [6] | 630 N | 0.2 | 700 N |
| 79-01-6 | TRICHLOROETHENE | 1.6 | 0.00026 | 2.8 C | 0.00072 | 0.071 C |
| 75-69-4 | TRICHLOROFLUOROMETHANE | NA | NA | 790 N | 0.83 | 1,100 N |
| 75-01-4 | VINYL CHLORIDE | 0.09 | 0.00012 | 0.06 C | 0.0000056 | 0.28 C |
| **Semivolatile Organic Compounds** | | | | | | |
| 105-67-9 | 2,4-DIMETHYLPHENOL | 160 | 6.7 | 1200 N | 0.86 | NA |
| 88-74-4 | 2-NITROANILINE | NA | NA | 610 N | 0.15 | 1.2 N |
| 65-85-0 | BENZOIC ACID | NA | NA | 240000 N | 34 | NA |
| 100-51-6 | BENZYL ALCOHOL | NA | NA | 6100 N | 0.89 | NA |
| 117-81-7 | BIS(2-ETHYLHEXYL)PHTHALATE | 46 | 2900 | 35 C | 1.1 | NA |
| 85-68-7 | BUTYL BENZYL PHTHALATE | NA | NA | 260 C | 0.51 | NA |
| 105-60-2 | CAPROLACTAM | NA | NA | 31000 N | 4.5 | NA |
| 86-74-8 | CARBAZOLE | 32 | 0.47 | NA | NA | NA |
| 132-64-9 | DIBENZOFURAN | 7.8 | NA | 78 N | 0.68 | NA |
| 131-11-3 | DIMETHYL PHTHALATE | NA | NA | NA | NA | NA |
| 84-74-2 | DI-N-BUTYL PHTHALATE | 780 | 5000 | 6100 N | 9.2 | NA |
| 117-84-0 | DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA |
| 86-30-6 | N-NITROSODIPHENYLAMINE | 130 | 0.76 | 99 C | 0.075 | NA |
| 108-95-2 | PHENOL | 2300 | 67 | 18000 N | 6.3 | NA |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | |
| 90-12-0 | 1-METHYLNAPHTHALENE | NA | NA | 22 C | 0.012 | NA |
| 91-57-6 | 2-METHYLNAPHTHALENE | 31 | 4.4 | 310 N | 0.75 | NA |
| 83-32-9 | ACENAPHTHENE | 470 | 100 | 3400 N | 22 | NA |
| 208-96-8 | ACENAPHTHYLENE | 470 | 100 | 3400 N[8] | 22 [8] | NA |
| 120-12-7 | ANTHRACENE | 2300 | 470 | 17000 N | 360 | NA |
| CALC013 | BAP EQUIVALENT-1/2 NONDETECT[19] | 0.022 | 0.12 | 0.015 C | 0.0035 | NA |
| CALC049 | BAP EQUIVALENT-POSITIVE RESULTS[19] | 0.022 | 0.12 | 0.015 C | 0.0035 | NA |
| 56-55-3 | BENZO(A)ANTHRACENE | 0.22 | 0.48 | 0.15 C | 0.01 | NA |
| 50-32-8 | BENZO(A)PYRENE | 0.022 | 0.12 | 0.015 C | 0.0035 | NA |
| 205-99-2 | BENZO(B)FLUORANTHENE | 0.22 | 1.5 | 0.15 C | 0.035 | NA |
| TTNUS140 | BENZO(B+K)FLUORANTHENE | 0.22 [17] | 1.5 [17] | 0.15 C[17] | 0.035 [17] | NA |
| 191-24-2 | BENZO(G,H,I)PERYLENE | 230 | 680 | 1700 N[9] | 120 [9] | NA |
| 207-08-9 | BENZO(K)FLUORANTHENE | 2.2 | 15 | 1.5 C | 0.35 | NA |
| 218-01-9 | CHRYSENE | 22 | 48 | 15 C | 1.1 | NA |

**Table 3-16**

**Human Health Screening Criteria for Soil - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| CAS No. | Chemical | MDE Cleanup Standards[1] | | USEPA Regional Screening Levels[2] | | USEPA Soil Screening Levels[3] |
|---|---|---|---|---|---|---|
| | | Residential Soil (mg/kg) | Groundwater Protection (mg/kg) | Residential Soil (mg/kg) | Protection of Groundwater (mg/kg) | Residential Soil to Air (mg/kg) |
| 53-70-3 | DIBENZO(A,H)ANTHRACENE | 0.022 | 0.46 | 0.015 C | 0.011 | NA |
| 206-44-0 | FLUORANTHENE | 310 | 6300 | 2300 N | 160 | NA |
| 86-73-7 | FLUORENE | 310 | 140 | 2300 N | 27 | NA |
| 193-39-5 | INDENO(1,2,3-CD)PYRENE | 0.22 | 4.2 | 0.15 C | 0.12 | NA |
| 85-01-8 | PHENANTHRENE | 2300 | 470 | 1700 N[9] | 120 [9] | NA |
| 129-00-0 | PYRENE | 230 | 680 | 1700 N | 120 | NA |
| **Pesticides/Polychlorinated Biphenyls** | | | | | | |
| 72-54-8 | 4,4'-DDD | 2.7 | 11 | 2 C | 0.066 | NA |
| 72-55-9 | 4,4'-DDE | 1.9 | 35 | 1.4 C | 0.047 | NA |
| 53469-21-9 | AROCLOR-1242 | 0.32 | NA | 0.22 C | 0.0053 | NA |
| 11097-69-1 | AROCLOR-1254 | 0.32 | 1.1 | 1.1 N[5] | 0.0088 | NA |
| 11096-82-5 | AROCLOR-1260 | 0.32 | NA | 0.22 C | 0.024 | NA |
| 319-85-7 | BETA-BHC | 0.35 | 0.0031 | 0.27 C | 0.00022 | 6 C |
| 1336-36-3 | TOTAL AROCLOR | 0.32 [10] | 0.41 [10] | 0.22 C[11] | NA | NA |
| **Metals** | | | | | | |
| 7440-36-0 | ANTIMONY | 3.1 | 13 | 31 N | 0.66 | NA |
| 7440-38-2 | ARSENIC | 0.43 | 0.026 | 0.39 C | 0.0013 | 769 C |
| 7440-39-3 | BARIUM | 1600 | 6000 | 15000 N | 300 | 709,000 N |
| 7440-41-7 | BERYLLIUM | 16 | 1200 | 160 N | 58 | 1,380 C |
| 7440-43-9 | CADMIUM | 3.9 | 27 | 70 N | 1.4 | 1,840 C |
| 7440-47-3 | CHROMIUM | 12000 [12] | 2000000000 [12] | 120000 N[12] | 99000000 [12] | 276 C |
| 7440-48-4 | COBALT | NA | NA | 23 N | 0.49 | 1,180 C |
| 7440-50-8 | COPPER | 310 | 11000 | 3100 N | 51 | NA |
| 7439-89-6 | IRON | 5500 | NA | 55000 N | 640 | NA |
| 7439-92-1 | LEAD | 400 | NA | 400 | 14 [13] | NA |
| 7439-96-5 | MANGANESE | 160 | 950 | 1800 N | 57 | 70,900 N |
| 7439-97-6 | MERCURY | 2.3 [14] | NA | 23 N[15] | NA | NA |
| 7439-98-7 | MOLYBDENUM | NA | NA | 390 N | 3.7 | NA |
| 7440-02-0 | NICKEL | 160 | NA | 1500 N | 48 | NA |
| 7782-49-2 | SELENIUM | 39 | 19 | 390 N | 0.95 | NA |
| 7440-22-4 | SILVER | 39 | 31 | 390 N | 1.6 | NA |
| 7440-28-0 | THALLIUM | 0.55 | 3.6 | NA | NA | NA |
| 7440-62-2 | VANADIUM | 7.8 | 730 | 390 N[16] | 180 | NA |
| 7440-66-6 | ZINC | 2300 | 14000 | 23000 N | 680 | NA |
| **Petroleum Hydrocarbons** | | | | | | |
| TTNUS004 | DIESEL RANGE ORGANICS | 230 | NA | NA | NA | NA |
| TTNUS005 | GASOLINE RANGE ORGANICS | 230 | NA | NA | NA | NA |
| TTNUS709 | TPH (C09-C36) | NA | NA | NA | NA | 284,000,000 N[18] |
| TTNUS827 | TPH (C10-C32) | NA | NA | NA | NA | 284,000,000 N[18] |
| **Miscellaneous Parameters** | | | | | | |
| 18540-29-9 | HEXAVALENT CHROMIUM | 23 | 42 | 0.29 C | 0.00083 | 276 C |
| 22967-92-6 | MERCURY (METHYL) | 0.78 | NA | 7.8 N | NA | NA |
| TTNUS291 | PERCENT SOLIDS | NA | NA | NA | NA | NA |
| TTNUS002 | PH | NA | NA | NA | NA | NA |
| TTNUS046 | TOTAL SOLIDS | NA | NA | NA | NA | NA |
| TTNUS003 | TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA |

**Notes:**

1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0
3 - USEPA Soil Screening Levels. EPA Internet Site at http://rais.ornl.gov/epa/ssl1.shtml.
4 - Groundwater protection criteria or soil-to-air criteria are not applicable for this chemical because this chemical was only detected in deep subsurface soil (greater than 10 feet).
5 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
6 - The value is for xylenes.
7 - The value is for xylene, mixture.
8 - The value for acenaphthene is used as a surrogate for acenaphthylene.
9 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
10 - The value is for PCB (total).
11 - The value is for polychlorinated biphenyls (high risk).
12 - The value is for trivalent chromium.
13 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
14 - The value is for mercury (inorganic/mercuric dichloride).
15 - The value is for mercuric chloride.
16 - The value is for vanadium and compounds.
17 - The value is for benzo(b)fluoranthene.
18 - The value for total petroleum hydrocarbons (aliphatic low) is used.
19 - See Section 3 for BaP equivalent calculation methodology.

BaP = Benzo(a)pyrene
C = Carcinogenic
CAS = Chemical Abstract Service
N = Noncarcinogenic
NA = Not available/not applicable
sat = Soil Saturation Concentration

**Table 3-17**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Direct Contact With Surface Soil (0-2 feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**



| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Volatile Organic Compounds** | | | | | | | | | | | | | |
| | 75-34-3 | 1,1-DICHLOROETHANE | 1 J | 1 J | ug/kg | SB-195-SS | 1/109 | 0.27 - 710 | 1 | 1600000 | 3,300 C | 120,000 N | No | BSL |
| | 75-35-4 | 1,1-DICHLOROETHENE | 2.5 | 2.5 | ug/kg | SB-195-SS | 1/109 | 0.39 - 750 | 2.5 | 390000 | 24,000 N | 29,000 N | No | BSL |
| | 87-61-6 | **1,2,3-TRICHLOROBENZENE** | 11 J | 43000 J | ug/kg | E-SB-833K-02 | 8/109 | 0.28 - 8 | 43000 | NA | **4,900 N** | NA | **Yes** | ASL |
| | 526-73-8 | 1,2,3-TRIMETHYLBENZENE | 0.2 J | 0.4 J | ug/kg | SB-284-0102 | 3/56 | 0.13 - 7.1 | 0.4 | NA | NA | NA | No | NTX |
| | 120-82-1 | **1,2,4-TRICHLOROBENZENE** | 47 J | 210000 | ug/kg | E-SB-833K-02 | 8/109 | 0.2 - 8 | 210000 | **78000** | **6,200 N[8]** | **18,000 N** | **Yes** | ASL |
| | 95-63-6 | 1,2,4-TRIMETHYLBENZENE | 0.83 J | 33 | ug/kg | SB-66-SS | 4/109 | 0.48 - 210 | 33 | NA | 6,200 N | 12,000 N | No | BSL |
| | 95-50-1 | 1,2-DICHLOROBENZENE | 3.4 J | 970 J | ug/kg | E-SB-833E-02 | 4/109 | 0.27 - 360 | 970 | 700000 | 190,000 N | 600,000 sat | No | BSL |
| | 108-67-8 | 1,3,5-TRIMETHYLBENZENE | 23 | 23 | ug/kg | SB-66-SS | 1/53 | 1.92 - 8 | 23 | NA | 78,000 N | 7,200 N | No | BSL |
| | 541-73-1 | 1,3-DICHLOROBENZENE | 0.33 J | 1100 J | ug/kg | E-SB-833K-02 | 4/109 | 0.26 - 190 | 1100 | 23000 | NA | NA | No | BSL |
| | 106-46-7 | **1,4-DICHLOROBENZENE** | 1.3 J | 2700 J | ug/kg | E-SB-833K-02 | 7/109 | 0.49 - 8 | 2700 | 27000 | **2,400 C** | 1,100,000 N | **Yes** | ASL |
| | 78-93-3 | 2-BUTANONE | 1.6 J | 88 J | ug/kg | E-SB-833J-02 | 24/104 | 1 - 1800 | 88 | 4700000 | 2,800,000 N | 24,000,000 sat | No | BSL |
| | 67-64-1 | ACETONE | 7.3 J | 440 J | ug/kg | D-SB-788-SS | 31/107 | 4.7 - 9800 | 440 | 7000000 | 6,100,000 N | NA | No | BSL |
| | 71-43-2 | BENZENE | 0.72 J | 0.72 J | ug/kg | D-SS-786-01 | 1/110 | 0.17 - 500 | 0.72 | 12000 | 1,100 C | 830 C | No | BSL |
| | 75-15-0 | CARBON DISULFIDE | 0.65 J | 7.1 | ug/kg | SB-238-SS | 20/109 | 0.33 - 500 | 7.1 | 780000 | 82,000 N | 720,000 sat | No | BSL |
| | 108-90-7 | CHLOROBENZENE | 12 | 12 | ug/kg | E-SB-833G-02 | 1/109 | 0.24 - 270 | 12 | 160000 | 29,000 N | 13,000 N | No | BSL |
| | 74-87-3 | CHLOROMETHANE | 3 J | 3 J | ug/kg | SB-284-0102 | 1/109 | 0.3 - 580 | 3 | NA | 12,000 N | 2,100 C | No | BSL |
| | 100-41-4 | ETHYLBENZENE | 0.31 J | 8 | ug/kg | SB-66-SS | 3/110 | 0.19 - 230 | 8 | 780000 | 5,400 C | 400,000 sat | No | BSL |
| | 98-82-8 | ISOPROPYLBENZENE | 47 J | 47 J | ug/kg | SB-84-SS | 1/109 | 0.12 - 270 | 47 | 780000 | 210,000 N | 850,000 sat | No | BSL |
| | -- | M+P-XYLENES | 10 J | 10 J | ug/kg | SB-66-SS, SB-33A-SS | 2/109 | 0.89 - 260 | 10 | 1600000 [9] | 63,000 N[10] | 70,000 N[10] | No | BSL |
| | 75-09-2 | METHYLENE CHLORIDE | 2.9 J | 88 J | ug/kg | E-SB-833F-02 | 20/109 | 0.5 - 3200 | 88 | 85000 | 11,000 C | 13,000 C | No | BSL |
| | 104-51-8 | N-BUTYLBENZENE | 0.9 J | 0.9 J | ug/kg | SB-284-0102 | 1/109 | 0.17 - 330 | 0.9 | NA | NA | NA | No | NTX |
| | 103-65-1 | N-PROPYLBENZENE | 7 J | 7 J | ug/kg | SB-84-SS | 1/109 | 0.3 - 580 | 7 | NA | 340,000 N | NA | No | BSL |
| | 91-20-3 | NAPHTHALENE | 2 J | 260 | ug/kg | SB-66-SS | 8/110 | 0.14 - 280 | 260 | 160000 | 3,600 C | 17,000 N | No | BSL |
| | 95-47-6 | O-XYLENE | 0.43 J | 23 | ug/kg | SB-66-SS | 2/109 | 0.26 - 360 | 23 | 1600000 [9] | 380,000 N | NA | No | BSL |
| | 75-65-0 | TERTIARY-BUTYL ALCOHOL | 5 J | 620 J | ug/kg | E-SB-833L-02 | 4/20 | 8 - 61 | 620 | NA | NA | NA | No | NTX |
| | 127-18-4 | TETRACHLOROETHENE | 1.8 J | 1.8 J | ug/kg | E-SB-833N-02 | 1/109 | 0.39 - 500 | 1.8 | 1200 | 550 C | 10,000 C | No | BSL |
| | 108-88-3 | TOLUENE | 0.31 J | 13.3 | ug/kg | SB-202-SS | 14/110 | 0.2 - 710 | 13.3 | 630000 | 500,000 N | 650,000 sat | No | BSL |
| | 1330-20-7 | TOTAL XYLENES | 1.1 J | 1.2 J | ug/kg | SB-500-0001 | 2/69 | 0.5 - 340 | 1.2 | 1600000 [9] | 63,000 N | 70,000 N | No | BSL |
| | 79-01-6 | TRICHLOROETHENE | 0.65 J | 4.8 | ug/kg | SB-202-SS | 6/109 | 0.31 - 410 | 4.8 | 1600 | 2,800 C | 71 C | No | BSL |
| | 75-69-4 | TRICHLOROFLUOROMETHANE | 0.85 J | 0.85 J | ug/kg | D-SB-794-SS | 1/109 | 0.25 - 670 | 0.85 | NA | 79,000 N | 110,000 N | No | BSL |
| | **Semivolatile Organic Compounds** | | | | | | | | | | | | | |
| | 88-74-4 | 2-NITROANILINE | 44 J | 44 J | ug/kg | SB-6A-SS | 1/108 | 9.5 - 15000 | 44 | NA | 61,000 N | 120 N | No | BSL |
| | 65-85-0 | BENZOIC ACID | 67.4 J | 925 | ug/kg | SB-267-SS | 11/31 | 40.9 - 16000 | 925 | NA | 24,000,000 N | NA | No | BSL |
| | 100-51-6 | BENZYL ALCOHOL | 47.5 J | 47.5 J | ug/kg | SB-269-02 | 1/29 | 360 - 8110 | 47.5 | NA | 610,000 N | NA | No | BSL |
| | 117-81-7 | BIS(2-ETHYLHEXYL)PHTHALATE | 20 J | 93 J | ug/kg | SB-505-0001 | 9/108 | 20 - 7600 | 93 | 46000 | 35,000 C | NA | No | BSL |
| | 85-68-7 | BUTYL BENZYL PHTHALATE | 25 J | 120 J | ug/kg | SB-507-0001 | 3/108 | 10 - 7600 | 120 | NA | 260,000 C | NA | No | BSL |
| | 105-60-2 | CAPROLACTAM | 140 J | 140 J | ug/kg | SB-1A-SS | 1/77 | 39 - 7600 | 140 | NA | 3,100,000 N | NA | No | BSL |
| | 86-74-8 | CARBAZOLE | 27 J | 4640 | ug/kg | SB-268-SS | 18/108 | 28 - 7600 | 4640 | 32000 | NA | NA | No | BSL |
| | 84-74-2 | DI-N-BUTYL PHTHALATE | 28 J | 38 J | ug/kg | SB-266-SS | 6/108 | 16 - 7600 | 38 | 780000 | 610,000 N | NA | No | BSL |
| | 117-84-0 | DI-N-OCTYL PHTHALATE | 53 J | 53 J | ug/kg | SB-95-SS | 1/108 | 28 - 7600 | 53 | NA | NA | NA | No | NTX |
| | 132-64-9 | DIBENZOFURAN | 11 J | 1650 J | ug/kg | SB-268-SS | 13/108 | 3.4 - 7600 | 1650 | 7800 | 7,800 N | NA | No | BSL |
| | 131-11-3 | DIMETHYL PHTHALATE | 60 J | 2000 J | ug/kg | SB-58-SS | 2/108 | 18 - 8110 | 2000 | NA | NA | NA | No | NTX |
| | 108-95-2 | PHENOL | 420 | 940 J | ug/kg | SB-92-SS | 2/108 | 28 - 8110 | 940 | 2300000 | 1,800,000 N | NA | No | BSL |
| | **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | | |
| | 90-12-0 | 1-METHYLNAPHTHALENE | 10 | 480 | ug/kg | D-SB-771-SS | 9/82 | 3.4 - 1670 | 480 | NA | 22,000 C | NA | No | BSL |
| | 91-57-6 | 2-METHYLNAPHTHALENE | 8.9 | 990 J | ug/kg | SB-66-SS | 23/159 | 3.4 - 7600 | 990 | 31000 | 31,000 N | NA | No | BSL |
| | 83-32-9 | ACENAPHTHENE | 7.5 J | 4500 | ug/kg | D-SB-771-SS | 46/198 | 3.4 - 7600 | 4500 | 470000 | 340,000 N | NA | No | BSL |
| | 208-96-8 | ACENAPHTHYLENE | 10 | 1600 J | ug/kg | SB-67-SS | 28/198 | 3.4 - 7600 | 1600 | 470000 | 340,000 N[11] | NA | No | BSL |
| | 120-12-7 | ANTHRACENE | 10 | 9420 | ug/kg | SB-268-SS | 71/198 | 3.5 - 7600 | 9420 | 2300000 | 1,700,000 N | NA | No | BSL |
| | -- | **BAP EQUIVALENT-POSITIVE RESULTS[21]** | 0.0072 | 49963 | ug/kg | F-SB-95RE-1 | 429/565 | 1.4 - 4200 | 49963 | **22** | **15 C** | NA | **Yes** | ASL |

**Table 3-17**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Direct Contact With Surface Soil (0-2 feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**



| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Polycyclic Aromatic Hydrocarbons (continued)** | | | | | | | | | | | | | |
| | -- | **BAP EQUIVALENT-1/2 NONDETECT[21]** | 1.6 | 50001 | ug/kg | F-SB-95RE-1 | 429/565 | 1.4 - 4200 | 50001 | **22** | **15 C** | NA | **Yes** | ASL |
| | 56-55-3 | **BENZO(A)ANTHRACENE** | 2.8 J | 42000 | ug/kg | F-SB-95RE-1 | 330/458 | 1 - 4800 | 42000 | **220** | **150 C** | NA | **Yes** | ASL |
| | 50-32-8 | **BENZO(A)PYRENE** | 2.8 J | 38000 | ug/kg | F-SB-95RE-1 | 407/565 | 1.4 - 4800 | 38000 | **22** | **15 C** | NA | **Yes** | ASL |
| | 205-99-2 | **BENZO(B)FLUORANTHENE** | 1.9 J | 55000 | ug/kg | F-SB-95RE-1 | 340/452 | 1.3 - 4800 | 55000 | **220** | **150 C** | NA | **Yes** | ASL |
| | -- | **BENZO(B+K)FLUORANTHENE** | 220 J | 7200 J | ug/kg | SB-84-SS | 4/6 | 400 - 2100 | 7200 | **220 [19]** | **150 C[19]** | NA | **Yes** | ASL |
| | 191-24-2 | BENZO(G,H,I)PERYLENE | 8 J | 24000 J | ug/kg | SB-91-SS | 98/198 | 3.5 - 7600 | 24000 | 230000 | 170,000 N[12] | NA | No | BSL |
| | 207-08-9 | **BENZO(K)FLUORANTHENE** | 1.475 | 23000 | ug/kg | F-SB-95RE-1, SB-268-SS | 283/452 | 1.6 - 7600 | 23000 | **2200** | **1,500 C** | NA | **Yes** | ASL |
| | 218-01-9 | **CHRYSENE** | 3.2 J | 41000 | ug/kg | G-SB-761C-1 | 343/458 | 0.96 - 4200 | 41000 | **22000** | **15,000 C** | NA | **Yes** | ASL |
| | 53-70-3 | **DIBENZO(A,H)ANTHRACENE** | 2.8 J | 7200 J | ug/kg | SB-91-SS | 179/458 | 1.4 - 7600 | 7200 | **22** | **15 C** | NA | **Yes** | ASL |
| | 206-44-0 | FLUORANTHENE | 8.4 | 63200 | ug/kg | SB-268-SS | 136/198 | 3.6 - 4800 | 63200 | 310000 | 230,000 N | NA | No | BSL |
| | 86-73-7 | FLUORENE | 8.8 | 3580 | ug/kg | SB-268-SS | 48/198 | 3.4 - 7600 | 3580 | 310000 | 230,000 N | NA | No | BSL |
| | 193-39-5 | **INDENO(1,2,3-CD)PYRENE** | 2.4 J | 20000 | ug/kg | F-SB-95RE-1 | 305/458 | 0.41 - 7600 | 20000 | **220** | **150 C** | NA | **Yes** | ASL |
| | 91-20-3 | NAPHTHALENE | 7.3 | 3100 | ug/kg | D-SB-771-SS | 42/198 | 3.4 - 7600 | 3100 | 160000 | 3,600 C | 17,000 N | No | BSL |
| | 85-01-8 | PHENANTHRENE | 8 | 36100 | ug/kg | SB-268-SS | 111/198 | 3.5 - 4800 | 36100 | 2300000 | 170,000 N[12] | NA | No | BSL |
| | 129-00-0 | PYRENE | 7 J | 55000 J | ug/kg | SB-91-SS | 143/198 | 3.6 - 3700 | 55000 | 230000 | 170,000 N | NA | No | BSL |
| | **Pesticides/Polychlorinated Biphenyls** | | | | | | | | | | | | | |
| | 72-54-8 | 4,4'-DDD | 4 J | 4 J | ug/kg | D-SB-794-SS | 1/27 | 0.66 - 1200 | 4 | 2700 | 2,000 C | NA | No | BSL |
| | 72-55-9 | 4,4'-DDE | 1.5 J | 7.8 J | ug/kg | D-SS-783-01 | 3/27 | 0.41 - 1200 | 7.8 | 1900 | 1,400 C | NA | No | BSL |
| | 53469-21-9 | AROCLOR-1242 | 32 J | 58 | ug/kg | SB-235-SS | 2/341 | 14 - 740000 | 58 | 320 | 220 C | NA | No | BSL |
| | 11097-69-1 | **AROCLOR-1254** | 12 J | 36000 | ug/kg | SB-555-SS0-0.5 | 5/341 | 17 - 740000 | 36000 | **320** | **110 N[8]** | NA | **Yes** | ASL |
| | 11096-82-5 | **AROCLOR-1260** | 4.3 J | 1800000 | ug/kg | SB-353-0001 | 151/341 | 17 - 410 | 1800000 | **320** | **220 C** | NA | **Yes** | ASL |
| | 319-85-7 | BETA-BHC | 6.4 J | 9.1 J | ug/kg | D-SS-783-01 | 2/27 | 1.2 - 1200 | 9.1 | 350 | 270 C | 6,000 C | No | BSL |
| | 1336-36-3 | **TOTAL AROCLOR** | 4.3 | 1800000 | ug/kg | SB-353-0001 | 153/341 | 0 - 0 | 1800000 | **320 [13]** | **220 C[14]** | NA | **Yes** | ASL |
| | **Metals** | | | | | | | | | | | | | |
| | 7440-36-0 | **ANTIMONY** | 0.031 L | 4 L | mg/kg | SB-237-01 | 54/102 | 0.025 - 3.3 | 4 | **3.1** | **3.1 N** | NA | **Yes** | ASL |
| | 7440-38-2 | **ARSENIC** | 0.52 J | 37 | mg/kg | SB-92-SS | 111/133 | 0.48 - 4.8 | 37 | **0.43** | **0.39 C** | 769 C | **Yes** | ASL |
| | 7440-39-3 | BARIUM | 3.7 | 207 | mg/kg | SB-268-SS | 73/73 | -- | 207 | 1600 | 1,500 N | 70900 N | No | BSL |
| | 7440-41-7 | BERYLLIUM | 0.055 J | 5.4 | mg/kg | SB-91-SS | 77/115 | 0.05 - 4 | 5.4 | 16 | 16 N | 1380 C | No | BSL |
| | 7440-43-9 | **CADMIUM** | 0.0125 | 14 | mg/kg | SB-85-SS | 45/115 | 0.0082 - 4 | 14 | **3.9** | **7 N** | 1840 C | **Yes** | ASL |
| | 7440-47-3 | CHROMIUM | 3.1 K | 185 | mg/kg | SB-237-01 | 115/115 | -- | 185 | 12000 [15] | 12,000 N[15] | 276 C | No | BSL |
| | 7440-48-4 | **COBALT** | 0.5 | 51.2 | mg/kg | SB-197-SS | 73/73 | -- | 51.2 | NA | **2.3 N** | 1180 C | **Yes** | ASL |
| | 7440-50-8 | COPPER | 2.9 | 74 | mg/kg | SB-55-SS | 114/115 | 2.6 - 2.6 | 74 | 310 | 310 N | NA | No | BSL |
| | 7439-89-6 | **IRON** | 3870 | 29900 | mg/kg | SB-518-0001 | 36/36 | -- | 29900 | **5500** | **5,500 N** | NA | **Yes** | ASL |
| | 7439-92-1 | **LEAD** | 0.98 | 447 | mg/kg | SB-268-SS | 106/115 | 2.8 - 8 | 447 | **400** | **400** | NA | **Yes** | ASL |
| | 7439-96-5 | **MANGANESE** | 9.4 J | 1370 J | mg/kg | SB-503-0001 | 36/36 | -- | 1,370 | **160** | **180 N** | 7090 N | **Yes** | ASL |
| | 7439-97-6 | **MERCURY** | 0.01 | 4.2 | mg/kg | SB-84-SS | 94/167 | 0.01 - 0.16 | 4.2 | **2.3 [16]** | **2.3 N[17]** | NA | **Yes** | ASL |
| | 7439-98-7 | **MOLYBDENUM** | 0.14 J | 63 | mg/kg | SB-237-01 | 25/73 | 0.077 - 2 | 63 | NA | **39 N** | NA | **Yes** | ASL |
| | 7440-02-0 | **NICKEL** | 0.64 | 280 J | mg/kg | SB-86-SS | 108/115 | 5 - 9 | 280 | **160** | **150 N** | NA | **Yes** | ASL |
| | 7782-49-2 | SELENIUM | 0.11 J | 4.7 | mg/kg | SB-91-SS | 43/115 | 0.18 - 4 | 4.7 | 39 | 39 N | NA | No | BSL |
| | 7440-22-4 | SILVER | 0.023 J | 3.4 | mg/kg | SB-23A-SS | 36/89 | 0.017 - 3.2 | 3.4 | 39 | 39 N | NA | No | BSL |
| | 7440-28-0 | THALLIUM | 0.026 K | 0.38 | mg/kg | SB-504-0001 | 15/115 | 0.014 - 3.2 | 0.38 | 0.55 | NA | NA | No | BSL |
| | 7440-62-2 | **VANADIUM** | 8.5 J | 60.7 J | mg/kg | SB-505-0001 | 73/73 | -- | 60.7 | **7.8** | **39 N[18]** | NA | **Yes** | ASL |
| | 7440-66-6 | ZINC | 2.9 | 302 | mg/kg | SB-505-0001 | 95/115 | 3.1 - 40 | 302 | 2300 | 2,300 N | NA | No | BSL |
| | **Petroleum Hydrocarbons** | | | | | | | | | | | | | |
| | -- | **DIESEL RANGE ORGANICS** | 8600 J | 8900000 J | ug/kg | E-SB-833A-02 | 47/73 | 10000 - 18000 | 8900000 | **230000** | NA | NA | **Yes** | ASL |
| | -- | **GASOLINE RANGE ORGANICS** | 31 J | 810000 | ug/kg | G-SB-734-0-4 | 23/85 | 13.1 - 13300 | 810000 | **230000** | NA | NA | **Yes** | ASL |
| | -- | TPH (C09-C36) | 3300 J | 34000 | ug/kg | SB-284-0102 | 6/7 | 6100 - 6100 | 34000 | NA | 28,400,000 N[20] | NA | No | BSL |
| | -- | TPH (C10-C32) | 2200 J | 650000 | ug/kg | SB-503-0001 | 13/21 | 610 - 22000 | 650000 | NA | 28,400,000 N[20] | NA | No | BSL |

**Table 3-17**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Direct Contact With Surface Soil (0-2 feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**



| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Miscellaneous Parameters** | | | | | | | | | | | | | |
| | 18540-29-9 | **HEXAVALENT CHROMIUM** | 0.32 J | 3.6 | mg/kg | SB-268-SS, SB-265-SS | 15/24 | 0.28 - 0.4 | 3.6 | 23 | **0.29 C** | 276 C | **Yes** | ASL |
| | 22967-92-6 | MERCURY (METHYL) | 0.071 J | 1.467 J | ug/kg | SB-237-01 | 5/5 | -- | 1.467 | 780 | 780 N | NA | No | BSL |
| | -- | PERCENT SOLIDS | 46.1 | 97 | % | SB-569-SS0.5-1 | 285/285 | -- | 97 | NA | NA | NA | No | NTX |
| | -- | PH | 6 | 8.4 | S.U. | SB-265-02 | 6/6 | -- | 8.4 | NA | NA | NA | No | NTX |
| | -- | TOTAL SOLIDS | 82 | 92 | % | SB-293-0102 | 7/7 | -- | 92 | NA | NA | NA | No | NTX |

**Footnotes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations.
2 - Values presented are sample-specific quantitation limits.
3 - The maximum detected concentration is used for screening purposes.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag).
6 - USEPA Soil Screening Levels. EPA Internet Site at http://rais.ornl.gov/epa/ssl1.shtml.
7 - The chemical is selected as a global COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
8 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
9 - The value is for xylenes.
10 - The value is for xylene, mixture.
11 - The value for acenaphthene is used as a surrogate for acenaphthylene.
12 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
13 - The value is for PCB (total).
14 - The value is for polychlorinated biphenyls (high risk).
15 - The value is for trivalent chromium.
16 - The value is for mercury (inorganic/mercuric dichloride).
17 - The value is for mercuric chloride.
18 - The value is for vanadium and compounds.
19 - The value for benzo(b)fluoranthene is used as a surrogate for benzo(b+k)fluoranthene.
20 - The value for total petroleum hydrocarbons (aliphatic low) is used.
21 - See Section 3 for BaP equivalent calculation methodology.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

**Associated Samples:** All surface soil samples (0-2 feet) from all tax blocks (D, E, F, G, and H) were included. See Tables 3-1 through 3-5 for sample lists.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NA = Not Applicable/Not Available
sat = soil saturation concentration

**Rationale Codes:**
For selection as a COPC:
ASL = Above Screening Level

For elimination as a COPC:
BSL = Below COPC Screening Level
NTX = No toxicity criteria

**Table 3-18**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Migration from Surface Soil (0-2 feet) to Groundwater**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**



| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Protection of Groundwater[4] | USEPA SSL for Protection of Groundwater[5] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Volatile Organic Compounds** | | | | | | | | | | | | |
| | 75-34-3 | **1,1-DICHLOROETHANE** | 1 J | 1 J | ug/kg | SB-195-SS | 1/109 | 0.27 - 710 | 1 | 5100 | **0.69** | **Yes** | ASL |
| | 75-35-4 | 1,1-DICHLOROETHENE | 2.5 | 2.5 | ug/kg | SB-195-SS | 1/109 | 0.39 - 750 | 2.5 | 2900 | 120 | No | BSL |
| | 87-61-6 | **1,2,3-TRICHLOROBENZENE** | 11 J | 43000 J | ug/kg | E-SB-833K-02 | 8/109 | 0.28 - 8 | 43000 | NA | **87** | **Yes** | ASL |
| | 526-73-8 | 1,2,3-TRIMETHYLBENZENE | 0.2 J | 0.4 J | ug/kg | SB-284-0102 | 3/56 | 0.13 - 7.1 | 0.4 | NA | NA | No | NTX |
| | 120-82-1 | **1,2,4-TRICHLOROBENZENE** | 47 J | 210000 | ug/kg | E-SB-833K-02 | 8/109 | 0.2 - 8 | 210000 | **2400** | **6.8** | **Yes** | ASL |
| | 95-63-6 | **1,2,4-TRIMETHYLBENZENE** | 0.83 J | 33 | ug/kg | SB-66-SS | 4/109 | 0.48 - 210 | 33 | NA | **21** | **Yes** | ASL |
| | 95-50-1 | **1,2-DICHLOROBENZENE** | 3.4 J | 970 J | ug/kg | E-SB-833E-02 | 4/109 | 0.27 - 360 | 970 | 4600 | **360** | **Yes** | ASL |
| | 108-67-8 | 1,3,5-TRIMETHYLBENZENE | 23 | 23 | ug/kg | SB-66-SS | 1/53 | 1.92 - 8 | 23 | NA | 520 | No | BSL |
| | 541-73-1 | **1,3-DICHLOROBENZENE** | 0.33 J | 1100 J | ug/kg | E-SB-833K-02 | 4/109 | 0.26 - 190 | 1100 | **290** | NA | **Yes** | ASL |
| | 106-46-7 | **1,4-DICHLOROBENZENE** | 1.3 J | 2700 J | ug/kg | E-SB-833K-02 | 7/109 | 0.49 - 8 | 2700 | **4.2** | **0.41** | **Yes** | ASL |
| | 78-93-3 | 2-BUTANONE | 1.6 J | 88 J | ug/kg | E-SB-833J-02 | 24/104 | 1 - 1800 | 88 | 29000 | 1,500 | No | BSL |
| | 67-64-1 | ACETONE | 7.3 J | 440 J | ug/kg | D-SB-788-SS | 31/107 | 4.7 - 9800 | 440 | 22000 | 4,500 | No | BSL |
| | 71-43-2 | **BENZENE** | 0.72 J | 0.72 J | ug/kg | D-SS-786-01 | 1/110 | 0.17 - 500 | 0.72 | 1.9 | **0.21** | **Yes** | ASL |
| | 75-15-0 | CARBON DISULFIDE | 0.65 J | 7.1 | ug/kg | SB-238-SS | 20/109 | 0.33 - 500 | 7.1 | 19000 | 310 | No | BSL |
| | 108-90-7 | CHLOROBENZENE | 12 | 12 | ug/kg | E-SB-833G-02 | 1/109 | 0.24 - 270 | 12 | 680 | 62 | No | BSL |
| | 74-87-3 | CHLOROMETHANE | 3 J | 3 J | ug/kg | SB-284-0102 | 1/109 | 0.3 - 580 | 3 | 930 | 49 | No | BSL |
| | 100-41-4 | **ETHYLBENZENE** | 0.31 J | 8 | ug/kg | SB-66-SS | 3/110 | 0.19 - 230 | 8 | 15000 | **1.7** | **Yes** | ASL |
| | 98-82-8 | ISOPROPYLBENZENE | 47 J | 47 J | ug/kg | SB-84-SS | 1/109 | 0.12 - 270 | 47 | 64000 | 1,100 | No | BSL |
| | -- | M+P-XYLENES | 10 J | 10 J | ug/kg | SB-66-SS, SB-33A-SS | 2/109 | 0.89 - 260 | 10 | 3000 [7] | 200 [8] | No | BSL |
| | 75-09-2 | **METHYLENE CHLORIDE** | 2.9 J | 88 J | ug/kg | E-SB-833F-02 | 20/109 | 0.5 - 3200 | 88 | **19** | **1.2** | **Yes** | ASL |
| | 104-51-8 | N-BUTYLBENZENE | 0.9 J | 0.9 J | ug/kg | SB-284-0102 | 1/109 | 0.17 - 330 | 0.9 | NA | NA | No | NTX |
| | 103-65-1 | N-PROPYLBENZENE | 7 J | 7 J | ug/kg | SB-84-SS | 1/109 | 0.3 - 580 | 7 | NA | 2,500 | No | BSL |
| | 91-20-3 | **NAPHTHALENE** | 2 J | 260 | ug/kg | SB-66-SS | 8/110 | 0.14 - 280 | 260 | **150** | **0.47** | **Yes** | ASL |
| | 95-47-6 | O-XYLENE | 0.43 J | 23 | ug/kg | SB-66-SS | 2/109 | 0.26 - 360 | 23 | 3000 [7] | 1,200 | No | BSL |
| | 75-65-0 | TERTIARY-BUTYL ALCOHOL | 5 J | 620 J | ug/kg | E-SB-833L-02 | 4/20 | 8 - 61 | 620 | NA | NA | No | NTX |
| | 127-18-4 | **TETRACHLOROETHENE** | 1.8 J | 1.8 J | ug/kg | E-SB-833N-02 | 1/109 | 0.39 - 500 | 1.8 | 4.7 | **0.049** | **Yes** | ASL |
| | 108-88-3 | TOLUENE | 0.31 J | 13.3 | ug/kg | SB-202-SS | 14/110 | 0.2 - 710 | 13.3 | 27000 | 1,600 | No | BSL |
| | 1330-20-7 | TOTAL XYLENES | 1.1 J | 1.2 J | ug/kg | SB-500-0001 | 2/69 | 0.5 - 340 | 1.2 | 3000 [7] | 200 | No | BSL |
| | 79-01-6 | **TRICHLOROETHENE** | 0.65 J | 4.8 | ug/kg | SB-202-SS | 6/109 | 0.31 - 410 | 4.8 | **0.26** | **0.72** | **Yes** | ASL |
| | 75-69-4 | TRICHLOROFLUOROMETHANE | 0.85 J | 0.85 J | ug/kg | D-SB-794-SS | 1/109 | 0.25 - 670 | 0.85 | NA | 830 | No | BSL |
| | **Semivolatile Organic Compounds** | | | | | | | | | | | | |
| | 88-74-4 | 2-NITROANILINE | 44 J | 44 J | ug/kg | SB-6A-SS | 1/108 | 9.5 - 15000 | 44 | NA | 150 | No | BSL |
| | 65-85-0 | BENZOIC ACID | 67.4 J | 925 | ug/kg | SB-267-SS | 11/31 | 40.9 - 16000 | 925 | NA | 34,000 | No | BSL |
| | 100-51-6 | BENZYL ALCOHOL | 47.5 J | 47.5 J | ug/kg | SB-269-02 | 1/29 | 360 - 8110 | 47.5 | NA | 890 | No | BSL |
| | 117-81-7 | BIS(2-ETHYLHEXYL)PHTHALATE | 20 J | 93 J | ug/kg | SB-505-0001 | 9/108 | 20 - 7600 | 93 | 2900000 | 1,100 | No | BSL |
| | 85-68-7 | BUTYL BENZYL PHTHALATE | 25 J | 120 J | ug/kg | SB-507-0001 | 3/108 | 10 - 7600 | 120 | NA | 510 | No | BSL |
| | 105-60-2 | CAPROLACTAM | 140 J | 140 J | ug/kg | SB-1A-SS | 1/77 | 39 - 7600 | 140 | NA | 4,500 | No | BSL |
| | 86-74-8 | **CARBAZOLE** | 27 J | 4640 | ug/kg | SB-268-SS | 18/108 | 28 - 7600 | 4640 | **470** | NA | **Yes** | ASL |
| | 84-74-2 | DI-N-BUTYL PHTHALATE | 28 J | 38 J | ug/kg | SB-266-SS | 6/108 | 16 - 7600 | 38 | 5000000 | 9,200 | No | BSL |
| | 117-84-0 | DI-N-OCTYL PHTHALATE | 53 J | 53 J | ug/kg | SB-95-SS | 1/108 | 28 - 7600 | 53 | NA | NA | No | NTX |
| | 132-64-9 | **DIBENZOFURAN** | 11 J | 1650 J | ug/kg | SB-268-SS | 13/108 | 3.4 - 7600 | 1650 | -- | **680** | **Yes** | ASL |
| | 131-11-3 | DIMETHYL PHTHALATE | 60 J | 2000 J | ug/kg | SB-58-SS | 2/108 | 18 - 8110 | 2000 | NA | NA | No | NTX |
| | 108-95-2 | PHENOL | 420 | 940 J | ug/kg | SB-92-SS | 2/108 | 28 - 8110 | 940 | 67000 | 6,300 | No | BSL |

**Table 3-18**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Migration from Surface Soil (0-2 feet) to Groundwater**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**



| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Protection of Groundwater[4] | USEPA SSL for Protection of Groundwater[5] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | |
| | 90-12-0 | **1-METHYLNAPHTHALENE** | 10 | 480 | ug/kg | D-SB-771-SS | 9/82 | 3.4 - 1670 | 480 | NA | **12** | **Yes** | ASL |
| | 91-57-6 | **2-METHYLNAPHTHALENE** | 8.9 | 990 J | ug/kg | SB-66-SS | 23/159 | 3.4 - 7600 | 990 | 4400 | **750** | **Yes** | ASL |
| | 83-32-9 | ACENAPHTHENE | 7.5 J | 4500 | ug/kg | D-SB-771-SS | 46/198 | 3.4 - 7600 | 4500 | 100000 | 22,000 | No | BSL |
| | 208-96-8 | ACENAPHTHYLENE | 10 | 1600 J | ug/kg | SB-67-SS | 28/198 | 3.4 - 7600 | 1600 | 100000 | 22,000 [9] | No | BSL |
| | 120-12-7 | ANTHRACENE | 10 | 9420 | ug/kg | SB-268-SS | 71/198 | 3.5 - 7600 | 9420 | 470000 | 360,000 | No | BSL |
| | -- | **BAP EQUIVALENT-POSITIVE RESULTS[15]** | 0.0072 | 49963 | ug/kg | F-SB-95RE-1 | 429/565 | 1.4 - 4200 | 49963 | **120** | **3.5** | **Yes** | ASL |
| | -- | **BAP EQUIVALENT-1/2 NONDETECT[15]** | 1.6 | 50001 | ug/kg | F-SB-95RE-1 | 429/565 | 1.4 - 4200 | 50001 | **120** | **3.5** | **Yes** | ASL |
| | 56-55-3 | **BENZO(A)ANTHRACENE** | 2.8 J | 42000 | ug/kg | F-SB-95RE-1 | 330/458 | 1 - 4800 | 42000 | **480** | **10** | **Yes** | ASL |
| | 50-32-8 | **BENZO(A)PYRENE** | 2.8 J | 38000 | ug/kg | F-SB-95RE-1 | 407/565 | 1.4 - 4800 | 38000 | **120** | **3.5** | **Yes** | ASL |
| | 205-99-2 | **BENZO(B)FLUORANTHENE** | 1.9 J | 55000 | ug/kg | F-SB-95RE-1 | 340/452 | 1.3 - 4800 | 55000 | **1500** | **35** | **Yes** | ASL |
| | -- | **BENZO(B+K)FLUORANTHENE** | 220 J | 7200 J | ug/kg | SB-84-SS | 4/6 | 400 - 2100 | 7200 | **1500** [14] | **35** [14] | **Yes** | ASL |
| | 191-24-2 | BENZO(G,H,I)PERYLENE | 8 J | 24000 J | ug/kg | SB-91-SS | 98/198 | 3.5 - 7600 | 24000 | 680000 | 120,000 [10] | No | BSL |
| | 207-08-9 | **BENZO(K)FLUORANTHENE** | 1.475 | 23000 | ug/kg | F-SB-95RE-1, SB-268-SS | 283/452 | 1.6 - 7600 | 23000 | **15000** | **350** | **Yes** | ASL |
| | 218-01-9 | **CHRYSENE** | 3.2 J | 41000 | ug/kg | G-SB-761C-1 | 343/458 | 0.96 - 4200 | 41000 | 48000 | **1,100** | **Yes** | ASL |
| | 53-70-3 | **DIBENZO(A,H)ANTHRACENE** | 2.8 J | 7200 J | ug/kg | SB-91-SS | 179/458 | 1.4 - 7600 | 7200 | **460** | **11** | **Yes** | ASL |
| | 206-44-0 | FLUORANTHENE | 8.4 | 63200 | ug/kg | SB-268-SS | 136/198 | 3.6 - 4800 | 63200 | 6300000 | 160,000 | No | BSL |
| | 86-73-7 | FLUORENE | 8.8 | 3580 | ug/kg | SB-268-SS | 48/198 | 3.4 - 7600 | 3580 | 140000 | 27,000 | No | BSL |
| | 193-39-5 | **INDENO(1,2,3-CD)PYRENE** | 2.4 J | 20000 | ug/kg | F-SB-95RE-1 | 305/458 | 0.41 - 7600 | 20000 | **4200** | **120** | **Yes** | ASL |
| | 91-20-3 | **NAPHTHALENE** | 7.3 | 3100 | ug/kg | D-SB-771-SS | 42/198 | 3.4 - 7600 | 3100 | **150** | **0.47** | **Yes** | ASL |
| | 85-01-8 | PHENANTHRENE | 8 | 36100 | ug/kg | SB-268-SS | 111/198 | 3.5 - 4800 | 36100 | 470000 | 120,000 [10] | No | BSL |
| | 129-00-0 | PYRENE | 7 J | 55000 J | ug/kg | SB-91-SS | 143/198 | 3.6 - 3700 | 55000 | 680000 | 120,000 | No | BSL |
| | **Pesticides/Polychlorinated Biphenyls** | | | | | | | | | | | | |
| | 72-54-8 | 4,4'-DDD | 4 J | 4 J | ug/kg | D-SB-794-SS | 1/27 | 0.66 - 1200 | 4 | 11000 | 66 | No | BSL |
| | 72-55-9 | 4,4'-DDE | 1.5 J | 7.8 J | ug/kg | D-SS-783-01 | 3/27 | 0.41 - 1200 | 7.8 | 35000 | 47 | No | BSL |
| | 53469-21-9 | **AROCLOR-1242** | 32 J | 58 | ug/kg | SB-235-SS | 2/341 | 14 - 740000 | 58 | -- | **5.3** | **Yes** | ASL |
| | 11097-69-1 | **AROCLOR-1254** | 12 J | 36,000 | ug/kg | SB-555-SS0-0.5 | 5/341 | 17 - 740000 | 36000 | **1100** | **8.8** | **Yes** | ASL |
| | 11096-82-5 | **AROCLOR-1260** | 4.3 J | 1800000 | ug/kg | SB-353-0001 | 151/341 | 17 - 410 | 1800000 | -- | **24** | **Yes** | ASL |
| | 319-85-7 | **BETA-BHC** | 6.4 J | 9.1 J | ug/kg | D-SS-783-01 | 2/27 | 1.2 - 1200 | 9.1 | **3.1** | **0.22** | **Yes** | ASL |
| | 1336-36-3 | **TOTAL AROCLOR** | 4.3 | 1800000 | ug/kg | SB-353-0001 | 153/341 | 0 - 0 | 1800000 | **410** [11] | NA | **Yes** | ASL |
| | **Metals** | | | | | | | | | | | | |
| | 7440-36-0 | **ANTIMONY** | 0.031 L | 4 L | mg/kg | SB-237-01 | 54/102 | 0.025 - 3.3 | 4 | 13 | **0.66** | **Yes** | ASL |
| | 7440-38-2 | **ARSENIC** | 0.52 J | 37 | mg/kg | SB-92-SS | 111/133 | 0.48 - 4.8 | 37 | **0.026** | **0.0013** | **Yes** | ASL |
| | 7440-39-3 | BARIUM | 3.7 | 207 | mg/kg | SB-268-SS | 73/73 | -- | 207 | 6000 | 300 | No | BSL |
| | 7440-41-7 | BERYLLIUM | 0.055 J | 5.4 | mg/kg | SB-91-SS | 77/115 | 0.05 - 4 | 5.4 | 1200 | 58 | No | BSL |
| | 7440-43-9 | **CADMIUM** | 0.0125 | 14 | mg/kg | SB-85-SS | 45/115 | 0.0082 - 4 | 14 | 27 | **1.4** | **Yes** | ASL |
| | 7440-47-3 | CHROMIUM | 3.1 K | 185 | mg/kg | SB-237-01 | 115/115 | -- | 185 | 2000000000 [12] | 99,000,000 [12] | No | BSL |
| | 7440-48-4 | **COBALT** | 0.5 | 51.2 | mg/kg | SB-197-SS | 73/73 | -- | 51.2 | NA | **0.49** | **Yes** | ASL |
| | 7440-50-8 | **COPPER** | 2.9 | 74 | mg/kg | SB-55-SS | 114/115 | 2.6 - 2.6 | 74 | 11000 | **51** | **Yes** | ASL |
| | 7439-89-6 | **IRON** | 3870 | 29900 | mg/kg | SB-518-0001 | 36/36 | -- | 29900 | -- | **640** | **Yes** | ASL |
| | 7439-92-1 | **LEAD** | 0.98 | 447 | mg/kg | SB-268-SS | 106/115 | 2.8 - 8 | 447 | -- | **14** [13] | **Yes** | ASL |
| | 7439-96-5 | **MANGANESE** | 9.4 J | 1370 J | mg/kg | SB-503-0001 | 36/36 | -- | 1370 | **950** | **57** | **Yes** | ASL |
| | 7439-97-6 | MERCURY | 0.01 | 4.2 | mg/kg | SB-84-SS | 94/167 | 0.01 - 0.16 | 4.2 | -- | NA | No | NTX |
| | 7439-98-7 | **MOLYBDENUM** | 0.14 J | 63 | mg/kg | SB-237-01 | 25/73 | 0.077 - 2 | 63 | NA | **3.7** | **Yes** | ASL |
| | 7440-02-0 | **NICKEL** | 0.64 | 280 J | mg/kg | SB-86-SS | 108/115 | 5 - 9 | 280 | -- | **48** | **Yes** | ASL |

**Table 3-18**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Migration from Surface Soil (0-2 feet) to Groundwater**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Protection of Groundwater[4] | USEPA SSL for Protection of Groundwater[5] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Metals (continued)** | | | | | | | | | | | | |
| | 7782-49-2 | **SELENIUM** | 0.11 J | 4.7 | mg/kg | SB-91-SS | 43/115 | 0.18 - 4 | 4.7 | 19 | **1.0** | **Yes** | ASL |
| | 7440-22-4 | **SILVER** | 0.023 J | 3.4 | mg/kg | SB-23A-SS | 36/89 | 0.017 - 3.2 | 3.4 | 31 | **1.6** | **Yes** | ASL |
| | 7440-28-0 | THALLIUM | 0.026 K | 0.38 | mg/kg | SB-504-0001 | 15/115 | 0.014 - 3.2 | 0.38 | 3.6 | NA | No | BSL |
| | 7440-62-2 | VANADIUM | 8.5 J | 60.7 J | mg/kg | SB-505-0001 | 73/73 | -- | 60.7 | 730 | 180 | No | BSL |
| | 7440-66-6 | ZINC | 2.9 | 302 | mg/kg | SB-505-0001 | 95/115 | 3.1 - 40 | 302 | 14000 | 680 | No | BSL |
| | **Petroleum Hydrocarbons** | | | | | | | | | | | | |
| | -- | DIESEL RANGE ORGANICS | 8600 J | 8900000 J | ug/kg | E-SB-833A-02 | 47/73 | 10000 - 18000 | 8900000 | -- | NA | No | NTX |
| | -- | GASOLINE RANGE ORGANICS | 31 J | 810000 | ug/kg | G-SB-734-0-4 | 23/85 | 13.1 - 13300 | 810000 | -- | NA | No | NTX |
| | -- | TPH (C09-C36) | 3300 J | 34000 | ug/kg | SB-284-0102 | 6/7 | 6100 - 6100 | 34000 | NA | NA | No | NTX |
| | -- | TPH (C10-C32) | 2200 J | 650000 | ug/kg | SB-503-0001 | 13/21 | 610 - 22000 | 650000 | NA | NA | No | NTX |
| | **Miscellaneous Parameters** | | | | | | | | | | | | |
| | 18540-29-9 | **HEXAVALENT CHROMIUM** | 0.32 J | 3.6 | mg/kg | SB-268-SS, SB-265-SS | 15/24 | 0.28 - 0.4 | 3.6 | 42 | **0.00083** | **Yes** | ASL |
| | 22967-92-6 | MERCURY (METHYL) | 0.071 J | 1.467 J | ug/kg | SB-237-01 | 5/5 | -- | 1.467 | -- | NA | No | NTX |
| | -- | PERCENT SOLIDS | 46.1 | 97 | % | SB-569-SS0.5-1 | 285/285 | -- | 97 | NA | NA | No | NTX |
| | -- | PH | 6 | 8.4 | S.U. | SB-265-02 | 6/6 | -- | 8.4 | NA | NA | No | NTX |
| | -- | TOTAL SOLIDS | 82 | 92 | % | SB-293-0102 | 7/7 | -- | 92 | NA | NA | No | NTX |

**Footnotes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations.
2 - Values presented are sample-specific quantitation limits.
3 - The maximum detected concentration is used for screening purposes.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag).
6 - The chemical is selected as a global COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
7 - The value is for xylenes.
8 - The value is for xylene, mixture.
9 - The value for acenaphthene is used as a surrogate for acenaphthylene.
10 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
11 - The value is for PCB (total).
12 - The value is for trivalent chromium.
13 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
14 - The value for benzo(b)fluoranthene is used as a surrogate for benzo(b+k)fluoranthene.
15 - See Section 3 for BaP equivalent calculation methodology.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

**Associated Samples:** All surface soil samples (0-2 feet) from all tax blocks (D, E, F, G, and H) were included. See Tables 3-1 through 3-5 for sample lists.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NA = Not Applicable/Not Available
sat = soil saturation concentration

**Rationale Codes:**
For selection as a COPC:
ASL = Above Screening Level

For elimination as a COPC:
BSL = Below COPC Screening Level
NTX = No toxicity criteria

**Table 3-19**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Direct Contact With Subsurface Soil (2-10 feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**



| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Volatile Organic Compounds** | | | | | | | | | | | | | |
| | 75-34-3 | 1,1-DICHLOROETHANE | 0.48 J | 0.69 J | ug/kg | SB-515-0406, SB-515-0810 | 3/266 | 0.25 - 44000 | 0.69 | 1600000 | 3,300 C | 120,000 N | No | BSL |
| | 75-35-4 | 1,1-DICHLOROETHENE | 0.54 J | 1.1 J | ug/kg | D-SB-793-09 | 2/266 | 0.36 - 46000 | 1.1 | 390000 | 24,000 N | 29,000 N | No | BSL |
| | 87-61-6 | **1,2,3-TRICHLOROBENZENE** | 0.6 J | 2200000 | ug/kg | E-SB-833-09 | 32/266 | 0.26 - 518 | 2200000 | NA | **4,900 N** | NA | **Yes** | ASL |
| | 526-73-8 | 1,2,3-TRIMETHYLBENZENE | 0.15 J | 49 J | ug/kg | E-SB-833L-04 | 15/172 | 0.12 - 2900 | 49 | NA | NA | NA | No | NTX |
| | 120-82-1 | **1,2,4-TRICHLOROBENZENE** | 5.9 J | 9600000 | ug/kg | E-SB-833-09 | 32/266 | 0.19 - 518 | 9600000 | **78000** | **6200 N[8]** | **18000 N** | **Yes** | ASL |
| | 95-63-6 | 1,2,4-TRIMETHYLBENZENE | 0.69 J | 658 | ug/kg | SB-238-05 | 9/266 | 0.45 - 13000 | 658 | NA | 6,200 N | 12,000 N | No | BSL |
| | 95-50-1 | 1,2-DICHLOROBENZENE | 0.39 J | 120000 J | ug/kg | E-SB-833-09 | 25/266 | 0.25 - 290 | 120000 | 700000 | 190,000 N | 600000 sat | No | BSL |
| | 107-06-2 | 1,2-DICHLOROETHANE | 1.5 J | 51 J | ug/kg | E-SB-833K-10 | 2/266 | 0.24 - 26000 | 51 | 7000 | 430 C | 360 C | No | BSL |
| | 108-67-8 | 1,3,5-TRIMETHYLBENZENE | 0.94 J | 139 J | ug/kg | SB-238-05 | 2/94 | 1.93 - 61 | 139 | NA | 78,000 N | 7,200 N | No | BSL |
| | 541-73-1 | **1,3-DICHLOROBENZENE** | 0.39 J | 38000 J | ug/kg | E-SB-833A-10 | 14/266 | 0.24 - 12000 | 38000 | **23000** | NA | NA | **Yes** | ASL |
| | 106-46-7 | **1,4-DICHLOROBENZENE** | 1.6 J | 130000 J | ug/kg | E-SB-833-09 | 28/266 | 0.46 - 290 | 130000 | **27000** | **2,400 C** | 1,100,000 N | **Yes** | ASL |
| | 78-93-3 | 2-BUTANONE | 1.3 J | 110 J | ug/kg | E-SB-833L-06 | 56/242 | 0.98 - 110000 | 110 | 4700000 | 2,800,000 N | 24000000 sat | No | BSL |
| | 99-87-6 | 4-ISOPROPYLTOLUENE | 0.34 J | 165 J | ug/kg | SB-238-05 | 5/266 | 0.15 - 12000 | 165 | NA | NA | NA | No | NTX |
| | 67-64-1 | ACETONE | 3.6 J | 16000 J | ug/kg | E-SB-833E-06 | 99/261 | 4.4 - 800000 | 16000 | 7000000 | 6,100,000 N | NA | No | BSL |
| | 71-43-2 | BENZENE | 0.33 J | 7 | ug/kg | SB-89-05 | 8/303 | 0.16 - 31000 | 7 | 12000 | 1,100 C | 830 C | No | BSL |
| | 74-83-9 | BROMOMETHANE | 0.49 | 0.49 | ug/kg | D-SB-783-09 | 1/266 | 0.38 - 75000 | 0.49 | 11000 | 730 N | 940 N | No | BSL |
| | 75-15-0 | CARBON DISULFIDE | 0.45 J | 35 J | ug/kg | D-SB-786-03 | 17/266 | 0.31 - 31000 | 35 | 780000 | 82,000 N | 720,000 sat | No | BSL |
| | 56-23-5 | CARBON TETRACHLORIDE | 0.88 J | 0.88 J | ug/kg | E-SB-833G-08 | 1/266 | 0.26 - 16000 | 0.88 | 4900 | 610 C | 330 C | No | BSL |
| | 108-90-7 | CHLOROBENZENE | 1.8 J | 4000 J | ug/kg | E-SB-833L-08 | 12/266 | 0.23 - 16000 | 4000 | 160000 | 29,000 N | 13,000 N | No | BSL |
| | 156-59-2 | CIS-1,2-DICHLOROETHENE | 0.37 J | 9.7 | ug/kg | SB-515-0406 | 4/266 | 0.25 - 18000 | 9.7 | 78000 | 16000 N | NA | No | BSL |
| | 100-41-4 | ETHYLBENZENE | 0.67 J | 394 | ug/kg | SB-238-05 | 7/303 | 0.18 - 14000 | 394 | 780000 | 5,400 C | 400,000 sat | No | BSL |
| | 98-82-8 | ISOPROPYLBENZENE | 0.82 J | 990 J | ug/kg | SB-84-05 | 5/266 | 0.11 - 17000 | 990 | 780000 | 210,000 N | 850,000 sat | No | BSL |
| | -- | M+P-XYLENES | 2.1 J | 270 J | ug/kg | SB-238-05 | 7/266 | 0.84 - 16000 | 270 | 1600000 [9] | 63,000 N[10] | 70000 N[10] | No | BSL |
| | 75-09-2 | METHYLENE CHLORIDE | 2.4 J | 4800 J | ug/kg | E-SB-833E-06 | 40/266 | 0.47 - 360000 | 4800 | 85000 | 11,000 C | 13000 C | No | BSL |
| | 104-51-8 | N-BUTYLBENZENE | 125 J | 2900 J | ug/kg | E-SB-833A-06 | 3/266 | 0.16 - 21000 | 2900 | NA | NA | NA | No | NTX |
| | 103-65-1 | N-PROPYLBENZENE | 1.2 J | 2200 J | ug/kg | SB-84-05 | 3/266 | 0.28 - 36000 | 2200 | NA | 340,000 N | NA | No | BSL |
| | 91-20-3 | **NAPHTHALENE** | 0.56 J | 159000 | ug/kg | SB-238-05 | 24/303 | 0.13 - 140000 | 159000 | 160000 | **3,600 C** | **17000 N** | **Yes** | ASL |
| | 95-47-6 | O-XYLENE | 0.8 J | 186 J | ug/kg | SB-238-05 | 9/266 | 0.24 - 22000 | 186 | 1600000 [9] | 380,000 N | NA | No | BSL |
| | 135-98-8 | SEC-BUTYLBENZENE | 380 J | 380 J | ug/kg | E-SB-833A-06 | 1/266 | 0.13 - 12000 | 380 | NA | NA | NA | No | NTX |
| | 75-65-0 | TERTIARY-BUTYL ALCOHOL | 5 J | 1200 J | ug/kg | E-SB-833L-04 | 13/65 | 8 - 7200000 | 1200 | NA | NA | NA | No | NTX |
| | 127-18-4 | TETRACHLOROETHENE | 0.49 J | 2.6 J | ug/kg | E-SB-833G-08 | 4/266 | 0.36 - 31000 | 2.6 | 1200 | 550 C | 10000 C | No | BSL |
| | 108-88-3 | TOLUENE | 0.21 J | 270 J | ug/kg | E-SB-833I-10 | 41/303 | 0.19 - 44000 | 270 | 630000 | 500000 N | 650000 sat | No | BSL |
| | 1330-20-7 | TOTAL XYLENES | 1.5 J | 600 | ug/kg | SB-88-05 | 15/230 | 0.47 - 21000 | 600 | 1600000 [9] | 63000 N | 70000 N | No | BSL |
| | 79-01-6 | TRICHLOROETHENE | 0.32 J | 2.7 | ug/kg | SB-202-05, SB-201-10 | 16/266 | 0.29 - 25000 | 2.7 | 1600 | 2800 C | 71 C | No | BSL |
| | 75-69-4 | TRICHLOROFLUOROMETHANE | 0.74 J | 29 | ug/kg | SB-520-0810 | 5/266 | 0.24 - 41000 | 29 | NA | 79,000 N | 110000 N | No | BSL |
| | 75-01-4 | VINYL CHLORIDE | 0.48 J | 3.5 J | ug/kg | SB-515-0406 | 3/266 | 0.27 - 46000 | 3.5 | 90 | 60 C | 280 C | No | BSL |
| | **Semivolatile Organic Compounds** | | | | | | | | | | | | | |
| | 105-67-9 | 2,4-DIMETHYLPHENOL | 68 J | 68 J | ug/kg | SB-238-05 | 1/214 | 22 - 65000 | 68 | 160000 | 120,000 N | NA | No | BSL |
| | 65-85-0 | BENZOIC ACID | 43 J | 136 J | ug/kg | SB-195-05 | 6/45 | 42.3 - 1200 | 136 | NA | 24000000 N | NA | No | BSL |
| | 117-81-7 | BIS(2-ETHYLHEXYL)PHTHALATE | 22 J | 190 J | ug/kg | SB-296-0910 | 17/214 | 21 - 62000 | 190 | 46000 | 35000 C | NA | No | BSL |
| | 85-68-7 | BUTYL BENZYL PHTHALATE | 36 J | 36 J | ug/kg | D-SB-795-07 | 1/214 | 11 - 33000 | 36 | NA | 260,000 C | NA | No | BSL |
| | 86-74-8 | CARBAZOLE | 22 J | 5690 | ug/kg | SB-238-05 | 9/214 | 30 - 88000 | 5690 | 32000 | NA | NA | No | BSL |
| | 84-74-2 | DI-N-BUTYL PHTHALATE | 38 J | 76 J | ug/kg | SB-66-10 | 3/214 | 17 - 49000 | 76 | 780000 | 610000 N | NA | No | BSL |
| | 117-84-0 | DI-N-OCTYL PHTHALATE | 76 J | 76 J | ug/kg | SB-63-05 | 1/214 | 30 - 88000 | 76 | NA | NA | NA | No | NTX |
| | 132-64-9 | DIBENZOFURAN | 8.9 J | 3980 | ug/kg | SB-238-05 | 16/214 | 3.6 - 11000 | 3980 | 7800 | 7,800 N | NA | No | BSL |
| | 131-11-3 | DIMETHYL PHTHALATE | 62 J | 310 J | ug/kg | SB-55-10 | 3/214 | 19 - 55000 | 310 | NA | NA | NA | No | NTX |
| | 86-30-6 | N-NITROSODIPHENYLAMINE | 34 J | 81 J | ug/kg | SB-238-05 | 2/213 | 23 - 69000 | 81 | 130000 | 99,000 C | NA | No | BSL |
| | 108-95-2 | PHENOL | 140 J | 1900 | ug/kg | SB-81-05 | 11/214 | 30 - 88000 | 1900 | 2300000 | 1800000 N | NA | No | BSL |

**Table 3-19**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Direct Contact With Subsurface Soil (2-10 feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**



| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | | |
| | 90-12-0 | 1-METHYLNAPHTHALENE | 8.6 | 3420 | ug/kg | SB-238-05 | 27/232 | 3.5 - 440 | 3420 | NA | 22,000 C | NA | No | BSL |
| | 91-57-6 | 2-METHYLNAPHTHALENE | 7.9 | 6900 | ug/kg | SB-238-05 | 43/401 | 3.5 - 11000 | 6900 | 31000 | 31000 N | NA | No | BSL |
| | 83-32-9 | ACENAPHTHENE | 8.2 | 27000 | ug/kg | E-SB-833-09 | 56/401 | 3.5 - 3900 | 27000 | 470000 | 340000 N | NA | No | BSL |
| | 208-96-8 | ACENAPHTHYLENE | 7.9 | 1000 | ug/kg | G-SB-813-09 | 36/401 | 3.5 - 11000 | 1000 | 470000 | 340000 N[11] | NA | No | BSL |
| | 120-12-7 | ANTHRACENE | 5.25 | 28000 | ug/kg | E-SB-833-09 | 79/401 | 3.5 - 3900 | 28000 | 2300000 | 1700000 | NA | No | BSL |
| | -- | **BAP EQUIVALENT-POSITIVE RESULTS[20]** | 0.008 | 57089 | ug/kg | G-SB-735A-5 | 797/1929 | 1.4 - 4200 | 57089 | **22** | **15 C** | NA | **Yes** | ASL |
| | -- | **BAP EQUIVALENT-1/2 NONDETECT[20]** | 1.2 | 57089 | ug/kg | G-SB-735A-5 | 797/1929 | 1.4 - 4200 | 57089 | **22** | **15 C** | NA | **Yes** | ASL |
| | 56-55-3 | **BENZO(A)ANTHRACENE** | 1.4 J | 44000 | ug/kg | G-SB-735A-5 | 610/1467 | 1 - 3800 | 44000 | **220** | **150 C** | NA | **Yes** | ASL |
| | 50-32-8 | **BENZO(A)PYRENE** | 2.6 J | 37000 | ug/kg | G-SB-735A-5 | 727/1928 | 1.4 - 4200 | 37000 | **22** | **15 C** | NA | **Yes** | ASL |
| | 205-99-2 | **BENZO(B)FLUORANTHENE** | 1.6 J | 55000 | ug/kg | G-SB-735A-5 | 648/1459 | 1.3 - 3800 | 55000 | **220** | **150 C** | NA | **Yes** | ASL |
| | 191-24-2 | BENZO(G,H,I)PERYLENE | 6.375 | 9200 J | ug/kg | G-SB-806-09 | 100/401 | 3.5 - 11000 | 9200 | 230000 | 170000 N[12] | NA | No | BSL |
| | 207-08-9 | **BENZO(K)FLUORANTHENE** | 2.25 | 25000 | ug/kg | G-SB-735A-5 | 472/1459 | 1.4 - 11000 | 25000 | **2200** | **1500 C** | NA | **Yes** | ASL |
| | 218-01-9 | **CHRYSENE** | 1.4 J | 42000 | ug/kg | E-SB-833-09 | 625/1467 | 0.97 - 3800 | 42000 | **22000** | **15000 C** | NA | **Yes** | ASL |
| | 53-70-3 | **DIBENZO(A,H)ANTHRACENE** | 3.05 | 7800 | ug/kg | G-SB-735A-5 | 267/1467 | 1.4 - 11000 | 7800 | **22** | **15 C** | NA | **Yes** | ASL |
| | 206-44-0 | FLUORANTHENE | 8.4 | 81000 | ug/kg | E-SB-833-09 | 146/401 | 3.5 - 3800 | 81000 | 310000 | 230000 N | NA | No | BSL |
| | 86-73-7 | FLUORENE | 8.5 | 6330 | ug/kg | SB-238-05 | 53/401 | 3.5 - 11000 | 6330 | 310000 | 230000 N | NA | No | BSL |
| | 193-39-5 | **INDENO(1,2,3-CD)PYRENE** | 0.96 J | 21000 J | ug/kg | G-SB-714-6, G-SB-735A-5 | 543/1467 | 0.41 - 11000 | 21000 | **220** | **150 C** | NA | **Yes** | ASL |
| | 91-20-3 | **NAPHTHALENE** | 8.4 | 31000 | ug/kg | SB-238-05 | 62/401 | 3.5 - 11000 | 31000 | 160000 | **3,600 C** | **17000 N** | **Yes** | ASL |
| | 85-01-8 | PHENANTHRENE | 5.575 | 88000 | ug/kg | E-SB-833-09 | 109/401 | 3.5 - 3900 | 88,000 | 2300000 | 170,000 N[12] | NA | No | BSL |
| | 129-00-0 | PYRENE | 7.8 | 60000 | ug/kg | E-SB-833-09 | 149/401 | 3.5 - 3800 | 60000 | 230000 | 170,000 N | NA | No | BSL |
| | **Pesticides/Polychlorinated Biphenyls** | | | | | | | | | | | | | |
| | 72-55-9 | 4,4'-DDE | 34 J | 34 J | ug/kg | D-SB-790-05 | 1/78 | 0.43 - 46 | 34 | 1900 | 1,400 C | NA | No | BSL |
| | 11097-69-1 | **AROCLOR-1254** | 27 | 9800 | ug/kg | SB-555-4 | 3/550 | 15 - 1100000 | 9800 | **320** | **110 N[8]** | NA | **Yes** | ASL |
| | 11096-82-5 | **AROCLOR-1260** | 8.1 J | 24000000 | ug/kg | E-SB-833-09 | 100/550 | 4.8 - 360 | 24000000 | **320** | **220 C** | NA | **Yes** | ASL |
| | 319-85-7 | BETA-BHC | 1.3 J | 1.3 J | ug/kg | D-SB-792-03 | 1/78 | 1.2 - 66 | 1.3 | 350 | 270 C | 6000 C | No | BSL |
| | 1336-36-3 | **TOTAL AROCLOR** | 8 | 24000000 | ug/kg | E-SB-833-09 | 102/550 | 0 - 0 | 24000000 | **320 [13]** | **220 C[14]** | NA | **Yes** | ASL |
| | **Metals** | | | | | | | | | | | | | |
| | 7440-36-0 | ANTIMONY | 0.056 L | 2 L | mg/kg | SB-236-05 | 59/207 | 0.0056 - 3.6 | 2 | 3.1 | 3.1 N | NA | No | BSL |
| | 7440-38-2 | **ARSENIC** | 0.22 L | 14.3 | mg/kg | D-SB-786-07 | 202/233 | 0.51 - 5.3 | 14.3 | **0.43** | **0.39 C** | 769 C | **Yes** | ASL |
| | 7440-39-3 | BARIUM | 1.6 | 103 | mg/kg | SB-236-05 | 155/155 | -- | 103 | 1600 | 1,500 N | 70900 N | No | BSL |
| | 7440-41-7 | BERYLLIUM | 0.076 | 6.6 J | mg/kg | D-SB-795-03 | 160/226 | 0.015 - 3.6 | 6.6 | 16 | 16 N | 1380 C | No | BSL |
| | 7440-43-9 | CADMIUM | 0.016 | 1.1 | mg/kg | D-SB-788-03 | 67/226 | 0.0037 - 3.6 | 1.1 | 3.9 | 7 N | 1840 C | No | BSL |
| | 7440-47-3 | CHROMIUM | 1.5 J | 120 J | mg/kg | SB-60-10 | 215/225 | 2.6 - 14 | 120 | 12000 [15] | 12,000 N[15] | 276 C | No | BSL |
| | 7440-48-4 | **COBALT** | 0.18 | 68.1 | mg/kg | SB-197-05 | 153/155 | 3.2 - 11 | 68.1 | NA | **2.3 N** | 1180 C | **Yes** | ASL |
| | 7440-50-8 | COPPER | 1 J | 110 J | mg/kg | D-SB-784-07 | 217/226 | 2.3 - 3.4 | 110 | 310 | 310 N | NA | No | BSL |
| | 7439-89-6 | **IRON** | 1290 | 72900 J | mg/kg | D-SB-787-09 | 102/102 | -- | 72900 | **5500** | **5,500 N** | NA | **Yes** | ASL |
| | 7439-92-1 | **LEAD** | 0.71 J | 1,010 | mg/kg | D-SB-783-03 | 211/226 | 1 - 4 | 1010 | **400** | **400** | NA | **Yes** | ASL |
| | 7439-96-5 | **MANGANESE** | 2.2 L | 326 J | mg/kg | D-SB-794-03 | 102/102 | -- | 326 | **160** | **180 N** | 7090 N | **Yes** | ASL |
| | 7439-97-6 | **MERCURY** | 0.007 | 3.3 | mg/kg | SB-33-05 | 103/424 | 0.002 - 0.15 | 3.3 | **2.3 [16]** | **2.3 N[17]** | NA | **Yes** | ASL |
| | 7439-98-7 | MOLYBDENUM | 0.16 J | 1.3 J | mg/kg | SB-504-0810 | 72/155 | 0.072 - 0.9 | 1.3 | NA | 39 N | NA | No | BSL |
| | 7440-02-0 | NICKEL | 0.76 J | 150 | mg/kg | SB-55-05 | 212/226 | 0.39 - 3.6 | 150 | 160 | 150 N | NA | No | BSL |
| | 7782-49-2 | SELENIUM | 0.2 | 11 L | mg/kg | SB-31-05 | 100/218 | 0.18 - 11 | 11 | 39 | 39 N | NA | No | BSL |
| | 7440-22-4 | SILVER | 0.03 | 2.3 | mg/kg | SB-236-05 | 56/174 | 0.0079 - 3.1 | 2.3 | 39 | 39 N | NA | No | BSL |
| | 7440-28-0 | THALLIUM | 0.018 J | 0.21 K | mg/kg | SB-504-0810 | 46/226 | 0.0052 - 5 | 0.21 | 0.55 | NA | NA | No | BSL |
| | 7440-62-2 | **VANADIUM** | 2.1 | 90.5 | mg/kg | SB-249-10 | 155/155 | -- | 90.5 | **7.8** | **39 N[18]** | NA | **Yes** | ASL |
| | 7440-66-6 | ZINC | 2.8 | 270 | mg/kg | SB-55-05 | 173/226 | 5.2 - 60 | 270 | 2300 | 2,300 N | NA | No | BSL |

**Table 3-19**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Direct Contact With Subsurface Soil (2-10 feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**



| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Petroleum Hydrocarbons** | | | | | | | | | | | | | |
| | -- | **DIESEL RANGE ORGANICS** | 840 J | 28000000 | ug/kg | E-SB-833-09 | 87/192 | 2400 - 29000 | 28000000 | **230000** | NA | NA | **Yes** | ASL |
| | -- | **GASOLINE RANGE ORGANICS** | 34 J | 980000 | ug/kg | G-SB-728-4 | 44/220 | 51 - 15200 | 980000 | **230000** | NA | NA | **Yes** | ASL |
| | -- | TPH (C09-C36) | 2900 J | 200000 | ug/kg | SB-285-0405 | 11/24 | 2200 - 8700 | 200000 | NA | 28,400,000 N[19] | NA | No | BSL |
| | -- | TPH (C10-C32) | 640 J | 48000 | ug/kg | SB-502-0406 | 10/39 | 990 - 130000 | 48000 | NA | 28,400,000 N[19] | NA | No | BSL |
| | **Miscellaneous Parameters** | | | | | | | | | | | | | |
| | 18540-29-9 | **HEXAVALENT CHROMIUM** | 0.33 J | 1.1 | mg/kg | D-SB-788-03 | 31/76 | 0.3 - 0.4 | 1.1 | 23 | **0.29 C** | 276 C | **Yes** | ASL |
| | 22967-92-6 | MERCURY (METHYL) | 0.31 K | 1.21 J | ug/kg | SB-236-05 | 3/3 | -- | 1.21 | 780 | 780 N | NA | No | BSL |
| | -- | PERCENT SOLIDS | 62.5 | 95.9 | % | SB-395-0203 | 608/608 | -- | 95.9 | NA | NA | NA | No | NTX |
| | -- | PH | 4.9 | 7.7 | S.U. | SB-236-05 | 5/5 | -- | 7.7 | NA | NA | NA | No | NTX |
| | -- | TOTAL ORGANIC CARBON | 690 J | 1350 | mg/kg | MRC-MW08[0809] | 2/3 | 238 | 1350 | NA | NA | NA | No | NTX |
| | -- | TOTAL SOLIDS | 70 | 88 | % | SB-297-0405 | 24/24 | -- | 88 | NA | NA | NA | No | NTX |

**Footnotes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations.
2 - Values presented are sample-specific quantitation limits.
3 - The maximum detected concentration is used for screening purposes.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag).
6 - USEPA Soil Screening Levels. EPA Internet Site at http://rais.ornl.gov/epa/ssl1.shtml.
7 - The chemical is selected as a global COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
8 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
9 - The value is for xylenes.
10 - The value is for xylene, mixture.
11 - The value for acenaphthene is used as a surrogate for acenaphthylene.
12 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
13 - The value is for PCB (total).
14 - The value is for polychlorinated biphenyls (high risk).
15 - The value is for trivalent chromium.
16 - The value is for mercury (inorganic/mercuric dichloride).
17 - The value is for mercuric chloride.
18 - The value is for vanadium and compounds.
19 - The value for total petroleum hydrocarbons (aliphatic low) is used.
20 - See Section 3 for BaP equivalent calculation methodology.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

**Associated Samples:** All subsurface soil (2-10 feet) samples from all tax blocks (D, E, F, G, and H) were included. See Tables 3-6 through 3-10 for sample lists.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NA = Not Applicable/Not Available
sat = soil saturation concentration

**Rationale Codes:**
For selection as a COPC:
ASL = Above Screening Level

For elimination as a COPC:
BSL = Below COPC Screening Level
NTX = No toxicity criteria

**Table 3-20**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Migration from Subsurface Soil (2-10 feet) to Groundwater**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**



| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Protection of Groundwater[4] | USEPA SSL for Protection of Groundwater[5] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Volatile Organic Compounds** | | | | | | | | | | | | |
| | 75-34-3 | 1,1-DICHLOROETHANE | 0.48 J | 0.69 J | ug/kg | SB-515-0406, SB-515-0810 | 3/266 | 0.25 - 44000 | 0.69 | 5100 | 0.69 | No | BSL |
| | 75-35-4 | 1,1-DICHLOROETHENE | 0.54 J | 1.1 J | ug/kg | D-SB-793-09 | 2/266 | 0.36 - 46000 | 1.1 | 2900 | 120 | No | BSL |
| | 87-61-6 | **1,2,3-TRICHLOROBENZENE** | 0.6 J | 2200000 | ug/kg | E-SB-833-09 | 32/266 | 0.26 - 518 | 2200000 | NA | **87** | **Yes** | ASL |
| | 526-73-8 | 1,2,3-TRIMETHYLBENZENE | 0.15 J | 49 J | ug/kg | E-SB-833L-04 | 15/172 | 0.12 - 2900 | 49 | NA | NA | No | NTX |
| | 120-82-1 | **1,2,4-TRICHLOROBENZENE** | 5.9 J | 9600000 | ug/kg | E-SB-833-09 | 32/266 | 0.19 - 518 | 9600000 | **2400** | **6.8** | **Yes** | ASL |
| | 95-63-6 | **1,2,4-TRIMETHYLBENZENE** | 0.69 J | 658 | ug/kg | SB-238-05 | 9/266 | 0.45 - 13000 | 658 | NA | **21** | **Yes** | ASL |
| | 95-50-1 | **1,2-DICHLOROBENZENE** | 0.39 J | 120000 J | ug/kg | E-SB-833-09 | 25/266 | 0.25 - 290 | 120000 | **4600** | **360** | **Yes** | ASL |
| | 107-06-2 | **1,2-DICHLOROETHANE** | 1.5 J | 51 J | ug/kg | E-SB-833K-10 | 2/266 | 0.24 - 26000 | 51 | **1** | **0.042** | **Yes** | ASL |
| | 108-67-8 | 1,3,5-TRIMETHYLBENZENE | 0.94 J | 139 J | ug/kg | SB-238-05 | 2/94 | 1.93 - 61 | 139 | NA | 520 | No | BSL |
| | 541-73-1 | **1,3-DICHLOROBENZENE** | 0.39 J | 38000 J | ug/kg | E-SB-833A-10 | 14/266 | 0.24 - 12000 | 38000 | **290** | NA | **Yes** | ASL |
| | 106-46-7 | **1,4-DICHLOROBENZENE** | 1.6 J | 130000 J | ug/kg | E-SB-833-09 | 28/266 | 0.46 - 290 | 130000 | **4.2** | **0.41** | **Yes** | ASL |
| | 78-93-3 | 2-BUTANONE | 1.3 J | 110 J | ug/kg | E-SB-833L-06 | 56/242 | 0.98 - 110000 | 110 | 29000 | 1,500 | No | BSL |
| | 99-87-6 | 4-ISOPROPYLTOLUENE | 0.34 J | 165 J | ug/kg | SB-238-05 | 5/266 | 0.15 - 12000 | 165 | NA | NA | No | NTX |
| | 67-64-1 | **ACETONE** | 3.6 J | 16000 J | ug/kg | E-SB-833E-06 | 99/261 | 4.4 - 800000 | 16000 | 22000 | **4,500** | **Yes** | ASL |
| | 71-43-2 | **BENZENE** | 0.33 J | 7 | ug/kg | SB-89-05 | 8/303 | 0.16 - 31000 | 7 | **1.9** | **0.21** | **Yes** | ASL |
| | 74-83-9 | BROMOMETHANE | 0.49 | 0.49 | ug/kg | D-SB-783-09 | 1/266 | 0.38 - 75000 | 0.49 | 41 | 2.2 | No | BSL |
| | 75-15-0 | CARBON DISULFIDE | 0.45 J | 35 J | ug/kg | D-SB-786-03 | 17/266 | 0.31 - 31000 | 35 | 19000 | 310 | No | BSL |
| | 56-23-5 | **CARBON TETRACHLORIDE** | 0.88 J | 0.88 J | ug/kg | E-SB-833G-08 | 1/266 | 0.26 - 16000 | 0.88 | 2.1 | **0.17** | **Yes** | ASL |
| | 108-90-7 | **CHLOROBENZENE** | 1.8 J | 4000 J | ug/kg | E-SB-833L-08 | 12/266 | 0.23 - 16000 | 4000 | **680** | **62** | **Yes** | ASL |
| | 156-59-2 | CIS-1,2-DICHLOROETHENE | 0.37 J | 9.7 | ug/kg | SB-515-0406 | 4/266 | 0.25 - 18000 | 9.7 | NA | 21 | No | BSL |
| | 100-41-4 | **ETHYLBENZENE** | 0.67 J | 394 | ug/kg | SB-238-05 | 7/303 | 0.18 - 14000 | 394 | 15000 | **1.7** | **Yes** | ASL |
| | 98-82-8 | ISOPROPYLBENZENE | 0.82 J | 990 J | ug/kg | SB-84-05 | 5/266 | 0.11 - 17000 | 990 | 64000 | 1,100 | No | BSL |
| | -- | **M+P-XYLENES** | 2.1 J | 270 J | ug/kg | SB-238-05 | 7/266 | 0.84 - 16000 | 270 | 3000 [7] | **200** [8] | **Yes** | ASL |
| | 75-09-2 | **METHYLENE CHLORIDE** | 2.4 J | 4,800 J | ug/kg | E-SB-833E-06 | 40/266 | 0.47 - 360000 | 4800 | **19** | **1.2** | **Yes** | ASL |
| | 104-51-8 | N-BUTYLBENZENE | 125 J | 2900 J | ug/kg | E-SB-833A-06 | 3/266 | 0.16 - 21000 | 2900 | NA | NA | No | NTX |
| | 103-65-1 | N-PROPYLBENZENE | 1.2 J | 2200 J | ug/kg | SB-84-05 | 3/266 | 0.28 - 36000 | 2200 | NA | 2,500 | No | BSL |
| | 91-20-3 | **NAPHTHALENE** | 0.56 J | 159000 | ug/kg | SB-238-05 | 24/303 | 0.13 - 140000 | 159000 | **150** | **0.47** | **Yes** | ASL |
| | 95-47-6 | O-XYLENE | 0.8 J | 186 J | ug/kg | SB-238-05 | 9/266 | 0.24 - 22000 | 186 | 3000 [7] | 1,200 | No | BSL |
| | 135-98-8 | SEC-BUTYLBENZENE | 380 J | 380 J | ug/kg | E-SB-833A-06 | 1/266 | 0.13 - 12000 | 380 | NA | NA | No | NTX |
| | 75-65-0 | TERTIARY-BUTYL ALCOHOL | 5 J | 1200 J | ug/kg | E-SB-833L-04 | 13/65 | 8 - 7200000 | 1200 | NA | NA | No | NTX |
| | 127-18-4 | **TETRACHLOROETHENE** | 0.49 J | 2.6 J | ug/kg | E-SB-833G-08 | 4/266 | 0.36 - 31000 | 2.6 | 4.7 | **0.049** | **Yes** | ASL |
| | 108-88-3 | TOLUENE | 0.21 J | 270 J | ug/kg | E-SB-833I-10 | 41/303 | 0.19 - 44000 | 270 | 27000 | 1600 | No | NTX |
| | 1330-20-7 | **TOTAL XYLENES** | 1.5 J | 600 | ug/kg | SB-88-05 | 15/230 | 0.47 - 21000 | 600 | 3000 [7] | **200** | **Yes** | ASL |
| | 79-01-6 | **TRICHLOROETHENE** | 0.32 J | 2.7 | ug/kg | SB-202-05, SB-201-10 | 16/266 | 0.29 - 25000 | 2.7 | **0.26** | **0.72** | **Yes** | ASL |
| | 75-69-4 | TRICHLOROFLUOROMETHANE | 0.74 J | 29 | ug/kg | SB-520-0810 | 5/266 | 0.24 - 41000 | 29 | NA | 830 | No | NTX |
| | 75-01-4 | **VINYL CHLORIDE** | 0.48 J | 3.5 J | ug/kg | SB-515-0406 | 3/266 | 0.27 - 46000 | 3.5 | **0.12** | **0.0056** | **Yes** | ASL |
| | **Semivolatile Organic Compounds** | | | | | | | | | | | | |
| | 105-67-9 | 2,4-DIMETHYLPHENOL | 68 J | 68 J | ug/kg | SB-238-05 | 1/214 | 22 - 65000 | 68 | 6700 | 860 | No | BSL |
| | 65-85-0 | BENZOIC ACID | 43 J | 136 J | ug/kg | SB-195-05 | 6/45 | 42.3 - 1200 | 136 | NA | 34000 | No | BSL |
| | 117-81-7 | BIS(2-ETHYLHEXYL)PHTHALATE | 22 J | 190 J | ug/kg | SB-296-0910 | 17/214 | 21 - 62000 | 190 | 2900000 | 1100 | No | BSL |
| | 85-68-7 | BUTYL BENZYL PHTHALATE | 36 J | 36 J | ug/kg | D-SB-795-07 | 1/214 | 11 - 33000 | 36 | NA | 510 | No | BSL |
| | 86-74-8 | **CARBAZOLE** | 22 J | 5690 | ug/kg | SB-238-05 | 9/214 | 30 - 88000 | 5690 | **470** | NA | **Yes** | ASL |
| | 84-74-2 | DI-N-BUTYL PHTHALATE | 38 J | 76 J | ug/kg | SB-66-10 | 3/214 | 17 - 49000 | 76 | 5000000 | 9200 | No | BSL |
| | 117-84-0 | DI-N-OCTYL PHTHALATE | 76 J | 76 J | ug/kg | SB-63-05 | 1/214 | 30 - 88000 | 76 | NA | NA | No | NTX |
| | 132-64-9 | **DIBENZOFURAN** | 8.9 J | 3980 | ug/kg | SB-238-05 | 16/214 | 3.6 - 11000 | 3980 | NA | **680** | **Yes** | ASL |

**Table 3-20**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Migration from Subsurface Soil (2-10 feet) to Groundwater**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Protection of Groundwater[4] | USEPA SSL for Protection of Groundwater[5] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Semivolatile Organic Compounds (continued)** | | | | | | | | | | | | |
| | 131-11-3 | DIMETHYL PHTHALATE | 62 J | 310 J | ug/kg | SB-55-10 | 3/214 | 19 - 55000 | 310 | NA | NA | No | NTX |
| | 86-30-6 | **N-NITROSODIPHENYLAMINE** | 34 J | 81 J | ug/kg | SB-238-05 | 2/213 | 23 - 69000 | 81 | 760 | **75** | **Yes** | ASL |
| | 108-95-2 | PHENOL | 140 J | 1900 | ug/kg | SB-81-05 | 11/214 | 30 - 88000 | 1900 | 67000 | 6300 | No | BSL |
| | **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | |
| | 90-12-0 | **1-METHYLNAPHTHALENE** | 8.6 | 3420 | ug/kg | SB-238-05 | 27/232 | 3.5 - 440 | 3420 | NA | **12** | **Yes** | ASL |
| | 91-57-6 | **2-METHYLNAPHTHALENE** | 7.9 | 6900 | ug/kg | SB-238-05 | 43/401 | 3.5 - 11000 | 6900 | **4400** | **750** | **Yes** | ASL |
| | 83-32-9 | **ACENAPHTHENE** | 8.2 | 27000 | ug/kg | E-SB-833-09 | 56/401 | 3.5 - 3900 | 27000 | 100000 | **22000** | **Yes** | ASL |
| | 208-96-8 | ACENAPHTHYLENE | 7.9 | 1000 | ug/kg | G-SB-813-09 | 36/401 | 3.5 - 11000 | 1000 | 100000 | 22000 [9] | No | BSL |
| | 120-12-7 | ANTHRACENE | 5.25 | 28000 | ug/kg | E-SB-833-09 | 79/401 | 3.5 - 3900 | 28000 | 470000 | 360000 | No | BSL |
| | -- | **BAP EQUIVALENT-POSITIVE RESULTS[14]** | 0.008 | 57089 | ug/kg | G-SB-735A-5 | 797/1929 | 1.4 - 4200 | 57089 | **120** | **3.5** | **Yes** | ASL |
| | -- | **BAP EQUIVALENT-1/2 NONDETECT[14]** | 1.2 | 57089 | ug/kg | G-SB-735A-5 | 797/1929 | 1.4 - 4200 | 57089 | **120** | **3.5** | **Yes** | ASL |
| | 56-55-3 | **BENZO(A)ANTHRACENE** | 1.4 J | 44000 | ug/kg | G-SB-735A-5 | 610/1467 | 1 - 3800 | 44000 | **480** | **10** | **Yes** | ASL |
| | 50-32-8 | **BENZO(A)PYRENE** | 2.6 J | 37000 | ug/kg | G-SB-735A-5 | 727/1928 | 1.4 - 4200 | 37000 | **120** | **3.5** | **Yes** | ASL |
| | 205-99-2 | **BENZO(B)FLUORANTHENE** | 1.6 J | 55000 | ug/kg | G-SB-735A-5 | 648/1459 | 1.3 - 3800 | 55000 | **1500** | **35** | **Yes** | ASL |
| | 191-24-2 | BENZO(G,H,I)PERYLENE | 6.375 | 9200 J | ug/kg | G-SB-806-09 | 100/401 | 3.5 - 11000 | 9200 | 680000 | 120000 [10] | No | BSL |
| | 207-08-9 | **BENZO(K)FLUORANTHENE** | 2.25 | 25000 | ug/kg | G-SB-735A-5 | 472/1459 | 1.4 - 11000 | 25000 | **15000** | **350** | **Yes** | ASL |
| | 218-01-9 | **CHRYSENE** | 1.4 J | 42000 | ug/kg | E-SB-833-09 | 625/1467 | 0.97 - 3800 | 42000 | 48000 | **1100** | **Yes** | ASL |
| | 53-70-3 | **DIBENZO(A,H)ANTHRACENE** | 3.05 | 7800 | ug/kg | G-SB-735A-5 | 267/1467 | 1.4 - 11000 | 7800 | **460** | **11** | **Yes** | ASL |
| | 206-44-0 | FLUORANTHENE | 8.4 | 81000 | ug/kg | E-SB-833-09 | 146/401 | 3.5 - 3800 | 81000 | 6300000 | 160000 | No | BSL |
| | 86-73-7 | FLUORENE | 8.5 | 6330 | ug/kg | SB-238-05 | 53/401 | 3.5 - 11000 | 6330 | 140000 | 27000 | No | BSL |
| | 193-39-5 | **INDENO(1,2,3-CD)PYRENE** | 0.96 J | 21000 J | ug/kg | G-SB-714-6, G-SB-735A-5 | 543/1467 | 0.41 - 11000 | 21000 | **4200** | **120** | **Yes** | ASL |
| | 91-20-3 | **NAPHTHALENE** | 8.4 | 31000 | ug/kg | SB-238-05 | 62/401 | 3.5 - 11000 | 31000 | **150** | **0.47** | **Yes** | ASL |
| | 85-01-8 | PHENANTHRENE | 5.575 | 88000 | ug/kg | E-SB-833-09 | 109/401 | 3.5 - 3900 | 88000 | 470000 | 120,000 [10] | No | BSL |
| | 129-00-0 | PYRENE | 7.8 | 60000 | ug/kg | E-SB-833-09 | 149/401 | 3.5 - 3800 | 60000 | 680000 | 120,000 | No | BSL |
| | **Pesticides/Polychlorinated Biphenyls** | | | | | | | | | | | | |
| | 72-55-9 | 4,4'-DDE | 34 J | 34 J | ug/kg | D-SB-790-05 | 1/78 | 0.43 - 46 | 34 | 35000 | 47 | No | BSL |
| | 11097-69-1 | **AROCLOR-1254** | 27 | 9800 | ug/kg | SB-555-4 | 3/550 | 15 - 1100000 | 9800 | **1100** | **8.8** | **Yes** | ASL |
| | 11096-82-5 | **AROCLOR-1260** | 8.1 J | 24000000 | ug/kg | E-SB-833-09 | 100/550 | 4.8 - 360 | 24000000 | NA | **24** | **Yes** | ASL |
| | 319-85-7 | **BETA-BHC** | 1.3 J | 1.3 J | ug/kg | D-SB-792-03 | 1/78 | 1.2 - 66 | 1.3 | 3.1 | **0.22** | **Yes** | ASL |
| | 1336-36-3 | **TOTAL AROCLOR** | 8 | 24000000 | ug/kg | E-SB-833-09 | 102/550 | 0 - 0 | 24000000 | **410 [11]** | NA | **Yes** | ASL |
| | **Metals** | | | | | | | | | | | | |
| | 7440-36-0 | **ANTIMONY** | 0.056 L | 2 L | mg/kg | SB-236-05 | 59/207 | 0.0056 - 3.6 | 2 | 13 | **0.66** | **Yes** | ASL |
| | 7440-38-2 | **ARSENIC** | 0.22 L | 14.3 | mg/kg | D-SB-786-07 | 202/233 | 0.51 - 5.3 | 14.3 | **0.026** | **0.0013** | **Yes** | ASL |
| | 7440-39-3 | BARIUM | 1.6 | 103 | mg/kg | SB-236-05 | 155/155 | -- | 103 | 6000 | 300 | No | BSL |
| | 7440-41-7 | BERYLLIUM | 0.076 | 6.6 J | mg/kg | D-SB-795-03 | 160/226 | 0.015 - 3.6 | 6.6 | 1200 | 58 | No | BSL |
| | 7440-43-9 | CADMIUM | 0.016 | 1.1 | mg/kg | D-SB-788-03 | 67/226 | 0.0037 - 3.6 | 1.1 | 27 | 1.4 | No | BSL |
| | 7440-47-3 | CHROMIUM | 1.5 J | 120 J | mg/kg | SB-60-10 | 215/225 | 2.6 - 14 | 120 | 2000000000 [12] | 99,000,000 [12] | No | BSL |
| | 7440-48-4 | **COBALT** | 0.18 | 68.1 | mg/kg | SB-197-05 | 153/155 | 3.2 - 11 | 68.1 | NA | **0.49** | **Yes** | ASL |
| | 7440-50-8 | **COPPER** | 1 J | 110 J | mg/kg | D-SB-784-07 | 217/226 | 2.3 - 3.4 | 110 | 11000 | **51** | **Yes** | ASL |
| | 7439-89-6 | **IRON** | 1290 | 72900 J | mg/kg | D-SB-787-09 | 102/102 | -- | 72900 | NA | **640** | **Yes** | ASL |
| | 7439-92-1 | **LEAD** | 0.71 J | 1010 | mg/kg | D-SB-783-03 | 211/226 | 1 - 4 | 1010 | NA | **14 [13]** | **Yes** | ASL |
| | 7439-96-5 | **MANGANESE** | 2.2 L | 326 J | mg/kg | D-SB-794-03 | 102/102 | -- | 326 | 950 | **57** | **Yes** | ASL |
| | 7439-97-6 | MERCURY | 0.007 | 3.3 | mg/kg | SB-33-05 | 103/424 | 0.002 - 0.15 | 3.3 | NA | NA | No | BSL |
| | 7439-98-7 | MOLYBDENUM | 0.16 J | 1.3 J | mg/kg | SB-504-0810 | 72/155 | 0.072 - 0.9 | 1.3 | NA | 3.7 | No | BSL |

**Table 3-20**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Migration from Subsurface Soil (2-10 feet) to Groundwater**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Protection of Groundwater[4] | USEPA SSL for Protection of Groundwater[5] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Metals (continued)** | | | | | | | | | | | | |
| | 7440-02-0 | **NICKEL** | 0.76 J | 150 | mg/kg | SB-55-05 | 212/226 | 0.39 - 3.6 | 150 | NA | **48** | **Yes** | ASL |
| | 7782-49-2 | **SELENIUM** | 0.2 | 11 L | mg/kg | SB-31-05 | 100/218 | 0.18 - 11 | 11 | 19 | **1.0** | **Yes** | ASL |
| | 7440-22-4 | **SILVER** | 0.03 | 2.3 | mg/kg | SB-236-05 | 56/174 | 0.0079 - 3.1 | 2.3 | 31 | **1.6** | **Yes** | ASL |
| | 7440-28-0 | THALLIUM | 0.018 J | 0.21 K | mg/kg | SB-504-0810 | 46/226 | 0.0052 - 5 | 0.21 | 3.6 | NA | No | BSL |
| | 7440-62-2 | VANADIUM | 2.1 | 90.5 | mg/kg | SB-249-10 | 155/155 | -- | 90.5 | 730 | 180 | No | BSL |
| | 7440-66-6 | ZINC | 2.8 | 270 | mg/kg | SB-55-05 | 173/226 | 5.2 - 60 | 270 | 14000 | 680 | No | BSL |
| | **Petroleum Hydrocarbons** | | | | | | | | | | | | |
| | -- | DIESEL RANGE ORGANICS | 840 J | 28000000 | ug/kg | E-SB-833-09 | 87/192 | 2400 - 29000 | 28000000 | NA | NA | No | NTX |
| | -- | GASOLINE RANGE ORGANICS | 34 J | 980000 | ug/kg | G-SB-728-4 | 44/220 | 51 - 15200 | 980000 | NA | NA | No | NTX |
| | -- | TPH (C09-C36) | 2900 J | 200000 | ug/kg | SB-285-0405 | 11/24 | 2200 - 8700 | 200000 | NA | NA | No | NTX |
| | -- | TPH (C10-C32) | 640 J | 48000 | ug/kg | SB-502-0406 | 10/39 | 990 - 130000 | 48,000 | NA | NA | No | NTX |
| | **Miscellaneous Parameters** | | | | | | | | | | | | |
| | 18540-29-9 | **HEXAVALENT CHROMIUM** | 0.33 J | 1.1 | mg/kg | D-SB-788-03 | 31/76 | 0.3 - 0.4 | 1.1 | 42 | **0.00083** | **Yes** | ASL |
| | 22967-92-6 | MERCURY (METHYL) | 0.31 K | 1.21 J | ug/kg | SB-236-05 | 3/3 | -- | 1.21 | NA | NA | No | NTX |
| | -- | PERCENT SOLIDS | 62.5 | 95.9 | % | SB-395-0203 | 608/608 | -- | 95.9 | NA | NA | No | NTX |
| | -- | PH | 4.9 | 7.7 | S.U. | SB-236-05 | 5/5 | -- | 7.7 | NA | NA | No | NTX |
| | -- | TOTAL ORGANIC CARBON | 690 J | 1350 | mg/kg | MRC-MW08[0809] | 2/3 | 238 | 1350 | NA | NA | No | NTX |
| | -- | TOTAL SOLIDS | 70 | 88 | % | SB-297-0405 | 24/24 | -- | 88 | NA | NA | No | NTX |

**Footnotes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations.
2 - Values presented are sample-specific quantitation limits.
3 - The maximum detected concentration is used for screening purposes.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag).
6 - The chemical is selected as a global COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
7 - The value is for xylenes.
8 - The value is for xylene, mixture.
9 - The value for acenaphthene is used as a surrogate for acenaphthylene.
10 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
11 - The value is for PCB (total).
12 - The value is for trivalent chromium.
13 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
14 - See Section 3 for BaP equivalent calculation methodology.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

**Associated Samples:** All subsurface soil (2-10 feet) samples from all tax blocks (D, E, F, G, and H) were included. See tables 3-6 through 3-10 for sample lists.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NA = Not Applicable/Not Available
sat = soil saturation concentration

**Rationale Codes:**
For selection as a COPC:
ASL = Above Screening Level

For elimination as a COPC:
BSL = Below COPC Screening Level
NTX = No toxicity criteria

**Table 3-21**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Direct Contact With Deep Subsurface Soil (Greater than 10 Feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**



| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Volatile Organic Compounds** | | | | | | | | | | | | | |
| | 71-55-6 | 1,1,1-TRICHLOROETHANE | 1.3 J | 1.3 J | ug/kg | OW-6-30 | 1/67 | 0.45 - 19 | 1.3 | 16000000 | 870000 N | 1200000 sat | No | BSL |
| | 75-34-3 | 1,1-DICHLOROETHANE | 1.3 J | 1.6 J | ug/kg | OW-6-20 | 2/67 | 0.29 - 15 | 1.6 | 1600000 | 3300 C | 120000 N | No | BSL |
| | 75-35-4 | 1,1-DICHLOROETHENE | 5 J | 7.4 | ug/kg | OW-6-30 | 2/67 | 0.41 - 16 | 7.4 | 390000 | 24,000 N | 29,000 N | No | BSL |
| | 526-73-8 | 1,2,3-TRIMETHYLBENZENE | 0.16 J | 3.2 J | ug/kg | D-SB-786-13 | 2/51 | 0.12 - 6.2 | 3.2 | NA | NA | NA | No | NTX |
| | 78-93-3 | 2-BUTANONE | 1.3 J | 27 | ug/kg | MRC-MW95D-SO-214 | 9/67 | 1.1 - 120 | 27 | 4700000 | 2,800,000 N | 24,000,000 sat | No | BSL |
| | 67-64-1 | ACETONE | 7.8 J | 230 | ug/kg | D-SB-788-15 | 7/67 | 5.1 - 350 | 230 | 7000000 | 6100000 N | NA | No | BSL |
| | 71-43-2 | BENZENE | 0.29 J | 20 J | ug/kg | D-SB-786-13 | 5/67 | 0.18 - 6.2 | 20 | 12000 | 1,100 C | 830 C | No | BSL |
| | 74-87-3 | CHLOROMETHANE | 0.7 J | 0.7 J | ug/kg | D-SB-785-13 | 1/67 | 0.33 - 13 | 0.7 | NA | 12,000 N | 2100 C | No | BSL |
| | 156-59-2 | CIS-1,2-DICHLOROETHENE | 0.87 J | 4.1 J | ug/kg | OW-6-20 | 3/67 | 0.29 - 6.2 | 4.1 | 78000 | 16,000 N | NA | No | BSL |
| | 100-41-4 | ETHYLBENZENE | 0.35 J | 9.2 J | ug/kg | D-SB-786-13 | 3/67 | 0.21 - 6.2 | 9.2 | 780000 | 5,400 C | 400,000 sat | No | BSL |
| | TTNUS054 | M+P-XYLENES | 12 J | 20 J | ug/kg | D-SB-786-13 | 2/67 | 0.96 - 13 | 20 | 1600000 [8] | 63,000 N[9] | 70,000 N[9] | No | BSL |
| | 75-09-2 | METHYLENE CHLORIDE | 8 J | 77 J | ug/kg | D-SB-786-13 | 9/67 | 0.53 - 16 | 77 | 85000 | 11,000 C | 13,000 C | No | BSL |
| | 104-51-8 | N-BUTYLBENZENE | 0.35 J | 0.35 J | ug/kg | MRC-MW95D-SO-214 | 1/67 | 0.18 - 7.1 | 0.35 | NA | NA | NA | No | NTX |
| | 91-20-3 | NAPHTHALENE | 47 | 530 | ug/kg | D-SB-786-13 | 3/67 | 0.15 - 6.2 | 530 | 160000 | 3,600 C | 17,000 N | No | BSL |
| | 95-47-6 | O-XYLENE | 0.57 J | 12 J | ug/kg | D-SB-786-13 | 4/67 | 0.28 - 6.2 | 12 | 1600000 [8] | 380,000 N | NA | No | BSL |
| | 100-42-5 | STYRENE | 0.16 J | 0.16 J | ug/kg | D-SB-791-13 | 1/67 | 0.12 - 6.2 | 0.16 | 1600000 | 630,000 N | 1500000 sat | No | BSL |
| | 994-05-8 | TERT-AMYL METHYL ETHER | 0.96 J | 0.96 J | ug/kg | D-SB-793-13 | 1/51 | 0.26 - 6.2 | 0.96 | NA | NA | NA | No | NTX |
| | 108-88-3 | TOLUENE | 0.28 J | 31 J | ug/kg | D-SB-786-13 | 6/67 | 0.22 - 6.2 | 31 | 630000 | 500,000 N | 650,000 sat | No | BSL |
| | 1330-20-7 | TOTAL XYLENES | 1 J | 32 J | ug/kg | D-SB-786-13 | 4/51 | 0.53 - 12 | 32 | 1600000 [8] | 63,000 N | 70000 N | No | BSL |
| | 79-01-6 | TRICHLOROETHENE | 4 J | 64 | ug/kg | OW-6-30 | 4/67 | 0.33 - 8.7 | 64 | 1600 | 2,800 C | 71 C | No | BSL |
| | 75-69-4 | TRICHLOROFLUOROMETHANE | 0.35 J | 0.35 J | ug/kg | D-SB-793-11 | 1/67 | 0.27 - 14 | 0.35 | NA | 79000 N | 110,000 N | No | BSL |
| | **Semivolatile Organic Compounds** | | | | | | | | | | | | | |
| | 117-81-7 | BIS(2-ETHYLHEXYL)PHTHALATE | 23 J | 140 | ug/kg | D-SB-790-13 | 6/62 | 21 - 4200 | 140 | 46000 | 35,000 C | NA | No | BSL |
| | 85-68-7 | BUTYL BENZYL PHTHALATE | 22 J | 29 J | ug/kg | D-SB-789-13 | 3/62 | 11 - 4200 | 29 | NA | 260,000 C | NA | No | BSL |
| | 108-95-2 | PHENOL | 520 | 980 J | ug/kg | SB-86-12 | 6/62 | 30 - 4200 | 980 | 2300000 | 1800000 N | NA | No | BSL |
| | **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | | |
| | 90-12-0 | 1-METHYLNAPHTHALENE | 7.9 | 190 | ug/kg | D-SB-772-15 | 18/89 | 3.7 - 15 | 190 | NA | 22,000 C | NA | No | BSL |
| | 91-57-6 | 2-METHYLNAPHTHALENE | 8.5 | 390 | ug/kg | D-SB-772-15 | 18/151 | 3.7 - 4200 | 390 | 31000 | 31,000 N | NA | No | BSL |
| | 83-32-9 | ACENAPHTHENE | 10 | 900 | ug/kg | D-SB-772-15 | 22/151 | 3.7 - 4200 | 900 | 470000 | 340,000 N | NA | No | BSL |
| | 208-96-8 | ACENAPHTHYLENE | 8 | 2700 | ug/kg | D-SB-778-13 | 31/151 | 3.7 - 4200 | 2,700 | 470000 | 340000 N[10] | NA | No | BSL |
| | 120-12-7 | ANTHRACENE | 9.1 | 1600 | ug/kg | D-SB-772-15 | 37/151 | 3.7 - 4200 | 1,600 | 2300000 | 1700000 N | NA | No | BSL |
| | CALC049 | **BAP EQUIVALENT-POSITIVE RESULTS[18]** | 0.5 | 35343 | ug/kg | G-SB-761-11 | 257/513 | 1.5-440 | 35,343 | **22** | **15 C** | NA | Yes | ASL |
| | CALC055 | **BAP EQUIVALENT-1/2 NONDETECT[18]** | 2.6 | 35343 | ug/kg | G-SB-761-11 | 257/513 | 1.5-440 | 35,343 | **22** | **15 C** | NA | Yes | ASL |
| | 56-55-3 | **BENZO(A)ANTHRACENE** | 1.9 J | 30000 | ug/kg | G-SB-761-11 | 238/513 | 1.1 - 4200 | 30,000 | **220** | **150 C** | NA | Yes | ASL |
| | 50-32-8 | **BENZO(A)PYRENE** | 5.15 | 24000 | ug/kg | G-SB-761-11 | 242/513 | 1.5 - 440 | 24,000 | **22** | **15 C** | NA | Yes | ASL |
| | 205-99-2 | **BENZO(B)FLUORANTHENE** | 2.1 J | 27000 | ug/kg | G-SB-761-11 | 248/511 | 1.3 - 4200 | 27,000 | **220** | **150 C** | NA | Yes | ASL |
| | TTNUS140 | BENZO(B+K)FLUORANTHENE | 74 J | 74 J | ug/kg | SB-86-12 | 1/2 | 390-390 | 74 | 220 [16] | 150 [16] | NA | No | BSL |
| | 191-24-2 | BENZO(G,H,I)PERYLENE | 9 | 3800 | ug/kg | D-SB-778-13 | 46/151 | 3.7 - 4200 | 3800 | 230000 | 170,000 N[11] | NA | No | BSL |
| | 207-08-9 | **BENZO(K)FLUORANTHENE** | 6.8 J | 11000 | ug/kg | G-SB-761-11 | 204/511 | 1.6 - 4200 | 11,000 | **2200** | **1,500 C** | NA | Yes | ASL |
| | 218-01-9 | **CHRYSENE** | 2 J | 33000 | ug/kg | G-SB-761-11 | 237/513 | 1 - 440 | 33,000 | **22000** | **15000 C** | NA | Yes | ASL |
| | 53-70-3 | **DIBENZO(A,H)ANTHRACENE** | 4.725 | 4300 | ug/kg | G-SB-761-11 | 96/513 | 1.4 - 4200 | 4300 | **22** | **15 C** | NA | Yes | ASL |
| | 206-44-0 | FLUORANTHENE | 8.4 | 7100 | ug/kg | D-SB-772-15 | 60/151 | 3.7 - 440 | 7,100 | 310000 | 230,000 N | NA | No | BSL |
| | 86-73-7 | FLUORENE | 8.7 | 950 | ug/kg | D-SB-772-15 | 22/151 | 3.7 - 4200 | 950 | 310000 | 230,000 N | NA | No | BSL |
| | 193-39-5 | **INDENO(1,2,3-CD)PYRENE** | 1.4 J | 12000 | ug/kg | G-SB-761-11 | 220/513 | 0.43 - 4200 | 12,000 | **220** | **150 C** | NA | Yes | ASL |
| | 91-20-3 | NAPHTHALENE | 10 | 990 | ug/kg | D-SB-772-15 | 20/151 | 3.7 - 4200 | 990 | 160000 | 3600 C | 17000 N | No | BSL |
| | 85-01-8 | PHENANTHRENE | 8.3 | 5600 | ug/kg | D-SB-772-15 | 42/151 | 3.7 - 4200 | 5,600 | 2300000 | 170,000 N[11] | NA | No | BSL |
| | 129-00-0 | PYRENE | 12 | 5200 | ug/kg | G-SB-813-15, D-SB-772-15 | 61/151 | 3.7 - 440 | 5,200 | 230000 | 170,000 N | NA | No | BSL |

**Table 3-21**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Direct Contact With Deep Subsurface Soil (Greater than 10 Feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**



| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Pesticides/Polychlorinated Biphenyls** | | | | | | | | | | | | | |
| | 11096-82-5 | **AROCLOR-1260** | 26 J | 61000 | ug/kg | E-SB-833-11 | 23/170 | 19 - 330 | 61000 | **320** | **220 C** | NA | Yes | ASL |
| | **Metals** | | | | | | | | | | | | | |
| | 7440-36-0 | ANTIMONY | 0.051 J | 0.83 J | mg/kg | D-SB-792-13 | 27/59 | 0.027 - 2.9 | 0.83 | 3.1 | 3.1 N | NA | No | BSL |
| | 7440-38-2 | **ARSENIC** | 0.19 L | 8.2 L | mg/kg | D-SB-791-15 | 63/72 | 0.51 - 2 | 8.2 | **0.43** | **0.39 C** | 769 C | Yes | ASL |
| | 7440-39-3 | BARIUM | 4.4 J | 25.2 | mg/kg | D-SB-788-11 | 51/51 | -- | 25.2 | 1600 | 1500 N | 70900 N | No | BSL |
| | 7440-41-7 | BERYLLIUM | 0.3 J | 10.5 | mg/kg | D-SB-789-13 | 49/67 | 0.057 - 3.1 | 10.5 | 16 | 16 N | 1,380 C | No | BSL |
| | 7440-43-9 | CADMIUM | 0.023 J | 0.12 | mg/kg | OW-6-20, D-SB-785-13 | 16/67 | 0.0081 - 3.1 | 0.12 | 3.9 | 7 N | 1840 C | No | BSL |
| | 7440-47-3 | CHROMIUM | 2.1 J | 56.1 | mg/kg | D-SB-791-15 | 64/67 | 2.8 - 3 | 56.1 | 12000 [12] | 12000 N[12] | 276 C | No | BSL |
| | 7440-48-4 | **COBALT** | 1.5 | 21.3 | mg/kg | D-SB-789-13 | 51/51 | -- | 21.3 | NA | **2.3 N** | 1,180 C | Yes | ASL |
| | 7440-50-8 | COPPER | 3 | 56.2 | mg/kg | D-SB-785-13 | 66/67 | 2.8 | 56.2 | 310 | 310 N | NA | No | BSL |
| | 7439-89-6 | **IRON** | 462 J | 134000 | mg/kg | D-SB-792-13 | 50/50 | -- | 134000 | **5500** | **5500 N** | NA | Yes | ASL |
| | 7439-92-1 | LEAD | 1.3 | 20 J | mg/kg | SB-58-15 | 59/67 | 2.6 - 3 | 20 | 400 | 400 | NA | No | BSL |
| | 7439-96-5 | **MANGANESE** | 1.6 | 341 | mg/kg | D-SB-789-13 | 50/50 | -- | 341 | **160** | **180 N** | 7090 N | Yes | ASL |
| | 7439-97-6 | MERCURY | 0.059 J | 0.059 J | mg/kg | D-SB-785-13 | 1/67 | 0.002 - 0.12 | 0.059 | 2.3 [13] | 2.3 N[14] | NA | No | BSL |
| | 7439-98-7 | MOLYBDENUM | 0.078 J | 1.5 | mg/kg | D-SB-791-15, D-SB-792-13 | 38/51 | 0.072 - 0.6 | 1.5 | NA | 39 N | NA | No | BSL |
| | 7440-02-0 | NICKEL | 2.5 J | 54.1 | mg/kg | D-SB-789-13 | 64/67 | 2.6 - 3 | 54.1 | 160 | 150 N | NA | No | BSL |
| | 7782-49-2 | SELENIUM | 0.22 L | 5 | mg/kg | SB-248-15 | 49/67 | 0.19 - 3.1 | 5 | 39 | 39 N | NA | No | BSL |
| | 7440-22-4 | SILVER | 0.026 J | 0.1 K | mg/kg | SB-503-1012 | 10/52 | 0.018 - 2.8 | 0.1 | 39 | 39 N | NA | No | BSL |
| | 7440-28-0 | THALLIUM | 0.031 | 0.15 J | mg/kg | D-SB-788-11 | 26/67 | 0.041 - 2.4 | 0.15 | 0.55 | NA | NA | No | BSL |
| | 7440-62-2 | **VANADIUM** | 1.6 | 111 | mg/kg | D-SB-792-13 | 51/51 | -- | 111 | **7.8** | **39 N[15]** | NA | Yes | ASL |
| | 7440-66-6 | ZINC | 3.4 J | 114 | mg/kg | D-SB-785-13 | 55/67 | 26 - 30 | 114 | 2300 | 2,300 N | NA | No | BSL |
| | **Petroleum Hydrocarbons** | | | | | | | | | | | | | |
| | TTNUS004 | DIESEL RANGE ORGANICS | 3400 J | 17,000 | ug/kg | D-SB-785-13 | 17/62 | 3100 - 13000 | 17,000 | 230000 | NA | NA | No | BSL |
| | TTNUS005 | GASOLINE RANGE ORGANICS | 79 J | 79 J | ug/kg | D-SB-786-13 | 1/62 | 52 - 130 | 79 | 230000 | NA | NA | No | BSL |
| | TTNUS827 | TPH (C10-C32) | 1100 J | 1100 J | ug/kg | SB-503-1012 | 1/1 | -- | 1100 | NA | 28,400,000 N[17] | NA | No | BSL |
| | **Miscellaneous Parameters** | | | | | | | | | | | | | |
| | 18540-29-9 | **HEXAVALENT CHROMIUM** | 0.31 J | 0.88 J | mg/kg | D-SB-785-11 | 19/46 | 0.3 - 0.35 | 0.88 | 23 | **0.29 C** | 276 C | Yes | ASL |
| | TTNUS291 | PERCENT SOLIDS | 80.5 | 89 | % | SB-555A-12 | 9/9 | -- | 89 | NA | NA | NA | No | NTX |
| | TTNUS003 | TOTAL ORGANIC CARBON | 319 J | 1320 | mg/kg | MRC-MW12[1213] | 2/2 | -- | 1,320 | NA | NA | NA | No | NTX |

**Footnotes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations.
2 - Values presented are sample-specific quantitation limits.
3 - The maximum detected concentration is used for screening purposes.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag).
6 - USEPA Soil Screening Levels. EPA Internet Site at http://rais.ornl.gov/epa/ssl1.shtml.
7 - The chemical is selected as a global COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
8 - The value is for xylenes.
9 - The value is for xylene, mixture.
10 - The value for acenaphthene is used as a surrogate for acenaphthylene.
11 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
12 - The value is for trivalent chromium.
13 - The value is for mercury (inorganic/mercuric dichloride).
14 - The value is for mercuric chloride.
15 - The value is for vanadium and compounds.
16 - The value for benzo(b)fluoranthene is used as a surrogate for benzo(b+k)fluoranthene.
17 - The value for total petroleum hydrocarbons (aliphatic low) is used.
18 - See Section 3 for BaP equivalent calculation methodology.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

**Associated Samples:** All deep subsurface soil (greater than 10 feet) samples from all tax blocks (D, E, F, G, and H) were included. See Tables 3-11 through 3-15 for sample lists.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NA = Not Applicable/Not Available
sat = soil saturation concentration

**Rationale Codes:**
For selection as a COPC:
ASL = Above Screening Level

For elimination as a COPC:
BSL = Below COPC Screening Level
NTX = No toxicity criteria
NUT = Essential nutrient

**Table 3-22**

**Chemicals Retained as Global Chemicals of Potential Concern - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Surface Soil (0-2 feet) | | | Subsurface Soil (2-10 feet) | | |
|---|---|---|---|---|---|---|
| | Direct Contact | Soil to Air | Soil to Groundwater | Direct Contact | Soil to Air | Soil to Groundwater |
| **Volatile Organic Compounds** | | | | | | |
| 1,2,3-Trichlorobenzene | X | | X | X | | X |
| 1,2,4-Trichlorobenzene | X | X | X | X | X | X |
| 1,2,4-Trimethylbenzene | | | X | | | X |
| 1,1-Dichloroethane | | | X | | | |
| 1,2-Dichlorobenzene | | | X | | | X |
| 1,2-Dichloroethane | | | | | | X |
| 1,3-Dichlorobenzene | | | X | X | | X |
| 1,4-Dichlorobenzene | X | | X | X | | X |
| Acetone | | | | | | X |
| Benzene | | | X | | | X |
| Carbon Tetrachloride | | | | | | X |
| Chlorobenzene | | | | | | X |
| Ethylbenzene | | | X | | | X |
| m+p-Xylenes | | | | | | X |
| Methylene Chloride | | | X | | | X |
| Naphthalene | | | X | X | X | X |
| Tetrachloroethene | | | X | | | X |
| Total Xylenes | | | | | | X |
| Trichloroethene | | | X | | | X |
| Vinyl Chloride | | | | | | X |
| **Semivolatile Organic Compounds** | | | | | | |
| 1-Methylnaphthalene | | | X | | | X |
| 2-Methylnaphthalene | | | X | | | X |
| Acenaphthene | | | | | | X |
| Benzo(a)pyrene Equivalents[(1)] | X | | X | X | | X |
| Benzo(a)anthracene | X | | X | X | | X |
| Benzo(a)pyrene | X | | X | X | | X |
| Benzo(b)fluoranthene | X | | X | X | | X |
| Benzo(b+k)fluoranthene | X | | X | | | |
| Benzo(k)fluoranthene | X | | X | X | | X |
| Carbazole | | | X | | | X |
| Chrysene | X | | X | X | | X |
| Dibenzo(a,h)anthracene | X | | X | X | | X |
| Dibenzofuran | | | X | | | X |
| Indeno(1,2,3-cd)pyrene | X | | X | X | | X |

**Table 3-22**

**Chemicals Retained as Global Chemicals of Potential Concern - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Surface Soil (0-2 feet) | | | Subsurface Soil (2-10 feet) | | |
|---|---|---|---|---|---|---|
| | Direct Contact | Soil to Air | Soil to Groundwater | Direct Contact | Soil to Air | Soil to Groundwater |
| N-nitrosodiphenylamine | | | | | | X |
| Naphthalene | | | X | X | X | X |
| **Pesticides/PCBs** | | | | | | |
| Aroclor-1242 | | | X | | | |
| Aroclor-1254 | X | | X | X | | X |
| Aroclor-1260 | X | | X | X | | X |
| Beta-BHC | | | X | | | X |
| Total Aroclor | X | | X | X | | X |
| **Inorganics** | | | | | | |
| Antimony | X | | X | | | X |
| Arsenic | X | | X | X | | X |
| Cadmium | X | | X | | | |
| Cobalt | X | | X | X | | X |
| Copper | | | X | | | X |
| Iron | X | | X | X | | X |
| Lead | X | | X | X | | X |
| Manganese | X | | X | X | | X |
| Mercury | X | | | X | | |
| Molybdenum | X | | X | | | |
| Nickel | X | | X | | | X |
| Selenium | | | X | | | X |
| Silver | | | X | | | X |
| Vanadium | X | | | X | | |
| **Petroleum Hydrocarbons** | | | | | | |
| Diesel Range Organics | X | | | X | | |
| Gasoline Range Organics | X | | | X | | |
| **Miscellaneous Parameters** | | | | | | |
| Hexavalent Chromium | X | | X | X | | X |

Notes
X - Chemical was retained as a global COPC.
1 - See Section 3 for benzo(a)pyrene equivalents calculation methodology.

**Table 3-23**

**Selection of Exposure Pathways - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
**Page 1 of 2**

| Scenario Timeframe | Medium | Exposure Medium | Exposure Point | Receptor Population | Receptor Age | Exposure Route | Type of Analysis | Rationale for Selection or Exclusion of Exposure Pathway |
|---|---|---|---|---|---|---|---|---|
| Current/Future | Surface Soil | Surface Soil | Tax Blocks | Construction Workers | Adult | Ingestion<br>Dermal | Quant<br>Quant | Construction workers may have contact with surface soil during excavation activities. |
| | | | | Industrial Worker | Adult | Ingestion<br>Dermal | Quant<br>Quant | Industrial workers may contact surface soil during normal work activities. |
| | | | | Commercial Receptors | Child | Ingestion<br>Dermal | Quant<br>Quant | Child commercial receptors may contact surface soil while at the site. |
| | | | | | Adolescent | Ingestion<br>Dermal | Quant<br>Quant | Adolescent commercial receptors may contact surface soil while at the site. |
| | | | | | Adult | Ingestion<br>Dermal | Quant<br>Quant | Adult commercial receptors may contact surface soil while at the site. |
| | | | | Recreational Users | Child | Ingestion<br>Dermal | Quant<br>Quant | Child recreational users may contact surface soil while at the site. |
| | | | | | Adolescent | Ingestion<br>Dermal | Quant<br>Quant | Adolescent recreational users may contact surface soil while at the site. |
| | | | | | Adult | Ingestion<br>Dermal | Quant<br>Quant | Adult recreational users may contact surface soil while at the site. |
| | | Air | Tax Blocks | Construction Workers | Adult | Inhalation | Quant | Construction workers may be exposed to fugitive dust and volatile emissions during construction activities. |
| | | | | Industrial Worker | Adult | Inhalation | Quant | Industrial workers may be exposed to fugitive dust and volatile emissions during work activities. |
| | | | | Commercial Receptors | Child | Inhalation | Quant | Child commercial receptors may be exposed to fugitive dust and volatile emissions while at the site. |
| | | | | | Adolescent | Inhalation | Quant | Adolescent commercial receptors may be exposed to fugitive dust and volatile emissions while at the site. |
| | | | | | Adult | Inhalation | Quant | Adult commercial receptors may be exposed to fugitive dust and volatile emissions while at the site. |
| | | | | Recreational Users | Child | Inhalation | Quant | Child recreational users may be exposed to fugitive dust and volatile emissions while at the site. |
| | | | | | Adolescent | Inhalation | Quant | Adolescent recreational users may be exposed to fugitive dust and volatile emissions while at the site. |
| | | | | | Adult | Inhalation | Quant | Adult recreational users may be exposed to fugitive dust and volatile emissions while at the site. |
| | Subsurface Soil | Subsurface Soil | Tax Blocks | Construction Workers | Adult | Ingestion<br>Dermal | Quant<br>Quant | Construction workers may have contact with subsurface soil during excavation activities. |
| | | | | Industrial Worker | Adult | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by industrial workers is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | commercial Land use Users | Child | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by child commercial receptors is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adolescent | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by adolescent commercial land use users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adult | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by adult commercial land use users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | Recreational Users | Child | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by child recreational users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adolescent | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by adolescent recreational users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adult | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by adult recreational users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |

**Table 3-23**

**Selection of Exposure Pathways - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
**Page 2 of 2**

| Scenario Timeframe | Medium | Exposure Medium | Exposure Point | Receptor Population | Receptor Age | Exposure Route | Type of Analysis | Rationale for Selection or Exclusion of Exposure Pathway |
|---|---|---|---|---|---|---|---|---|
| Current/Future | Subsurface Soil | Air | Tax Blocks | Construction Workers | Adult | Inhalation | Quant | Construction workers may be exposed to fugitive dust and volatile emissions during construction activities. |
| | | | | Industrial Worker | Adult | Inhalation | Quant | Although exposure to subsurface soil by industrial workers is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | Commercial Receptors | Child | Inhalation | Quant | Although exposure to subsurface soil by child commercial receptors is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adolescent | Inhalation | Quant | Although exposure to subsurface soil by adolescent commercial receptors is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adult | Inhalation | Quant | Although exposure to subsurface soil by adult commercial receptors is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | Recreational Users | Child | Inhalation | Quant | Although exposure to subsurface soil by child recreational users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adolescent | Inhalation | Quant | Although exposure to subsurface soil by adolescent recreational users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adult | Inhalation | Quant | Although exposure to subsurface soil by adult recreational users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| Future | Surface Soil | Surface Soil | Tax Blocks | Residents | Child | Ingestion<br>Dermal | Quant<br>Quant | Although a future residential scenario is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adolescent | Ingestion<br>Dermal | Quant<br>Quant | |
| | | | | | Adult | Ingestion<br>Dermal | Quant<br>Quant | |
| | | Air | Tax Blocks | Residents | Child | Inhalation | Quant | Although a future residential scenario is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adolescent | Inhalation | Quant | |
| | | | | | Adult | Inhalation | Quant | |
| | Subsurface Soil | Subsurface Soil | Tax Blocks | Residents | Child | Ingestion<br>Dermal | Quant<br>Quant | Although a future residential scenario is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adolescent | Ingestion<br>Dermal | Quant<br>Quant | |
| | | | | | Adult | Ingestion<br>Dermal | Quant<br>Quant | |
| | | Air | Tax Blocks | Residents | Child | Inhalation | Quant | Although a future residential scenario is considered unlikely at the site. this scenario is included to aid in future risk management decisions. |
| | | | | | Adolescent | Inhalation | Quant | |
| | | | | | Adult | Inhalation | Quant | |

Notes:
Quant - Quantitative.

**Table 3-24**

**Receptors and Exposure Routes for Quantitative Evaluation - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| Receptors | Exposure Routes |
|---|---|
| Construction Workers<br>(current/future land use) | • Soil incidental ingestion (surface/subsurface)<br>• Soil dermal contact (surface/subsurface)<br>• Inhalation of air/dust/emissions |
| Industrial Worker<br>(current/future land use) | • Soil ingestion (surface/subsurface[1])<br>• Soil dermal contact (surface/subsurface[1])<br>• Inhalation of air/dust/emissions (surface/subsurface[1]) |
| Commercial Receptors<br>(child, adolescent, and adults)<br>(current/future land use) | • Soil ingestion (surface/subsurface[1])<br>• Soil dermal contact (surface/subsurface[1])<br>• Inhalation of air/dust/emissions (surface/subsurface[1]) |
| Recreational Users<br>(child, adolescent, and adults)<br>(current/future land use) | • Soil ingestion (surface/subsurface[1])<br>• Soil dermal contact (surface/subsurface[1])<br>• Inhalation of air/dust/emissions (surface/subsurface[1]) |
| Hypothetical Residents<br>(child, adolescent, and adults)<br>(future land use) | • Soil ingestion (surface/subsurface[1])<br>• Soil dermal contact (surface/subsurface[1])<br>• Inhalation of air/dust/emissions (surface/subsurface[1]) |

1 – These receptors are not expected to be exposed to subsurface soil, but exposure to subsurface is evaluated to aid in risk management decisions.

**Table 3-25**

**Exposure Point Concentrations - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| Chemical | Block D | | Block E | | Block F | | Block G | | Block H | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Surface Soil (mg/kg) | Subsurface Soil (mg/kg) | Surface Soil (mg/kg) | Subsurface Soil (mg/kg) | Surface Soil (mg/kg) | Subsurface Soil (mg/kg) | Surface Soil (mg/kg) | Subsurface Soil (mg/kg) | Surface Soil (mg/kg) | Subsurface Soil (mg/kg) |
| **Volatile Organic Compounds** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NA | NA | 16.3 | 165 | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | 77.7 | 724 | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | 4.2 | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | 0.23 | 10.4 | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | 4(1) | NA | 0.025 | NA | 159(1) | NA | 0.063 | NA | 0.025 |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | |
| BENZO(A)PYRENE EQUIVALENTS(4) | 3.8 | 0.65 | 1.5 | 1.7 | 6.1 | 0.22 | 3.7 | 1.3 | 11.8 | 0.25 |
| NAPHTHALENE | NA | 0.068 | NA | 0.072 | NA | 31(1) | NA | 0.037 | NA | 0.15 |
| **Pesticides/Polychlorinated Biphenyls** | | | | | | | | | | |
| AROCLOR-1254 | NA | NA | 36(1) | 9.8(1) | 0.096(1) | NA | 0.012(1) | NA | NA | NA |
| AROCLOR-1260 | 0.02(1) | 0.24(1) | 108 | 709 | 0.16 | 0.017 | 0.26 | 0.014(1) | NA | NA |
| **Metals** | | | | | | | | | | |
| ANTIMONY | 0.48 | NA | 0.37 | NA | 1.4 | NA | 1.7 | NA | 0.82 | NA |
| ARSENIC | 3.5 | 4.6 | 2.2 | 1.5 | 3.1 | 2.4 | 7.9 | 3.6 | 3.5 | 3.6 |
| CADMIUM | 0.15 | NA | 2.7 | NA | 1.2 | NA | 14(1) | NA | 0.2 | NA |
| COBALT | 10.7 | 11.7 | 11.6 | 4.0 | 7 | 18.7 | 41.2 | 31.0 | 9.3 | 12.9 |
| IRON | 16300 | 30900 | 17200 | 17100 | NA | NA | NA | 17200(1) | NA | NA |
| LEAD(2) | 20.6 | 22.9 | 21.6 | 3.6 | 58.9 | 10.4 | 68.3 | 8.4 | 6.8 | 7.2 |
| MANGANESE | 89.9 | 67.6 | 174 | 93.9 | NA | NA | NA | 123(1) | NA | NA |
| MERCURY | 0.25 | 0.18 | 0.12 | 0.29(1) | 0.87 | 0.27 | 1.8 | 0.014 | 0.19 | 0.031 |
| MOLYBDENUM | 0.45 | NA | 0.83 | NA | 63(1) | NA | NA | NA | 0.45 | NA |
| NICKEL | 14.6 | NA | 10.9 | NA | 12.4 | NA | 161 | NA | 10.9 | NA |
| VANADIUM | 25.6 | 42.2 | 24.0 | 13.8 | 35 | 39.9 | 31.5 | 46.3 | 27.2 | 38.1 |
| **Petroleum Hydrocarbons** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 550 | 40.3 | 2340 | 2010 | 91.8 | 522 | 77.4 | 21.7 | 242(1) | 130 |
| GASOLINE RANGE ORGANICS | 0.81 | 0.25(1) | 0.48 | 81.1 | 1.2(1) | 21.2(1) | 131 | 131 | 12(1) | 2.6 |
| **Miscellaneous Parameters** | | | | | | | | | | |
| HEXAVALENT CHROMIUM(3) | 0.87 | 1.4 | 1.3 | 0.49 | 2.7 | 0.98 | 1.3 | 1.1 | 1.1 | 1.8 |

Notes:
EPCs are the 95% UCLs recommended by ProUCL 4.00.05 unless otherwise noted.
NA - Not applicable, chemical is not a COPC for this medium.
RAGS Part D tables for the EPCs are included in Appendix D.
(1) There are less than three detected concentrations or less than five samples - reliable statistics cannot be calculated. The maximum concentration is used as the EPC.
(2) The average concentration is used as the EPC for lead.
(3) Calculated by multiplying the total chromium concentration by 0.05.
(4) See Section 3 for benzo(a)pyrene equivalents calculation methodology.

Acronym
COPC = Chemical of Potential Concern
EPC = Exposure Point Concentration
UCL = Upper Confidence Limit

**Table 3-26**

**Summary of Exposure Input Parameters for Reasonable Maximum Exposure (RME) - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| Exposure Parameter | Construction Worker | Industrial Worker | Commercial Receptors | | | Recreational Users | | | Future On-Property Resident | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Child | Adolescent | Adult | Child | Adolescent | Adult | Child | Adolescent | Adult |
| **All Exposures** | | | | | | | | | | | |
| $C_{soil}$ (mg/kg) | Maximum or 95% UCL[1] | Maximum or 95% UCL[1] | Maximum or 95% UCL[1] | Maximum or 95% UCL[1] | Maximum or 95% UCL[1] | Maximum or 95% UCL[1] | Maximum or 95% UCL[1] | Maximum or 95% UCL[1] | Maximum or 95% UCL[1] | Maximum or 95% UCL[1] | Maximum or 95% UCL[1] |
| ED (years) | 1[2] | 25[3] | 6[4] | 12[4] | 25[4] | 6[5] | 12[5] | 12[5] | 6[4] | 12[4] | 12[4] |
| BW (kg) | 70[6] | 70[6] | 15[4] | 40[4] | 70[4] | 15[5] | 40[5] | 70[5] | 15[6] | 40[6] | 70[6] |
| $AT_n$ (days) | ED x 365[6] | ED x 365[6] | ED x 365[6] | ED x 365[6] | ED x 365[6] | ED x 365[6] | ED x 365[6] | ED x 365[6] | ED x 365[6] | ED x 365[6] | ED x 365[6] |
| $AT_c$ (days) | 25550[6] | 25550[6] | 25550[6] | 25550[6] | 25550[6] | 25550[6] | 25550[6] | 25550[6] | 25550[6] | 25550[6] | 25550[6] |
| **Incidental Ingestion/Dermal Contact with Soil** | | | | | | | | | | | |
| IR (mg/day) | 480[4] | 50[4] | 200[4] | 100[4] | 50[4] | 200[5] | 100[5] | 100[5] | 200[7] | 100[7] | 100[7] |
| EF-Soil (days/year) | 250[2] | 250[3] | 132[4] | 132[4] | 250[4] | 250[4][8] | 250[4][8] | 250[4][8] | 350[9] | 350[9] | 350[9] |
| FI (unitless) | 1[2] | 1[3] | 1[4] | 1[4] | 1[4] | 1[5] | 1[5] | 1[5] | 1[7] | 1[7] | 1[7] |
| SA ($cm^2$) | 3280[4] | 3300[9] | 2350[4] | 4320[4] | 3300[4] | 2800[5] | 4320[5] | 5700[5] | 2800[9] | 4320[4] | 5700[9] |
| AF ($mg/cm^2$-event) | 0.3[4] | 0.2[9] | 0.2[4] | 0.2[4] | 0.2[4] | 0.2[5] | 0.07[5] | 0.07[5] | 0.2[9] | 0.07[9] | 0.07[9] |
| EV (events/day) | 1[9] | 1[9] | 1[4] | 1[4] | 1[4] | 1[9] | 1[9] | 1[9] | 1[9] | 1[9] | 1[9] |
| ABS (unitless) | Chemical Specific | Chemical Specific | Chemical Specific | Chemical Specific | Chemical Specific | Chemical Specific | Chemical Specific | Chemical Specific | Chemical Specific | Chemical Specific | Chemical Specific |
| CF (kg/mg) | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 | 1E-06 |
| **Inhalation Fugitive Dust/Volatile Emissions from Soil** | | | | | | | | | | | |
| $C_{air}$ ($mg/m^3$) | Calculated | Calculated | Calculated | Calculated | Calculated | Calculated | Calculated | Calculated | Calculated | Calculated | Calculated |
| ET (hours/day) | 8[2] | 8[2] | 4[4] | 4[4] | 8[4] | 8[8] | 8[8] | 8[8] | 24[7] | 24[7] | 24[7] |
| PEF ($m^3/kg$) | 1.43E+06[10] | 3.23E+09[10] | 3.23E+09[10] | 3.23E+09[10] | 3.23E+09[10] | 3.23E+09[10] | 3.23E+09[10] | 3.23E+09[10] | 3.23E+09[10] | 3.23E+09[10] | 3.23E+09[10] |

**Notes:**

ABS Absorption factor
AF Soil-to-skin adherence factor
$AT_c$ Averaging time for carcinogenic effects
$AT_n$ Averaging time for noncarcinogenic effects
BW Body weight
CF Conversion factor
$C_{soil/air}$ Exposure concentration for soil/sediment/groundwater/air
ED Exposure duration
EF Exposure frequency
ET Exposure time
EV Event frequency
FI Fraction ingested from contaminated source
IR Ingestion rate
PEF Particulate Emission Factor
SA Skin surface area available for contact
VF Volatization Factor

1 - USEPA, 2002: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 92
2 - Professional Judgment (see text).
3 - USEPA, 2002: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
4 - MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.
5 - Assumed same as resident.
6 - USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.
7 - USEPA, 1991: Risk Assessment Guidance for Superfund - Supplemental Guidance- Standard Default Exposure Factors Interim Final.
8 - Recreational users' exposure frequency and time on site are assumed at 250 days per year and 8 hours per day.
9 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.
10 - USEPA, 2010: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.

**Table 3-27**

**Dermal Absorption Fraction - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Chemical of Potential Concern | Dermal Absorption Fraction |
|---|---|
| **Volatile Organic Compounds** | |
| 1,2,3-Trichlorobenzene | 0.03 |
| 1,2,4-Trichlorobenzene | 0.03 |
| 1,3-Dichlorobenzene | 0.03 |
| 1,4-Dichlorobenzene | 0.03 |
| Naphthalene | 0.13 |
| **Polycyclic Aromatic Hydrocarbons** | |
| Benzo(a)pyrene Equivalents(1) | 0.13 |
| Benzo(a)anthracene | 0.13 |
| Benzo(a)pyrene | 0.13 |
| Benzo(b)fluoranthene | 0.13 |
| Benzo(k)fluoranthene | 0.13 |
| Chrysene | 0.13 |
| Dibenzo(a,h)anthracene | 0.13 |
| Indeno(1,2,3-cd)pyrene | 0.13 |
| Naphthalene | 0.13 |
| **Pesticides/PCBs** | |
| Aroclor-1254 | 0.14 |
| Aroclor-1260 | 0.14 |
| **Inorganics** | |
| Antimony | 0.01 |
| Arsenic | 0.03 |
| Cadmium | 0.001 |
| Cobalt | 0.01 |
| Iron | 0.01 |
| Manganese | 0.01 |
| Lead | NA |
| Mercury | 0.01 |
| Molybdenum | 0.01 |
| Nickel | 0.01 |
| Vanadium | 0.01 |
| **Petroleum Hydrocarbons** | |
| Diesel Range Organics | NA |
| Gasoline Range Organics | NA |
| **Miscellaneous Parameters** | |
| Hexavalent Chromium | 0.01 |

Notes:
All values from EPA's Risk Assessment Guidance for Superfund Volume 1: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Final, July 2004.

1 - See Section 3 for benzo(a)pyrene equivalents calculation methodology.

NA = Not available.

**Table 3-28**

**Chemical Properties for Volatilization from Soil to Outdoor Air Models - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| Chemical | Organic Carbon Partition Coefficient ($cm^3/g$) | Air Diffusivity ($cm^2/sec$) | Water Diffusivity ($cm^2/sec$) | Solubility Limit (mg/L) | Henry's Law Constant (Dimensionless) |
|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 1.36E+03 | 4.00E-02 | 8.40E-06 | 4.90E+01 | 5.80E-02 |
| 1,2,3-Trichlorobenzene | 1.38E+03 | 4.00E-02 | 8.40E-06 | 1.80E+01 | 5.13E-02 |
| 1,3-Dichlorobenzene | 7.21E+02 | NV | NV | 1.33E+02 | 1.27E-01 |
| 1,4-Dichlorobenzene | 3.75E+02 | 5.50E-02 | 8.70E-06 | 8.13E+01 | 9.90E-02 |
| Naphthalene | 1.54E+03 | 6.00E-02 | 8.40E-06 | 3.10E+01 | 1.80E-02 |

Source:
USEPA 2010: USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010.
NV = No value.

**Table 3-29**

**Input Parameters for Calculation of the Volatilization from Soil to Outdoor Air Models - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| Parameter | Definition | Value | Reference |
|---|---|---|---|
| Q/C | Inverse of mean concentration at center of source ($g/m^2$-s per $kg/m^3$). | Receptor specific(1) | USEPA, 20010a |
| T | Exposure interval (seconds). | Receptor specific(2) | USEPA, 2002 |
| pb | Dry soil bulk density ($g/cm^3$). | 1.5 | USEPA, 2002 |
| ps | Soil particle density ($g/cm^3$). | 2.65 | USEPA, 2002 |
| θw | Water-filled soil porosity ($L_{pore}/L_{soil}$). | 0.15 | USEPA, 2002 |
| n | Total soil porosity ($L_{pore}/L_{soil}$). | 0.434 | USEPA, 2002 |
| Di | Diffusivity in air ($cm^2$/sec). | Chemical specific(3) | USEPA, 2010b |
| H' | Dimensionless Henry's Law Constant. | Chemical specific(3) | USEPA, 2010b |
| S | Solubility limit (mg/L) | Chemical specific(3) | USEPA, 2010b |
| Dw | Diffusivity in water ($cm^2$/sec). | Chemical specific(3) | USEPA, 2010b |
| Koc | Soil organic carbon partition coefficient ($cm^3/g$). | Chemical specific(3) | USEPA, 2010b |
| foc | Fraction organic carbon in soil (g/g). | 0.006 | USEPA, 2002 |

Notes:
1 - Value is 14.31 for construction workers and 87.36898 for all other receptors evaluated.
2 - Value is 3.2E+07 for construction workers and 9.5E+08 for all other receptors evaluated.
3 - Chemical-specific values are presented in Table 3-28.
USEPA 2002: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.
USEPA, 2010a: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm.
Site-specific values for Philadelphia, Pennsylvania.
USEPA 2010b: USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010.

**Table 3-30**

**Non-Cancer Toxicity Data -- Oral/Dermal**
**Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Chemical of Potential Concern | Chronic/ Subchronic | Oral RfD | | Oral Absorption Efficiency for Dermal[1] | Absorbed RfD for Dermal[2] | | Primary Target Organ(s) | Combined Uncertainty/Modifying Factors | RfD:Target Organ(s) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Value | Units | | Value | Units | | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Volatile Organic Compounds** | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | Subchronic | 8.00E-03 | mg/kg/day | 1 | 8.0E-03 | mg/kg/day | Body Weight | 1000/1 | PPRTV | 9/11/2009 |
| | Chronic | 8.0E-04 | mg/kg/day | 1 | 8.0E-04 | mg/kg/day | Adrenals | NA | PPRTV | 9/11/2009 |
| 1,2,4-Trichlorobenzene | Subchronic | 9.0E-02 | mg/kg/day | 1 | 9.0E-02 | mg/kg/day | Liver | 100/1 | PPRTV | 6/16/2009 |
| | Chronic | 1.0E-02 | mg/kg/day | 1 | 1.0E-02 | mg/kg/day | Adrenals | 1000/1 | IRIS | 04/08/2011 |
| 1,3-Dichlorobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | Chronic | 7.0E-02 | mg/kg/day | 1 | 7.0E-02 | mg/kg/day | Liver | NA | ATSDR | 07/2006 |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | |
| Benzo(a)anthracene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(a)pyrene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(b)fluoranthene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(k)fluoranthene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chrysene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibenzo(a,h)anthracene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Indeno(1,2,3-cd)pyrene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | Chronic | 2.0E-02 | mg/kg/day | 1 | 2.0E-02 | mg/kg/day | Body Weight | 3000/1 | IRIS | 04/08/2011 |
| **Polychlorinated Biphenyls** | | | | | | | | | | |
| Aroclor-1254 | Chronic | 2.0E-05 | mg/kg/day | 1 | 2.0E-05 | mg/kg/day | Autoimmune | 300/1 | IRIS | 04/08/2011 |
| Aroclor-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Metals** | | | | | | | | | | |
| Antimony | Subchronic | 4.0E-04 | mg/kg/day | 0.15 | 6.0E-05 | mg/kg/day | Blood | 1000/1 | PPRTV | 7/29/2008 |
| | Chronic | 4.0E-04 | mg/kg/day | 0.15 | 6.0E-05 | mg/kg/day | Blood | 1000/1 | IRIS | 04/08/2011 |
| Arsenic | Chronic | 3.0E-04 | mg/kg/day | 1 | 3.0E-04 | mg/kg/day | Skin, CVS | 3/1 | IRIS | 04/08/2011 |
| Cadmium[3] | Chronic | 1.0E-03 | mg/kg/day | 0.03 | 2.5E-05 | mg/kg/day | Kidney | 10/1 | IRIS | 04/08/2011 |
| Cobalt | Subchronic | 3.0E-03 | mg/kg/day | 1 | 3.0E-03 | mg/kg/day | Thyroid | 300/1 | PPRTV | 8/25/208 |
| | Chronic | 3.0E-04 | mg/kg/day | 1 | 3.0E-04 | mg/kg/day | Blood | NA | PPRTV | 8/25/2008 |
| Iron | Subchronic | 7.0E-01 | mg/kg/day | 1 | 7.0E-01 | mg/kg/day | GS | 1.5 | PPRTV | 9/11/2006 |
| | Chronic | 7.0E-01 | mg/kg/day | 1 | 7.0E-01 | mg/kg/day | GS | 1.5 | PPRTV | 9/11/2006 |
| Lead | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese[4] | Chronic | 1.4E-01 | mg/kg/day | 1.00 | 1.4E-01 | mg/kg/day | CNS | 1 | IRIS | 04/08/2011 |
| Mercury[5] | Chronic | 3.0E-04 | mg/kg/day | 0.07 | 2.1E-05 | mg/kg/day | Autoimmune | 1000/1 | IRIS | 04/08/2011 |
| Molybdenum | Chronic | 5.0E-03 | mg/kg/day | 1 | 5.0E-03 | mg/kg/day | Gout | 30/1 | IRIS | 04/08/2011 |
| Nickel | Chronic | 2.0E-02 | mg/kg/day | 0.04 | 8.0E-04 | mg/kg/day | Body Weight | 300/1 | IRIS | 04/08/2011 |
| Vanadium | Subchronic | 1.0E-02 | mg/kg/day | 1 | 1.0E-02 | mg/kg/day | Kidney | 10 | ATSDR | 9/2009 |
| | Chronic | 5.0E-03 | mg/kg/day | 1 | 5.0E-03 | mg/kg/day | Kidney | 300 | RSL | 11/2010 |
| **Petroleum Hydrocarbons** | | | | | | | | | | |
| Diesel Range Organics | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Gasoline Range Organics | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Miscellaneous Parameters** | | | | | | | | | | |
| Hexavalent Chromium | Chronic | 3.0E-03 | mg/kg/day | 0.025 | 7.5E-05 | mg/kg/day | None Reported | 300/3 | IRIS | 04/08/2011 |

**Table 3-30**

**Non-Cancer Toxicity Data -- Oral/Dermal**
**Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


Notes:
1 - U.S. EPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
2 - Adjusted dermal RfD = Oral RfD x Oral Absorption Efficiency for Dermal.
3 - Values are for cadmium - diet.
4 - Values are for manganese - diet.
5 - Values are for mercuric chloride.

Definitions:
ATSDR = Agency for Toxic Substances and Disease Registry
CNS = Central Nervous System.
CVS = Cardiovascular system.
GS = Gastrointestinal.
IRIS = Integrated Risk Information System.
NA = Not available.
RSL = USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010.
PPRTV = Provisional Peer Reviewed Toxicity Value.

**Table 3-31**

**Non-Cancer Toxicity Data -- Inhalation**
**Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
**Page 1 of 2**

| Chemical of Potential Concern | Chronic/ Subchronic | Inhalation RfC | | Extrapolated RfD[1] | | Primary Target Organ(s) | Combined Uncertainty/Modifying Factors | RfC : Target Organ(s) | |
|---|---|---|---|---|---|---|---|---|---|
| | | Value | Units | Value | Units | | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Volatile Organic Compounds** | | | | | | | | | |
| 1,2,3-Trichlorobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | Subchronic | 2.0E-02 | $mg/m^3$ | 5.7E-03 | (mg/kg/day) | Urinary Tract | NA | PPRTV | 6/17/2009 |
| | Chronic | 2.0E-03 | $mg/m^3$ | 5.7E-04 | (mg/kg/day) | Adrenals | NA | PPRTV | 6/17/2009 |
| 1,3-Dichlorobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | Subchronic | 1.2E+00 | $mg/m^3$ | 3.4E-01 | (mg/kg/day) | Liver | NA | ATSDR | 07/2006 |
| | Chronic | 8.0E-01 | $mg/m^3$ | 2.3E-01 | (mg/kg/day) | Liver | 100/1 | IRIS | 04/08/2011 |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | |
| Benzo(a)anthracene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(a)pyrene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(b)fluoranthene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(k)fluoranthene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chrysene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibenzo(a,h)anthracene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Indeno(1,2,3-cd)pyrene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | Chronic | 3.0E-03 | $mg/m^3$ | 8.6E-04 | (mg/kg/day) | Respiratory | 3000/1 | IRIS | 04/08/2011 |
| **Polychlorinated Biphenyls** | | | | | | | | | |
| Aroclor-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Metals** | | | | | | | | | |
| Antimony | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arsenic | Chronic | 1.5E-05 | mg/m3 | 4.3E-06 | (mg/kg/day) | NA | NA | Cal EPA | 11/2010 |
| Cadmium | Chronic | 1.0E-05 | mg/m3 | 2.9E-06 | (mg/kg/day) | Kidney | NA | ATSDR | 9/2008 |
| Cobalt | Chronic | 6.0E-06 | $mg/m^3$ | 1.7E-06 | (mg/kg/day) | Lungs | NA | PPRTV | 8/25/2008 |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Lead | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | Chronic | 5.0E-05 | $mg/m^3$ | 1.4E-05 | (mg/kg/day) | CNS | 1000/1 | IRIS | 04/08/2011 |
| Mercury[2] | Chronic | 3.0E-05 | $mg/m^3$ | 8.6E-06 | (mg/kg/day) | Autoimmune | NA | Cal EPA | 11/2010 |
| Molybdenum | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Nickel | Chronic | 9.0E-05 | $mg/m^3$ | 2.6E-05 | (mg/kg/day) | Body Weight | NA | ASTDR | 9/2005 |
| Vanadium | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 3-31**

**Non-Cancer Toxicity Data -- Inhalation**
**Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
**Page 2 of 2**

| Chemical of Potential Concern | Chronic/ Subchronic | Inhalation RfC | | Extrapolated RfD(1) | | Primary Target Organ(s) | Combined Uncertainty/Modifying Factors | RfC : Target Organ(s) | |
|---|---|---|---|---|---|---|---|---|---|
| | | Value | Units | Value | Units | | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Petroleum Hydrocarbons** | | | | | | | | | |
| Diesel Range Organics | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Gasoline Range Organics | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Miscellaneous Parameters** | | | | | | | | | |
| Hexavalent Chromium | Chronic | 1.0E-04 | $mg/m^3$ | 2.9E-05 | (mg/kg/day) | Lungs | 300/1 | IRIS | 04/08/2011 |

Notes:
1 - Extrapolated RfD = RfC *$20m^3$/day / 70 kg
2 - Value is for mercuric chloride.
Definitions:
ATSDR = Agency for Toxic Substances and Disease Registry.
Cal EPA = California Environmental Protection Agency.
CNS = Central Nervous System.
IRIS = Integrated Risk Information System.
NA = Not available.
PPRTV = Provisional Peer Reviewed Toxicity Value.

**Table 3-32**

**Cancer Toxicity Data -- Oral/Dermal**
**Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Chemical of Potential Concern | Oral Cancer Slope Factor | | Oral Absorption Efficiency for Dermal[1] | Absorbed Cancer Slope Factor for Dermal[2] | | Weight of Evidence/ Cancer Guideline Description | Oral CSF | |
|---|---|---|---|---|---|---|---|---|
| | Value | Units | | Value | Units | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Volatile Organic Compounds** | | | | | | | | |
| 1,2,3-Trichlorobenzene | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1 | 2.9E-02 | $(mg/kg/day)^{-1}$ | NA | PPRTV | 6/17/2009 |
| 1,3-Dichlorobenzene | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | 5.4E-03 | $(mg/kg/day)^{-1}$ | 1 | 5.4E-03 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | |
| Benzo(a)anthracene[3] | 7.3E-01 | $(mg/kg/day)^{-1}$ | 1 | 7.3E-01 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 7/1993 |
| Benzo(a)pyrene[3] | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1 | 7.3E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | IRIS | 04/08/2011 |
| Benzo(b)fluoranthene[3] | 7.3E-01 | $(mg/kg/day)^{-1}$ | 1 | 7.3E-01 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 7/1993 |
| Benzo(k)fluoranthene[3] | 7.3E-02 | $(mg/kg/day)^{-1}$ | 1 | 7.3E-02 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 7/1993 |
| Chrysene[3] | 7.3E-03 | $(mg/kg/day)^{-1}$ | 1 | 7.3E-03 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 7/1993 |
| Dibenzo(a,h)anthracene[3] | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1 | 7.3E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 7/1993 |
| Indeno(1,2,3-cd)pyrene[3] | 7.3E-01 | $(mg/kg/day)^{-1}$ | 1 | 7.3E-01 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 7/1993 |
| Naphthalene | NA | NA | NA | NA | NA | C / Possible human carcinogen | IRIS | 04/08/2011 |
| **Polychlorinated Biphenyls** | | | | | | | | |
| Aroclor-1254 | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1 | 2.0E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(2) | 9/1996 |
| Aroclor-1260 | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1 | 2.0E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(2) | 9/1996 |
| **Metals** | | | | | | | | |
| Antimony | NA | NA | NA | NA | NA | NA | NA | NA |
| Arsenic | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1 | 1.5E+00 | $(mg/kg/day)^{-1}$ | A / Known human carcinogen | IRIS | 04/08/2011 |
| Cadmium | NA | NA | NA | NA | NA | B1 / Probable human carcinogen | IRIS | 04/08/2011 |
| Cobalt | NA | NA | NA | NA | NA | NA | NA | NA |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA |
| Lead | NA | NA | NA | NA | NA | B2 / Probable human carcinogen | IRIS | 04/08/2011 |
| Manganese | NA | NA | NA | NA | NA | D / Not classifiable as to human carcinogenicity | IRIS | 04/08/2011 |
| Mercury | NA | NA | NA | NA | NA | C / Possible human carcinogen | IRIS | 04/08/2011 |
| Molybdenum | NA | NA | NA | NA | NA | NA | NA | NA |
| Nickel | NA | NA | NA | NA | NA | NA | NA | NA |
| Vanadium | NA | NA | NA | NA | NA | NA | NA | NA |
| **Petroleum Hydrocarbons** | | | | | | | | |
| Diesel Range Organics | NA | NA | NA | NA | NA | NA | NA | NA |
| Gasoline Range Organics | NA | NA | NA | NA | NA | NA | NA | NA |
| **Miscellaneous Parameters** | | | | | | | | |
| Hexavalent Chromium[3] | 5.0E-01 | $(mg/kg/day)^{-1}$ | 0.025 | 2.0E+01 | $(mg/kg/day)^{-1}$ | A / Known human carcinogen | NJ | 11/2010 |

**Table 3-32**

**Cancer Toxicity Data -- Oral/Dermal**
**Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


Notes:
1 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
2 - Adjusted cancer slope factor for dermal = Oral cancer slope factor / Oral Absorption Efficiency for Dermal.
3 - Several PAHs and hexavalent chromium are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
Cal EPA = California Environmental Protection Agency.
IRIS = Integrated Risk Information System.
NA = Not available.
NJ = New Jersey.
PPRTV = Provisional Peer Reviwed Toxicity Value.
USEPA(1) = OSWER Directive No.9285.7-75.
USEPA(2) = USEPA, PCBs: Cancer Dose-Response Assessment and Applications to Environmental Mixtures, September 1996, EPA/600/P-96/001F.

**Table 3-33**

**Cancer Toxicity Data -- Inhalation**
**Tax Blocks Soil**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Chemical of Potential Concern | Unit Risk | | Inhalation Cancer Slope Factor[1] | | Weight of Evidence/ Cancer Guideline Description | Unit Risk : Inhalation CSF | |
|---|---|---|---|---|---|---|---|
| | Value | Units | Value | Units | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Volatile Organic Compounds** | | | | | | | |
| 1,2,3-Trichlorobenzene | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | 1.1E-05 | $(ug/m^3)^{-1}$ | 3.9E-02 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | |
| Benzo(a)anthracene[2] | 1.1E-04 | $(ug/m^3)^{-1}$ | 3.9E-01 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Benzo(a)pyrene[2] | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.9E+00 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Benzo(b)fluoranthene[2] | 1.1E-04 | $(ug/m^3)^{-1}$ | 3.9E-01 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Benzo(k)fluoranthene[2] | 1.1E-04 | $(ug/m^3)^{-1}$ | 3.9E-01 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Chrysene[2] | 1.1E-05 | $(ug/m^3)^{-1}$ | 3.9E-02 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Dibenzo(a,h)anthracene[2] | 1.2E-03 | $(ug/m^3)^{-1}$ | 4.2E+00 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Indeno(1,2,3-cd)pyrene[2] | 1.1E-04 | $(ug/m^3)^{-1}$ | 3.9E-01 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Naphthalene | 3.4E-05 | $(ug/m3)^{-1}$ | 1.2E-01 | $(mg/kg/day)^{-1}$ | C / Possible Human Carcinogen | Cal EPA | 11/2010 |
| **Polychlorinated Biphenyls** | | | | | | | |
| Aroclor-1254 | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.0E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 9/1996 |
| Aroclor-1260 | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.0E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 9/1996 |
| **Metals** | | | | | | | |
| Antimony | NA | NA | NA | NA | NA | NA | NA |
| Arsenic | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.5E+01 | $(mg/kg/day)^{-1}$ | A / Known human carcinogen | IRIS | 04/08/2011 |
| Cadmium | 1.8E-03 | $(ug/m^3)^{-1}$ | 6.3E+00 | $(mg/kg/day)^{-1}$ | B1 / Probable human carcinogen | IRIS | 04/08/2011 |
| Cobalt | 9.0E-03 | $(ug/m^3)^{-1}$ | 3.2E+01 | $(mg/kg/day)^{-1}$ | NA | PPRTV | 8/25/2008 |
| Iron | NA | NA | NA | NA | NA | NA | NA |
| Lead | NA | NA | NA | NA | B2 / Probable human carcinogen | IRIS | 04/08/2011 |
| Manganese | NA | NA | NA | NA | D / Not classifiable as to human carcinogenicity | IRIS | 04/08/2011 |
| Mercury | NA | NA | NA | NA | C / Possible human carcinogen | IRIS | 04/08/2011 |
| Molybdenum | NA | NA | NA | NA | NA | NA | NA |
| Nickel | 2.6E-04 | $(ug/m^3)^{-1}$ | 9.1E-01 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |

**Table 3-33**

**Cancer Toxicity Data -- Inhalation**
**Tax Blocks Soil**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Chemical of Potential Concern | Unit Risk | | Inhalation Cancer Slope Factor[1] | | Weight of Evidence/ Cancer Guideline Description | Unit Risk : Inhalation CSF | |
|---|---|---|---|---|---|---|---|
| | Value | Units | Value | Units | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Metals (Continued)** | | | | | | | |
| Vanadium | NA | NA | NA | NA | NA | NA | NA |
| **Petroleum Hydrocarbons** | | | | | | | |
| Diesel Range Organics | NA | NA | NA | NA | NA | NA | NA |
| Gasoline Range Organics | NA | NA | NA | NA | NA | NA | NA |
| **Miscellaneous Parameters** | | | | | | | |
| Hexavalent Chromium[2] | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.9E+02 | $(mg/kg/day)^{-1}$ | A / Known human carcinogen | IRIS | 04/08/2011 |

Notes:

1 - Inhalation CSF = Unit Risk * 70 kg / $20m^3$/day.

2 - Several PAHs and hexavalent chromium are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

Definitions:

Cal EPA = California Environmental Protection Agency.

IRIS = Integrated Risk Information System.

NA = Not available.

PPRTV = Provisional Peer Reviewed Toxicity Value.

USEPA(1) = USEPA, PCBs: Cancer Dose-Response Assessment and Applications to Environmental Mixtures, September 1996, EPA/600/P-96/001F.

**Figure 3-1**

**Human Health Conceptual Site Model - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

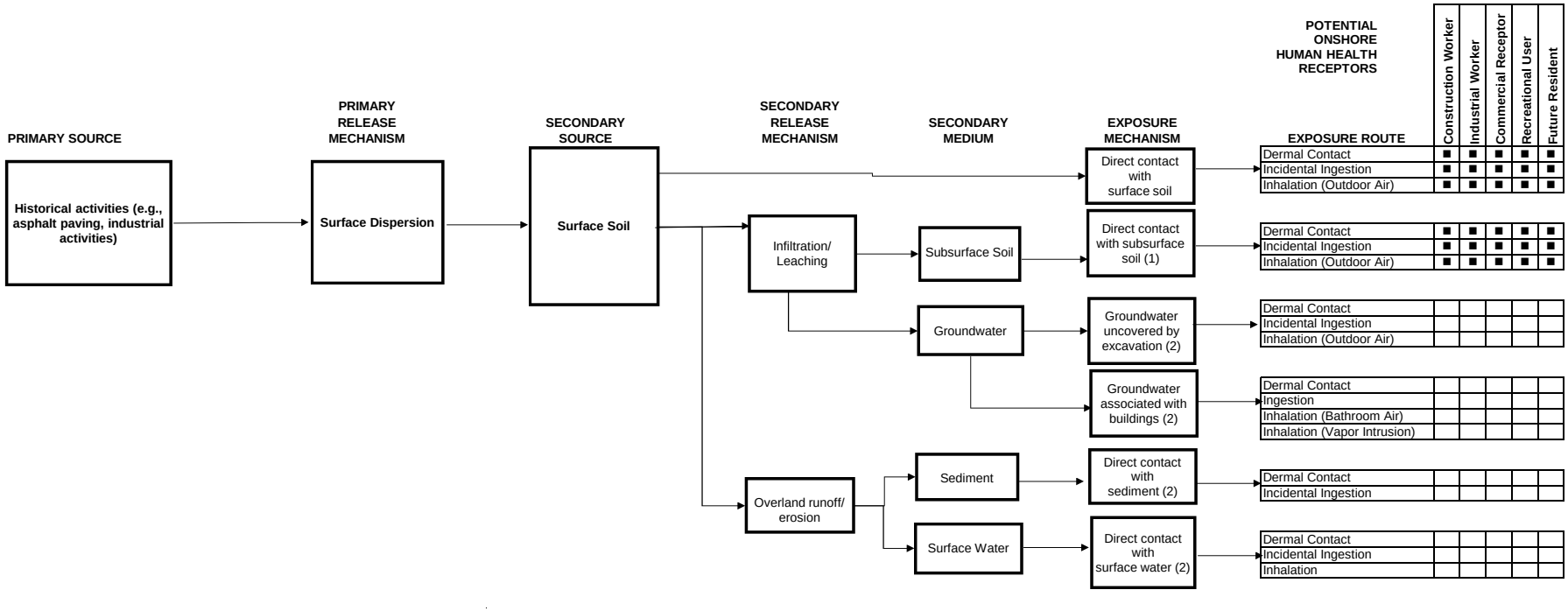


■ = POTENTIALLY COMPLETE EXPOSURE PATHWAY

1. Direct contact with subsurface soil (2 to 10 feet below ground surface) is not expected for industrial workers, commercial receptors, recreational users, and hypothetical residents. Direct exposure to subsurface soil would not be likely unless future construction activities brought subsurface soil to the surface. However, this pathway was evaluated to aid in risk-management decisions.
2. Exposure to media other than soils were not addressed for this risk evaluation. Groundwater will be addressed for the Middle River Complex in a Groundwater Response Action Plan provided under a separate cover. Drainage (overland flow) discharges at the Middled River Complex are permitted throught the State of Maryland NPDES.

# Section 4
# Risk Characterization Results

Section 4 presents risk characterization results for chemicals of potential concern (COPC) detected in soils in each of the tax blocks. Potential risks from direct-contact exposures to soil as well as a refined evaluation of the potential for chemical migration from soils to groundwater are provided. Risk assessment uncertainties common to all tax blocks are discussed in this section on a block-specific basis, as necessary. Risk assessment sample calculations are in Appendix D. The results of the risk assessment of the exposure-point concentration (EPC) for COPC detected in each tax block are summarized in this section and also presented in detail in Appendix D in the U.S. Environmental Protection Agency's (USEPA) *Risk Assessment Guidance for Superfund (RAGS) Part D* format tables. Risk estimates and hazard indices, calculated on a location-specific basis, are in Appendix E.

## 4.1 RISK CHARACTERIZATION RESULTS: TAX BLOCK D

### 4.1.1 Noncarcinogenic Risks—RME

Tables 4-1 through 4-3 summarize the chemical concentrations detected in Block D soil samples. Cumulative hazard indices (HIs) for the receptors hypothetically exposed to COPC in surface and subsurface soil in Block D are summarized below. Chemicals contributing to target-organ-specific HIs greater than one are considered chemicals of concern (COC) and are listed by environmental medium in Table 4-4. These COC will be further evaluated in the feasibility study (FS) for the tax blocks. The "risk drivers" listed in the following table are the predominant COPC contributing to the medium-specific cumulative risk estimates:

| Receptor | Environmental medium | Hazard index | Primary risk drivers |
|---|---|---|---|
| Construction worker | Surface soil (SS) | 1 | SS: No COC[(1)] |
| | Subsurface soil (SB) | 1 | SB: No COC[(1)] |
| Industrial/commercial worker | Surface soil | 0.05 | SS: No COC[(1)] |
| | Subsurface soil | 0.07 | SB: No COC[(1)] |
| Child commercial receptor | Surface soil | 0.4 | SS: No COC[(1)] |
| | Subsurface soil | 0.5 | SB: No COC[(1)] |

| Receptor | Environmental medium | Hazard index | Primary risk drivers |
|---|---|---|---|
| Adolescent commercial receptor | Surface soil | 0.08 | SS: No COC[(1)] |
| | Subsurface soil | 0.1 | SB: No COC[(1)] |
| Child recreational user | Surface soil | 0.8 | SS: No COC[(1)] |
| | Subsurface soil | 1 | SB: No COC[(1)] |
| Adolescent recreational user | Surface soil | 0.1 | SS: No COC[(1)] |
| | Subsurface soil | 0.2 | SB: No COC[(1)] |
| Adult recreational user | Surface soil | 0.08 | SS: No COC[(1)] |
| | Subsurface soil | 0.1 | SB: No COC[(1)] |
| Child resident | Surface soil | 1 | SS: No COC[(1)] |
| | Subsurface soil | 1 | SB: No COC[(1)] |
| Adolescent resident | Surface soil | 0.2 | SS: No COC[(1)] |
| | Subsurface soil | 0.3 | SB: No COC[(1)] |
| Adult resident | Surface soil | 0.1 | SS: No COC[(1)] |
| | Subsurface soil | 0.2 | SB: No COC[(1)] |

[(1)] HIs calculated on a target-organ-specific basis do not exceed 1. Therefore, no COC were identified for this medium

Hazard indices calculated on a target-organ-specific basis do not exceed 1 for any of the receptors evaluated. Consequently, adverse non-carcinogenic health effects are not anticipated under the conditions established in the exposure assessment.

Risk estimates calculated on a location-specific basis are in Appendix E. None of the location-specific HIs calculated for the typical industrial worker exposed to COPC in surface soil, shallow subsurface soils, or deeper saturated-zone soils exceed 1. HIs calculated for the hypothetical future resident for samples from five surface soil locations (maximum HI=2.1); 17 shallow subsurface soil locations (maximum HI=2.6), and 13 deeper saturated-zone soil locations (maximum HI=3.8) marginally exceed 1; arsenic, iron, and cobalt are the major contributors to risk. Most of these locations are in the panhandle portion of Block D.

### 4.1.2 Carcinogenic Risks—RME

Cancer risk estimates for receptors hypothetically exposed to EPC for COPC in surface and subsurface soil in Block D are summarized in the following table. Chemicals contributing an incremental lifetime-cancer risk (ILCR) greater than $1\times10^{-6}$ are listed in Table 4-4 by environmental medium. Chemicals are considered COC if the cumulative risk estimate for the environmental medium exceeds $1\times10^{-5}$. Block D COC will be further evaluated in the FS. The "risk drivers" in the following table are the predominant COPC contributing to the cancer risk estimates presented here by medium:

| Receptor | Environmental medium | Cancer risk estimates | Primary risk drivers[1] |
|---|---|---|---|
| Construction worker | Surface soil (SS) | $3\times10^{-6}$ | SS: No COC[2] |
| | Subsurface soil (SB) | $2\times10^{-6}$ | SB: No COC[2] |
| Industrial/commercial worker | Surface soil | $1\times10^{-5}$ | SS: No COC[2] |
| | Subsurface soil | $5\times10^{-6}$ | SB: No COC[2] |
| Child + adolescent commercial receptor | Surface soil | *$1\times10^{-4}$*[3] | SS: BaPEq, As, Cr VI |
| | Subsurface soil | *$3\times10^{-5}$* | SB: BaPEq, As, Cr VI |
| Lifelong recreational user | Surface soil | **$2\times10^{-4}$**[4] | SS: BaPEq, As, Cr VI |
| | Subsurface soil | *$5\times10^{-5}$*[3] | SB: BaPEq, As, Cr VI |
| Lifelong resident | Surface soil | **$3\times10^{-4}$**[4] | SS: BaPEq, As, Cr VI |
| | Subsurface soil | *$7\times10^{-5}$*[3] | SB: BaPEq, As, Cr VI |

[1] Arsenic (As), hexavalent chromium (Cr VI), benzo(a)pyrene equivalents (BaPEq).

[2] ILCRs do not exceed $1\times10^{-5}$. Therefore, no COC were identified for this medium.

[3] The medium-specific ILCR exceeds $1\times10^{-5}$ (ILCRs are italicized).

[4] The medium-specific ILCR exceeds $1\times10^{-4}$ (ILCRs are bolded).

Cumulative cancer-risk estimates for the lifelong recreational user and the lifelong resident exposed to EPC for COPC in surface soil exceed the USEPA's target cancer-risk range. Cumulative cancer-risk estimates for these receptors and the child/adolescent commercial receptor also exceed MDE's cumulative risk benchmark of $1\times10^{-5}$ for surface and subsurface soil. Cancer risk estimates for the construction worker and the industrial/commercial worker do not exceed either USEPA or MDE cumulative cancer risk benchmarks. The primary risk drivers are the benzo(a)pyrene equivalents (BaPEq), and, to a lesser extent, arsenic and hexavalent chromium. However, as noted earlier, hexavalent chromium is not the dominant chromium species in the limited number of soil samples specifically analyzed for hexavalent chromium. Consequently, the ILCRs for chromium for soils may be overestimated.

Cancer risk estimates calculated on a location-specific basis are in Appendix E. Although location-specific risk estimates for the typical industrial worker exposed to COPC concentrations in surface, shallow subsurface, or deeper saturated-zone soils exceed $1\times10^{-5}$ at a limited number of Block D locations, none of the risk estimates exceed $1\times10^{-4}$. In contrast, risk estimates for the hypothetical future resident for several locations scattered across Block D exceed $1\times10^{-4}$, and estimates for four surface and one shallow subsurface-soil locations exceed $1\times10^{-3}$. None of the future-resident risk estimates for deeper saturated-zone soils exceed $1\times10^{-3}$. As noted above, BaPEq are the primary risk drivers.

### 4.1.3 Lead Risks/GRO/DRO

Lead was identified as a "global" COPC in surface soil and subsurface soil. However, the maximum lead concentration in subsurface soils is the only detection (SB-783 [1,010 mg/kg]) in Block D to exceed the COPC screening level. Analytical data for nearby sampling locations are all less than 120 mg/kg and the arithmetic-mean concentrations for Block F surface and subsurface soils samples are less than 50 mg/kg. Therefore, lead concentrations in Block D soils will not be further evaluated in this HHRA.

| Environmental medium | Maximum detected lead concentration | Arithmetic-mean lead concentration | COPC screening level [(1)] |
|---|---|---|---|
| Surface soil | 75 mg/kg | 20.6 mg/kg | 400 mg/kg |
| Subsurface soil | 1,010 mg/kg | 22.9 mg/kg | 400 mg/kg |

[(1)] COPC screening levels are defined and referenced in Section 3

Maximum detected GRO concentrations in Block D surface and subsurface soil do not exceed residential or non-residential MDE soil cleanup standards. However, the maximum detected DRO concentrations in the surface soil (1,800 mg/kg; SB-32A) exceed both MDE standards (230 mg/kg and 620 mg/kg, respectively).

## 4.2 RISK CHARACTERIZATION RESULTS: TAX BLOCK E

### 4.2.1 Noncarcinogenic Risks—RME

Tables 4-5 through 4-7 summarize chemical concentrations detected in Block E soil samples. Cumulative HIs for the receptors hypothetically exposed to EPC for COPC for surface and subsurface soil in Block E are summarized below. Chemicals contributing to target-organ-specific HIs greater than one (i.e., COC) are listed by environmental medium in Table 4-8. These COC will be further evaluated in the FS for the tax blocks. The "risk drivers" listed in the following table are the predominant COPC contributing to the medium-specific cumulative risk estimates:

| Receptor | Environmental medium | Hazard index | Primary risk drivers[1][5] |
|---|---|---|---|
| Construction worker | Surface soil (SS) | **13**[4] | SS: A-1254 |
| | Subsurface soil (SB) | **4**[4] | SB: A-1254 |
| Industrial/commercial worker | Surface soil | **3**[4] | SS: A-1254 |
| | Subsurface soil | *2*[2] | SB: No COC[3] |
| Child commercial receptor | Surface soil | **12**[4] | SS: A-1254 |
| | Subsurface soil | **5**[4] | SB: A-1254 |
| Adolescent commercial receptor | Surface soil | **4**[4] | SS: A-1254 |
| | Subsurface soil | *2*[2] | SB: No COC[3] |
| Child recreational user | Surface soil | **24**[4] | SS: A-1254 |
| | Subsurface soil | **11**[4] | SB: 123-TCB, 124-TCB, A-1254 |
| Adolescent recreational user | Surface soil | **5**[4] | SS:A-1254 |
| | Subsurface soil | *3*[2] | SB: No COC[3] |
| Adult recreational user | Surface soil | **3**[4] | SS: A-1254 |
| | Subsurface soil | *2*[2] | SB: No COC[3] |
| Child resident | Surface soil | **34**[4] | SS: A-1254 |
| | Subsurface soil | **18**[4] | SB: 123-TCB, 124-TCB, A-1254 |
| Adolescent resident | Surface soil | **7**[4] | SS: A-1254 |
| | Subsurface soil | **7**[4] | SB: 123-TCB, 124-TCB, A-1254 |
| Adult resident | Surface soil | **5**[4] | SS: A-1254 |
| | Subsurface soil | **6**[4] | SB: 124-TCB |

[1] Aroclor-1254 (A-1254), 1,2,3-trichlorobenzene (123-TCB), 1,2,4-trichlorobenzene (124-TCB)

[2] The medium-specific hazard index exceeds one, but target-organ-specific hazard indices do not exceed one (HIs are italicized)

[3] HIs calculated on a target-organ-specific basis do not exceed 1. Therefore, no COC were identified for this medium

[4] The medium-specific hazard index exceeds one and target-organ-specific hazard indices exceed one (HIs are bolded)

[5] DRO was also selected as a COC as discussed in Section 4.2.3.

Except for the target-organ-specific HIs calculated for industrial workers, adolescent commercial receptors, or adolescent and adult recreational users exposed to subsurface soils, HI calculations based on the EPC for COPC exceed 1 for all receptors evaluated. Consequently, adverse non-carcinogenic health effects would be anticipated for these receptors under the conditions established in the exposure assessment. The primary risk drivers are Aroclor-1254, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene. As discussed below, the EPC, and thus the risk estimates, are strongly influenced by the maximum detected concentrations of these COPC in surface and subsurface soils:

| COPC | Maximum detected surface soil concentration (mg/kg) | Maximum detected subsurface soil concentration (mg/kg) |
|---|---|---|
| Aroclor-1254 | 36 | 9.8 |
| 1,2,3-trichlorobenzene | 43 | 2,200 |
| 1,2,4-trichlorobenzene | 210 | 9,600 |

Risk estimates calculated on a location-specific basis are in Appendix E. When significant figures are taken into consideration for the estimated HI results, none of the location-specific HIs calculated for the deeper saturated-zone soils exceed unity. However, the HIs calculated for the typical industrial worker and the hypothetical future resident for samples from a single shallow sub-surface soil location (SB-833) exceed 10. Risk drivers for that location are Aroclor-1254, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene. No other location-specific risk estimates for the industrial worker exposed to subsurface soils exceed one.

Location-specific risk estimates for eight other locations for the hypothetical future resident exposed to shallow subsurface soils range from 1–10; Aroclor-1254, cobalt, and iron are the primary risk drivers. Location-specific risk estimates for the typical industrial worker for one surface location (SB-353) and for eight surface locations scattered across the block exceed an HI of 10 and 1, respectively. As indicated in the risk estimate figures in Appendix E, risk estimates for the hypothetical future resident for several Block E surface locations exceed 10, one of which (SB-353) had an HI of 330; Aroclor-1254, cobalt, and iron are the primary contributors to the non-cancer risks.

In reviewing the location-specific risk estimates in Appendix E, note that Aroclor-1254 was only actually detected in samples from boring location SB-555 (maximum concentration = 36 mg/kg). Risk estimates for this compound were calculated for other locations assuming that half of the sample quantitation-limit (SQL) reported for this chemical was present at those locations. However, SQLs reported for Aroclor-1254 for several locations are elevated (many exceed 1 mg/kg) because of the Aroclor-1260 detections at these locations. Aroclor-1254 may or may not be at these locations; detection of this compound is potentially “masked” by Aroclor-1260 in these samples.

### 4.2.2 Carcinogenic Risks—RME

Cancer risk estimates for receptors hypothetically exposed to EPC for COPC in surface and subsurface soil in Block E are summarized in the following table. Chemicals contributing an ILCR greater than $1\times10^{-6}$ are listed by environmental medium in Table 4-8. Chemicals are considered COC if the cumulative risk estimate for the environmental medium exceeds $1\times10^{-5}$. Block E COC will be further evaluated in the FS. The "risk drivers" in the following table are the predominant COPC contributing to the cancer risk estimates, presented here by medium:

| Receptor | Environmental medium | Cancer risk estimates | Primary risk drivers[(1)] |
|---|---|---|---|
| Construction worker | Surface soil (SS) | *$3\times10^{-5}$*[(2)] | SS: A-1254, A-1260 |
| | Subsurface soil (SB) | *$1\times10^{-4}$*[(2)] | SB: A-1254, A-1260 |
| Industrial/commercial worker | Surface soil | **$2\times10^{-4}$**[(3)] | SS: A-1254, A-1260, BaPEq |
| | Subsurface soil | **$7\times10^{-4}$**[(3)] | SB: A-1254, A-1260, BaPEq, 124-TCB |
| Child + adolescent commercial receptor | Surface soil | **$3\times10^{-4}$**[(3)] | SS: A-1254, A-1260, BaPEq, As, Cr VI |
| | Subsurface soil | **$1\times10^{-3}$**[(3)] | SB: A-1254, A-1260, BaPEq, 124-TCB |
| Lifelong recreational user | Surface soil | **$6\times10^{-4}$**[(3)] | SS: A-1254, A-1260, BaPEq, 124-TCB, As, Cr VI |
| | Subsurface soil | **$3\times10^{-3}$**[(3)] | SB: A-1254, A-1260, BaPEq, 124-TCB, As, Cr VI |
| Lifelong resident | Surface soil | **$8\times10^{-4}$**[(3)] | SS: A-1254, A-1260, BaPEq, 124-TCB, As, Cr VI |
| | Subsurface soil | **$4\times10^{-3}$**[(3)] | SB: A-1254, A-1260, BaPEq, 124-TCB, 14-DCB, As, Cr VI |

[(1)] Aroclor-1254 (A-1254), 1,2,4-trichlorobenzene (124-TCB), Arsenic (As), hexavalent chromium (Cr VI), benzo(a)pyrene equivalents (BaPEq), 1,4-dichlorobenzene (14-DCB)

[(2)] The medium-specific ILCR exceeds $1\times10^{-5}$ (ILCRs are italicized)

[(3)] The medium-specific ILCR exceeds $1\times10^{-4}$ (ILCRs are bolded)

Except for the construction worker, cumulative cancer risk estimates for the receptors listed above exceed the USEPA's target cancer risk range. Cumulative cancer risk estimates for the construction worker exceed MDE's cumulative risk benchmark of $1\times10^{-5}$. The primary risk drivers are the Aroclors (particularly, Aroclor-1260), BaPEq, chlorobenzene compounds, and, to a lesser extent, arsenic and hexavalent chromium. However, as noted earlier, hexavalent chromium is not the dominant chromium species in the limited number of soil samples specifically analyzed for hexavalent chromium. Consequently, the ILCRs for chromium for soils may be overestimated. As discussed below, cancer risk estimates are strongly influenced by the maximum detected concentrations of these COPC in surface and subsurface soils.

Risk estimates calculated on a location-specific basis are in Appendix E. Aroclor-1260 is the predominant risk driver. With three exceptions (SB-503, SB-833, SB-827), cancer risk estimates for the industrial worker exposed to the deeper saturated-zone soils (greater than 10 feet bgs) do not exceed $1\times10^{-5}$; none of these estimates exceed $1\times10^{-4}$. Except for samples from locations SB-503 and SB-833, none of the cancer risk estimates for the hypothetical future resident exposed to the deeper saturated-zone soils exceed $1\times10^{-4}$. However, as detailed in Appendix E, risk estimates for both industrial workers and future residents being exposed at several surface and subsurface (2–10 feet bgs) sampling locations exceed $1\times10^{-4}$, one of which even exceeds $1\times10^{-1}$ (i.e., a one in 10 probability). Of particular note are the risk estimates for samples associated with boring locations SB-353 and -833, which had the greatest concentrations of Aroclor-1260 in surface and subsurface soil samples, respectively.

### 4.2.3 Lead Risks/GRO/DRO

Lead was identified as a "global" COPC in surface soil and subsurface soil. However, the maximum lead concentrations in surface and subsurface soils do not exceed the COPC screening level. Therefore, lead concentrations in the Block E soils are not further evaluated in this HHRA.

| Environmental medium | Maximum detected lead concentration | Arithmetic-mean lead concentration | COPC screening-*level*[(1)] |
|---|---|---|---|
| Surface soil | 278 mg/kg | 21.6 mg/kg | 400 mg/kg |
| Subsurface soil | 14.4 mg/kg | 3.6 mg/kg | 400 mg/kg |

[(1)] COPC screening levels are defined and referenced in Section 3

Maximum detected GRO concentrations in Block E surface and subsurface soil do not exceed residential or non-residential MDE soil-screening levels. However, the maximum detected DRO concentrations in the surface (8,900 mg/kg; SB-833) and subsurface (28,000 mg/kg; SB-833) soils exceed the MDE residential soil-screening level (230 mg/kg) and also exceed the MDE non-residential soil-screening level (620 mg/kg). Additionally, as discussed in Section 5.3, two detected DRO concentrations in Block E soil exceed the calculated industrial risk-based concentration (6,100 mg/kg) based on an HQ of 0.1 and MDE risk assessment methodology. Because DRO concentrations exceed the 6,100 mg/kg risk-based concentration, DRO was selected as a COC for Block E (see Section 5.3 for a more detailed analysis).

## 4.3 RISK CHARACTERIZATION RESULTS: TAX BLOCK F

### 4.3.1 Noncarcinogenic Risks—RME

Tables 4-9 through 4-11 summarize the chemical concentrations detected in Block F soil samples. Cumulative HIs for receptors hypothetically exposed to EPC for COPC in surface and subsurface soil in Block F are summarized below. Chemicals contributing to target-organ-specific HIs greater than one (i.e., COC) are listed by environmental medium in Table 4-12. These COC will be further evaluated in the FS for the tax blocks. The "risk drivers" listed in the following table are the predominant COPC contributing to the medium-specific cumulative risk estimates:

| Receptor | Environmental medium | Hazard index | Primary risk drivers[1] |
|---|---|---|---|
| Construction worker | Surface soil (SS) | 0.5 | SS: No COC[3] |
| | Subsurface soil (SB) | *2*[2] | SB: No COC[3] |
| Industrial/commercial worker | Surface soil | 0.05 | SS: No COC[3] |
| | Subsurface soil | 0.2 | SB: No COC[3] |
| Child commercial receptor | Surface soil | 0.4 | SS: No COC[3] |
| | Subsurface soil | 0.5 | SB: No COC[3] |
| Adolescent commercial receptor | Surface soil | 0.08 | SS: No COC[3] |
| | Subsurface soil | 0.1 | SB: No COC[3] |
| Child recreational user | Surface soil | 0.7 | SS: No COC[3] |
| | Subsurface soil | 1 | SB: No COC[3] |
| Adolescent recreational user | Surface soil | 0.1 | SS: No COC[3] |
| | Subsurface soil | 0.4 | SB: No COC[3] |
| Adult recreational user | Surface soil | 0.08 | SS: No COC[3] |
| | Subsurface soil | 0.3 | SB: No COC[3] |
| Child resident | Surface soil | 1 | SS: No COC[3] |
| | Subsurface soil | *2*[2] | SB: No COC[3] |
| Adolescent resident | Surface soil | 0.2 | SS: No COC[3] |
| | Subsurface soil | 1 | SB: No COC[3] |
| Adult resident | Surface soil | 0.1 | SS: No COC[3] |
| | Subsurface soil | 0.9 | SB: No COC[3] |

[1] There are no primary risk drivers for any receptor.

[2] The medium-specific hazard index exceeds 1, but target-organ-specific hazard indices do not exceed 1 (HIs are italicized)

[3] HIs calculated on a target-organ-specific basis do not exceed 1. Therefore, no COC were identified for this medium.

Hazard indices calculated for the Block F EPCs on a target-organ-specific basis do not exceed 1. Consequently adverse non-carcinogenic health effects would not be anticipated for the construction worker, the industrial/commercial worker, the child/adolescent commercial receptor, the recreational user, or a resident under the conditions established in the exposure assessment. HIs were also calculated for surface soils, subsurface soils (2–10 feet bgs), and saturated-zone

soils (greater than 10 feet bgs) on a location-specific basis (Appendix E) for hypothetical future residents and industrial workers. None of the location-specific total HIs calculated for the industrial worker exceed unity (i.e., an HI of 1). Total HIs calculated for surface soil from two locations and for subsurface soils from two locations range from 1.1–1.9 for the hypothetical future resident; all other HIs calculated for the resident are less than 1. These results support the conclusion that adverse non-carcinogenic health effects would not be anticipated for the receptors evaluated.

### 4.3.2 Carcinogenic Risks—RME

Cancer risk estimates for receptors hypothetically exposed to EPC of COPC in surface and subsurface soil in Block F are summarized in the following table. Chemicals contributing an ILCR greater than $1\times10^{-6}$ are listed by environmental medium in Table 4-12. Chemicals are considered COC if the cumulative risk estimate for the environmental medium exceeds $1\times10^{-5}$. Block F COC will be further evaluated in the FS. The "risk drivers" in the following table are the predominant COPC contributing to the cancer risk estimates presented here by medium:

| Receptor | Environmental medium | Cancer risk estimates | Primary risk drivers[(1)] |
|---|---|---|---|
| Construction worker | Surface soil (SS) | $5\times10^{-6}$ | SS: No COC[(2)] |
| | Subsurface soil (SB) | *$3\times10^{-6}$* | SB: No COC[(2)] |
| Industrial/commercial worker | Surface soil | *$2\times10^{-5}$*[(3)] | SS: BaPEq |
| | Subsurface soil | $9\times10^{-6}$ | SB: No COC[(2)] |
| Child + adolescent commercial receptor | Surface soil | **$2\times10^{-4}$**[(4)] | SS: BaPEq, As, Cr VI |
| | Subsurface soil | $1\times10^{-5}$ | SB: No COC[(2)] |
| Lifelong recreational user | Surface soil | **$3\times10^{-4}$**[(4)] | SS: BaPEq, As, Cr VI |
| | Subsurface soil | *$3\times10^{-5}$*[(3)] | SB: BaPEq, As, Cr VI, Nap. |
| Lifelong resident | Surface soil | **$5\times10^{-4}$**[(4)] | SS: BaPEq, As, Cr VI |
| | Subsurface soil | *$7\times10^{-5}$*[(3)] | SB: BaPEq, As, Cr VI, Nap. |

[(1)] Arsenic (As), hexavalent chromium (Cr VI), benzo(a)pyrene equivalents (BaPEq), naphthalene (Nap.)
[(2)] ILCRs do not exceed $1\times10^{-5}$. Therefore, no COC were identified for this medium
[(3)] The medium-specific ILCR exceeds $1\times10^{-5}$ (ILCRs are italicized)
[(4)] The medium-specific ILCR exceeds $1\times10^{-4}$ (ILCRs are bolded)

Cumulative cancer-risk estimates for the child/adolescent commercial-receptor, lifelong recreational user, and the lifelong resident exposed to COPC in surface soil exceed the USEPA's target cancer-risk range. Cumulative cancer risk estimates for all receptors except the construction worker exposed to COPC in both surface subsurface soils and the industrial/commercial worker and child/adolescent commercial receptor exposed to COPC in subsurface soils exceed MDE's cumulative risk benchmark of $1\times10^{-5}$. In most cases, the primary

risk drivers are the BaPEq, and, to a lesser extent, arsenic and hexavalent chromium. (However, as noted earlier, hexavalent chromium is not the dominant chromium species in the limited number of soil samples specifically analyzed for hexavalent chromium. Consequently, the ILCRs for chromium for soils may be overestimated.)

Naphthalene is also a risk-driver for lifelong recreational users/residents hypothetically exposed to subsurface soils. The EPC for naphthalene (159 mg/kg) is more than an order of magnitude greater than the current USEPA RSL for industrial-worker exposure to soils (USEPA RSL = 18 mg/kg). As indicated in Table 4-12, the cancer risk estimates for naphthalene (a relatively volatile PAH compound) are driven by the inhalation exposure pathway. The naphthalene EPC evaluated is the maximum detected concentration (159 mg/kg at location SB-238, five-foot depth interval). Naphthalene concentrations at other Block F locations do not exceed COPC soil-screening levels. The naphthalene contamination detected at location SB-238 is co-located with a BaPEq concentration of approximately 3 mg/kg.

Cancer risk estimates were also calculated for surface soils, shallow subsurface soils (2-10 feet bgs), and saturated-zone soils (greater than 10 feet bgs) on a location-specific basis (Appendix E) for hypothetical future residents and industrial workers. BaPEq are the primary risk drivers. Cancer risk estimates for the typical industrial worker for samples from several locations exceed $1\times10^{-5}$; however, estimates for this receptor based on samples from only two surface soil locations (SB-95 and SB-268) exceed $1\times10^{-4}$.

Cancer risk estimates calculated for the hypothetical future resident on the basis of samples from approximately 50% of the surface soil locations exceed the $1\times10^{-5}$ cancer risk benchmark. BaPEq contamination and, thus, cancer-risk estimates for the hypothetical future resident, are generally less in samples collected from the shallow subsurface soil. Risk estimates for the hypothetical future resident for four surface locations exceed $1\times10^{-3}$; risk estimates for the industrial worker do not exceed $1\times10^{-3}$. The location-specific risk estimates for saturated-zone soil samples are typically less than those calculated for the surface and shallow-subsurface zones; only the location-specific risk estimate for the hypothetical future resident for the deep saturated-zone soils at location SB-268 exceeds $1\times10^{-4}$.

### 4.3.3 Lead Risks/GRO/DRO

Lead was identified as a "global" COPC in surface soil and subsurface soil. However, the maximum lead concentration in surface soils is the only one of two detections (SB-055 [420 mg/kg] and SB-268 [447 mg/kg]) in Block F to exceed the COPC screening level. Analytical data for nearby sampling locations are all less than 100 mg/kg, and the arithmetic-mean concentrations from Block F surface and subsurface soils samples are less than 60 mg/kg. Therefore, lead concentrations in Block F soils will not be further evaluated in this HHRA.

| Environmental medium | Maximum detected lead concentration | Arithmetic-mean lead concentration | COPC screening level (1) |
|---|---|---|---|
| Surface soil | 447 mg/kg | 58.9 mg/kg | 400 mg/kg |
| Subsurface soil | 81 mg/kg | 10.4 mg/kg | 400 mg/kg |

(1) COPC screening levels are defined and referenced in Section 3

Maximum detected GRO concentrations in Block F surface and subsurface soil do not exceed residential or non-residential MDE soil cleanup standards. However, the maximum detected DRO concentrations in surface (271 mg/kg at SB-238) and subsurface (881 mg/kg at SB-238) soils exceed both MDE screening levels (230 mg/kg and 620 mg/kg for residential and non-residential screening levels, respectively).

## 4.4 RISK CHARACTERIZATION RESULTS: TAX BLOCK G

### 4.4.1 Noncarcinogenic Risks—RME

Tables 4-13 through 4-15 summarize the chemical concentrations detected in Block G soil samples. Cumulative HIs for receptors hypothetically exposed to EPC for COPC detected in surface and subsurface soil in Block G are summarized below. Chemicals contributing to target-organ-specific HIs greater than one (i.e., COC) are listed by environmental medium in Table 4-16. These COC will be further evaluated in the FS for the tax blocks. The "risk drivers" listed in the following table are the predominant COPC contributing to the medium-specific cumulative risk estimates:

| Receptor | Environmental medium | Hazard index | Primary risk drivers[1] |
|---|---|---|---|
| Construction worker | Surface soil (SS) | *2*[2] | SS: No COC[3] |
| | Subsurface soil (SB) | *2*[2] | SB: No COC[3] |
| Industrial/commercial worker | Surface soil | 0.09 | SS: No COC[3] |
| | Subsurface soil | 0.1 | SB: No COC[3] |
| Child commercial receptor | Surface soil | 1 | SS: No COC[3] |
| | Subsurface soil | 0.7 | SB: No COC[3] |
| Adolescent commercial receptor | Surface soil | 0.2 | SS: No COC[3] |
| | Subsurface soil | 0.2 | SB: No COC[3] |
| Child recreational user | Surface soil | *2*[2] | SS: No COC[3] |
| | Subsurface soil | 1 | SB: No COC[3] |
| Adolescent recreational user | Surface soil | 0.4 | SS: No COC[3] |
| | Subsurface soil | 0.3 | SB: No COC[3] |
| Adult recreational user | Surface soil | 0.2 | SS: No COC[3] |
| | Subsurface soil | 0.2 | SB: No COC[3] |
| Child resident | Surface soil | **3**[4] | SS: cobalt |
| | Subsurface soil | *2*[2] | SB: No COC[3] |
| Adolescent resident | Surface soil | 0.5 | SS: No COC[3] |
| | Subsurface soil | 0.4 | SB: No COC[3] |
| Adult resident | Surface soil | 0.3 | SS: No COC[3] |
| | Subsurface soil | 0.2 | SB: No COC[3] |

(1) Cobalt (Co)

(2) The medium-specific hazard index exceeds one, but target-organ-specific hazard indices do not exceed one (HIs are italicized)

(3) HIs calculated on a target-organ-specific basis do not exceed 1. Therefore, no COC were identified for this medium.

(4) The medium-specific hazard index exceeds one and target-organ-specific hazard indices exceed one (HIs are bolded)

With one exception, hazard indices calculated on a target organ-specific basis for the Block G EPCs do not exceed 1. However, the total HI calculated for the child resident hypothetically exposed to cobalt concentrations in surface soil does exceed 1. The maximum surface soil concentration (51.2 mg/kg at location SB-197-SS) and the EPC for surface soils (41.2 mg/kg) exceed the current USEPA RSL for residential soils (23 mg/kg). This indicates a potential for adverse non-carcinogenic health effects for this receptor under the conditions established in the exposure assessment.

Note that the calculated EPC is strongly influenced by the positive cobalt detection reported for location SB-197-SS. Location-specific HIs calculated for cobalt at other Block G locations (Appendix E) do not exceed unity. Location SB-197 is otherwise unremarkable. Consequently, the cobalt concentration detected at this location (surface and subsurface) may be somewhat anomalous.

### 4.4.2 Carcinogenic Risks—RME

Cancer risk estimates for receptors hypothetically exposed to EPC of COPC detected in surface and subsurface soil in Block G are summarized in the following table. Chemicals contributing an ILCR greater than $1\times10^{-6}$ are listed by environmental medium in Table 4-16. Chemicals are considered COC if the cumulative risk estimate for the environmental medium exceeds $1\times10^{-5}$. Block G COC will be further evaluated in the FS. The "risk drivers" in the following table are the predominant COPC contributing to the cancer risk estimates, presented here by medium:

| Receptor | Environmental medium | Cancer risk estimates | Primary risk drivers[1] |
|---|---|---|---|
| Construction worker | Surface soil (SS) | $5\times10^{-6}$ | SS: No COC[2] |
| | Subsurface soil (SB) | $2\times10^{-6}$ | SB: No COC[2] |
| Industrial/commercial worker | Surface soil | *$2\times10^{-5}$*[3] | SS: BaPEq, As |
| | Subsurface soil | $6\times10^{-6}$ | SB: No COC[2] |
| Child + adolescent commercial receptor | Surface soil | *$1\times10^{-4}$*[3] | SS: BaPEq, As, Cr VI |
| | Subsurface soil | *$4\times10^{-5}$*[3] | SB: BaPEq, As, Cr VI |
| Lifelong recreational user | Surface soil | **$2\times10^{-4}$**[4] | SS: BaPEq, As, Cr VI |
| | Subsurface soil | *$8\times10^{-5}$*[3] | SB: BaPEq, As, Cr VI |
| Lifelong resident | Surface soil | **$3\times10^{-4}$**[4] | SS: BaPEq, As, Cr VI |
| | Subsurface soil | *$1\times10^{-4}$*[3] | SB: BaPEq, As, Cr VI |

[1] Arsenic (As), hexavalent chromium (Cr VI), benzo(a)pyrene equivalents (BaPEq)

[2] ILCRs do not exceed $1\times10^{-5}$. Therefore, no COC were identified for this medium.

[3] The medium-specific ILCR exceeds $1\times10^{-5}$ (ILCRs are italicized)

[4] The medium-specific ILCR exceeds $1\times10^{-4}$ (ILCRs are bolded)

Cumulative cancer-risk estimates for the lifelong recreational user and the lifelong resident exposed to COPC in surface soil exceed the USEPA's target cancer-risk range. Cumulative cancer risk estimates for all receptors except the construction worker exposed to COPC in surface and subsurface soils and the industrial worker exposed to COPC in subsurface soils exceed MDE's cumulative risk benchmark of $1\times10^{-5}$. The primary risk drivers are the BaPEq, and, to a lesser extent, arsenic and hexavalent chromium. However, as noted earlier, hexavalent chromium is not the dominant chromium species in the limited number of soil samples specifically analyzed for hexavalent chromium. Consequently, the ILCRs for chromium for soils may be overestimated.

Risk estimates calculated for surface soils, subsurface soils (2–10 feet bgs), and saturated-zone soils (greater than 10 feet bgs) on a location-specific basis for hypothetical future residents and industrial workers are in Appendix E. Cancer risk estimates calculated for the typical industrial worker exposed to COPC in samples from surface or shallow sub-surface soils exceed $1\times10^{-4}$ at

four and three locations, respectively; location-specific cancer risks for this receptor do not exceed $1\times10^{-3}$. Cancer risk estimates calculated for the hypothetical future resident for more than 50% of the locations evaluated exceed the $1\times10^{-5}$ cancer risk benchmark. Risk estimates for several locations exceed $1\times10^{-3}$. The location-specific risk estimates for saturated-zone soil samples collected from several locations exceed $1\times10^{-4}$, indicating COC contamination as deep as 15 feet bgs.

### 4.4.3 Lead Risks/GRO/DRO

Lead was identified as a "global" COPC in surface soil and subsurface soil. However, the maximum and arithmetic-mean lead concentrations detected in Block G soils are less than the COPC screening level. Therefore, lead concentrations in Block G soils will not be further evaluated in this HHRA.

| Environmental medium | Maximum detected lead concentration | Arithmetic-mean lead concentration | COPC screening level (1) |
|---|---|---|---|
| Surface soil | 340 mg/kg | 68.3 mg/kg | 400 mg/kg |
| Subsurface soil | 18 mg/kg | 7 mg/kg | 400 mg/kg |

(1) COPC screening levels are defined and referenced in Section 3

Maximum detected DRO concentrations in Block G surface and subsurface soil do not exceed residential or non-residential MDE soil cleanup standards. However, the maximum detected GRO concentrations in surface (810 mg/kg at SB-734) and subsurface (980 mg/kg at SB728) soils exceed both MDE screening levels (230 mg/kg and 620 mg/kg for residential and non-residential screening levels, respectively).

## 4.5 RISK CHARACTERIZATION RESULTS: TAX BLOCK H

### 4.5.1 Noncarcinogenic Risks—RME

Tables 4-17 through 4-19 summarize the chemical concentrations detected in Block H soil sample. Cumulative HIs for the receptors hypothetically exposed to EPC for COPC in surface and subsurface soil in Block H are summarized below. Chemicals contributing to target-organ-specific HIs greater than one (i.e., COC) are listed by environmental medium in Table 4-20. These COC will be further evaluated in the FS for the tax blocks. The "risk drivers"

listed in the following table are the predominant COPC contributing to the medium-specific cumulative risk estimates:

| Receptor | Environmental medium | Hazard index | Primary risk drivers |
|---|---|---|---|
| Construction worker | Surface soil (SS) | 0.4 | SS: No COC |
| | Subsurface soil (SB) | 0.5 | SB: No COC |
| Industrial/commercial worker | Surface soil | 0.03 | SS: No COC |
| | Subsurface soil | 0.04 | SB: No COC |
| Child commercial receptor | Surface soil | 0.3 | SS: No COC |
| | Subsurface soil | 0.3 | SB: No COC |
| Adolescent commercial receptor | Surface soil | 0.06 | SS: No COC |
| | Subsurface soil | 0.07 | SB: No COC |
| Child recreational user | Surface soil | 0.5 | SS: No COC |
| | Subsurface soil | 0.6 | SB: No COC |
| Adolescent recreational user | Surface soil | 0.1 | SS: No COC |
| | Subsurface soil | 0.1 | SB: No COC |
| Adult recreational user | Surface soil | 0.06 | SS: No COC |
| | Subsurface soil | 0.07 | SB: No COC |
| Child resident | Surface soil | 0.7 | SS: No COC |
| | Subsurface soil | 0.9 | SB: No COC |
| Adolescent resident | Surface soil | 0.1 | SS: No COC |
| | Subsurface soil | 0.2 | SB: No COC |
| Adult resident | Surface soil | 0.08 | SS: No COC |
| | Subsurface soil | 0.09 | SB: No COC |

Total hazard indices and hazard indices calculated on a target organ-specific basis that is based on Block H EPCs do not exceed 1 for any of the receptors evaluated. Consequently, adverse non-carcinogenic health effects would not be anticipated under the conditions established in the exposure assessment.

HIs were also calculated for surface soils, subsurface soils (2–10 feet bgs), and saturated-zone soils (greater than 10 feet bgs) on a location-specific basis (Appendix E) for hypothetical future residents and industrial workers. None of the location-specific total HIs calculated for the industrial worker exceed unity. Total HIs calculated for surface soil from one location and subsurface soils from three locations range from 1.3–1.6 for the hypothetical future resident; all other HIs calculated for the resident are less than 1. These results support the conclusion that adverse non-carcinogenic health effects would not be anticipated for the receptors evaluated.

### 4.5.2 Carcinogenic Risks—RME

Cancer risk estimates for receptors hypothetically exposed to surface and subsurface soil in Block H are summarized in the following table. Chemicals contributing an ILCR greater than

$1\times10^{-6}$ are listed by environmental medium in Table 4-20. Chemicals are considered COC if the cumulative risk estimate for the environmental medium exceeds $1\times10^{-5}$. COC for Block H will be further evaluated in the FS. The "risk drivers" in the following table are the predominant COPC contributing to the cancer risk estimates, presented here by medium:

| Receptor | Environmental medium | Cancer risk estimates | Primary risk drivers[1] |
|---|---|---|---|
| Construction worker | Surface soil (SS) | $8\times10^{-6}$ | SS: No COC[2] |
| | Subsurface soil (SB) | $1\times10^{-6}$ | SB: No COC[2] |
| Industrial/commercial worker | Surface soil | *$4\times10^{-5}$*[3] | SS: BaPEq |
| | Subsurface soil | $3\times10^{-6}$ | SB: No COC[2] |
| Child + adolescent commercial receptor | Surface soil | **$3\times10^{-4}$**[4] | SS: BaPEq, As, Cr VI |
| | Subsurface soil | *$2\times10^{-5}$*[3] | SB: BaPEq, As, Cr VI |
| Lifelong recreational user | Surface soil | **$6\times10^{-4}$**[4] | SS: BaPEq, As, Cr VI |
| | Subsurface soil | *$3\times10^{-5}$*[3] | SB: BaPEq, As, Cr VI |
| Lifelong resident | Surface soil | **$9\times10^{-4}$**[4] | SS: BaPEq, As, Cr VI |
| | Subsurface soil | *$4\times10^{-5}$*[3] | SB: BaPEq, As, Cr VI |

[1] Arsenic (As), hexavalent chromium (Cr VI), benzo(a)pyrene equivalents (BaPEq)

[2] ILCRs do not exceed $1\times10^{-5}$. Therefore, no COC were identified for this medium

[3] The medium-specific ILCR exceeds $1\times10^{-5}$ (ILCRs are italicized)

[4] The medium-specific ILCR exceeds $1\times10^{-4}$ (ILCRs are bolded)

Cumulative cancer-risk estimates (based on the Block H EPCs) for the lifelong recreational user, the lifelong resident, and the child/adolescent commercial receptor exposed to EPCs for COPC in surface soil exceed the USEPA's target cancer-risk range. Cumulative cancer risk estimates for these receptors exposed to COPC in subsurface soil and for the industrial/commercial worker exposed to COPC in surface soil exceed MDE's cumulative risk benchmark of $1\times10^{-5}$. Cancer risk estimates for the construction worker exposed to COPC in surface and subsurface soil and for the industrial/commercial worker exposed to COPC in subsurface soil do not exceed either USEPA or MDE cumulative cancer risk benchmarks. BaPEq are the primary risk drivers and, to a lesser extent, arsenic and hexavalent chromium. However, as noted earlier, hexavalent chromium is not the dominant chromium species in the limited number of soil samples specifically analyzed for hexavalent chromium. Consequently, the ILCRs for chromium for soils may be overestimated.

Cancer risk estimates were also calculated for surface soils, subsurface soils (2–10 feet bgs), and saturated-zone soils (greater than 10 feet bgs) on a location-specific basis (Appendix E) for hypothetical future residents and industrial workers. Cancer risk estimates developed for the hypothetical future resident for surface soils from boring locations SB-282A, -282D, and -604D,

and for subsurface soils (2–10 feet bgs) from soil-boring locations SB-282, -282B, -604B, -614, and -285 exceed $1\times10^{-4}$. Cancer risk estimates developed for the industrial worker for surface soils from boring location SB-604D exceed $1\times10^{-4}$; none of the cancer risk estimates developed for the industrial worker for subsurface soil locations exceed $1\times10^{-4}$. Cancer risk estimates developed for the hypothetical future resident for deeper saturated-zone soils from soil boring location SB-282 also exceed $1\times10^{-4}$. As summarized in Appendix E, cancer risk estimates developed for these receptors at several Block H locations exceed $1\times10^{-5}$. The locations exceeding $1\times10^{-5}$ are scattered across Block H.

### 4.5.3 Lead Risks/GRO/DRO

Lead was identified as a "global" COPC in surface soil and subsurface soil. However, the maximum and arithmetic-mean lead concentrations detected in Block H soils are less than the COPC screening level. Therefore, lead concentrations in Block H soils will not be further evaluated in this HHRA.

| Environmental medium | Maximum detected lead concentration | Arithmetic-mean lead concentration | COPC screening level [(1)] |
|---|---|---|---|
| Surface soil | 18 mg/kg | 6.8 mg/kg | 400 mg/kg |
| Subsurface soil | 17 mg/kg | 7.2 mg/kg | 400 mg/kg |

[(1)]COPC screening levels are defined and referenced in Section 3

The maximum detected concentration of DRO in surface soil (242 mg/kg at SB-201) marginally exceeds the MDE residential soil-screening level (230 mg/kg). However, no other GRO or DRO concentration reported for Block H soils exceeds the MDE residential standard. None of the reported DRO/GRO concentrations exceed the MDE industrial soil-screening level (620 mg/kg). These indicators of fuel-related contamination are not significant contaminants in Block H soils.

## 4.6 REFINED EVALUATION OF CHEMICAL MIGRATION FROM SOILS TO GROUNDWATER

This section presents the results of the refined evaluation of the potential for chemical migration from soils to groundwater. The methodology used for the evaluation is provided in Section 3.4.3. Block-specific comparisons of soil data to MDE groundwater-protection criteria and adjusted USEPA soil-screening levels (SSLs) for groundwater protection are included in the "Occurrence and Distribution of Chemicals" tables for surface soil and subsurface soil (Tables 4-1, 4-2, 4-5,

4-6, 4-9, 4-10, 4-13, 4-14, 4-17, and 4-18). The MDE groundwater-protection criteria are based on a DAF of 20, and the USEPA criteria in these tables have been adjusted (i.e., multiplied by 20) to be based on a DAF of 20. A global COPC for the soil to groundwater migration pathway was deemed a block-specific COPC for the migration to groundwater pathway if the chemical was detected in a block-specific data set. Using this methodology, block-specific migration-to-groundwater COPC are presented in Tables 4-21 and 4-22 for surface soil and subsurface soil, respectively.

Groundwater data were not evaluated in the quantitative risk assessment. However, depth to groundwater at the Middle River Complex (MRC) is relatively shallow (i.e., groundwater is typically within 10 feet of the surface), and, as mentioned previously, site contamination presumably occurred more than 40 years ago. Therefore, evaluating groundwater data is very important in assessing possible contaminant migration to groundwater. Groundwater data collected at the MRC during the May–June 2010 sampling event were used to evaluate the migration to groundwater pathway. These groundwater data were selected because they were collected recently and can therefore be reasonably assumed to represent current conditions.

The May–June 2010 groundwater data set was evaluated as a whole to determine if any migration to groundwater COPC have negatively affected site groundwater. Table 4-23 presents positive detections of chemicals detected in the May–June 2010 sampling event. Only the samples collected from the blocks evaluated in this HHRA (i.e., Blocks D, E, F, G, and H) are included in Table 4-23. Block identifiers are also included in that table's headers.

Descriptive statistics for the groundwater data set (e.g., maximum and mean concentrations, frequency of detection), relevant screening criteria (MDE groundwater cleanup standards, USEPA tap water RSLs, and SDWA MCLs), as well as results for the frequency of detected chemicals in groundwater that exceed (1) MDE groundwater cleanup standards, (2) USEPA tap water RSLs, and (3) 10× the tap water RSLs were calculated for Blocks E and G. These results are presented in Tables 4-24 and 4-25, respectively. Descriptive statistics were not calculated for groundwater collected from Blocks D, F, and H because only three samples, two samples, and three samples, respectively, are associated with these data sets.

Note that none of the PAHs or other semivolatile organic compounds (SVOCs) selected as migration to groundwater COPC appear in Table 4-23. PAHs and other SVOCs have not been frequent analytes in the groundwater sampling at the MRC in recent years because past sampling determined that PAHs are not significant COC in groundwater at these tax blocks. Therefore, PAHs and other SVOCs are not retained as COC for the migration from soil to groundwater pathway for these tax blocks and are not discussed further in this section. Pesticides and polychlorinated biphenyls (PCBs) were not analytes in the groundwater data set. Therefore, COC for pesticides and PCBs are selected using only the available soil data.

No filtered metals results are included in the groundwater data set used for evaluation. Therefore, the analysis is based on total metals results. However, concentrations of total metals in groundwater may be artificially elevated if sample turbidity was high during groundwater collection. Therefore, filtered groundwater results from prior sampling events (July–August 2008 and July–August 2009) (Appendix D) were considered to assess if metals results for groundwater were likely attributable to sample turbidity. However, in most cases, metals with total groundwater concentrations exceeding criteria in the 2010 data set had similar exceedances in the 2008 and 2009 groundwater data sets. Thus, incorporating filtered groundwater results into the evaluation would not greatly affect overall conclusions.

Numerous metals were retained as block-specific migration-to-groundwater COPC in both surface soil and subsurface soil. However, as Table 4-23 shows, only the metals migration-to-groundwater COPC arsenic, cobalt, iron, manganese, and nickel had detected concentrations in groundwater exceeding the USEPA tap water RSL. Therefore, these constituents are considered groundwater COPC for this evaluation, and other metals will not be further discussed. No results are available for the miscellaneous parameter hexavalent chromium in groundwater. Therefore, hexavalent chromium is discussed below where applicable.

***Block D surface soil***—Volatiles, pesticides/PCBs, metals, and hexavalent chromium were selected as "global" migration-to-groundwater COPC and were detected in Block D surface soil. Of the volatiles selected as "global" migration-to-groundwater COPC, 1,2,4-trimethylbenzene, benzene, ethylbenzene, and methylene chloride were not detected in soil at concentrations exceeding MDE groundwater-protection criterion or the USEPA SSL at a DAF of 20. They are therefore eliminated as COC.

Naphthalene is the only volatile organic compound (VOC) detected at a concentration exceeding these criteria (in one of 29 samples). The maximum concentration of naphthalene is greater than twice the SSL. However, note that the maximum concentration of naphthalene is less than twice the MDE criterion. Of the pesticides/PCBs, only beta-BHC had detections exceeding MDE and USEPA criteria; therefore, Aroclor-1260 and total Aroclor are eliminated from COC selection. Beta-BHC exceeded criteria in only two of 17 samples. Of the metals, arsenic exceeded criteria in 27 of 29 samples, cobalt exceeded the SSL in three of 15 samples, iron exceeded the SSL in five of 15 samples, and manganese and nickel did not exceed applicable criteria in any samples. Therefore, manganese and nickel are eliminated for COC selection.

Hexavalent chromium exceeded the USEPA SSL at a DAF of 20 in nine of 15 samples. However, hexavalent chromium concentrations did not exceed the MDE groundwater-protection criterion. Actually reported hexavalent chromium data (i.e., not predicted based on a 5% assumed ratio between hexavalent and total chromium) were used in this evaluation.

The Block D groundwater data set had only three samples. Therefore, frequency of detections exceeding criteria could not be considered in selecting COC. Naphthalene was not detected in groundwater in any Block D groundwater samples and is thus eliminated as a COC. Beta-BHC was not a target analyte for the recent groundwater samples. Arsenic, cobalt, and iron exceeded applicable groundwater criteria, including MCLs (when available) in at least one sample. Hexavalent chromium results were not available for Block D groundwater.

***Summary/Conclusions for Block D surface soil***— The analysis presented above suggests that beta-BHC, arsenic, cobalt, iron, and hexavalent chromium should be retained as migration to groundwater COC. However, it should be noted that beta-BHC is most likely present in the soils as a consequence of the wide-spread application of pesticides/herbicides (not as a consequence of releases in the study area) and most of the metals concentrations detected may reflect background conditions. (The reader is referred to Section 5.1 for a further discussion of background soil concentrations.) Additionally, the maximum detection of beta-BHC (9.1 µg/kg) is less than the MCL-based SSL (DAFof 20) published for a related chemical, gamma-BHC (24 µg/kg). Consequently, these parameters are not recommended for further evaluation in the RAP.

***Block D subsurface soil***—The list of chemicals selected as "global" migration-to-groundwater COPC and detected in Block D subsurface soil is similar to that for the Block D surface soil. Of the volatiles, 1,2,4-trimethylbenzene, acetone, benzene, m+p-xylenes, and total xylenes detections in soil do not exceed MDE criteria or USEPA criteria based on a DAF of 20, and they are eliminated from COC selection. Concentrations of ethylbenzene do not exceed the MDE criterion but do exceed the SSL based on a DAF 20 in one of 84 samples. Ethylbenzene is eliminated from COC selection because the exceedances occur in less than 5% of samples and because the maximum concentration is less than twice the SSL at a DAF of 20.

Methylene chloride exceeds both the MDE criterion and adjusted SSL in two of 84 samples, and the maximum concentration of this chemical exceeds the criteria by more than 2×. Naphthalene concentrations also exceed relevant MDE and USEPA criteria in two of 84 and three of 84 samples, respectively. No concentrations of the pesticides/PCBs selected as "global" migration to groundwater COPC exceed groundwater-protection criteria in Block D subsurface soil. These chemicals are therefore eliminated as COC for Block D subsurface soil.

For the metals, arsenic, cobalt, and iron have concentrations exceeding applicable groundwater-protection criteria at frequencies greater than 5%. No concentrations of manganese or nickel exceed the available groundwater-protection criteria. These chemicals are therefore eliminated as COC. Hexavalent chromium was detected in 30 of 64 Block D subsurface soil samples. Concentrations of hexavalent chromium exceeded the USEPA SSL based on a DAF of 20 in 30 of 64 samples but do not exceed the MDE groundwater-protection criterion in any samples.

In Block D groundwater samples, ethylbenzene, methylene chloride, and naphthalene were not detected and are thus eliminated as COC. As mentioned previously, arsenic, cobalt, and iron were detected at concentrations exceeding criteria (including the MCL when available) in at least one of the three groundwater samples. Block D groundwater samples were not analyzed for hexavalent chromium.

***Summary/Conclusions for Block D subsurface soil—*** The analysis above suggests the retention of arsenic, cobalt, iron, and hexavalent chromium as migration to groundwater COC. However, most of the metals concentrations detected likely reflect background conditions. (The reader is

referred to Section 5.1 for a further discussion of background soil concentrations.) Consequently, these parameters are not recommended for further evaluation in the RAP.

***Block E surface soil***—VOCs, PCBs, and metals were selected as "global" migration-to-groundwater COPC and all were detected in Block E surface soil. Of the VOCs, 1,2-dichlorobenzene in surface soil did not exceed relevant criteria in any samples and is thus eliminated from COC selection. No concentrations of tetrachloroethene (PCE) exceed the MDE criterion, and PCE detections in surface soil exceed the adjusted SSL in only one of 42 samples. No PCE hot spot is present (i.e., concentrations do not exceed twice the adjusted SSL), so PCE was eliminated from COC selection.

The rest of the VOC COPC have relatively low frequencies of detection exceeding criteria (i.e., no more than approximately 17% exceedances): 1,2,3-trichlorobenzene, 1,3-dichlorobenzene, methylene chloride, and naphthalene have frequencies of detections exceeding criteria that are less than 5%. However, all of these VOCs may have possible hot spot concentrations (i.e., concentrations greater than twice the criteria). Three PCBs and total Aroclor were selected as "global" migration-to-groundwater COPC. Aroclor-1254 exceeds both the MDE and USEPA criteria in two of 220 samples but has a maximum concentration greater than twice the criteria. Aroclor-1260/total Aroclor exceed the relevant criteria in 73 of 220 samples. Manganese and nickel were not detected in surface soil at concentrations exceeding criteria and are thus eliminated from COC selection. Arsenic, cobalt, and iron exceed criteria in more than 5% of surface soil samples.

Methylene chloride and naphthalene were not detected in Block E groundwater samples and are thus eliminated from COC selection. Neither was PCE (previously eliminated from COC selection) detected in groundwater. Concentrations of 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene exceeded the MDE groundwater protection value or USEPA tap water value and MCL (when available). Less than 20 samples were available for Block E groundwater, so these chemicals are not eliminated from COC selection based on the frequency of their detection in excess of relevant criteria.

Concentrations of arsenic, cobalt, and iron in Block E groundwater exceed the USEPA tap water criteria. However, concentrations of arsenic do not exceed the MDE groundwater standard.

Concentrations of arsenic do not exceed the MCL; therefore, arsenic is eliminated as a COC. The frequency of detections of these chemicals in excess of relevant criteria was not considered in determine COC because less than 20 samples of Block E groundwater were available.

***Summary/Conclusions for Block E surface soil***—The preceding analysis suggests the retention of the following chemicals as COC: 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, Aroclor-1242, Aroclor-1260, total Aroclor, cobalt, and iron. However, PCBs (i.e., the Aroclors) have already been identified as COC in the Block E surface soils because of direct contact risk. These PCB parameters do not readily migrate from soils to groundwater, and direct-contact-risk remedial goals established for these chemicals are typically more conservative (i.e., lower than) site-specific migration-to-groundwater remedial goals that may be calculated for these parameters. Note that most of the metals concentrations detected may reflect background conditions. (The reader is referred to Section 5.1 for a further discussion of background soil concentrations.) Consequently, PCBs and metals are not recommended for further evaluation in the RAP. In contrast, the referenced chlorobenzene compounds (mostly associated with "hot spot" location SB-833) are recommended for further evaluation in the RAP.

***Block E subsurface soil—*** The migration-to-groundwater "global" COPC list for Block E subsurface soil is similar to that of Block E surface soil, although a few more volatiles are COPC for subsurface soil. Of the VOCs in subsurface soil, 1,2,4-trimethylbenzene, acetone, carbon tetrachloride, m+p-xylenes, and total xylenes do not have concentrations exceeding applicable criteria and are thus eliminated from COC selection. 1,2-Dichlorobenzene, 1,2-dichloroethane, 1,3-dichlorobenzene, benzene, chlorobenzene, methylene chloride, naphthalene, PCE, trichloroethene (TCE) and vinyl chloride have less than 5% frequencies of detection exceeding the relevant criteria and are thus eliminated from COC selection. For the PCBs, Aroclor-1254 exceeds criteria in only one of 255 samples; however, the maximum concentration is greater than twice the criteria. Aroclor-1260/total Aroclor exceed criteria in more than 5% of samples and have maximum concentrations exceeding the relevant criteria. For the metals, cobalt, manganese, and nickel are eliminated from COC selection because no concentrations of these chemicals in soil exceed the applicable criteria. Concentrations of arsenic and iron exceed the criteria in more than 5% of samples.

As mentioned previously, concentrations of 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, and 1,4-dichlorobenzene in groundwater exceed applicable screening criteria, including MCLs (when available). Arsenic concentrations exceed the USEPA tap water criterion but do not exceed the MDE criterion or the MCL; arsenic is thus eliminated from COC selection. Iron concentrations do exceed the MDE cleanup standard and the USEPA tap water criterion. Fewer than 20 samples were available, so the frequency of detections exceeding criteria was not considered in selecting COC.

***Summary/Conclusions for Block E subsurface soil—***The preceding analysis suggests the retention of the following chemicals as migration-to-groundwater COC: 1,2,3-trichlorobenzene, 1,2,4-trichlorobenzene, 1,4-dichlorobenzene, Aroclor-1254, Aroclor-1260, total Aroclor, and iron. The narrative provided above regarding the chlorobenzene and PCB detections in the Block E surface soils also applies to the Block E subsurface soils. Therefore, PCBs are not recommended for further evaluation in the RAP (on the basis of groundwater protection); the chlorobenzene compounds are recommended for evaluation in the RAP. Note that most of the iron concentrations detected may reflect background conditions. (The reader is referred to Section 5.1 for a further discussion of background soil concentrations.) Consequently, iron is not recommended for further evaluation in the RAP.

***Block F surface soil—***One VOC, PCBs, metals, and hexavalent chromium are "global" COPC detected in Block F surface soil. The VOC methylene chloride was not detected at concentrations in surface soil exceeding the MDE groundwater-protection criterion or the USEPA SSL, based on a DAF of 20. Therefore, methylene chloride is eliminated from COC selection. Aroclor-1254 was not detected at concentrations exceeding criteria in surface soil and is also eliminated from COC selection. Aroclor-1260 and total Aroclor were detected in less than 5% of samples; however, their maximum concentrations exceed twice the screening criteria.

Of the metals, nickel was not detected at concentrations in surface soil exceeding criteria and thus is not a COC. One of 20 (approximately 5%) cobalt concentrations exceeded the adjusted USEPA SSL, so cobalt is not a COC. Arsenic concentrations exceeded criteria in more than 5% of surface soil samples. Hexavalent chromium concentrations exceeded the adjusted USEPA SSL in more than 5% of samples but did not exceed MDE groundwater-protection criterion.

Only two groundwater samples were available for Block F groundwater. Arsenic concentrations exceeded the USEPA tap water RSL but did not exceed the MDE groundwater-protection cleanup standard or the MCL. It should also be noted that most of the arsenic concentrations detected in the Block F surface soils appear to reflect background conditions. Thus, arsenic is not retained as a COC. Block F groundwater samples were not analyzed for hexavalent chromium, so hexavalent chromium could not be eliminated from migration-to-groundwater COC selection based on groundwater data.

***Summary Conclusions for Block F surface soil—*** The analysis above suggests the retention of the following chemicals as migration-to-groundwater COC for Block F surface soil: Aroclor-1260, total Aroclor, and hexavalent chromium. However, PCBs (i.e., the Aroclors) were not selected as groundwater protection COC for the Block F subsurface soils suggesting limited migration from surface to subsurface soils. Additionally, the vast majority of total chromium and hexavalent chromium results suggest that chromium concentrations in the Block F soils are reflective of background conditions. Also, maximum total and hexavalent chromium concentrations do not exceed the MDE clean-up standard for groundwater protection. (The reader is referred to Section 5.1 for a further discussion of background soil concentrations.) Therefore, PCBs and hexavalent chromium are not recommended for further evaluation in the RAP.

***Block F subsurface soil—***The "global" COPC list for Block F subsurface soil is similar to Block F surface soil, with the addition of a few VOCs. In subsurface soil, the VOCs acetone, m+p-xylenes, and total xylenes do not have concentrations exceeding the MDE cleanup standard for groundwater protection or exceeding the adjusted USEPA SSL based on a DAF of 20. These chemicals are therefore not retained as COC for migration to groundwater.

Concentrations of 1,2,4-trimethylbenzene exceed the criteria in only one of 36 samples (approximately 3%); this chemical is thus not a COC. Concentrations of ethylbenzene, methylene chloride, and naphthalene in subsurface soil exceed criteria in only one of 36 samples; however, the maximum concentrations of these chemicals are greater than twice the applicable criteria.

For PCBs, concentrations of Aroclor-1260 and total Aroclor do not exceed the MDE or adjusted USEPA criteria. PCBs are therefore eliminated as COC. For the metals, concentrations of nickel did not exceed the applicable screening criteria, so nickel is likewise not a COC. Concentrations of arsenic and cobalt exceed criteria in more than 5% of samples.

Ethylbenzene, methylene chloride, and naphthalene were not detected in groundwater, so these chemicals are eliminated as migration-to-groundwater COC. As previously stated, arsenic concentrations in groundwater exceed the tap water RSL but do not exceed the MDE cleanup standard or the MCL. Therefore, arsenic is not a COC. Cobalt concentrations in groundwater exceed the tap water RSL in one of two samples. No MCL is available for cobalt.

***Summary/Conclusions for Block F subsurface soil—*** The preceding analysis suggests the retention of cobalt as a migration-to-groundwater COC for Block F subsurface soil. However, note that most of the cobalt concentrations detected may reflect background conditions. (The reader is referred to Section 5.1 for a further discussion of background soil concentrations.) Therefore, cobalt is not recommended for further evaluation in the RAP.

***Block G surface soil—***Volatiles, PCBs, and metals were selected as "global" migration-to-groundwater COPC and were detected in Block G surface soil. In surface soil, the VOCs 1,1-dichloroethane, 1,2,4-trimethylbenzene, methylene chloride, and naphthalene do not exceed the MDE cleanup standard for groundwater protection or the adjusted USEPA SSL based on a DAF of 20. These chemicals are therefore not retained as COC. Concentrations of TCE exceed the MDE groundwater protection cleanup standard in three of 14 samples but do not exceed the adjusted SSL. For the PCBs, Aroclor-1254 does not exceed criteria and is thus not retained as a COC. Concentrations of Aroclor-1260 and total Aroclor exceed criteria in two of 22 samples. For the metals, concentrations of nickel do not exceed criteria; nickel is thus not a COC. Concentrations of arsenic and cobalt exceed criteria in more than 5% of samples.

Nineteen samples were available for Block G groundwater. Concentrations of TCE in groundwater exceed groundwater-screening criteria in more than 5% of samples, in addition to exceeding the MCL. Concentrations of arsenic in groundwater exceed the USEPA tap water criterion in more than 5% of samples and also exceed the MDE groundwater cleanup standard

and the MCL. Concentrations of cobalt exceed the USEPA tap water RSL in more than 5% of samples. No MCL is available for cobalt.

***Summary/Conclusions for Block G surface soil—***The preceding analysis suggests the selection of TCE, Aroclor-1260, total Aroclor, arsenic, and cobalt as migration-to-groundwater COC for Block G surface soil. However, the maximum TCE detection does not exceed the MCL-based SSL calculated using a DAF of 20. PCBs (i.e., the Aroclors) were not selected as groundwater protection COC for the Block G subsurface soils suggesting limited migration from surface to subsurface soils. Most of the metals concentrations detected may reflect background conditions. (The reader is referred to Section 5.1 for a further discussion of background soil concentrations.) Therefore, these parameters are not recommended for further evaluation in the RAP.

***Block G subsurface soil—***Global migration-to-groundwater COPC for Block G subsurface soil include VOCs, PCBs, and metals. For the VOCs in subsurface soil, 1,2,4-trimethylbenzene, acetone, methylene chloride, and total xylenes do not have concentrations exceeding the MDE groundwater-protection standard or the adjusted SSL based on a DAF of 20. These chemicals are therefore eliminated from COC selection. Additionally, concentrations of benzene exceed criteria in less than 5% of samples; therefore, benzene is not a COC. Concentrations of ethylbenzene exceed criteria in less than 5% of samples; however, the maximum concentration of ethylbenzene is more than twice the adjusted SSL.

Concentrations of naphthalene and TCE exceed criteria in more than 5% of samples. Concentrations of PCBs do not exceed criteria; PCBs are therefore not retained as COC. Concentrations of the metals manganese and nickel do not exceed criteria and are thus not retained as COC. In contrast, concentrations of arsenic, cobalt, and iron exceed criteria in more than 5% of samples.

Ethylbenzene and naphthalene were not detected in groundwater, so these chemicals are eliminated from COC selection. Groundwater concentrations of TCE exceed the screening criteria in more than 5% of samples and also exceed the MCL. As mentioned previously, concentrations of arsenic in groundwater exceed the USEPA tap water criterion in more than 5% of samples and exceed the MDE groundwater cleanup standard and the MCL. Concentrations of

cobalt exceed the USEPA tap water RSL in more than 5% of samples. No MCL is available for cobalt. Concentrations of iron also exceed criteria in more than 5% of samples.

***Summary/Conclusions for Block G subsurface soil***—The preceding analysis suggests the retention of the following constituents as migration-to-groundwater COC for Block G subsurface soil: TCE, arsenic, cobalt, and iron. However, the maximum TCE detection does not exceed the MCL-based SSL calculated using a DAF of 20. Also, note that most of the metals concentrations detected may reflect background conditions. (The reader is referred to Section 5.1 for a further discussion of background soil concentrations.) Therefore, these parameters are not recommended for further evaluation in the RAP.

***Block H surface soil—***VOCs and metals were selected as "global" migration-to-groundwater COPC and were detected in Block H surface soil. Of the VOCs, ethylbenzene, and methylene chloride were not detected at concentrations exceeding the MDE groundwater protection standard or the adjusted USEPA SSL at a DAF of 20. These constituents are therefore not COC. Concentrations of naphthalene exceed the adjusted SSL in two of 11 samples. For the metals, no concentrations of nickel exceeded applicable criteria, so nickel is not retained as a COC. At least one concentration each of arsenic and cobalt exceed criteria. The frequency of detections exceeding criteria was not considered in determining COC because less than 20 samples of arsenic and cobalt were available.

Three groundwater samples were available for Block H. Naphthalene was not detected in Block H groundwater and is therefore eliminated as a migration-to-groundwater COC. TCE was detected in groundwater at a concentration exceeding criteria, including the MCL. Arsenic was detected in groundwater at detections exceeding the USEPA tap water criterion; however, arsenic concentrations did not exceed the MDE groundwater-protection criterion and did not exceed the MCL. Therefore, arsenic is not retained as a COC. Concentrations of cobalt did exceed the USEPA tap water criterion. No MDE groundwater-protection criterion or MCL is available for cobalt.

***Summary/Conclusions for Block H surface soil—***The preceding analysis suggests the retention of TCE and cobalt as migration-to-groundwater COC for Block G subsurface soil. However, the maximum TCE detection does not exceed the MCL-based SSL calculated using a DAF of 20. Also,, note that most (if not all) of the cobalt concentrations detected may reflect background

conditions. (The reader is referred to Section 5.1 for a further discussion of background soil concentrations.) Therefore, these parameters are not recommended for further evaluation in the RAP.

***Block H subsurface soil—***VOCs, metals, and hexavalent chromium were selected as "global" migration-to-groundwater COPC and were detected in the Block H subsurface soil. Of the VOC COPC, only naphthalene and TCE were detected at concentrations exceeding the screening criteria. Therefore, the remaining VOCs, 1,2,4-trimethylbenzene, acetone, ethylbenzene, m+p-xylenes, and methylene chloride are eliminated from COC selection. Of the metals, nickel was not detected at concentrations exceeding criteria and is thus eliminated from COC selection. Concentrations of arsenic and cobalt exceed criteria in more than 5% of samples. One of five concentrations of hexavalent chromium exceed the adjusted USEPA SSL, but no concentrations of hexavalent chromium exceed the MDE groundwater protection value.

The frequency of detections exceeding criteria in Block H groundwater was not considered in selecting COC because only three samples were available. Naphthalene was not detected in the Block H groundwater samples; naphthalene is thus not a COC. TCE was detected in groundwater at a concentration exceeding criteria, including the MCL. Arsenic concentrations exceeded the USEPA tap water value but did not exceed the MDE cleanup standard for groundwater protection, or the MCL. Arsenic is therefore eliminated as a migration-to-groundwater COC. Concentrations of cobalt exceeded the adjusted USEPA SSL. No MDE groundwater cleanup standard or MCL is available for cobalt. Hexavalent chromium was not an analyte in the Block H groundwater samples.

***Summary/Conclusions for Block H subsurface soil—***The preceding analysis suggests the retention of TCE, cobalt, and hexavalent chromium as migration-to-groundwater COC for Block H subsurface soil. However, the maximum TCE detection does not exceed the MCL-based SSL calculated using a DAF of 20. Note, also, that most of the cobalt concentrations detected may reflect background conditions. Additionally, the vast majority of total chromium and hexavalent chromium results suggest that chromium concentrations in the Block H soils are reflective of background conditions. Also, maximum total and hexavalent chromium concentrations do not exceed the MDE clean-up standard for groundwater protection. (The

reader is referred to Section 5.1 for a further discussion of background soil concentrations.) Therefore, these parameters are not recommended for further evaluation in the RAP.

Table 4-1
Occurrence and Distribution of Chemicals - Surface Soil (0-2 feet) - Tax Block Soils
Block D
Lockheed Martin, Middle River Complex


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | 1/29 | 33 | | 33 | | SB-66-SS | 0.48 | 7 | 33.0 | 2.6 | NC | NC | 6200 | N | 0 | NC | NC | 420 | 0 |
| 1,3,5-TRIMETHYLBENZENE | 1/14 | 23 | | 23 | | SB-66-SS | 5 | 7 | 23.0 | 4.3 | NC | NC | 78000 | N | 0 | NC | NC | 10400 | 0 |
| 2-BUTANONE | 7/29 | 1.6 | J | 17 | | D-SB-795-SS | 1 | 72 | 6.9 | 15.9 | 4700000 | 0 | 2800000 | N | 0 | 29000 | 0 | 30000 | 0 |
| ACETONE | 2/29 | 110 | | 440 | J | D-SB-788-SS | 4.7 | 210 | 275 | 43.4 | 7000000 | 0 | 6100000 | N | 0 | 22000 | 0 | 90000 | 0 |
| BENZENE | 1/29 | 0.72 | J | 0.72 | J | D-SS-786-01 | 0.17 | 7 | 0.72 | 1.5 | 12000 | 0 | 1100 | C | 0 | 1.9 | 0 | 4.2 | 0 |
| CARBON DISULFIDE | 3/29 | 0.65 | J | 0.82 | J | D-SB-789-SS | 0.33 | 7 | 0.71 | 1.7 | 780000 | 0 | 82000 | N | 0 | 19000 | 0 | 6200 | 0 |
| ETHYLBENZENE | 1/29 | 8 | | 8 | | SB-66-SS | 0.19 | 7 | 8.0 | 1.6 | 780000 | 0 | 5400 | C | 0 | 15000 | 0 | 34 | 0 |
| M+P-XYLENES | 2/29 | 10 | J | 10 | J | SB-33A-SS, SB-66-SS | 0.89 | 14 | 10.0 | 3.4 | 1600000 [6] | 0 | 63000 | N[7] | 0 | 3000 [6] | 0 | 4000 | 0 |
| METHYLENE CHLORIDE | 5/29 | 7 | J | 10 | J | SB-66-SS | 0.5 | 7 | 8.0 | 2.6 | 85000 | 0 | 11000 | C | 0 | 19 | 0 | 24 | 0 |
| NAPHTHALENE | 1/29 | 260 | | 260 | | SB-66-SS | 0.14 | 7 | 260 | 10.4 | 160000 | 0 | 3600 | C | 0 | 150 | 1 | 9.4 | 1 |
| O-XYLENE | 1/29 | 23 | | 23 | | SB-66-SS | 0.26 | 7 | 23.0 | 2.2 | 1600000 [6] | 0 | 380000 | N | 0 | 3000 [6] | 0 | 24000 | 0 |
| TOLUENE | 1/29 | 0.38 | J | 0.38 | J | D-SB-792-SS | 0.2 | 7 | 0.38 | 1.5 | 630000 | 0 | 500000 | N | 0 | 27000 | 0 | 32000 | 0 |
| TRICHLOROFLUOROMETHANE | 1/29 | 0.85 | J | 0.85 | J | D-SB-794-SS | 0.25 | 7 | 0.85 | 1.5 | NC | NC | 79000 | N | 0 | NC | NC | 16600 | 0 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1/29 | 20 | J | 20 | J | D-SB-788-SS | 20 | 4800 | 20.0 | 820 | 46000 | 0 | 35000 | C | 0 | 2900000 | 0 | 22000 | 0 |
| CARBAZOLE | 2/29 | 62 | | 120 | | D-SB-794-SS | 28 | 4800 | 91.0 | 827 | 32000 | 0 | NC | | 0 | 470 | 0 | NC | NC |
| DIBENZOFURAN | 4/29 | 11 | J | 110 | | D-SB-794-SS | 3.4 | 4800 | 42.5 | 821 | 7800 | 0 | 7800 | N | 0 | NC | NC | 13600 | 0 |
| DIMETHYL PHTHALATE | 1/29 | 2000 | J | 2000 | J | SB-58-SS | 18 | 4800 | 2000 | 826 | NC | NC | NC | | NC | NC | NC | NC | NC |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 3/16 | 15 | | 480 | | D-SB-771-SS | 3.6 | 83 | 174 | 38.5 | NC | NC | 22000 | C | 0 | NC | NC | 240 | 1 |
| 2-METHYLNAPHTHALENE | 10/45 | 8.9 | | 990 | J | SB-66-SS | 3.4 | 4800 | 223 | 532 | 31000 | 0 | 31000 | N | 0 | 4400 | 0 | 15000 | 0 |
| ACENAPHTHENE | 20/60 | 11 | | 4500 | | D-SB-771-SS | 3.5 | 4800 | 455 | 530 | 470000 | 0 | 340000 | N | 0 | 100000 | 0 | 440000 | 0 |
| ACENAPHTHYLENE | 15/60 | 10 | | 1600 | J | SB-67-SS | 3.5 | 4800 | 271 | 375 | 470000 | 0 | 340000 | N[8] | 0 | 100000 | 0 | 440000 [8] | 0 |
| ANTHRACENE | 23/60 | 15 | | 6000 | | D-SS-781-01 | 3.5 | 4800 | 854 | 701 | 2300000 | 0 | 1700000 | N | 0 | 470000 | 0 | 7200000 | 0 |
| BAP EQUIVALENT-1/2 NONDETECT[17] | 97/120 | 2.6 | | 22517 | | D-SB-60RE-1 | 1.4 | 4200 | 1988 | 1702 | 22 | 80 | 15 | | 90 | NC | NC | 70 | 61 |
| BAP EQUIVALENT-POSITIVE RESULTS[17] | 97/120 | 0.0072 | | 22517 | | D-SB-60RE-1 | 1.4 | 4200 | 1803 | 1552 | 22 | 76 | 15 | C | 86 | 120 | 42 | 70 | 56 |
| BENZO(A)ANTHRACENE | 84/120 | 8.3 | | 23000 | | D-SB-60RE-1 | 1 | 4800 | 1584 | 1242 | 220 | 28 | 150 | C | 31 | 480 | 23 | 200 | 29 |
| BENZO(A)PYRENE | 88/120 | 5 | | 16000 | | D-SB-60RE-1 | 1.4 | 4800 | 1399 | 1175 | 22 | 73 | 15 | C | 77 | 120 | 33 | 70 | 44 |
| BENZO(B)FLUORANTHENE | 90/120 | 4.925 | | 16000 | | D-SB-60RE-1 | 1.3 | 4800 | 1466 | 1250 | 220 | 29 | 150 | C | 32 | 1500 | 17 | 700 | 21 |
| BENZO(G,H,I)PERYLENE | 33/60 | 8.9 | | 6900 | J | SB-67-SS | 3.5 | 4800 | 833 | 757 | 230000 | 0 | 170000 | N[9] | 0 | 680000 | 0 | 2400000 [9] | 0 |
| BENZO(K)FLUORANTHENE | 76/120 | 8.2 | | 6300 | | D-SB-60RE-1 | 1.8 | 4800 | 777 | 643 | 2200 | 12 | 1500 | C | 13 | 15000 | 0 | 7000 | 0 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 2/6 | 500 | J | 1600 | J | D-SB-777-SS | 73 | 80 | 1050 | 376 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-FLUORANTHENES/PYRENES | 2/6 | 710 | J | 2300 | J | D-SB-777-SS | 73 | 80 | 1505 | 528 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-PHENANTHRENES/ANTHRACENES | 2/6 | 290 | J | 1300 | J | D-SB-777-SS | 73 | 80 | 795 | 291 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 2/6 | 220 | J | 780 | J | D-SB-777-SS | 73 | 80 | 500 | 193 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-PHENANTHRENES/ANTHRACENES | 2/6 | 170 | J | 590 | J | D-SB-777-SS | 73 | 80 | 380 | 153 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 2/6 | 110 | J | 420 | J | D-SB-777-SS | 73 | 80 | 265 | 114 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-PHENANTHRENES/ANTHRACENES | 2/6 | 110 | J | 310 | J | D-SB-777-SS | 73 | 80 | 210 | 95.8 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | 1/6 | 300 | J | 300 | J | D-SB-777-SS | 73 | 85 | 300 | 82.9 | NC | NC | NC | | NC | NC | NC | NC | NC |
| CHRYSENE | 89/120 | 7.2 | | 24000 | | D-SB-60RE-1 | 0.96 | 4200 | 1538 | 1236 | 22000 | 1 | 15000 | C | 1 | 48000 | 0 | 22000 | 1 |
| DIBENZO(A,H)ANTHRACENE | 38/120 | 6.375 | | 2000 | | D-SB-62RED-1, SB-67-SS | 1.4 | 4800 | 472 | 324 | 22 | 28 | 15 | C | 33 | 460 | 12 | 220 | 14 |
| FLUORANTHENE | 47/60 | 8.4 | | 37000 | | D-SB-774-SS | 3.6 | 4800 | 2241 | 1955 | 310000 | 0 | 230000 | N | 0 | 6300000 | 0 | 3200000 | 0 |
| FLUORENE | 19/60 | 9.8 | | 3100 | | D-SB-771-SS | 3.5 | 4800 | 508 | 506 | 310000 | 0 | 230000 | N | 0 | 140000 | 0 | 540000 | 0 |
| INDENO(1,2,3-CD)PYRENE | 81/120 | 8.7 | J | 7000 | | D-SB-62RED-1 | 1.6 | 4800 | 813 | 698 | 220 | 24 | 150 | C | 30 | 4200 | 5 | 2400 | 12 |
| NAPHTHALENE | 21/60 | 8.1 | | 3100 | | D-SB-771-SS | 3.4 | 4800 | 237 | 452 | 160000 | 0 | 3600 | C | 0 | 150 | 3 | 9.4 | 20 |
| PHENANTHRENE | 37/60 | 12 | | 27000 | | D-SB-774-SS | 3.5 | 4800 | 2282 | 1675 | 2300000 | 0 | 170000 | N[9] | 0 | 470000 | 0 | 2400000 [9] | 0 |
| PYRENE | 50/60 | 7 | J | 27000 | | D-SB-774-SS | 3.6 | 3700 | 2014 | 1800 | 230000 | 0 | 170000 | N | 0 | 680000 | 0 | 2400000 | 0 |
| **Pesticides/PCBs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 4,4'-DDD | 1/17 | 4 | J | 4 | J | D-SB-794-SS | 0.66 | 53 | 4.0 | 4.3 | 2700 | 0 | 2000 | C | 0 | 11000 | 0 | 1320 | 0 |
| 4,4'-DDE | 3/17 | 1.5 | J | 7.8 | J | D-SS-783-01 | 0.41 | 53 | 5.5 | 4.5 | 1900 | 0 | 1400 | C | 0 | 35000 | 0 | 940 | 0 |
| AROCLOR-1260 | 1/29 | 20 | J | 20 | J | D-SB-794-SS | 18 | 350 | 20.0 | 74.5 | 320 | 0 | 220 | C | 0 | NC | NC | 480 | 0 |
| BETA-BHC | 2/17 | 6.4 | J | 9.1 | J | D-SS-783-01 | 1.2 | 53 | 7.8 | 5.8 | 350 | 0 | 270 | C | 0 | 3.1 | 2 | 4.4 | 2 |
| TOTAL AROCLOR | 1/29 | 20 | | 20 | | D-SB-794-SS | 0 | 0 | 20.0 | 0.69 | 320 [10] | 0 | 220 | C[11] | 0 | 410 [10] | 0 | NC | NC |

Table 4-1
Occurrence and Distribution of Chemicals - Surface Soil (0-2 feet) - Tax Block Soils
Block D
Lockheed Martin, Middle River Complex


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | | |
| ANTIMONY | 9/24 | 0.034 J | 3 J | SB-67-SS | 0.025 | 3.3 | 0.50 | 0.66 | 3.1 | 0 | 3.1 N | 0 | 13 | 0 | 13.2 | 0 |
| ARSENIC | 27/29 | 0.54 L | 6 | D-SS-786-01 | 0.48 | 0.56 | 2.2 | 2.1 | 0.43 | 27 | 0.39 C | 27 | 0.026 | 27 | 0.026 | 27 |
| BARIUM | 15/15 | 3.7 | 54.4 | D-SB-794-SS | -- | -- | 22.1 | 22.1 | 1600 | 0 | 1500 N | 0 | 6000 | 0 | 6000 | 0 |
| BERYLLIUM | 17/29 | 0.055 J | 4.6 | SB-67-SS | 0.05 | 3.1 | 1.3 | 1.3 | 16 | 0 | 16 N | 0 | 1200 | 0 | 1160 | 0 |
| CADMIUM | 5/29 | 0.053 J | 0.4 L | D-SS-787-01 | 0.0082 | 3.3 | 0.18 | 0.69 | 3.9 | 0 | 7 N | 0 | 27 | 0 | 28 | 0 |
| CHROMIUM | 29/29 | 3.1 K | 36 J | SB-66-SS | -- | -- | 15.0 | 15.0 | 12000 [12] | 0 | 12000 N[12] | 0 | 2000000000 [12] | 0 | 1980000000 [12] | 0 |
| COBALT | 15/15 | 0.5 | 27.5 | D-SS-787-01 | -- | -- | 6.07 | 6.1 | NC | NC | 2.3 N | 8 | NC | NC | 9.8 | 3 |
| COPPER | 28/29 | 2.9 | 34 L | SB-33A-SS | 2.6 | 2.6 | 12.5 | 12.1 | 310 | 0 | 310 N | 0 | 11000 | 0 | 1020 | 0 |
| IRON | 15/15 | 3870 | 25400 J | D-SS-786-01 | -- | -- | 11700 | 11700 | 5500 | 10 | 5500 N | 10 | NC | NC | 12800 | 5 |
| LEAD | 29/29 | 0.98 | 75 K | SB-64-SS | -- | -- | 20.6 | 20.6 | 400 | 0 | 400 | 0 | NC | NC | 280 [13] | 0 |
| MANGANESE | 15/15 | 9.4 J | 183 J | D-SB-794-SS | -- | -- | 56.3 | 56.3 | 160 | 1 | 180 N | 1 | 950 | 0 | 1140 | 0 |
| MERCURY | 11/29 | 0.019 J | 1.7 | D-SB-794-SS | 0.016 | 0.13 | 0.32 | 0.15 | 2.3 [14] | 0 | 2.3 N[15] | 0 | NC | NC | NC | NC |
| MOLYBDENUM | 14/15 | 0.14 J | 0.61 | D-SB-796-SS | 0.14 | 0.14 | 0.40 | 0.38 | NC | NC | 39 N | 0 | NC | NC | 74 | 0 |
| NICKEL | 29/29 | 0.64 | 40.6 J | D-SS-787-01 | -- | -- | 10.9 | 10.9 | 160 | 0 | 150 N | 0 | NC | NC | 960 | 0 |
| SELENIUM | 19/29 | 0.11 J | 4.4 | SB-67-SS | 2.4 | 3.3 | 1.47 | 1.4 | 39 | 0 | 39 N | 0 | 19 | 0 | 19 | 0 |
| SILVER | 9/15 | 0.023 J | 1.4 | D-SB-794-SS | 0.017 | 0.025 | 0.34 | 0.21 | 39 | 0 | 39 N | 0 | 31 | 0 | 32 | 0 |
| THALLIUM | 4/29 | 0.034 J | 0.054 J | D-SS-787-01 | 0.014 | 2.6 | 0.04 | 0.54 | 0.55 | 0 | NC | NC | 3.6 | 0 | NC | NC |
| VANADIUM | 15/15 | 10.9 | 43.3 | D-SB-793-SS | -- | -- | 20.9 | 20.9 | 7.8 | 15 | 39 N[16] | 1 | 730 | 0 | 3600 | 0 |
| ZINC | 21/29 | 2.9 | 139 J | D-SS-787-01 | 3.1 | 31 | 41.2 | 33.1 | 2300 | 0 | 2300 N | 0 | 14000 | 0 | 13600 | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 22/29 | 8600 J | 1800000 | SB-32A-SS | 11000 | 18000 | 180136 | 138172 | 230000 | 4 | NC | NC | NC | NC | NC | NC |
| GASOLINE RANGE ORGANICS | 8/29 | 71 J | 4800 | SB-66-SS | 48 | 140 | 1476 | 434 | 230000 | 0 | NC | NC | NC | NC | NC | NC |
| **Miscellaneous Parameters (mg/kg)** | | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 9/15 | 0.32 J | 1.3 | D-SS-784-01 | 0.28 | 0.32 | 0.62 | 0.43 | 23 | 0 | 0.29 C | 9 | 42 | 0 | 0.0166 | 9 |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
The SSL at a DAF of 20 is 20x the SSL at a DAF of 1.
6 - The value is for xylenes.
7 - The value is for xylene, mixture.
8 - The value for acenaphthene is used as a surrogate for acenaphthylene.
9 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
10 - The value is for PCB (total).
11 - The value is for polychlorinated biphenyls (high risk).
12 - The value is for trivalent chromium.
13 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
14 - The value is for mercury (inorganic/mercuric dichloride).
15 - The value is for mercuric chloride.
16 - The value is for vanadium and compounds.
17 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NC = No criteria

**Table 4-2**

**Occurrence and Distribution of Chemicals - Subsurface Soil (2-10 feet) - Tax Block Soils**
**Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 1/84 | 1.1 | J | 1.1 | J | D-SB-793-09 | 0.36 | 17 | 1.1 | 1.2 | 390000 | 0 | 24000 | N | 0 | 2900 | 0 | 2400 | 0 |
| 1,2,3-TRIMETHYLBENZENE | 6/60 | 0.15 | J | 23 | J | D-SB-786-03 | 0.12 | 0.41 | 5.9 | 0.66 | NC | NC | NC | | NC | NC | NC | NC | NC |
| 1,2,4-TRIMETHYLBENZENE | 3/84 | 0.74 | J | 41 | J | D-SB-786-03 | 0.45 | 7 | 20.2 | 1.8 | NC | NC | 6200 | N | 0 | NC | NC | 420 | 0 |
| 2-BUTANONE | 37/84 | 1.3 | J | 52 | | D-SB-792-03 | 0.98 | 120 | 7.1 | 12.3 | 4700000 | 0 | 2800000 | N | 0 | 29000 | 0 | 30000 | 0 |
| 4-ISOPROPYLTOLUENE | 2/84 | 0.34 | J | 0.85 | J | D-SB-788-03 | 0.15 | 7 | 0.60 | 1.0 | NC | NC | NC | | NC | NC | NC | NC | NC |
| ACETONE | 10/84 | 59 | J | 400 | J | D-SB-791-05 | 4.4 | 390 | 197 | 52.6 | 7000000 | 0 | 6100000 | N | 0 | 22000 | 0 | 90000 | 0 |
| BENZENE | 1/84 | 0.79 | J | 0.79 | J | D-SB-786-09 | 0.16 | 11 | 0.79 | 1.1 | 12000 | 0 | 1100 | C | 0 | 1.9 | 0 | 4.2 | 0 |
| BROMOMETHANE | 1/84 | 0.49 | | 0.49 | | D-SB-783-09 | 0.38 | 27 | 0.49 | 1.3 | 11000 | 0 | 730 | N | 0 | 41 | 0 | 44 | 0 |
| CARBON DISULFIDE | 5/84 | 0.45 | J | 35 | J | D-SB-786-03 | 0.31 | 11 | 7.6 | 1.7 | 780000 | 0 | 82000 | N | 0 | 19000 | 0 | 6200 | 0 |
| ETHYLBENZENE | 3/84 | 0.67 | J | 40 | J | D-SB-786-03 | 0.18 | 7 | 17.9 | 1.6 | 780000 | 0 | 5400 | C | 0 | 15000 | 0 | 34 | 1 |
| ISOPROPYLBENZENE | 2/84 | 3.1 | J | 5.2 | J | D-SB-786-03 | 0.11 | 7 | 4.2 | 1.1 | 780000 | 0 | 210000 | N | 0 | 64000 | 0 | 22000 | 0 |
| M+P-XYLENES | 3/84 | 6 | J | 68 | J | D-SB-786-03 | 0.84 | 20 | 31.7 | 3.4 | 1600000 [6] | 0 | 63000 | N[7] | 0 | 3000 [6] | 0 | 4000 | 0 |
| METHYLENE CHLORIDE | 12/84 | 5 | J | 120 | J | D-SB-786-03, D-SB-786-05 | 0.47 | 7 | 27.4 | 4.8 | 85000 | 0 | 11000 | C | 0 | 19 | 2 | 24 | 2 |
| N-PROPYLBENZENE | 2/84 | 1.2 | J | 2.6 | J | D-SB-789-05 | 0.28 | 13 | 1.9 | 1.2 | NC | NC | 340000 | N | 0 | NC | NC | 50000 | 0 |
| NAPHTHALENE | 3/84 | 16 | | 4000 | | D-SB-786-03 | 0.13 | 7 | 1972 | 71.6 | 160000 | 0 | 3600 | C | 1 | 150 | 2 | 9.4 | 3 |
| O-XYLENE | 4/84 | 2 | J | 50 | J | D-SB-786-03 | 0.24 | 20 | 26.8 | 2.5 | 1600000 [6] | 0 | 380000 | N | 0 | 3000 [6] | 0 | 24000 | 0 |
| TOLUENE | 5/84 | 0.26 | J | 0.71 | J | D-SB-792-03 | 0.19 | 16 | 0.48 | 1.2 | 630000 | 0 | 500000 | N | 0 | 27000 | 0 | 32000 | 0 |
| TOTAL XYLENES | 4/60 | 2.9 | J | 120 | J | D-SB-786-03 | 0.47 | 0.78 | 51.5 | 3.7 | 1600000 [6] | 0 | 63000 | N | 0 | 3000 [6] | 0 | 4000 | 0 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 12/84 | 22 | J | 110 | | D-SB-784-09 | 21 | 3900 | 39.8 | 111 | 46000 | 0 | 35000 | C | 0 | 2900000 | 0 | 22000 | 0 |
| BUTYL BENZYL PHTHALATE | 1/84 | 36 | J | 36 | J | D-SB-795-07 | 11 | 3900 | 36.0 | 105 | NC | NC | 260000 | C | 0 | NC | NC | 10200 | 0 |
| CARBAZOLE | 3/84 | 33 | J | 180 | | D-SB-787-03 | 30 | 3900 | 111 | 114 | 32000 | 0 | NC | | NC | 470 | 0 | NC | NC |
| DI-N-BUTYL PHTHALATE | 2/84 | 61 | J | 76 | J | SB-66-10 | 17 | 3900 | 68.5 | 104 | 780000 | 0 | 610000 | N | 0 | 5000000 | 0 | 184000 | 0 |
| DI-N-OCTYL PHTHALATE | 1/84 | 76 | J | 76 | J | SB-63-05 | 30 | 3900 | 76.0 | 111 | NC | NC | NC | | NC | NC | NC | NC | NC |
| DIBENZOFURAN | 8/84 | 8.9 | J | 120 | | D-SB-787-03 | 3.6 | 3900 | 43.5 | 103 | 7800 | 0 | 7800 | N | 0 | NC | NC | 13600 | 0 |
| DIMETHYL PHTHALATE | 1/84 | 62 | J | 62 | J | SB-58-05 | 19 | 3900 | 62.0 | 107 | NC | NC | NC | | NC | NC | NC | NC | NC |
| PHENOL | 2/84 | 670 | | 690 | | SB-58-10 | 30 | 3900 | 680 | 124 | 2300000 | 0 | 1800000 | N | 0 | 67000 | 0 | 126000 | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 15/73 | 8.6 | | 610 | | D-TP-2-3-6-7 | 3.5 | 200 | 120 | 27.6 | NC | NC | 22000 | C | 0 | NC | NC | 240 | 4 |
| 2-METHYLNAPHTHALENE | 26/157 | 7.9 | | 600 | | D-SB-777-07, D-TP-2-3-6-7 | 3.5 | 3900 | 102 | 72.8 | 31000 | 0 | 31000 | N | 0 | 4400 | 0 | 15000 | 0 |
| ACENAPHTHENE | 33/157 | 8.2 | | 2400 | | D-SB-774-03 | 3.6 | 3900 | 189 | 91.9 | 470000 | 0 | 340000 | N | 0 | 100000 | 0 | 440000 | 0 |
| ACENAPHTHYLENE | 18/157 | 9 | | 420 | | D-TP-2-3-6-7 | 3.6 | 3900 | 77 | 64.9 | 470000 | 0 | 340000 | N[8] | 0 | 100000 | 0 | 440000 [8] | 0 |
| ANTHRACENE | 41/157 | 5.25 | | 9200 | | D-SB-774-03 | 3.6 | 3900 | 386 | 153 | 2300000 | 0 | 1700000 | N | 0 | 470000 | 0 | 7200000 | 0 |
| BAP EQUIVALENT-1/2 NONDETECTS[17] | 222/431 | 2.4 | | 24437 | | D-SB-774-03 | 1.4 | 4200 | 438 | 247 | 22 | 168 | 15 | | 190 | NC | NC | 70 | 101 |
| BAP EQUIVALENT-POSITIVE RESULTS[17] | 222/431 | 0.79 | | 24437 | | D-SB-774-03 | 1.4 | 4200 | 413 | 234 | 22 | 163 | 15 | C | 183 | 120 | 77 | 70 | 100 |
| BENZO(A)ANTHRACENE | 167/350 | 4 | J | 26000 | | D-SB-774-03 | 1 | 490 | 419 | 211 | 220 | 32 | 150 | C | 46 | 480 | 20 | 200 | 33 |
| BENZO(A)PYRENE | 206/431 | 3 | J | 16000 | | D-SB-774-03 | 1.4 | 4200 | 313 | 171 | 22 | 151 | 15 | C | 175 | 120 | 61 | 70 | 91 |
| BENZO(B)FLUORANTHENE | 179/350 | 6.1 | J | 25000 | | D-SB-774-03 | 1.3 | 3800 | 442 | 243 | 220 | 36 | 150 | C | 58 | 1500 | 8 | 700 | 15 |
| BENZO(G,H,I)PERYLENE | 50/157 | 8.1 | | 7500 | | D-SB-774-03 | 3.6 | 3900 | 286 | 143 | 230000 | 0 | 170000 | N[9] | 0 | 680000 | 0 | 2400000 [9] | 0 |
| BENZO(K)FLUORANTHENE | 135/350 | 5.5 | | 10000 | | D-SB-774-03 | 1.6 | 3800 | 226 | 104 | 2200 | 1 | 1500 | C | 4 | 15000 | 0 | 7000 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 4/10 | 130 | J | 3300 | J | D-TP-2-2-6-7 | 75 | 84 | 1468 | 610 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-FLUORANTHENES/PYRENES | 4/10 | 140 | J | 5900 | J | D-TP-2-2-6-7 | 75 | 84 | 2645 | 1081 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-FLURENES | 1/10 | 1100 | J | 1100 | J | D-TP-2-2-6-7 | 75 | 84 | 1100 | 145 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-PHENANTHRENES/ANTHRACENES | 3/10 | 93 | J | 6900 | J | D-TP-2-2-6-7 | 75 | 84 | 3031 | 937 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 3/10 | 86 | J | 1500 | J | D-TP-2-2-6-7 | 75 | 84 | 809 | 270 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-FLURENES | 1/10 | 870 | J | 870 | J | D-TP-2-2-6-7 | 75 | 84 | 870 | 122 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-NAPHTHALENES | 1/10 | 4100 | J | 4100 | J | D-TP-2-2-6-7 | 75 | 84 | 4100 | 445 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-PHENANTHRENES/ANTHRACENES | 2/10 | 870 | J | 3900 | J | D-TP-2-2-6-7 | 75 | 84 | 2385 | 508 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 2/10 | 380 | J | 520 | J | D-TP-2-2-6-7 | 75 | 84 | 450 | 121 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-FLUORENES | 1/10 | 600 | J | 600 | J | D-TP-2-2-6-7 | 75 | 84 | 600 | 95.2 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-NAPHTHALENES | 1/10 | 2800 | J | 2800 | J | D-TP-2-2-6-7 | 75 | 84 | 2800 | 315 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-PHENANTHRENES/ANTHRACENES | 2/10 | 360 | J | 1700 | J | D-TP-2-2-6-7 | 75 | 84 | 1030 | 237 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C4-NAPHTHALENES | 1/10 | 1300 | J | 1300 | J | D-TP-2-2-6-7 | 75 | 84 | 1300 | 165 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C4-PHENANTHRENES/ANTHRACENES | 1/10 | 520 | J | 520 | J | D-TP-2-2-6-7 | 75 | 84 | 520 | 87.2 | NC | NC | NC | | NC | NC | NC | NC | NC |
| CHRYSENE | 164/350 | 4.7 | J | 27000 | | D-SB-774-03 | 0.98 | 490 | 425 | 210 | 22000 | 1 | 15000 | C | 1 | 48000 | 0 | 22000 | 1 |
| DIBENZO(A,H)ANTHRACENE | 70/350 | 3.05 | | 2500 | | D-SB-774-03 | 1.4 | 3900 | 125 | 50.2 | 22 | 41 | 15 | C | 56 | 460 | 5 | 220 | 8 |
| FLUORANTHENE | 66/157 | 8.9 | | 73000 | | D-SB-774-03 | 3.6 | 490 | 1553 | 676 | 310000 | 0 | 230000 | N | 0 | 6300000 | 0 | 3200000 | 0 |
| FLUORENE | 34/157 | 8.5 | | 3200 | | D-SB-774-03 | 3.6 | 3900 | 224 | 101 | 310000 | 0 | 230000 | N | 0 | 140000 | 0 | 540000 | 0 |
| INDENO(1,2,3-CD)PYRENE | 151/350 | 2.5 | J | 7100 | | D-SB-774-03 | 1.6 | 3900 | 207 | 113 | 220 | 24 | 150 | C | 32 | 4200 | 1 | 2400 | 2 |
| NAPHTHALENE | 34/157 | 8.9 | | 1600 | | D-SB-777-07 | 3.6 | 3900 | 151 | 86.9 | 160000 | 0 | 3600 | C | 0 | 150 | 8 | 9.4 | 31 |

**Table 4-2**

**Occurrence and Distribution of Chemicals - Subsurface Soil (2-10 feet) - Tax Block Soils**
**Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PHENANTHRENE | 53/157 | 9 | 44000 | D-SB-774-03 | 3.6 | 3900 | 1279 | 481 | 2300000 | 0 | 170000 N[9] | 0 | 470000 | 0 | 2400000 [9] | 0 |
| PYRENE | 70/157 | 7.8 L | 54000 | D-SB-774-03 | 3.6 | 490 | 1170 | 545 | 230000 | 0 | 170000 N | 0 | 680000 | 0 | 2400000 | 0 |
| **Pesticides/PCBs (ug/kg)** | | | | | | | | | | | | | | | | |
| 4,4'-DDE | 1/62 | 34 J | 34 J | D-SB-790-05 | 0.43 | 25 | 34.0 | 1.5 | 1900 | 0 | 1400 C | 0 | 35000 | 0 | 940 | 0 |
| AROCLOR-1260 | 1/96 | 240 | 240 | D-SB-790-05 | 19 | 360 | 240 | 45.3 | 320 | 0 | 220 C | 1 | NC | NC | 480 | 0 |
| BETA-BHC | 1/62 | 1.3 J | 1.3 J | D-SB-792-03 | 1.2 | 66 | 1.3 | 2.1 | 350 | 0 | 270 C | 0 | 3.1 | 0 | 4.4 | 0 |
| TOTAL AROCLOR | 1/96 | 240 | 240 | D-SB-790-05 | 0 | 0 | 240 | 2.5 | 320 [10] | 0 | 220 C[11] | 1 | 410 [10] | 0 | NC | NC |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | | |
| ANTIMONY | 34/84 | 0.065 J | 1 | SB-247-10 | 0.027 | 3.6 | 0.28 | 0.47 | 3.1 | 0 | 3.1 N | 0 | 13 | 0 | 13.2 | 0 |
| ARSENIC | 83/89 | 0.65 L | 14.3 | D-SB-786-07 | 0.51 | 3 | 4.4 | 4.2 | 0.43 | 83 | 0.39 C | 83 | 0.026 | 83 | 0.026 | 83 |
| BARIUM | 66/66 | 5.2 J | 48.1 | D-SB-783-03 | -- | -- | 19.1 | 19.1 | 1600 | 0 | 1500 N | 0 | 6000 | 0 | 6000 | 0 |
| BERYLLIUM | 67/90 | 0.28 | 6.6 J | D-SB-795-03 | 2.5 | 3.6 | 2.2 | 2.0 | 16 | 0 | 16 N | 0 | 1200 | 0 | 1160 | 0 |
| CADMIUM | 29/90 | 0.017 J | 1.1 | D-SB-788-03 | 0.0089 | 3.6 | 0.17 | 0.46 | 3.9 | 0 | 7 N | 0 | 27 | 0 | 28 | 0 |
| CHROMIUM | 90/90 | 2.2 | 120 J | SB-60-10 | -- | -- | 22.3 | 22.3 | 12000 [12] | 0 | 12000 N[12] | 0 | 2000000000 [12] | 0 | 1980000000 [12] | 0 |
| COBALT | 66/66 | 2 J | 33 | D-SB-792-03 | -- | -- | 10.1 | 10.1 | NC | NC | 2.3 N | 65 | NC | NC | 9.8 | 24 |
| COPPER | 89/90 | 4 J | 110 J | D-SB-784-07 | 2.7 | 2.7 | 22.7 | 22.5 | 310 | 0 | 310 N | 0 | 11000 | 0 | 1020 | 0 |
| IRON | 60/60 | 1420 | 72900 J | D-SB-787-09 | -- | -- | 27943 | 27943 | 5500 | 56 | 5500 N | 56 | NC | NC | 12800 | 51 |
| LEAD | 88/90 | 2.9 J | 1010 | D-SB-783-03 | 2.6 | 2.7 | 23.4 | 22.9 | 400 | 1 | 400 | 1 | NC | NC | 280 [13] | 1 |
| **Inorganics (mg/kg) (continued)** | | | | | | | | | | | | | | | | |
| MANGANESE | 60/60 | 5.9 J | 326 J | D-SB-794-03 | -- | -- | 56.9 | 56.9 | 160 | 2 | 180 N | 1 | 950 | 0 | 1140 | 0 |
| MERCURY | 57/171 | 0.021 J | 3.3 | SB-33-05 | 0.002 | 0.15 | 0.34 | 0.13 | 2.3 [14] | 1 | 2.3 N[15] | 1 | NC | NC | NC | NC |
| MOLYBDENUM | 56/66 | 0.16 J | 1.2 | D-SB-796-05 | 0.072 | 0.9 | 0.55 | 0.50 | NC | NC | 39 N | 0 | NC | NC | 74 | 0 |
| NICKEL | 85/90 | 3.7 K | 53.2 J | D-SB-795-03 | 2.7 | 3.6 | 20.8 | 19.8 | 160 | 0 | 150 N | 0 | NC | NC | 960 | 0 |
| SELENIUM | 68/90 | 0.45 J | 11 L | SB-31-05 | 2.5 | 3.6 | 2.1 | 1.9 | 39 | 0 | 39 N | 0 | 19 | 0 | 19 | 0 |
| SILVER | 16/67 | 0.038 J | 1.9 | D-SB-792-03 | 0.018 | 3 | 0.40 | 0.13 | 39 | 0 | 39 N | 0 | 31 | 0 | 32 | 0 |
| THALLIUM | 31/90 | 0.018 J | 0.17 J | D-SB-782-07 | 0.016 | 2.9 | 0.08 | 0.39 | 0.55 | 0 | NC | NC | 3.6 | 0 | NC | NC |
| VANADIUM | 66/66 | 2.1 | 90.5 | SB-249-10 | -- | -- | 38.6 | 38.6 | 7.8 | 65 | 39 N[16] | 30 | 730 | 0 | 3600 | 0 |
| ZINC | 77/90 | 7 L | 205 J | D-SB-788-03 | 26 | 36 | 54.6 | 48.9 | 2300 | 0 | 2300 N | 0 | 14000 | 0 | 13600 | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 53/84 | 3400 J | 230000 | D-SB-790-07 | 3200 | 27000 | 32626 | 22484 | 230000 | 0 | NC | 0 | NC | NC | NC | NC |
| GASOLINE RANGE ORGANICS | 3/84 | 150 | 250 | D-SB-786-03 | 51 | 150 | 197 | 43.7 | 230000 | 0 | NC | 0 | NC | NC | NC | NC |
| **Miscellaneous Parameters (mg/kg)** | | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 30/64 | 0.33 J | 1.1 | D-SB-788-03 | 0.3 | 0.37 | 0.61 | 0.37 | 23 | 0 | 0.29 C | 30 | 42 | 0 | 0.0166 | 30 |
| **Miscellaneous Parameters (ug/kg)** | | | | | | | | | | | | | | | | |
| MERCURY (METHYL) | 2/2 | 0.31 K | 0.474 K | SB-249-05 | -- | -- | 0.39 | 0.39 | 780 | 0 | 780 N | 0 | NC | NC | NC | NC |
| **Miscellaneous Parameters (%)** | | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | 84/84 | 62.5 | 89.6 | SB-323-0203, SB-324-0203 | -- | -- | 83.3 | 83.3 | NC | 0 | NC | NC | NC | NC | NC | NC |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
The SSL at a DAF of 20 is 20x the SSL at a DAF of 1.
6 - The value is for xylenes.
7 - The value is for xylene, mixture.
8 - The value for acenaphthene is used as a surrogate for acenaphthylene.
9 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
10 - The value is for PCB (total).
11 - The value is for polychlorinated biphenyls (high risk).
12 - The value is for trivalent chromium.
13 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
14 - The value is for mercury (inorganic/mercuric dichloride).
15 - The value is for mercuric chloride.
16 - The value is for vanadium and compounds.
17 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NC = No criteria

**Table 4-3**

**Occurrence and Distribution of Chemicals - Deep Subsurface Soil (10+ feet) - Tax Block Soils**
**Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | 2/45 | 0.16 | J | 3.2 | J | D-SB-786-13 | 0.12 | 0.2 | 1.7 | 0.15 | NC | NC | NC | | NC |
| 2-BUTANONE | 8/55 | 1.3 | J | 4 | J | D-SB-791-13 | 1.1 | 120 | 2.2 | 7.6 | 4700000 | 0 | 2800000 | N | 0 |
| ACETONE | 3/55 | 100 | | 230 | | D-SB-788-15 | 5.1 | 350 | 147 | 31.8 | 7000000 | 0 | 6100000 | N | 0 |
| BENZENE | 3/55 | 3.4 | J | 20 | J | D-SB-786-13 | 0.18 | 6 | 11.1 | 1.2 | 12000 | 0 | 1100 | C | 0 |
| CHLOROMETHANE | 1/55 | 0.7 | J | 0.7 | J | D-SB-785-13 | 0.33 | 13 | 0.70 | 0.91 | NC | NC | 12000 | N | 0 |
| ETHYLBENZENE | 2/55 | 0.35 | J | 9.2 | J | D-SB-786-13 | 0.21 | 6 | 4.8 | 0.84 | 780000 | 0 | 5400 | C | 0 |
| M+P-XYLENES | 2/55 | 12 | J | 20 | J | D-SB-786-13 | 0.96 | 13 | 16.0 | 2.1 | 1600000 [6] | 0 | 63000 | N[7] | 0 |
| METHYLENE CHLORIDE | 6/55 | 8 | J | 77 | J | D-SB-786-13 | 0.53 | 7 | 31.0 | 4.0 | 85000 | 0 | 11000 | C | 0 |
| NAPHTHALENE | 3/55 | 47 | | 530 | | D-SB-786-13 | 0.15 | 6 | 279 | 16.0 | 160000 | 0 | 3600 | C | 0 |
| O-XYLENE | 3/55 | 0.57 | J | 12 | J | D-SB-786-13 | 0.28 | 6 | 6.3 | 1.0 | 1600000 [6] | 0 | 380000 | N | 0 |
| STYRENE | 1/55 | 0.16 | J | 0.16 | J | D-SB-791-13 | 0.12 | 6 | 0.16 | 0.68 | 1600000 | 0 | 630000 | N | 0 |
| TERT-AMYL METHYL ETHER | 1/45 | 0.96 | J | 0.96 | J | D-SB-793-13 | 0.26 | 0.43 | 0.96 | 0.18 | NC | NC | NC | | NC |
| TOLUENE | 6/55 | 0.28 | J | 31 | J | D-SB-786-13 | 0.22 | 6 | 7.6 | 1.5 | 630000 | 0 | 500000 | N | 0 |
| TOTAL XYLENES | 3/45 | 1 | J | 32 | J | D-SB-786-13 | 0.53 | 0.78 | 17.0 | 1.4 | 1600000 [6] | 0 | 63000 | N | 0 |
| TRICHLOROFLUOROMETHANE | 1/55 | 0.35 | J | 0.35 | J | D-SB-793-11 | 0.27 | 14 | 0.35 | 0.90 | NC | NC | 79000 | N | 0 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 6/55 | 23 | J | 140 | | D-SB-790-13 | 21 | 4200 | 67.2 | 118 | 46000 | 0 | 35000 | C | 0 |
| BUTYL BENZYL PHTHALATE | 3/55 | 22 | J | 29 | J | D-SB-789-13 | 11 | 4200 | 26.3 | 109 | NC | NC | 260000 | C | 0 |
| PHENOL | 3/55 | 520 | | 590 | | SB-58-20 | 30 | 4200 | 553 | 135 | 2300000 | 0 | 1800000 | N | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 12/47 | 11 | | 190 | | D-SB-772-15 | 3.7 | 15 | 53.3 | 15.2 | NC | NC | 22000 | C | 0 |
| 2-METHYLNAPHTHALENE | 14/102 | 8.5 | | 390 | | D-SB-772-15 | 3.7 | 4200 | 79.6 | 68.1 | 31000 | 0 | 31000 | N | 0 |
| ACENAPHTHENE | 13/102 | 13 | | 900 | | D-SB-772-15 | 3.7 | 4200 | 142 | 75.2 | 470000 | 0 | 340000 | N | 0 |
| ACENAPHTHYLENE | 18/102 | 8.2 | | 2700 | | D-SB-778-13 | 3.7 | 4200 | 236 | 98.8 | 470000 | 0 | 340000 | N[8] | 0 |
| ANTHRACENE | 21/102 | 10 | | 1600 | | D-SB-772-15 | 3.7 | 4200 | 217 | 102 | 2300000 | 0 | 1700000 | N | 0 |
| BAP EQUIVALENT-1/2 NONDETECTS[15] | 73/195 | 5.8 | | 6217 | | D-SB-778-13 | 1.5 | 440 | 419 | 166 | 22 | 62 | 15 | | 69 |
| BAP EQUIVALENT-POSITIVE RESULTS[15] | 73/195 | 1.3 | | 6217 | | D-SB-778-13 | 1.5 | 440 | 351 | 141 | 22 | 62 | 15 | C | 68 |
| BENZO(A)ANTHRACENE | 63/195 | 8.5 | | 2500 | | D-SB-778-13 | 1.1 | 4200 | 232 | 94.8 | 220 | 13 | 150 | C | 20 |
| BENZO(A)PYRENE | 71/195 | 8 | | 4400 | | D-SB-778-13 | 1.5 | 440 | 263 | 105 | 22 | 58 | 15 | C | 65 |
| BENZO(B)FLUORANTHENE | 71/195 | 9.3 | | 4600 | | D-SB-778-13 | 1.3 | 4200 | 302 | 130 | 220 | 22 | 150 | C | 25 |
| BENZO(G,H,I)PERYLENE | 26/102 | 10 | | 3800 | | D-SB-778-13 | 3.7 | 4200 | 310 | 136 | 230000 | 0 | 170000 | N[9] | 0 |
| BENZO(K)FLUORANTHENE | 59/195 | 8.8 | | 1400 | | D-SB-778-13 | 1.9 | 4200 | 150 | 65.4 | 2200 | 0 | 1500 | C | 0 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 2/6 | 130 | J | 370 | J | D-SB-774-15-D, D-SB-770-15 | 79 | 89 | 310 | 131 | NC | NC | NC | | NC |
| C1-FLUORANTHENES/PYRENES | 2/6 | 160 | J | 610 | J | D-SB-774-15-D | 79 | 89 | 398 | 160 | NC | NC | NC | | NC |
| C1-PHENANTHRENES/ANTHRACENES | 2/6 | 140 | J | 360 | J | D-SB-774-15-D | 78 | 89 | 170 | 84.3 | NC | NC | NC | | NC |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 2/6 | 84 | J | 240 | J | D-SB-770-15 | 79 | 89 | 179 | 87.3 | NC | NC | NC | | NC |
| C2-PHENANTHRENES/ANTHRACENES | 2/6 | 99.5 | | 170 | J | D-SB-770-15 | 78 | 89 | 135 | 72.7 | NC | NC | NC | | NC |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 2/6 | 59.5 | | 99 | J | D-SB-770-15 | 78 | 89 | 79.3 | 54.2 | NC | NC | NC | | NC |
| C3-PHENANTHRENES/ANTHRACENES | 2/6 | 67.5 | | 130 | J | D-SB-770-15 | 78 | 89 | 98.8 | 60.7 | NC | NC | NC | | NC |
| CHRYSENE | 64/195 | 8.7 | | 3000 | | D-SB-778-13 | 1 | 440 | 261 | 94.3 | 22000 | 0 | 15000 | C | 0 |
| DIBENZO(A,H)ANTHRACENE | 26/195 | 11 | | 820 | | D-SB-778-13 | 1.5 | 4200 | 82.1 | 41.2 | 22 | 18 | 15 | C | 20 |
| FLUORANTHENE | 31/102 | 9.9 | | 7100 | | D-SB-772-15 | 3.7 | 440 | 576 | 192 | 310000 | 0 | 230000 | N | 0 |
| FLUORENE | 13/102 | 13 | | 950 | | D-SB-772-15 | 3.7 | 4200 | 146 | 75.8 | 310000 | 0 | 230000 | N | 0 |
| INDENO(1,2,3-CD)PYRENE | 65/195 | 7.7 | | 2700 | | D-SB-778-13 | 1.7 | 4200 | 169 | 86.5 | 220 | 12 | 150 | C | 17 |
| NAPHTHALENE | 15/102 | 11 | | 990 | | D-SB-772-15 | 3.7 | 4200 | 135 | 77.0 | 160000 | 0 | 3600 | C | 0 |
| PHENANTHRENE | 20/102 | 8.3 | | 5600 | | D-SB-772-15 | 3.7 | 4200 | 526 | 160 | 2300000 | 0 | 170000 | N[9] | 0 |
| PYRENE | 32/102 | 12 | | 5200 | | D-SB-772-15 | 3.7 | 440 | 676 | 229 | 230000 | 0 | 170000 | N | 0 |

**Table 4-3**

**Occurrence and Distribution of Chemicals - Deep Subsurface Soil (10+ feet) - Tax Block Soils**
**Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | |
| ANTIMONY | 25/52 | 0.051 | J | 0.83 | J | D-SB-792-13 | 0.027 | 2.9 | 0.31 | 0.33 | 3.1 | 0 | 3.1 | N | 0 |
| ARSENIC | 52/56 | 0.43 | J | 8.2 | L | D-SB-791-15 | 0.52 | 2 | 3.4 | 3.2 | 0.43 | 51 | 0.39 | C | 52 |
| BARIUM | 46/46 | 4.4 | J | 25.2 | | D-SB-788-11 | -- | -- | 13.6 | 13.6 | 1600 | 0 | 1500 | N | 0 |
| BERYLLIUM | 44/56 | 0.3 | J | 10.5 | | D-SB-789-13 | 0.057 | 3.1 | 2.7 | 2.4 | 16 | 0 | 16 | N | 0 |
| CADMIUM | 14/56 | 0.023 | J | 0.12 | K | D-SB-785-13 | 0.0092 | 3.1 | 0.06 | 0.27 | 3.9 | 0 | 7 | N | 0 |
| CHROMIUM | 54/56 | 2.1 | J | 56.1 | | D-SB-791-15 | 2.8 | 2.8 | 20.5 | 19.8 | 12000 [11] | 0 | 12000 | N[11] | 0 |
| COBALT | 46/46 | 1.5 | | 21.3 | | D-SB-789-13 | -- | -- | 8.5 | 8.5 | NC | NC | 2.3 | N | 43 |
| COPPER | 55/56 | 3 | | 56.2 | | D-SB-785-13 | 2.8 | 2.8 | 17.5 | 17.2 | 310 | 0 | 310 | N | 0 |
| IRON | 45/45 | 462 | J | 134000 | | D-SB-792-13 | -- | -- | 28870 | 28870 | 5500 | 39 | 5500 | N | 39 |
| LEAD | 50/56 | 1.3 | | 20 | J | SB-58-15 | 2.6 | 3 | 6.6 | 6.0 | 400 | 0 | 400 | | 0 |
| **Inorganics (continued) (mg/kg)** | | | | | | | | | | | | | | | |
| MANGANESE | 45/45 | 1.6 | | 341 | | D-SB-789-13 | | | 43.2 | 43.2 | 160 | 1 | 180 | N | 1 |
| MERCURY | 1/56 | 0.059 | J | 0.059 | J | D-SB-785-13 | 0.002 | 0.12 | 0.06 | 0.02 | 2.3 [12] | 0 | 2.3 | N[13] | 0 |
| MOLYBDENUM | 38/46 | 0.078 | J | 1.5 | | D-SB-791-15, D-SB-792-13 | 0.072 | 0.6 | 0.51 | 0.43 | NC | NC | 39 | N | 0 |
| NICKEL | 54/56 | 2.5 | J | 54.1 | | D-SB-789-13 | 2.6 | 2.8 | 19.6 | 18.9 | 160 | 0 | 150 | N | 0 |
| SELENIUM | 46/56 | 0.57 | J | 5 | | SB-248-15 | 2.5 | 3.1 | 1.8 | 1.7 | 39 | 0 | 39 | N | 0 |
| SILVER | 6/47 | 0.026 | J | 0.082 | J | D-SB-782-13 | 0.018 | 2.8 | 0.04 | 0.04 | 39 | 0 | 39 | N | 0 |
| THALLIUM | 21/56 | 0.037 | J | 0.15 | J | D-SB-788-11 | 0.041 | 2.4 | 0.09 | 0.26 | 0.55 | 0 | NC | | NC |
| VANADIUM | 46/46 | 1.6 | | 111 | | D-SB-792-13 | -- | -- | 35.8 | 35.8 | 7.8 | 40 | 39 | N[14] | 18 |
| ZINC | 48/56 | 3.4 | J | 114 | | D-SB-785-13 | 26 | 30 | 37.0 | 33.7 | 2300 | 0 | 2300 | N | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 15/55 | 3400 | J | 17000 | | D-SB-785-13 | 3100 | 13000 | 5660 | 3588 | 230000 | 0 | NC | | NC |
| GASOLINE RANGE ORGANICS | 1/55 | 79 | J | 79 | J | D-SB-786-13 | 52 | 130 | 79.0 | 34.2 | 230000 | 0 | NC | | NC |
| **Miscellaneous Parameters (mg/kg)** | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 19/46 | 0.31 | J | 0.88 | J | D-SB-785-11 | 0.3 | 0.35 | 0.54 | 0.32 | 23 | 0 | 0.29 | C | 19 |
| TOTAL ORGANIC CARBON | 1/1 | 319 | J | 319 | J | MRC-MW40[1214] | -- | -- | 319 | 319 | NC | NC | NC | | NC |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
6 - The value is for xylenes.
7 - The value is for xylene, mixture.
8 - The value for acenaphthene is used as a surrogate for acenaphthylene.
9 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
11 - The value is for trivalent chromium.
12 - The value is for mercury (inorganic/mercuric dichloride).
13 - The value is for mercuric chloride.
14 - The value is for vanadium and compounds.
15 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NC = No criteria

**TABLE 4-4**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**BLOCK D**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Construction Worker | Surface Soil | Incidental Ingestion | 2E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.2 | -- |
| | | Dermal Contact | 5E-07 | -- | -- | -- | 0.01 | -- |
| | | Inhalation | 4E-07 | -- | -- | -- | 0.6 | -- |
| | | Total | 3E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.9 | -- |
| | Subsurface Soil | Incidental Ingestion | 9E-07 | -- | -- | -- | 0.3 | -- |
| | | Dermal Contact | 2E-07 | -- | -- | -- | 0.01 | -- |
| | | Inhalation | 6E-07 | -- | -- | -- | 0.6 | -- |
| | | Total | 2E-06 | -- | -- | -- | 1 | -- |
| Industrial Worker | Surface Soil | Incidental Ingestion | 6E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.04 | -- |
| | | Dermal Contact | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 5E-09 | -- | -- | -- | 0.0003 | -- |
| | | Total | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.05 | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-06 | -- | -- | -- | 0.05 | -- |
| | | Dermal Contact | 3E-06 | -- | -- | -- | 0.01 | -- |
| | | Inhalation | 2E-07 | -- | -- | -- | 0.005 | -- |
| | | Total | 5E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.07 | -- |
| Child Commercial Receptor | Surface Soil | Incidental Ingestion | 6E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.4 | -- |
| | | Dermal Contact | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.02 | -- |
| | | Inhalation | 8E-10 | -- | -- | -- | 0.00007 | -- |
| | | Total | 8E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 0.4 | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.5 | -- |
| | | Dermal Contact | 5E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.02 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.001 | -- |
| | | Total | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.5 | -- |

**TABLE 4-4**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**BLOCK D**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Adolescent Commercial Receptor | Surface Soil | Incidental Ingestion | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.07 | -- |
| | | Dermal Contact | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 1E-09 | -- | -- | -- | 0.00007 | -- |
| | | Total | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.08 | -- |
| | Subsurface Soil | Incidental Ingestion | 3E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.1 | -- |
| | | Dermal Contact | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 2E-08 | -- | -- | -- | 0.001 | -- |
| | | Total | 7E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.1 | -- |
| Lifelong Commercial Receptor (Child + Adolescent) | Surface Soil | Incidental Ingestion | 8E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | NA | -- |
| | | Dermal Contact | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 2E-09 | -- | -- | -- | NA | -- |
| | | Total | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 8E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 4E-08 | -- | -- | -- | NA | -- |
| | | Total | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| Adult Commercial Receptor | Surface Soil | Incidental Ingestion | 6E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.04 | -- |
| | | Dermal Contact | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 5E-09 | -- | -- | -- | 0.0003 | -- |
| | | Total | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.05 | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-06 | -- | -- | -- | 0.05 | -- |
| | | Dermal Contact | 3E-06 | -- | -- | -- | 0.01 | -- |
| | | Inhalation | 2E-07 | -- | -- | -- | 0.005 | -- |
| | | Total | 5E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.07 | -- |

**TABLE 4-4**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**BLOCK D**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Child Recreational User | Surface Soil | Incidental Ingestion | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 0.7 | -- |
| | | Dermal Contact | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.04 | -- |
| | | Inhalation | 3E-09 | -- | -- | -- | 0.0003 | -- |
| | | Total | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 0.8 | -- |
| | Subsurface Soil | Incidental Ingestion | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 1.0 | -- |
| | | Dermal Contact | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | 0.04 | -- |
| | | Inhalation | 5E-08 | -- | -- | -- | 0.005 | -- |
| | | Total | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 1 | -- |
| | | | | | | | | |
| Adolescent Recreational User | Surface Soil | Incidental Ingestion | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.1 | -- |
| | | Dermal Contact | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.008 | -- |
| | | Inhalation | 4E-09 | -- | -- | -- | 0.0003 | -- |
| | | Total | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.1 | -- |
| | Subsurface Soil | Incidental Ingestion | 6E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.2 | -- |
| | | Dermal Contact | 2E-06 | -- | -- | -- | 0.009 | -- |
| | | Inhalation | 9E-08 | -- | -- | -- | 0.005 | -- |
| | | Total | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.2 | -- |
| | | | | | | | | |
| Adult Recreational User | Surface Soil | Incidental Ingestion | 6E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.08 | -- |
| | | Dermal Contact | 3E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.006 | -- |
| | | Inhalation | 2E-09 | -- | -- | -- | 0.0003 | -- |
| | | Total | 8E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.08 | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-06 | -- | -- | -- | 0.1 | -- |
| | | Dermal Contact | 8E-07 | -- | -- | -- | 0.007 | -- |
| | | Inhalation | 9E-08 | -- | -- | -- | 0.005 | -- |
| | | Total | 3E-06 | -- | -- | -- | 0.1 | -- |

**TABLE 4-4**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**BLOCK D**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks $> 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-5}$ and $\leq 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-6}$ and $\leq 10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Lifelong Recreational User (Child + Adolescent + Adult) | Surface Soil | Incidental Ingestion | 2E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 6E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 9E-09 | -- | -- | -- | NA | -- |
| | | Total | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 2E-07 | -- | -- | -- | NA | -- |
| | | Total | 5E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| Child Resident | Surface Soil | Incidental Ingestion | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 1 | -- |
| | | Dermal Contact | 6E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.05 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.001 | -- |
| | | Total | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 1 | -- |
| | Subsurface Soil | Incidental Ingestion | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 1 | -- |
| | | Dermal Contact | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | 0.06 | -- |
| | | Inhalation | 2E-07 | -- | -- | -- | 0.02 | -- |
| | | Total | 6E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 1 | -- |
| Adolescent Resident | Surface Soil | Incidental Ingestion | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.2 | -- |
| | | Dermal Contact | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 2E-08 | -- | -- | -- | 0.001 | -- |
| | | Total | 5E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.2 | -- |
| | Subsurface Soil | Incidental Ingestion | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.3 | -- |
| | | Dermal Contact | 3E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 4E-07 | -- | -- | -- | 0.02 | -- |
| | | Total | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.3 | -- |

**TABLE 4-4**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**BLOCK D**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks $> 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-5}$ and $\leq 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-6}$ and $\leq 10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Adult Resident | Surface Soil | Incidental Ingestion | 8E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.1 | -- |
| | | Dermal Contact | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.008 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.001 | -- |
| | | Total | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.1 | -- |
| | Subsurface Soil | Incidental Ingestion | 3E-06 | -- | -- | ARSENIC | 0.1 | -- |
| | | Dermal Contact | 1E-06 | -- | -- | -- | 0.009 | -- |
| | | Inhalation | 4E-07 | -- | -- | -- | 0.02 | -- |
| | | Total | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.2 | -- |
| Lifelong Resident (Child + Adolescent + Adult) | Surface Soil | Incidental Ingestion | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 8E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 4E-08 | -- | -- | -- | NA | -- |
| | | Total | 3E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 5E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 9E-07 | -- | -- | -- | NA | -- |
| | | Total | 7E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |

Note: See Section 3 for benzo(a)pyrene equivalents calculation methodology.

**Table 4-5**

**Occurrence and Distribution of Chemicals - Surface Soil (0-2 feet) - Tax Block Soils**
**Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 8/42 | 11 | J | 43000 | J | E-SB-833K-02 | 0.29 | 6.5 | 10353 | 1974 | NC | NC | 4900 | N | 2 | NC | NC | 1740 | 2 |
| 1,2,3-TRIMETHYLBENZENE | 2/34 | 0.2 | J | 0.35 | J | SB-503-0001-AVG, SB-503-0001 | 0.13 | 7.1 | 0.28 | 1.9 | NC | NC | NC | | NC | NC | NC | NC | NC |
| 1,2,4-TRICHLOROBENZENE | 8/42 | 47 | J | 210000 | | E-SB-833K-02 | 0.22 | 6.5 | 49173 | 9368 | 78000 | 2 | 6200 | N[6] | 2 | 2400 | 2 | 136 | 7 |
| 1,2-DICHLOROBENZENE | 4/42 | 3.4 | J | 970 | J | E-SB-833E-02 | 0.27 | 360 | 255 | 30.7 | 700000 | 0 | 190000 | N | 0 | 4600 | 0 | 7200 | 0 |
| 1,3-DICHLOROBENZENE | 4/42 | 0.33 | J | 1100 | J | E-SB-833K-02 | 0.27 | 190 | 283 | 31.4 | 23000 | 0 | NC | | NC | 290 | 1 | NC | NC |
| 1,4-DICHLOROBENZENE | 7/42 | 1.3 | J | 2700 | J | E-SB-833K-02 | 0.5 | 6.5 | 615 | 105 | 27000 | 0 | 2400 | C | 1 | 4.2 | 6 | 8.2 | 6 |
| 2-BUTANONE | 4/42 | 2.7 | J | 88 | J | E-SB-833J-02 | 1.1 | 1800 | 25.0 | 53.0 | 4700000 | 0 | 2800000 | N | 0 | 29000 | 0 | 30000 | 0 |
| ACETONE | 11/42 | 7.3 | J | 230 | J | E-SB-833F-02 | 4.8 | 9800 | 41.3 | 221 | 7000000 | 0 | 6100000 | N | 0 | 22000 | 0 | 90000 | 0 |
| CARBON DISULFIDE | 3/42 | 0.66 | J | 0.95 | J | SB-506-0001-AVG, SB-506-0001 | 0.33 | 500 | 0.81 | 13.9 | 780000 | 0 | 82000 | N | 0 | 19000 | 0 | 6200 | 0 |
| CHLOROBENZENE | 1/42 | 12 | | 12 | | E-SB-833G-02 | 0.25 | 270 | 12.0 | 8.8 | 160000 | 0 | 29000 | N | 0 | 680 | 0 | 1240 | 0 |
| METHYLENE CHLORIDE | 8/42 | 8 | J | 88 | J | E-SB-833F-02 | 0.51 | 3200 | 18.3 | 81.1 | 85000 | 0 | 11000 | C | 0 | 19 | 1 | 24 | 1 |
| NAPHTHALENE | 1/42 | 58 | | 58 | | SB-4A-SS | 0.14 | 280 | 58.0 | 9.9 | 160000 | 0 | 3600 | C | 0 | 150 | 0 | 9.4 | 1 |
| O-XYLENE | 1/42 | 0.43 | J | 0.43 | J | SB-503-0001-AVG, SB-503-0001 | 0.27 | 360 | 0.43 | 10.6 | 1600000 [7] | 0 | 380000 | N | 0 | 3000 [7] | 0 | 24000 | 0 |
| TERTIARY-BUTYL ALCOHOL | 2/2 | 390 | J | 620 | J | E-SB-833L-02 | | | 505 | 505 | NC | NC | NC | | NC | NC | NC | NC | NC |
| TETRACHLOROETHENE | 1/42 | 1.8 | J | 1.8 | J | E-SB-833N-02 | 0.4 | 500 | 1.8 | 14.1 | 1200 | 0 | 550 | C | 0 | 4.7 | 0 | 0.98 | 1 |
| TOLUENE | 3/42 | 0.31 | J | 0.46 | J | SB-503-0001, SB-503-0001-AVG | 0.21 | 710 | 0.38 | 19.0 | 630000 | 0 | 500000 | N | 0 | 27000 | 0 | 32000 | 0 |
| TOTAL XYLENES | 2/34 | 1.1 | J | 1.2 | J | SB-500-0001 | 0.51 | 340 | 1.2 | 13.6 | 1600000 [7] | 0 | 63000 | N | 0 | 3000 [7] | 0 | 4000 | 0 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 2-NITROANILINE | 1/29 | 44 | J | 44 | J | SB-6A-SS | 720 | 15000 | 44.0 | 939 | NC | NC | 61000 | N | 0 | NC | NC | 3000 | 0 |
| BIS(2-ETHYLHEXYL)PHTHALATE | 7/29 | 24 | J | 93 | J | SB-505-0001 | 360 | 7600 | 46.1 | 367 | 46000 | 0 | 35000 | C | 0 | 2900000 | 0 | 22000 | 0 |
| BUTYL BENZYL PHTHALATE | 2/29 | 78 | J | 120 | J | SB-507-0001 | 360 | 7600 | 99.0 | 443 | NC | NC | 260000 | C | 0 | NC | NC | 10200 | 0 |
| CAPROLACTAM | 1/29 | 140 | J | 140 | J | SB-1A-SS | 360 | 7600 | 140 | 448 | NC | NC | 3100000 | N | 0 | NC | NC | 90000 | 0 |
| CARBAZOLE | 5/29 | 27 | J | 430 | J | SB-503-0001 | 360 | 7600 | 97.2 | 383 | 32000 | 0 | NC | | NC | 470 | 0 | NC | NC |
| DI-N-BUTYL PHTHALATE | 1/29 | 28 | J | 28 | J | SB-505-0001 | 360 | 7600 | 28.0 | 444 | 780000 | 0 | 610000 | N | 0 | 5000000 | 0 | 184000 | 0 |
| DIBENZOFURAN | 2/29 | 34 | J | 250 | J | SB-4A-SS | 360 | 7600 | 142 | 399 | 7800 | 0 | 7800 | N | 0 | NC | NC | 13600 | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 4/42 | 9.8 | J | 190 | J | SB-503-0001 | 3.7 | 7600 | 45.5 | 267 | 31000 | 0 | 31000 | N | 0 | 4400 | 0 | 15000 | 0 |
| ACENAPHTHENE | 7/42 | 7.5 | J | 470 | J | SB-503-0001 | 3.7 | 7600 | 94.9 | 267 | 470000 | 0 | 340000 | N | 0 | 100000 | 0 | 440000 | 0 |
| ACENAPHTHYLENE | 4/42 | 13 | J | 330 | J | SB-503-0001 | 3.7 | 7600 | 73.3 | 248 | 470000 | 0 | 340000 | N[8] | 0 | 100000 | 0 | 440000 [8] | 0 |
| ANTHRACENE | 9/42 | 16 | J | 1500 | J | SB-503-0001 | 3.7 | 7600 | 217 | 269 | 2300000 | 0 | 1700000 | N | 0 | 470000 | 0 | 7200000 | 0 |
| BAP EQUIVALENT-1/2 NONDETECTS[17] | 19/42 | 7.0 | | 10999 | | SB-503-0001 | 3.7 | 3600 | 1223 | 649 | 22 | 18 | 15 | | 18 | NC | NC | 70 | 18 |
| BAP EQUIVALENT-POSITIVE RESULTS[17] | 19/42 | 1.2 | | 10999 | | SB-503-0001 | 3.7 | 3600 | 874 | 491 | 22 | 14 | 15 | C | 16 | 120 | 10 | 70 | 11 |
| BENZO(A)ANTHRACENE | 17/42 | 12 | J | 7300 | | SB-503-0001 | 3.7 | 3600 | 679 | 380 | 220 | 8 | 150 | C | 9 | 480 | 5 | 200 | 8 |
| BENZO(A)PYRENE | 16/42 | 14 | J | 7600 | | SB-503-0001 | 3.7 | 3600 | 715 | 377 | 22 | 13 | 15 | C | 14 | 120 | 8 | 70 | 10 |
| BENZO(B)FLUORANTHENE | 19/42 | 12 | J | 8100 | | SB-503-0001 | 3.7 | 3600 | 745 | 433 | 220 | 7 | 150 | C | 9 | 1500 | 3 | 700 | 5 |
| BENZO(G,H,I)PERYLENE | 15/42 | 8 | J | 5000 | J | SB-503-0001 | 3.7 | 7600 | 487 | 370 | 230000 | 0 | 170000 | N[9] | 0 | 680000 | 0 | 2400000 [9] | 0 |
| BENZO(K)FLUORANTHENE | 12/42 | 8.7 | J | 3100 | J | SB-503-0001 | 3.7 | 7600 | 484 | 348 | 2200 | 0 | 1500 | C | 2 | 15000 | 0 | 7000 | 0 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 2/7 | 120 | J | 170 | J | E-SB-828-SS | 75 | 85 | 145 | 69.9 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-FLUORANTHENES/PYRENES | 2/7 | 85 | J | 150 | J | E-SB-835-SS | 75 | 85 | 118 | 62.0 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-PHENANTHRENES/ANTHRACENES | 1/7 | 88 | J | 88 | J | E-SB-835-SS | 75 | 85 | 88.0 | 46.5 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 1/7 | 260 | J | 260 | J | E-SB-828-SS | 75 | 85 | 260 | 71.3 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-PHENANTHRENES/ANTHRACENES | 2/7 | 86 | J | 96 | J | E-SB-833-SS | 75 | 81 | 91.0 | 54.1 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 1/7 | 200 | J | 200 | J | E-SB-828-SS | 75 | 85 | 200 | 62.7 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-PHENANTHRENES/ANTHRACENES | 1/7 | 160 | J | 160 | J | E-SB-828-SS | 75 | 85 | 160 | 57.0 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | 1/7 | 170 | J | 170 | J | E-SB-828-SS | 75 | 85 | 170 | 58.4 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C4-PHENANTHRENES/ANTHRACENES | 1/7 | 110 | J | 110 | J | E-SB-828-SS | 75 | 85 | 110 | 49.9 | NC | NC | NC | | NC | NC | NC | NC | NC |
| CHRYSENE | 17/42 | 13 | J | 7700 | | SB-503-0001 | 1.2 | 3600 | 665 | 373 | 22000 | 0 | 15000 | C | 0 | 48000 | 0 | 22000 | 0 |
| DIBENZO(A,H)ANTHRACENE | 7/42 | 14 | J | 1400 | J | SB-503-0001 | 3.7 | 7600 | 270 | 277 | 22 | 6 | 15 | C | 6 | 460 | 2 | 220 | 2 |
| FLUORANTHENE | 21/42 | 9.5 | J | 14000 | | SB-503-0001 | 3.7 | 400 | 1087 | 599 | 310000 | 0 | 230000 | N | 0 | 6300000 | 0 | 3200000 | 0 |
| FLUORENE | 6/42 | 8.8 | | 580 | J | SB-503-0001 | 3.7 | 7600 | 94.4 | 269 | 310000 | 0 | 230000 | N | 0 | 140000 | 0 | 540000 | 0 |
| INDENO(1,2,3-CD)PYRENE | 14/42 | 9.2 | J | 4200 | J | SB-503-0001 | 3.7 | 7600 | 464 | 355 | 220 | 6 | 150 | C | 6 | 4200 | 0 | 2400 | 0 |
| NAPHTHALENE | 8/42 | 10 | J | 410 | | E-SB-833A-02 | 3.7 | 7600 | 92.8 | 279 | 160000 | 0 | 3600 | C | 0 | 150 | 1 | 9.4 | 8 |
| PHENANTHRENE | 16/42 | 9.4 | J | 5600 | J | SB-503-0001 | 3.7 | 3600 | 536 | 309 | 2300000 | 0 | 170000 | N[9] | 0 | 470000 | 0 | 2400000 [9] | 0 |
| PYRENE | 20/42 | 13 | J | 16000 | | SB-503-0001 | 3.7 | 400 | 1068 | 569 | 230000 | 0 | 170000 | N | 0 | 680000 | 0 | 2400000 | 0 |
| **Pesticides/PCBs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1242 | 2/220 | 32 | J | 58 | | SB-235-SS | 14 | 740000 | 45.0 | 3526 | 320 | 0 | 220 | C | 0 | NC | NC | 106 | 0 |
| AROCLOR-1254 | 3/220 | 51 | | 36000 | | SB-555-SS0-0.5 | 17 | 740000 | 13617 | 3746 | 320 | 2 | 110 | N[6] | 2 | 1100 | 2 | 176 | 2 |

**Table 4-5**

**Occurrence and Distribution of Chemicals - Surface Soil (0-2 feet) - Tax Block Soils**
**Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AROCLOR-1260 | 129/220 | 4.3 | J | 1800000 | | SB-353-0001 | 17 | 290 | 58917 | 34555 | 320 | 75 | 220 | C | 77 | NC | NC | 480 | 73 |
| TOTAL AROCLOR | 130/220 | 4.3 | | 1800000 | | SB-353-0001 | 0 | 0 | 58779 | 34733 | 320 [10] | 75 | 220 | C[11] | 77 | 410 [10] | 73 | NC | NC |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | | | | | |
| ANTIMONY | 15/29 | 0.031 | L | 2.2 | J | SB-503-0001 | 0.059 | 2.9 | 0.33 | 0.56 | 3.1 | 0 | 3.1 | N | 0 | 13 | 0 | 13.2 | 0 |
| ARSENIC | 29/29 | 0.52 | J | 9.6 | J | SB-510-0001 | -- | -- | 1.8 | 1.8 | 0.43 | 29 | 0.39 | C | 29 | 0.026 | 29 | 0.026 | 29 |
| BARIUM | 21/21 | 9 | | 153 | | SB-504-0001 | -- | -- | 32.2 | 32.2 | 1600 | 0 | 1500 | N | 0 | 6000 | 0 | 6000 | 0 |
| BERYLLIUM | 21/29 | 0.12 | | 2 | | SB-507-0001 | 2.4 | 2.9 | 0.80 | 0.95 | 16 | 0 | 16 | N | 0 | 1200 | 0 | 1160 | 0 |
| CADMIUM | 20/29 | 0.0125 | | 6.4 | | SB-505-0001 | 0.012 | 2.9 | 0.53 | 0.74 | 3.9 | 1 | 7 | N | 0 | 27 | 0 | 28 | 0 |
| CHROMIUM | 29/29 | 6.3 | J | 83.7 | J | SB-505-0001 | -- | -- | 15.2 | 15.2 | 12000 [12] | 0 | 12000 | N[12] | 0 | 2000000000 [12] | 0 | 1980000000 [12] | 0 |
| COBALT | 21/21 | 2.1 | | 27.2 | | SB-508-0001 | -- | -- | 5.9 | 5.9 | NC | NC | 2.3 | N | 19 | NC | NC | 9.8 | 3 |
| COPPER | 29/29 | 3.8 | J | 27.9 | J | SB-510-0001 | -- | -- | 11.9 | 11.9 | 310 | 0 | 310 | N | 0 | 11000 | 0 | 1020 | 0 |
| IRON | 21/21 | 5610 | | 29900 | | SB-518-0001 | -- | -- | 15185 | 15185 | 5500 | 21 | 5500 | N | 21 | NC | NC | 12800 | 15 |
| LEAD | 27/29 | 2 | J | 278 | J | SB-505-0001 | 2.8 | 2.9 | 23.0 | 21.6 | 400 | 0 | 400 | | 0 | NC | NC | 280 [13] | 0 |
| MANGANESE | 21/21 | 11.2 | | 1370 | J | SB-503-0001 | -- | -- | 118 | 118 | 160 | 2 | 180 | N | 2 | 950 | 0 | 1140 | 0 |
| MERCURY | 8/29 | 0.061 | | 0.41 | | SB-504-0001 | 0.019 | 0.12 | 0.18 | 0.07 | 2.3 [14] | 0 | 2.3 | N[15] | 0 | NC | NC | NC | NC |
| MOLYBDENUM | 4/21 | 0.3775 | | 3.2 | J | SB-510-0001 | 0.077 | 0.78 | 1.4 | 0.36 | NC | NC | 39 | N | 0 | NC | NC | 74 | 0 |
| **Inorganics (mg/kg) (continued)** | | | | | | | | | | | | | | | | | | | |
| NICKEL | 29/29 | 3.2 | J | 20 | | SB-3A-SS | | | 9.5 | 9.5 | 160 | 0 | 150 | N | 0 | NC | NC | 960 | 0 |
| SELENIUM | 12/29 | 0.24 | | 1.1 | L | SB-511-0001 | 0.18 | 2.9 | 0.45 | 0.59 | 39 | 0 | 39 | N | 0 | 19 | 0 | 19 | 0 |
| SILVER | 21/27 | 0.031 | | 0.38 | | SB-505-0001 | 0.035 | 2.9 | 0.11 | 0.38 | 39 | 0 | 39 | N | 0 | 31 | 0 | 32 | 0 |
| THALLIUM | 11/29 | 0.026 | K | 0.38 | | SB-504-0001 | 0.02 | 2.3 | 0.09 | 0.34 | 0.55 | 0 | NC | | 0 | 3.6 | 0 | NC | NC |
| VANADIUM | 21/21 | 8.5 | J | 60.7 | J | SB-505-0001 | -- | -- | 19.3 | 19.3 | 7.8 | 21 | 39 | N[16] | 2 | 730 | 0 | 3600 | 0 |
| ZINC | 22/29 | 11.1 | | 302 | | SB-505-0001 | 25 | 29 | 52.5 | 43.2 | 2300 | 0 | 2300 | N | 0 | 14000 | 0 | 13600 | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 6/12 | 13000 | | 8900000 | J | E-SB-833A-02 | 11000 | 12000 | 1905500 | 955542 | 230000 | 4 | NC | | 0 | NC | NC | NC | NC |
| GASOLINE RANGE ORGANICS | 5/13 | 64 | J | 1400 | | E-SB-833K-02 | 55 | 120 | 581 | 254 | 230000 | 0 | NC | | 0 | NC | NC | NC | NC |
| TPH (C10-C32) | 13/21 | 2200 | J | 650000 | | SB-503-0001 | 610 | 22000 | 65277 | 42062 | NC | NC | NC | | 0 | NC | NC | NC | NC |
| **Miscellaneous Parameters (%)** | | | | | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | 166/166 | 46.1 | | 97 | | SB-569-SS0.5-1 | -- | -- | 85.4 | 85.4 | NC | NC | NC | | 0 | NC | NC | NC | NC |
| **Radionuclides (pci/g)** | | | | | | | | | | | | | | | | | | | |
| ACTINIUM-228 | 1/3 | 1.02 | | 1.02 | | SB-42S-SS | 0.03 | 0.15 | 1.0 | 0.37 | -- | -- | -- | | -- | -- | -- | -- | -- |
| BISMUTH-212 | 1/3 | 2.3 | | 2.3 | | SB-42S-SS | 0.1 | 0.1 | 2.3 | 0.80 | -- | -- | -- | | -- | -- | -- | -- | -- |
| BISMUTH-214 | 1/3 | 0.67 | J | 0.67 | J | SB-42S-SS | 0.1 | 0.38 | 0.67 | 0.30 | -- | -- | -- | | -- | -- | -- | -- | -- |
| CESIUM-137 | 1/3 | 0.145 | | 0.145 | | SB-41S-SS | -0.048 | 0.08 | 0.15 | 0.05 | -- | -- | -- | | -- | -- | -- | -- | -- |
| LEAD-212 | 2/3 | 0.3 | | 1.2 | | SB-42S-SS | 0.3 | 0.3 | 0.75 | 0.55 | -- | -- | -- | | -- | -- | -- | -- | -- |
| LEAD-214 | 2/3 | 0.42 | J | 1.09 | J | SB-42S-SS | 0.25 | 0.25 | 0.76 | 0.55 | -- | -- | -- | | -- | -- | -- | -- | -- |
| POTASSIUM-40 | 3/3 | 3.4 | | 9.2 | | SB-42S-SS | -- | -- | 5.7 | 5.7 | -- | -- | -- | | -- | -- | -- | -- | -- |
| RADIUM-226 | 1/3 | 1.22 | J | 1.22 | J | SB-42S-SS | 0.32 | 0.51 | 1.2 | 0.55 | -- | -- | -- | | -- | -- | -- | -- | -- |
| THALLIUM-208 | 1/3 | 0.39 | | 0.39 | | SB-42S-SS | 0.075 | 0.1 | 0.39 | 0.16 | -- | -- | -- | | -- | -- | -- | -- | -- |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
The SSL at a DAF of 20 is 20x the SSL at a DAF of 1.
6 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
7 - The value is for xylenes.
8 - The value for acenaphthene is used as a surrogate for acenaphthylene.
9 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
10 - The value is for PCB (total).
11 - The value is for polychlorinated biphenyls (high risk).
12 - The value is for trivalent chromium.
13 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
14 - The value is for mercury (inorganic/mercuric dichloride).
15 - The value is for mercuric chloride.
16 - The value is for vanadium and compounds.
17 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NC = No criteria

**Table 4-6**

**Occurrence and Distribution of Chemicals - Subsurface Soil (2-10 feet) - Tax Block Soils**
**Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 3/100 | 0.48 J | 0.69 J | SB-515-0406 | 0.26 | 44000 | 0.62 | 273 | 1600000 | 0 | 3300 C | 0 | 5100 | 0 | 13.8 | 0 |
| 1,1-DICHLOROETHANE | 3/100 | 0.48 J | 0.69 J | SB-515-0810 | 0.26 | 44000 | 0.62 | 273 | 1600000 | 0 | 3300 C | 0 | 5100 | 0 | 13.8 | 0 |
| 1,2,3-TRICHLOROBENZENE | 32/100 | 0.6 J | 2200000 | E-SB-833-09 | 0.28 | 11 | 80223 | 25673 | NC | NC | 4900 N | 10 | NC | NC | 1740 | 11 |
| 1,2,3-TRIMETHYLBENZENE | 8/86 | 0.35 J | 49 J | E-SB-833L-04 | 0.12 | 2900 | 23.1 | 26.5 | NC | NC | NC | NC | NC | NC | NC | NC |
| 1,2,4-TRICHLOROBENZENE | 32/100 | 5.9 J | 9600000 | E-SB-833-09 | 0.23 | 52 | 364319 | 116584 | 78000 | 7 | 6200 N[6] | 10 | 2400 | 13 | 136 | 22 |
| 1,2,4-TRIMETHYLBENZENE | 1/100 | 4.4 J | 4.4 J | SB-500-0406 | 0.47 | 13000 | 4.4 | 93.9 | NC | NC | 6200 N | 0 | NC | NC | 420 | 0 |
| 1,2-DICHLOROBENZENE | 25/100 | 0.39 J | 120000 J | E-SB-833-09 | 0.26 | 290 | 5460 | 1369 | 700000 | 0 | 190000 N | 0 | 4600 | 2 | 7200 | 1 |
| 1,2-DICHLOROETHANE | 2/100 | 1.5 J | 51 J | E-SB-833K-10 | 0.25 | 26000 | 26.3 | 169 | 7000 | 0 | 430 C | 0 | 1 | 2 | 0.84 | 2 |
| 1,3-DICHLOROBENZENE | 14/100 | 0.39 J | 38000 J | E-SB-833A-10 | 0.25 | 12000 | 5795 | 894 | 23000 | 2 | NC | NC | 290 | 4 | NC | NC |
| 1,4-DICHLOROBENZENE | 28/100 | 1.6 J | 130000 J | E-SB-833-09 | 0.48 | 290 | 6806 | 1909 | 27000 | 2 | 2400 C | 6 | 4.2 | 27 | 8.2 | 26 |
| 2-BUTANONE | 8/100 | 1.5 J | 110 J | E-SB-833L-06 | 1 | 110000 | 25.8 | 679 | 4700000 | 0 | 2800000 N | 0 | 29000 | 0 | 30000 | 0 |
| 4-ISOPROPYLTOLUENE | 2/100 | 1.6 J | 9 | SB-504-0406 | 0.15 | 12000 | 5.3 | 88.7 | NC | NC | NC | NC | NC | NC | NC | NC |
| ACETONE | 42/100 | 7 J | 16000 J | E-SB-833E-06 | 4.8 | 800000 | 430 | 4537 | 7000000 | 0 | 6100000 N | 0 | 22000 | 0 | 90000 | 0 |
| BENZENE | 6/116 | 0.33 J | 6 | SB-21-10 | 0.17 | 31000 | 1.4 | 171 | 12000 | 0 | 1100 C | 0 | 1.9 | 1 | 4.2 | 1 |
| CARBON DISULFIDE | 3/100 | 1.2 J | 4.2 J | SB-506-0810 | 0.32 | 31000 | 2.6 | 198 | 780000 | 0 | 82000 N | 0 | 19000 | 0 | 6200 | 0 |
| CARBON TETRACHLORIDE | 1/100 | 0.88 J | 0.88 J | E-SB-833G-08 | 0.27 | 16000 | 0.88 | 112 | 4900 | 0 | 610 C | 0 | 2.1 | 0 | 3.4 | 0 |
| CHLOROBENZENE | 12/100 | 1.8 J | 4000 J | E-SB-833L-08 | 0.24 | 16000 | 523 | 170 | 160000 | 0 | 29000 N | 0 | 680 | 2 | 1240 | 2 |
| CIS-1,2-DICHLOROETHENE | 4/100 | 0.37 J | 9.7 | SB-515-0406 | 0.26 | 18000 | 4.2 | 123 | 78000 | 0 | 16000 N | 0 | NC | NC | 420 | 0 |
| ISOPROPYLBENZENE | 1/100 | 0.82 J | 0.82 J | SB-504-0406 | 0.12 | 17000 | 0.82 | 117 | 780000 | 0 | 210000 N | 0 | 64000 | 0 | 22000 | 0 |
| M+P-XYLENES | 2/100 | 2.1 J | 14 J | E-SB-833L-04 | 0.87 | 16000 | 8.1 | 131 | 1600000 [7] | 0 | 63000 N[8] | 0 | 3000 [7] | 0 | 4000 | 0 |
| METHYLENE CHLORIDE | 14/100 | 7 J | 4800 J | E-SB-833E-06 | 0.49 | 360000 | 359 | 2014 | 85000 | 0 | 11000 C | 0 | 19 | 2 | 24 | 2 |
| N-BUTYLBENZENE | 1/100 | 2900 J | 2900 J | E-SB-833A-06 | 0.17 | 21000 | 2900 | 168 | NC | NC | NC | NC | NC | NC | NC | NC |
| NAPHTHALENE | 2/116 | 2 | 110 J | SB-512-0810 | 0.14 | 140000 | 41.3 | 632 | 160000 | 0 | 3600 C | 0 | 150 | 0 | 9.4 | 1 |
| O-XYLENE | 3/100 | 0.8 J | 1.4 J | SB-504-0406 | 0.25 | 22000 | 1.2 | 147 | 1600000 [7] | 0 | 380000 N | 0 | 3000 [7] | 0 | 24000 | 0 |
| SEC-BUTYLBENZENE | 1/100 | 380 J | 380 J | E-SB-833A-06 | 0.13 | 12000 | 380 | 91.6 | NC | NC | NC | NC | NC | NC | NC | NC |
| TERTIARY-BUTYL ALCOHOL | 7/8 | 7 J | 1200 J | E-SB-833L-04 | 7200000 | 7200000 | 411 | 450360 | NC | NC | NC | NC | NC | NC | NC | NC |
| TETRACHLOROETHENE | 4/100 | 0.49 J | 2.6 J | E-SB-833G-08 | 0.38 | 31000 | 1.5 | 198 | 1200 | 0 | 550 C | 0 | 4.7 | 0 | 0.98 | 2 |
| TOLUENE | 18/116 | 0.21 J | 270 J | E-SB-833I-10 | 0.2 | 44000 | 19.8 | 238 | 630000 | 0 | 500000 N | 0 | 27000 | 0 | 32000 | 0 |
| TOTAL XYLENES | 6/102 | 1.5 J | 14 J | E-SB-833L-04 | 0.49 | 21000 | 5.7 | 155 | 1600000 [7] | 0 | 63000 N | 0 | 3000 [7] | 0 | 4000 | 0 |
| TRICHLOROETHENE | 3/100 | 0.32 J | 2.2 J | E-SB-833G-08 | 0.3 | 25000 | 1.0 | 163 | 1600 | 0 | 2800 C | 0 | 0.26 | 3 | 14.4 | 0 |
| TRICHLOROFLUOROMETHANE | 1/100 | 29 | 29 | SB-520-0810 | 0.25 | 41000 | 29.0 | 257 | NC | NC | 79000 N | 0 | NC | NC | 16600 | 0 |
| VINYL CHLORIDE | 3/100 | 0.48 J | 3.5 J | SB-515-0406 | 0.28 | 46000 | 1.5 | 285 | 90 | 0 | 60 C | 0 | 0.12 | 3 | 0.112 | 3 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 4/54 | 24 J | 38 J | SB-504-0810 | 370 | 62000 | 29.8 | 802 | 46000 | 0 | 35000 C | 0 | 2900000 | 0 | 22000 | 0 |
| CARBAZOLE | 2/54 | 22 J | 370 J | SB-504-0406 | 370 | 88000 | 196 | 1045 | 32000 | 0 | NC | NC | 470 | 0 | NC | NC |
| DIBENZOFURAN | 2/54 | 91 J | 260 J | SB-504-0406 | 370 | 11000 | 176 | 331 | 7800 | 0 | 7800 N | 0 | NC | NC | 13600 | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 3/100 | 12 J | 140 J | SB-504-0406 | 3.8 | 11000 | 71.7 | 180 | 31000 | 0 | 31000 N | 0 | 4400 | 0 | 15000 | 0 |
| ACENAPHTHENE | 4/100 | 21 J | 27000 | E-SB-833-09 | 3.8 | 3800 | 6889 | 398 | 470000 | 0 | 340000 N | 0 | 100000 | 0 | 440000 | 0 |
| ACENAPHTHYLENE | 1/100 | 18 J | 18 J | SB-512-0810-AVG, SB-512-0810-D | 3.8 | 11000 | 18.0 | 187 | 470000 | 0 | 340000 N[9] | 0 | 100000 | 0 | 440000 [9] | 0 |
| ANTHRACENE | 4/100 | 26 J | 28000 | E-SB-833-09 | 3.8 | 3800 | 7296 | 415 | 2300000 | 0 | 1700000 N | 0 | 470000 | 0 | 7200000 | 0 |
| BAP EQUIVALENT-1/2 NONDETECTS[18] | 19/100 | 60.2 | 39347 | E-SB-833-09 | 3.8 | 3800 | 2455 | 568 | 22 | 19 | 15 | 19 | NC | NC | 70 | 18 |
| BAP EQUIVALENT-POSITIVE RESULTS[18] | 19/100 | 0.052 | 33242 | E-SB-833-09 | 3.8 | 3800 | 1937 | 469 | 22 | 12 | 15 C | 13 | 120 | 7 | 70 | 8 |
| BENZO(A)ANTHRACENE | 13/100 | 8.6 J | 35000 | E-SB-833-09 | 3.8 | 3800 | 2908 | 486 | 220 | 2 | 150 C | 5 | 480 | 2 | 200 | 3 |
| BENZO(A)PYRENE | 13/100 | 10 J | 27000 | E-SB-833-09 | 3.8 | 3800 | 2278 | 408 | 22 | 11 | 15 C | 12 | 120 | 5 | 70 | 8 |
| BENZO(B)FLUORANTHENE | 17/100 | 9.8 J | 27000 | E-SB-833-09 | 3.8 | 3800 | 1790 | 408 | 220 | 4 | 150 C | 6 | 1500 | 2 | 700 | 2 |
| BENZO(G,H,I)PERYLENE | 9/100 | 11 J | 710 J | SB-504-0406 | 3.8 | 11000 | 125 | 179 | 230000 | 0 | 170000 N[10] | 0 | 680000 | 0 | 2400000 [10] | 0 |
| BENZO(K)FLUORANTHENE | 8/100 | 9.2 J | 770 J | SB-504-0406 | 3.8 | 11000 | 128 | 178 | 2200 | 0 | 1500 C | 0 | 15000 | 0 | 7000 | 0 |

**Table 4-6**

**Occurrence and Distribution of Chemicals - Subsurface Soil (2-10 feet) - Tax Block Soils**
**Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 1/7 | 490 | J | 490 | J | E-SB-828-09 | 77 | 90 | 490 | 105 | NC | NC | NC | NC | NC | NC | NC | NC |
| C1-FLUORANTHENES/PYRENES | 1/7 | 370 | J | 370 | J | E-SB-828-09 | 77 | 90 | 370 | 87.4 | NC | NC | NC | NC | NC | NC | NC | NC |
| C1-FLUORENES | 1/7 | 170 | J | 170 | J | E-SB-828-09 | 77 | 90 | 170 | 58.9 | NC | NC | NC | NC | NC | NC | NC | NC |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 1/7 | 580 | J | 580 | J | E-SB-828-09 | 77 | 90 | 580 | 117 | NC | NC | NC | NC | NC | NC | NC | NC |
| C2-FLUORENES | 1/7 | 330 | J | 330 | J | E-SB-828-09 | 77 | 90 | 330 | 81.7 | NC | NC | NC | NC | NC | NC | NC | NC |
| C2-PHENANTHRENES/ANTHRACENES | 1/7 | 460 | J | 460 | J | E-SB-828-09 | 77 | 90 | 460 | 100 | NC | NC | NC | NC | NC | NC | NC | NC |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 1/7 | 430 | J | 430 | J | E-SB-828-09 | 77 | 90 | 430 | 96.0 | NC | NC | NC | NC | NC | NC | NC | NC |
| C3-FLUORENES | 1/7 | 320 | J | 320 | J | E-SB-828-09 | 77 | 90 | 320 | 80.3 | NC | NC | NC | NC | NC | NC | NC | NC |
| C3-NAPHTHALENES | 1/7 | 500 | J | 500 | J | E-SB-828-09 | 77 | 90 | 500 | 106 | NC | NC | NC | NC | NC | NC | NC | NC |
| C3-PHENANTHRENES/ANTHRACENES | 1/7 | 620 | J | 620 | J | E-SB-828-09 | 77 | 90 | 620 | 123 | NC | NC | NC | NC | NC | NC | NC | NC |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | 1/7 | 350 | J | 350 | J | E-SB-828-09 | 77 | 90 | 350 | 84.6 | NC | NC | NC | NC | NC | NC | NC | NC |
| C4-NAPHTHALENES | 1/7 | 2300 | J | 2300 | J | E-SB-828-09 | 77 | 90 | 2300 | 363 | NC | NC | NC | NC | NC | NC | NC | NC |
| C4-PHENANTHRENES/ANTHRACENES | 1/7 | 660 | J | 660 | J | E-SB-828-09 | 77 | 90 | 660 | 129 | NC | NC | NC | NC | NC | NC | NC | NC |
| CHRYSENE | 15/100 | 8.7 | J | 42000 | | E-SB-833-09 | 1.3 | 3800 | 2993 | 552 | 22000 | 1 | 15000 C | 1 | 48000 | 0 | 22000 | 1 |
| DIBENZO(A,H)ANTHRACENE | 2/100 | 61 | J | 200 | J | SB-504-0406 | 3.8 | 11000 | 131 | 182 | 22 | 2 | 15 C | 2 | 460 | 0 | 220 | 0 |
| FLUORANTHENE | 20/100 | 9.2 | J | 81000 | | E-SB-833-09 | 3.8 | 3800 | 4463 | 998 | 310000 | 0 | 230000 N | 0 | 6300000 | 0 | 3200000 | 0 |
| FLUORENE | 3/100 | 17 | J | 510 | J | SB-504-0406 | 3.8 | 11000 | 182 | 183 | 310000 | 0 | 230000 N | 0 | 140000 | 0 | 540000 | 0 |
| INDENO(1,2,3-CD)PYRENE | 7/100 | 10 | J | 680 | J | SB-504-0406 | 3.8 | 11000 | 128 | 179 | 220 | 1 | 150 C | 1 | 4200 | 0 | 2400 | 0 |
| NAPHTHALENE | 14/100 | 17 | | 460 | | E-SB-833A-10 | 3.8 | 11000 | 134 | 195 | 160000 | 0 | 3600 C | 0 | 150 | 5 | 9.4 | 14 |
| PHENANTHRENE | 10/100 | 10 | J | 88000 | | E-SB-833-09 | 3.8 | 3800 | 9295 | 1044 | 2300000 | 0 | 170000 N[10] | 0 | 470000 | 0 | 2400000 [10] | 0 |
| **PAHs (ug/kg) (continued)** | | | | | | | | | | | | | | | | | | |
| PYRENE | 20/100 | 9.2 | J | 60000 | | E-SB-833-09 | 3.8 | 3800 | 3294 | 764 | 230000 | 0 | 170000 N | 0 | 680000 | 0 | 2400000 | 0 |
| TOTAL PAHS | 33/100 | 9.2 | | 415000 | | E-SB-833-09 | 0 | 0 | 13736 | 4533 | NC | NC | NC | NC | NC | NC | NC | NC |
| **Pesticides/PCBs (ug/kg)** | | | | | | | | | | | | | | | | | | |
| AROCLOR-1254 | 3/255 | 27 | | 9800 | | SB-555-4 | 17 | 1100000 | 3290 | 3683 | 320 | 1 | 110 N[6] | 1 | 1100 | 1 | 176 | 1 |
| AROCLOR-1260 | 93/255 | 15 | J | 2.4E+07 | | E-SB-833-09 | 17 | 300 | 319537 | 116546 | 320 | 38 | 220 C | 45 | NC | NC | 480 | 31 |
| TOTAL AROCLOR | 95/255 | 8 | | 2.4E+07 | | E-SB-833-09 | 0 | 0 | 312914 | 116576 | 320 [11] | 38 | 220 C[12] | 45 | 410 [11] | 32 | NC | NC |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | | | | |
| ANTIMONY | 17/54 | 0.056 | L | 0.26 | J | SB-517-0406 | 0.0056 | 3.6 | 0.15 | 0.49 | 3.1 | 0 | 3.1 N | 0 | 13 | 0 | 13.2 | 0 |
| ARSENIC | 54/54 | 0.22 | L | 5.5 | L | SB-1-05 | -- | -- | 1.3 | 1.3 | 0.43 | 45 | 0.39 C | 48 | 0.026 | 54 | 0.026 | 54 |
| BARIUM | 40/40 | 1.6 | | 89.2 | | SB-504-0810 | -- | -- | 12.7 | 12.7 | 1600 | 0 | 1500 N | 0 | 6000 | 0 | 6000 | 0 |
| BERYLLIUM | 40/54 | 0.076 | | 4.4 | | SB-515-0810 | 0.015 | 3.5 | 1.2 | 1.3 | 16 | 0 | 16 N | 0 | 1200 | 0 | 1160 | 0 |
| CADMIUM | 25/54 | 0.016 | K | 0.67 | | SB-504-0406 | 0.0037 | 3.6 | 0.09 | 0.46 | 3.9 | 0 | 7 N | 0 | 27 | 0 | 28 | 0 |
| CHROMIUM | 45/54 | 1.5 | J | 27 | J | SB-4-05 | 3.3 | 14 | 9.5 | 8.5 | 12000 [13] | 0 | 12000 N[13] | 0 | 2000000000 [13] | 0 | 1980000000 [13] | 0 |
| COBALT | 40/40 | 0.18 | | 9.1 | | SB-514-0406 | -- | -- | 3.3 | 3.3 | NC | NC | 2.3 N | 23 | NC | NC | 9.8 | 0 |
| COPPER | 49/54 | 1 | J | 45 | | SB-1-05 | 3.3 | 3.4 | 9.9 | 9.2 | 310 | 0 | 310 N | 0 | 11000 | 0 | 1020 | 0 |
| IRON | 40/40 | 1290 | | 51200 | | SB-514-0810 | -- | -- | 14125 | 14125 | 5500 | 34 | 5500 N | 34 | NC | NC | 12800 | 20 |
| LEAD | 47/54 | 0.71 | J | 14.4 | J | SB-504-0406 | 2.8 | 3.4 | 3.9 | 3.6 | 400 | 0 | 400 | 0 | NC | NC | 280 [14] | 0 |
| MANGANESE | 40/40 | 2.2 | L | 280 | L | SB-514-0406 | -- | -- | 57.9 | 57.9 | 160 | 4 | 180 N | 3 | 950 | 0 | 1140 | 0 |
| MERCURY | 2/54 | 0.079 | | 0.29 | | SB-504-0810 | 0.019 | 0.14 | 0.18 | 0.03 | 2.3 [15] | 0 | 2.3 N[16] | 0 | NC | NC | NC | NC |
| MOLYBDENUM | 1/40 | 1.3 | J | 1.3 | J | SB-504-0810 | 0.076 | 0.42 | 1.3 | 0.11 | NC | NC | 39 N | 0 | NC | NC | 74 | 0 |
| NICKEL | 48/54 | 0.76 | J | 30 | | SB-1-10 | 0.39 | 3.3 | 8.4 | 7.6 | 160 | 0 | 150 N | 0 | NC | NC | 960 | 0 |
| SELENIUM | 23/54 | 0.2 | L | 3.6 | | SB-6-05 | 0.18 | 3.6 | 0.60 | 0.68 | 39 | 0 | 39 N | 0 | 19 | 0 | 19 | 0 |
| SILVER | 32/41 | 0.03 | | 0.16 | | SB-504-0406 | 0.0079 | 2.8 | 0.07 | 0.09 | 39 | 0 | 39 N | 0 | 31 | 0 | 32 | 0 |
| THALLIUM | 13/54 | 0.021 | K | 0.21 | K | SB-504-0810 | 0.0052 | 2.9 | 0.06 | 0.36 | 0.55 | 0 | NC | NC | 3.6 | 0 | NC | NC |
| VANADIUM | 40/40 | 2.2 | J | 21.1 | J | SB-518-0406 | -- | -- | 12.4 | 12.4 | 7.8 | 29 | 39 N[17] | 0 | 730 | 0 | 3600 | 0 |
| ZINC | 35/54 | 2.8 | | 79 | | SB-1-05 | 5.2 | 35 | 25.6 | 20.6 | 2300 | 0 | 2300 N | 0 | 14000 | 0 | 13600 | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 11/41 | 7300 | J | 2.8E+07 | | E-SB-833-09 | 3300 | 29000 | 3046445 | 826079 | 230000 | 7 | NC | NC | NC | NC | NC | NC |
| GASOLINE RANGE ORGANICS | 15/31 | 56 | J | 170000 | J | E-SB-833A-10 | 55 | 280 | 21525 | 10446 | 230000 | 0 | NC | NC | NC | NC | NC | NC |
| TPH (C10-C32) | 10/39 | 640 | J | 48000 | | SB-502-0406 | 990 | 130000 | 18719 | 8653 | NC | NC | NC | NC | NC | NC | NC | NC |

**Table 4-6**

**Occurrence and Distribution of Chemicals - Subsurface Soil (2-10 feet) - Tax Block Soils**
**Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Miscellaneous Parameters (%)** | | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | 128/128 | 70 | 94 | SB-570A-10, SB-559-4 | -- | -- | 83.6 | 83.6 | NC | NC | NC | NC | NC | NC | NC | NC |
| **Miscellaneous Parameters (mg/kg)** | | | | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | 1/1 | 690 J | 690 J | MRC-MW43[0910] | -- | -- | 690 | 690 | NC | NC | NC | NC | NC | NC | NC | NC |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
The SSL at a DAF of 20 is 20x the SSL at a DAF of 1.
6 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
7 - The value is for xylenes.
8 - The value is for xylene, mixture.
9 - The value for acenaphthene is used as a surrogate for acenaphthylene.
10 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
11 - The value is for PCB (total).
12 - The value is for polychlorinated biphenyls (high risk).
13 - The value is for trivalent chromium.
14 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
15 - The value is for mercury (inorganic/mercuric dichloride).
16 - The value is for mercuric chloride.
17 - The value is for vanadium and compounds.
18 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NC = No criteria

**Table 4-7**

**Occurrence and Distribution of Chemicals - Deep Subsurface Soil (10+ feet) - Tax Block Soils**
**Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | |
| ACETONE | 1/1 | 45 | J | 45 | J | SB-503-1012 | -- | -- | 45.0 | 45.0 | 7000000 | 0 | 6100000 | N | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 2/7 | 150 | J | 260 | J | E-SB-828-15 | 79 | 88 | 205 | 88.2 | NC | NC | NC | | NC |
| C1-FLUORANTHENES/PYRENES | 2/7 | 220 | J | 250 | J | E-SB-833-11 | 79 | 88 | 235 | 96.8 | NC | NC | NC | | NC |
| C1-PHENANTHRENES/ANTHRACENES | 1/7 | 120 | J | 120 | J | E-SB-833-11 | 79 | 88 | 120 | 52.9 | NC | NC | NC | | NC |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 1/7 | 350 | J | 350 | J | E-SB-828-15 | 79 | 88 | 350 | 85.3 | NC | NC | NC | | NC |
| C2-FLUORENES | 1/7 | 280 | J | 280 | J | E-SB-828-15 | 79 | 88 | 280 | 75.3 | NC | NC | NC | | NC |
| C2-PHENANTHRENES/ANTHRACENES | 1/7 | 230 | J | 230 | J | E-SB-828-15 | 79 | 88 | 230 | 68.1 | NC | NC | NC | | NC |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 1/7 | 280 | J | 280 | J | E-SB-828-15 | 79 | 88 | 280 | 75.3 | NC | NC | NC | | NC |
| C3-FLUORENES | 1/7 | 230 | J | 230 | J | E-SB-828-15 | 79 | 88 | 230 | 68.1 | NC | NC | NC | | NC |
| C3-NAPHTHALENES | 1/7 | 310 | J | 310 | J | E-SB-828-15 | 79 | 88 | 310 | 79.6 | NC | NC | NC | | NC |
| C3-PHENANTHRENES/ANTHRACENES | 1/7 | 420 | J | 420 | J | E-SB-828-15 | 79 | 88 | 420 | 95.3 | NC | NC | NC | | NC |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | 1/7 | 250 | J | 250 | J | E-SB-828-15 | 79 | 88 | 250 | 71.0 | NC | NC | NC | | NC |
| C4-NAPHTHALENES | 1/7 | 1600 | J | 1600 | J | E-SB-828-15 | 79 | 88 | 1600 | 264 | NC | NC | NC | | NC |
| C4-PHENANTHRENES/ANTHRACENES | 1/7 | 390 | J | 390 | J | E-SB-828-15 | 79 | 88 | 390 | 91.0 | NC | NC | NC | | NC |
| **Pesticides/PCBs (ug/kg)** | | | | | | | | | | | | | | | |
| AROCLOR-1260 | 23/92 | 26 | J | 61000 | | E-SB-833-11 | 19 | 39 | 3478 | 877 | 320 | 6 | 220 | C | 8 |
| TOTAL AROCLOR | 23/92 | 26 | | 61000 | | E-SB-833-11 | 0 | 0 | 3478 | 870 | 320[6] | 6 | 220 | C[7] | 8 |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | |
| ANTIMONY | 1/1 | 0.26 | K | 0.26 | K | SB-503-1012 | -- | -- | 0.26 | 0.26 | 3.1 | 0 | 3.1 | N | 0 |
| ARSENIC | 1/1 | 1.7 | | 1.7 | | SB-503-1012 | -- | -- | 1.7 | 1.7 | 0.43 | 1 | 0.39 | C | 1 |
| BARIUM | 1/1 | 12.8 | | 12.8 | | SB-503-1012 | -- | -- | 12.8 | 12.8 | 1600 | 0 | 1500 | N | 0 |
| BERYLLIUM | 1/1 | 1.5 | | 1.5 | | SB-503-1012 | -- | -- | 1.5 | 1.5 | 16 | 0 | 16 | N | 0 |
| CADMIUM | 1/1 | 0.043 | K | 0.043 | K | SB-503-1012 | -- | -- | 0.04 | 0.04 | 3.9 | 0 | 7 | N | 0 |
| CHROMIUM | 1/1 | 14.1 | J | 14.1 | J | SB-503-1012 | -- | -- | 14.1 | 14.1 | 12000[8] | 0 | 12000 | N[8] | 0 |
| COBALT | 1/1 | 3.3 | | 3.3 | | SB-503-1012 | -- | -- | 3.3 | 3.3 | NC | NC | 2.3 | N | 1 |
| COPPER | 1/1 | 12.4 | J | 12.4 | J | SB-503-1012 | -- | -- | 12.4 | 12.4 | 310 | 0 | 310 | N | 0 |
| IRON | 1/1 | 34200 | | 34200 | | SB-503-1012 | -- | -- | 34200 | 34200 | 5500 | 1 | 5500 | N | 1 |
| LEAD | 1/1 | 5.8 | J | 5.8 | J | SB-503-1012 | -- | -- | 5.8 | 5.8 | 400 | 0 | 400 | | 0 |
| MANGANESE | 1/1 | 69.9 | | 69.9 | | SB-503-1012 | -- | -- | 69.9 | 69.9 | 160 | 0 | 180 | N | 0 |
| NICKEL | 1/1 | 12.1 | | 12.1 | | SB-503-1012 | -- | -- | 12.1 | 12.1 | 160 | 0 | 150 | N | 0 |
| SELENIUM | 1/1 | 0.8 | | 0.8 | | SB-503-1012 | -- | -- | 0.80 | 0.80 | 39 | 0 | 39 | N | 0 |
| SILVER | 1/1 | 0.1 | K | 0.1 | K | SB-503-1012 | -- | -- | 0.10 | 0.10 | 39 | 0 | 39 | N | 0 |
| THALLIUM | 1/1 | 0.056 | K | 0.056 | K | SB-503-1012 | -- | -- | 0.06 | 0.06 | 0.55 | 0 | NC | | NC |

**Table 4-7**

**Occurrence and Distribution of Chemicals - Deep Subsurface Soil (10+ feet) - Tax Block Soils**
**Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 1/1 | 17.4 J | 17.4 J | SB-503-1012 | -- | -- | 17.4 | 17.4 | 7.8 | 1 | 39 N[9] | 0 |
| ZINC | 1/1 | 17.5 | 17.5 | SB-503-1012 | -- | -- | 17.5 | 17.5 | 2300 | 0 | 2300 N | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 1/1 | 3800 J | 3800 J | E-SB-828-11 | -- | -- | 3800 | 3800 | 230000 | 0 | NC | NC |
| TPH (C10-C32) | 1/1 | 1100 J | 1100 J | SB-503-1012 | -- | -- | 1100 | 1100 | NC | NC | NC | NC |
| **Miscellaneous Parameters (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | 5/5 | 84 | 89 | SB-555A-12 | -- | -- | 85.7 | 85.7 | NC | NC | NC | NC |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
6 - The value is for PCB (total).
7 - The value is for polychlorinated biphenyls (high risk).
8 - The value is for trivalent chromium.
9 - The value is for vanadium and compounds.

**Definitions:**
C = Carcinogen
J = Estimated value
K = Biased high
N = Noncarcinogen
NC = No criteria

**TABLE 4-8**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK E**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks $> 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-5}$ and $\leq 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-6}$ and $\leq 10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Construction Worker | Surface Soil | Incidental Ingestion | 2E-05 | -- | -- | AROCLOR-1254, AROCLOR-1260 | 9 | AROCLOR-1254 |
| | | Dermal Contact | 6E-06 | -- | -- | AROCLOR-1260 | 2 | AROCLOR-1254 |
| | | Inhalation | 7E-07 | -- | -- | -- | 1 | -- |
| | | Total | 3E-05 | -- | AROCLOR-1260 | AROCLOR-1254 | 12 | AROCLOR-1254 |
| | Subsurface Soil | Incidental Ingestion | 1E-04 | -- | AROCLOR-1260 | -- | 3 | AROCLOR-1254 |
| | | Dermal Contact | 3E-05 | -- | AROCLOR-1260 | -- | 0.7 | -- |
| | | Inhalation | 1E-06 | -- | -- | -- | 0.4 | -- |
| | | Total | 1E-04 | -- | AROCLOR-1260 | AROCLOR-1254 | 4 | AROCLOR-1254 |
| Industrial Worker | Surface Soil | Incidental Ingestion | 5E-05 | -- | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.9 | -- |
| | | Dermal Contact | 1E-04 | -- | AROCLOR-1254, AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 2 | AROCLOR-1254 |
| | | Inhalation | 2E-08 | -- | -- | -- | 0.2 | -- |
| | | Total | 2E-04 | -- | AROCLOR-1254, AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 3 | AROCLOR-1254 |
| | Subsurface Soil | Incidental Ingestion | 3E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.4 | -- |
| | | Dermal Contact | 5E-04 | AROCLOR-1260 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.5 | -- |
| | | Inhalation | 7E-07 | -- | -- | -- | 1 | -- |
| | | Total | 7E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 2 | Target Organs HI ≤ 1 |
| Child Commercial Receptor | Surface Soil | Incidental Ingestion | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254, AROCLOR-1260 | -- | 9 | AROCLOR-1254 |
| | | Dermal Contact | 5E-05 | -- | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 3 | AROCLOR-1254 |
| | | Inhalation | 2E-09 | -- | -- | -- | 0.06 | -- |
| | | Total | 2E-04 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254, AROCLOR-1260 | HEXAVALENT CHROMIUM | 12 | AROCLOR-1254 |
| | Subsurface Soil | Incidental Ingestion | 6E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 1,2,4-TRICHLOROBENZENE, AROCLOR-1254 | 4 | AROCLOR-1254 |
| | | Dermal Contact | 2E-04 | AROCLOR-1260 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.9 | -- |
| | | Inhalation | 4E-08 | -- | -- | -- | 0.3 | -- |
| | | Total | 8E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 1,2,4-TRICHLOROBENZENE, AROCLOR-1254 | 5 | AROCLOR-1254 |

**TABLE 4-8**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK E**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Adolescent Commercial Receptor | Surface Soil | Incidental Ingestion | 5E-05 | -- | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 2 | AROCLOR-1254 |
| | | Dermal Contact | 6E-05 | -- | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 2 | AROCLOR-1254 |
| | | Inhalation | 3E-09 | -- | -- | -- | 0.06 | -- |
| | | Total | 1E-04 | -- | AROCLOR-1254, AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 4 | AROCLOR-1254 |
| | Subsurface Soil | Incidental Ingestion | 2E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.7 | -- |
| | | Dermal Contact | 3E-04 | AROCLOR-1260 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.6 | -- |
| | | Inhalation | 8E-08 | -- | -- | -- | 0.3 | -- |
| | | Total | 5E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 2 | Target Organs HI ≤ 1 |
| Lifelong Commercial Receptor (Child + Adolescent) | Surface Soil | Incidental Ingestion | 2E-04 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254, AROCLOR-1260 | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 1E-04 | -- | AROCLOR-1254, AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 6E-09 | -- | -- | -- | NA | -- |
| | | Total | 3E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 9E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 1,2,4-TRICHLOROBENZENE, AROCLOR-1254 | NA | -- |
| | | Dermal Contact | 5E-04 | AROCLOR-1260 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | NA | -- |
| | | Inhalation | 1E-07 | -- | -- | -- | NA | -- |
| | | Total | 1E-03 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 1,2,4-TRICHLOROBENZENE | NA | -- |

**TABLE 4-8**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK E**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Adult Commercial Receptor | Surface Soil | Incidental Ingestion | 5E-05 | -- | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.9 | -- |
| | | Dermal Contact | 1E-04 | -- | AROCLOR-1254, AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 2 | AROCLOR-1254 |
| | | Inhalation | 2E-08 | -- | -- | -- | 0.2 | -- |
| | | Total | 2E-04 | -- | AROCLOR-1254, AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 3 | AROCLOR-1254 |
| | Subsurface Soil | Incidental Ingestion | 3E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.4 | -- |
| | | Dermal Contact | 5E-04 | AROCLOR-1260 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.5 | -- |
| | | Inhalation | 7E-07 | -- | -- | -- | 1 | -- |
| | | Total | 7E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 2 | Target Organs HI ≤ 1 |
| Child Recreational User | Surface Soil | Incidental Ingestion | 3E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 1,2,4-TRICHLOROBENZENE, ARSENIC, HEXAVALENT CHROMIUM | 17 | AROCLOR-1254 |
| | | Dermal Contact | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254, AROCLOR-1260 | HEXAVALENT CHROMIUM | 7 | AROCLOR-1254 |
| | | Inhalation | 8E-09 | -- | -- | -- | 0.2 | -- |
| | | Total | 4E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 1,2,4-TRICHLOROBENZENE, ARSENIC, HEXAVALENT CHROMIUM | 24 | AROCLOR-1254 |
| | Subsurface Soil | Incidental Ingestion | 1E-03 | AROCLOR-1260 | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | ARSENIC | 7 | 1,2,3-TRICHLOROBENZENE, 1,2,4-TRICHLOROBENZENE, AROCLOR-1254 |
| | | Dermal Contact | 5E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | AROCLOR-1254 | 2 | AROCLOR-1254 |
| | | Inhalation | 2E-07 | -- | -- | -- | 1 | -- |
| | | Total | 2E-03 | AROCLOR-1260 | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | ARSENIC, HEXAVALENT CHROMIUM | 11 | 1,2,3-TRICHLOROBENZENE, 1,2,4-TRICHLOROBENZENE, AROCLOR-1254 |

**TABLE 4-8**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK E**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Adolescent Recreational User | Surface Soil | Incidental Ingestion | 1E-04 | -- | AROCLOR-1254, AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 3 | AROCLOR-1254 |
| | | Dermal Contact | 4E-05 | -- | AROCLOR-1260 | AROCLOR-1254, BENZO(A)PYRENE EQUIVALENTS | 1 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.2 | -- |
| | | Total | 1E-04 | -- | AROCLOR-1254, AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 5 | AROCLOR-1254 |
| | Subsurface Soil | Incidental Ingestion | 4E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 1 | -- |
| | | Dermal Contact | 2E-04 | AROCLOR-1260 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.4 | -- |
| | | Inhalation | 3E-07 | -- | -- | -- | 1 | -- |
| | | Total | 6E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 3 | Target Organs HI ≤ 1 |
| Adult Recreational User | Surface Soil | Incidental Ingestion | 5E-05 | -- | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 2 | AROCLOR-1254 |
| | | Dermal Contact | 3E-05 | -- | AROCLOR-1260 | AROCLOR-1254 | 1.0 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.2 | -- |
| | | Total | 8E-05 | -- | AROCLOR-1254, AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 3 | AROCLOR-1254 |
| | Subsurface Soil | Incidental Ingestion | 2E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.8 | -- |
| | | Dermal Contact | 1E-04 | -- | AROCLOR-1260 | AROCLOR-1254 | 0.3 | -- |
| | | Inhalation | 3E-07 | -- | -- | -- | 1 | -- |
| | | Total | 4E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 2 | Target Organs HI ≤ 1 |

**TABLE 4-8**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK E**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Lifelong Recreational User (Child + Adolescent + Adult) | Surface Soil | Incidental Ingestion | 4E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 1,2,4-TRICHLOROBENZENE, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 2E-04 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254, AROCLOR-1260 | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 3E-08 | -- | -- | -- | NA | -- |
| | | Total | 6E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 1,2,4-TRICHLOROBENZENE, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-03 | AROCLOR-1260 | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | ARSENIC | NA | -- |
| | | Dermal Contact | 8E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 1,2,4-TRICHLOROBENZENE, AROCLOR-1254 | NA | -- |
| | | Inhalation | 8E-07 | -- | -- | -- | NA | -- |
| | | Total | 3E-03 | AROCLOR-1260 | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| Child Resident | Surface Soil | Incidental Ingestion | 4E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 1,2,4-TRICHLOROBENZENE, ARSENIC, HEXAVALENT CHROMIUM | 24 | AROCLOR-1254 |
| | | Dermal Contact | 2E-04 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254, AROCLOR-1260 | HEXAVALENT CHROMIUM | 9 | AROCLOR-1254 |
| | | Inhalation | 3E-08 | -- | -- | -- | 0.9 | -- |
| | | Total | 5E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 1,2,4-TRICHLOROBENZENE, ARSENIC, HEXAVALENT CHROMIUM | 34 | AROCLOR-1254 |
| | Subsurface Soil | Incidental Ingestion | 2E-03 | AROCLOR-1260 | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | ARSENIC | 10 | 1,2,3-TRICHLOROBENZENE, 1,2,4-TRICHLOROBENZENE, AROCLOR-1254 |
| | | Dermal Contact | 6E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 1,2,4-TRICHLOROBENZENE, AROCLOR-1254, HEXAVALENT CHROMIUM | 3 | AROCLOR-1254 |
| | | Inhalation | 7E-07 | -- | -- | -- | 5 | 1,2,4-TRICHLOROBENZENE |
| | | Total | 2E-03 | AROCLOR-1260 | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | ARSENIC, HEXAVALENT CHROMIUM | 18 | 1,2,3-TRICHLOROBENZENE, 1,2,4-TRICHLOROBENZENE, AROCLOR-1254 |

**TABLE 4-8**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK E**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks $> 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-5}$ and $\leq 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-6}$ and $\leq 10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Adolescent Resident | Surface Soil | Incidental Ingestion | 1E-04 | -- | AROCLOR-1254, AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 5 | AROCLOR-1254 |
| | | Dermal Contact | 6E-05 | -- | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 2 | AROCLOR-1254 |
| | | Inhalation | 5E-08 | -- | -- | -- | 0.9 | -- |
| | | Total | 2E-04 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254, AROCLOR-1260 | HEXAVALENT CHROMIUM | 7 | AROCLOR-1254 |
| | Subsurface Soil | Incidental Ingestion | 6E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 2 | Target Organs HI ≤ 1 |
| | | Dermal Contact | 3E-04 | AROCLOR-1260 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.6 | -- |
| | | Inhalation | 1E-06 | -- | -- | -- | 5 | 1,2,4-TRICHLOROBENZENE |
| | | Total | 9E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 1,2,4-TRICHLOROBENZENE, AROCLOR-1254 | 7 | 1,2,3-TRICHLOROBENZENE, 1,2,4-TRICHLOROBENZENE, AROCLOR-1254 |
| Adult Resident | Surface Soil | Incidental Ingestion | 7E-05 | -- | AROCLOR-1254, AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 3 | AROCLOR-1254 |
| | | Dermal Contact | 4E-05 | -- | AROCLOR-1260 | AROCLOR-1254 | 1 | -- |
| | | Inhalation | 4E-08 | -- | -- | -- | 0.9 | -- |
| | | Total | 1E-04 | -- | AROCLOR-1254, AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 5 | AROCLOR-1254 |
| | Subsurface Soil | Incidental Ingestion | 3E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 1 | -- |
| | | Dermal Contact | 2E-04 | AROCLOR-1260 | -- | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 0.4 | -- |
| | | Inhalation | 1E-06 | -- | -- | -- | 5 | 1,2,4-TRICHLOROBENZENE |
| | | Total | 5E-04 | AROCLOR-1260 | -- | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 6 | 1,2,4-TRICHLOROBENZENE |

**TABLE 4-8**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK E**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**


| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks $> 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-5}$ and $\leq 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-6}$ and $\leq 10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Lifelong Resident (Child + Adolescent + Adult) | Surface Soil | Incidental Ingestion | 6E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | 1,2,4-TRICHLOROBENZENE, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 2E-04 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 4E-08 | -- | -- | -- | NA | -- |
| | | Total | 8E-04 | AROCLOR-1260, AROCLOR-1254 | BENZO(A)PYRENE EQUIVALENTS | 1,2,4-TRICHLOROBENZENE, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 3E-03 | AROCLOR-1260 | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 1E-03 | AROCLOR-1260 | BENZO(A)PYRENE EQUIVALENTS | 1,2,4-TRICHLOROBENZENE, AROCLOR-1254, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 3E-06 | -- | -- | 1,4-DICHLOROBENZENE | NA | -- |
| | | Total | 4E-03 | AROCLOR-1260 | 1,2,4-TRICHLOROBENZENE, BENZO(A)PYRENE EQUIVALENTS, AROCLOR-1254 | ARSENIC, HEXAVALENT CHROMIUM, 1,4-DICHLOROBENZENE | NA | -- |

Note: See Section 3 for benzo(a)pyrene equivalents calculation methodology.

**Table 4-9**

**Occurrence and Distribution of Chemicals - Surface Soil (0-2 feet) - Tax Block Soils**
**Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 2-BUTANONE | 2/13 | 2.87 | J | 3.14 | J | SB-238-SS | 53 | 82 | 3.0 | 26.2 | 4700000 | 0 | 2800000 | N | 0 | 29000 | 0 | 30000 | 0 |
| ACETONE | 3/13 | 27.2 | J | 89 | J | SB-22A-SS | 53 | 82 | 49.1 | 34.5 | 7000000 | 0 | 6100000 | N | 0 | 22000 | 0 | 90000 | 0 |
| CARBON DISULFIDE | 2/13 | 0.72 | J | 7.1 | | SB-238-SS | 5 | 8 | 3.9 | 3.2 | 780000 | 0 | 82000 | N | 0 | 19000 | 0 | 6200 | 0 |
| METHYLENE CHLORIDE | 2/13 | 3.3 | J | 8 | J | SB-96-SS | 5 | 11 | 5.7 | 3.6 | 85000 | 0 | 11000 | C | 0 | 19 | 0 | 24 | 0 |
| TOLUENE | 2/13 | 1.2 | J | 1.9 | J | SB-238-01 | 5 | 8 | 1.6 | 2.8 | 630000 | 0 | 500000 | N | 0 | 27000 | 0 | 32000 | 0 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| BENZOIC ACID | 7/14 | 152 | J | 925 | | SB-267-SS | 740 | 16000 | 308 | 891 | NC | NC | 24000000 | N | 0 | NC | NC | 680000 | 0 |
| BENZYL ALCOHOL | 1/14 | 47.5 | J | 47.5 | J | SB-269-02 | 369 | 8110 | 47.5 | 461 | NC | NC | 610000 | N | 0 | NC | NC | 17800 | 0 |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1/25 | 40 | J | 40 | J | SB-265-SS | 77 | 4500 | 40.0 | 290 | 46000 | 0 | 35000 | C | 0 | 2900000 | 0 | 22000 | 0 |
| BUTYL BENZYL PHTHALATE | 1/25 | 25 | J | 25 | J | SB-265-SS | 188 | 4500 | 25.0 | 365 | NC | NC | 260000 | C | 0 | NC | NC | 10200 | 0 |
| CARBAZOLE | 9/25 | 32 | J | 4640 | | SB-268-SS | 193 | 4500 | 657 | 488 | 32000 | 0 | NC | | NC | 470 | 1 | NC | NC |
| DI-N-BUTYL PHTHALATE | 4/25 | 32 | J | 38 | J | SB-266-SS | 191 | 4500 | 36.0 | 358 | 780000 | 0 | 610000 | N | 0 | 5000000 | 0 | 184000 | 0 |
| DI-N-OCTYL PHTHALATE | 1/25 | 53 | J | 53 | J | SB-95-SS | 184 | 4500 | 53.0 | 361 | NC | NC | NC | | NC | NC | NC | NC | NC |
| DIBENZOFURAN | 6/25 | 27 | J | 1650 | J | SB-268-SS | 110 | 4500 | 333 | 328 | 7800 | 0 | 7800 | N | 0 | NC | NC | 13600 | 0 |
| DIMETHYL PHTHALATE | 1/25 | 60 | J | 60 | J | SB-23A-SS | 350 | 8110 | 60.0 | 494 | NC | NC | NC | | NC | NC | NC | NC | NC |
| PHENOL | 1/25 | 420 | | 420 | | SB-23A-SS | 350 | 8110 | 420 | 509 | 2300000 | 0 | 1800000 | N | 0 | 67000 | 0 | 126000 | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 2/17 | 36.5 | J | 55 | | F-SB-797-SS | 3.7 | 1670 | 45.8 | 83.1 | NC | NC | 22000 | C | 0 | NC | NC | 240 | 0 |
| 2-METHYLNAPHTHALENE | 2/28 | 32 | J | 46 | | F-SB-797-SS | 3.7 | 4500 | 39.0 | 260 | 31000 | 0 | 31000 | N | 0 | 4400 | 0 | 15000 | 0 |
| ACENAPHTHENE | 7/28 | 79 | J | 3620 | | SB-268-SS | 3.7 | 4500 | 689 | 388 | 470000 | 0 | 340000 | N | 0 | 100000 | 0 | 440000 | 0 |
| ACENAPHTHYLENE | 3/28 | 44 | J | 135 | | SB-265-SS | 3.7 | 4500 | 76.0 | 263 | 470000 | 0 | 340000 | N[6] | 0 | 100000 | 0 | 440000 [6] | 0 |
| ANTHRACENE | 12/28 | 30 | J | 9420 | | SB-268-SS | 3.7 | 4500 | 1100 | 680 | 2300000 | 0 | 1700000 | N | 0 | 470000 | 0 | 7200000 | 0 |
| BAP EQUIVALENT-1/2 NONDETECTS[16] | 85/109 | 1.7 | | 50001 | | F-SB-95RE-1 | 1.4 | 560 | 2546 | 1996 | 22 | 74 | 15 | | 76 | NC | NC | 70 | 64 |
| BAP EQUIVALENT-POSITIVE RESULTS[16] | 85/109 | 0.012 | | 49963 | | F-SB-95RE-1 | 1.4 | 560 | 2487 | 1950 | 22 | 73 | 15 | C | 75 | 120 | 50 | 70 | 63 |
| BENZO(A)ANTHRACENE | 64/80 | 8.1 | | 42000 | | F-SB-95RE-1 | 1 | 560 | 2263 | 1825 | 220 | 33 | 150 | C | 37 | 480 | 24 | 200 | 34 |
| BENZO(A)PYRENE | 82/109 | 3.1 | J | 38000 | | F-SB-95RE-1 | 1.4 | 560 | 1877 | 1424 | 22 | 71 | 15 | C | 73 | 120 | 46 | 70 | 56 |
| BENZO(B)FLUORANTHENE | 62/80 | 8.9 | | 55000 | | F-SB-95RE-1 | 1.3 | 560 | 2864 | 2236 | 220 | 37 | 150 | C | 38 | 1500 | 16 | 700 | 24 |
| BENZO(G,H,I)PERYLENE | 17/28 | 48 | J | 13200 | J | SB-268-SS | 3.7 | 3600 | 1185 | 837 | 230000 | 0 | 170000 | N[7] | 0 | 680000 | 0 | 2400000 [7] | 0 |
| BENZO(K)FLUORANTHENE | 55/80 | 8.4 | | 23000 | | F-SB-95RE-1, SB-268-SS | 1.6 | 560 | 1451 | 1012 | 2200 | 6 | 1500 | C | 11 | 15000 | 2 | 7000 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 1/1 | 3700 | J | 3700 | J | F-SB-797-SS | -- | -- | 3700 | 3700 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-FLUORANTHENES/PYRENES | 1/1 | 5800 | J | 5800 | J | F-SB-797-SS | -- | -- | 5800 | 5800 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-PHENANTHRENES/ANTHRACENES | 1/1 | 1600 | J | 1600 | J | F-SB-797-SS | -- | -- | 1600 | 1600 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 1/1 | 1300 | J | 1300 | J | F-SB-797-SS | -- | -- | 1300 | 1300 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-PHENANTHRENES/ANTHRACENES | 1/1 | 950 | J | 950 | J | F-SB-797-SS | -- | -- | 950 | 950 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 1/1 | 470 | J | 470 | J | F-SB-797-SS | -- | -- | 470 | 470 | NC | NC | NC | | NC | NC | NC | NC | NC |
| CHRYSENE | 64/80 | 8.1 | | 33000 | | F-SB-95RE-1 | 0.97 | 560 | 2044 | 1649 | 22000 | 2 | 15000 | C | 2 | 48000 | 0 | 22000 | 2 |
| DIBENZO(A,H)ANTHRACENE | 44/80 | 2.8 | J | 5250 | | SB-268-SS | 1.4 | 4500 | 386 | 286 | 22 | 39 | 15 | C | 41 | 460 | 8 | 220 | 12 |
| FLUORANTHENE | 23/28 | 11 | | 63200 | | SB-268-SS | 82 | 560 | 4258 | 3530 | 310000 | 0 | 230000 | N | 0 | 6300000 | 0 | 3200000 | 0 |
| FLUORENE | 8/28 | 32 | J | 3580 | | SB-268-SS | 3.7 | 4500 | 602 | 387 | 310000 | 0 | 230000 | N | 0 | 140000 | 0 | 540000 | 0 |
| INDENO(1,2,3-CD)PYRENE | 58/80 | 8.8 | | 20000 | | F-SB-95RE-1 | 0.43 | 560 | 1268 | 940 | 220 | 28 | 150 | C | 30 | 4200 | 3 | 2400 | 7 |
| NAPHTHALENE | 3/28 | 36 | J | 140 | | F-SB-797-SS | 3.7 | 4500 | 77.7 | 265 | 160000 | 0 | 3600 | C | 0 | 150 | 0 | 9.4 | 3 |
| PHENANTHRENE | 22/28 | 8 | | 36100 | | SB-268-SS | 3.7 | 560 | 2411 | 1927 | 2300000 | 0 | 170000 | N[7] | 0 | 470000 | 0 | 2400000 [7] | 0 |
| PYRENE | 23/28 | 9.1 | | 45200 | | SB-268-SS | 380 | 560 | 3063 | 2555 | 230000 | 0 | 170000 | N | 0 | 680000 | 0 | 2400000 | 0 |
| **Pesticides/PCBs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1254 | 1/59 | 96 | | 96 | | SB-267-SS | 18 | 1300 | 96.0 | 51.8 | 320 | 0 | 110 | N[8] | 0 | 1100 | 0 | 176 | 0 |
| AROCLOR-1260 | 12/59 | 22 | J | 1400 | | SB-94-SS | 18 | 410 | 305 | 95.9 | 320 | 3 | 220 | C | 3 | NC | NC | 480 | 3 |
| TOTAL AROCLOR | 12/59 | 22 | | 1400 | | SB-94-SS | 0 | 0 | 313 | 63.7 | 320 [9] | 3 | 220 | C[10] | 3 | 410 [9] | 3 | NC | NC |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | | | | | |
| ANTIMONY | 19/25 | 0.4 | L | 4 | L | SB-237-01 | 0.3 | 3 | 1.1 | 1.1 | 3.1 | 1 | 3.1 | N | 1 | 13 | 0 | 13.2 | 0 |
| ARSENIC | 22/32 | 0.6 | | 6 | | SB-269-SS | 1 | 3 | 3.1 | 2.6 | 0.43 | 22 | 0.39 | C | 22 | 0.026 | 22 | 0.026 | 22 |
| BARIUM | 20/20 | 27 | | 207 | | SB-268-SS | -- | -- | 58.6 | 58.6 | 1600 | 0 | 1500 | N | 0 | 6000 | 0 | 6000 | 0 |
| BERYLLIUM | 21/32 | 0.5 | | 5 | | SB-25A-SS | 2.4 | 4 | 1.2 | 1.3 | 16 | 0 | 16 | N | 0 | 1200 | 0 | 1160 | 0 |
| CADMIUM | 14/32 | 0.3 | | 4.5 | L | SB-94-SS | 0.09 | 4 | 1.4 | 1.1 | 3.9 | 1 | 7 | N | 0 | 27 | 0 | 28 | 0 |
| CHROMIUM | 32/32 | 8.1 | | 185 | | SB-237-01 | -- | -- | 27.0 | 27.0 | 12000 [11] | 0 | 12000 | N[11] | 0 | 2000000000 [11] | 0 | 1980000000 [11] | 0 |
| COBALT | 20/20 | 2.8 | | 11.7 | | SB-268-SS | -- | -- | 6.1 | 6.1 | NC | NC | 2.3 | N | 20 | NC | NC | 9.8 | 1 |
| COPPER | 32/32 | 4 | | 74 | | SB-55-SS | -- | -- | 17.2 | 17.2 | 310 | 0 | 310 | N | 0 | 11000 | 0 | 1020 | 0 |

**Table 4-9**

**Occurrence and Distribution of Chemicals - Surface Soil (0-2 feet) - Tax Block Soils**
**Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LEAD | 25/32 | 3.2 L | 447 | SB-268-SS | 3 | 8 | 74.6 | 58.9 | 400 | 2 | 400 | 2 | NC | NC | 280 [12] | 2 |
| MERCURY | 39/47 | 0.01 | 2.7 L | F-SB-626-2 | 0.02 | 0.16 | 0.54 | 0.46 | 2.3 [13] | 1 | 2.3 N[14] | 1 | NC | NC | NC | NC |
| MOLYBDENUM | 1/20 | 63 | 63 | SB-237-01 | 0.4 | 2 | 63.0 | 3.5 | NC | NC | 39 N | 1 | NC | NC | 74 | 0 |
| NICKEL | 25/32 | 4.5 K | 27 | SB-25A-SS | 5 | 9 | 12.1 | 10.2 | 160 | 0 | 150 N | 0 | NC | NC | 960 | 0 |
| SELENIUM | 9/32 | 2 | 4 | SB-237-01 | 2 | 4 | 2.8 | 1.7 | 39 | 0 | 39 N | 0 | 19 | 0 | 19 | 0 |
| SILVER | 5/25 | 0.9 | 3.4 | SB-23A-SS | 0.04 | 3.2 | 1.6 | 0.57 | 39 | 0 | 39 N | 0 | 31 | 0 | 32 | 0 |
| VANADIUM | 20/20 | 20.3 | 49 | SB-238-SS | -- | -- | 31.8 | 31.8 | 7.8 | 20 | 39 N[15] | 4 | 730 | 0 | 3600 | 0 |
| ZINC | 27/32 | 20 | 289 | SB-268-SS | 26 | 40 | 78.8 | 68.9 | 2300 | 0 | 2300 N | 0 | 14000 | 0 | 13600 | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 5/13 | 13000 | 271000 | SB-238-SS | 10000 | 17000 | 111340 | 46592 | 230000 | 1 | NC | NC | NC | NC | NC | NC |
| GASOLINE RANGE ORGANICS | 1/13 | 1200 | 1200 | SB-25A-SS | 13.1 | 10300 | 1200 | 536 | 230000 | 0 | NC | NC | NC | NC | NC | NC |
| **Miscellaneous Parameters (mg/kg)** | | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 6/8 | 0.49 | 3.6 | SB-268-SS, SB-265-SS | 0.36 | 0.4 | 1.8 | 1.4 | 23 | 0 | 0.29 C | 6 | 42 | 0 | 0.0166 | 6 |
| **Miscellaneous Parameters (ug/kg)** | | | | | | | | | | | | | | | | |
| MERCURY (METHYL) | 4/4 | 0.071 J | 1.467 J | SB-237-01 | -- | -- | 0.73 | 0.73 | 780 | 0 | 780 N | 0 | NC | NC | NC | NC |
| **Miscellaneous Parameters (%)** | | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | 29/29 | 77.6 | 95.1 | SB-397-0102 | -- | -- | 87.4 | 87.4 | NC | NC | NC | NC | NC | NC | NC | NC |
| **Miscellaneous Parameters (s.u)** | | | | | | | | | | | | | | | | |
| PH | 4/4 | 8.1 | 8.4 | SB-265-02 | -- | -- | 8.3 | 8.3 | NC | NC | NC | NC | NC | NC | NC | NC |

**Notes:**

1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
The SSL at a DAF of 20 is 20x the SSL at a DAF of 1.
6 - The value for acenaphthene is used as a surrogate for acenaphthylene.
7 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
8 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
9 - The value is for PCB (total).
10 - The value is for polychlorinated biphenyls (high risk).
11 - The value is for trivalent chromium.
12 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
3 - The value is for mercury (inorganic/mercuric dichloride).
14 - The value is for mercuric chloride.
15 - The value is for vanadium and compounds.
16 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**

BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NC = No criteria

**Table 4-10**

**Occurrence and Distribution of Chemicals - Subsurface Soil (2-10 feet) - Tax Block Soils**
**Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | 1/36 | 658 | | 658 | | SB-238-05 | 6 | 7 | 658 | 21.2 | NC | NC | 6200 | N | 0 | NC | NC | 420 | 1 |
| 1,3,5-TRIMETHYLBENZENE | 1/26 | 139 | J | 139 | J | SB-238-05 | 6 | 7 | 139 | 8.3 | NC | NC | 78000 | N | 0 | NC | NC | 10400 | 0 |
| 2-BUTANONE | 2/26 | 6 | J | 9 | J | SB-29-10 | 57 | 2590 | 7.5 | 76.8 | 4700000 | 0 | 2800000 | N | 0 | 29000 | 0 | 30000 | 0 |
| 4-ISOPROPYLTOLUENE | 1/36 | 165 | J | 165 | J | SB-238-05 | 6 | 7 | 165 | 7.5 | NC | NC | NC | | 0 | NC | NC | NC | NC |
| ACETONE | 16/34 | 9 | J | 48 | J | SB-26-10 | 16 | 62 | 26.1 | 26.2 | 7000000 | 0 | 6100000 | N | 0 | 22000 | 0 | 90000 | 0 |
| ETHYLBENZENE | 1/36 | 394 | | 394 | | SB-238-05 | 6 | 7 | 394 | 13.9 | 780000 | 0 | 5400 | C | 0 | 15000 | 0 | 34 | 1 |
| ISOPROPYLBENZENE | 1/36 | 83.1 | J | 83.1 | J | SB-238-05 | 6 | 7 | 83.1 | 5.3 | 780000 | 0 | 210000 | N | 0 | 64000 | 0 | 22000 | 0 |
| M+P-XYLENES | 1/36 | 270 | J | 270 | J | SB-238-05 | 11 | 20 | 270 | 14.5 | 1600000 [6] | 0 | 63000 | N[7] | 0 | 3000 [6] | 0 | 4000 | 0 |
| METHYLENE CHLORIDE | 9/36 | 5 | J | 147 | J | SB-238-05 | 6 | 11 | 21.4 | 7.8 | 85000 | 0 | 11000 | C | 0 | 19 | 1 | 24 | 1 |
| N-BUTYLBENZENE | 1/36 | 125 | J | 125 | J | SB-238-05 | 6 | 7 | 125 | 6.4 | NC | NC | NC | | 0 | NC | NC | NC | NC |
| NAPHTHALENE | 1/36 | 159000 | | 159000 | | SB-238-05 | 6 | 7 | 159000 | 4420 | 160000 | 0 | 3600 | C | 1 | 150 | 1 | 9.4 | 1 |
| O-XYLENE | 1/36 | 186 | J | 186 | J | SB-238-05 | 6 | 20 | 186 | 10.3 | 1600000 [6] | 0 | 380000 | N | 0 | 3000 [6] | 0 | 24000 | 0 |
| TOTAL XYLENES | 1/11 | 456 | J | 456 | J | SB-238-05 | 17 | 19 | 456 | 49.6 | 1600000 [6] | 0 | 63000 | N | 0 | 3000 [6] | 0 | 4000 | 0 |
| TRICHLOROFLUOROMETHANE | 1/36 | 2 | J | 2 | J | SB-295-0405 | 6 | 259 | 2.0 | 7.3 | NC | NC | 79000 | N | 0 | NC | NC | 16600 | 0 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 1/32 | 68 | J | 68 | J | SB-238-05 | 380 | 420 | 68.0 | 193 | 160000 | 0 | 120000 | N | 0 | 6700 | 0 | 17200 | 0 |
| BIS(2-ETHYLHEXYL)PHTHALATE | 1/32 | 190 | J | 190 | J | SB-296-0910 | 85 | 420 | 190 | 192 | 46000 | 0 | 35000 | C | 0 | 2900000 | 0 | 22000 | 0 |
| CARBAZOLE | 3/32 | 200 | J | 5690 | | SB-238-05 | 380 | 420 | 2090 | 374 | 32000 | 0 | NC | | 0 | 470 | 1 | NC | NC |
| DIBENZOFURAN | 3/32 | 73 | J | 3980 | | SB-238-05 | 380 | 420 | 1394 | 309 | 7800 | 0 | 7800 | N | 0 | NC | NC | 13600 | 0 |
| DIMETHYL PHTHALATE | 2/32 | 77 | J | 310 | J | SB-55-10 | 380 | 412 | 194 | 197 | NC | NC | NC | | 0 | NC | NC | NC | NC |
| N-NITROSODIPHENYLAMINE | 1/31 | 81 | J | 81 | J | SB-238-05 | 380 | 420 | 81.0 | 193 | 130000 | 0 | 99000 | C | 0 | 760 | 0 | 1500 | 0 |
| PHENOL | 4/32 | 140 | J | 910 | | SB-56-05 | 380 | 420 | 565 | 244 | 2300000 | 0 | 1800000 | N | 0 | 67000 | 0 | 126000 | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 1/17 | 3420 | | 3420 | | SB-238-05 | 3.5 | 410 | 3420 | 317 | NC | NC | 22000 | C | 0 | NC | NC | 240 | 1 |
| 2-METHYLNAPHTHALENE | 1/38 | 6900 | | 6900 | | SB-238-05 | 3.5 | 420 | 6900 | 343 | 31000 | 0 | 31000 | N | 0 | 4400 | 1 | 15000 | 0 |
| ACENAPHTHENE | 4/38 | 15 | | 6960 | | SB-238-05 | 3.5 | 420 | 1819 | 342 | 470000 | 0 | 340000 | N | 0 | 100000 | 0 | 440000 | 0 |
| ACENAPHTHYLENE | 1/38 | 69 | J | 69 | J | SB-238-05 | 3.5 | 420 | 69.0 | 163 | 470000 | 0 | 340000 | N[8] | 0 | 100000 | 0 | 440000 [8] | 0 |
| ANTHRACENE | 4/38 | 47 | | 2510 | | SB-238-05 | 3.5 | 420 | 814 | 236 | 2300000 | 0 | 1700000 | N | 0 | 470000 | 0 | 7200000 | 0 |
| BAP EQUIVALENT-1/2 NONDETECTS[17] | 85/324 | 2.3 | | 7604 | | F-SB-268RE-3 | 1.4 | 410 | 338 | 106 | 22 | 62 | 15 | | 68 | NC | NC | 70 | 35 |
| BAP EQUIVALENT-POSITIVE RESULTS[17] | 85/324 | 0.19 | | 7604 | | F-SB-268RE-3 | 1.4 | 410 | 330 | 104 | 22 | 62 | 15 | C | 68 | 120 | 27 | 70 | 35 |
| BENZO(A)ANTHRACENE | 48/235 | 3.4 | J | 5700 | | F-SB-268RE-3 | 1 | 410 | 412 | 108 | 220 | 14 | 150 | C | 18 | 480 | 8 | 200 | 17 |
| BENZO(A)PYRENE | 78/324 | 3.1 | J | 5200 | | F-SB-268RE-3 | 1.4 | 410 | 267 | 81.8 | 22 | 55 | 15 | C | 65 | 120 | 26 | 70 | 32 |
| BENZO(B)FLUORANTHENE | 55/235 | 1.7 | J | 6500 | | F-SB-268RE-3 | 1.3 | 410 | 385 | 114 | 220 | 16 | 150 | C | 20 | 1500 | 4 | 700 | 6 |
| BENZO(G,H,I)PERYLENE | 6/38 | 6.375 | | 1240 | J | SB-238-05 | 3.5 | 410 | 398 | 208 | 230000 | 0 | 170000 | N[9] | 0 | 680000 | 0 | 2400000 [9] | 0 |
| BENZO(K)FLUORANTHENE | 42/235 | 5.875 | | 2900 | | F-SB-268RE-3 | 1.5 | 410 | 265 | 71.4 | 2200 | 1 | 1500 | C | 2 | 15000 | 0 | 7000 | 0 |
| CHRYSENE | 48/235 | 2.9 | J | 5400 | | F-SB-268RE-3 | 0.98 | 410 | 412 | 108 | 22000 | 0 | 15000 | C | 0 | 48000 | 0 | 22000 | 0 |
| DIBENZO(A,H)ANTHRACENE | 20/235 | 9.8 | | 860 | | F-SB-268RE-3 | 1.4 | 420 | 105 | 35.5 | 22 | 14 | 15 | C | 18 | 460 | 1 | 220 | 2 |
| FLUORANTHENE | 8/38 | 9.8 | | 10000 | | SB-238-05 | 3.5 | 410 | 1890 | 543 | 310000 | 0 | 230000 | N | 0 | 6300000 | 0 | 3200000 | 0 |
| FLUORENE | 4/38 | 26 | | 6330 | | SB-238-05 | 3.5 | 420 | 1667 | 326 | 310000 | 0 | 230000 | N | 0 | 140000 | 0 | 540000 | 0 |
| INDENO(1,2,3-CD)PYRENE | 48/235 | 0.96 | J | 2900 | | F-SB-268RE-3 | 0.41 | 410 | 190 | 62.8 | 220 | 9 | 150 | C | 10 | 4200 | 0 | 2400 | 1 |
| NAPHTHALENE | 2/38 | 58 | J | 31000 | | SB-238-05 | 3.5 | 420 | 15529 | 973 | 160000 | 0 | 3600 | C | 1 | 150 | 1 | 9.4 | 2 |
| PHENANTHRENE | 6/38 | 5.575 | | 18600 | | SB-238-05 | 3.5 | 410 | 3734 | 735 | 2300000 | 0 | 170000 | N[9] | 0 | 470000 | 0 | 2400000 [9] | 0 |
| PYRENE | 7/38 | 9.1 | | 7570 | | SB-238-05 | 3.5 | 410 | 1610 | 441 | 230000 | 0 | 170000 | N | 0 | 680000 | 0 | 2400000 | 0 |
| **Pesticides/PCBs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1260 | 4/153 | 15 | J | 27 | J | F-SB-636-5 | 19 | 310 | 20.5 | 27.6 | 320 | 0 | 220 | C | 0 | NC | NC | 480 | 0 |
| TOTAL AROCLOR | 4/153 | 15 | | 27 | | F-SB-636-5 | 0 | 0 | 20.5 | 0.54 | 320 [10] | 0 | 220 | C[11] | 0 | 410 [10] | 0 | NC | NC |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | | | | | |
| ANTIMONY | 2/25 | 0.3 | L | 2 | L | SB-236-05 | 0.3 | 3.1 | 1.2 | 0.95 | 3.1 | 0 | 3.1 | N | 0 | 13 | 0 | 13.2 | 0 |
| ARSENIC | 25/36 | 0.58 | L | 7 | | SB-236-05 | 0.52 | 2 | 2.5 | 1.9 | 0.43 | 25 | 0.39 | C | 25 | 0.026 | 25 | 0.026 | 25 |
| BARIUM | 13/13 | 12.5 | | 103 | | SB-236-05 | -- | -- | 27.6 | 27.6 | 1600 | 0 | 1500 | N | 0 | 6000 | 0 | 6000 | 0 |
| BERYLLIUM | 19/36 | 0.6 | | 6.2 | | SB-55-05 | 2.6 | 3.1 | 3.3 | 2.4 | 16 | 0 | 16 | N | 0 | 1200 | 0 | 1160 | 0 |
| CADMIUM | 3/36 | 0.3 | | 0.5 | | SB-238-05, SB-236-05 | 0.06 | 3.1 | 0.43 | 0.99 | 3.9 | 0 | 7 | N | 0 | 27 | 0 | 28 | 0 |
| CHROMIUM | 34/35 | 5.3 | L | 39.4 | K | SB-298-0910 | 2.6 | 2.6 | 17.7 | 17.2 | 12000 [12] | 0 | 12000 | N[12] | 0 | 2000000000 [12] | 0 | 1980000000 [12] | 0 |
| COBALT | 12/13 | 5.3 | | 32.3 | | SB-296-0405 | 3.2 | 3.2 | 10.3 | 9.7 | NC | NC | 2.3 | N | 12 | NC | NC | 9.8 | 3 |
| COPPER | 34/36 | 4.3 | L | 56 | | SB-55-05 | 2.9 | 3 | 16.4 | 15.6 | 310 | 0 | 310 | N | 0 | 11000 | 0 | 1020 | 0 |
| LEAD | 32/36 | 2.9 | L | 81 | | SB-236-05 | 2.6 | 3 | 11.5 | 10.4 | 400 | 0 | 400 | | 0 | NC | NC | 280 [13] | 0 |
| MERCURY | 17/47 | 0.01 | | 1.8 | L | F-SB-800-03 | 0.01 | 0.12 | 0.46 | 0.19 | 2.3 [14] | 0 | 2.3 | N[15] | 0 | NC | NC | NC | NC |
| MOLYBDENUM | 7/13 | 0.32 | | 0.55 | K | SB-296-0405 | 0.18 | 0.7 | 0.42 | 0.32 | NC | NC | 39 | N | 0 | NC | NC | 74 | 0 |
| NICKEL | 34/36 | 3.6 | L | 150 | | SB-55-05 | 2.6 | 2.9 | 22.1 | 21.0 | 160 | 0 | 150 | N | 0 | NC | NC | 960 | 0 |
| SELENIUM | 5/28 | 2.8 | | 4.4 | L | SB-30-05 | 0.56 | 3 | 3.7 | 1.4 | 39 | 0 | 39 | N | 0 | 19 | 0 | 19 | 0 |
| SILVER | 5/25 | 0.72 | | 2.3 | | SB-236-05 | 0.05 | 3.1 | 1.4 | 1.0 | 39 | 0 | 39 | N | 0 | 31 | 0 | 32 | 0 |
| VANADIUM | 13/13 | 20.7 | | 61.6 | | SB-296-0405 | -- | -- | 34.9 | 34.9 | 7.8 | 13 | 39 | N[16] | 3 | 730 | 0 | 3600 | 0 |

**Table 4-10**

**Occurrence and Distribution of Chemicals - Subsurface Soil (2-10 feet) - Tax Block Soils**
**Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ZINC | 20/36 | 24.1 | 270 | SB-55-05 | 26 | 60 | 66.9 | 46.4 | 2300 | 0 | 2300 N | 0 | 14000 | 0 | 13600 | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 3/22 | 12000 | 881000 | SB-238-05 | 11000 | 25000 | 303333 | 48909 | 230000 | 1 | NC | 0 | NC | NC | NC | NC |
| GASOLINE RANGE ORGANICS | 1/36 | 21200 | 21200 | SB-238-05 | 110 | 2900 | 21200 | 1013 | 230000 | 0 | NC | 0 | NC | NC | NC | NC |
| TPH (C09-C36) | 3/10 | 3500 J | 4900 J | SB-296-0405 | 2800 | 6100 | 4067 | 2730 | NC | NC | NC | 0 | NC | NC | NC | NC |
| **Miscellaneous Parameters (ug/kg)** | | | | | | | | | | | | | | | | |
| MERCURY (METHYL) | 1/1 | 1.21 J | 1.21 J | SB-236-05 | -- | -- | 1.2 | 1.2 | 780 | 0 | 780 N | 0 | NC | NC | NC | NC |
| **Miscellaneous Parameters (%)** | | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | 102/102 | 65.8 | 95.9 | SB-395-0203 | -- | -- | 83.9 | 83.9 | NC | NC | NC | 0 | NC | NC | NC | NC |
| TOTAL SOLIDS | 10/10 | 80 | 88 | SB-297-0405 | -- | -- | 83.9 | 83.9 | NC | NC | NC | 0 | NC | NC | NC | NC |
| **Miscellaneous Parameters (s.u.)** | | | | | | | | | | | | | | | | |
| PH | 1/1 | 7.7 | 7.7 | SB-236-05 | -- | -- | 7.7 | 7.7 | NC | NC | NC | 0 | NC | NC | NC | NC |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
The SSL at a DAF of 20 is 20x the SSL at a DAF of 1.
6 - The value is for xylenes.
7 - The value is for xylene, mixture.
8 - The value for acenaphthene is used as a surrogate for acenaphthylene.
9 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
10 - The value is for PCB (total).
11 - The value is for polychlorinated biphenyls (high risk).
12 - The value is for trivalent chromium.
13 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
14 - The value is for mercury (inorganic/mercuric dichloride).
15 - The value is for mercuric chloride.
16 - The value is for vanadium and compounds.
17 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NC = No criteria

**Table 4-11**

**Occurrence and Distribution of Chemicals - Deep Subsurface Soil (10+ feet) - Tax Block Soils**
**Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | |
| METHYLENE CHLORIDE | 1/4 | 8 J | 8 J | SB-93-15 | 6 | 6 | 8.0 | 4.3 | 85000 | 0 | 11000 C | 0 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | |
| PHENOL | 1/4 | 770 | 770 | SB-56-15 | 400 | 410 | 770 | 344 | 2300000 | 0 | 1800000 N | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | |
| BAP EQUIVALENT-1/2 NONDETECTS[8] | 27/70 | 2.6 | 6440.9 | F-SB-268RE-13 | 1.5 | 410 | 298 | 127 | 22 | 18 | 15 | 19 |
| BAP EQUIVALENT-POSITIVE RESULTS[8] | 27/70 | 0.83 | 6440.9 | F-SB-268RE-13 | 1.5 | 410 | 297 | 126 | 22 | 17 | 15 C | 19 |
| BENZO(A)ANTHRACENE | 24/70 | 8.5 | 4500 | F-SB-268RE-13 | 1.1 | 410 | 234 | 92.1 | 220 | 2 | 150 C | 3 |
| BENZO(A)PYRENE | 23/70 | 9.3 | 4400 | F-SB-268RE-13 | 1.5 | 410 | 239 | 90.4 | 22 | 11 | 15 C | 18 |
| BENZO(B)FLUORANTHENE | 26/70 | 8.3 | 5600 | F-SB-268RE-13 | 1.4 | 410 | 272 | 113 | 220 | 3 | 150 C | 5 |
| BENZO(K)FLUORANTHENE | 16/70 | 8.8 | 2700 | F-SB-268RE-13 | 1.6 | 410 | 205 | 59.1 | 2200 | 1 | 1500 C | 1 |
| CHRYSENE | 23/70 | 8.3 | 3900 | F-SB-268RE-13 | 1 | 410 | 217 | 83.2 | 22000 | 0 | 15000 C | 0 |
| DIBENZO(A,H)ANTHRACENE | 7/70 | 12 | 720 | F-SB-268RE-13 | 1.5 | 410 | 125 | 24.6 | 22 | 5 | 15 C | 6 |
| INDENO(1,2,3-CD)PYRENE | 19/70 | 9.4 | 2800 | F-SB-268RE-13 | 1.7 | 410 | 183 | 61.8 | 220 | 1 | 150 C | 1 |
| **Inorganics (mg/kg)** | | | | | | | | | | | | |
| CHROMIUM | 3/4 | 9.5 L | 27 | SB-94-15 | 3 | 3 | 18.2 | 14.0 | 12000 [6] | 0 | 12000 N[6] | 0 |
| COPPER | 4/4 | 3.3 L | 12 L | SB-93-15 | -- | -- | 6.7 | 6.7 | 310 | 0 | 310 N | 0 |
| LEAD | 2/4 | 3.3 L | 4 L | SB-93-15 | 2.8 | 3 | 3.7 | 2.6 | 400 | 0 | 400 | 0 |
| NICKEL | 3/4 | 6 | 20 | SB-94-15 | 3 | 3 | 14.7 | 11.4 | 160 | 0 | 150 N | 0 |

**Notes:**

1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
6 - The value is for trivalent chromium.
7- Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
8 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**

BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
L = Biased low
N = Noncarcinogen
NC = No criteria

**TABLE 4-12**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK F**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Construction Worker | Surface Soil | Incidental Ingestion | 3E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.2 | -- |
| | | Dermal Contact | 9E-07 | -- | -- | -- | 0.02 | -- |
| | | Inhalation | 7E-07 | -- | -- | -- | 0.3 | -- |
| | | Total | 5E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.5 | -- |
| | Subsurface Soil | Incidental Ingestion | 4E-07 | -- | -- | -- | 0.1 | -- |
| | | Dermal Contact | 7E-08 | -- | -- | -- | 0.02 | -- |
| | | Inhalation | 2E-06 | -- | -- | NAPHTHALENE | 2 | Target Organs HI ≤ 1 |
| | | Total | 3E-06 | -- | -- | NAPHTHALENE | 2 | Target Organs HI ≤ 1 |
| Industrial Worker | Surface Soil | Incidental Ingestion | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.03 | -- |
| | | Dermal Contact | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.02 | -- |
| | | Inhalation | 8E-09 | -- | -- | -- | 0.0001 | -- |
| | | Total | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.05 | -- |
| | Subsurface Soil | Incidental Ingestion | 1E-06 | -- | -- | -- | 0.04 | -- |
| | | Dermal Contact | 1E-06 | -- | -- | -- | 0.01 | -- |
| | | Inhalation | 7E-06 | -- | -- | NAPHTHALENE | 0.2 | -- |
| | | Total | 9E-06 | -- | -- | NAPHTHALENE | 0.2 | -- |
| Child Commercial Receptor | Surface Soil | Incidental Ingestion | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 0.3 | -- |
| | | Dermal Contact | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.03 | -- |
| | | Inhalation | 2E-09 | -- | -- | -- | 0.00003 | -- |
| | | Total | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 0.4 | -- |
| | Subsurface Soil | Incidental Ingestion | 6E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.4 | -- |
| | | Dermal Contact | 2E-06 | -- | -- | -- | 0.03 | -- |
| | | Inhalation | 4E-07 | -- | -- | -- | 0.05 | -- |
| | | Total | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.5 | -- |
| Adolescent Commercial Receptor | Surface Soil | Incidental Ingestion | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.06 | -- |
| | | Dermal Contact | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.02 | -- |
| | | Inhalation | 2E-09 | -- | -- | -- | 0.00003 | -- |
| | | Total | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.08 | -- |
| | Subsurface Soil | Incidental Ingestion | 1E-06 | -- | -- | -- | 0.08 | -- |
| | | Dermal Contact | 2E-06 | -- | -- | -- | 0.02 | -- |
| | | Inhalation | 9E-07 | -- | -- | -- | 0.05 | -- |
| | | Total | 4E-06 | -- | -- | -- | 0.1 | -- |

**TABLE 4-12**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK F**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Lifelong Commercial Receptor (Child + Adolescent) | Surface Soil | Incidental Ingestion | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 6E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 4E-09 | -- | -- | -- | NA | -- |
| | | Total | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 8E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | NA | -- |
| | | Dermal Contact | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 1E-06 | -- | -- | -- | NA | -- |
| | | Total | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| Adult Commercial Receptor | Surface Soil | Incidental Ingestion | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.03 | -- |
| | | Dermal Contact | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.02 | -- |
| | | Inhalation | 8E-09 | -- | -- | -- | 0.0001 | -- |
| | | Total | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.05 | -- |
| | Subsurface Soil | Incidental Ingestion | 1E-06 | -- | -- | -- | 0.04 | -- |
| | | Dermal Contact | 1E-06 | -- | -- | -- | 0.01 | -- |
| | | Inhalation | 7E-06 | -- | -- | NAPHTHALENE | 0.2 | -- |
| | | Total | 9E-06 | -- | -- | NAPHTHALENE | 0.2 | -- |
| Child Recreational User | Surface Soil | Incidental Ingestion | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 0.6 | -- |
| | | Dermal Contact | 7E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.07 | -- |
| | | Inhalation | 8E-09 | -- | -- | -- | 0.0001 | -- |
| | | Total | 3E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 0.7 | -- |
| | Subsurface Soil | Incidental Ingestion | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.8 | -- |
| | | Dermal Contact | 5E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | 0.06 | -- |
| | | Inhalation | 2E-06 | -- | -- | NAPHTHALENE | 0.2 | -- |
| | | Total | 2E-05 | -- | -- | NAPHTHALENE, BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 1 | -- |

**TABLE 4-12**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK F**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Adolescent Recreational User | Surface Soil | Incidental Ingestion | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.1 | -- |
| | | Dermal Contact | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 9E-09 | -- | -- | -- | 0.0001 | -- |
| | | Total | 5E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.1 | -- |
| | Subsurface Soil | Incidental Ingestion | 3E-06 | -- | -- | -- | 0.1 | -- |
| | | Dermal Contact | 1E-06 | -- | -- | -- | 0.01 | -- |
| | | Inhalation | 3E-06 | -- | -- | NAPHTHALENE | 0.2 | -- |
| | | Total | 7E-06 | -- | -- | NAPHTHALENE, BENZO(A)PYRENE EQUIVALENTS | 0.4 | -- |
| Adult Recreational User | Surface Soil | Incidental Ingestion | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.07 | -- |
| | | Dermal Contact | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 4E-09 | -- | -- | -- | 0.0001 | -- |
| | | Total | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.08 | -- |
| | Subsurface Soil | Incidental Ingestion | 1E-06 | -- | -- | -- | 0.09 | -- |
| | | Dermal Contact | 3E-07 | -- | -- | -- | 0.009 | -- |
| | | Inhalation | 3E-06 | -- | -- | NAPHTHALENE | 0.2 | -- |
| | | Total | 5E-06 | -- | -- | NAPHTHALENE | 0.3 | -- |
| Lifelong Recreational User (Child + Adolescent + Adult) | Surface Soil | Incidental Ingestion | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 9E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 2E-08 | -- | -- | -- | NA | -- |
| | | Total | 3E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 6E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 8E-06 | -- | -- | NAPHTHALENE | NA | -- |
| | | Total | 3E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, NAPHTHALENE, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |

**TABLE 4-12**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK F**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Child Resident | Surface Soil | Incidental Ingestion | 3E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 0.9 | -- |
| | | Dermal Contact | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.09 | -- |
| | | Inhalation | 3E-08 | -- | -- | -- | 0.0005 | -- |
| | | Total | 4E-04 | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | ARSENIC | 1.0 | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 1 | -- |
| | | Dermal Contact | 7E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | 0.08 | -- |
| | | Inhalation | 7E-06 | -- | -- | NAPHTHALENE | 0.8 | -- |
| | | Total | 3E-05 | -- | -- | NAPHTHALENE, BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 2 | Target Organs HI ≤ 1 |
| Adolescent Resident | Surface Soil | Incidental Ingestion | 5E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.2 | -- |
| | | Dermal Contact | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.02 | -- |
| | | Inhalation | 4E-08 | -- | -- | -- | 0.0005 | -- |
| | | Total | 7E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 0.2 | -- |
| | Subsurface Soil | Incidental Ingestion | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.2 | -- |
| | | Dermal Contact | 1E-06 | -- | -- | -- | 0.02 | -- |
| | | Inhalation | 1E-05 | -- | -- | NAPHTHALENE | 0.8 | -- |
| | | Total | 2E-05 | -- | -- | NAPHTHALENE, BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 1 | -- |
| Adult Resident | Surface Soil | Incidental Ingestion | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.09 | -- |
| | | Dermal Contact | 6E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 2E-08 | -- | -- | -- | 0.0005 | -- |
| | | Total | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.1 | -- |
| | Subsurface Soil | Incidental Ingestion | 1E-06 | -- | -- | -- | 0.1 | -- |
| | | Dermal Contact | 5E-07 | -- | -- | -- | 0.01 | -- |
| | | Inhalation | 1E-05 | -- | -- | NAPHTHALENE | 0.8 | -- |
| | | Total | 2E-05 | -- | -- | NAPHTHALENE | 0.9 | -- |

**TABLE 4-12**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK F**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Lifelong Resident (Child + Adolescent + Adult) | Surface Soil | Incidental Ingestion | 3E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 9E-08 | -- | -- | -- | NA | -- |
| | | Total | 5E-04 | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | ARSENIC | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 3E-05 | -- | NAPHTHALENE | -- | NA | -- |
| | | Total | 7E-05 | -- | BENZO(A)PYRENE EQUIVALENTS, NAPHTHALENE | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |

Note: See Section 3 for benzo(a)pyrene equivalents calculation methodology.

**Table 4-13**

**Occurrence and Distribution of Chemicals - Surface Soil (0-2 feet) - Tax Block Soils**
**Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1/14 | 1 | J | 1 | J | SB-195-SS | 2 | 6 | 1.0 | 2.1 | 1600000 | 0 | 3300 | C | 0 | 5100 | 0 | 13.8 | 0 |
| 1,1-DICHLOROETHENE | 1/14 | 2.5 | | 2.5 | | SB-195-SS | 2 | 6 | 2.5 | 2.2 | 390000 | 0 | 24000 | N | 0 | 2900 | 0 | 2400 | 0 |
| 1,2,4-TRIMETHYLBENZENE | 3/14 | 0.83 | J | 1.5 | J | SB-197-SS | 2 | 6 | 1.2 | 2.2 | NC | NC | 6200 | N | 0 | NC | NC | 420 | 0 |
| 2-BUTANONE | 5/14 | 3.36 | J | 14.5 | | SB-195-SS | 9 | 64 | 7.7 | 20.0 | 4700000 | 0 | 2800000 | N | 0 | 29000 | 0 | 30000 | 0 |
| ACETONE | 7/14 | 10.4 | J | 128 | J | SB-195-SS | 54 | 64 | 63.3 | 46.5 | 7000000 | 0 | 6100000 | N | 0 | 22000 | 0 | 90000 | 0 |
| CARBON DISULFIDE | 5/14 | 1.6 | J | 6.2 | | SB-199-SS | 2 | 6 | 2.9 | 2.8 | 780000 | 0 | 82000 | N | 0 | 19000 | 0 | 6200 | 0 |
| ISOPROPYLBENZENE | 1/14 | 47 | J | 47 | J | SB-84-SS | 2 | 6 | 47.0 | 5.3 | 780000 | 0 | 210000 | N | 0 | 64000 | 0 | 22000 | 0 |
| METHYLENE CHLORIDE | 2/14 | 6 | J | 7 | J | SB-82-SS | 3.9 | 6 | 6.5 | 3.1 | 85000 | 0 | 11000 | C | 0 | 19 | 0 | 24 | 0 |
| N-PROPYLBENZENE | 1/14 | 7 | J | 7 | J | SB-84-SS | 2 | 6 | 7.0 | 2.4 | NC | NC | 340000 | N | 0 | NC | NC | 50000 | 0 |
| NAPHTHALENE | 2/15 | 2.9 | | 6 | J | SB-85-SS | 1 | 6 | 4.5 | 2.4 | 160000 | 0 | 3600 | C | 0 | 150 | 0 | 9.4 | 0 |
| TOLUENE | 5/15 | 0.79 | J | 3.6 | | SB-195-SS | 1 | 6 | 1.9 | 2.3 | 630000 | 0 | 500000 | N | 0 | 27000 | 0 | 32000 | 0 |
| TRICHLOROETHENE | 3/14 | 0.65 | J | 1.3 | J | SB-195-SS | 2 | 6 | 1.0 | 2.1 | 1600 | 0 | 2800 | C | 0 | 0.26 | 3 | 14.4 | 0 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| BENZOIC ACID | 1/6 | 174 | J | 174 | J | SB-195-SS | 40.9 | 80.2 | 174 | 52.8 | NC | NC | 24000000 | N | 0 | NC | NC | 680000 | 0 |
| CARBAZOLE | 2/14 | 250 | J | 320 | J | SB-85-SS | 185 | 2100 | 285 | 394 | 32000 | 0 | NC | | NC | 470 | 0 | NC | NC |
| PHENOL | 1/14 | 940 | J | 940 | J | SB-92-SS | 371 | 2100 | 940 | 533 | 2300000 | 0 | 1800000 | N | 0 | 67000 | 0 | 126000 | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 1/21 | 140 | | 140 | | G-SB-806-SS | 3.4 | 85.3 | 140 | 20.3 | NC | NC | 22000 | C | 0 | NC | NC | 240 | 0 |
| 2-METHYLNAPHTHALENE | 4/29 | 9.2 | | 460 | | G-TP-1-3-1-2 | 3.4 | 2100 | 237 | 223 | 31000 | 0 | 31000 | N | 0 | 4400 | 0 | 15000 | 0 |
| ACENAPHTHENE | 8/53 | 33 | J | 640 | J | SB-91-SS | 3.4 | 2100 | 320 | 118 | 470000 | 0 | 340000 | N | 0 | 100000 | 0 | 440000 | 0 |
| ACENAPHTHYLENE | 6/53 | 38 | J | 1200 | | G-TP-1-3-1-2 | 3.4 | 2100 | 461 | 196 | 470000 | 0 | 340000 | N[6] | 0 | 100000 | 0 | 440000 [6] | 0 |
| ANTHRACENE | 22/53 | 10 | | 2800 | | G-TP-1-3-1-2 | 3.7 | 2100 | 533 | 281 | 2300000 | 0 | 1700000 | N | 0 | 470000 | 0 | 7200000 | 0 |
| BAP EQUIVALENT-1/2 NONDETECTS[17] | 195/238 | 1.6 | | 38666 | | G-SB-764D-1 | 1.4 | 2100 | 1770 | 1457 | 22 | 160 | 15 | | 171 | NC | NC | 70 | 123 |
| BAP EQUIVALENT-POSITIVE RESULTS[17] | 195/238 | 0.01 | | 38666 | | G-SB-764D-1 | 1.4 | 2100 | 1759 | 1448 | 22 | 157 | 15 | C | 169 | 120 | 92 | 70 | 118 |
| BENZO(A)ANTHRACENE | 147/187 | 2.8 | J | 34000 | | G-SB-761C-1 | 1.1 | 2100 | 1614 | 1277 | 220 | 54 | 150 | C | 63 | 480 | 37 | 200 | 54 |
| BENZO(A)PYRENE | 188/238 | 2.8 | J | 27000 | | G-SB-761D-1 | 1.4 | 2100 | 1252 | 996 | 22 | 150 | 15 | C | 163 | 120 | 83 | 70 | 103 |
| BENZO(A)PYRENE | 188/238 | 2.8 | J | 27000 | | G-SB-764D-1 | 1.4 | 2100 | 1252 | 996 | 22 | 150 | 15 | C | 163 | 120 | 83 | 70 | 103 |
| BENZO(B)FLUORANTHENE | 151/181 | 1.9 | J | 28000 | | G-SB-764D-1 | 1.3 | 86 | 1585 | 1325 | 220 | 56 | 150 | C | 64 | 1500 | 21 | 700 | 31 |
| BENZO(B+K)FLUORANTHENE | 4/6 | 220 | J | 7200 | J | SB-84-SS | 400 | 2100 | 3778 | 2727 | 220 [7] | 3 | 150 | C[7] | 4 | 1500 [7] | 2 | 700 [7] | 3 |
| BENZO(G,H,I)PERYLENE | 29/53 | 13 | | 24000 | J | SB-91-SS | 3.8 | 2100 | 1948 | 1122 | 230000 | 0 | 170000 | N[8] | 0 | 680000 | 0 | 2400000 [8] | 0 |
| BENZO(K)FLUORANTHENE | 124/181 | 1.475 | | 17000 | J | SB-91-SS | 1.6 | 86 | 1023 | 703 | 2200 | 12 | 1500 | C | 16 | 15000 | 1 | 7000 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 3/9 | 260 | J | 41000 | J | G-TP-1-4-1-2 | 74 | 90 | 14120 | 4733 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-FLUORANTHENES/PYRENES | 3/9 | 270 | J | 47000 | J | G-TP-1-4-1-2 | 74 | 90 | 16157 | 5412 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-FLUORENES | 1/9 | 1200 | J | 1200 | J | G-TP-1-4-1-2 | 74 | 90 | 1200 | 169 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-PHENANTHRENES/ANTHRACENES | 3/9 | 130 | J | 33000 | J | G-TP-1-4-1-2 | 74 | 90 | 11317 | 3799 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 3/9 | 140 | J | 20000 | J | G-TP-1-4-1-2 | 74 | 90 | 6910 | 2330 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-FLUORENES | 1/9 | 3800 | J | 3800 | J | G-TP-1-4-1-2 | 74 | 90 | 3800 | 458 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-NAPHTHALENES | 1/9 | 1800 | J | 1800 | J | G-TP-1-4-1-2 | 74 | 90 | 1800 | 236 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C2-PHENANTHRENES/ANTHRACENES | 3/9 | 160 | J | 31000 | J | G-TP-1-4-1-2 | 74 | 90 | 10643 | 3574 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 2/9 | 210 | J | 7000 | J | G-TP-1-4-1-2 | 74 | 90 | 3605 | 832 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-FLUORENES | 2/9 | 200 | J | 7200 | J | G-TP-1-4-1-2 | 74 | 90 | 3700 | 853 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-NAPHTHALENES | 1/9 | 4000 | J | 4000 | J | G-TP-1-4-1-2 | 74 | 90 | 4000 | 480 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C3-PHENANTHRENES/ANTHRACENES | 3/9 | 100 | J | 17000 | J | G-TP-1-4-1-2 | 74 | 90 | 5850 | 1977 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | 2/9 | 92 | J | 3000 | J | G-TP-1-4-1-2 | 74 | 90 | 1546 | 374 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C4-NAPHTHALENES | 2/9 | 92 | J | 4100 | J | G-TP-1-4-1-2 | 74 | 90 | 2096 | 497 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C4-PHENANTHRENES/ANTHRACENES | 2/9 | 160 | J | 5900 | J | G-TP-1-4-1-2 | 74 | 90 | 3030 | 704 | NC | NC | NC | | NC | NC | NC | NC | NC |
| CHRYSENE | 155/187 | 3.2 | J | 41000 | | G-SB-761C-1 | 0.99 | 2100 | 1773 | 1478 | 22000 | 4 | 15000 | C | 6 | 48000 | 0 | 22000 | 4 |
| DIBENZO(A,H)ANTHRACENE | 83/187 | 3.8 | J | 7200 | J | SB-91-SS | 1.4 | 2100 | 528 | 252 | 22 | 68 | 15 | C | 75 | 460 | 15 | 220 | 20 |
| FLUORANTHENE | 39/53 | 13 | | 21000 | K | SB-91-SS | 3.8 | 400 | 2352 | 1741 | 310000 | 0 | 230000 | N | 0 | 6300000 | 0 | 3200000 | 0 |
| FLUORENE | 10/53 | 21 | J | 600 | | G-TP-1-3-1-2 | 3.4 | 2100 | 263 | 132 | 310000 | 0 | 230000 | N | 0 | 140000 | 0 | 540000 | 0 |
| INDENO(1,2,3-CD)PYRENE | 136/187 | 2.4 | J | 17000 | J | SB-91-SS | 0.41 | 2100 | 973 | 724 | 220 | 40 | 150 | C | 52 | 4200 | 9 | 2400 | 10 |
| INDENO(1,2,3-CD)PYRENE | 136/187 | 2.4 | J | 17000 | | G-SB-764D-1 | 0.41 | 2100 | 973 | 724 | 220 | 40 | 150 | C | 52 | 4200 | 9 | 2400 | 10 |

**Table 4-13**

**Occurrence and Distribution of Chemicals - Surface Soil (0-2 feet) - Tax Block Soils**
**Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NAPHTHALENE | 7/53 | 7.3 | 660 | G-TP-1-3-1-2 | 3.7 | 2100 | 233 | 141 | 160000 | 0 | 3600 C | 0 | 150 | 4 | 9.4 | 5 |
| PHENANTHRENE | 30/53 | 25 | 13000 K | SB-91-SS | 3.7 | 2100 | 1658 | 972 | 2300000 | 0 | 170000 N[8] | 0 | 470000 | 0 | 2400000 [8] | 0 |
| PYRENE | 41/53 | 9.4 | 55000 J | SB-91-SS | 3.8 | 2100 | 3851 | 3008 | 230000 | 0 | 170000 N | 0 | 680000 | 0 | 2400000 | 0 |
| **Pesticides/PCBs (ug/kg)** | | | | | | | | | | | | | | | | |
| AROCLOR-1254 | 1/22 | 12 J | 12 J | SB-198-SS | 34 | 330 | 12.0 | 64.9 | 320 | 0 | 110 N[9] | 0 | 1100 | 0 | 176 | 0 |
| AROCLOR-1260 | 9/22 | 8.2 J | 1190 J | SB-258-SS[6] | 36 | 330 | 323 | 178 | 320 | 4 | 220 C | 4 | NC | NC | 480 | 2 |
| TOTAL AROCLOR | 10/22 | 8.2 | 1190 | SB-258-SS[6] | 0 | 0 | 292 | 133 | 320 [10] | 4 | 220 C[11] | 4 | 410 [10] | 2 | NC | NC |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | | |
| ANTIMONY | 7/14 | 0.6 L | 3.9 L | SB-85-SS | 2.5 | 3.2 | 1.4 | 1.4 | 3.1 | 1 | 3.1 N | 1 | 13 | 0 | 13.2 | 0 |
| ARSENIC | 27/32 | 0.8 L | 37 | SB-92-SS | 1 | 3 | 3.4 | 3.0 | 0.43 | 27 | 0.39 C | 27 | 0.026 | 27 | 0.026 | 27 |
| BARIUM | 6/6 | 22 | 74 | SB-197-SS | -- | -- | 42.8 | 42.8 | 1600 | 0 | 1500 N | 0 | 6000 | 0 | 6000 | 0 |
| BERYLLIUM | 8/14 | 0.3 | 5.4 | SB-91-SS | 2.3 | 3.2 | 1.7 | 1.5 | 16 | 0 | 16 N | 0 | 1200 | 0 | 1160 | 0 |
| CADMIUM | 2/14 | 5.7 | 14 | SB-85-SS | 0.1 | 3.2 | 9.9 | 2.0 | 3.9 | 2 | 7 N | 1 | 27 | 0 | 28 | 0 |
| CHROMIUM | 14/14 | 11.2 | 48 | SB-85-SS | -- | -- | 21.2 | 21.2 | 12000 [12] | 0 | 12000 N[12] | 0 | 2000000000 [12] | 0 | 1980000000 [12] | 0 |
| COBALT | 6/6 | 3.2 | 51.2 | SB-197-SS | -- | -- | 15.1 | 15.1 | NC | NC | 2.3 N | 6 | NC | NC | 9.8 | 2 |
| COPPER | 14/14 | 5 | 45 | SB-85-SS | -- | -- | 14.8 | 14.8 | 310 | 0 | 310 N | 0 | 11000 | 0 | 1020 | 0 |
| LEAD | 14/14 | 4 | 340 | SB-85-SS | -- | -- | 68.3 | 68.3 | 400 | 0 | 400 | 0 | NC | NC | 280 [13] | 1 |
| MERCURY | 11/14 | 0.02 | 4.2 | SB-84-SS | 0.1 | 0.11 | 0.60 | 0.48 | 2.3 [14] | 1 | 2.3 N[15] | 1 | NC | NC | NC | NC |
| NICKEL | 14/14 | 5 | 280 J | SB-86-SS | -- | -- | 49.3 | 49.3 | 160 | 2 | 150 N | 2 | NC | NC | 960 | 0 |
| **Inorganics (mg/kg) (continued)** | | | | | | | | | | | | | | | | |
| SELENIUM | 2/14 | 3.7 | 4.7 | SB-91-SS | 2 | 3.2 | 4.2 | 1.6 | 39 | 0 | 39 N | 0 | 19 | 0 | 19 | 0 |
| VANADIUM | 6/6 | 20.2 | 39.2 | SB-197-SS | -- | -- | 25.7 | 25.7 | 7.8 | 6 | 39 N[16] | 1 | 730 | 0 | 3600 | 0 |
| ZINC | 14/14 | 16 | 290 | SB-86-SS | -- | -- | 78.4 | 78.4 | 2300 | 0 | 2300 N | 0 | 14000 | 0 | 13600 | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 10/15 | 12000 | 163000 | SB-198-SS | 11000 | 12000 | 72200 | 50100 | 230000 | 0 | NC | 0 | NC | NC | NC | NC |
| GASOLINE RANGE ORGANICS | 7/19 | 31 J | 810000 | G-SB-734-0-4 | 110 | 12500 | 142206 | 54121 | 230000 | 1 | NC | 0 | NC | NC | NC | NC |
| **Miscellaneous Parameters (%)** | | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | 63/63 | 81.7 | 95.9 | SB-414-0102 | -- | -- | 88.7 | 88.7 | NC | NC | NC | 0 | NC | NC | NC | NC |
| **Miscellaneous Parameters (s.u.)** | | | | | | | | | | | | | | | | |
| PH | 1/1 | 7.1 | 7.1 | SB-194-SS | -- | -- | 7.1 | 7.1 | NC | NC | NC | 0 | NC | NC | NC | NC |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
The SSL at a DAF of 20 is 20x the SSL at a DAF of 1.
6 - The value for acenaphthene is used as a surrogate for acenaphthylene.
7 - The value is for benzo(b)fluoranthene.
8 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
9 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
10 - The value is for PCB (total).
11 - The value is for polychlorinated biphenyls (high risk).
12 - The value is for trivalent chromium.
13 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
14 - The value is for mercury (inorganic/mercuric dichloride).
15 - The value is for mercuric chloride.
16 - The value is for vanadium and compounds.
17 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NC = No criteria

**Table 4-14**

**Occurrence and Distribution of Chemicals - Subsurface Soil (2-10 feet) - Tax Block Soils**
**Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 1/24 | 0.54 | J | 0.54 | J | SB-197-10 | 1.9 | 61 | 0.54 | 4.1 | 390000 | 0 | 24000 | N | 0 | 2900 | 0 | 2400 | 0 |
| 1,2,4-TRIMETHYLBENZENE | 3/24 | 0.69 | J | 1.1 | J | SB-195-05 | 1.9 | 61 | 0.87 | 4.1 | NC | NC | 6200 | N | 0 | NC | NC | 420 | 0 |
| 2-BUTANONE | 5/24 | 3.58 | J | 8.24 | J | SB-199-10 | 7.73 | 610 | 5.5 | 36.3 | 4700000 | 0 | 2800000 | N | 0 | 29000 | 0 | 30000 | 0 |
| ACETONE | 14/24 | 3.6 | J | 89.6 | J | SB-198-05 | 56 | 610 | 24.3 | 47.6 | 7000000 | 0 | 6100000 | N | 0 | 22000 | 0 | 90000 | 0 |
| BENZENE | 1/45 | 7 | | 7 | | SB-89-05 | 1 | 121 | 7.0 | 10.0 | 12000 | 0 | 1100 | C | 0 | 1.9 | 1 | 4.2 | 1 |
| CARBON DISULFIDE | 7/24 | 0.68 | J | 2.1 | J | SB-196-10 | 1.9 | 61 | 1.3 | 4.2 | 780000 | 0 | 82000 | N | 0 | 19000 | 0 | 6200 | 0 |
| ETHYLBENZENE | 2/45 | 3 | | 100 | | SB-89-05 | 1 | 121 | 51.5 | 12.2 | 780000 | 0 | 5400 | C | 0 | 15000 | 0 | 34 | 1 |
| ISOPROPYLBENZENE | 1/24 | 990 | J | 990 | J | SB-84-05 | 1.9 | 61 | 990 | 44.3 | 780000 | 0 | 210000 | N | 0 | 64000 | 0 | 22000 | 0 |
| METHYLENE CHLORIDE | 3/24 | 8 | J | 10 | J | SB-86-10, SB-86-05 | 3.9 | 61 | 9.3 | 5.9 | 85000 | 0 | 11000 | C | 0 | 19 | 0 | 24 | 0 |
| N-BUTYLBENZENE | 1/24 | 850 | J | 850 | J | SB-84-05 | 1.9 | 61 | 850 | 38.5 | NC | NC | NC | | NC | NC | NC | NC | NC |
| N-PROPYLBENZENE | 1/24 | 2200 | J | 2200 | J | SB-84-05 | 1.9 | 61 | 2200 | 94.7 | NC | NC | 340000 | N | 0 | NC | NC | 50000 | 0 |
| NAPHTHALENE | 9/45 | 0.62 | J | 620 | J | SB-84-05 | 1 | 362 | 153 | 54.1 | 160000 | 0 | 3600 | C | 0 | 150 | 4 | 9.4 | 6 |
| TERTIARY-BUTYL ALCOHOL | 2/12 | 6 | J | 7 | J | SB-197-10 | 8 | 10 | 6.5 | 4.8 | NC | NC | NC | | NC | NC | NC | NC | NC |
| TOLUENE | 11/45 | 1.1 | J | 4.2 | | SB-199-05 | 1 | 121 | 2.5 | 10.3 | 630000 | 0 | 500000 | N | 0 | 27000 | 0 | 32000 | 0 |
| TOTAL XYLENES | 4/35 | 3 | | 600 | | SB-88-05 | 1 | 362 | 196 | 52.9 | 1600000 [6] | 0 | 63000 | N | 0 | 3000 [6] | 0 | 4000 | 0 |
| TRICHLOROETHENE | 7/24 | 0.62 | J | 1.5 | J | SB-199-05 | 1.9 | 61 | 1.0 | 4.1 | 1600 | 0 | 2800 | C | 0 | 0.26 | 7 | 14.4 | 0 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| BENZOIC ACID | 2/12 | 134 | J | 136 | J | SB-195-05 | 42.3 | 70.8 | 135 | 46.9 | NC | NC | 24000000 | N | 0 | NC | NC | 680000 | 0 |
| CARBAZOLE | 1/22 | 51 | J | 51 | J | SB-199-05 | 187 | 410 | 51.0 | 142 | 32000 | 0 | NC | | NC | 470 | 0 | NC | NC |
| DIBENZOFURAN | 1/22 | 34 | J | 34 | J | SB-199-05 | 110 | 410 | 34.0 | 121 | 7800 | 0 | 7800 | N | 0 | NC | NC | 13600 | 0 |
| PHENOL | 5/22 | 1000 | J | 1900 | | SB-81-05 | 375 | 436 | 1380 | 468 | 2300000 | 0 | 1800000 | N | 0 | 67000 | 0 | 126000 | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4/58 | 18 | | 900 | | G-SB-813-09 | 3.6 | 89.9 | 258 | 28.2 | NC | NC | 22000 | C | 0 | NC | NC | 240 | 1 |
| 2-METHYLNAPHTHALENE | 6/68 | 20 | | 650 | | G-SB-813-09 | 3.6 | 410 | 216 | 56.3 | 31000 | 0 | 31000 | N | 0 | 4400 | 0 | 15000 | 0 |
| ACENAPHTHENE | 7/68 | 18 | | 1200 | J | G-SB-813-09 | 3.6 | 410 | 294 | 67.4 | 470000 | 0 | 340000 | N | 0 | 100000 | 0 | 440000 | 0 |
| ACENAPHTHYLENE | 15/68 | 7.9 | | 1000 | | G-SB-813-09 | 3.6 | 410 | 149 | 69.4 | 470000 | 0 | 340000 | N[7] | 0 | 100000 | 0 | 440000 [7] | 0 |
| ANTHRACENE | 21/68 | 9.1 | | 3500 | J | G-SB-813-09 | 3.6 | 410 | 355 | 144 | 2300000 | 0 | 1700000 | N | 0 | 470000 | 0 | 7200000 | 0 |
| BAP EQUIVALENT-1/2 NONDETECTS[16] | 414/845 | 1.2 | | 57089 | | G-SB-735A-5 | 1.4 | 410 | 1323 | 651 | 22 | 297 | 15 | | 341 | NC | NC | 70 | 197 |
| BAP EQUIVALENT-POSITIVE RESULTS[16] | 414/845 | 0.0078 | | 57089 | | G-SB-735A-5 | 1.4 | 410 | 1320 | 650 | 22 | 291 | 15 | C | 333 | 120 | 164 | 70 | 191 |
| BENZO(A)ANTHRACENE | 333/661 | 1.4 | J | 44000 | | G-SB-735A-5 | 1 | 410 | 1172 | 594 | 220 | 109 | 150 | C | 125 | 480 | 82 | 200 | 112 |
| BENZO(A)PYRENE | 378/845 | 2.6 | J | 37000 | | G-SB-735A-5 | 1.4 | 410 | 1000 | 450 | 22 | 270 | 15 | C | 310 | 120 | 146 | 70 | 174 |
| BENZO(B)FLUORANTHENE | 352/653 | 1.6 | J | 55000 | | G-SB-735A-5 | 1.3 | 400 | 1249 | 675 | 220 | 118 | 150 | C | 137 | 1500 | 53 | 700 | 74 |
| BENZO(G,H,I)PERYLENE | 27/68 | 13 | | 9200 | J | G-SB-806-09 | 3.6 | 410 | 1015 | 436 | 230000 | 0 | 170000 | N[8] | 0 | 680000 | 0 | 2400000 [8] | 0 |
| BENZO(K)FLUORANTHENE | 251/653 | 2.25 | | 25000 | | G-SB-735A-5 | 1.4 | 400 | 647 | 250 | 2200 | 20 | 1500 | C | 25 | 15000 | 1 | 7000 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 2/10 | 83 | J | 89 | J | G-TP-1-2-7-8 | 74 | 81 | 86.0 | 48.7 | NC | NC | NC | | NC | NC | NC | NC | NC |
| C1-FLUORANTHENES/PYRENES | 2/10 | 84 | J | 96 | J | G-TP-1-2-7-8 | 74 | 81 | 90.0 | 49.5 | NC | NC | NC | | NC | NC | NC | NC | NC |
| CHRYSENE | 351/661 | 1.4 | J | 40000 | J | G-SB-714-6 | 0.97 | 410 | 1176 | 627 | 22000 | 2 | 15000 | C | 7 | 48000 | 0 | 22000 | 2 |
| DIBENZO(A,H)ANTHRACENE | 158/661 | 5.225 | | 7800 | | G-SB-735A-5 | 1.4 | 410 | 396 | 99.0 | 22 | 130 | 15 | C | 139 | 460 | 33 | 220 | 50 |
| FLUORANTHENE | 35/68 | 8.4 | | 17000 | J | G-SB-813-09 | 3.6 | 410 | 1518 | 810 | 310000 | 0 | 230000 | N | 0 | 6300000 | 0 | 3200000 | 0 |
| FLUORENE | 4/68 | 25 | | 1800 | J | G-SB-813-09 | 3.6 | 410 | 520 | 68.5 | 310000 | 0 | 230000 | N | 0 | 140000 | 0 | 540000 | 0 |
| INDENO(1,2,3-CD)PYRENE | 300/661 | 1.5 | J | 21000 | J | G-SB-714-6, G-SB-735A-5 | 0.41 | 410 | 703 | 323 | 220 | 90 | 150 | C | 107 | 4200 | 13 | 2400 | 23 |
| NAPHTHALENE | 6/68 | 8.4 | | 510 | | G-SB-806-09 | 3.6 | 410 | 148 | 50.9 | 160000 | 0 | 3600 | C | 0 | 150 | 2 | 9.4 | 5 |
| PHENANTHRENE | 27/68 | 19 | J | 18000 | J | G-SB-813-09 | 3.6 | 410 | 1263 | 535 | 2300000 | 0 | 170000 | N[8] | 0 | 470000 | 0 | 2400000 [8] | 0 |
| PYRENE | 35/68 | 8.9 | J | 31000 | | G-SB-813-09 | 3.6 | 410 | 2691 | 1415 | 230000 | 0 | 170000 | N | 0 | 680000 | 0 | 2400000 | 0 |
| **Pesticides/PCBs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| AROCLOR-1260 | 2/24 | 8.1 | J | 14 | J | SB-195-10 | 36 | 300 | 11.1 | 71.3 | 320 | 0 | 220 | C | 0 | NC | NC | 480 | 0 |
| TOTAL AROCLOR | 2/24 | 8.1 | | 14 | | SB-195-10 | 0 | 0 | 11.1 | 0.9 | 320 [9] | 0 | 220 | C[10] | 0 | 410 [9] | 0 | NC | NC |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | | | | | |
| ANTIMONY | 4/24 | 0.3 | L | 0.7 | L | SB-199-10 | 0.17 | 3 | 0.44 | 0.70 | 3.1 | 0 | 3.1 | N | 0 | 13 | 0 | 13.2 | 0 |

**Table 4-14**

**Occurrence and Distribution of Chemicals - Subsurface Soil (2-10 feet) - Tax Block Soils**
**Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ARSENIC | 25/32 | 0.61 | 8.5 | G-SB-92RE-7 | 0.53 | 5 | 3.5 | 2.9 | 0.43 | 25 | 0.39 C | 25 | 0.026 | 25 | 0.026 | 25 |
| BARIUM | 14/14 | 3 | 35 | SB-198-05 | -- | -- | 20.5 | 20.5 | 1600 | 0 | 1500 N | 0 | 6000 | 0 | 6000 | 0 |
| BERYLLIUM | 15/24 | 0.2 | 3.9 | SB-198-05 | 2.6 | 3 | 1.3 | 1.3 | 16 | 0 | 16 N | 0 | 1200 | 0 | 1160 | 0 |
| CADMIUM | 3/24 | 0.085 | 0.4 | SB-198-10 | 0.08 | 3 | 0.24 | 0.65 | 3.9 | 0 | 7 N | 0 | 27 | 0 | 28 | 0 |
| CHROMIUM | 24/24 | 6.9 | 40 | SB-198-05 | -- | -- | 19.0 | 19.0 | 12000 [11] | 0 | 12000 N[11] | 0 | 2000000000 [11] | 0 | 1.98E+09 [11] | 0 |
| COBALT | 13/14 | 2.6 J | 68.1 | SB-197-05 | 11 | 11 | 11.8 | 11.3 | NC | NC | 2.3 N | 13 | NC | NC | 9.8 | 4 |
| COPPER | 24/24 | 4 | 47 | SB-198-10 | -- | -- | 14.4 | 14.4 | 310 | 0 | 310 N | 0 | 11000 | 0 | 1020 | 0 |
| IRON | 2/2 | 15700 J | 17200 J | OW-5-4 | -- | -- | 16450 | 16450 | 5500 | 2 | 5500 N | 2 | NC | NC | 12800 | 2 |
| LEAD | 23/24 | 2 | 18 | SB-198-05 | 1 | 1 | 7.3 | 7.0 | 400 | 0 | 400 | 0 | NC | NC | 280 [12] | 0 |
| MANGANESE | 2/2 | 67.3 J | 123 J | OW-5-4 | -- | -- | 95.2 | 95.2 | 160 | 0 | 180 N | 0 | 950 | 0 | 1140 | 0 |
| MERCURY | 12/24 | 0.007 | 0.03 | SB-198-05 | 0.019 | 0.12 | 0.01 | 0.03 | 2.3 [13] | 0 | 2.3 N[14] | 0 | NC | NC | NC | NC |
| NICKEL | 23/24 | 3 | 49 | SB-198-05 | 2.9 | 2.9 | 15.1 | 14.5 | 160 | 0 | 150 N | 0 | NC | NC | 960 | 0 |
| SELENIUM | 2/24 | 1 | 3 | SB-196-05 | 0.18 | 11 | 2.0 | 1.3 | 39 | 0 | 39 N | 0 | 19 | 0 | 19 | 0 |
| SILVER | 2/19 | 0.12 | 0.21 | OW-5-4 | 0.03 | 2.9 | 0.17 | 0.40 | 39 | 0 | 39 N | 0 | 31 | 0 | 32 | 0 |
| THALLIUM | 2/24 | 0.053 | 0.073 | OW-5-4 | 0.6 | 5 | 0.06 | 0.78 | 0.55 | 0 | NC | NC | 3.6 | 0 | NC | NC |
| VANADIUM | 14/14 | 13.3 J | 72.7 | SB-195-10 | -- | -- | 36.6 | 36.6 | 7.8 | 14 | 39 N[15] | 5 | 730 | 0 | 3600 | 0 |
| ZINC | 19/24 | 8 | 145 | SB-198-05 | 26 | 30 | 38.0 | 33.0 | 2300 | 0 | 2300 N | 0 | 14000 | 0 | 13600 | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 14/37 | 840 J | 105000 | SB-199-05 | 11000 | 13000 | 33046 | 16220 | 230000 | 0 | NC | NC | NC | NC | NC | NC |
| GASOLINE RANGE ORGANICS | 21/46 | 34 J | 980000 | G-SB-728-4 | 110 | 12800 | 174565 | 81771 | 230000 | 5 | NC | NC | NC | NC | NC | NC |
| **Miscellaneous Parameters (%)** | | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | 186/186 | 68.6 | 94.7 | SB-433-0203 | -- | -- | 85.5 | 85.5 | NC | NC | NC | NC | NC | NC | NC | NC |
| **Miscellaneous Parameters (s.u.)** | | | | | | | | | | | | | | | | |
| PH | 2/2 | 5.7 | 7 | SB-194-10 | -- | -- | 6.4 | 6.4 | NC | NC | NC | NC | NC | NC | NC | NC |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
The SSL at a DAF of 20 is 20x the SSL at a DAF of 1.
6 - The value is for xylenes.
7 - The value for acenaphthene is used as a surrogate for acenaphthylene.
8 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
9 - The value is for PCB (total).
10 - The value is for polychlorinated biphenyls (high risk).
11 - The value is for trivalent chromium.
12 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
13 - The value is for mercury (inorganic/mercuric dichloride).
14 - The value is for mercuric chloride.
15 - The value is for vanadium and compounds.
16 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
L = Biased low
N = Noncarcinogen
NC = No criteria

**Table 4-15**

**Occurrence and Distribution of Chemicals - Deep Subsurface Soil (10+ feet) - Tax Block Soils**
**Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 1/7 | 1.3 | J | 1.3 | J | OW-6-30 | 0.65 | 6.2 | 1.3 | 2.4 | 16000000 | 0 | 870000 | N | 0 |
| 1,1-DICHLOROETHANE | 2/7 | 1.3 | J | 1.6 | J | OW-6-20 | 0.42 | 6 | 1.5 | 2.2 | 1600000 | 0 | 3300 | C | 0 |
| 1,1-DICHLOROETHENE | 2/7 | 5 | J | 7.4 | | OW-6-30 | 0.6 | 6 | 6.2 | 3.5 | 390000 | 0 | 24000 | N | 0 |
| 2-BUTANONE | 1/7 | 27 | | 27 | | MRC-MW95D-SO-214 | 12 | 57 | 27.0 | 15.4 | 4700000 | 0 | 2800000 | N | 0 |
| ACETONE | 3/7 | 7.8 | J | 9.7 | J | OW-6-30 | 12 | 64 | 8.5 | 17.2 | 7000000 | 0 | 6100000 | N | 0 |
| BENZENE | 2/7 | 0.29 | J | 0.52 | J | MRC-MW95D-SO-214 | 5.9 | 6.2 | 0.41 | 2.3 | 12000 | 0 | 1100 | C | 0 |
| CIS-1,2-DICHLOROETHENE | 3/7 | 0.87 | J | 4.1 | J | OW-6-20 | 0.42 | 6 | 2.8 | 2.5 | 78000 | 0 | 16000 | N | 0 |
| ETHYLBENZENE | 1/7 | 0.41 | J | 0.41 | J | MRC-MW95D-SO-214 | 5.9 | 6.2 | 0.41 | 2.6 | 780000 | 0 | 5400 | C | 0 |
| METHYLENE CHLORIDE | 2/7 | 9 | J | 11 | J | SB-86-12 | 0.99 | 16 | 10.0 | 5.7 | 85000 | 0 | 11000 | C | 0 |
| N-BUTYLBENZENE | 1/7 | 0.35 | J | 0.35 | J | MRC-MW95D-SO-214 | 5.9 | 6.2 | 0.35 | 2.6 | NC | NC | NC | | NC |
| O-XYLENE | 1/7 | 0.59 | J | 0.59 | J | MRC-MW95D-SO-214 | 5.9 | 6.2 | 0.59 | 2.7 | 1600000 [6] | 0 | 380000 | N | 0 |
| TOTAL XYLENES | 1/5 | 1.5 | J | 1.5 | J | MRC-MW95D-SO-214 | 12 | 12 | 1.5 | 5.1 | 1600000 [6] | 0 | 63000 | N | 0 |
| TRICHLOROETHENE | 4/7 | 4 | J | 64 | | OW-6-30 | 0.49 | 6 | 23.0 | 14.0 | 1600 | 0 | 2800 | C | 0 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | | | | |
| PHENOL | 2/2 | 960 | J | 980 | J | SB-86-12 | -- | -- | 970 | 970 | 2300000 | 0 | 1800000 | N | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 5/32 | 7.9 | | 120 | | G-SB-813-15-AVG, G-SB-813-15 | 3.7 | 8.3 | 42.0 | 8.4 | NC | NC | 22000 | C | 0 |
| 2-METHYLNAPHTHALENE | 3/34 | 14 | | 30 | | G-SB-806-15 | 3.7 | 390 | 23.0 | 15.5 | 31000 | 0 | 31000 | N | 0 |
| ACENAPHTHENE | 7/34 | 14 | J | 210 | J | G-SB-813-15-AVG, G-SB-813-15 | 3.7 | 390 | 64.9 | 26.2 | 470000 | 0 | 340000 | N | 0 |
| ACENAPHTHYLENE | 11/34 | 9.1 | | 190 | | G-SB-813-15-AVG, G-SB-813-15 | 3.7 | 390 | 57.7 | 31.3 | 470000 | 0 | 340000 | N[7] | 0 |
| ANTHRACENE | 13/34 | 9.1 | | 630 | J | G-SB-813-15-AVG, G-SB-813-15 | 3.8 | 390 | 150 | 69.8 | 2300000 | 0 | 1700000 | N | 0 |
| BAP EQUIVALENT-1/2 NONDETECTS[12] | 121/186 | 2.6 | | 35343 | | G-SB-761-11 | 1.5 | 390 | 1756 | 1144 | 22 | 105 | 15 | | 114 |
| BAP EQUIVALENT-POSITIVE RESULTS[12] | 121/186 | 0.54 | | 35343 | | G-SB-761-11 | 1.5 | 390 | 1752 | 1141 | 22 | 103 | 15 | C | 111 |
| BENZO(A)ANTHRACENE | 117/186 | 1.9 | J | 30000 | | G-SB-761-11 | 1.1 | 390 | 1292 | 814 | 220 | 53 | 150 | C | 64 |
| BENZO(A)PYRENE | 117/186 | 6.2 | J | 24000 | | G-SB-761-11 | 1.5 | 390 | 1271 | 802 | 22 | 99 | 15 | C | 106 |
| BENZO(B)FLUORANTHENE | 118/184 | 2.1 | J | 27000 | | G-SB-761-11 | 1.3 | 4.3 | 1389 | 891 | 220 | 56 | 150 | C | 69 |
| BENZO(B+K)FLUORANTHENE | 1/2 | 74 | J | 74 | J | SB-86-12 | 390 | 390 | 74.0 | 135 | 220 [8] | 0 | 150 | C[8] | 0 |
| BENZO(G,H,I)PERYLENE | 15/34 | 10 | | 1000 | J | G-SB-813-15-AVG, G-SB-813-15 | 3.8 | 390 | 379 | 180 | 230000 | 0 | 170000 | N[9] | 0 |
| BENZO(K)FLUORANTHENE | 103/184 | 6.8 | J | 11000 | | G-SB-761-11 | 1.6 | 5.8 | 714 | 400 | 2200 | 9 | 1500 | C | 12 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 2/6 | 460 | J | 1300 | J | G-SB-812-15 | 83 | 86 | 905 | 330 | NC | NC | NC | | NC |
| C1-FLUORANTHENES/PYRENES | 2/6 | 510 | J | 1400 | J | G-SB-812-15 | 83 | 86 | 983 | 356 | NC | NC | NC | | NC |
| C1-PHENANTHRENES/ANTHRACENES | 2/6 | 500 | J | 740 | J | G-SB-812-15 | 83 | 86 | 643 | 242 | NC | NC | NC | | NC |

**Table 4-15**

**Occurrence and Distribution of Chemicals - Deep Subsurface Soil (10+ feet) - Tax Block Soils**
**Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 2/6 | 250 | J | 720 | J | G-SB-812-15 | 83 | 86 | 490 | 192 | NC | NC | NC | | NC |
| C2-NAPHTHALENES | 1/6 | 66.5 | | 90 | J | G-SB-813-15 | 75 | 86 | 66.5 | 45.5 | NC | NC | NC | | NC |
| C2-PHENANTHRENES/ANTHRACENES | 2/6 | 410 | J | 820 | J | G-SB-812-15 | 83 | 86 | 625 | 237 | NC | NC | NC | | NC |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 2/6 | 88 | J | 240 | J | G-SB-812-15 | 83 | 86 | 164 | 82.9 | NC | NC | NC | | NC |
| C3-FLUORENES | 1/6 | 130 | J | 130 | J | G-SB-812-15 | 83 | 88 | 130 | 57.1 | NC | NC | NC | | NC |
| C3-NAPHTHALENES | 1/6 | 76.5 | | 110 | J | G-SB-813-15 | 75 | 86 | 77 | 47.2 | NC | NC | NC | | NC |
| C3-PHENANTHRENES/ANTHRACENES | 2/6 | 200 | J | 510 | J | G-SB-812-15 | 83 | 86 | 365 | 150 | NC | NC | NC | | NC |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | 1/6 | 110 | J | 110 | J | G-SB-812-15 | 83 | 88 | 110 | 53.8 | NC | NC | NC | | NC |
| C4-NAPHTHALENES | 1/6 | 90 | J | 90 | J | G-SB-812-15 | 83 | 88 | 90.0 | 50.4 | NC | NC | NC | | NC |
| C4-PHENANTHRENES/ANTHRACENES | 1/6 | 170 | J | 170 | J | G-SB-812-15 | 83 | 88 | 170 | 63.8 | NC | NC | NC | | NC |
| CHRYSENE | 117/186 | 2 | J | 33000 | | G-SB-761-11 | 1 | 390 | 1454 | 916 | 22000 | 1 | 15000 | C | 2 |
| DIBENZO(A,H)ANTHRACENE | 56/186 | 4.725 | | 4300 | | G-SB-761-11 | 1.5 | 390 | 412 | 127 | 22 | 51 | 15 | C | 53 |
| FLUORANTHENE | 23/34 | 8.4 | | 2900 | J | G-SB-813-15-AVG, G-SB-813-15 | 3.8 | 390 | 541 | 372 | 310000 | 0 | 230000 | N | 0 |
| FLUORENE | 6/34 | 22 | | 280 | J | G-SB-813-15-AVG, G-SB-813-15 | 3.7 | 390 | 90.7 | 28.9 | 310000 | 0 | 230000 | N | 0 |
| INDENO(1,2,3-CD)PYRENE | 108/186 | 1.4 | J | 12000 | | G-SB-761-11 | 0.43 | 390 | 719 | 420 | 220 | 43 | 150 | C | 50 |
| NAPHTHALENE | 4/34 | 13 | | 37 | | G-SB-806-15 | 3.7 | 390 | 23.5 | 16.1 | 160000 | 0 | 3600 | C | 0 |
| **PAHs (continued) (ug/kg)** | | | | | | | | | | | | | | | |
| PHENANTHRENE | 18/34 | 12 | | 2900 | J | G-SB-813-15-AVG, G-SB-813-15 | 3.8 | 390 | 437 | 238 | 2300000 | 0 | 170000 | N[9] | 0 |
| PYRENE | 24/34 | 13 | | 5200 | | G-SB-813-15-AVG, G-SB-813-15 | 3.8 | 390 | 913 | 651 | 230000 | 0 | 170000 | N | 0 |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | |
| ANTIMONY | 1/6 | 0.28 | J | 0.28 | J | OW-4-26 | 0.095 | 2.6 | 0.28 | 0.51 | 3.1 | 0 | 3.1 | N | 0 |
| ARSENIC | 10/11 | 0.19 | L | 5.6 | | G-SB-92RE-15 | 0.51 | 0.51 | 2.2 | 2.0 | 0.43 | 7 | 0.39 | C | 7 |
| BARIUM | 4/4 | 6 | | 11.8 | | OW-6-20 | -- | -- | 8.5 | 8.5 | 1600 | 0 | 1500 | N | 0 |
| BERYLLIUM | 4/6 | 0.48 | | 0.8 | | OW-6-20 | 2.6 | 2.6 | 0.65 | 0.87 | 16 | 0 | 16 | N | 0 |
| CADMIUM | 1/6 | 0.12 | | 0.12 | | OW-6-20 | 0.0081 | 2.6 | 0.12 | 0.46 | 3.9 | 0 | 7 | N | 0 |
| CHROMIUM | 6/6 | 8.9 | J | 14 | | SB-85-12 | -- | -- | 10.5 | 10.5 | 12000 (10) | 0 | 12000 | N[10] | 0 |
| COBALT | 4/4 | 2.1 | J | 8.1 | J | OW-6-20 | -- | -- | 4.1 | 4.1 | NC | NC | 2.3 | N | 3 |
| COPPER | 6/6 | 4.6 | J | 12 | | SB-86-12, SB-85-12 | -- | -- | 7.9 | 7.9 | 310 | 0 | 310 | N | 0 |
| IRON | 4/4 | 6100 | J | 21600 | J | OW-4-26 | -- | -- | 11600 | 11600 | 5500 | 4 | 5500 | N | 4 |
| LEAD | 6/6 | 2.5 | J | 16 | J | SB-86-12 | -- | -- | 7.5 | 7.5 | 400 | 0 | 400 | | 0 |
| MANGANESE | 4/4 | 30.6 | J | 156 | J | OW-4-26 | -- | -- | 100 | 100 | 160 | 0 | 180 | N | 0 |
| NICKEL | 6/6 | 4.5 | J | 26 | J | SB-85-12 | -- | -- | 12.1 | 12.1 | 160 | 0 | 150 | N | 0 |

**Table 4-15**

**Occurrence and Distribution of Chemicals - Deep Subsurface Soil (10+ feet) - Tax Block Soils**
**Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SELENIUM | 2/6 | 0.22 | L | 0.24 | L | OW-4-26 | 0.19 | 2.6 | 0.23 | 0.54 | 39 | 0 | 39 | N | 0 |
| SILVER | 3/4 | 0.047 | | 0.089 | | OW-4-26 | 0.03 | 0.03 | 0.06 | 0.05 | 39 | 0 | 39 | N | 0 |
| THALLIUM | 4/6 | 0.031 | | 0.05 | | OW-4-26 | 2 | 2.1 | 0.04 | 0.37 | 0.55 | 0 | NC | | NC |
| VANADIUM | 4/4 | 10.1 | J | 19.2 | J | OW-6-30 | -- | -- | 15.0 | 15.0 | 7.8 | 4 | 39 | N[11] | 0 |
| ZINC | 6/6 | 10.5 | K | 110 | | SB-85-12 | -- | -- | 35.3 | 35.3 | 2300 | 0 | 2300 | N | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 1/2 | 13000 | J | 13000 | J | SB-85-12 | 11000 | 11000 | 13000 | 9250 | 230000 | 0 | NC | | NC |
| **Miscellaneous Parameters (%)** | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | 4/4 | 80.5 | | 84.2 | | OW-4-30 | -- | -- | 82.9 | 82.9 | NC | NC | NC | | NC |
| **Miscellaneous Parameters (mg/kg)** | | | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | 1/1 | 1320 | | 1320 | | MRC-MW12[1213] | -- | -- | 1320 | 1320 | NC | NC | NC | | NC |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
6 - The value is for xylenes.
7 - The value for acenaphthene is used as a surrogate for acenaphthylene.
8 - The value is for benzo(b)fluoranthene.
9 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
10 - The value is for trivalent chromium.
11 - The value is for vanadium and compounds.
12 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NC = No criteria

**TABLE 4-16**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOIL**
**TAX BLOCK G**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Construction Worker | Surface Soil | Incidental Ingestion | 3E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.4 | -- |
| | | Dermal Contact | 6E-07 | -- | -- | -- | 0.05 | -- |
| | | Inhalation | 1E-06 | -- | -- | -- | 2 | Target Organs HI < 1 |
| | | Total | 5E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 2 | Target Organs HI < 1 |
| | Subsurface Soil | Incidental Ingestion | 1E-06 | -- | -- | -- | 0.2 | -- |
| | | Dermal Contact | 2E-07 | -- | -- | -- | 0.01 | -- |
| | | Inhalation | 9E-07 | -- | -- | -- | 1 | -- |
| | | Total | 2E-06 | -- | -- | -- | 2 | Target Organs HI < 1 |
| Industrial Worker | Surface Soil | Incidental Ingestion | 7E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.10 | -- |
| | | Dermal Contact | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.04 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.0008 | -- |
| | | Total | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.1 | -- |
| | Subsurface Soil | Incidental Ingestion | 3E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.07 | -- |
| | | Dermal Contact | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.0006 | -- |
| | | Total | 6E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.09 | -- |
| Child Commercial Receptor | Surface Soil | Incidental Ingestion | 7E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 1.0 | -- |
| | | Dermal Contact | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.07 | -- |
| | | Inhalation | 2E-09 | -- | -- | -- | 0.0002 | -- |
| | | Total | 9E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 1 | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.7 | -- |
| | | Dermal Contact | 8E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.02 | -- |
| | | Inhalation | 1E-09 | -- | -- | -- | 0.0002 | -- |
| | | Total | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 0.7 | -- |

**TABLE 4-16**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOIL**
**TAX BLOCK G**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Adolescent Commercial Receptor | Surface Soil | Incidental Ingestion | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.2 | -- |
| | | Dermal Contact | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.05 | -- |
| | | Inhalation | 2E-09 | -- | -- | -- | 0.0002 | -- |
| | | Total | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.2 | -- |
| | Subsurface Soil | Incidental Ingestion | 5E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.1 | -- |
| | | Dermal Contact | 5E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 2E-09 | -- | -- | -- | 0.0002 | -- |
| | | Total | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.2 | -- |
| Lifelong Commercial Receptor (Child + Adolescent) | Surface Soil | Incidental Ingestion | 8E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 4E-09 | -- | -- | -- | NA | -- |
| | | Total | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | NA | -- |
| | | Dermal Contact | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 4E-09 | -- | -- | -- | NA | -- |
| | | Total | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| Adult Commercial Receptor | Surface Soil | Incidental Ingestion | 7E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.10 | -- |
| | | Dermal Contact | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.04 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.0008 | -- |
| | | Total | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.1 | -- |
| | Subsurface Soil | Incidental Ingestion | 3E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.07 | -- |
| | | Dermal Contact | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.0006 | -- |
| | | Total | 6E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.09 | -- |

**TABLE 4-16**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOIL**
**TAX BLOCK G**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Child Recreational User | Surface Soil | Incidental Ingestion | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 2 | Target Organs HI < 1 |
| | | Dermal Contact | 5E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.2 | -- |
| | | Inhalation | 7E-09 | -- | -- | -- | 0.0008 | -- |
| | | Total | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 2 | Target Organs HI < 1 |
| | Subsurface Soil | Incidental Ingestion | 5E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 1 | -- |
| | | Dermal Contact | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | 0.05 | -- |
| | | Inhalation | 5E-09 | -- | -- | -- | 0.0006 | -- |
| | | Total | 6E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 1 | -- |
| Adolescent Recreational User | Surface Soil | Incidental Ingestion | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.3 | -- |
| | | Dermal Contact | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.03 | -- |
| | | Inhalation | 9E-09 | -- | -- | -- | 0.0008 | -- |
| | | Total | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.4 | -- |
| | Subsurface Soil | Incidental Ingestion | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.3 | -- |
| | | Dermal Contact | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.010 | -- |
| | | Inhalation | 8E-09 | -- | -- | -- | 0.0006 | -- |
| | | Total | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.3 | -- |
| Adult Recreational User | Surface Soil | Incidental Ingestion | 7E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.2 | -- |
| | | Dermal Contact | 3E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.02 | -- |
| | | Inhalation | 7E-09 | -- | -- | -- | 0.0008 | -- |
| | | Total | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.2 | -- |
| | Subsurface Soil | Incidental Ingestion | 3E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.1 | -- |
| | | Dermal Contact | 1E-06 | -- | -- | -- | 0.007 | -- |
| | | Inhalation | 6E-09 | -- | -- | -- | 0.0006 | -- |
| | | Total | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.2 | -- |

**TABLE 4-16**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOIL**
**TAX BLOCK G**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Lifelong Recreational User (Child + Adolescent + Adult) | Surface Soil | Incidental Ingestion | 2E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 6E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 2E-08 | -- | -- | -- | NA | -- |
| | | Total | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 6E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 2E-08 | -- | -- | -- | NA | -- |
| | | Total | 8E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| Child Resident | Surface Soil | Incidental Ingestion | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 3 | COBALT |
| | | Dermal Contact | 6E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.2 | -- |
| | | Inhalation | 3E-08 | -- | -- | -- | 0.003 | -- |
| | | Total | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 3 | COBALT |
| | Subsurface Soil | Incidental Ingestion | 6E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 2 | Target Organs HI < 1 |
| | | Dermal Contact | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.07 | -- |
| | | Inhalation | 2E-08 | -- | -- | -- | 0.003 | -- |
| | | Total | 9E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | 2 | Target Organs HI < 1 |
| Adolescent Resident | Surface Soil | Incidental Ingestion | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.5 | -- |
| | | Dermal Contact | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.04 | -- |
| | | Inhalation | 4E-08 | -- | -- | -- | 0.003 | -- |
| | | Total | 5E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.5 | -- |
| | Subsurface Soil | Incidental Ingestion | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.4 | -- |
| | | Dermal Contact | 5E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.01 | -- |
| | | Inhalation | 3E-08 | -- | -- | -- | 0.003 | -- |
| | | Total | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.4 | -- |

**TABLE 4-16**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOIL**
**TAX BLOCK G**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Adult Resident | Surface Soil | Incidental Ingestion | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.3 | -- |
| | | Dermal Contact | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.03 | -- |
| | | Inhalation | 3E-08 | -- | -- | -- | 0.003 | -- |
| | | Total | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.3 | -- |
| | Subsurface Soil | Incidental Ingestion | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.2 | -- |
| | | Dermal Contact | 2E-06 | -- | -- | -- | 0.01 | -- |
| | | Inhalation | 3E-08 | -- | -- | -- | 0.003 | -- |
| | | Total | 5E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.2 | -- |
| Lifelong Resident (Child + Adolescent + Adult) | Surface Soil | Incidental Ingestion | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 8E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 1E-07 | -- | -- | -- | NA | -- |
| | | Total | 3E-04 | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 8E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 8E-08 | -- | -- | -- | NA | -- |
| | | Total | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |

Note: See Section 3 for benzo(a)pyrene equivalents calculation methodology.

**Table 4-17**

**Occurrence and Distribution of Chemicals - Surface Soil (0-2 feet) - Tax Block Soils**
**Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | 1/7 | 0.4 | J | 0.4 | J | SB-284-0102 | 5 | 6 | 0.40 | 2.6 | NC | NC | NC | | NC | NC | NC | NC | NC |
| 2-BUTANONE | 6/6 | 4 | J | 29.4 | | SB-201-SS | -- | -- | 12.8 | 12.8 | 4700000 | 0 | 2800000 | N | 0 | 29000 | 0 | 30000 | 0 |
| ACETONE | 8/9 | 39 | L | 210 | J | SB-201-SS | 27 | 27 | 107 | 96.4 | 7000000 | 0 | 6100000 | N | 0 | 22000 | 0 | 90000 | 0 |
| CARBON DISULFIDE | 7/11 | 1.7 | J | 3 | J | SB-202-SS, SB-286-0102, SB-282-0102 | 2.3 | 6 | 2.4 | 2.4 | 780000 | 0 | 82000 | N | 0 | 19000 | 0 | 6200 | 0 |
| CHLOROMETHANE | 1/11 | 3 | J | 3 | J | SB-284-0102 | 1.9 | 12 | 3.0 | 3.8 | NC | NC | 12000 | N | 0 | 930 | 0 | 980 | 0 |
| ETHYLBENZENE | 2/11 | 0.31 | J | 1.5 | J | SB-201-SS | 1.9 | 6 | 0.91 | 2.2 | 780000 | 0 | 5400 | C | 0 | 15000 | 0 | 34 | 0 |
| METHYLENE CHLORIDE | 3/11 | 2.9 | J | 4.9 | J | SB-202-SS | 3 | 16 | 3.6 | 4.1 | 85000 | 0 | 11000 | C | 0 | 19 | 0 | 24 | 0 |
| N-BUTYLBENZENE | 1/11 | 0.9 | J | 0.9 | J | SB-284-0102 | 1.9 | 6 | 0.90 | 2.1 | NC | NC | NC | | NC | NC | NC | NC | NC |
| NAPHTHALENE | 4/11 | 2 | J | 180 | J | SB-284-0102 | 0.94 | 6 | 55.6 | 21.5 | 160000 | 0 | 3600 | C | 0 | 150 | 1 | 9.4 | 2 |
| TERTIARY-BUTYL ALCOHOL | 2/4 | 5 | J | 7 | J | SB-201-SS | 8 | 11 | 6.0 | 5.4 | NC | NC | NC | | NC | NC | NC | NC | NC |
| TOLUENE | 3/11 | 7.8 | | 13.3 | | SB-202-SS | 1.9 | 6 | 9.7 | 4.6 | 630000 | 0 | 500000 | N | 0 | 27000 | 0 | 32000 | 0 |
| TRICHLOROETHENE | 3/11 | 2.9 | | 4.8 | | SB-202-SS | 1.9 | 6 | 3.7 | 3.0 | 1600 | 0 | 2800 | C | 0 | 0.26 | 3 | 14.4 | 0 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| BENZOIC ACID | 3/11 | 67.4 | J | 723 | J | SB-201-SS | 767 | 990 | 297 | 413 | NC | NC | 24000000 | N | 0 | NC | NC | 680000 | 0 |
| DI-N-BUTYL PHTHALATE | 1/11 | 31 | J | 31 | J | SB-203-SS | 192 | 400 | 31.0 | 151 | 780000 | 0 | 610000 | N | 0 | 5000000 | 0 | 184000 | 0 |
| DIBENZOFURAN | 1/11 | 27 | J | 27 | J | SB-200-SS | 110 | 400 | 27.0 | 139 | 7800 | 0 | 7800 | N | 0 | NC | NC | 13600 | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 3/15 | 10 | | 210 | J | SB-284-0102 | 3.7 | 400 | 134 | 111 | NC | NC | 22000 | C | 0 | NC | NC | 240 | 0 |
| 2-METHYLNAPHTHALENE | 3/15 | 11 | | 180 | J | SB-284-0102 | 3.7 | 400 | 117 | 108 | 31000 | 0 | 31000 | N | 0 | 4400 | 0 | 15000 | 0 |
| ACENAPHTHENE | 4/15 | 43 | J | 130 | J | SB-283-0102 | 3.7 | 400 | 102 | 98.2 | 470000 | 0 | 340000 | N | 0 | 100000 | 0 | 440000 | 0 |
| ANTHRACENE | 5/15 | 31 | J | 283 | | SB-200-SS | 3.7 | 400 | 147 | 117 | 2300000 | 0 | 1700000 | N | 0 | 470000 | 0 | 7200000 | 0 |
| BAP EQUIVALENT-1/2 NONDETECTS[12] | 33/56 | 9 | | 45883 | | H-SB-604D-1 | 1.4 | 400 | 2871 | 1716 | 22 | 24 | 15 | | 26 | NC | NC | 70 | 12 |
| BAP EQUIVALENT-POSITIVE RESULTS[12] | 33/56 | 9 | | 45883 | | H-SB-604D-1 | 1.4 | 400 | 2855 | 1707 | 22 | 24 | 15 | C | 26 | 120 | 10 | 70 | 10 |
| BENZO(A)ANTHRACENE | 18/29 | 11 | | 38000 | | H-SB-604D-1 | 1 | 400 | 4215 | 2650 | 220 | 6 | 150 | C | 7 | 480 | 3 | 200 | 6 |
| BENZO(A)PYRENE | 33/56 | 9 | J | 33000 | | H-SB-604D-1 | 1.4 | 400 | 2098 | 1260 | 22 | 23 | 15 | C | 26 | 120 | 7 | 70 | 10 |
| BENZO(B)FLUORANTHENE | 18/29 | 11 | | 31000 | | H-SB-604D-1 | 1.3 | 400 | 3754 | 2364 | 220 | 5 | 150 | C | 6 | 1500 | 3 | 700 | 3 |
| BENZO(G,H,I)PERYLENE | 4/15 | 37 | J | 180 | J | SB-283-0102 | 3.7 | 400 | 104 | 109 | 230000 | 0 | 170000 | N[6] | 0 | 680000 | 0 | 2400000 [6] | 0 |
| BENZO(K)FLUORANTHENE | 16/29 | 8.6 | | 15000 | | H-SB-604D-1 | 1.9 | 400 | 1879 | 1077 | 2200 | 3 | 1500 | C | 3 | 15000 | 0 | 7000 | 2 |
| CHRYSENE | 18/29 | 9.7 | | 33000 | | H-SB-604D-1 | 0.99 | 400 | 4006 | 2520 | 22000 | 1 | 15000 | C | 3 | 48000 | 0 | 22000 | 1 |
| DIBENZO(A,H)ANTHRACENE | 7/29 | 26 | | 4500 | | H-SB-604D-1 | 1.4 | 400 | 1047 | 304 | 22 | 7 | 15 | C | 7 | 460 | 2 | 220 | 2 |
| FLUORANTHENE | 6/15 | 55 | J | 840 | | SB-200-SS | 3.7 | 400 | 358 | 209 | 310000 | 0 | 230000 | N | 0 | 6300000 | 0 | 3200000 | 0 |
| FLUORENE | 5/15 | 28 | J | 180 | J | SB-283-0102 | 3.7 | 400 | 114 | 106 | 310000 | 0 | 230000 | N | 0 | 140000 | 0 | 540000 | 0 |
| INDENO(1,2,3-CD)PYRENE | 16/29 | 16 | | 13000 | | H-SB-604D-1 | 1.6 | 400 | 1850 | 1063 | 220 | 3 | 150 | C | 5 | 4200 | 3 | 2400 | 3 |
| NAPHTHALENE | 3/15 | 42 | | 239 | | SB-200-SS | 3.7 | 400 | 160 | 116 | 160000 | 0 | 3600 | C | 0 | 150 | 2 | 9.4 | 3 |
| PHENANTHRENE | 6/15 | 42 | J | 1020 | | SB-200-SS | 3.7 | 400 | 513 | 271 | 2300000 | 0 | 170000 | N[6] | 0 | 470000 | 0 | 2400000 [6] | 0 |
| PYRENE | 9/15 | 8.5 | | 970 | | SB-283-0102 | 3.9 | 400 | 305 | 245 | 230000 | 0 | 170000 | N | 0 | 680000 | 0 | 2400000 | 0 |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | | | | | |
| ANTIMONY | 4/10 | 0.6 | | 1 | | SB-201-SS, SB-203-SS | 0.34 | 0.71 | 0.88 | 0.48 | 3.1 | 0 | 3.1 | N | 0 | 13 | 0 | 13.2 | 0 |
| ARSENIC | 6/11 | 0.7 | | 6.1 | | SB-282-0102 | 0.7 | 4.8 | 2.9 | 2.1 | 0.43 | 6 | 0.39 | C | 6 | 0.026 | 6 | 0.026 | 6 |
| BARIUM | 11/11 | 16.3 | | 74 | | SB-201-SS | -- | -- | 31.3 | 31.3 | 1600 | 0 | 1500 | N | 0 | 6000 | 0 | 6000 | 0 |
| BERYLLIUM | 10/11 | 0.23 | | 1.4 | | SB-201-SS | 0.37 | 0.37 | 0.70 | 0.65 | 16 | 0 | 16 | N | 0 | 1200 | 0 | 1160 | 0 |
| CADMIUM | 4/11 | 0.06 | | 0.5 | | SB-201-SS | 0.03 | 0.42 | 0.21 | 0.12 | 3.9 | 0 | 7 | N | 0 | 27 | 0 | 28 | 0 |
| CHROMIUM | 11/11 | 7.8 | | 30.7 | | SB-286-0102 | -- | -- | 15.8 | 15.8 | 12000 [7] | 0 | 12000 | N[7] | 0 | 2E+09 [7] | 0 | 1980000000 [7] | 0 |
| COBALT | 11/11 | 2.8 | | 19.7 | | SB-201-SS | -- | -- | 6.5 | 6.5 | NC | NC | 2.3 | N | 11 | NC | NC | 9.8 | 1 |
| COPPER | 11/11 | 4.5 | | 13.6 | | SB-285-0102 | -- | -- | 6.9 | 6.9 | 310 | 0 | 310 | N | 0 | 11000 | 0 | 1020 | 0 |
| LEAD | 11/11 | 3.4 | | 18 | | SB-201-SS | -- | -- | 6.8 | 6.8 | 400 | 0 | 400 | | 0 | NC | NC | 280 [8] | 0 |

**Table 4-17**

**Occurrence and Distribution of Chemicals - Surface Soil (0-2 feet) - Tax Block Soils**
**Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MERCURY | 25/48 | 0.01 | 1.14 L | SB-201-SS | 0.01 | 0.021 | 0.13 | 0.07 | 2.3 [9] | 0 | 2.3 N[10] | 0 | NC | NC | NC | NC |
| MOLYBDENUM | 6/11 | 0.2 | 0.55 K | SB-294-0001 | 0.4 | 0.9 | 0.39 | 0.35 | NC | NC | 39 N | 0 | NC | NC | 74 | 0 |
| NICKEL | 11/11 | 5.1 | 15 | SB-285-0102 | -- | -- | 9.1 | 9.1 | 160 | 0 | 150 N | 0 | NC | NC | 960 | 0 |
| SELENIUM | 1/11 | 2 | 2 | SB-202-SS | 0.29 | 2 | 2.0 | 0.57 | 39 | 0 | 39 N | 0 | 19 | 0 | 19 | 0 |
| SILVER | 1/11 | 0.41 L | 0.41 L | SB-293-0102 | 0.04 | 0.42 | 0.41 | 0.09 | 39 | 0 | 39 N | 0 | 31 | 0 | 32 | 0 |
| VANADIUM | 11/11 | 13.1 | 37.9 | SB-285-0102 | -- | -- | 21.7 | 21.7 | 7.8 | 11 | 39 N[11] | 0 | 730 | 0 | 3600 | 0 |
| ZINC | 11/11 | 15.9 | 45 | SB-201-SS | -- | -- | 25.4 | 25.4 | 2300 | 0 | 2300 N | 0 | 14000 | 0 | 13600 | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 4/4 | 37300 | 2E+05 | SB-201-SS | -- | -- | 167575 | 167575 | 230000 | 1 | NC | NC | NC | NC | NC | NC |
| GASOLINE RANGE ORGANICS | 2/11 | 3200 | 12000 | SB-282-0102 | 2600 | 13300 | 7600 | 3710 | 230000 | 0 | NC | NC | NC | NC | NC | NC |
| TPH (C09-C36) | 6/7 | 3300 J | 34000 | SB-284-0102 | 6100 | 6100 | 19217 | 16907 | NC | NC | NC | NC | NC | NC | NC | NC |
| **Miscellaneous Parameters (ug/kg)** | | | | | | | | | | | | | | | | |
| MERCURY (METHYL) | 1/1 | 0.219 J | 0.219 J | SB-201-SS | -- | -- | 0.22 | 0.22 | 780 | 0 | 780 N | 0 | NC | NC | NC | NC |
| **Miscellaneous Parameters (%)** | | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | 27/27 | 78.1 | 90.3 | SB-478-0102 | -- | -- | 87.3 | 87.3 | NC | NC | NC | NC | NC | NC | NC | NC |
| TOTAL SOLIDS | 7/7 | 82 | 92 | SB-293-0102 | -- | -- | 87.7 | 87.7 | NC | NC | NC | NC | NC | NC | NC | NC |
| **Miscellaneous Parameters (s.u.)** | | | | | | | | | | | | | | | | |
| PH | 1/1 | 6 | 6 | SB-200-SS | -- | -- | 6.0 | 6.0 | NC | NC | NC | NC | NC | NC | NC | NC |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
The SSL at a DAF of 20 is 20x the SSL at a DAF of 1.
6 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
7 - The value is for trivalent chromium.
8 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
9 - The value is for mercury (inorganic/mercuric dichloride).
10 - The value is for mercuric chloride.
11 - The value is for vanadium and compounds.
12 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NC = No criteria

**Table 4-18**

**Occurrence and Distribution of Chemicals - Subsurface Soil (2-10 feet) - Tax Block Soils**
**Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/kg)** | | | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | 1/14 | 0.8 J | 0.8 J | SB-285-0405 | 6 | 7 | 0.80 | 2.9 | NC | NC | NC | NC | NC | NC | NC | NC |
| 1,2,4-TRIMETHYLBENZENE | 1/22 | 3.3 | 3.3 | SB-200-10 | 0.55 | 7 | 3.3 | 2.3 | NC | NC | 6200 N | 0 | NC | NC | 420 | 0 |
| 1,3,5-TRIMETHYLBENZENE | 1/8 | 0.94 J | 0.94 J | SB-200-10 | 1.98 | 2.35 | 0.94 | 1.0 | NC | NC | 78000 N | 0 | NC | NC | 10400 | 0 |
| 2-BUTANONE | 4/8 | 2.14 J | 7.39 J | SB-201-05 | 7.92 | 9.41 | 4.8 | 4.5 | 4700000 | 0 | 2800000 N | 0 | 29000 | 0 | 30000 | 0 |
| ACETONE | 17/19 | 4.4 J | 111 J | SB-201-05 | 6 | 15 | 31.7 | 28.9 | 7000000 | 0 | 6100000 N | 0 | 22000 | 0 | 90000 | 0 |
| CARBON DISULFIDE | 2/22 | 0.68 J | 1.9 J | SB-201-05 | 2 | 7 | 1.3 | 2.4 | 780000 | 0 | 82000 N | 0 | 19000 | 0 | 6200 | 0 |
| ETHYLBENZENE | 1/22 | 1.2 J | 1.2 J | SB-200-10 | 2 | 7 | 1.2 | 2.3 | 780000 | 0 | 5400 C | 0 | 15000 | 0 | 34 | 0 |
| M+P-XYLENES | 1/22 | 4.9 | 4.9 | SB-200-10 | 4 | 14 | 4.9 | 4.8 | 1600000 [6] | 0 | 63000 N[7] | 0 | 3000 [6] | 0 | 4000 | 0 |
| METHYLENE CHLORIDE | 2/22 | 2.4 J | 3.8 J | SB-201-10 | 3 | 11 | 3.1 | 3.0 | 85000 | 0 | 11000 C | 0 | 19 | 0 | 24 | 0 |
| NAPHTHALENE | 9/22 | 0.56 J | 130 | SB-285-0405 | 2 | 6 | 31.7 | 14.3 | 160000 | 0 | 3600 C | 0 | 150 | 0 | 9.4 | 5 |
| O-XYLENE | 1/22 | 1.2 J | 1.2 J | SB-200-10 | 2 | 7 | 1.2 | 2.3 | 1600000 [6] | 0 | 380000 N | 0 | 3000 [6] | 0 | 24000 | 0 |
| TERTIARY-BUTYL ALCOHOL | 4/8 | 5 J | 6 J | SB-203-10, SB-201-10 | 8 | 9 | 5.5 | 4.9 | NC | NC | NC | NC | NC | NC | NC | NC |
| TOLUENE | 7/22 | 1.5 J | 7.6 | SB-201-10 | 2.2 | 7 | 5.1 | 3.6 | 630000 | 0 | 500000 N | 0 | 27000 | 0 | 32000 | 0 |
| TRICHLOROETHENE | 6/22 | 1.1 J | 2.7 | SB-201-10, SB-202-05 | 2 | 7 | 2.3 | 2.7 | 1600 | 0 | 2800 C | 0 | 0.26 | 6 | 14.4 | 0 |
| TRICHLOROFLUOROMETHANE | 3/22 | 0.74 J | 2 J | SB-293-0405 | 2 | 14 | 1.2 | 4.0 | NC | NC | 79000 N | 0 | NC | NC | 16600 | 0 |
| **Semivolatile Organics (ug/kg)** | | | | | | | | | | | | | | | | |
| BENZOIC ACID | 4/22 | 43 J | 51 J | SB-201-10 | 773 | 1200 | 46.5 | 399 | NC | NC | 24000000 N | 0 | NC | NC | 680000 | 0 |
| DI-N-BUTYL PHTHALATE | 1/22 | 38 J | 38 J | SB-201-05 | 195 | 470 | 38.0 | 162 | 780000 | 0 | 610000 N | 0 | 5000000 | 0 | 184000 | 0 |
| DIBENZOFURAN | 2/22 | 91 J | 110 J | SB-285-0405 | 115 | 470 | 101 | 147 | 7800 | 0 | 7800 N | 0 | NC | NC | 13600 | 0 |
| N-NITROSODIPHENYLAMINE | 1/22 | 34 J | 34 J | SB-200-10 | 115 | 470 | 34.0 | 148 | 130000 | 0 | 99000 C | 0 | 760 | 0 | 1500 | 0 |
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 7/38 | 40 | 700 | SB-285-0405 | 3.5 | 440 | 305 | 116 | NC | NC | 22000 C | 0 | NC | NC | 240 | 4 |
| 2-METHYLNAPHTHALENE | 7/38 | 37 | 1100 | SB-285-0405 | 3.5 | 440 | 335 | 121 | 31000 | 0 | 31000 N | 0 | 4400 | 0 | 15000 | 0 |
| ACENAPHTHENE | 8/38 | 30 J | 430 | SB-285-0405 | 3.5 | 440 | 185 | 98.3 | 470000 | 0 | 340000 N | 0 | 100000 | 0 | 440000 | 0 |
| ACENAPHTHYLENE | 1/38 | 100 | 100 | H-SB-814-09 | 3.5 | 470 | 100 | 86.2 | 470000 | 0 | 340000 N[8] | 0 | 100000 | 0 | 440000 [8] | 0 |
| ANTHRACENE | 9/38 | 34 J | 595 | SB-200-10 | 3.5 | 440 | 249 | 113 | 2300000 | 0 | 1700000 N | 0 | 470000 | 0 | 7200000 | 0 |
| BAP EQUIVALENT-1/2 NONDETECTS[15] | 57/229 | 1.8 | 5337 | H-SB-614-10 | 1.4 | 470 | 432 | 128 | 22 | 44 | 15 | 49 | NC | NC | 70 | 29 |
| BAP EQUIVALENT-POSITIVE RESULTS[15] | 57/229 | 0.9 | 5330 | H-SB-614-10 | 1.4 | 470 | 414 | 123 | 22 | 42 | 15 C | 48 | 120 | 24 | 70 | 28 |
| BENZO(A)ANTHRACENE | 49/121 | 4.8 | 3900 | H-SB-614-10 | 1.1 | 470 | 390 | 176 | 220 | 16 | 150 C | 18 | 480 | 10 | 200 | 17 |
| BENZO(A)PYRENE | 52/228 | 8.2 | 4300 | H-SB-614-10 | 1.4 | 470 | 331 | 95.3 | 22 | 40 | 15 C | 46 | 120 | 20 | 70 | 24 |
| BENZO(B)FLUORANTHENE | 45/121 | 7.9 | 4100 | H-SB-614-10 | 1.3 | 470 | 403 | 169 | 220 | 16 | 150 C | 18 | 1500 | 3 | 700 | 7 |
| BENZO(G,H,I)PERYLENE | 8/38 | 40 | 650 | SB-285-0405 | 3.5 | 470 | 258 | 120 | 230000 | 0 | 170000 N[9] | 0 | 680000 | 0 | 2400000 [9] | 0 |
| BENZO(K)FLUORANTHENE | 36/121 | 7.8 | 1600 | H-SB-614-10 | 1.9 | 470 | 196 | 79.1 | 2200 | 0 | 1500 C | 1 | 15000 | 0 | 7000 | 0 |
| CHRYSENE | 47/121 | 10 | 3900 | H-SB-282RE-9 | 1 | 470 | 441 | 190 | 22000 | 0 | 15000 C | 0 | 48000 | 0 | 22000 | 0 |
| DIBENZO(A,H)ANTHRACENE | 17/121 | 18 | 430 | H-SB-282RE-9 | 1.5 | 470 | 97.7 | 40.1 | 22 | 15 | 15 C | 17 | 460 | 0 | 220 | 1 |
| FLUORANTHENE | 17/38 | 10 | 1770 | SB-200-10 | 3.5 | 440 | 389 | 221 | 310000 | 0 | 230000 N | 0 | 6300000 | 0 | 3200000 | 0 |
| FLUORENE | 8/38 | 32 J | 507 | SB-200-10 | 3.5 | 440 | 234 | 109 | 310000 | 0 | 230000 N | 0 | 140000 | 0 | 540000 | 0 |
| INDENO(1,2,3-CD)PYRENE | 37/121 | 7.9 | 2100 | H-SB-614-10 | 1.7 | 470 | 244 | 95.4 | 220 | 11 | 150 C | 14 | 4200 | 0 | 2400 | 0 |
| NAPHTHALENE | 6/38 | 28 | 1200 | SB-285-0405 | 3.5 | 440 | 385 | 121 | 160000 | 0 | 3600 C | 0 | 150 | 4 | 9.4 | 6 |
| PHENANTHRENE | 13/38 | 16 J | 2610 | SB-200-10 | 3.5 | 440 | 738 | 300 | 2300000 | 0 | 170000 N[9] | 0 | 470000 | 0 | 2400000 [9] | 0 |
| PYRENE | 17/38 | 11 | 2900 | SB-285-0405 | 3.5 | 440 | 640 | 333 | 230000 | 0 | 170000 N | 0 | 680000 | 0 | 2400000 | 0 |
| TOTAL PAHS | 60/229 | 4.5 | 19600 | H-SB-614-10 | 0 | 0 | 2207 | 578 | NC | NC | NC | NC | NC | NC | NC | NC |
| **Inorganics (mg/kg)** | | | | | | | | | | | | | | | | |
| ANTIMONY | 2/20 | 0.8 | 0.9 | SB-201-05 | 0.2 | 1.34 | 0.85 | 0.34 | 3.1 | 0 | 3.1 N | 0 | 13 | 0 | 13.2 | 0 |
| ARSENIC | 15/22 | 1 | 7.4 | SB-283-0910 | 0.54 | 5.3 | 3.5 | 2.8 | 0.43 | 15 | 0.39 C | 15 | 0.026 | 15 | 0.026 | 15 |
| BARIUM | 22/22 | 2.8 | 79 | SB-200-10 | -- | -- | 22.6 | 22.6 | 1600 | 0 | 1500 N | 0 | 6000 | 0 | 6000 | 0 |
| BERYLLIUM | 19/22 | 0.33 L | 4.5 | SB-202-10 | 0.14 | 0.37 | 1.7 | 1.5 | 16 | 0 | 16 N | 0 | 1200 | 0 | 1160 | 0 |

**Table 4-18**

**Occurrence and Distribution of Chemicals - Subsurface Soil (2-10 feet) - Tax Block Soils**
**Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | Maximum Concentration[1] | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] | MDE Cleanup Standards - Groundwater Protection[4] | # Detects Greater than MDE Cleanup Standards - Groundwater Protection[1] | USEPA Soil Screening Level (SSL) for Groundwater Protection - Dilution Attenuation Factor (DAF) of 20[5] | # Detects Greater than USEPA SSL for Groundwater Protection - DAF of 20[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CADMIUM | 7/22 | 0.08 | 0.2 | SB-202-05, SB-202-10 | 0.03 | 0.46 | 0.12 | 0.09 | 3.9 | 0 | 7 N | 0 | 27 | 0 | 28 | 0 |
| CHROMIUM | 22/22 | 7.5 | 90.4 | SB-286-0405 | -- | -- | 28.8 | 28.8 | 12000 (10) | 0 | 12000 N(10) | 0 | 2000000000 (10) | 0 | 1980000000 (10) | 0 |
| COBALT | 22/22 | 1.8 | 30.8 | SB-203-05 | -- | -- | 9.4 | 9.4 | NC | NC | 2.3 N | 20 | NC | NC | 9.8 | 7 |
| COPPER | 21/22 | 4.1 | 23 K | SB-282-0405, SB-203-05 | 2.3 | 2.3 | 11.7 | 11.3 | 310 | 0 | 310 N | 0 | 11000 | 0 | 1020 | 0 |
| LEAD | 21/22 | 1.6 | 17 | SB-200-10, SB-202-05 | 4 | 4 | 7.5 | 7.2 | 400 | 0 | 400 | 0 | NC | NC | 280 (11) | 0 |
| MERCURY | 15/128 | 0.01 L | 0.24 L | SB-201-05 | 0.01 | 0.022 | 0.08 | 0.02 | 2.3 (12) | 0 | 2.3 N(13) | 0 | NC | NC | NC | NC |
| MOLYBDENUM | 8/22 | 0.17 | 1.2 | SB-294-0910 | 0.15 | 0.6 | 0.48 | 0.31 | NC | NC | 39 N | 0 | NC | NC | 74 | 0 |
| NICKEL | 22/22 | 2.7 | 44 | SB-203-05 | -- | -- | 18.9 | 18.9 | 160 | 0 | 150 N | 0 | NC | NC | 960 | 0 |
| SELENIUM | 2/22 | 3 | 3 | SB-200-10, SB-201-10 | 0.27 | 2 | 3.0 | 0.73 | 39 | 0 | 39 N | 0 | 19 | 0 | 19 | 0 |
| SILVER | 1/22 | 0.44 L | 0.44 L | SB-293-0910 | 0.05 | 0.47 | 0.44 | 0.10 | 39 | 0 | 39 N | 0 | 31 | 0 | 32 | 0 |
| VANADIUM | 22/22 | 5.7 | 52.9 | SB-200-10 | -- | -- | 33.5 | 33.5 | 7.8 | 21 | 39 N(14) | 9 | 730 | 0 | 3600 | 0 |
| ZINC | 22/22 | 4 | 83.1 | SB-283-0910 | -- | -- | 37.6 | 37.6 | 2300 | 0 | 2300 N | 0 | 14000 | 0 | 13600 | 0 |
| **Petroleum Hydrocarbons (ug/kg)** | | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 6/8 | 11100 | 173000 | SB-200-10 | 2400 | 3800 | 51233 | 38813 | 230000 | 0 | NC | NC | NC | NC | NC | NC |
| GASOLINE RANGE ORGANICS | 4/23 | 36 J | 9000 | SB-293-0405 | 2700 | 15200 | 4684 | 3493 | 230000 | 0 | NC | NC | NC | NC | NC | NC |
| TPH (C09-C36) | 8/14 | 2900 J | 200000 | SB-285-0405 | 2200 | 8700 | 65538 | 38607 | NC | NC | NC | NC | NC | NC | NC | NC |
| **Miscellaneous Parameters (mg/kg)** | | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1/5 | 0.78 | 0.78 | SB-203-05 | 0.3 | 0.4 | 0.78 | 0.31 | 23 | 0 | 0.29 C | 1 | 42 | 0 | 0.0166 | 1 |
| TOTAL ORGANIC CARBON | 1/1 | 1350 | 1350 | MRC-MW08[0809] | -- | -- | 1350 | 1350 | NC | NC | NC | NC | NC | NC | NC | NC |
| **Miscellaneous Parameters (%)** | | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | 108/108 | 73.9 | 90.9 | SB-474-0506 | -- | -- | 84.2 | 84.2 | NC | NC | NC | NC | NC | NC | NC | NC |
| TOTAL SOLIDS | 14/14 | 70 | 87 | SB-282-0910 | -- | -- | 82.1 | 82.1 | NC | NC | NC | NC | NC | NC | NC | NC |
| **Miscellaneous Parameters (s.u.)** | | | | | | | | | | | | | | | | |
| PH | 2/2 | 4.9 | 5 | SB-200-10 | -- | -- | 5.0 | 5.0 | NC | NC | NC | NC | NC | NC | NC | NC |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
The SSL at a DAF of 20 is 20x the SSL at a DAF of 1.
6 - The value is for xylenes.
7 - The value is for xylene, mixture.
8 - The value for acenaphthene is used as a surrogate for acenaphthylene.
9 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
10 - The value is for trivalent chromium.
11 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
12 - The value is for mercury (inorganic/mercuric dichloride).
13 - The value is for mercuric chloride.
14 - The value is for vanadium and compounds.
15 - See Section 3 for BaP equivalent calculation methodology.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NC = No criteria

**Table 4-19**

**Occurrence and Distribution of Chemicals - Deep Subsurface Soil (10+ feet) - Tax Block Soils**
**Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Residential Soil[4] | # Detects Greater than MDE Cleanup Standards - Residential Soil[1] | Adjusted USEPA Regional Screening Level (RSL) - Residential Soil[5] | | # Detects Greater than Adjusted USEPA (RSL) - Residential Soil[1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **PAHs (ug/kg)** | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 1/10 | 11 | | 11 | | H-SB-816-11 | 3.9 | 4.2 | 11.0 | 2.9 | NC | NC | 22000 | C | 0 |
| 2-METHYLNAPHTHALENE | 1/10 | 13 | | 13 | | H-SB-816-11 | 3.9 | 4.2 | 13.0 | 3.1 | 31000 | 0 | 31000 | N | 0 |
| ACENAPHTHENE | 2/10 | 10 | | 38 | J | H-SB-816-11 | 3.9 | 4.1 | 24.0 | 6.4 | 470000 | 0 | 340000 | N | 0 |
| ACENAPHTHYLENE | 2/10 | 8 | | 9 | | H-SB-815-13 | 3.9 | 4.1 | 8.5 | 3.3 | 470000 | 0 | 340000 | N[6] | 0 |
| ANTHRACENE | 3/10 | 12 | | 58 | J | H-SB-816-11 | 3.9 | 4.1 | 38.3 | 12.9 | 2300000 | 0 | 1700000 | N | 0 |
| BAP EQUIVALENT-1/2 NONDETECTS[8] | 36/61 | 2.6 | | 2123 | | H-SB-282REC-11 | 1.5 | 33 | 240 | 143 | 22 | 25 | 15 | | 29 |
| BAP EQUIVALENT-POSITIVE RESULTS[8] | 36/61 | 0.96 | | 2121 | | H-SB-282REC-11 | 1.5 | 33 | 239 | 142 | 22 | 25 | 15 | C | 26 |
| BENZO(A)ANTHRACENE | 34/61 | 5.775 | | 1800 | | H-SB-282REC-11 | 1.1 | 24 | 212 | 119 | 220 | 7 | 150 | C | 8 |
| BENZO(A)PYRENE | 31/61 | 5.15 | | 1700 | | H-SB-282REC-11 | 1.5 | 33 | 206 | 106 | 22 | 23 | 15 | C | 24 |
| BENZO(B)FLUORANTHENE | 33/61 | 4.8 | | 1500 | | H-SB-282REC-11 | 1.4 | 31 | 215 | 117 | 220 | 7 | 150 | C | 11 |
| BENZO(G,H,I)PERYLENE | 5/10 | 9 | | 160 | | H-SB-815-13 | 3.9 | 4 | 69.6 | 35.8 | 230000 | 0 | 170000 | N[7] | 0 |
| BENZO(K)FLUORANTHENE | 26/61 | 9.8 | | 620 | | H-SB-282REC-11 | 1.9 | 44 | 120 | 52.5 | 2200 | 0 | 1500 | C | 0 |
| C1-CHRYSENES | 1/2 | 240 | J | 240 | J | H-SB-816-11 | 78 | 78 | 240 | 140 | NC | NC | NC | | NC |
| C1-FLUORANTHENES/PYRENES | 1/2 | 290 | J | 290 | J | H-SB-816-11 | 78 | 78 | 290 | 165 | NC | NC | NC | | NC |
| C1-PHENANTHRENES/ANTHRACENES | 1/2 | 220 | J | 220 | J | H-SB-816-11 | 78 | 78 | 220 | 130 | NC | NC | NC | | NC |
| C2-CHRYSENES | 1/2 | 140 | J | 140 | J | H-SB-816-11 | 78 | 78 | 140 | 89.5 | NC | NC | NC | | NC |
| C2-PHENANTHRENES/ANTHRACENES | 1/2 | 180 | J | 180 | J | H-SB-816-11 | 78 | 78 | 180 | 110 | NC | NC | NC | | NC |
| C3-PHENANTHRENES/ANTHRACENES | 1/2 | 100 | J | 100 | J | H-SB-816-11 | 78 | 78 | 100 | 69.5 | NC | NC | NC | | NC |
| CHRYSENE | 33/61 | 6.275 | | 2000 | | H-SB-282REC-11 | 1 | 23 | 237 | 129 | 22000 | 0 | 15000 | C | 0 |
| DIBENZO(A,H)ANTHRACENE | 7/61 | 14 | | 210 | | H-SB-282RE-13 | 1.4 | 33 | 59.9 | 8.3 | 22 | 5 | 15 | C | 6 |
| FLUORANTHENE | 6/10 | 9.7 | | 210 | | H-SB-815-13 | 3.9 | 4 | 81.8 | 49.9 | 310000 | 0 | 230000 | N | 0 |
| FLUORENE | 3/10 | 8.7 | | 42 | J | H-SB-816-11 | 3.9 | 4.1 | 22.2 | 8.1 | 310000 | 0 | 230000 | N | 0 |
| INDENO(1,2,3-CD)PYRENE | 28/61 | 13 | | 830 | | H-SB-282REC-11 | 1.7 | 39 | 122 | 57.0 | 220 | 4 | 150 | C | 5 |
| NAPHTHALENE | 1/10 | 10 | | 10 | | H-SB-815-13 | 3.9 | 4.1 | 10.0 | 2.8 | 160000 | 0 | 3600 | C | 0 |
| PHENANTHRENE | 4/10 | 11 | | 170 | J | H-SB-816-11 | 3.9 | 4 | 80.0 | 33.2 | 2300000 | 0 | 170000 | N[7] | 0 |
| PYRENE | 5/10 | 12 | | 340 | J | H-SB-816-11 | 3.9 | 4 | 154 | 78.1 | 230000 | 0 | 170000 | N | 0 |

**Notes:**

1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.

2 - Average of positive analytical results only.

3 - Average of all analytical results are calculated using half of the detection limit for nondetects.

4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.

5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010. RSL cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0. The SSL at a DAF of 20 is 20x the SSL at a DAF of 1.

6 - The value for acenaphthene is used as a surrogate for acenaphthylene.

7 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.

**Definitions:**

BaP = Benzo(a)pyrene
C = Carcinogen
J = Estimated value
N = Noncarcinogen
NC = No criteria

**TABLE 4-20**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK H**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Construction Worker | Surface Soil | Incidental Ingestion | 6E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.1 | -- |
| | | Dermal Contact | 2E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.009 | -- |
| | | Inhalation | 5E-07 | -- | -- | -- | 0.3 | -- |
| | | Total | 8E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.4 | -- |
| | Subsurface Soil | Incidental Ingestion | 5E-07 | -- | -- | -- | 0.1 | -- |
| | | Dermal Contact | 1E-07 | -- | -- | -- | 0.007 | -- |
| | | Inhalation | 6E-07 | -- | -- | -- | 0.4 | -- |
| | | Total | 1E-06 | -- | -- | -- | 0.5 | -- |
| Industrial Worker | Surface Soil | Incidental Ingestion | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.03 | -- |
| | | Dermal Contact | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.008 | -- |
| | | Inhalation | 5E-09 | -- | -- | -- | 0.0001 | -- |
| | | Total | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.03 | -- |
| | Subsurface Soil | Incidental Ingestion | 1E-06 | -- | -- | -- | 0.03 | -- |
| | | Dermal Contact | 2E-06 | -- | -- | -- | 0.007 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.0003 | -- |
| | | Total | 3E-06 | -- | -- | -- | 0.04 | -- |
| Child Commercial Receptor | Surface Soil | Incidental Ingestion | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC | 0.3 | -- |
| | | Dermal Contact | 6E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.01 | -- |
| | | Inhalation | 1E-09 | -- | -- | -- | 0.00004 | -- |
| | | Total | 3E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 0.3 | -- |
| | Subsurface Soil | Incidental Ingestion | 8E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.3 | -- |
| | | Dermal Contact | 3E-06 | -- | -- | HEXAVALENT CHROMIUM | 0.01 | -- |
| | | Inhalation | 2E-09 | -- | -- | -- | 0.00009 | -- |
| | | Total | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.3 | -- |

**TABLE 4-20**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK H**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks $> 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-5}$ and $\leq 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-6}$ and $\leq 10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Adolescent Commercial Receptor | Surface Soil | Incidental Ingestion | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.05 | -- |
| | | Dermal Contact | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.010 | -- |
| | | Inhalation | 1E-09 | -- | -- | -- | 0.00004 | -- |
| | | Total | 8E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.06 | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-06 | -- | -- | -- | 0.06 | -- |
| | | Dermal Contact | 2E-06 | -- | -- | -- | 0.009 | -- |
| | | Inhalation | 3E-09 | -- | -- | -- | 0.00009 | -- |
| | | Total | 4E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | 0.07 | -- |
| Lifelong Commercial Receptor (Child + Adolescent) | Surface Soil | Incidental Ingestion | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC | NA | -- |
| | | Dermal Contact | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 2E-09 | -- | -- | -- | NA | -- |
| | | Total | 3E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 6E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 4E-09 | -- | -- | -- | NA | -- |
| | | Total | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| Adult Commercial Receptor | Surface Soil | Incidental Ingestion | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.03 | -- |
| | | Dermal Contact | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.008 | -- |
| | | Inhalation | 5E-09 | -- | -- | -- | 0.0001 | -- |
| | | Total | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.03 | -- |
| | Subsurface Soil | Incidental Ingestion | 1E-06 | -- | -- | -- | 0.03 | -- |
| | | Dermal Contact | 2E-06 | -- | -- | -- | 0.007 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.0003 | -- |
| | | Total | 3E-06 | -- | -- | -- | 0.04 | -- |

**TABLE 4-20**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK H**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks $> 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-5}$ and $\leq 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-6}$ and $\leq 10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Child Recreational User | Surface Soil | Incidental Ingestion | 4E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 0.5 | -- |
| | | Dermal Contact | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | HEXAVALENT CHROMIUM | 0.03 | -- |
| | | Inhalation | 2E-08 | -- | -- | -- | 0.0006 | -- |
| | | Total | 5E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 0.5 | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.6 | -- |
| | | Dermal Contact | 7E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | 0.03 | -- |
| | | Inhalation | 3E-08 | -- | -- | -- | 0.001 | -- |
| | | Total | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.6 | -- |
| Adolescent Recreational User | Surface Soil | Incidental Ingestion | 7E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.09 | -- |
| | | Dermal Contact | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.006 | -- |
| | | Inhalation | 5E-09 | -- | -- | -- | 0.0001 | -- |
| | | Total | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.10 | -- |
| | Subsurface Soil | Incidental Ingestion | 4E-06 | -- | -- | ARSENIC | 0.1 | -- |
| | | Dermal Contact | 2E-06 | -- | -- | -- | 0.006 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.0003 | -- |
| | | Total | 5E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.1 | -- |
| Adult Recreational User | Surface Soil | Incidental Ingestion | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.05 | -- |
| | | Dermal Contact | 8E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.005 | -- |
| | | Inhalation | 3E-09 | -- | -- | -- | 0.0001 | -- |
| | | Total | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.06 | -- |
| | Subsurface Soil | Incidental Ingestion | 1E-06 | -- | -- | -- | 0.06 | -- |
| | | Dermal Contact | 5E-07 | -- | -- | -- | 0.004 | -- |
| | | Inhalation | 7E-09 | -- | -- | -- | 0.0003 | -- |
| | | Total | 2E-06 | -- | -- | -- | 0.07 | -- |

**TABLE 4-20**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK H**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks > $10^{-4}$ | Chemicals with Cancer Risks > $10^{-5}$ and ≤ $10^{-4}$ | Chemicals with Cancer Risks > $10^{-6}$ and ≤ $10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Lifelong Recreational User (Child + Adolescent + Adult) | Surface Soil | Incidental Ingestion | 5E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 2E-08 | -- | -- | -- | NA | -- |
| | | Total | 6E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 9E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 5E-08 | -- | -- | -- | NA | -- |
| | | Total | 3E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| Child Resident | Surface Soil | Incidental Ingestion | 5E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 0.7 | -- |
| | | Dermal Contact | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | HEXAVALENT CHROMIUM | 0.04 | -- |
| | | Inhalation | 2E-08 | -- | -- | -- | 0.0006 | -- |
| | | Total | 7E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | 0.7 | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.8 | -- |
| | | Dermal Contact | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | 0.04 | -- |
| | | Inhalation | 3E-08 | -- | -- | -- | 0.001 | -- |
| | | Total | 3E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.9 | -- |
| Adolescent Resident | Surface Soil | Incidental Ingestion | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.1 | -- |
| | | Dermal Contact | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.009 | -- |
| | | Inhalation | 2E-08 | -- | -- | -- | 0.0006 | -- |
| | | Total | 1E-04 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC | 0.1 | -- |
| | Subsurface Soil | Incidental Ingestion | 5E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC | 0.2 | -- |
| | | Dermal Contact | 2E-06 | -- | -- | -- | 0.008 | -- |
| | | Inhalation | 4E-08 | -- | -- | -- | 0.001 | -- |
| | | Total | 7E-06 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | 0.2 | -- |

**TABLE 4-20**

**SUMMARY OF CANCER RISKS AND HAZARD INDICES - TAX BLOCK SOILS**
**TAX BLOCK H**
**REASONABLE MAXIMUM EXPOSURES**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND**



| Receptor | Media | Exposure Route | Cancer Risk | Chemicals with Cancer Risks $> 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-5}$ and $\leq 10^{-4}$ | Chemicals with Cancer Risks $> 10^{-6}$ and $\leq 10^{-5}$ | Hazard Index | Chemicals Contributing to an Target Organ HI > 1 |
|---|---|---|---|---|---|---|---|---|
| Adult Resident | Surface Soil | Incidental Ingestion | 2E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.07 | -- |
| | | Dermal Contact | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS | 0.007 | -- |
| | | Inhalation | 1E-08 | -- | -- | -- | 0.0006 | -- |
| | | Total | 3E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | -- | 0.08 | -- |
| | Subsurface Soil | Incidental Ingestion | 2E-06 | -- | -- | -- | 0.09 | -- |
| | | Dermal Contact | 7E-07 | -- | -- | -- | 0.006 | -- |
| | | Inhalation | 3E-08 | -- | -- | -- | 0.001 | -- |
| | | Total | 3E-06 | -- | -- | -- | 0.09 | -- |
| Lifelong Resident (Child + Adolescent + Adult) | Surface Soil | Incidental Ingestion | 6E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 2E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 5E-08 | -- | -- | -- | NA | -- |
| | | Total | 9E-04 | BENZO(A)PYRENE EQUIVALENTS | -- | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | Subsurface Soil | Incidental Ingestion | 3E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, ARSENIC, HEXAVALENT CHROMIUM | NA | -- |
| | | Dermal Contact | 1E-05 | -- | -- | BENZO(A)PYRENE EQUIVALENTS, HEXAVALENT CHROMIUM | NA | -- |
| | | Inhalation | 1E-07 | -- | -- | -- | NA | -- |
| | | Total | 4E-05 | -- | BENZO(A)PYRENE EQUIVALENTS | ARSENIC, HEXAVALENT CHROMIUM | NA | -- |

Note: See Section 3 for benzo(a)pyrene equivalents calculation methodology.

**Table 4-21**

**Chemicals Retained as Block-Specific COPC for Migration to Groundwater - Surface Soil - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| Parameter | Block-Specific COPC? | | | | |
|---|---|---|---|---|---|
| | Block D | Block E | Block F | Block G | Block H |
| **Volatile Organic Compounds** | | | | | |
| 1,2,3-Trichlorobenzene | | X | | | |
| 1,2,4-Trichlorobenzene | | X | | | |
| 1,2,4-Trimethylbenzene | X | | | X | |
| 1,1-Dichloroethane | | | | X | |
| 1,2-Dichlorobenzene | | X | | | |
| 1,3-Dichlorobenzene | | X | | | |
| 1,4-Dichlorobenzene | | X | | | |
| Benzene | X | | | | |
| Ethylbenzene | X | | | | X |
| Methylene Chloride | X | X | X | X | X |
| Naphthalene | X | X | | X | X |
| Tetrachloroethene | | X | | | |
| Trichloroethene | | | | X | X |
| **Semivolatile Organic Compounds** | | | | | |
| Carbazole | X | X | X | X | |
| Dibenzofuran | X | X | X | | X |
| **Polycyclic Aromatic Hydrocarbons** | | | | | |
| 1-Methylnaphthalene | X | | X | X | X |
| 2-Methylnaphthalene | X | X | X | X | X |
| Benzo(a)pyrene Equivalents[(1)] | X | X | X | X | X |
| Benzo(a)anthracene | X | X | X | X | X |
| Benzo(a)pyrene | X | X | X | X | X |
| Benzo(b)fluoranthene | X | X | X | X | X |
| Benzo(b+k)fluoranthene | NA | NA | NA | X | NA |
| Benzo(k)fluoranthene | X | X | X | X | X |
| Chrysene | X | X | X | X | X |
| Dibenzo(a,h)anthracene | X | X | X | X | X |
| Indeno(1,2,3-cd)pyrene | X | X | X | X | X |
| Naphthalene | X | X | X | X | X |
| **Pesticides/PCBs** | | | | | |
| Aroclor-1242 | | X | | | |
| Aroclor-1254 | | X | X | X | |
| Aroclor-1260 | X | X | X | X | |
| Beta-BHC | X | NA | | | NA |
| Total Aroclor | X | X | X | X | |
| **Inorganics** | | | | | |
| Antimony | X | X | X | X | X |
| Arsenic | X | X | X | X | X |
| Cadmium | X | X | X | X | X |
| Cobalt | X | X | X | X | X |
| Copper | X | X | X | X | X |
| Iron | X | X | NA | NA | NA |
| Lead | X | X | X | X | X |
| Manganese | X | X | NA | NA | NA |
| Molybdenum | X | X | X | | X |
| Nickel | X | X | X | X | X |
| Selenium | X | X | X | X | X |
| Silver | X | X | X | | X |
| **Miscellaneous Parameters** | | | | | |
| Hexavalent Chromium | X | NA | X | NA | |

Notes
X - Chemical was retained as a block-specific COPC.
NA - Not analyzed.

1 - See Section 3 for benzo(a)pyrene equivalents calculation methodology.

**Table 4-22**

**Chemicals Retained as Block-Specific COPC for Migration to Groundwater - Subsurface Soil - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| | Block-Specific COPC? | | | | |
|---|---|---|---|---|---|
| **Parameter** | **Block D** | **Block E** | **Block F** | **Block G** | **Block H** |
| **Volatile Organic Compounds** | | | | | |
| 1,2,3-Trichlorobenzene | | X | | | |
| 1,2,4-Trichlorobenzene | | X | | | |
| 1,2,4-Trimethylbenzene | X | X | X | X | X |
| 1,2-Dichlorobenzene | | X | | | |
| 1,2-Dichloroethane | | X | | | |
| 1,3-Dichlorobenzene | | X | | | |
| 1,4-Dichlorobenzene | | X | | | |
| Acetone | X | X | X | X | X |
| Benzene | X | X | | X | |
| Carbon Tetrachloride | | X | | | |
| Chlorobenzene | | X | | | |
| Ethylbenzene | X | | X | X | X |
| m+p-Xylenes | X | X | X | | X |
| Methylene Chloride | X | X | X | X | X |
| Naphthalene | X | X | X | X | X |
| Tetrachloroethene | | X | | | |
| Total Xylenes | X | X | X | X | |
| Trichloroethene | | X | | X | X |
| Vinyl Chloride | | X | | | |
| **Semivolatile Organic Compounds** | | | | | |
| Carbazole | X | X | X | X | |
| Dibenzofuran | X | X | X | X | X |
| N-nitrosodiphenylamine | | | X | | X |
| **Polycyclic Aromatic Hydrocarbons** | | | | | |
| 1-Methylnaphthalene | X | | X | X | X |
| 2-Methylnaphthalene | X | X | X | X | X |
| Acenaphthene | X | X | X | X | X |
| Benzo(a)pyrene Equivalents[(1)] | X | X | X | X | X |
| Benzo(a)anthracene | X | X | X | X | X |
| Benzo(a)pyrene | X | X | X | X | X |
| Benzo(b)fluoranthene | X | X | X | X | X |
| Benzo(k)fluoranthene | X | X | X | X | X |
| Chrysene | X | X | X | X | X |
| Dibenzo(a,h)anthracene | X | X | X | X | X |
| Indeno(1,2,3-cd)pyrene | X | X | X | X | X |
| Naphthalene | X | X | X | X | X |
| **Pesticides/PCBs** | | | | | |
| Aroclor-1254 | | X | | | |
| Aroclor-1260 | X | X | X | X | |
| Beta-BHC | X | NA | | | NA |
| Total Aroclor | X | X | X | X | |
| **Inorganics** | | | | | |
| Antimony | X | X | X | X | X |
| Arsenic | X | X | X | X | X |
| Cobalt | X | X | X | X | X |
| Copper | X | X | X | X | X |
| Iron | X | X | NA | X | NA |
| Lead | X | X | X | X | X |
| Manganese | X | X | NA | X | NA |
| Nickel | X | X | X | X | X |
| Selenium | X | X | X | X | X |
| Silver | X | X | X | X | X |
| **Miscellaneous Parameters** | | | | | |
| Hexavalent Chromium | X | NA | | | X |

Notes
X - Chemical was retained as a block-specific COPC.
NA - Not analyzed.

**Table 4-23**

**Detected Concentrations Groundwater - May-June 2010**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| BLOCK | MDE Cleanup Standards for Groundwater (Type I Aquifer)[1, 4] | USEPA Regional Screening Level forTap Water[2, 4] | USEPA MCL[3] | BLOCK D | BLOCK D | BLOCK D | BLOCK E | BLOCK E | BLOCK E | BLOCK E |
|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | | | | MRC-MW35A | MRC-MW39A | MRC-MW40A | MRC-MW30A | MRC-MW31A | MRC-MW32A | MRC-MW34A |
| SAMPLE ID | | | | MRC-MW35A-062510 | MRC-MW39A-062110 | MRC-MW40A-062410 | MRC-MW30A-052810 | MRC-MW31A-060110 | MRC-MW32A-060210 | MRC-MW34A-061510 |
| SAMPLE DATE | | | | 20100625 | 20100621 | 20100624 | 20100528 | 20100601 | 20100602 | 20100615 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | GW | GW | GW | GW | GW | GW | GW |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| **VOLATILES (UG/L)** | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 200 | 9100 | 200 | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 0.22 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NC | 59000 | NC | 0.28 U | 0.28 U | 0.28 U | 0.28 U | 0.28 U | 0.28 U | 0.28 U |
| **1,1-DICHLOROETHANE** | 90 | 2.4 | NC | 0.15 U | 0.15 U | 0.15 U | 0.25 J | 0.15 U | 0.15 U | 0.15 U |
| **1,1-DICHLOROETHENE** | 7 | 340 | 7 | 0.19 U | 0.19 U | 0.19 U | 0.48 J | 0.19 U | 0.19 U | 0.19 U |
| **1,2,3-TRICHLOROBENZENE** | NC | 29 | NC | 0.17 U | 0.17 U | 0.17 UJ | 0.17 U | 0.17 U | 0.19 B | 0.17 U |
| **1,2,4-TRICHLOROBENZENE** | 70 | 2.3 | 70 | 0.15 U | 0.15 U | 0.15 UJ | 0.47 J | 0.15 U | 0.54 B | 0.15 U |
| **1,2-DICHLOROBENZENE** | 600 | 370 | 600 | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U |
| **1,2-DICHLOROETHANE** | 5 | 0.15 | 5 | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 0.22 U |
| **1,3-DICHLOROBENZENE** | 1.8 | NC | NC | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U |
| **1,4-DICHLOROBENZENE** | 75 | 0.43 | 75 | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U |
| ACETONE | 550 | 22000 | NC | 3.7 B | 5.7 B | 2.8 B | 5.7 B | 7.9 B | 6.6 B | 3.6 B |
| **BENZENE** | 5 | 0.41 | 5 | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U |
| **CARBON TETRACHLORIDE** | 5 | 0.44 | 5 | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U |
| CHLOROBENZENE | 100 | 91 | 100 | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U |
| **CHLOROFORM** | 80 | 0.19 | 80 | 0.16 U | 0.16 U | 0.16 U | 0.19 J | **0.92 J** | 0.16 U | 0.16 U |
| CHLOROMETHANE | 19 | 190 | NC | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.3 J |
| **CIS-1,2-DICHLOROETHENE** | 70 | 73 | 70 | 0.44 J | 0.17 U | 0.17 U | 18 | 0.36 J | 0.17 U | 0.17 U |
| **METHYL TERT-BUTYL ETHER** | 20 | 12 | NC | 0.17 U | 0.17 U | 0.17 U | 0.21 J | 2 J | 0.17 U | 0.17 U |
| **METHYLENE CHLORIDE** | 5 | 4.8 | 5 | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NC | 3.9 UR | 3.9 UR | 3.9 UR | 3.9 UR | 3.9 UR | 3.9 UR | 3.9 UR |
| **TETRACHLOROETHENE** | 5 | 0.11 | 5 | 0.29 U | 0.29 U | 0.29 U | 0.29 U | 0.29 U | 0.29 U | 0.29 U |
| TRANS-1,2-DICHLOROETHENE | 100 | 110 | 100 | 0.19 U | 0.19 U | 0.19 U | 1.7 | 0.19 U | 0.19 U | 0.19 U |
| **TRICHLOROETHENE** | 5 | 2 | 5 | 0.17 U | 0.17 U | 0.17 U | **29** | 0.9 J | 0.55 J | **15** |
| **VINYL CHLORIDE** | 2 | 0.016 | 2 | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 0.22 U |
| **SEMIVOLATILES (UG/L)** | | | | | | | | | | |
| **1,4-DIOXANE** | NC | 0.67 | NC | NA | NA | NA | NA | NA | NA | NA |
| **VOLATILE GASES (UG/L)** | | | | | | | | | | |
| ETHANE | NC | NC | NC | NA | NA | NA | NA | NA | NA | 0.26 UJ |
| METHANE | NC | NC | NC | NA | NA | NA | NA | NA | NA | 0.1 U |
| **METALS (UG/L)** | | | | | | | | | | |
| **ANTIMONY** | 6 | 15 | 6 | 0.96 J | 0.027 U | 0.027 B | 0.46 B | 0.035 B | 0.027 U | 0.053 B |
| **ARSENIC** | 10 | 0.045 | 10 | **31.2** | **1.9 J** | 0.16 U | 0.41 B | 0.16 U | 0.16 U | 0.16 U |
| BARIUM | 2000 | 7300 | 2000 | 74.1 | 47.6 | 26.4 | 92.2 | 89.6 | 21.9 | 95.8 |
| **BERYLLIUM** | 4 | 73 | 4 | 0.034 B | 0.22 J | 4 | 0.11 B | **5.7** | 1 B | 0.078 B |
| CADMIUM | 5 | 18 | 5 | 0.025 UL | 0.025 UL | 0.025 U | 0.046 B | 0.039 B | 0.025 U | 0.047 B |
| **CHROMIUM** | 100 | NC | 100 | 1.8 J | 0.64 B | 1.5 J | 0.77 J | 0.69 B | 1.3 J | 0.47 J |
| **COBALT** | NC | 11 | NC | 1.8 | 5.8 | **21.8** | 2.9 | **45.4** | 3.2 | 0.99 J |
| COPPER | 1300 | 1500 | 1300 | 0.38 B | 0.13 B | 7.1 | 0.87 B | 25.2 | 3.7 B | 0.26 B |
| **IRON** | 300 | 26000 | NC | **92900 K** | **28600** | 129 | 142 B | **325** | **916** | 6 U |
| **LEAD** | 15 | NC | 15 | 0.28 B | 0.038 B | 0.045 B | 0.11 B | 0.47 J | 0.42 B | 0.019 UL |
| **MANGANESE** | 50 | 880 | NC | **254** | **256** | 28.6 | 32 | 24.1 | 3.6 B | 3.5 |
| MOLYBDENUM | NC | 180 | NC | 0.27 U | 0.27 U | 0.27 U | 0.41 J | 0.27 U | 0.27 U | 0.27 U |
| **NICKEL** | 73 | 730 | NC | 0.47 J | 7.5 | 29.8 | 4.7 | **88.9** | 5 | 1.2 B |
| POTASSIUM | NC | NC | NC | NA | NA | NA | NA | NA | NA | 9010 |
| SELENIUM | 50 | 180 | 50 | 0.76 J | 0.13 U | 0.13 U | 1.5 J | 0.13 U | 0.13 U | 1.7 J |
| SILVER | 100 | 180 | NC | 0.015 U | 0.015 U | 0.015 U | 0.015 U | 0.015 U | 0.015 U | 0.015 U |
| THALLIUM | 2 | NC | 2 | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U |
| **VANADIUM** | 3.7 | 180 | NC | 2.6 J | 0.43 U | 0.43 U | **9.6 J** | 0.57 J | 2.1 J | 0.43 U |
| **ZINC** | 5000 | 11000 | NC | 2.9 B | 2.7 B | 62 | 21.1 B | 93.3 | 17.4 B | 2.9 B |
| **MISCELLANEOUS PARAMETERS (MG/L)** | | | | | | | | | | |
| ALKALINITY | NC | NC | NC | NA | NA | NA | NA | NA | NA | 27 |
| AMMONIA-N | NC | NC | NC | NA | NA | NA | NA | NA | NA | 0.1 U |
| CHLORIDE | NC | NC | NC | NA | NA | NA | NA | NA | NA | 69.8 |
| DISSOLVED ORGANIC CARBON | NC | NC | NC | NA | NA | NA | NA | NA | NA | 0.6 J |
| NITRATE-N | NC | NC | NC | NA | NA | NA | NA | NA | NA | 1.1 |
| ORTHOPHOSPHATE-P | NC | NC | NC | NA | NA | NA | NA | NA | NA | 0.1 J |
| SULFATE | NC | NC | NC | NA | NA | NA | NA | NA | NA | 11.3 |
| TOTAL DISSOLVED SOLIDS | NC | NC | NC | NA | NA | NA | NA | NA | NA | 220 |
| **MISCELLANEOUS PARAMETERS (UG/L)** | | | | | | | | | | |
| **HEXAVALENT CHROMIUM** | 100 | 0.043 | NC | NA | NA | NA | NA | NA | NA | **0.96 J** |

**Table 4-23**

**Detected Concentrations Groundwater - May-June 2010**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
**Page 2 of 8**

| BLOCK | MDE Cleanup Standards for Groundwater (Type I Aquifer)[1, 4] | USEPA Regional Screening Level forTap Water[2, 4] | USEPA MCL[3] | BLOCK E | BLOCK E | BLOCK E | BLOCK E | BLOCK E | BLOCK E | BLOCK E |
|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | | | | MRC-MW34B | MRC-MW34C | MRC-MW36A | MRC-MW43A | MRC-MW44A | MRC-MW72A | MRC-MW72B |
| SAMPLE ID | | | | MRC-MW34B-061710 | MRC-MW34C-061710 | MRC-MW36A-060310 | MRC-MW43A-060210 | MRC-MW44A-052810 | MRC-MW72A-060310 | MRC-MW72B-060310 |
| SAMPLE DATE | | | | 20100617 | 20100617 | 20100603 | 20100602 | 20100528 | 20100603 | 20100603 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | GW | GW | GW | GW | GW | GW | GW |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| **VOLATILES (UG/L)** | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 200 | 9100 | 200 | 0.22 U | 0.22 U | 0.55 U | 110 U | 0.22 U | 0.22 U | 37 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NC | 59000 | NC | 0.28 U | 0.28 U | 0.7 U | 140 U | 0.28 U | 0.28 U | 47 U |
| **1,1-DICHLOROETHANE** | 90 | 2.4 | NC | 0.82 J | 0.15 U | 0.38 U | 75 U | 0.15 U | 0.58 J | 25 U |
| **1,1-DICHLOROETHENE** | 7 | 340 | 7 | 0.33 J | 0.19 U | 0.48 U | 95 U | 0.19 U | 0.19 U | 32 U |
| **1,2,3-TRICHLOROBENZENE** | NC | 29 | NC | 0.17 U | 0.17 U | 16 | **2000** | 0.17 U | 0.33 B | 28 U |
| **1,2,4-TRICHLOROBENZENE** | 70 | 2.3 | 70 | 0.15 U | 0.15 U | **91** | **11000** | 0.15 U | 0.93 B | 25 U |
| **1,2-DICHLOROBENZENE** | 600 | 370 | 600 | 0.13 U | 0.13 U | 4.3 | **450 J** | 0.13 U | 0.13 U | 22 U |
| **1,2-DICHLOROETHANE** | 5 | 0.15 | 5 | 0.22 U | 0.22 U | 0.55 U | 110 U | 0.22 U | 0.22 U | 37 U |
| **1,3-DICHLOROBENZENE** | 1.8 | NC | NC | 0.14 U | 0.14 U | **22** | 70 U | 0.14 U | 0.14 U | 23 U |
| **1,4-DICHLOROBENZENE** | 75 | 0.43 | 75 | 0.13 U | 0.13 U | **25** | **570** | 0.13 U | 0.13 U | 22 U |
| ACETONE | 550 | 22000 | NC | 6.9 B | 5.5 B | 7.8 J | 550 U | 6.8 B | 13 | 180 U |
| **BENZENE** | 5 | 0.41 | 5 | 0.13 U | 0.13 U | **0.91 J** | 65 U | 0.13 U | 0.13 U | 22 U |
| **CARBON TETRACHLORIDE** | 5 | 0.44 | 5 | **13** | 0.13 U | 0.32 U | 65 U | 0.13 U | 0.13 U | 22 U |
| CHLOROBENZENE | 100 | 91 | 100 | 0.15 U | 0.15 U | 37 | 75 U | 0.15 U | 0.15 U | 25 U |
| **CHLOROFORM** | 80 | 0.19 | 80 | **3.2** | 0.16 U | 0.4 U | 80 U | 0.16 U | 0.16 U | 27 U |
| CHLOROMETHANE | 19 | 190 | NC | 0.38 J | 0.39 J | 0.75 U | 150 U | 0.3 U | 0.3 U | 50 U |
| **CIS-1,2-DICHLOROETHENE** | 70 | 73 | 70 | 22 | 0.17 U | 0.63 J | 85 U | 0.17 U | 2.8 | 28 U |
| **METHYL TERT-BUTYL ETHER** | 20 | 12 | NC | **21** | 0.17 U | 0.42 U | 85 U | 0.17 UJ | 0.17 U | 28 U |
| **METHYLENE CHLORIDE** | 5 | 4.8 | 5 | 0.33 U | 0.33 U | 0.82 U | 160 U | 0.33 U | 0.33 U | 55 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NC | 31 L | 3.9 UR | 9.8 UR | 2000 UR | 3.9 UR | 3.9 UR | 650 UR |
| **TETRACHLOROETHENE** | 5 | 0.11 | 5 | 0.29 U | 0.29 U | 0.72 U | 140 U | 0.29 U | 0.29 U | 48 U |
| TRANS-1,2-DICHLOROETHENE | 100 | 110 | 100 | 1.9 | 0.19 U | 0.48 U | 95 U | 0.19 U | 0.19 U | 32 U |
| **TRICHLOROETHENE** | 5 | 2 | 5 | **25** | 0.17 U | **4.4** | 85 U | 0.17 U | 0.8 J | **4200** |
| **VINYL CHLORIDE** | 2 | 0.016 | 2 | **3.8** | 0.22 U | 0.55 U | 110 U | 0.22 U | 0.22 U | 37 U |
| **SEMIVOLATILES (UG/L)** | | | | | | | | | | |
| **1,4-DIOXANE** | NC | 0.67 | NC | NA | NA | NA | NA | **4.6** | NA | NA |
| **VOLATILE GASES (UG/L)** | | | | | | | | | | |
| ETHANE | NC | NC | NC | 0.55 | NA | 0.26 U | 0.36 J | NA | NA | NA |
| METHANE | NC | NC | NC | 150 | NA | 21 | 36 | NA | NA | NA |
| **METALS (UG/L)** | | | | | | | | | | |
| **ANTIMONY** | 6 | 15 | 6 | 0.027 U | 0.027 U | 0.57 B | 0.027 U | 0.095 B | 0.12 B | 0.027 B |
| **ARSENIC** | 10 | 0.045 | 10 | 0.45 B | 0.63 B | **1.8 J** | 0.16 U | **1.6 J** | 0.16 U | 0.16 U |
| BARIUM | 2000 | 7300 | 2000 | 148 | 31 | 51 | 37.9 | 102 | 40.9 | 14.8 |
| **BERYLLIUM** | 4 | 73 | 4 | **9.4** | 0.11 B | 3.4 | 1.6 | 0.12 B | 0.042 B | 0.79 J |
| CADMIUM | 5 | 18 | 5 | 0.37 B | 0.025 U | 0.073 B | 0.06 B | 0.025 UL | 0.025 U | 0.025 U |
| **CHROMIUM** | 100 | NC | 100 | 0.43 J | 3.8 | 12 | 0.26 B | 1.4 J | 0.21 B | 0.11 B |
| **COBALT** | NC | 11 | NC | **124** | 1.4 | **38.4** | **40.3** | 0.89 J | 0.97 J | 10.6 |
| COPPER | 1300 | 1500 | 1300 | 36.8 | 3.3 B | 10.6 | 0.8 B | 0.46 B | 0.2 B | 1.7 B |
| **IRON** | 300 | 26000 | NC | **372** | **2220** | **13400** | **5120** | **33200** | **468** | 43.5 J |
| **LEAD** | 15 | NC | 15 | 0.019 UL | 0.6 J | 3.5 | 0.11 B | 0.13 B | 0.019 UL | 0.019 UL |
| **MANGANESE** | 50 | 880 | NC | **417** | 38.2 | **81.2** | **878** | **363** | 20.4 | **68** |
| MOLYBDENUM | NC | 180 | NC | 0.27 U | 0.27 U | 0.46 J | 0.27 U | 0.27 U | 0.27 U | 0.27 U |
| **NICKEL** | 73 | 730 | NC | **162** | 4.1 | 52.8 | 38.9 | 0.44 B | 1.4 B | 12.4 |
| POTASSIUM | NC | NC | NC | 6380 | NA | 2260 | 4920 | NA | NA | NA |
| SELENIUM | 50 | 180 | 50 | 1.1 J | 0.13 U | 0.64 J | 0.13 U | 0.13 UL | 0.44 J | 0.13 U |
| SILVER | 100 | 180 | NC | 0.015 UL | 0.015 UL | 0.015 U | 0.015 U | 0.015 U | 0.015 U | 0.015 U |
| THALLIUM | 2 | NC | 2 | 0.26 B | 0.13 U | 0.29 B | 0.13 U | 0.13 U | 0.13 U | 0.13 U |
| **VANADIUM** | 3.7 | 180 | NC | 1.7 J | **8.1 J** | **22.2** | 0.43 U | 1.2 J | 0.43 U | 0.65 B |
| **ZINC** | 5000 | 11000 | NC | 329 | 11.4 B | 92 | 62.6 | 69.8 B | 26.2 B | 116 |
| **MISCELLANEOUS PARAMETERS (MG/L)** | | | | | | | | | | |
| ALKALINITY | NC | NC | NC | 5.1 B | NA | 7.4 | 16 | NA | NA | NA |
| AMMONIA-N | NC | NC | NC | 0.1 U | NA | 0.1 U | 0.1 U | NA | NA | NA |
| CHLORIDE | NC | NC | NC | 189 | NA | 19.8 | 58.9 | NA | NA | NA |
| DISSOLVED ORGANIC CARBON | NC | NC | NC | 2 | NA | 3 | 1 | NA | NA | NA |
| NITRATE-N | NC | NC | NC | 0.1 | NA | 0.2 J | 0.1 | NA | NA | NA |
| ORTHOPHOSPHATE-P | NC | NC | NC | 0.4 J | NA | 1.2 J | 0.3 J | NA | NA | NA |
| SULFATE | NC | NC | NC | 16.8 | NA | 18.9 | 4.8 | NA | NA | NA |
| TOTAL DISSOLVED SOLIDS | NC | NC | NC | 360 | NA | 100 | 140 | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/L)** | | | | | | | | | | |
| **HEXAVALENT CHROMIUM** | 100 | 0.043 | NC | 0.11 U | 0.11 U | NA | NA | NA | NA | NA |

**Table 4-23**

**Detected Concentrations Groundwater - May-June 2010**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| BLOCK | MDE Cleanup Standards for Groundwater (Type I Aquifer)[1, 4] | USEPA Regional Screening Level forTap Water[2, 4] | USEPA MCL[3] | BLOCK E | BLOCK E | BLOCK E | BLOCK E | BLOCK E | BLOCK E | BLOCK F |
|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | | | | MRC-MW73A | MRC-MW73B | MRC-MW74A | MRC-MW74B | MRC-MW74C | MRC-MW62C | MRC-MW45A |
| SAMPLE ID | | | | MRC-MW73A-060410 | MRC-MW73B-060410 | MRC-MW74A-060410 | MRC-MW74B-060710 | MRC-MW74C-060710 | MRC-MW62C-052810 | MRC-MW45A-062110 |
| SAMPLE DATE | | | | 20100604 | 20100604 | 20100604 | 20100607 | 20100607 | 20100528 | 20100621 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | GW | GW | GW | GW | GW | GW | GW |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| **VOLATILES (UG/L)** | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 200 | 9100 | 200 | 0.22 U | 1.1 U | 0.55 U | 160 U | 0.22 U | 0.22 U | 0.22 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NC | 59000 | NC | 0.28 U | 1.4 U | 0.7 U | 200 U | 0.28 U | 0.28 U | 0.28 U |
| **1,1-DICHLOROETHANE** | 90 | 2.4 | NC | 0.15 U | 0.75 U | 0.38 U | 110 U | 0.15 U | 0.15 U | 0.15 U |
| **1,1-DICHLOROETHENE** | 7 | 340 | 7 | 0.19 U | 0.95 U | 0.48 U | 140 U | 0.19 U | 0.19 U | 0.19 U |
| **1,2,3-TRICHLOROBENZENE** | NC | 29 | NC | 0.17 U | 0.85 U | 0.42 U | 120 U | 0.17 U | 0.17 U | 0.17 U |
| **1,2,4-TRICHLOROBENZENE** | 70 | 2.3 | 70 | 0.15 U | 0.75 U | 0.38 U | 110 U | 0.15 U | 0.15 U | 0.15 U |
| **1,2-DICHLOROBENZENE** | 600 | 370 | 600 | 0.13 U | 0.65 U | 0.32 U | 93 U | 0.13 U | 0.13 U | 0.13 U |
| **1,2-DICHLOROETHANE** | 5 | 0.15 | 5 | 0.22 U | 1.1 U | 0.55 U | 160 U | 0.22 U | 0.22 U | 0.22 U |
| **1,3-DICHLOROBENZENE** | 1.8 | NC | NC | 0.14 U | 0.7 U | 0.45 J | 100 U | 0.14 U | 0.14 U | 0.14 U |
| **1,4-DICHLOROBENZENE** | 75 | 0.43 | 75 | 0.13 U | 0.65 U | **1.3 J** | 93 U | 0.13 U | 0.13 U | 0.13 U |
| ACETONE | 550 | 22000 | NC | 9.9 | 10 J | 5.7 J | 790 U | 7.9 | 9.6 B | 5 B |
| **BENZENE** | 5 | 0.41 | 5 | 0.13 U | 0.65 U | 0.32 U | 93 U | 0.13 U | 0.13 U | 0.13 U |
| **CARBON TETRACHLORIDE** | 5 | 0.44 | 5 | 0.13 U | 0.65 U | 0.32 U | 93 U | 0.13 U | 0.13 U | 0.13 U |
| CHLOROBENZENE | 100 | 91 | 100 | 0.15 U | 0.75 U | 1.3 J | 110 U | 0.15 U | 0.15 U | 0.15 U |
| **CHLOROFORM** | 80 | 0.19 | 80 | 0.16 U | 0.8 U | 0.4 U | 110 U | 0.16 U | 0.16 U | 0.16 U |
| CHLOROMETHANE | 19 | 190 | NC | 1.3 | 1.5 U | 0.75 U | 210 U | 0.3 U | 0.3 U | 0.53 J |
| **CIS-1,2-DICHLOROETHENE** | 70 | 73 | 70 | 0.17 U | 3.1 J | 2.7 | **360 J** | 0.17 U | 0.17 U | 0.17 U |
| **METHYL TERT-BUTYL ETHER** | 20 | 12 | NC | 0.17 U | 0.85 U | 0.42 U | 120 U | 0.17 U | 0.17 UJ | 0.17 U |
| **METHYLENE CHLORIDE** | 5 | 4.8 | 5 | 0.33 U | 1.6 U | 0.82 U | 240 U | 0.33 U | 0.33 U | 0.33 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NC | 3.9 UR | 20 UR | 9.8 UR | 2800 UR | 3.9 UR | 3.9 UR | 3.9 UR |
| **TETRACHLOROETHENE** | 5 | 0.11 | 5 | 0.29 U | 1.4 U | 0.72 U | 210 U | 0.29 U | 0.29 U | 0.29 U |
| TRANS-1,2-DICHLOROETHENE | 100 | 110 | 100 | 0.19 U | 0.95 U | 0.48 U | 140 U | 0.19 U | 0.19 U | 0.19 U |
| **TRICHLOROETHENE** | 5 | 2 | 5 | 0.17 U | **150** | **78** | **19000** | **3.7** | 0.17 U | 0.17 U |
| **VINYL CHLORIDE** | 2 | 0.016 | 2 | 0.22 U | 1.1 U | 0.55 U | 160 U | 0.22 U | 0.22 U | 0.22 U |
| **SEMIVOLATILES (UG/L)** | | | | | | | | | | |
| **1,4-DIOXANE** | NC | 0.67 | NC | NA | NA | NA | NA | 0.49 U | 0.49 U | 0.49 U |
| **VOLATILE GASES (UG/L)** | | | | | | | | | | |
| ETHANE | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| METHANE | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| **METALS (UG/L)** | | | | | | | | | | |
| **ANTIMONY** | 6 | 15 | 6 | 0.1 B | 0.027 U | 0.05 B | 0.1 B | 0.27 B | 0.4 B | 1.2 J |
| **ARSENIC** | 10 | 0.045 | 10 | **0.16 J** | 0.16 U | **0.75 J** | 0.28 B | **1.1 J** | **1.2 J** | **0.99 J** |
| BARIUM | 2000 | 7300 | 2000 | 37.4 | 30.7 | 60.8 | 33.2 | 32 | 42.5 | 22 |
| **BERYLLIUM** | 4 | 73 | 4 | 0.36 J | 1.9 B | 0.87 J | 0.39 B | 0.22 B | 0.0059 U | 0.32 J |
| CADMIUM | 5 | 18 | 5 | 0.062 B | 0.025 U | 0.14 B | 0.11 B | 0.025 U | 0.025 U | 0.14 B |
| **CHROMIUM** | 100 | NC | 100 | 0.61 J | 0.25 B | 1.9 J | 1.2 J | 3.5 | 1.5 J | 7.3 |
| **COBALT** | NC | 11 | NC | 9.9 | **19.2** | **45.2** | **13.8** | 2.4 | **15.7** | 4.3 |
| COPPER | 1300 | 1500 | 1300 | 2 B | 3.8 B | 5.1 B | 2.6 B | 3.4 B | 1.7 B | 20.2 |
| **IRON** | 300 | 26000 | NC | **503** | **826** | **4580** | **1240** | **4630** | **2450** | **5680** |
| **LEAD** | 15 | NC | 15 | 0.019 UL | 0.019 UL | 0.17 B | 0.099 B | 0.71 J | 0.49 J | 11.8 |
| **MANGANESE** | 50 | 880 | NC | 33.6 | **102** | **3370** | **202** | 45 | **388** | **187** |
| MOLYBDENUM | NC | 180 | NC | 0.27 U | 0.27 U | 0.27 U | 0.27 U | 0.75 B | 0.62 B | 0.41 J |
| **NICKEL** | 73 | 730 | NC | 22.8 | 19.5 | 9.7 | 17.6 | 4.3 | 24.5 | 49.9 |
| POTASSIUM | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 50 | 180 | 50 | 0.54 J | 0.13 U | 1 J | 0.26 B | 0.15 B | 0.13 U | 0.2 J |
| SILVER | 100 | 180 | NC | 0.015 U | 0.015 U | 0.015 U | 0.015 U | 0.015 U | 0.015 U | 0.1 B |
| THALLIUM | 2 | NC | 2 | 0.13 U | 0.13 U | 0.13 U | 0.19 B | 0.13 U | 0.13 U | 0.13 U |
| **VANADIUM** | 3.7 | 180 | NC | 1.3 B | 1.2 B | 2.5 J | 2.1 J | **4.9 J** | **8.4 J** | **7.3 J** |
| **ZINC** | 5000 | 11000 | NC | 27.8 B | 56.6 | 119 | 290 | 361 | 53.8 | **5520** |
| **MISCELLANEOUS PARAMETERS (MG/L)** | | | | | | | | | | |
| ALKALINITY | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| AMMONIA-N | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| CHLORIDE | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| DISSOLVED ORGANIC CARBON | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| NITRATE-N | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| ORTHOPHOSPHATE-P | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| SULFATE | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| TOTAL DISSOLVED SOLIDS | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/L)** | | | | | | | | | | |
| **HEXAVALENT CHROMIUM** | 100 | 0.043 | NC | NA | NA | NA | NA | NA | NA | NA |

**Table 4-23**

**Detected Concentrations Groundwater - May-June 2010**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| BLOCK | MDE Cleanup Standards for Groundwater (Type I Aquifer)[1, 4] | USEPA Regional Screening Level forTap Water[2, 4] | USEPA MCL[3] | BLOCK F | BLOCK G | BLOCK G | BLOCK G | BLOCK G | BLOCK G | BLOCK G |
|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | | | | MRC-MW46A | MRC-MW09A | MRC-MW10A | MRC-MW11A | MRC-MW11C | MRC-MW12A | MRC-MW12B |
| SAMPLE ID | | | | MRC-MW46A-060310 | MRC-MW09A-061710 | MRC-MW10A-062510 | MRC-MW11A-062310 | MRC-MW11C-061710 | MRC-MW12A-061610 | MRC-MW12B-061610 |
| SAMPLE DATE | | | | 20100603 | 20100617 | 20100625 | 20100623 | 20100617 | 20100616 | 20100616 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | GW | GW | GW | GW | GW | GW | GW |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| **VOLATILES (UG/L)** | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 200 | 9100 | 200 | 0.22 U | 0.22 U | 0.22 U | 0.31 U | 0.22 U | 12 U | 2 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NC | 59000 | NC | 0.28 U | 0.28 U | 0.28 U | 0.4 U | 0.28 U | 16 U | 2.5 U |
| **1,1-DICHLOROETHANE** | 90 | 2.4 | NC | 0.15 U | 0.15 U | 0.42 J | **9.8** | 0.15 U | **22 J** | **4.6 J** |
| **1,1-DICHLOROETHENE** | 7 | 340 | 7 | 0.19 U | 0.19 U | 0.91 J | **57** | 0.19 U | **280** | **32** |
| **1,2,3-TRICHLOROBENZENE** | NC | 29 | NC | 0.17 U | 0.17 U | 0.17 U | 0.24 U | 0.17 U | 9.4 U | 1.5 U |
| **1,2,4-TRICHLOROBENZENE** | 70 | 2.3 | 70 | 0.15 U | 0.15 U | 0.15 U | 0.21 U | 0.15 U | 8.3 UJ | 1.4 U |
| **1,2-DICHLOROBENZENE** | 600 | 370 | 600 | 0.13 U | 0.13 U | 0.13 U | 0.19 U | 0.13 U | 7.2 U | 1.2 U |
| **1,2-DICHLOROETHANE** | 5 | 0.15 | 5 | 0.22 U | 0.22 U | 0.22 U | 0.31 U | 0.22 U | 12 U | 2 U |
| **1,3-DICHLOROBENZENE** | 1.8 | NC | NC | 0.14 U | 0.14 U | 0.14 U | 0.2 U | 0.14 U | 7.8 U | 1.3 U |
| **1,4-DICHLOROBENZENE** | 75 | 0.43 | 75 | 0.13 U | 0.13 U | 0.13 U | 0.19 U | 0.13 U | 7.2 U | 1.2 U |
| ACETONE | 550 | 22000 | NC | 7.5 | 5.1 B | 1.1 U | 3.2 B | 4 B | 61 U | 10 U |
| **BENZENE** | 5 | 0.41 | 5 | 0.13 U | 0.13 U | 0.13 U | 0.19 U | 0.13 U | 7.2 U | 1.2 U |
| **CARBON TETRACHLORIDE** | 5 | 0.44 | 5 | 0.13 U | 0.13 U | 0.13 U | 0.19 U | 0.13 U | 7.2 U | 1.2 U |
| CHLOROBENZENE | 100 | 91 | 100 | 0.15 U | 0.15 U | 0.15 U | 0.21 U | 0.15 U | 8.3 U | 1.4 U |
| **CHLOROFORM** | 80 | 0.19 | 80 | 0.16 U | 0.16 U | 0.16 U | 0.23 U | 0.16 U | 8.9 U | 1.5 U |
| CHLOROMETHANE | 19 | 190 | NC | 0.3 U | 0.32 J | 0.3 U | 0.43 U | 0.3 U | 17 U | 2.7 U |
| **CIS-1,2-DICHLOROETHENE** | 70 | 73 | 70 | 0.17 U | 0.17 U | 0.6 J | 7.7 | 0.17 U | **120** | 30 |
| **METHYL TERT-BUTYL ETHER** | 20 | 12 | NC | 0.17 U | 0.17 U | 0.17 U | 0.24 U | 0.17 U | 9.4 U | 1.5 U |
| **METHYLENE CHLORIDE** | 5 | 4.8 | 5 | 0.33 U | 0.33 U | 0.33 U | 0.47 U | 0.33 U | 57 B | 7.6 B |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NC | 3.9 UR | 3.9 UR | 3.9 UR | 5.6 UR | 3.9 UR | 220 UR | 35 UR |
| **TETRACHLOROETHENE** | 5 | 0.11 | 5 | 0.29 U | 0.29 U | 0.29 U | 0.41 U | 0.29 U | 16 U | 2.6 U |
| TRANS-1,2-DICHLOROETHENE | 100 | 110 | 100 | 0.19 U | 0.19 U | 0.19 U | 0.27 U | 0.19 U | 11 U | 1.7 U |
| **TRICHLOROETHENE** | 5 | 2 | 5 | 0.17 U | 0.17 U | 0.17 U | **12** | 0.17 U | **1600** | **300** |
| **VINYL CHLORIDE** | 2 | 0.016 | 2 | 0.22 U | 0.22 U | 0.22 U | **2.1** | 0.22 U | 12 U | 2 U |
| **SEMIVOLATILES (UG/L)** | | | | | | | | | | |
| **1,4-DIOXANE** | NC | 0.67 | NC | 0.49 U | 0.49 U | **0.96 J** | **5** | 0.49 U | **160** | **43** |
| **VOLATILE GASES (UG/L)** | | | | | | | | | | |
| ETHANE | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| METHANE | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| **METALS (UG/L)** | | | | | | | | | | |
| **ANTIMONY** | 6 | 15 | 6 | 0.73 B | 0.37 J | 0.22 B | 1.1 J | 0.067 J | 0.26 B | 0.19 B |
| **ARSENIC** | 10 | 0.045 | 10 | **1.8 J** | **1.7 J** | **3.8 J** | **2.5 J** | **1.7 J** | **0.69 J** | **0.66 J** |
| BARIUM | 2000 | 7300 | 2000 | 131 | 41.8 | 81.8 | 41.7 | 54.4 | 74 | 77.6 |
| **BERYLLIUM** | 4 | 73 | 4 | 0.53 J | 0.0059 U | 0.23 J | 0.009 B | 1.2 | 0.32 J | 0.12 B |
| CADMIUM | 5 | 18 | 5 | 0.17 B | 0.025 U | 0.025 UL | 0.025 U | 0.1 B | 0.03 B | 0.037 B |
| **CHROMIUM** | 100 | NC | 100 | 0.37 B | 0.6 J | 1.2 J | 0.61 B | 7.2 | 1.9 J | 0.93 J |
| **COBALT** | NC | 11 | NC | **19.8** | 1.1 | **63.8** | **58.3** | **25.9** | **34.7** | **19.2** |
| COPPER | 1300 | 1500 | 1300 | 4 K | 1.2 B | 1.7 B | 0.92 B | 16.7 | 3.1 B | 2.4 B |
| **IRON** | 300 | 26000 | NC | **1020** | **1440** | **71000** | **96800** | **6400** | **36900** | **7550** |
| **LEAD** | 15 | NC | 15 | 0.42 J | 0.019 UL | 0.77 J | 0.47 J | 6.5 | 1.5 L | 0.61 J |
| **MANGANESE** | 50 | 880 | NC | **159** | **361** | **6530** | **7410** | **111** | **1880** | **1730** |
| MOLYBDENUM | NC | 180 | NC | 1.2 J | 0.54 J | 0.27 U | 0.37 B | 0.27 U | 0.27 J | 0.27 U |
| **NICKEL** | 73 | 730 | NC | 19.8 | 2.3 K | 18.8 | 11.7 | 34.6 | 66.6 | 44.5 |
| POTASSIUM | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 50 | 180 | 50 | 0.13 U | 0.36 J | 0.33 J | 0.29 B | 0.62 J | 0.2 B | 0.13 U |
| SILVER | 100 | 180 | NC | 0.015 U | 0.015 UL | 0.015 U | 0.015 B | 0.015 UL | 0.019 B | 0.015 U |
| THALLIUM | 2 | NC | 2 | 0.13 U | 0.13 U | 0.14 B | 0.2 B | 0.18 B | 0.13 U | 0.13 U |
| **VANADIUM** | 3.7 | 180 | NC | 1.3 B | **5.6 J** | 1.1 J | 1.5 J | **9.7 J** | 2.7 B | 0.58 B |
| **ZINC** | 5000 | 11000 | NC | 794 | 22 B | 118 | 177 | 83.8 | 107 | 72.3 |
| **MISCELLANEOUS PARAMETERS (MG/L)** | | | | | | | | | | |
| ALKALINITY | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| AMMONIA-N | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| CHLORIDE | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| DISSOLVED ORGANIC CARBON | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| NITRATE-N | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| ORTHOPHOSPHATE-P | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| SULFATE | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| TOTAL DISSOLVED SOLIDS | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/L)** | | | | | | | | | | |
| **HEXAVALENT CHROMIUM** | 100 | 0.043 | NC | NA | 0.11 U | NA | NA | NA | 0.11 U | 0.11 U |

**Table 4-23**

**Detected Concentrations Groundwater - May-June 2010**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
**Page 5 of 8**

| BLOCK | MDE Cleanup Standards for Groundwater (Type I Aquifer)[1, 4] | USEPA Regional Screening Level forTap Water[2, 4] | USEPA MCL[3] | BLOCK G | BLOCK G | BLOCK G | BLOCK G | BLOCK G | BLOCK G | BLOCK G |
|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | | | | MRC-MW12C | MRC-MW13A | MRC-MW14A | MRC-MW14B | MRC-MW14C | MRC-MW15A | MRC-MW16A |
| SAMPLE ID | | | | MRC-MW12C-061510 | MRC-MW13A-062510 | MRC-MW14A-062210 | MRC-MW14B-062210 | MRC-MW14C-061510 | MRC-MW15A-062210 | MRC-MW16A-062310 |
| SAMPLE DATE | | | | 20100615 | 20100625 | 20100622 | 20100622 | 20100615 | 20100622 | 20100623 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | GW | GW | GW | GW | GW | GW | GW |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| **VOLATILES (UG/L)** | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 200 | 9100 | 200 | 0.22 U | 0.22 U | 0.22 U | 22 U | 0.22 U | 0.44 U | 0.22 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NC | 59000 | NC | 0.28 U | 0.28 U | 0.28 U | 28 U | 0.28 U | 0.56 U | 0.28 U |
| **1,1-DICHLOROETHANE** | 90 | 2.4 | NC | 0.15 U | 0.15 U | 2.3 | **49 J** | 0.15 U | **16** | **7.1** |
| **1,1-DICHLOROETHENE** | 7 | 340 | 7 | 0.19 U | 0.19 U | 2.9 | **780** | 0.19 U | **55** | **23** |
| **1,2,3-TRICHLOROBENZENE** | NC | 29 | NC | 0.17 U | 0.17 U | 0.17 U | 17 U | 0.17 U | 0.34 U | 0.17 U |
| **1,2,4-TRICHLOROBENZENE** | 70 | 2.3 | 70 | 0.15 U | 0.15 U | 0.15 U | 15 U | 0.15 U | 0.3 U | 0.15 U |
| **1,2-DICHLOROBENZENE** | 600 | 370 | 600 | 0.13 U | 0.13 U | 0.13 U | 13 U | 0.13 U | 0.26 U | 0.13 U |
| **1,2-DICHLOROETHANE** | 5 | 0.15 | 5 | 0.22 U | 0.22 U | 0.22 U | 22 U | 0.22 U | **0.59 J** | 0.22 U |
| **1,3-DICHLOROBENZENE** | 1.8 | NC | NC | 0.14 U | 0.14 U | 0.14 U | 14 U | 0.14 U | 0.28 U | 0.14 U |
| **1,4-DICHLOROBENZENE** | 75 | 0.43 | 75 | 0.13 U | 0.13 U | 0.13 U | 13 U | 0.13 U | 0.26 U | 0.13 U |
| ACETONE | 550 | 22000 | NC | 6 B | 1.3 B | 3.7 B | 110 U | 6 B | 5.1 B | 6.5 B |
| **BENZENE** | 5 | 0.41 | 5 | 0.13 U | 0.13 U | 0.13 U | 13 U | 0.13 U | 0.26 U | 0.13 U |
| **CARBON TETRACHLORIDE** | 5 | 0.44 | 5 | 0.13 U | 0.13 U | 0.13 U | 13 U | 0.13 U | 0.26 U | 0.13 U |
| CHLOROBENZENE | 100 | 91 | 100 | 0.15 U | 0.15 U | 0.15 U | 15 U | 0.15 U | 0.3 U | 0.15 U |
| **CHLOROFORM** | 80 | 0.19 | 80 | 0.16 U | 0.16 U | 0.16 U | 16 U | 0.16 U | 0.32 U | 0.16 U |
| CHLOROMETHANE | 19 | 190 | NC | 0.3 U | 0.3 U | 0.49 J | 30 U | 0.3 U | 0.6 U | 0.3 U |
| **CIS-1,2-DICHLOROETHENE** | 70 | 73 | 70 | 0.17 U | 0.28 J | 22 | 49 J | 0.17 U | 0.34 U | 2.3 |
| **METHYL TERT-BUTYL ETHER** | 20 | 12 | NC | 0.17 U | 0.17 U | 0.17 U | 17 U | 0.17 U | 0.34 U | 0.17 U |
| **METHYLENE CHLORIDE** | 5 | 4.8 | 5 | 0.33 U | 0.33 U | 0.33 U | **40 J** | 0.33 U | 0.66 U | 0.33 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NC | 3.9 UR | 3.9 UR | 3.9 UR | 390 UR | 3.9 UR | 7.8 UR | 3.9 UR |
| **TETRACHLOROETHENE** | 5 | 0.11 | 5 | 0.29 U | 0.29 U | 0.29 U | 29 U | 0.29 U | 0.58 U | **3.7** |
| TRANS-1,2-DICHLOROETHENE | 100 | 110 | 100 | 0.19 U | 0.19 U | 5.1 | 19 U | 0.19 U | 0.38 U | 0.19 U |
| **TRICHLOROETHENE** | 5 | 2 | 5 | 0.17 U | 0.17 U | **10** | **2800** | 0.17 U | 0.34 U | **5.5** |
| **VINYL CHLORIDE** | 2 | 0.016 | 2 | 0.22 U | **0.22 J** | **0.53 J** | 22 U | 0.22 U | **7.2** | **1.1** |
| **SEMIVOLATILES (UG/L)** | | | | | | | | | | |
| **1,4-DIOXANE** | NC | 0.67 | NC | 0.49 U | 0.49 U | **6.1** | **360** | 0.49 U | **17** | **4.7** |
| **VOLATILE GASES (UG/L)** | | | | | | | | | | |
| ETHANE | NC | NC | NC | NA | NA | NA | 0.27 J | NA | NA | NA |
| METHANE | NC | NC | NC | NA | NA | NA | 33 | NA | NA | NA |
| **METALS (UG/L)** | | | | | | | | | | |
| **ANTIMONY** | 6 | 15 | 6 | 0.32 B | 0.34 J | 0.069 B | 0.58 B | 0.34 B | 0.58 B | **6.1** |
| **ARSENIC** | 10 | 0.045 | 10 | **0.75 J** | **2.1 J** | **1.5 J** | **1.1 J** | **0.71 J** | **13.8** | **0.67 J** |
| BARIUM | 2000 | 7300 | 2000 | 24.2 | 74.6 | 62.1 | 66.5 | 63.4 | 124 | 67.8 |
| **BERYLLIUM** | 4 | 73 | 4 | 0.45 J | 0.076 B | 0.048 B | 0.41 J | 0.25 B | 1 | 0.41 J |
| CADMIUM | 5 | 18 | 5 | 0.031 B | 0.025 U | 0.025 UL | 0.18 B | 0.04 B | 0.13 B | 0.25 B |
| **CHROMIUM** | 100 | NC | 100 | 5.8 | 0.96 J | 0.38 B | 7.2 | 6.8 | 8.2 | 1.7 B |
| **COBALT** | NC | 11 | NC | 6.7 | 2.2 | **54.5** | **43** | 7.6 | **42** | **27.9** |
| COPPER | 1300 | 1500 | 1300 | 15.9 | 1.7 B | 0.2 B | 10 | 8.2 | 8.8 | 5.1 J |
| **IRON** | 300 | 26000 | NC | **4890** | **1720** | **47100** | **49400** | **19900** | **44500** | **703** |
| **LEAD** | 15 | NC | 15 | 2 L | 0.94 J | 0.081 B | 4.8 | 1.9 | 5.9 | 3.3 |
| **MANGANESE** | 50 | 880 | NC | **53.4** | **658** | **2800** | **1720** | **1060** | **4950** | **635** |
| MOLYBDENUM | NC | 180 | NC | 0.46 B | 0.82 B | 0.27 U | 0.56 J | 0.58 B | 0.72 J | 1 B |
| **NICKEL** | 73 | 730 | NC | 12 | 2.8 | 42.5 | 72.6 | 15.3 | 16.7 | 38.5 |
| POTASSIUM | NC | NC | NC | NA | NA | NA | 3910 | NA | NA | NA |
| SELENIUM | 50 | 180 | 50 | 0.23 J | 0.21 J | 0.13 U | 0.19 J | 0.3 J | 4.1 J | 1.2 J |
| SILVER | 100 | 180 | NC | 0.015 U | 0.015 U | 0.015 U | 0.31 J | 0.02 B | 0.04 B | 0.028 B |
| THALLIUM | 2 | NC | 2 | 0.21 B | 0.13 U | 0.13 U | 0.13 U | 0.2 B | 0.16 B | 0.13 U |
| **VANADIUM** | 3.7 | 180 | NC | **8.1 J** | 2.9 J | 0.43 U | **10.6 J** | **9.8 J** | **13.4 J** | **5.7 J** |
| **ZINC** | 5000 | 11000 | NC | 30.1 K | 151 | 22.5 B | 88.2 | 30.4 K | 54.4 | 112 |
| **MISCELLANEOUS PARAMETERS (MG/L)** | | | | | | | | | | |
| ALKALINITY | NC | NC | NC | NA | NA | NA | 11 B | NA | NA | NA |
| AMMONIA-N | NC | NC | NC | NA | NA | NA | 0.3 | NA | NA | NA |
| CHLORIDE | NC | NC | NC | NA | NA | NA | 104 | NA | NA | NA |
| DISSOLVED ORGANIC CARBON | NC | NC | NC | NA | NA | NA | 5 | NA | NA | NA |
| NITRATE-N | NC | NC | NC | NA | NA | NA | 0.023 U | NA | NA | NA |
| ORTHOPHOSPHATE-P | NC | NC | NC | NA | NA | NA | 0.12 B | NA | NA | NA |
| SULFATE | NC | NC | NC | NA | NA | NA | 69.4 | NA | NA | NA |
| TOTAL DISSOLVED SOLIDS | NC | NC | NC | NA | NA | NA | 320 | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/L)** | | | | | | | | | | |
| **HEXAVALENT CHROMIUM** | 100 | 0.043 | NC | 0.11 U | NA | 0.11 U | 0.11 U | 0.11 U | **0.71 J** | NA |

**Table 4-23**

**Detected Concentrations Groundwater - May-June 2010**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| BLOCK | MDE Cleanup Standards for Groundwater (Type I Aquifer)[1, 4] | USEPA Regional Screening Level forTap Water[2, 4] | USEPA MCL[3] | BLOCK G | BLOCK G | BLOCK G | BLOCK G | BLOCK G | BLOCK G | BLOCK H |
|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | | | | MRC-MW54A | MRC-MW63A | MRC-MW70A | MRC-MW70B | MRC-MW71A | MRC-MW71B | MRC-MW08A |
| SAMPLE ID | | | | MRC-MW54A-052510 | MRC-MW63A-062510 | MRC-MW70A-062210 | MRC-MW70B-062210 | MRC-MW71A-062310 | MRC-MW71B-062310 | MRC-MW08A-060110 |
| SAMPLE DATE | | | | 20100525 | 20100625 | 20100622 | 20100622 | 20100623 | 20100623 | 20100601 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | GW | GW | GW | GW | GW | GW | GW |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| **VOLATILES (UG/L)** | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 200 | 9100 | 200 | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 1.3 | 1.1 U | 0.22 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NC | 59000 | NC | 0.28 U | 0.28 U | 0.28 U | 0.28 U | 0.56 J | 1.4 U | 0.28 U |
| **1,1-DICHLOROETHANE** | 90 | 2.4 | NC | 0.15 U | 0.45 J | 0.81 J | 1.5 | **2.9** | **3.5 J** | 0.15 U |
| **1,1-DICHLOROETHENE** | 7 | 340 | 7 | 0.19 U | 0.19 U | 0.53 J | **11** | **40** | **34** | 0.19 U |
| **1,2,3-TRICHLOROBENZENE** | NC | 29 | NC | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.85 UJ | 0.17 U |
| **1,2,4-TRICHLOROBENZENE** | 70 | 2.3 | 70 | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.75 UJ | 0.15 U |
| **1,2-DICHLOROBENZENE** | 600 | 370 | 600 | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.65 U | 0.13 U |
| **1,2-DICHLOROETHANE** | 5 | 0.15 | 5 | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 1.1 U | 0.22 U |
| **1,3-DICHLOROBENZENE** | 1.8 | NC | NC | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.7 U | 0.14 U |
| **1,4-DICHLOROBENZENE** | 75 | 0.43 | 75 | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.65 U | 0.13 U |
| ACETONE | 550 | 22000 | NC | 6.3 B | 1.1 U | 6.4 B | 5.8 B | 4.9 B | 5.5 U | 6.1 B |
| **BENZENE** | 5 | 0.41 | 5 | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.65 U | 0.13 U |
| **CARBON TETRACHLORIDE** | 5 | 0.44 | 5 | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.65 U | 0.13 U |
| CHLOROBENZENE | 100 | 91 | 100 | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.75 U | 0.15 U |
| **CHLOROFORM** | 80 | 0.19 | 80 | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.8 U | 0.16 U |
| CHLOROMETHANE | 19 | 190 | NC | 0.3 U | 0.3 U | 0.3 U | 0.43 J | 0.3 U | 1.5 U | 0.3 U |
| **CIS-1,2-DICHLOROETHENE** | 70 | 73 | 70 | 0.17 U | 0.35 J | 1.1 | 23 | 0.17 U | 8.2 | 0.17 U |
| **METHYL TERT-BUTYL ETHER** | 20 | 12 | NC | 0.17 UJ | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.85 U | 0.17 UJ |
| **METHYLENE CHLORIDE** | 5 | 4.8 | 5 | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 4.2 B | 0.33 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NC | 3.9 UR | 3.9 UR | 3.9 UR | 3.9 UR | 3.9 UR | 20 UR | 3.9 UR |
| **TETRACHLOROETHENE** | 5 | 0.11 | 5 | 0.29 U | 0.29 U | 0.29 U | 0.29 U | 0.29 U | 1.4 U | 0.29 U |
| TRANS-1,2-DICHLOROETHENE | 100 | 110 | 100 | 0.19 U | 0.19 U | 0.19 U | 0.52 J | 0.19 U | 0.95 U | 0.19 U |
| **TRICHLOROETHENE** | 5 | 2 | 5 | 0.17 U | 0.47 J | 0.73 J | **34** | 0.55 J | **58** | 0.17 U |
| **VINYL CHLORIDE** | 2 | 0.016 | 2 | 0.22 U | 0.22 U | 0.22 U | **0.77 J** | **0.4 J** | 1.1 U | 0.22 U |
| **SEMIVOLATILES (UG/L)** | | | | | | | | | | |
| **1,4-DIOXANE** | NC | 0.67 | NC | 0.49 U | NA | **1.5** | **17** | 0.49 U | 0.49 U | 0.49 U |
| **VOLATILE GASES (UG/L)** | | | | | | | | | | |
| ETHANE | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| METHANE | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| **METALS (UG/L)** | | | | | | | | | | |
| **ANTIMONY** | 6 | 15 | 6 | 0.027 U | 0.08 B | 0.52 B | 0.59 B | 0.48 B | 0.73 J | 0.062 B |
| **ARSENIC** | 10 | 0.045 | 10 | 0.16 U | **1.3 J** | **8.2** | **12.4** | **0.98 J** | **0.33 J** | **1.2 J** |
| BARIUM | 2000 | 7300 | 2000 | 15.6 | 120 | 145 | 680 | 54 | 92.6 | 191 |
| **BERYLLIUM** | 4 | 73 | 4 | 0.32 B | 0.063 B | 3 | **4.5** | **8.7** | 0.026 J | 0.53 B |
| CADMIUM | 5 | 18 | 5 | 0.025 U | 0.041 J | 0.57 J | 0.082 B | 2.1 | 0.082 B | 0.091 B |
| **CHROMIUM** | 100 | NC | 100 | 0.21 B | 0.66 J | 25.2 | **233** | 2.3 | 0.88 B | 1.3 J |
| **COBALT** | NC | 11 | NC | 0.18 J | **60.6** | **52.6** | **27.6** | **54.6** | **72.5** | **127** |
| COPPER | 1300 | 1500 | 1300 | 0.12 B | 0.31 B | 21.4 | 28.8 | 3.1 B | 0.84 B | 2.1 B |
| **IRON** | 300 | 26000 | NC | 243 | **17000** | **86800** | **81300** | **2590** | **29100** | **63200** |
| **LEAD** | 15 | NC | 15 | 0.085 B | 0.057 B | **21.2** | **42.8** | 1.9 | 0.52 J | 0.92 J |
| **MANGANESE** | 50 | 880 | NC | 24.2 | **578** | **3010** | **848** | **1370** | **3400** | **39500** |
| MOLYBDENUM | NC | 180 | NC | 0.27 U | 0.27 U | 0.85 J | 1.8 J | 0.27 U | 0.81 B | 0.27 U |
| **NICKEL** | 73 | 730 | NC | 1.3 J | **77.6** | 59 | 64.5 | **115** | **82.9** | **261** |
| POTASSIUM | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 50 | 180 | 50 | 0.13 UL | 0.2 J | 4 J | 8.9 | 0.55 B | 0.13 B | 0.19 B |
| SILVER | 100 | 180 | NC | 0.015 U | 0.015 U | 0.28 J | 0.046 B | 0.015 U | 0.015 U | 0.015 U |
| THALLIUM | 2 | NC | 2 | 0.13 U | 0.13 U | 0.13 U | 0.51 B | 0.13 U | 0.13 U | 0.13 U |
| **VANADIUM** | 3.7 | 180 | NC | 0.43 U | 0.43 U | **45.9** | **279** | **4.2 J** | 3.2 J | 1.5 J |
| **ZINC** | 5000 | 11000 | NC | 3.8 B | 37.8 | 690 | 1760 | 310 | 247 | 162 |
| **MISCELLANEOUS PARAMETERS (MG/L)** | | | | | | | | | | |
| ALKALINITY | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| AMMONIA-N | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| CHLORIDE | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| DISSOLVED ORGANIC CARBON | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| NITRATE-N | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| ORTHOPHOSPHATE-P | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| SULFATE | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| TOTAL DISSOLVED SOLIDS | NC | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/L)** | | | | | | | | | | |
| **HEXAVALENT CHROMIUM** | 100 | 0.043 | NC | NA | NA | NA | NA | NA | NA | NA |

**Table 4-23**

**Detected Concentrations Groundwater - May-June 2010**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| BLOCK<br>LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE | MDE Cleanup Standards for Groundwater (Type I Aquifer)[1, 4] | USEPA Regional Screening Level forTap Water[2, 4] | USEPA MCL[3] | BLOCK H<br>MRC-MW52A<br>MRC-MW52A-052410<br>20100524<br>NORMAL<br>GW<br>NORMAL | BLOCK H<br>MRC-MW53A<br>MRC-MW53A-052410<br>20100524<br>NORMAL<br>GW<br>NORMAL |
|---|---|---|---|---|---|
| **VOLATILES (UG/L)** | | | | | |
| 1,1,1-TRICHLOROETHANE | 200 | 9100 | 200 | 0.22 U | 2.2 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NC | 59000 | NC | 0.28 U | 2.8 U |
| **1,1-DICHLOROETHANE** | 90 | 2.4 | NC | 1.9 | 1.5 U |
| **1,1-DICHLOROETHENE** | 7 | 340 | 7 | 0.19 U | **8.1 J** |
| **1,2,3-TRICHLOROBENZENE** | NC | 29 | NC | 0.17 U | 1.7 U |
| **1,2,4-TRICHLOROBENZENE** | 70 | 2.3 | 70 | 0.15 U | 1.5 U |
| **1,2-DICHLOROBENZENE** | 600 | 370 | 600 | 0.13 U | 1.3 U |
| **1,2-DICHLOROETHANE** | 5 | 0.15 | 5 | 0.22 U | 2.2 U |
| **1,3-DICHLOROBENZENE** | 1.8 | NC | NC | 0.14 U | 1.4 U |
| **1,4-DICHLOROBENZENE** | 75 | 0.43 | 75 | 0.13 U | 1.3 U |
| ACETONE | 550 | 22000 | NC | 18 B | 11 U |
| **BENZENE** | 5 | 0.41 | 5 | 0.13 U | 1.3 U |
| **CARBON TETRACHLORIDE** | 5 | 0.44 | 5 | 0.13 U | 1.3 U |
| CHLOROBENZENE | 100 | 91 | 100 | 0.15 U | 1.5 U |
| **CHLOROFORM** | 80 | 0.19 | 80 | **0.23 J** | **2.3 J** |
| CHLOROMETHANE | 19 | 190 | NC | 0.3 U | 3 U |
| **CIS-1,2-DICHLOROETHENE** | 70 | 73 | 70 | 0.17 U | 6.6 J |
| **METHYL TERT-BUTYL ETHER** | 20 | 12 | NC | 0.17 UJ | 1.7 UJ |
| **METHYLENE CHLORIDE** | 5 | 4.8 | 5 | **6.4 J** | 3.3 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NC | 3.9 UR | 39 UR |
| **TETRACHLOROETHENE** | 5 | 0.11 | 5 | 0.29 U | 2.9 U |
| TRANS-1,2-DICHLOROETHENE | 100 | 110 | 100 | 0.19 U | 1.9 U |
| **TRICHLOROETHENE** | 5 | 2 | 5 | 0.17 U | **270** |
| **VINYL CHLORIDE** | 2 | 0.016 | 2 | 0.22 U | 2.2 U |
| **SEMIVOLATILES (UG/L)** | | | | | |
| **1,4-DIOXANE** | NC | 0.67 | NC | NA | **12** |
| **VOLATILE GASES (UG/L)** | | | | | |
| ETHANE | NC | NC | NC | NA | NA |
| METHANE | NC | NC | NC | NA | NA |
| **METALS (UG/L)** | | | | | |
| **ANTIMONY** | 6 | 15 | 6 | 0.33 B | 0.11 B |
| **ARSENIC** | 10 | 0.045 | 10 | **1.3 J** | 0.16 U |
| BARIUM | 2000 | 7300 | 2000 | 947 | 97.2 |
| **BERYLLIUM** | 4 | 73 | 4 | **75.7** | **7.7** |
| CADMIUM | 5 | 18 | 5 | 3.5 | 0.21 J |
| **CHROMIUM** | 100 | NC | 100 | 1.1 B | 2.3 B |
| **COBALT** | NC | 11 | NC | **2470** | **51.8** |
| COPPER | 1300 | 1500 | 1300 | 130 | 11.8 |
| **IRON** | 300 | 26000 | NC | **16000** | 45.8 B |
| **LEAD** | 15 | NC | 15 | 1.4 | 0.18 B |
| **MANGANESE** | 50 | 880 | NC | **33400** | **226** |
| MOLYBDENUM | NC | 180 | NC | 0.27 U | 0.27 U |
| **NICKEL** | 73 | 730 | NC | **1720** | **94.5** |
| POTASSIUM | NC | NC | NC | NA | NA |
| SELENIUM | 50 | 180 | 50 | 1.8 J | 0.14 B |
| SILVER | 100 | 180 | NC | 0.26 J | 0.015 U |
| THALLIUM | 2 | NC | 2 | 1.2 | 0.13 U |
| **VANADIUM** | 3.7 | 180 | NC | 0.43 U | 0.43 U |
| **ZINC** | 5000 | 11000 | NC | 3200 | 176 |
| **MISCELLANEOUS PARAMETERS (MG/L)** | | | | | |
| ALKALINITY | NC | NC | NC | NA | NA |
| AMMONIA-N | NC | NC | NC | NA | NA |
| CHLORIDE | NC | NC | NC | NA | NA |
| DISSOLVED ORGANIC CARBON | NC | NC | NC | NA | NA |
| NITRATE-N | NC | NC | NC | NA | NA |
| ORTHOPHOSPHATE-P | NC | NC | NC | NA | NA |
| SULFATE | NC | NC | NC | NA | NA |
| TOTAL DISSOLVED SOLIDS | NC | NC | NC | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/L)** | | | | | |
| **HEXAVALENT CHROMIUM** | 100 | 0.043 | NC | NA | NA |

**Table 4-23**

**Detected Concentrations Table for Groundwater**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


Notes:
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010.
3 - 2009 Edition of the Drinking Water Standards and Health Advisories (USEPA, October 2009).
4 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for tap water are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.

Definitions: NC = no criterion available; MCL = Maximum Contaminant Level; SDWA = Safe Drinking Water Act
Qualifiers: B = present in blank; J = estimated; K = biased high; L = biased low; U = non-detected; R = rejected

A shaded chemical name indicates that at least one sample concentration exceeds at least one criterion.

**Table 4-24**

**Occurrence and Distribution of Chemicals - Groundwater - Tax Block Soils**
**Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**

| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Groundwater[4] | # Detects Greater than MDE Cleanup Standards - Groundwater[1] | USEPA RBC - Tap Water[5] | # Detects Greater than USEPA RBC - Tap Water[1] | # Detects Greater than 10X USEPA RBC - Tap Water[1] | USEPA MCL[6] | # Detects Greater than USEPA MCL [1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/L)** | | | | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 3/17 | 0.25 | J | 0.82 | J | MRC-MW34B-061710 | 0.15 | 110 | 0.55 | 6.4 | 90 | 0 | 2.4 | 0 | 0 | NC | NC |
| 1,1-DICHLOROETHENE | 2/17 | 0.33 | J | 0.48 | J | MRC-MW30A-052810 | 0.19 | 140 | 0.41 | 8.0 | 7 | 0 | 340 | 0 | 0 | 7 | 0 |
| 1,2,3-TRICHLOROBENZENE | 2/17 | 16 | | 2000 | | MRC-MW43A-060210 | 0.17 | 120 | 1008 | 123 | NC | NC | 29 | 1 | 1 | NC | NC |
| 1,2,4-TRICHLOROBENZENE | 3/17 | 0.47 | J | 11000 | | MRC-MW43A-060210 | 0.15 | 110 | 3697 | 657 | 70 | 2 | 2.3 | 2 | 2 | 70 | 2 |
| 1,2-DICHLOROBENZENE | 2/17 | 4.3 | | 450 | J | MRC-MW43A-060210 | 0.13 | 93 | 227 | 30.2 | 600 | 0 | 370 | 1 | 0 | 600 | 0 |
| 1,3-DICHLOROBENZENE | 2/17 | 0.45 | J | 22 | | MRC-MW36A-060310 | 0.14 | 100 | 11.2 | 7.1 | 1.8 | 1 | NC | NC | NC | NC | NC |
| 1,4-DICHLOROBENZENE | 3/17 | 1.3 | J | 570 | | MRC-MW43A-060210 | 0.13 | 93 | 199 | 38.5 | 75 | 1 | 0.43 | 3 | 2 | 75 | 1 |
| ACETONE | 6/17 | 5.7 | J | 13 | | MRC-MW72A-060310 | 3.6 | 790 | 9.1 | 49.4 | 550 | 0 | 22000 | 0 | 0 | NC | NC |
| BENZENE | 1/17 | 0.91 | J | 0.91 | J | MRC-MW36A-060310 | 0.13 | 93 | 0.91 | 5.4 | 5 | 0 | 0.41 | 1 | 0 | 5 | 0 |
| CARBON TETRACHLORIDE | 1/17 | 13 | | 13 | | MRC-MW34B-061710 | 0.13 | 93 | 13.0 | 6.1 | 5 | 1 | 0.44 | 1 | 1 | 5 | 1 |
| CHLOROBENZENE | 2/17 | 1.3 | J | 37 | | MRC-MW36A-060310 | 0.15 | 110 | 19.2 | 8.5 | 100 | 0 | 91 | 0 | 0 | 100 | 0 |
| CHLOROFORM | 3/17 | 0.19 | J | 3.2 | | MRC-MW34B-061710 | 0.16 | 110 | 1.4 | 6.7 | 80 | 0 | 0.19 | 2 | 1 | 80 | 0 |
| CHLOROMETHANE | 4/17 | 0.3 | J | 1.3 | | MRC-MW73A-060410 | 0.3 | 210 | 0.59 | 12.3 | 19 | 0 | 190 | 0 | 0 | NC | NC |
| CIS-1,2-DICHLOROETHENE | 8/17 | 0.36 | J | 360 | J | MRC-MW74B-060710 | 0.17 | 85 | 51.2 | 27.5 | 70 | 1 | 73 | 1 | 0 | 70 | 1 |
| METHYL TERT-BUTYL ETHER | 3/17 | 0.21 | J | 21 | | MRC-MW34B-061710 | 0.17 | 120 | 7.7 | 8.3 | 20 | 1 | 12 | 1 | 0 | NC | NC |
| TERTIARY-BUTYL ALCOHOL | 1/1 | 31 | L | 31 | L | MRC-MW34B-061710 | | | 31.0 | 31.0 | NC | NC | NC | NC | NC | NC | NC |
| TRANS-1,2-DICHLOROETHENE | 2/17 | 1.7 | | 1.9 | | MRC-MW34B-061710 | 0.19 | 140 | 1.8 | 8.2 | 100 | 0 | 110 | 0 | 0 | 100 | 0 |
| TRICHLOROETHENE | 12/17 | 0.55 | J | 19000 | | MRC-MW74B-060710 | 0.17 | 85 | 1959 | 1385 | 5 | 7 | 2 | 9 | 6 | 5 | 7 |
| VINYL CHLORIDE | 1/17 | 3.8 | | 3.8 | | MRC-MW34B-061710 | 0.22 | 160 | 3.8 | 9.4 | 2 | 1 | 0.016 | 1 | 1 | 2 | 1 |
| **Semivolatile Organics (ug/L)** | | | | | | | | | | | | | | | | | |
| 1,4-DIOXANE | 1/3 | 4.6 | | 4.6 | | MRC-MW44A-052810 | 0.49 | 0.49 | 4.6 | 1.7 | NC | NC | 0.67 | 1 | 0 | NC | NC |
| **Volatile Gases (ug/L)** | | | | | | | | | | | | | | | | | |
| ETHANE | 2/4 | 0.36 | J | 0.55 | | MRC-MW34B-061710 | 0.26 | 0.26 | 0.46 | 0.29 | NC | NC | NC | NC | NC | NC | NC |
| METHANE | 3/4 | 21 | | 150 | | MRC-MW34B-061710 | 0.1 | 0.1 | 69.0 | 51.8 | NC | NC | NC | NC | NC | NC | NC |
| **Inorganics (ug/L)** | | | | | | | | | | | | | | | | | |
| ARSENIC | 6/17 | 0.16 | J | 1.8 | J | MRC-MW36A-060310 | 0.16 | 0.63 | 1.1 | 0.47 | 10 | 0 | 0.045 | 6 | 5 | 10 | 0 |
| BARIUM | 17/17 | 14.8 | | 148 | | MRC-MW34B-061710 | | | 56.6 | 56.6 | 2000 | 0 | 7300 | 0 | 0 | 2000 | 0 |
| BERYLLIUM | 7/17 | 0.36 | J | 9.4 | | MRC-MW34B-061710 | 0.0059 | 1.9 | 3.2 | 1.4 | 4 | 2 | 73 | 0 | 0 | 4 | 2 |
| CHROMIUM | 12/17 | 0.43 | J | 12 | | MRC-MW36A-060310 | 0.11 | 0.69 | 2.4 | 1.7 | 100 | 0 | NC | NC | NC | 100 | 0 |
| COBALT | 17/17 | 0.89 | J | 124 | | MRC-MW34B-061710 | | | 22.1 | 22.1 | NC | NC | 11 | 8 | 1 | NC | NC |
| COPPER | 3/17 | 10.6 | | 36.8 | | MRC-MW34B-061710 | 0.2 | 5.1 | 24.2 | 5.1 | 1300 | 0 | 1500 | 0 | 0 | 1300 | 0 |
| IRON | 15/17 | 43.5 | J | 33200 | | MRC-MW44A-052810 | 6 | 142 | 4686 | 4139 | 300 | 14 | 26000 | 1 | 0 | NC | NC |
| LEAD | 5/17 | 0.47 | J | 3.5 | | MRC-MW36A-060310 | 0.019 | 0.42 | 1.2 | 0.37 | 15 | 0 | NC | NC | NC | 15 | 0 |
| MANGANESE | 16/17 | 3.5 | | 3370 | | MRC-MW74A-060410 | 3.6 | 3.6 | 379 | 357 | 50 | 9 | 880 | 1 | 0 | NC | NC |
| MOLYBDENUM | 2/17 | 0.41 | J | 0.46 | J | MRC-MW36A-060310 | 0.27 | 0.75 | 0.44 | 0.19 | NC | NC | 180 | 0 | 0 | NC | NC |
| NICKEL | 14/17 | 4.1 | | 162 | | MRC-MW34B-061710 | 0.44 | 1.4 | 33.4 | 27.6 | 73 | 2 | 730 | 0 | 0 | NC | NC |
| POTASSIUM | 4/4 | 2260 | | 9010 | | MRC-MW34A-061510 | | | 5643 | 5643 | NC | NC | NC | NC | NC | NC | NC |
| SELENIUM | 7/17 | 0.44 | J | 1.7 | J | MRC-MW34A-061510 | 0.13 | 0.26 | 0.99 | 0.45 | 50 | 0 | 180 | 0 | 0 | 50 | 0 |
| VANADIUM | 11/17 | 0.57 | J | 22.2 | | MRC-MW36A-060310 | 0.43 | 1.3 | 5.8 | 3.9 | 3.7 | 5 | 180 | 0 | 0 | NC | NC |
| ZINC | 10/17 | 53.8 | | 361 | | MRC-MW74C-060710 | 2.9 | 69.8 | 157 | 97.7 | 5000 | 0 | 11000 | 0 | 0 | NC | NC |
| **Miscellaneous Parameters (ug/L)** | | | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1/3 | 0.96 | J | 0.96 | J | MRC-MW34A-061510 | 0.11 | 0.11 | 0.96 | 0.36 | 100 | 0 | 0.043 | 1 | 1 | 100 | 0 |
| **Miscellaneous Parameters (mg/L)** | | | | | | | | | | | | | | | | | |
| ALKALINITY | 3/4 | 7.4 | | 27 | | MRC-MW34A-061510 | 5.1 | 5.1 | 16.8 | 13.2 | NC | NC | NC | NC | NC | NC | NC |
| CHLORIDE | 4/4 | 19.8 | | 189 | | MRC-MW34B-061710 | | | 84.4 | 84.4 | NC | NC | NC | NC | NC | NC | NC |
| DISSOLVED ORGANIC CARBON | 4/4 | 0.6 | J | 3 | | MRC-MW36A-060310 | | | 1.7 | 1.7 | NC | NC | NC | NC | NC | NC | NC |
| NITRATE-N | 4/4 | 0.1 | | 1.1 | | MRC-MW34A-061510 | | | 0.38 | 0.38 | NC | NC | NC | NC | NC | NC | NC |
| ORTHOPHOSPHATE-P | 4/4 | 0.1 | J | 1.2 | J | MRC-MW36A-060310 | | | 0.50 | 0.50 | NC | NC | NC | NC | NC | NC | NC |
| SULFATE | 4/4 | 4.8 | | 18.9 | | MRC-MW36A-060310 | | | 13.0 | 13.0 | NC | NC | NC | NC | NC | NC | NC |
| TOTAL DISSOLVED SOLIDS | 4/4 | 100 | | 360 | | MRC-MW34B-061710 | | | 205 | 205 | NC | NC | NC | NC | NC | NC | NC |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010.
6 - 2009 Edition of the Drinking Water Standards and Health Advisories (USEPA, October 2009).

**Definitions:**
J = Estimated value
L = Biased low
MCL = Maximum Contaminant Level
NC = No criteria

**Table 4-25**

**Occurrence and Distribution of Chemicals - Groundwater - Tax Block Soils**
**Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Parameter | Frequency of Detection[1] | Minimum Concentration[1] | | Maximum Concentration[1] | | Sample of Maximum Concentration | Minimum Nondetect | Maximum Nondetect | Average of Positive Results[2] | Overall Average[3] | MDE Cleanup Standards - Groundwater[4] | # Detects Greater than MDE Cleanup Standards - Groundwater[1] | USEPA RBC - Tap Water[5] | # Detects Greater than USEPA RBC - Tap Water[1] | # Detects Greater than 10X USEPA RBC - Tap Water[1] | USEPA MCL[6] | # Detects Greater than USEPA MCL [1] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Volatile Organics (ug/L)** | | | | | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 1/19 | 1.3 | | 1.3 | | MRC-MW71A-062310 | 0.22 | 22 | 1.3 | 1.1 | 200 | 0 | 9100 | 0 | 0 | 200 | 0 |
| 1,1,2-TRICHLOROTRIFLUOROETHAN | 1/19 | 0.56 | J | 0.56 | J | MRC-MW71A-062310 | 0.28 | 28 | 0.56 | 1.4 | NC | NC | 59000 | 0 | 0 | NC | NC |
| 1,1-DICHLOROETHANE | 13/19 | 0.42 | J | 49 | J | MRC-MW14B-062210 | 0.15 | 0.15 | 9.3 | 6.4 | 90 | 0 | 2.4 | 8 | 1 | NC | NC |
| 1,1-DICHLOROETHENE | 12/19 | 0.53 | J | 780 | | MRC-MW14B-062210 | 0.19 | 0.19 | 110 | 69.3 | 7 | 9 | 340 | 1 | 0 | 7 | 9 |
| 1,2-DICHLOROETHANE | 1/19 | 0.59 | J | 0.59 | J | MRC-MW15A-062210 | 0.22 | 22 | 0.59 | 1.1 | 5 | 0 | 0.15 | 1 | 0 | 5 | 0 |
| CHLOROMETHANE | 3/19 | 0.32 | J | 0.49 | J | MRC-MW14A-062210 | 0.3 | 30 | 0.41 | 1.5 | 19 | 0 | 190 | 0 | 0 | NC | NC |
| CIS-1,2-DICHLOROETHENE | 12/19 | 0.28 | J | 120 | | MRC-MW12A-061610 | 0.17 | 0.34 | 22.0 | 14.0 | 70 | 1 | 73 | 1 | 0 | 70 | 1 |
| METHYLENE CHLORIDE | 1/19 | 40 | J | 40 | J | MRC-MW14B-062210 | 0.33 | 57 | 40.0 | 4.1 | 5 | 1 | 4.8 | 1 | 0 | 5 | 1 |
| TETRACHLOROETHENE | 1/19 | 3.7 | | 3.7 | | MRC-MW16A-062310 | 0.29 | 29 | 3.7 | 1.6 | 5 | 0 | 0.11 | 1 | 1 | 5 | 0 |
| TRANS-1,2-DICHLOROETHENE | 2/19 | 0.52 | J | 5.1 | | MRC-MW14A-062210 | 0.19 | 19 | 2.8 | 1.2 | 100 | 0 | 110 | 0 | 0 | 100 | 0 |
| TRICHLOROETHENE | 11/19 | 0.47 | J | 2800 | | MRC-MW14B-062210 | 0.17 | 0.34 | 438 | 254 | 5 | 8 | 2 | 8 | 5 | 5 | 8 |
| VINYL CHLORIDE | 7/19 | 0.22 | J | 7.2 | | MRC-MW15A-062210 | 0.22 | 22 | 1.8 | 1.7 | 2 | 2 | 0.016 | 7 | 7 | 2 | 2 |
| **Semivolatile Organics (ug/L)** | | | | | | | | | | | | | | | | | |
| 1,4-DIOXANE | 10/18 | 0.96 | J | 360 | | MRC-MW14B-062210 | 0.49 | 0.49 | 61.5 | 34.3 | NC | NC | 0.67 | 10 | 5 | NC | NC |
| **Volatile Gases (ug/L)** | | | | | | | | | | | | | | | | | |
| ETHANE | 1/1 | 0.27 | J | 0.27 | J | MRC-MW14B-062210 | | | 0.27 | 0.27 | NC | NC | NC | NC | NC | NC | NC |
| METHANE | 1/1 | 33 | | 33 | | MRC-MW14B-062210 | | | 33.0 | 33.0 | NC | NC | NC | NC | NC | NC | NC |
| **Inorganics (ug/L)** | | | | | | | | | | | | | | | | | |
| ANTIMONY | 6/19 | 0.067 | J | 6.1 | | MRC-MW16A-062310 | 0.027 | 0.59 | 1.5 | 0.57 | 6 | 1 | 15 | 0 | 0 | 6 | 1 |
| ARSENIC | 18/19 | 0.33 | J | 13.8 | | MRC-MW15A-062210 | 0.16 | 0.16 | 3.0 | 2.9 | 10 | 2 | 0.045 | 18 | 17 | 10 | 2 |
| BARIUM | 19/19 | 15.6 | | 680 | | MRC-MW70B-062210 | | | 103 | 103 | 2000 | 0 | 7300 | 0 | 0 | 2000 | 0 |
| BERYLLIUM | 11/19 | 0.026 | J | 8.7 | | MRC-MW71A-062310 | 0.0059 | 0.32 | 1.8 | 1.1 | 4 | 2 | 73 | 0 | 0 | 4 | 2 |
| CADMIUM | 3/19 | 0.041 | J | 2.1 | | MRC-MW71A-062310 | 0.025 | 0.25 | 0.90 | 0.17 | 5 | 0 | 18 | 0 | 0 | 5 | 0 |
| CHROMIUM | 14/19 | 0.6 | J | 233 | | MRC-MW70B-062210 | 0.21 | 1.7 | 21.6 | 16.0 | 100 | 1 | NC | NC | NC | 100 | 1 |
| COBALT | 19/19 | 0.18 | J | 72.5 | | MRC-MW71B-062310 | | | 34.5 | 34.5 | NC | NC | 11 | 14 | 0 | NC | NC |
| COPPER | 8/19 | 5.1 | J | 28.8 | | MRC-MW70B-062210 | 0.12 | 3.1 | 14.4 | 6.5 | 1300 | 0 | 1500 | 0 | 0 | 1300 | 0 |
| IRON | 19/19 | 243 | | 96800 | | MRC-MW11A-062310 | | | 31860 | 31860 | 300 | 18 | 26000 | 9 | 0 | NC | NC |
| LEAD | 15/19 | 0.47 | J | 42.8 | | MRC-MW70B-062210 | 0.019 | 0.085 | 6.3 | 5.0 | 15 | 2 | NC | NC | NC | 15 | 2 |
| MANGANESE | 19/19 | 24.2 | | 7410 | | MRC-MW11A-062310 | | | 2059 | 2059 | 50 | 18 | 880 | 11 | 0 | NC | NC |
| MOLYBDENUM | 6/19 | 0.27 | J | 1.8 | J | MRC-MW70B-062210 | 0.27 | 1 | 0.79 | 0.41 | NC | NC | 180 | 0 | 0 | NC | NC |
| NICKEL | 19/19 | 1.3 | J | 115 | | MRC-MW71A-062310 | | | 41.0 | 41.0 | 73 | 3 | 730 | 0 | 0 | NC | NC |
| POTASSIUM | 1/1 | 3910 | | 3910 | | MRC-MW14B-062210 | | | 3910 | 3910 | NC | NC | NC | NC | NC | NC | NC |
| SELENIUM | 12/19 | 0.19 | J | 8.9 | | MRC-MW70B-062210 | 0.13 | 0.55 | 1.7 | 1.1 | 50 | 0 | 180 | 0 | 0 | 50 | 0 |
| SILVER | 2/19 | 0.28 | J | 0.31 | J | MRC-MW14B-062210 | 0.015 | 0.046 | 0.30 | 0.04 | 100 | 0 | 180 | 0 | 0 | NC | NC |
| VANADIUM | 14/19 | 1.1 | J | 279 | | MRC-MW70B-062210 | 0.43 | 2.7 | 28.6 | 21.2 | 3.7 | 10 | 180 | 1 | 0 | NC | NC |
| ZINC | 16/19 | 30.1 | K | 1760 | | MRC-MW70B-062210 | 3.8 | 22.5 | 254 | 215 | 5000 | 0 | 11000 | 0 | 0 | NC | NC |
| **Miscellaneous Parameters (ug/L)** | | | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1/8 | 0.71 | J | 0.71 | J | MRC-MW15A-062210 | 0.11 | 0.11 | 0.71 | 0.14 | 100 | 0 | 0.043 | 1 | 1 | 100 | 0 |
| **Miscellaneous Parameters (mg/L)** | | | | | | | | | | | | | | | | | |
| AMMONIA-N | 1/1 | 0.3 | | 0.3 | | MRC-MW14B-062210 | | | 0.30 | 0.30 | NC | NC | NC | NC | NC | NC | NC |
| CHLORIDE | 1/1 | 104 | | 104 | | MRC-MW14B-062210 | | | 104 | 104 | NC | NC | NC | NC | NC | NC | NC |
| DISSOLVED ORGANIC CARBON | 1/1 | 5 | | 5 | | MRC-MW14B-062210 | | | 5.0 | 5.0 | NC | NC | NC | NC | NC | NC | NC |
| SULFATE | 1/1 | 69.4 | | 69.4 | | MRC-MW14B-062210 | | | 69.4 | 69.4 | NC | NC | NC | NC | NC | NC | NC |
| TOTAL DISSOLVED SOLIDS | 1/1 | 320 | | 320 | | MRC-MW14B-062210 | | | 320 | 320 | NC | NC | NC | NC | NC | NC | NC |

**Notes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum detected concentrations and as one sample when determining the frequency of detection and exceedances.
2 - Average of positive analytical results only.
3 - Average of all analytical results are calculated using half of the detection limit for nondetects.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010.
6 - 2009 Edition of the Drinking Water Standards and Health Advisories (USEPA, October 2009).

**Definitions:**
J = Estimated value
K = Biased high
MCL = Maximum Contaminant Level
NC = No criteria

# Section 5
# Uncertainty Analysis

The uncertainty analysis component of this human health risk assessment (HHRA) summarizes uncertainties inherent in the risk assessment and includes a discussion of how they may affect the quantitative risk estimates and risk analysis conclusions. The baseline HHRA for the study area was done in accordance with current U.S Environmental Protection Agency (USEPA) guidance. However, varying degrees of uncertainty are associated with any baseline HHRA. A brief discussion of uncertainty issues that must generally be considered in an HHRA is provided in the following narrative.

Uncertainty in selecting chemicals of potential concern (COPC) is related to the status of the available databases, the grouping of samples, the numbers, types, and distributions of samples, data quality, and the procedures used to include or exclude constituents as COPC. Uncertainty associated with the exposure assessment can stem from the values used as input variables for a given intake route or scenario, the assumptions made to determine exposure-point concentrations (EPCs), and the predictions made regarding future land uses and population characteristics. Uncertainty in the toxicity assessment stems from the quality of the existing toxicity data needed to support dose-response relationships and the weight of evidence used to determine the carcinogenicity of COPC. Uncertainty in risk characterization is associated with receptor exposure to multiple chemicals and the cumulative uncertainty arising from combining conservative assumptions made in earlier steps of the risk assessment.

Whereas various sources of random uncertainty and bias exist, the magnitude of bias and uncertainty and the direction of bias are influenced by the assumptions made throughout the risk assessment, including selection of COPC and of values for dose-response relationships. Throughout the risk assessment, assumptions that consider safety factors must be made to overestimate the final calculated risks. Risk assessments generally carry two types of uncertainty: *measurement* and *informational* uncertainty.

*Measurement uncertainty* refers to the usual variance that accompanies scientific measurements. For example, this type of uncertainty is associated with the analytical data collected for each site. The risk assessment reflects the accumulated variances of the individual values used.

*Informational uncertainty* stems from inadequate availability of information needed to complete the toxicity and exposure assessments. This gap is often significant, such as the absence of information on the effects of human exposure to low doses of a chemical, the biological mechanism of chemical action, or the behavior of a chemical in soil. After the risk assessment is complete, the results must be reviewed and evaluated to identify the type and magnitude of uncertainty involved. Relying on risk assessment results without considering the uncertainties, limitations, and assumptions inherent in the process can be misleading. For example, to account for uncertainties in developing exposure assumptions, conservative estimates must be made to ensure that the particular assumptions protect sensitive subpopulations or maximally exposed individuals.

If a number of conservative assumptions are combined in an exposure model, the resulting calculations can propagate the uncertainties associated with those assumptions, thereby producing much larger uncertainty in the results. This uncertainty is biased toward over predicting both carcinogenic and noncarcinogenic risks. Thus, both the results of the risk assessment and the uncertainties associated with them must be considered when making risk management decisions.

This interpretation of uncertainty is especially relevant when the risks exceed the point of departure for defining regulatorily "acceptable" risk. For example, when risks calculated using a high degree of uncertainty are less than an "acceptable" risk level (i.e., $10^{-6}$), the interpretation of "no significant risk" is typically straightforward. However, when risks calculated with a high degree of uncertainty exceed a regulatorily acceptable risk level (i.e., $10^{-4}$) reaching a conclusion can be difficult unless uncertainty is considered. The HHRA was prepared using the November 2010 regional screening-levels (RSLs). However, the RSLs are "evergreen" screening values and subject to change as new toxicity information becomes available and is evaluated by USEPA. Consequently, the COPC could change if the RSLs change.

## 5.1 UNCERTAINTY IN COPC SELECTION

The most significant issues related to uncertainty in COPC selection at the subject tax blocks are the usability of existing databases (only validated data were used in the risk assessment), the COPC screening levels used, the selection of COPC using USEPA generic soil screening-levels (SSLs) for transfers from soil to air, and the absence of screening levels for a few chemicals detected in site environmental media. A brief discussion of each of these issues is provided in the remainder of this section.

***Usability and completeness of existing databases—***As discussed in Section 3, data from samples collected in previous field investigations (2003–2009), as well as data collected during field investigations in 2010, were used to assess risks to potential human receptors from exposure to contaminated environmental media. These data were validated according to USEPA data-validation guidelines. Only fixed-base analytical results (i.e., results from a fixed-base laboratory, as opposed to field analytical results) from the field investigations for the lists of target analytes were used in the quantitative risk evaluation. Data regarded as rejected (i.e., qualified as "R" during data validation) were not used in the quantitative risk assessment. Elimination of data qualified as "R" may increase uncertainty in the risk assessment.

Naphthalene results were analyzed and reported in both the volatile organic compound (VOC) and polycyclic aromatic-hydrocarbon (PAH) fractions. The extraction and analytical methods used in either VOC or PAH methods may provide more accurate naphthalene results. However, both the VOC and PAH naphthalene results were included in selecting COPC. This is particularly important because not all samples were analyzed for naphthalene in both fractions. For subsurface soil, naphthalene was selected as a COPC in both the VOC and PAH fractions. For EPCs in the quantitative risk assessment, the maximum EPC of naphthalene from either the VOC or the PAH fractions was used for each tax block. In subsurface soil, the maximum EPC for naphthalene is from the VOC fraction for Blocks D, F, and G, and from the PAH fraction for Blocks E and H. Using the higher concentration ensures that risks due to naphthalene are not underestimated.

Several sampling locations were resampled for benzo(a)pyrene and related chemicals to obtain lower detection limits (see table below). To avoid including elevated detection limits in the risk

calculations, resampled results were used instead of the original results if the original results were all non-detects. However, to be conservative, no positive detections were removed from the data sets. Therefore, if positive results were included in the original sampling, those results were included in the risk calculations along with the resampling results. This may overestimate risks from BaPEq at locations where resampling occurred.

| Locations of benzo(a)pyrene and related chemicals resampling | | | |
|---|---|---|---|
| **Block D** | **Block F** | **Block G** | **Block H** |
| SB-57 | SB-56 | SB-81 | SB-282 |
| SB-58 | SB-93 | SB-82 | |
| SB-60 | SB-94 | SB-83 | |
| SB-61 | SB-95 | SB-86 | |
| SB-62 | SB-96 | SB-91 | |
| SB-63 | | SB-92 | |
| SB-65 | | SB-254 | |
| SB-66 | | SB-257 | |
| SB-240 | | | |
| SB-243 | | | |

Soil samples collected from 0–10 feet below ground surface (bgs) were included in the quantitative risk evaluation. Some uncertainty is associated with some samples included in the subsurface soil data because groundwater is relatively shallow at these tax blocks (i.e., within 10 feet of ground surface). Therefore, some of the samples included in the subsurface data set for the quantitative risk assessment may be saturated. The following table presents average and maximum groundwater depths for each tax block:

| Sampling date | Average depth to groundwater (feet) | | | | |
|---|---|---|---|---|---|
| | Block D | Block E | Block F | Block G | Block H |
| 6/5/2005 | 1.87 | 2.92 | 4.00 | 2.42 | 0* |
| 10/13/2005 | 1.67 | 3.12 | 4.90 | 0.72 | 0* |
| 12/6/2005 | **2.98** | 3.11 | 6.07 | 1.54 | **5.37** |
| 10/30/2008 | 2.95 | **4.93** | 5.53 | 2.30 | 4.34 |
| 7/22/2009 | 1.58 | 4.90 | 4.13 | 3.00 | 4.24 |
| 6/30/2010 | 2.93 | 4.82 | **7.20** | **3.78** | 3.60 |
| **Average depth selected:** | 3 | 5 | 7 | 4 | 5 |
| **Sampling date** | **Maximum depth to groundwater (feet)** | | | | |
| 6/5/2005 | 5.21 | 7.11 | 4.6 | 7.65 | 0 |
| 10/13/2005 | 5.55 | 7.3 | 9.75 | 3.45 | 0 |
| 12/6/2005 | 5.56 | 7.6 | **12.9** | 4.7 | **10.61** |
| 10/30/2008 | **6.6** | **8.8** | 7.55 | 4.8 | 6.6 |
| 7/22/2009 | 3.17 | 7.7 | 6.89 | 5.8 | 6.21 |
| 6/30/2010 | 6.26 | 8.25 | 12.89 | **8.72** | 6.19 |
| **Maximum depth:** | 7 | 9 | 13 | 9 | 11 |

The deepest average or maximum depth for each block is in **bold**

*Data from only one well were available

The average depths to groundwater are less than 10 feet for all wells, and the maximum depths to groundwater for Blocks D, E, and G are less than 10 feet. However, all subsurface soil samples from 2–10 feet bgs were included in the quantitative risk evaluation, to be conservative.

Data for soil samples collected at depths greater than 10 feet bgs (i.e., deep subsurface soil) were excluded from the quantitative risk assessment because these samples are likely saturated; however, COPC were selected for informational purposes. Table 3-21 shows the results of the COPC selection for deep subsurface soil. The list of COPC is similar to those for surface soil and subsurface soil. COPC are the BaPEq and its constituents, Aroclor-1260, arsenic, cobalt, iron, manganese, vanadium, and hexavalent chromium.

Maximum concentrations of all of these chemicals except for iron and vanadium are greater in the shallower depths than in the deep subsurface soil, and the concentration of vanadium in deep subsurface soil is not significantly greater than that found in shallower soil depths. Only the maximum concentration of iron in deep subsurface soil is significantly greater (i.e., more than an

order of magnitude greater) than concentrations detected in the shallower intervals. Thus, excluding deep subsurface soil from the quantitative risk evaluation should not add much uncertainty.

Numerous chemicals in surface and subsurface soil have detection limits that exceed screening criteria. This adds uncertainty to the risk assessment because these constituents may be present in site media at concentrations below the detection limit (i.e., below the concentration that may be seen by the analytical technique) and above screening criteria. However, the effort was made to achieve detection limits below screening levels for notable risk drivers (such as benzo(a)pyrene and related chemicals). Other chemicals not detected in the tax blocks are assumed not to contribute significantly to overall risks.

***COPC screening levels—***Using risk-based screening values based on conservative land use scenarios (i.e., residential land use for soil), corresponding to incremental lifetime-cancer risks (ILCRs) of $10^{-6}$ and hazard indices (HIs) of 0.1, the risk analyst must ensure that all significant contributors to risk at a site are evaluated. Eliminating chemicals present at concentrations that correspond to ILCRs less than $10^{-6}$ and HIs less than 0.1 should not affect the risk assessment's final conclusions, because those chemicals are not expected to pose potential health concerns at the concentrations detected.

***Background soil database—***Comprehensive site-specific databases on background soil are not available for the subject tax blocks. The lack of site-specific background levels for various chemicals may overestimate site-related risks for the tax blocks, since no chemical was eliminated as a COPC based on a background screen (i.e., a comparison of site concentrations to site-specific background concentrations). The lack of such data may affect the selection of remedial goals for inorganics typically detected at background concentrations above common risk benchmarks (e.g., arsenic). Arsenic was noted as a risk driver in soil for several receptors and in several data sets. Appendix C presents Maryland background data for arsenic.

Arsenic, cobalt, and hexavalent chromium were noted in Section 4 as risk drivers for direct-contact risk posed to several receptors and for several tax blocks. Concentrations of arsenic and cobalt and predicted concentrations of hexavalent chromium (i.e., concentrations calculated by assuming 5% of total chromium) in surface and subsurface soil produced risk estimates that

were less than the $1\times10^{-5}$ cancer risk level for most tax block data sets. Exceptions are arsenic and cobalt for Block G surface soil and hexavalent chromium for Block F surface soil. Arsenic, cobalt, and chromium are metals occurring naturally in soil.

Anticipated typical concentrations (ATCs) are available from the State of Maryland for arsenic and total chromium (State of Maryland, 2008). ATCs for arsenic are 3.6 mg/kg, 4.9 mg/kg, and 11 mg/kg for Eastern, Central, and Western Maryland, respectively. EPCs (i.e., the 95% upper confidence-limits [UCLs]) calculated for arsenic do not exceed the central Maryland ATC in any data set except for Block G surface soil. No 95% UCLs for arsenic exceed the Western Maryland ATC. ATCs for total chromium are 28 mg/kg, 30 mg/kg, and 42 mg/kg for Eastern, Central, and Western Maryland, respectively. The 95% UCLs calculated for total chromium (i.e., the calculated hexavalent chromium 95% UCL divided by 0.05) are all less than the Western Maryland ATC except for the Block F surface soil data set. All other data sets are likewise less than the Central Maryland ATC, except for Block H subsurface soil, which slightly exceeds the Central Maryland ATC with a 95% total chromium UCL of 36 mg/kg. Given that arsenic and total chromium concentrations in the tax blocks are, in most cases, similar to background values and are not significant risk drivers, most metals concentrations probably represent background conditions.

The inorganics arsenic, cobalt, iron, and hexavalent chromium were retained as chemicals of concern (COC) for migration to groundwater, based on the analysis in Section 4.6. As noted earlier, not all of the subject tax bocks had frequent detections of hexavalent chromium. Hexavalent chromium was conservatively included as a migration-to-groundwater COC based on the limited data available. As discussed above, most detections of arsenic and cobalt likely reflect background concentrations. Most concentrations of iron observed in the tax block soils also likely reflect background. The EPCs used for iron (95% UCL or maximum concentration) are within the range of ATCs (15,000 mg/kg, 26,000 mg/kg, and 39,000 mg/kg for Eastern, Central, and Western Maryland, respectively) for all surface and subsurface soil data sets in which iron was analyzed.

***Contaminants without established direct-contact screening levels—***Risk-based screening levels are currently not available for some constituents detected at the tax blocks. Appropriate surrogates for some of these chemicals, based on similar chemical structures, were selected if available. In the COPC screening, acenaphthene was used as a surrogate for acenaphthylene and pyrene was

selected as a surrogate for benzo(g,h,i)perylene and phenanthrene. Applying the toxicity values of one compound to another increases uncertainty in the risk assessment, both with regard to COPC selection and the calculated risks. The direction of the uncertainty is unknown.

Appropriate screening levels or surrogates were not available for several organic chemicals detected in tax block soils. The list of chemicals lacking COPC-selection criteria includes 1,2,3-trimethylbenzene, n-butylbenzene, tert-butyl alcohol, di-n-octyl phthalate, dimethyl phthalate, 4-isopropyltoluene, and sec-butylbenzene. In most cases, these chemicals were detected at concentrations and detection frequencies significantly less than those reported for the primary site contaminants. For all chemicals except 1,2,3-trimethylbenzene and tert-butyl alcohol, the frequency of detection was less than 5% across the tax blocks. Given that risk-based screening levels are available for most of the primary contaminants (in terms of concentration and frequency of detection), the lack of risk-based screening levels for some contaminants should not affect risk management decisions for the tax block soils.

Many constituents have no USEPA SSLs for the soil to air migration pathway. This uncertainty is probably small, because for most chemicals potential risks associated with exposures via inhalation are typically orders of magnitude lower than those associated with exposures via incidental ingestion and dermal contact with soil. Comparing the screening criteria for direct-contact exposures with the screening criteria for migration from soil to air shows that, in most cases, the direct-contact screening criteria are at least an order of magnitude lower than the soil to air migration screening-criteria for the same compound. If regulatorily unacceptable risks result from inhalation exposures, then regulatorily unacceptable risks are usually also posed by exposures via the incidental-ingestion and dermal-contact exposure pathways.

***Use of USEPA generic SSLs for transfers from soil to groundwater for COPC selection—*** Several chemicals were selected as COPC because their maximum concentrations exceed USEPA generic SSLs for soil to groundwater contaminant migration (dilution-attenuation factor [DAF] = 1.0). However, USEPA's *Soil Screening Guidance* (USEPA, 1996a) states that "the USEPA has selected a default DAF of 20 to account for contaminant dilution and attenuation during transport through the saturated zone to a compliance point (i.e., a receptor well). At most sites, this adjustment will more accurately reflect a contaminant's threat to groundwater resources than assuming a DAF of 1 (i.e., no dilution or attenuation)." The guidance further

states that “a DAF of 20 is protective for sources up to 0.5 acres in size” and “can be protective of larger sources as well." Consequently, the use of SSLs based on a DAF of 1 is very conservative. A more refined evaluation of the potential for chemical migration from soils is provided in Section 4.6 for surface and subsurface soils, respectively. COC were selected based on that analysis.

## 5.2 EXPOSURE ASSESSMENT UNCERTAINTY

Uncertainty in the exposure assessment arose because of the methods used to calculate EPCs, the determination of land use conditions, the selection of receptors and scenarios, and the selection of exposure parameters. Each of these is discussed below:

***Land use—***Current land use patterns for the subject tax blocks are well established, thereby limiting uncertainty associated with land use assumptions. Land use is currently limited to industrial/commercial, and the area will most likely remain commercial/industrial in the future. To be conservative, receptors were considered for all possible future land uses, and risks to potential and future construction workers, industrial workers, commercial receptors, recreational users, and on-site residents were evaluated.

***Exposure-point concentrations—***Uncertainty is associated with the use of the 95% UCL on the mean concentration as the EPC. As a result of using the 95% UCL, estimations of potential risk for the reasonable maximum exposure (RME) scenario are most likely overstated because it represents the upper limit that potential receptors would be exposed to over the entire exposure period. In some cases (because data sets contained less than five samples, because less than four positive detections occurred, or because the UCL was greater than the maximum concentration), the maximum concentration was used as the EPC. Using the maximum concentration tends to overestimate potential risks because receptors are assumed to be continuously exposed to the maximum concentration for the entire exposure period.

MDE guidance (State of Maryland, 2008) typically requires at least 10 samples to calculate UCLs. As noted above, this guidance differs from that provided by the USEPA. However, this difference has limited impact on the HHRA because most EPCs presented in the HHRA are based on data sets that included 10 or more samples. The only exceptions are EPCs for cobalt and vanadium in Block G surface soil, and DRO in Block H subsurface soil. Cobalt and vanadium in Block G

surface soil were both detected in 6 of 6 samples, and DRO in Block H subsurface soil was detected in 6 of 8 samples. If the maximum concentrations of cobalt and vanadium were used as EPCs for the Block G surface soil data set, cobalt would become a COC for the child recreational user. However, cobalt was already identified as a risk driver for Block G surface soil based on the hypothetical residential receptor. (Vanadium would not become a COC for any receptor; the maximum concentration of vanadium in Block G surface soil is less than the regional screening level [RSL] for residential soil.) DRO concentrations were evaluated both qualitatively and quantitatively in this HHRA. The HHRA also acknowledges when any detected concentration exceeds MDE benchmarks for a residential or industrial land use scenario (regardless of the EPC value). Therefore, overall HHRA conclusions are not expected to be significantly impacted by the EPCs selected for these parameters.

One-half the detection limit was used for non-detected results for the location-by-location risk estimates in Appendix E. Using one-half the detection limit for non-detects can result in elevated risk estimates if detection limits are elevated. An example of this is noted for Aroclor-1254 in Block E surface soil. The maximum non-detect result (i.e., the greatest reported sample detection limit [i.e., sample quantitation limit]) for Aroclor-1254 in Block E surface soil is 740,000 µg/kg, which exceeds the actual maximum detected concentration of 36,000 µg/kg. As a result, some of the risk estimates and hazard indices for Aroclor-1254 in Block E surface soil exceed USEPA and or Maryland Department of the Environment (MDE) target levels at locations where Aroclor-1254 was non-detected (e.g., location SB-353). Therefore, risk results for Aroclor-1254 are likely overestimated in samples with elevated detection limits and results should be interpreted with caution.

***Exposure routes and receptor identification—***Determination of various receptor groups and exposure routes of potential concern is based on observed current and anticipated future land use at the site. Therefore, uncertainty associated with selecting exposure routes and potential receptors is minimal because they are considered well defined.

***Exposure parameters—***Each exposure factor selected for use in the risk assessment had some associated uncertainty. Exposure factors are generally based on surveys of physiological and lifestyle profiles across the United States. The attributes and activities studied in these surveys are generally broadly distributed. In most cases, to avoid underestimating exposure, USEPA

guidelines on the RME receptor were used. These generally specify using the 95$^{th}$-percentile value for most parameters. Therefore, the values selected for the RME receptor represent an upper bound of the observed or expected habits of most of the population. MDE exposure assumptions were used when available.

The value used for exposure frequency for recreational users (the MDE exposure frequency Level 1 of 250 days per year) corresponds with high-frequency use. MDE provides two other exposure frequencies: a Level 2 value of 182 days per year and a Level 3 value of 52 days per year. The Level 1 was chosen for this HHRA to be protective of all possible future land use scenarios.

Uncertainty can generally be assessed quantitatively for many of the assumptions made in determining factors with which to calculate exposures and intakes. Many of these parameters were determined from statistical analyses of human population characteristics. Often, the database used to derive a particular exposure parameter (e.g., body weight) is relatively large. Consequently, the values chosen for such variables in the RME scenario have low uncertainty.

Many of the exposure parameters used to calculate exposures and risks in this report were selected from a distribution of possible values, including MDE guidance (State of Maryland, 2008) and USEPA guidance (USEPA, 1989, 1991, 1993, 1997a, 2004). For the RME scenario, the value representing the 95$^{th}$ percentile was generally selected for each parameter to ensure that the assessment bounds most actual risks posed by a postulated exposure. This risk number is used in risk management decisions, but it does not indicate what an average and more-representative exposure might be, or what risk range might be expected for individuals in the exposed population.

## 5.3 UNCERTAINTY IN THE TOXICOLOGICAL EVALUATION

Uncertainties associated with the toxicity assessment (determination of RfDs and CSFs and use of available criteria) are below.

***Derivation of toxicity criteria—***Uncertainty associated with the toxicity assessment is related to the hazard assessment and dose-response evaluations for the COPC. The hazard assessment characterizes the nature and strength of causal evidence or the likelihood that a chemical that induces adverse effects in animals will do likewise in humans. A hazard assessment of

carcinogenicity was evaluated as a weight-of-evidence determination using USEPA methods. Positive animal-cancer test data suggest that humans contain tissue(s) that may manifest a carcinogenic response; however, animal data cannot necessarily be used to predict the target tissue in humans. In the hazard assessment of noncarcinogenic effects, however, positive animal data often suggest the nature of the effects (i.e., the target tissues and type of effects) to be anticipated in humans.

Uncertainty in hazard assessment arises from the nature and quality of the animal and human data. Uncertainty is reduced when:

- similar effects are observed across species, strain, sex, and exposure route
- the magnitude of the response is clearly dose related
- pharmacokinetic data indicate a similar fate in humans and animals
- postulated mechanisms of toxicity are similar for humans and animals
- the COC are structurally similar to other chemicals for which toxicity is more completely characterized

Uncertainty in the dose-response evaluation includes determining a cancer-slope factor (CSF) for the carcinogenic assessment and deriving a reference dose (RfD) for the noncarcinogenic assessment. Uncertainty is introduced from interspecies (animal to human) extrapolation, which, in the absence of quantitative pharmacokinetic or mechanistic data, is usually based on consideration of interspecies differences in basal metabolic rate. Uncertainty also results from intraspecies variation. Most toxicity experiments are performed on animals similar in age and genotype to minimize intragroup biological variation.

In contrast, the human population of concern may reflect a great deal of heterogeneity, including unusual sensitivity or tolerance to the COPC. Even toxicity data from human occupational exposures reflect a bias, because only those individuals sufficiently healthy to regularly attend work (the “healthy worker effect”) and those not unusually sensitive to the chemical are likely to be occupationally exposed. Finally, uncertainty arises from the quality of the key study from which the quantitative estimate is derived and which produced the database used. For cancer effects, the uncertainty associated with dose-response factors was mitigated by assuming the 95% upper bound for the slope factor.

Another source of uncertainty in carcinogenic assessment is the method by which data from high doses in animal studies are extrapolated to the dose range expected for environmentally exposed humans. The linearized multi-stage model, which is used in nearly all quantitative estimations of human risk based on animal data, is based on a nonthreshold assumption of carcinogenesis. Evidence suggests, however, that epigenetic carcinogens, as well as many genotoxic carcinogens, have a threshold below which they are noncarcinogenic. Therefore, using the linearized multi-stage model is conservative for chemicals that exhibit a threshold for carcinogenicity.

For noncarcinogenic effects, additional uncertainty factors may have been applied to derive the RfD to mitigate the poor quality of the key study or gaps in the resultant database. Additional uncertainty for noncarcinogenic effects arises from using an effect level in estimating an RfD, because this estimate is predicated on the assumption of a threshold less than that at which adverse effects are not expected. Therefore, an uncertainty factor is usually applied to estimate a no effect level.

Additional uncertainty arises in estimating an RfD for chronic exposure from subchronic data. Unless empirical data indicated that effects do not worsen with increasing exposure duration, an additional uncertainty factor was applied to the no effect level in the subchronic study. Uncertainty in deriving RfDs was mitigated by using uncertainty and modifying factors that normally range from 3–10. The resulting combination of uncertainty and modifying factors may have reached 1,000 or more. Deriving dermal RfDs and CSFs from oral-exposure values may also have caused uncertainty. This is particularly the case when no gastrointestinal absorption rates are available in the literature, or when only qualitative statements regarding absorption are available.

***Use of chronic toxicity values for construction workers –*** Under the guidelines established by the Superfund program, exposures to construction workers of one year or less are classified as subchronic exposures. Risks for noncarcinogenic effects associated with subchronic exposures should incorporate toxicity values for subchronic and not chronic effects. Subchronic toxicity values are not as widely available as chronic values. Subchronic toxicity values used in this HHRA were obtained from USEPA's PPRTV internet site. Also, ATSDR Minimal Risk Levels (MRLs) were used as subchronic toxicity values when PPRTV values were not available. Chronic toxicity values were used when subchronic toxicity values were not available. Using

chronic toxicity criteria to evaluate subchronic exposures for construction workers tends to overestimate potential noncarcinogenic risks. However, no construction worker noncarcinogenic HIs for the inhalation pathway exceeded 1. Therefore, uncertainty due to the use of chronic toxicity values for construction workers does not affect overall risk assessment conclusions.

***Uncertainty in the toxicity criteria for chromium—***Toxicity criteria are available for different forms of chromium, which is considered more toxic in the hexavalent state. The following table compares the maximum total- and hexavalent-chromium concentrations reported for the tax block soil samples to available USEPA RSLs:

| Environmental medium (maximum concentration) | USEPA RSL residential scenario (assuming hexavalent chromium) | USEPA RSL residential scenario (assuming trivalent chromium) |
|---|---|---|
| Surface soil:<br>Total = 185 mg/kg<br>Cr VI = 3.6 mg/kg | 0.29 mg/kg | 120,000 mg/kg |
| Subsurface soil:<br>Total = 120 mg/kg<br>Cr VI = 1.1 mg/kg | | |

Cr VI—hexavalent chromium

As indicated in Section 3.3.3, in most of the subject tax blocks a limited number of surface and subsurface soil samples were analyzed for hexavalent chromium. The available hexavalent/total chromium data sets led to the conservative assumption that 5% of the chromium detected in the soils is in the hexavalent state. Risks calculated for chromium in soil, assuming 5% of total chromium is in the hexavalent form, are therefore likely overestimated.

***Refined risk evaluation of GRO/DRO concentrations in tax block soils—***The risk evaluation in Section 4 includes a qualitative comparison of gasoline-range organics (GRO) and diesel-range organics (DRO) concentrations to MDE's *Generic Numeric Cleanup Standards for Soil*. The evaluation is qualitative only because USEPA has not published toxicity criteria (e.g., reference doses or cancer slope-factors) for these parameters. However, as noted in the 2008 MDE *Guidance for Cleanup Standards for Soil and Groundwater*, some state regulators have established protocols for the quantitative risk assessment of these parameters.

An example of such protocols is found in Massachusetts' final policy #WSC-02-411 (*Characterizing Risks Posed by Petroleum Contaminated Sites: Implementation of the MADEP VPH/EPH Approach*) (State of Massachusetts, 2002). This methodology is cited in the referenced MDE guidelines as the basis of the published generic standards for soil. Although quantitative risk estimates based on this methodology (and the associated toxicity criteria) are more uncertain than those based on USEPA recommended toxicity criteria, for purposes of completeness, the following tables provide non-cancer risk estimates (hazard indices) for GRO/DRO based on a simple comparison of EPCs to risk-based concentrations developed using the methodology endorsed by MDE to develop the generic standards (see Appendix D). The calculated RBC values incorporate MDE exposure assuptions and are based on a hazard quotient (HQ) of 1.

The hazard indices presented in the tables are less than or approximately equal to 1; therefore, the results suggests that adverse noncarcinogenic effects are not expected for the receptors evaluated. The evaluation indicates that although some isolated detections of GRO/DRO clearly exceed the MDE generic standards (see Section 4), risk estimates based on the EPCs do not indicate that these parameters are major contributors to noncancer risk for receptors hypothetically exposed to the tax block soils. The evaluation is limited in that it does not consider the potential carcinogenic effects of the GRO/DRO constituents (e.g., benzo(a)pyrene and related chemicals). However, the chemical-specific risk assessment in Section 4 for a number of these constituents does.

**Block D—Refined Evaluation of GRO/DRO (Hazard Indices)**

| Block D | Surface soil GRO | Subsurface soil GRO | Surface soil DRO | Subsurface soil DRO |
|---|---|---|---|---|
| EPC (mg/kg) | 0.81 | 0.25 | 550 | 40.3 |
| Ratio of EPC to residential RBC [2,300 mg/kg] | <0.1 | <0.1 | **0.2** | <0.1 |
| Ratio of EPC to commercial RBC [6,200 mg/kg] | <0.1 | <0.1 | <0.1 | <0.1 |
| Ratio of EPC to industrial RBC [61,000 mg/kg] | <0.1 | <0.1 | <0.1 | <0.1 |
| Ration of EPC to recreational RBC [3,300 mg/kg] | <0.1 | <0.1 | 0.2 | <0.1 |

**Block E—Refined Evaluation of GRO/DRO (Hazard Indices)**

| Block E | Surface soil GRO | Subsurface soil GRO | Surface soil DRO | Subsurface soil DRO |
|---|---|---|---|---|
| EPC (mg/kg) | 0.48 | 81.1 | 2340 | 2010 |
| Ratio of EPC to residential RBC [2,300 mg/kg] | <0.1 | <0.1 | **Approximately 1** | 0.9 |
| Ratio of EPC to commercial RBC [6,200 mg/kg] | <0.1 | <0.1 | 0.4 | 0.3 |
| Ratio of EPC to industrial RBC [61,000 mg/kg] | <0.1 | <0.1 | <0.1 | <0.1 |
| Ration of EPC to recreational RBC [3,300 mg/kg] | <0.1 | <0.1 | <0.1 | 0.6 |

**Block F—Refined Evaluation of GRO/DRO (Hazard Indices)**

| Block F | Surface soil GRO | Subsurface soil GRO | Surface soil DRO | Subsurface soil DRO |
|---|---|---|---|---|
| EPC (mg/kg) | 1.2 | 21.2 | 91.8 | 522 |
| Ratio of EPC to Residential RBC [2,300 mg/kg] | <0.1 | <0.1 | <0.1 | 0.2 |
| Ratio of EPC to commercial RBC [6,200 mg/kg] | <0.1 | <0.1 | <0.1 | <0.1 |
| Ratio of EPC to industrial RBC [61,000 mg/kg] | <0.1 | <0.1 | <0.1 | <0.1 |
| Ration of EPC to recreational RBC [3,300 mg/kg] | <0.1 | <0.1 | <0.1 | 0.2 |

**Block G—Refined Evaluation of GRO/DRO (Hazard Indices)**

| Block G | Surface soil GRO | Subsurface soil GRO | Surface soil DRO | Subsurface soil DRO |
|---|---|---|---|---|
| EPC (mg/kg) | 131 | 131 | 77.4 | 21.7 |
| Ratio of EPC to residential RBC [2,300 mg/kg] | <0.1 | <0.1 | <0.1 | <0.1 |
| Ratio of EPC to commercial RBC [6,200 mg/kg] | <0.1 | <0.1 | <0.1 | <0.1 |
| Ratio of EPC to industrial RBC [61,000 mg/kg] | <0.1 | <0.1 | <0.1 | <0.1 |
| Ration of EPC to recreational RBC [3,300 mg/kg] | <0.1 | <0.1 | <0.1 | <0.1 |

**Block H—Refined Evaluation of GRO/DRO (Hazard Indices)**

| Block H | Surface soil GRO | Subsurface soil GRO | Surface soil DRO | Subsurface soil DRO |
|---|---|---|---|---|
| EPC (mg/kg) | 12 | 2.6 | 240 | 130 |
| Ratio of EPC to residential RBC [2,300 mg/kg] | <0.1 | <0.1 | Approximately 0.1 | <0.1 |
| Ratio of EPC to commercial RBC [6,200 mg/kg] | <0.1 | <0.1 | <0.1 | <0.1 |
| Ratio of EPC to industrial RBC [61,000 mg/kg] | <0.1 | <0.1 | <0.1 | <0.1 |
| Ration of EPC to recreational RBC [3,300 mg/kg] | <0.1 | <0.1 | <0.1 | <0.1 |

In addition to the evaluation presented in the tables above, based on discussion with MDE, the industrial RBC–based benchmark (presented above, based on MDE 2008 guidance) was decreased from a value of 61,000 mg/kg to 6,100 mg/kg. The 61,000 mg/kg value is based on an HQ of 1 whereas the 6,100 mg/kg value is based on an HQ of 0.1. DRO/GRO concentrations detected in the soils were then compared to 6,100 mg/kg, to be conservative. This additional analysis was conducted because:

- RBCs based on an HQ of 0.1 account for the potential cumulative effects of several chemicals affecting the same target organ or producing the same adverse noncarcinogenic effect. Consequently, they are more conservative than RBCs based on an HQ of 1.
- The industrial screening value of 61,000 mg/kg, while risk-based, represents six percent petroleum product. Therefore, MDE requested that the industrial benchmark be decreased to a value of 6,100 mg/kg (i.e., be established at an HI of 0.1).

Although the tables above do not indicate that GRO and DRO parameters are major contributors to noncancer risk for receptors hypothetically exposed to the tax block soils, two detected DRO concentrations in Block E soil exceed the more conservative, calculated industrial risk-based concentration (6,100 mg/kg) based on an HQ of 0.1 and MDE risk assessment methodology (calculations are presented in Appendix D).The Block E locations where concentrations exceeding 6,100 mg/kg were detected are SB-833A, with a detected DRO concentration of 8,900 mg/kg in surface soil (0–2 feet), and SB-833, with a detected DRO concentration of 28,000 mg/kg in subsurface soil (9–9 feet). No other DRO concentrations exceed the industrial

risk-based concentration based on an HQ of 0.1. Because two DRO concentrations exceed the 6,100 mg/kg risk-based concentration, DRO was selected as a COC for Block E.

## 5.4 UNCERTAINTY IN THE RISK CHARACTERIZATION

Uncertainty in risk characterization resulted from assumptions made regarding additivity of effects from exposure to multiple COPC via various exposure routes. High uncertainty exists when summing noncarcinogenic risks for several substances across different exposure pathways. This assumes that each substance has a similar effect and/or mode of action. Even when compounds affect the same target organs, they may have different mechanisms of action or differ in their fate in the body, so additivity may not be an appropriate assumption in all cases. However, the assumption of additivity was considered because in most cases it represents a conservative estimate of risk. Risks to any individual may also have been overestimated by summing multiple assumed exposure pathway risks for any single receptor. Although every effort was made to develop reasonable scenarios, not all individual receptors may be exposed via all pathways considered.

Finally, the risk characterization does not consider antagonistic or synergistic effects. Little or no information is available to determine the potential for antagonism or synergism among the COPC. The likelihood of over- or under-predicting risks could not be defined because chemical-specific interactions could not be predicted; however, the methodology used is based on current USEPA guidance.

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# Section 6
# Remedial Goal Options

Cleanup goals were developed for those environmental media with incremental lifetime-cancer risk (ILCRs) greater than $1\times10^{-5}$ and a total hazard index (HI) greater than 1.0. Cleanup goals were derived for those contaminants of concern (COC) that contribute significantly to the cancer risk and/or hazard index for each exposure pathway in a given land-use scenario for a receptor group. Chemicals were not considered significant contributors to risk, and were therefore not included as COC, if their individual carcinogenic risk contribution was less than or equal to $1\times10^{-6}$ and their non-carcinogenic hazard quotient (HQ) was less than or equal to 0.1. Cleanup goals were calculated using the following equation:

$$\text{Cleanup Goal [chemical i]} = \text{EPC[chemical i]} \times \text{Target Risk/Calculated Risk[chemical i]}$$

where:

| | | |
|---|---|---|
| Cleanup goal [chemical i] | = | chemical specific cleanup goal |
| EPC [chemical i] | = | exposure point concentration used in risk assessment calculations |
| Target risk | = | target risk for carcinogens or the target hazard quotients for noncarcinogens |
| Calculated risk [chemical i] | = | total risk calculated for a specific chemical in the risk assessment |

Cleanup goals calculated for soil for each tax block are presented in Tables 6-1 through 6-5. These tables include potential U.S. Environmental Protection Agency (USEPA) regional screening-level (RSL) criteria, when available.

Figures displaying the concentrations of the COC selected for each tax block compared to relevant benchmark concentrations such as commercial receptor, industrial worker, and resident Remedial goal options (RGOs) and Maryland Department of the Environment (MDE) cleanup standards are presented in Appendix E.

As noted in Section 5.3, diesel range organics (DRO) and gasoline range organics (GRO) were evaluated qualitatively only in Section 4, because USEPA has not published toxicity criteria for these parameters. Although the refined evaluation presented in Section 5.3 did not indicate that DRO and GRO are major contributors to risk, detected DRO concentrations at two locations in Block E soil exceed a risk-based concentration (6,100 mg/kg) calculated for the industrial worker. Therefore, DRO are also retained as COC for Block E soil. The RGO recommended for DRO is conservatively set at 6,100 mg/kg to account for potential cumulative effects of multiple chemicals impacting the same target organ.

**Table 6-1**

**Preliminary Remedial Goals - Tax Block Soils**
**Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| CHILD COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[(1)] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[(3)] | NA | 0.048 | 0.48 | 4.8 | NA |
| Arsenic | NA | 1.51 | 15.1 | 151 | 58.1 |
| Hexavalent Chromium | NA | 0.468 | 4.68 | 46.8 | 321 |

| ADOLESCENT COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[(1)] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[(3)] | NA | 0.156 | 1.56 | 15.6 | NA |

| LIFELONG COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[(1)] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[(3)] | NA | 0.036 | 0.36 | 3.6 | NA |
| Arsenic | NA | 1.05 | 10.5 | 105 | NA |
| Hexavalent Chromium | NA | 0.327 | 3.27 | 32.7 | NA |

| CHILD RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[(1,2)] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[(3)] | 0.015 | 0.024 | 0.241 | 2.41 | NA |
| Arsenic | 0.39 | 0.786 | 7.86 | 78.6 | 30.3 |
| Hexavalent Chromium | 0.29 | 0.226 | 2.26 | 22.6 | 155 |

| ADOLESCENT RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[(1,2)] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[(3)] | 0.015 | 0.126 | 1.26 | 12.6 | NA |
| Arsenic | 0.39 | 2.08 | 20.8 | 208 | 161 |

| LIFELONG RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[(1,2)] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[(3)] | 0.015 | 0.0195 | 0.195 | 1.95 | NA |
| Arsenic | 0.39 | 0.491 | 4.91 | 49.1 | NA |
| Hexavalent Chromium | 0.29 | 0.181 | 1.81 | 18.1 | NA |

**Table 6-1**

**Preliminary Remedial Goals - Tax Block Soils**
**Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| CHILD RESIDENTS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1,2] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[3] | 0.015 | 0.017 | 0.172 | 1.72 | NA |
| Arsenic | 0.39 | 0.561 | 5.61 | 56.1 | 21.6 |
| Hexavalent Chromium | 0.29 | 0.161 | 1.61 | 16.1 | 111 |

| ADOLESCENT RESIDENTS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1,2] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[3] | 0.015 | 0.090 | 0.897 | 8.97 | NA |
| Arsenic | 0.39 | 1.49 | 14.9 | 149 | 114 |

| LIFELONG RESIDENTS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1,2] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[3] | 0.015 | 0.0139 | 0.139 | 1.39 | NA |
| Arsenic | 0.39 | 0.351 | 3.51 | 35.1 | NA |
| Hexavalent Chromium | 0.29 | 0.129 | 1.29 | 12.9 | NA |

Notes:
1 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. [Cancer benchmark value = 1E-06, Hazard index (HI) = 1.0].
2 - Residential soil.
3 - See Section 3 for benzo(a)pyrene equivalents calculation methodology.
NA - Not applicable/not available.
RSLs are available for commercial receptors.

**Table 6-2**

**Preliminary Remedial Goals - Tax Block Soils**
**Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| CONSTRUCTION WORKERS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1,2] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Aroclor-1254 | 0.74 | 5.75 | 57.5 | 575 | 3.31 |
| Aroclor-1260 | 0.74 | 5.75 | 57.5 | 575 | NA |

| INDUSTRIAL WORKERS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1,2] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| 1,2,4-Trichlorobenzene | 99 | 141 | 1,414 | 14,137 | 350 |
| Benzo(a)pyrene Equivalents[4] | 0.21 | 0.289 | 2.89 | 28.9 | NA |
| Aroclor-1254 | 0.74 | 1.00 | 10.0 | 100 | 14.4 |
| Aroclor-1260 | 0.74 | 1.00 | 10.0 | 100 | NA |

| CHILD COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| 1,2,4-Trichlorobenzene | NA | 77.9 | 779 | 7,794 | 799 |
| Benzo(a)pyrene Equivalents[4] | NA | 0.048 | 0.476 | 4.76 | NA |
| Aroclor-1254 | NA | 0.910 | 9.10 | 91.0 | 3.12 |
| Aroclor-1260 | NA | 0.910 | 9.10 | 91.0 | NA |
| Hexavalent Chromium | NA | 0.468 | 4.68 | 46.8 | 321 |

| ADOLESCENT COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| 1,2,4-Trichlorobenzene | NA | 177 | 1,767 | 17,669 | 1,178 |
| Benzo(a)pyrene Equivalents[4] | NA | 0.156 | 1.56 | 15.6 | NA |
| Aroclor-1254 | NA | 1.46 | 14.6 | 146 | 10.0 |
| Aroclor-1260 | NA | 1.46 | 14.6 | 146 | NA |

**Table 6-2**

**Preliminary Remedial Goals - Tax Block Soils**
**Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LIFELONG COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[(1)] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| 1,2,4-Trichlorobenzene | NA | 54.1 | 541 | 5408 | NA |
| Benzo(a)pyrene Equivalents[(4)] | NA | 0.0365 | 0.365 | 3.65 | NA |
| Aroclor-1254 | NA | 0.561 | 5.61 | 56.1 | NA |
| Aroclor-1260 | NA | 0.561 | 5.61 | 56.1 | NA |
| Arsenic | NA | 1.05 | 10.5 | 105 | NA |
| Hexavalent Chromium | NA | 0.327 | 3.27 | 32.7 | NA |

| ADULT COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[(1)] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| 1,2,4-Trichlorobenzene | NA | 141 | 1,414 | 14,137 | 350 |
| Benzo(a)pyrene Equivalents[(4)] | NA | 0.289 | 2.89 | 28.9 | NA |
| Aroclor-1254 | NA | 1.00 | 10.0 | 100 | 14.4 |
| Aroclor-1260 | NA | 1.00 | 10.0 | 100 | NA |

| CHILD RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[(1,3)] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| 1,2,3-Trichlorobenzene | 49 | NA | NA | NA | 80.8 |
| 1,2,4-Trichlorobenzene | 22 | 40.6 | 406 | 4,064 | 265 |
| Benzo(a)pyrene Equivalents[(4)] | 0.015 | 0.024 | 0.241 | 2.41 | NA |
| Aroclor-1254 | 0.22 | 0.459 | 4.59 | 45.9 | 1.57 |
| Aroclor-1260 | 0.22 | 0.459 | 4.59 | 45.9 | NA |
| Arsenic | 0.39 | 0.786 | 7.86 | 78.6 | 30.3 |
| Hexavalent Chromium | 0.29 | 0.226 | 2.26 | 22.6 | 155 |

| ADOLESCENT RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[(1,3)] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| 1,2,4-Trichlorobenzene | 22 | 108 | 1,077 | 10,770 | 337 |
| Benzo(a)pyrene Equivalents[(4)] | 0.015 | 0.126 | 1.26 | 12.6 | NA |
| Aroclor-1254 | 0.22 | 1.20 | 12.0 | 120 | 8.21 |
| Aroclor-1260 | 0.22 | 1.20 | 12.0 | 120 | NA |

**Table 6-2**

**Preliminary Remedial Goals - Tax Block Soils**
**Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| ADULT RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| 1,2,4-Trichlorobenzene | 22 | 184 | 1,836 | 18,360 | 345 |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.538 | 5.38 | 53.8 | NA |
| Aroclor-1254 | 0.22 | 1.91 | 19.1 | 191 | 13.1 |
| Aroclor-1260 | 0.22 | 1.91 | 19.1 | 191 | NA |

| LIFELONG RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| 1,2,4-Trichlorobenzene | 22 | 25.4 | 254 | 2542 | NA |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.0195 | 0.195 | 1.95 | NA |
| Aroclor-1254 | 0.22 | 0.283 | 2.83 | 28.3 | NA |
| Aroclor-1260 | 0.22 | 0.283 | 2.83 | 28.3 | NA |
| Arsenic | 0.39 | 0.491 | 4.91 | 49.1 | NA |
| Hexavalent Chromium | 0.29 | 0.181 | 1.81 | 18.1 | NA |

| CHILD RESIDENTS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| 1,2,3-Trichlorobenzene | 49 | NA | NA | NA | 57.7 |
| 1,2,4-Trichlorobenzene | 22 | 29.0 | 290 | 2,903 | 76.4 |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.017 | 0.172 | 1.72 | NA |
| Aroclor-1254 | 0.22 | 0.328 | 3.28 | 32.8 | 1.12 |
| Aroclor-1260 | 0.22 | 0.328 | 3.28 | 32.8 | NA |
| Arsenic | 0.39 | 0.561 | 5.61 | 56.1 | 21.6 |
| Hexavalent Chromium | 0.29 | 0.161 | 1.61 | 16.1 | 111 |

| ADOLESCENT RESIDENTS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| 1,2,3-Trichlorobenzene | 49 | NA | NA | NA | 306 |
| 1,2,4-Trichlorobenzene | 22 | 76.9 | 769 | 7,693 | 83.6 |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.090 | 0.897 | 8.97 | NA |
| Aroclor-1254 | 0.22 | 0.855 | 8.55 | 85.5 | 5.86 |
| Aroclor-1260 | 0.22 | 0.855 | 8.55 | 85.5 | NA |
| Hexavalent Chromium | 0.29 | 0.818 | 8.18 | 81.8 | 565 |

**Table 6-2**

**Preliminary Remedial Goals - Tax Block Soils**
**Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| ADULT RESIDENTS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1,3] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| 1,2,4-Trichlorobenzene | 22 | 131 | 1,311 | 13,114 | 84.4 |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.384 | 3.84 | 38.4 | NA |
| Aroclor-1254 | 0.22 | 1.37 | 13.7 | 137 | 9.37 |
| Aroclor-1260 | 0.22 | 1.37 | 13.7 | 137 | NA |
| | | | | | |
| **LIFELONG RESIDENTS** | | | | | |
| **Chemical** | **USEPA RSL[1,3] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| 1,2,4-Trichlorobenzene | 22 | 18.2 | 182 | 1816 | NA |
| 1,4-Dichlorobenzene | 2.4 | 3.1 | 31 | 307 | NA |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.014 | 0.14 | 1.4 | NA |
| Aroclor-1254 | 0.22 | 0.20 | 2.0 | 20 | NA |
| Aroclor-1260 | 0.22 | 0.202 | 2.02 | 20.2 | NA |
| Arsenic | 0.39 | 0.351 | 3.51 | 35.1 | NA |
| Hexavalent Chromium | 0.29 | 0.129 | 1.29 | 12.9 | NA |

Notes:
1 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. [Cancer benchmark value = 1E-06, Hazard index (HI) = 1.0].
2 - Industrial soil.
3 - Residential soil.
4 - See Section 3 for benzo(a)pyrene equivalents calculation methodology.
NA - Not applicable/not available.
RSLs are available for commercial receptors.

**Table 6-3**

**Preliminary Remedial Goals - Tax Block Soils**
**Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| INDUSTRIAL WORKERS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1,2] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[4] | 0.21 | 0.289 | 2.89 | 28.9 | NA |

| CHILD COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[4] | NA | 0.048 | 0.476 | 4.76 | NA |
| Arsenic | NA | 1.51 | 15.1 | 151 | 58.1 |
| Hexavalent Chromium | NA | 0.468 | 4.68 | 46.8 | 321 |

| ADOLESCENT COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[4] | NA | 0.156 | 1.56 | 15.6 | NA |
| Hexavalent Chromium | NA | 1.09 | 10.9 | 109 | 745 |

| LIFELONG COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[4] | NA | 0.0365 | 0.365 | 3.65 | NA |
| Arsenic | NA | 1.05 | 10.5 | 105 | NA |
| Hexavalent Chromium | NA | 0.327 | 3.27 | 32.7 | NA |

| ADULT COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[4] | NA | 0.289 | 2.89 | 28.9 | NA |

| CHILD RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1,3] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.024 | 0.241 | 2.41 | NA |
| Naphthalene | 3.6 | 96.2 | 962 | 9,621 | 552 |
| Arsenic | 0.39 | 0.786 | 7.86 | 78.6 | 30.3 |
| Hexavalent Chromium | 0.29 | 0.226 | 2.26 | 22.6 | 155 |

**Table 6-3**

**Preliminary Remedial Goals - Tax Block Soils**
**Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| ADOLESCENT RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.126 | 1.26 | 12.6 | NA |
| Hexavalent Chromium | 0.29 | 1.15 | 11.5 | 115 | 792 |

| LIFELONG RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.0195 | 0.195 | 1.95 | NA |
| Naphthalene | 3.6 | 19.2 | 192.4 | 1924 | NA |
| Arsenic | 0.39 | 0.491 | 4.91 | 49.1 | NA |
| Hexavalent Chromium | 0.29 | 0.181 | 1.81 | 18.1 | NA |

| CHILD RESIDENTS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.017 | 0.172 | 1.72 | NA |
| Naphthalene | 3.6 | 22.9 | 229 | 2,291 | 171 |
| Arsenic | 0.39 | 0.561 | 5.61 | 56.1 | 21.6 |
| Hexavalent Chromium | 0.29 | 0.161 | 1.61 | 16.1 | 111 |

| ADOLESCENT RESIDENTS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.090 | 0.897 | 8.97 | NA |
| Naphthalene | 3.6 | 11.5 | 115 | 1,145 | 194 |
| Arsenic | 0.39 | 1.49 | 14.9 | 149 | 114 |
| Hexavalent Chromium | 0.29 | 0.818 | 8.18 | 81.8 | 565 |

| ADULT RESIDENTS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.384 | 3.84 | 38.4 | NA |
| Naphthalene | 3.6 | 11.5 | 115 | 1,145 | 196 |

**Table 6-3**

**Preliminary Remedial Goals - Tax Block Soils**
**Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LIFELONG RESIDENTS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1,3] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents[4] | 0.015 | 0.0139 | 0.139 | 1.39 | NA |
| Naphthalene | 3.6 | 4.58 | 45.8 | 458 | NA |
| Arsenic | 0.39 | 0.351 | 3.51 | 35.1 | NA |
| Hexavalent Chromium | 0.29 | 0.129 | 1.29 | 12.9 | NA |

Notes:
1 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. [Cancer benchmark value = 1E-06, Hazard index (HI) = 1.0].
2 - Industrial soil.
3 - Residential soil.
4 - See Section 3 for benzo(a)pyrene equivalents calculation methodology.
NA - Not applicable/not available.
RSLs are not available for commercial receptors.

**Table 6-4**

**Preliminary Remedial Goals - Tax Block Soils**
**Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| INDUSTRIAL WORKERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,2] (mg/kg) | Target Cancer Risk Level $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | Hazard Index = 1 (mg/kg) |
| Benzo(a)pyrene Equivalents | 0.21 | 0.289 | 2.89 | 28.9 | NA |
| Arsenic | 1.6 | 2.73 | 27.3 | 273 | 438 |

| CHILD COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1] (mg/kg) | Target Cancer Risk Level $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | Hazard Index = 1 (mg/kg) |
| Benzo(a)pyrene Equivalents | NA | 0.048 | 0.476 | 4.76 | NA |
| Arsenic | NA | 1.51 | 15.1 | 151 | 58.1 |
| Hexavalent Chromium | NA | 0.468 | 4.68 | 46.8 | 321 |

| ADOLESCENT COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1] (mg/kg) | Target Cancer Risk Level $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | Hazard Index = 1 (mg/kg) |
| Benzo(a)pyrene Equivalents | NA | 0.156 | 1.56 | 15.6 | NA |
| Arsenic | NA | 3.42 | 34.2 | 342 | 263 |

| LIFELONG COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1] (mg/kg) | Target Cancer Risk Level $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | Hazard Index = 1 (mg/kg) |
| Benzo(a)pyrene Equivalents | NA | 0.0365 | 0.365 | 3.65 | NA |
| Arsenic | NA | 1.05 | 10.5 | 105 | NA |
| Hexavalent Chromium | NA | 0.327 | 3.27 | 32.7 | NA |

| ADULT COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1] (mg/kg) | Target Cancer Risk Level $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | Hazard Index = 1 (mg/kg) |
| Benzo(a)pyrene Equivalents | NA | 0.289 | 2.89 | 28.9 | NA |
| Arsenic | NA | 2.73 | 27.3 | 273 | 438 |

| CHILD RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | Hazard Index = 1 (mg/kg) |
| Benzo(a)pyrene Equivalents | 0.015 | 0.024 | 0.241 | 2.41 | NA |
| Arsenic | 0.39 | 0.786 | 7.86 | 78.6 | 30.3 |
| Hexavalent Chromium | 0.29 | 0.226 | 2.26 | 22.6 | 155 |

**Table 6-4**

**Preliminary Remedial Goals - Tax Block Soils**
**Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| ADOLESCENT RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents | 0.015 | 0.126 | 1.26 | 12.6 | NA |
| Arsenic | 0.39 | 2.08 | 20.8 | 208 | 161 |

| LIFELONG RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents | 0.015 | 0.0195 | 0.195 | 1.95 | NA |
| Arsenic | 0.39 | 0.491 | 4.91 | 49.1 | NA |
| Hexavalent Chromium | 0.29 | 0.181 | 1.81 | 18.1 | NA |

| CHILD RESIDENTS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents | 0.015 | 0.017 | 0.172 | 1.72 | NA |
| Arsenic | 0.39 | 0.561 | 5.61 | 56.1 | 21.6 |
| Cobalt | 23 | 4,366 | 43,665 | 436,648 | 22.8 |
| Hexavalent Chromium | 0.29 | 0.161 | 1.61 | 16.1 | 111 |

| ADOLESCENT RESIDENTS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents | 0.015 | 0.090 | 0.897 | 8.97 | NA |
| Arsenic | 0.39 | 1.49 | 14.9 | 149 | 114 |

| LIFELONG RESIDENTS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents | 0.015 | 0.014 | 0.14 | 1.4 | NA |
| Arsenic | 0.39 | 0.351 | 3.51 | 35.1 | NA |
| Hexavalent Chromium | 0.29 | 0.129 | 1.29 | 12.9 | NA |

Notes:
1 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. [Cancer benchmark value = 1E-06, Hazard index (HI) = 1.0].
2 - Industrial soil.
3 - Residential soil.
NA - Not applicable/not available.
RSLs are not available for commercial receptors.

**Table 6-5**

**Preliminary Remedial Goals - Tax Block Soils**
**Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| INDUSTRIAL WORKERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,2] (mg/kg) | Target Cancer Risk Level $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | Hazard Index = 1 (mg/kg) |
| Benzo(a)pyrene Equivalents | 0.21 | 0.289 | 2.89 | 28.9 | NA |

| CHILD COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1] (mg/kg) | Target Cancer Risk Level $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | Hazard Index = 1 (mg/kg) |
| Benzo(a)pyrene Equivalents | NA | 0.048 | 0.476 | 4.76 | NA |
| Arsenic | NA | 1.51 | 15.1 | 151 | 58.1 |
| Hexavalent Chromium | NA | 0.468 | 4.68 | 46.8 | 321 |

| ADOLESCENT COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1] (mg/kg) | Target Cancer Risk Level $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | Hazard Index = 1 (mg/kg) |
| Benzo(a)pyrene Equivalents | NA | 0.156 | 1.56 | 15.6 | NA |

| LIFELONG COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1] (mg/kg) | Target Cancer Risk Level $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | Hazard Index = 1 (mg/kg) |
| Benzo(a)pyrene Equivalents | NA | 0.0365 | 0.365 | 3.65 | NA |
| Arsenic | NA | 1.05 | 10.5 | 105 | NA |
| Hexavalent Chromium | NA | 0.327 | 3.27 | 32.7 | NA |

| ADULT COMMERCIAL RECEPTORS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1] (mg/kg) | Target Cancer Risk Level $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | Hazard Index = 1 (mg/kg) |
| Benzo(a)pyrene Equivalents | NA | 0.289 | 2.89 | 28.9 | NA |

| CHILD RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | Hazard Index = 1 (mg/kg) |
| Benzo(a)pyrene Equivalents | 0.015 | 0.024 | 0.241 | 2.41 | NA |
| Arsenic | 0.39 | 0.786 | 7.86 | 78.6 | 30.3 |
| Hexavalent Chromium | 0.29 | 0.225 | 2.25 | 22.5 | 155 |

**Table 6-5**

**Preliminary Remedial Goals - Tax Block Soils**
**Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| ADOLESCENT RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents | 0.015 | 0.126 | 1.26 | 12.6 | NA |
| Arsenic | 0.39 | 2.08 | 20.8 | 208 | 161 |

| ADULT RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents | 0.015 | 0.538 | 5.38 | 53.8 | NA |

| LIFELONG RECREATIONAL USERS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents | 0.015 | 0.0195 | 0.195 | 1.95 | NA |
| Arsenic | 0.39 | 0.491 | 4.91 | 49.1 | NA |
| Hexavalent Chromium | 0.29 | 0.181 | 1.81 | 18.1 | NA |

| CHILD RESIDENTS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents | 0.015 | 0.017 | 0.172 | 1.72 | NA |
| Arsenic | 0.39 | 0.561 | 5.61 | 56.1 | 21.6 |
| Hexavalent Chromium | 0.29 | 0.161 | 1.61 | 16.1 | 111 |

| ADOLESCENT RESIDENTS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents | 0.015 | 0.090 | 0.897 | 8.97 | NA |
| Arsenic | 0.39 | 1.49 | 14.9 | 149 | 114 |
| Hexavalent Chromium | 0.29 | 0.818 | 8.18 | 81.8 | 565 |

| ADULT RESIDENTS | | | | | |
|---|---|---|---|---|---|
| Chemical | USEPA RSL[1,3] (mg/kg) | Target Cancer Risk Level | | | Hazard Index = 1 (mg/kg) |
| | | $10^{-6}$ (mg/kg) | $10^{-5}$ (mg/kg) | $10^{-4}$ (mg/kg) | |
| Benzo(a)pyrene Equivalents | 0.015 | 0.384 | 3.84 | 38.4 | NA |

**Table 6-5**

**Preliminary Remedial Goals - Tax Block Soils**
**Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LIFELONG RESIDENTS | | | | | |
|---|---|---|---|---|---|
| **Chemical** | **USEPA RSL[1,3] (mg/kg)** | **Target Cancer Risk Level** | | | **Hazard Index = 1 (mg/kg)** |
| | | **$10^{-6}$ (mg/kg)** | **$10^{-5}$ (mg/kg)** | **$10^{-4}$ (mg/kg)** | |
| Benzo(a)pyrene Equivalents | 0.015 | 0.0195 | 0.195 | 1.95 | NA |
| Arsenic | 0.39 | 0.491 | 4.91 | 49.1 | NA |

Notes:
1 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. [Cancer benchmark value = 1E-06, Hazard index (HI) = 1.0].
2 - Industrial soil.
3 - Residential soil.
NA - Not applicable/not available.
RSLs are not available for commercial receptors.

# Section 7
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# APPENDIX A—DATA SUMMARY TABLES

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31A-SS | SB-32A-SS | SB-33A-SS | F-SB-57RE-1 | F-SB-57RE-2 | F-SB-57RE-2-AVG |
| SAMPLE DATE | 20040913 | 20040924 | 20040917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 0 | 1 | 2 | 2 |
| BOTTOM DEPTH | 0 | 0 | 0 | 1 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,1-DICHLOROETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,1-DICHLOROETHENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,2-DIBROMOETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,2-DICHLOROETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 2-BUTANONE | 55 U | 55 UL | 54 U | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 5 U | 6 UL | 5 U | NA | NA | NA |
| 2-CHLOROTOLUENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 2-HEXANONE | 55 U | 55 UL | 54 U | NA | NA | NA |
| 4-CHLOROTOLUENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 55 U | 55 UL | 54 U | NA | NA | NA |
| ACETONE | 55 U | 55 UL | 54 U | NA | NA | NA |
| BENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| BROMOBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| BROMOCHLOROMETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| BROMODICHLOROMETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| BROMOFORM | 5 U | 6 UL | 5 U | NA | NA | NA |
| BROMOMETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| CARBON DISULFIDE | 5 U | 6 UL | 5 U | NA | NA | NA |
| CARBON TETRACHLORIDE | 5 U | 6 UL | 5 U | NA | NA | NA |
| CHLOROBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| CHLORODIBROMOMETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| CHLOROETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| CHLOROFORM | 5 U | 6 UL | 5 U | NA | NA | NA |
| CHLOROMETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| DIBROMOMETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31A-SS | SB-32A-SS | SB-33A-SS | F-SB-57RE-1 | F-SB-57RE-2 | F-SB-57RE-2-AVG |
| SAMPLE DATE | 20040913 | 20040924 | 20040917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 0 | 1 | 2 | 2 |
| BOTTOM DEPTH | 0 | 0 | 0 | 1 | 2 | 2 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| M+P-XYLENES | 11 U | 11 UL | 10 J | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 5 U | 6 UL | 5 U | NA | NA | NA |
| METHYLENE CHLORIDE | 5 U | 6 UL | 8 J | NA | NA | NA |
| NAPHTHALENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| N-BUTYLBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| N-PROPYLBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| O-XYLENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| SEC-BUTYLBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| STYRENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| TOLUENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| TRICHLOROETHENE | 5 U | 6 UL | 5 U | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 5 U | 6 UL | 5 U | NA | NA | NA |
| VINYL ACETATE | 5 U | 6 UL | 5 U | NA | NA | NA |
| VINYL CHLORIDE | 5 U | 6 UL | 5 U | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 920 U | 9200 U | 9100 U | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 2,4-DINITROPHENOL | 920 U | 9200 U | 9100 U | NA | NA | NA |
| 2,4-DINITROTOLUENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 2,6-DINITROTOLUENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 2-CHLOROPHENOL | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 2-METHYLPHENOL | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 2-NITROANILINE | 920 U | 9200 U | 9100 U | NA | NA | NA |
| 2-NITROPHENOL | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 3&4-METHYLPHENOL | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 3-NITROANILINE | 920 U | 9200 U | 9100 U | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 850 U | 8400 U | 8400 U | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 4-CHLOROANILINE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 370 U | 3700 U | 3600 U | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 920 U | 9200 U | 9100 U | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31A-SS | SB-32A-SS | SB-33A-SS | F-SB-57RE-1 | F-SB-57RE-2 | F-SB-57RE-2-AVG |
| SAMPLE DATE | 20040913 | 20040924 | 20040917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 0 | 1 | 2 | 2 |
| BOTTOM DEPTH | 0 | 0 | 0 | 1 | 2 | 2 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 920 U | 9200 U | 9100 U | NA | NA | NA |
| ACETOPHENONE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 370 U | 3700 U | 3600 U | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| CAPROLACTAM | 370 U | 3700 U | 3600 U | NA | NA | NA |
| CARBAZOLE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| DIBENZOFURAN | 370 U | 3700 U | 3600 U | NA | NA | NA |
| DIETHYL PHTHALATE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| DIMETHYL PHTHALATE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 370 U | 3700 U | 3600 UJ | NA | NA | NA |
| HEXACHLOROBENZENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| HEXACHLOROBUTADIENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| HEXACHLOROETHANE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| ISOPHORONE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| NITROBENZENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| PENTACHLOROPHENOL | 920 U | 9200 U | 9100 U | NA | NA | NA |
| PHENOL | 370 U | 3700 U | 3600 U | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| ACENAPHTHENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| ACENAPHTHYLENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| ANTHRACENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 370 U | 3700 U | 3600 U | 20.4 | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 370 U | 3700 U | 3600 U | 19.6 | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 370 U | 3700 U | 3600 U | 13 | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 370 U | 3700 U | 3600 UJ | 14 | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 370 U | 3700 U | 3600 UJ | 22 | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 370 U | 3700 U | 3600 UJ | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 370 U | 3700 U | 3600 UJ | 9.2 | 1.9 U | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31A-SS | SB-32A-SS | SB-33A-SS | F-SB-57RE-1 | F-SB-57RE-2 | F-SB-57RE-2-AVG |
| SAMPLE DATE | 20040913 | 20040924 | 20040917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 0 | 1 | 2 | 2 |
| BOTTOM DEPTH | 0 | 0 | 0 | 1 | 2 | 2 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 370 U | 3700 U | 3600 U | 18 | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 370 U | 3700 U | 3600 UJ | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| FLUORENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 370 U | 3700 U | 3600 UJ | 20 | 1.7 U | 1.7 U |
| NAPHTHALENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| PHENANTHRENE | 370 U | 3700 U | 3600 U | NA | NA | NA |
| PYRENE | 37 J | 3700 U | 3600 U | NA | NA | NA |
| TOTAL PAHS | 37 | 0 U | 0 U | 96.2 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 270 U | 270 U | 270 U | NA | NA | NA |
| AROCLOR-1221 | 270 U | 270 U | 270 U | NA | NA | NA |
| AROCLOR-1232 | 270 U | 270 U | 270 U | NA | NA | NA |
| AROCLOR-1242 | 270 U | 270 U | 270 U | NA | NA | NA |
| AROCLOR-1248 | 270 U | 270 U | 270 U | NA | NA | NA |
| AROCLOR-1254 | 270 U | 270 U | 270 U | NA | NA | NA |
| AROCLOR-1260 | 270 U | 270 U | 270 U | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 2.6 UR | 2.4 UL | 2.4 UR | NA | NA | NA |
| ARSENIC | 1.8 L | 0.48 U | 1 L | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31A-SS | SB-32A-SS | SB-33A-SS | F-SB-57RE-1 | F-SB-57RE-2 | F-SB-57RE-2-AVG |
| SAMPLE DATE | 20040913 | 20040924 | 20040917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 0 | 1 | 2 | 2 |
| BOTTOM DEPTH | 0 | 0 | 0 | 1 | 2 | 2 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 2.6 U | 2.4 U | 2.4 UL | NA | NA | NA |
| CADMIUM | 2.6 UL | 2.4 U | 2.4 UL | NA | NA | NA |
| CHROMIUM | 7.9 L | 14 J | 7.1 K | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | 7.4 | 15 J | 34 L | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | 2.8 J | 13 K | 12 L | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.11 UL | 0.096 U | 0.098 U | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | 3.6 K | 14 K | 25 | NA | NA | NA |
| SELENIUM | 2.6 UL | 2.5 | 2.4 UL | NA | NA | NA |
| SILVER | 2.6 UR | 2.4 UR | 2.4 UR | NA | NA | NA |
| THALLIUM | 2.1 UL | 1.9 U | 2 UL | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | 26 UL | 24 UL | 24 U | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 11000 U | 1800000 | 11000 U | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 110 U | 1100 | 3200 | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-057 | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-57RE-2-D | SB-57-SS | F-SB-58RE-1 | F-SB-58RE-2 | SB-58-SS | F-SB-58REA-2 |
| SAMPLE DATE | 20090917 | 20040913 | 20090917 | 20090917 | 20040913 | 20091103 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 2 | 0 | 1 | 2 | 0 | 2 |
| BOTTOM DEPTH | 2 | 0 | 1 | 2 | 0 | 2 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | 7 U | NA | NA | 5 U | NA |
| 1,1,1-TRICHLOROETHANE | NA | 7 U | NA | NA | 5 U | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | 7 U | NA | NA | 5 U | NA |
| 1,1,2-TRICHLOROETHANE | NA | 7 U | NA | NA | 5 U | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | 7 U | NA | NA | 5 U | NA |
| 1,1-DICHLOROETHANE | NA | 7 U | NA | NA | 5 U | NA |
| 1,1-DICHLOROETHENE | NA | 7 U | NA | NA | 5 U | NA |
| 1,1-DICHLOROPROPENE | NA | 7 U | NA | NA | 5 U | NA |
| 1,2,3-TRICHLOROBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| 1,2,3-TRICHLOROPROPANE | NA | 7 U | NA | NA | 5 U | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | 7 U | NA | NA | 5 U | NA |
| 1,2-DIBROMOETHANE | NA | 7 U | NA | NA | 5 U | NA |
| 1,2-DICHLOROBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| 1,2-DICHLOROETHANE | NA | 7 U | NA | NA | 5 U | NA |
| 1,2-DICHLOROPROPANE | NA | 7 U | NA | NA | 5 U | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| 1,3-DICHLOROBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| 1,3-DICHLOROPROPANE | NA | 7 U | NA | NA | 5 U | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | 7 U | NA | NA | 5 U | NA |
| 2-BUTANONE | NA | 67 U | NA | NA | 53 U | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | 7 U | NA | NA | 5 U | NA |
| 2-CHLOROTOLUENE | NA | 7 U | NA | NA | 5 U | NA |
| 2-HEXANONE | NA | 67 U | NA | NA | 53 U | NA |
| 4-CHLOROTOLUENE | NA | 7 U | NA | NA | 5 U | NA |
| 4-ISOPROPYLTOLUENE | NA | 7 U | NA | NA | 5 U | NA |
| 4-METHYL-2-PENTANONE | NA | 67 U | NA | NA | 53 U | NA |
| ACETONE | NA | 67 U | NA | NA | 53 U | NA |
| BENZENE | NA | 7 U | NA | NA | 5 U | NA |
| BROMOBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| BROMOCHLOROMETHANE | NA | 7 U | NA | NA | 5 U | NA |
| BROMODICHLOROMETHANE | NA | 7 U | NA | NA | 5 U | NA |
| BROMOFORM | NA | 7 U | NA | NA | 5 U | NA |
| BROMOMETHANE | NA | 7 U | NA | NA | 5 U | NA |
| CARBON DISULFIDE | NA | 7 U | NA | NA | 5 U | NA |
| CARBON TETRACHLORIDE | NA | 7 U | NA | NA | 5 U | NA |
| CHLOROBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| CHLORODIBROMOMETHANE | NA | 7 U | NA | NA | 5 U | NA |
| CHLOROETHANE | NA | 7 U | NA | NA | 5 U | NA |
| CHLOROFORM | NA | 7 U | NA | NA | 5 U | NA |
| CHLOROMETHANE | NA | 7 U | NA | NA | 5 U | NA |
| CIS-1,2-DICHLOROETHENE | NA | 7 U | NA | NA | 5 U | NA |
| CIS-1,3-DICHLOROPROPENE | NA | 7 U | NA | NA | 5 U | NA |
| DIBROMOMETHANE | NA | 7 U | NA | NA | 5 U | NA |
| DICHLORODIFLUOROMETHANE | NA | 7 U | NA | NA | 5 U | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-057 | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-57RE-2-D | SB-57-SS | F-SB-58RE-1 | F-SB-58RE-2 | SB-58-SS | F-SB-58REA-2 |
| SAMPLE DATE | 20090917 | 20040913 | 20090917 | 20090917 | 20040913 | 20091103 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 2 | 0 | 1 | 2 | 0 | 2 |
| BOTTOM DEPTH | 2 | 0 | 1 | 2 | 0 | 2 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| M+P-XYLENES | NA | 13 U | NA | NA | 11 U | NA |
| METHYL TERT-BUTYL ETHER | NA | 7 U | NA | NA | 5 U | NA |
| METHYLENE CHLORIDE | NA | 7 U | NA | NA | 5 U | NA |
| NAPHTHALENE | NA | 7 U | NA | NA | 5 U | NA |
| N-BUTYLBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| N-PROPYLBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| O-XYLENE | NA | 7 U | NA | NA | 5 U | NA |
| SEC-BUTYLBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| STYRENE | NA | 7 U | NA | NA | 5 U | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | 7 U | NA | NA | 5 U | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | 7 U | NA | NA | 5 U | NA |
| TOLUENE | NA | 7 U | NA | NA | 5 U | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | 7 U | NA | NA | 5 U | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | 7 U | NA | NA | 5 U | NA |
| TRICHLOROETHENE | NA | 7 U | NA | NA | 5 U | NA |
| TRICHLOROFLUOROMETHANE | NA | 7 U | NA | NA | 5 U | NA |
| VINYL ACETATE | NA | 7 U | NA | NA | 5 U | NA |
| VINYL CHLORIDE | NA | 7 U | NA | NA | 5 U | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | 450 U | NA | NA | 3600 U | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | 450 U | NA | NA | 3600 U | NA |
| 2,4,5-TRICHLOROPHENOL | NA | 1100 U | NA | NA | 9000 U | NA |
| 2,4,6-TRICHLOROPHENOL | NA | 450 U | NA | NA | 3600 U | NA |
| 2,4-DICHLOROPHENOL | NA | 450 U | NA | NA | 3600 U | NA |
| 2,4-DIMETHYLPHENOL | NA | 450 U | NA | NA | 3600 U | NA |
| 2,4-DINITROPHENOL | NA | 1100 U | NA | NA | 9000 U | NA |
| 2,4-DINITROTOLUENE | NA | 450 U | NA | NA | 3600 U | NA |
| 2,6-DINITROTOLUENE | NA | 450 U | NA | NA | 3600 U | NA |
| 2-CHLORONAPHTHALENE | NA | 450 U | NA | NA | 3600 U | NA |
| 2-CHLOROPHENOL | NA | 450 U | NA | NA | 3600 U | NA |
| 2-METHYLPHENOL | NA | 450 U | NA | NA | 3600 U | NA |
| 2-NITROANILINE | NA | 1100 U | NA | NA | 9000 U | NA |
| 2-NITROPHENOL | NA | 450 U | NA | NA | 3600 U | NA |
| 3&4-METHYLPHENOL | NA | 450 U | NA | NA | 3600 U | NA |
| 3,3'-DICHLOROBENZIDINE | NA | 450 U | NA | NA | 3600 U | NA |
| 3-NITROANILINE | NA | 1100 U | NA | NA | 9000 U | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | 1000 U | NA | NA | 8300 U | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | 450 U | NA | NA | 3600 U | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | 450 U | NA | NA | 3600 U | NA |
| 4-CHLOROANILINE | NA | 450 U | NA | NA | 3600 U | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | 450 U | NA | NA | 3600 U | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | 1100 U | NA | NA | 9000 U | NA |

| LOCATION | SB-057 | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-57RE-2-D | SB-57-SS | F-SB-58RE-1 | F-SB-58RE-2 | SB-58-SS | F-SB-58REA-2 |
| SAMPLE DATE | 20090917 | 20040913 | 20090917 | 20090917 | 20040913 | 20091103 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 2 | 0 | 1 | 2 | 0 | 2 |
| BOTTOM DEPTH | 2 | 0 | 1 | 2 | 0 | 2 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | 1100 U | NA | NA | 9000 U | NA |
| ACETOPHENONE | NA | 450 U | NA | NA | 3600 U | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | 450 U | NA | NA | 3600 U | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | 450 U | NA | NA | 3600 U | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | 450 U | NA | NA | 3600 U | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | 450 U | NA | NA | 3600 U | NA |
| BUTYL BENZYL PHTHALATE | NA | 450 U | NA | NA | 3600 U | NA |
| CAPROLACTAM | NA | 450 U | NA | NA | 3600 U | NA |
| CARBAZOLE | NA | 450 U | NA | NA | 3600 U | NA |
| DIBENZOFURAN | NA | 450 U | NA | NA | 3600 U | NA |
| DIETHYL PHTHALATE | NA | 450 U | NA | NA | 3600 U | NA |
| DIMETHYL PHTHALATE | NA | 450 U | NA | NA | 2000 J | NA |
| DI-N-BUTYL PHTHALATE | NA | 450 U | NA | NA | 3600 U | NA |
| DI-N-OCTYL PHTHALATE | NA | 450 U | NA | NA | 3600 U | NA |
| HEXACHLOROBENZENE | NA | 450 U | NA | NA | 3600 U | NA |
| HEXACHLOROBUTADIENE | NA | 450 U | NA | NA | 3600 U | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | 450 U | NA | NA | 3600 U | NA |
| HEXACHLOROETHANE | NA | 450 U | NA | NA | 3600 U | NA |
| ISOPHORONE | NA | 450 U | NA | NA | 3600 U | NA |
| NITROBENZENE | NA | 450 U | NA | NA | 3600 U | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | 450 U | NA | NA | 3600 U | NA |
| N-NITROSODIPHENYLAMINE | NA | 450 U | NA | NA | 3600 U | NA |
| PENTACHLOROPHENOL | NA | 1100 U | NA | NA | 9000 U | NA |
| PHENOL | NA | 450 U | NA | NA | 3600 U | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | 450 U | NA | NA | 3600 U | NA |
| ACENAPHTHENE | NA | 450 U | NA | NA | 3600 U | NA |
| ACENAPHTHYLENE | NA | 450 U | NA | NA | 3600 U | NA |
| ANTHRACENE | NA | 450 U | NA | NA | 3600 U | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 520 | 715 | 8596 | 3600 U | 33.9 |
| BAP EQUIVALENT-POS | 1.5 U | 0.06 | 714 | 8591 | 3600 U | 33.2 |
| BENZO(A)ANTHRACENE | 1.1 U | 450 U | 380 | 5200 | 3600 U | 23 J |
| BENZO(A)PYRENE | 1.5 U | 450 U | 560 | 6900 | 3600 U | 23 J |
| BENZO(B)FLUORANTHENE | 1.4 U | 450 U | 780 | 7400 | 3600 U | 56 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | 450 U | NA | NA | 3600 U | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 450 U | 290 | 3600 | 3600 U | 16 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-057 | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-57RE-2-D | SB-57-SS | F-SB-58RE-1 | F-SB-58RE-2 | SB-58-SS | F-SB-58REA-2 |
| SAMPLE DATE | 20090917 | 20040913 | 20090917 | 20090917 | 20040913 | 20091103 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 2 | 0 | 1 | 2 | 0 | 2 |
| BOTTOM DEPTH | 2 | 0 | 1 | 2 | 0 | 2 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 60 J | 530 | 4600 | 3600 U | 37 J |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 450 U | 1.7 U | 11 U | 3600 U | 1.5 UJ |
| FLUORANTHENE | NA | 98 J | NA | NA | 630 J | NA |
| FLUORENE | NA | 450 U | NA | NA | 3600 U | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 450 U | 350 | 3900 | 3600 U | 21 J |
| NAPHTHALENE | NA | 450 U | NA | NA | 3600 U | NA |
| PHENANTHRENE | NA | 54 J | NA | NA | 3600 U | NA |
| PYRENE | NA | 94 J | NA | NA | 540 J | NA |
| TOTAL PAHS | 0 U | 306 | 2890 | 31600 | 1170 | 176 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | 53 U | NA | NA | 42 U | NA |
| 4,4'-DDE | NA | 53 U | NA | NA | 42 U | NA |
| 4,4'-DDT | NA | 53 U | NA | NA | 42 U | NA |
| ALDRIN | NA | 53 U | NA | NA | 42 U | NA |
| ALPHA-BHC | NA | 53 U | NA | NA | 42 U | NA |
| ALPHA-CHLORDANE | NA | 53 U | NA | NA | 42 U | NA |
| AROCLOR-1016 | NA | 330 U | NA | NA | 260 U | NA |
| AROCLOR-1221 | NA | 330 U | NA | NA | 260 U | NA |
| AROCLOR-1232 | NA | 330 U | NA | NA | 260 U | NA |
| AROCLOR-1242 | NA | 330 U | NA | NA | 260 U | NA |
| AROCLOR-1248 | NA | 330 U | NA | NA | 260 U | NA |
| AROCLOR-1254 | NA | 330 U | NA | NA | 260 U | NA |
| AROCLOR-1260 | NA | 330 U | NA | NA | 260 U | NA |
| BETA-BHC | NA | 53 U | NA | NA | 42 U | NA |
| DELTA-BHC | NA | 53 U | NA | NA | 42 U | NA |
| DIELDRIN | NA | 53 U | NA | NA | 42 U | NA |
| ENDOSULFAN I | NA | 53 U | NA | NA | 42 U | NA |
| ENDOSULFAN II | NA | 53 U | NA | NA | 42 U | NA |
| ENDOSULFAN SULFATE | NA | 53 U | NA | NA | 42 U | NA |
| ENDRIN | NA | 53 U | NA | NA | 42 U | NA |
| ENDRIN ALDEHYDE | NA | 53 U | NA | NA | 42 U | NA |
| ENDRIN KETONE | NA | 53 U | NA | NA | 42 U | NA |
| GAMMA-BHC (LINDANE) | NA | 53 U | NA | NA | 42 U | NA |
| GAMMA-CHLORDANE | NA | 53 U | NA | NA | 42 U | NA |
| HEPTACHLOR | NA | 53 U | NA | NA | 42 U | NA |
| HEPTACHLOR EPOXIDE | NA | 53 U | NA | NA | 42 U | NA |
| METHOXYCHLOR | NA | 53 U | NA | NA | 42 U | NA |
| TOTAL AROCLOR | NA | 0 U | NA | NA | 0 U | NA |
| TOXAPHENE | NA | 1300 U | NA | NA | 1100 U | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | 3.1 UR | NA | NA | 2.6 UR | NA |
| ARSENIC | NA | 2.2 L | NA | NA | 1.5 L | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-057 | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-57RE-2-D | SB-57-SS | F-SB-58RE-1 | F-SB-58RE-2 | SB-58-SS | F-SB-58REA-2 |
| SAMPLE DATE | 20090917 | 20040913 | 20090917 | 20090917 | 20040913 | 20091103 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 2 | 0 | 1 | 2 | 0 | 2 |
| BOTTOM DEPTH | 2 | 0 | 1 | 2 | 0 | 2 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | 3.1 U | NA | NA | 2.6 U | NA |
| CADMIUM | NA | 3.1 UL | NA | NA | 2.6 UL | NA |
| CHROMIUM | NA | 11 L | NA | NA | 24 L | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | 7.5 | NA | NA | 9.4 | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | 8.6 J | NA | NA | 41 J | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | 0.13 UL | NA | NA | 0.1 UL | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | 7.4 | NA | NA | 8.4 | NA |
| SELENIUM | NA | 3.1 UL | NA | NA | 2.6 UL | NA |
| SILVER | NA | 3.1 UR | NA | NA | 2.6 UR | NA |
| THALLIUM | NA | 2.5 UL | NA | NA | 2.1 UL | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | 31 UL | NA | NA | 43 J | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | 14000 U | NA | NA | 100000 L | NA |
| GASOLINE RANGE ORGANICS | NA | 130 U | NA | NA | 110 U | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058 | SB-058B | SB-058C | SB-058D | SB-059 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REA-2-AVG | F-SB-58REA-2-D | F-SB-58REB-2 | F-SB-58REC-2 | F-SB-58RED-2 | SB-59-SS |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20040923 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 0 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 5 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | 5 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 5 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | 5 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | 5 U |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | 5 U |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | 5 U |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | 5 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 5 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | 5 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 5 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 5 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | 5 U |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | 5 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | 5 U |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | 5 U |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 5 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 5 U |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | 5 U |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | 5 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | 5 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 5 U |
| 2-BUTANONE | NA | NA | NA | NA | NA | 52 U |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | 5 U |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | 5 U |
| 2-HEXANONE | NA | NA | NA | NA | NA | 52 U |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | 5 U |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | 5 U |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | 52 U |
| ACETONE | NA | NA | NA | NA | NA | 52 U |
| BENZENE | NA | NA | NA | NA | NA | 5 U |
| BROMOBENZENE | NA | NA | NA | NA | NA | 5 U |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | 5 U |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | 5 U |
| BROMOFORM | NA | NA | NA | NA | NA | 5 U |
| BROMOMETHANE | NA | NA | NA | NA | NA | 5 U |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | 5 U |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | 5 U |
| CHLOROBENZENE | NA | NA | NA | NA | NA | 5 U |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | 5 U |
| CHLOROETHANE | NA | NA | NA | NA | NA | 5 U |
| CHLOROFORM | NA | NA | NA | NA | NA | 5 U |
| CHLOROMETHANE | NA | NA | NA | NA | NA | 5 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 5 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 5 U |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | 5 U |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | 5 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | 5 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058 | SB-058B | SB-058C | SB-058D | SB-059 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REA-2-AVG | F-SB-58REA-2-D | F-SB-58REB-2 | F-SB-58REC-2 | F-SB-58RED-2 | SB-59-SS |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20040923 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 0 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | 5 U |
| M+P-XYLENES | NA | NA | NA | NA | NA | 10 U |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | 5 U |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | 7 J |
| NAPHTHALENE | NA | NA | NA | NA | NA | 5 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | 5 U |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | 5 U |
| O-XYLENE | NA | NA | NA | NA | NA | 5 U |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | 5 U |
| STYRENE | NA | NA | NA | NA | NA | 5 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | 5 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | 5 U |
| TOLUENE | NA | NA | NA | NA | NA | 5 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 5 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 5 U |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | 5 U |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | 5 U |
| VINYL ACETATE | NA | NA | NA | NA | NA | 5 U |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | 5 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | 3500 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | 3500 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 8800 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 3500 U |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | 3500 U |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | 3500 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | 8800 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | 3500 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | 3500 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | 3500 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | 3500 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | 3500 U |
| 2-NITROANILINE | NA | NA | NA | NA | NA | 8800 U |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | 3500 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | 3500 U |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | 3500 U |
| 3-NITROANILINE | NA | NA | NA | NA | NA | 8800 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | 8100 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 3500 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | 3500 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | 3500 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 3500 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | 8800 U |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058 | SB-058B | SB-058C | SB-058D | SB-059 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REA-2-AVG | F-SB-58REA-2-D | F-SB-58REB-2 | F-SB-58REC-2 | F-SB-58RED-2 | SB-59-SS |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20040923 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 0 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | 8800 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | 3500 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | 3500 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | 3500 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | 3500 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | 3500 U |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | 3500 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | 3500 U |
| CARBAZOLE | NA | NA | NA | NA | NA | 3500 U |
| DIBENZOFURAN | NA | NA | NA | NA | NA | 3500 U |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | 3500 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | 3500 U |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | 3500 U |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | 3500 U |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | 3500 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | 3500 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | 3500 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | 3500 U |
| ISOPHORONE | NA | NA | NA | NA | NA | 3500 U |
| NITROBENZENE | NA | NA | NA | NA | NA | 3500 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | 3500 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | 3500 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | 8800 U |
| PHENOL | NA | NA | NA | NA | NA | 3500 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | 3500 U |
| ACENAPHTHENE | NA | NA | NA | NA | NA | 3500 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | 3500 U |
| ANTHRACENE | NA | NA | NA | NA | NA | 3500 U |
| BAP EQUIVALENT-HALFND | 121 | 209 | 3019 | 6424 | 131 | 3500 U |
| BAP EQUIVALENT-POS | 121 | 209 | 3019 | 6424 | 131 | 3500 U |
| BENZO(A)ANTHRACENE | 71.5 | 120 J | 1700 | 4300 | 55 | 3500 U |
| BENZO(A)PYRENE | 76.5 | 130 J | 2000 | 4300 | 79 | 3500 U |
| BENZO(B)FLUORANTHENE | 123 | 190 J | 2300 | 5800 | 110 | 3500 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | 3500 U |
| BENZO(K)FLUORANTHENE | 37 | 58 J | 740 | 2000 | 28 | 3500 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058 | SB-058B | SB-058C | SB-058D | SB-059 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REA-2-AVG | F-SB-58REA-2-D | F-SB-58REB-2 | F-SB-58REC-2 | F-SB-58RED-2 | SB-59-SS |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20040923 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 0 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 78.5 | 120 J | 1700 | 3900 | 58 | 3500 U |
| DIBENZO(A,H)ANTHRACENE | 19.875 | 39 J | 480 | 850 | 29 | 3500 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | 3500 U |
| FLUORENE | NA | NA | NA | NA | NA | 3500 U |
| INDENO(1,2,3-CD)PYRENE | 51 | 81 J | 1300 | 2400 | 58 | 3500 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | 3500 U |
| PHENANTHRENE | NA | NA | NA | NA | NA | 3500 U |
| PYRENE | NA | NA | NA | NA | NA | 3500 U |
| TOTAL PAHS | 457 | 738 | 10220 | 23550 | 417 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | 260 U |
| AROCLOR-1221 | NA | NA | NA | NA | NA | 260 U |
| AROCLOR-1232 | NA | NA | NA | NA | NA | 260 U |
| AROCLOR-1242 | NA | NA | NA | NA | NA | 260 U |
| AROCLOR-1248 | NA | NA | NA | NA | NA | 260 U |
| AROCLOR-1254 | NA | NA | NA | NA | NA | 260 U |
| AROCLOR-1260 | NA | NA | NA | NA | NA | 260 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | 2.5 UL |
| ARSENIC | NA | NA | NA | NA | NA | 1.7 |
| BARIUM | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-058 | SB-058 | SB-058B | SB-058C | SB-058D | SB-059 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REA-2-AVG | F-SB-58REA-2-D | F-SB-58REB-2 | F-SB-58REC-2 | F-SB-58RED-2 | SB-59-SS |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20040923 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 0 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | 2.5 U |
| CADMIUM | NA | NA | NA | NA | NA | 2.5 U |
| CHROMIUM | NA | NA | NA | NA | NA | 9.4 J |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | 4.8 |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | 5.1 |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | 0.099 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | 5.6 |
| SELENIUM | NA | NA | NA | NA | NA | 2.5 U |
| SILVER | NA | NA | NA | NA | NA | 2.5 UR |
| THALLIUM | NA | NA | NA | NA | NA | 2 U |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | 25 UL |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | 21000 |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | 1400 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060A | SB-060B | SB-060C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-1 | D-SB-60RE-2 | SB-60-SS | D-SB-60REA-1 | D-SB-60REB-1 | D-SB-60REC-1 |
| SAMPLE DATE | 20090915 | 20090915 | 20040924 | 20091012 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 0 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 0 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | 6 UL | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | 6 UL | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | 6 UL | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | 6 UL | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | 6 UL | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | 6 UL | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | 6 UL | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | 6 UL | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | 6 UL | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | 6 UL | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | 6 UL | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | 6 UL | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | 6 UL | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | 6 UL | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | 6 UL | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | 6 UL | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | 6 UL | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | 6 UL | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | 6 UL | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | 6 UL | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | 6 UL | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | 6 UL | NA | NA | NA |
| 2-BUTANONE | NA | NA | 56 UL | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | 6 UL | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | 6 UL | NA | NA | NA |
| 2-HEXANONE | NA | NA | 56 UL | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | 6 UL | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | 6 UL | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | 56 UL | NA | NA | NA |
| ACETONE | NA | NA | 56 UL | NA | NA | NA |
| BENZENE | NA | NA | 6 UL | NA | NA | NA |
| BROMOBENZENE | NA | NA | 6 UL | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | 6 UL | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | 6 UL | NA | NA | NA |
| BROMOFORM | NA | NA | 6 UL | NA | NA | NA |
| BROMOMETHANE | NA | NA | 6 UL | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | 6 UL | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | 6 UL | NA | NA | NA |
| CHLOROBENZENE | NA | NA | 6 UL | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | 6 UL | NA | NA | NA |
| CHLOROETHANE | NA | NA | 6 UL | NA | NA | NA |
| CHLOROFORM | NA | NA | 6 UL | NA | NA | NA |
| CHLOROMETHANE | NA | NA | 6 UL | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | 6 UL | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | 6 UL | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | 6 UL | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | 6 UL | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | 6 UL | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-060 | SB-060 | SB-060 | SB-060A | SB-060B | SB-060C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-1 | D-SB-60RE-2 | SB-60-SS | D-SB-60REA-1 | D-SB-60REB-1 | D-SB-60REC-1 |
| SAMPLE DATE | 20090915 | 20090915 | 20040924 | 20091012 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 0 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 0 | 1 | 1 | 1 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | 6 UL | NA | NA | NA |
| M+P-XYLENES | NA | NA | 11 UL | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | 6 UL | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | 6 UL | NA | NA | NA |
| NAPHTHALENE | NA | NA | 6 UL | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | 6 UL | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | 6 UL | NA | NA | NA |
| O-XYLENE | NA | NA | 6 UL | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | 6 UL | NA | NA | NA |
| STYRENE | NA | NA | 6 UL | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | 6 UL | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | 6 UL | NA | NA | NA |
| TOLUENE | NA | NA | 6 UL | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | 6 UL | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | 6 UL | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | 6 UL | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | 6 UL | NA | NA | NA |
| VINYL ACETATE | NA | NA | 6 UL | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | 6 UL | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | 3800 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | 3800 U | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | 9400 U | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | 3800 U | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | 3800 U | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | 3800 U | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | 9400 U | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | 3800 U | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | 3800 U | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | 3800 U | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | 3800 U | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | 3800 U | NA | NA | NA |
| 2-NITROANILINE | NA | NA | 9400 U | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | 3800 U | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | 3800 U | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | 3800 U | NA | NA | NA |
| 3-NITROANILINE | NA | NA | 9400 U | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | 8700 U | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | 3800 U | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | 3800 U | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | 3800 U | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | 3800 U | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | 9400 U | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060A | SB-060B | SB-060C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-1 | D-SB-60RE-2 | SB-60-SS | D-SB-60REA-1 | D-SB-60REB-1 | D-SB-60REC-1 |
| SAMPLE DATE | 20090915 | 20090915 | 20040924 | 20091012 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 0 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 0 | 1 | 1 | 1 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | 9400 U | NA | NA | NA |
| ACETOPHENONE | NA | NA | 3800 U | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | 3800 U | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | 3800 U | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | 3800 U | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | 3800 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | 3800 U | NA | NA | NA |
| CAPROLACTAM | NA | NA | 3800 U | NA | NA | NA |
| CARBAZOLE | NA | NA | 3800 U | NA | NA | NA |
| DIBENZOFURAN | NA | NA | 3800 U | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | 3800 U | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | 3800 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | 3800 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | 3800 U | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | 3800 U | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | 3800 U | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | 3800 U | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | 3800 U | NA | NA | NA |
| ISOPHORONE | NA | NA | 3800 U | NA | NA | NA |
| NITROBENZENE | NA | NA | 3800 U | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | 3800 U | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | 3800 U | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | 9400 U | NA | NA | NA |
| PHENOL | NA | NA | 3800 U | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | 3800 U | NA | NA | NA |
| ACENAPHTHENE | NA | NA | 3800 U | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | 3800 U | NA | NA | NA |
| ANTHRACENE | NA | NA | 3800 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22517 | 46.1 | 4243 | 17997 | 23.7 | 646 |
| BAP EQUIVALENT-POS | 22517 | 45.3 | 43.7 | 17997 | 22.9 | 646 |
| BENZO(A)ANTHRACENE | 23000 | 42 | 430 J | 15000 | 16 | 490 |
| BENZO(A)PYRENE | 16000 | 35 | 3800 U | 13000 | 18 | 450 |
| BENZO(B)FLUORANTHENE | 16000 | 42 | 3800 U | 12000 | 20 | 560 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | 3800 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 6300 | 20 | 3800 U | 4300 | 9.5 | 210 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060A | SB-060B | SB-060C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-1 | D-SB-60RE-2 | SB-60-SS | D-SB-60REA-1 | D-SB-60REB-1 | D-SB-60REC-1 |
| SAMPLE DATE | 20090915 | 20090915 | 20040924 | 20091012 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 0 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 0 | 1 | 1 | 1 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 24000 | 43 | 650 J | 14000 | 18 | 440 |
| DIBENZO(A,H)ANTHRACENE | 1900 | 1.5 U | 3800 U | 1700 | 1.6 U | 66 |
| FLUORANTHENE | NA | NA | 980 J | NA | NA | NA |
| FLUORENE | NA | NA | 3800 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 6300 | 17 | 3800 U | 5400 | 12 | 220 |
| NAPHTHALENE | NA | NA | 3800 U | NA | NA | NA |
| PHENANTHRENE | NA | NA | 610 J | NA | NA | NA |
| PYRENE | NA | NA | 1800 J | NA | NA | NA |
| TOTAL PAHS | 93500 | 199 | 4470 | 65400 | 93.5 | 2436 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | 280 U | NA | NA | NA |
| AROCLOR-1221 | NA | NA | 280 U | NA | NA | NA |
| AROCLOR-1232 | NA | NA | 280 U | NA | NA | NA |
| AROCLOR-1242 | NA | NA | 280 U | NA | NA | NA |
| AROCLOR-1248 | NA | NA | 280 U | NA | NA | NA |
| AROCLOR-1254 | NA | NA | 280 U | NA | NA | NA |
| AROCLOR-1260 | NA | NA | 280 U | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | 0 U | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | 2.7 UL | NA | NA | NA |
| ARSENIC | NA | NA | 0.62 K | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-060 | SB-060 | SB-060 | SB-060A | SB-060B | SB-060C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-1 | D-SB-60RE-2 | SB-60-SS | D-SB-60REA-1 | D-SB-60REB-1 | D-SB-60REC-1 |
| SAMPLE DATE | 20090915 | 20090915 | 20040924 | 20091012 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 0 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 0 | 1 | 1 | 1 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | 2.7 U | NA | NA | NA |
| CADMIUM | NA | NA | 2.7 U | NA | NA | NA |
| CHROMIUM | NA | NA | 13 J | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | 20 J | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | 22 K | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | 0.11 U | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | 16 K | NA | NA | NA |
| SELENIUM | NA | NA | 2.7 U | NA | NA | NA |
| SILVER | NA | NA | 2.7 UR | NA | NA | NA |
| THALLIUM | NA | NA | 2.2 U | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | 29 L | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | 660000 K | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | 590 | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060D | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RED-1 | D-SB-61RE-1 | D-SB-61RE-2 | D-SB-61RE-2-AVG | D-SB-61RE-2-D | SB-61-SS |
| SAMPLE DATE | 20091013 | 20090916 | 20090916 | 20090916 | 20090916 | 20040924 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 2 | 2 | 2 | 0 |
| BOTTOM DEPTH | 1 | 1 | 2 | 2 | 2 | 0 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 UL |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 UL |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | 6 UL |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | 6 UL |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 UL |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 UL |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 UL |
| 2-BUTANONE | NA | NA | NA | NA | NA | 62 UL |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | 6 UL |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | 6 UL |
| 2-HEXANONE | NA | NA | NA | NA | NA | 62 UL |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | 6 UL |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | 6 UL |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | 62 UL |
| ACETONE | NA | NA | NA | NA | NA | 62 UL |
| BENZENE | NA | NA | NA | NA | NA | 6 UL |
| BROMOBENZENE | NA | NA | NA | NA | NA | 6 UL |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | 6 UL |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | 6 UL |
| BROMOFORM | NA | NA | NA | NA | NA | 6 UL |
| BROMOMETHANE | NA | NA | NA | NA | NA | 6 UL |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | 6 UL |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | 6 UL |
| CHLOROBENZENE | NA | NA | NA | NA | NA | 6 UL |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | 6 UL |
| CHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| CHLOROFORM | NA | NA | NA | NA | NA | 6 UL |
| CHLOROMETHANE | NA | NA | NA | NA | NA | 6 UL |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 UL |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 UL |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | 6 UL |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | 6 UL |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060D | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RED-1 | D-SB-61RE-1 | D-SB-61RE-2 | D-SB-61RE-2-AVG | D-SB-61RE-2-D | SB-61-SS |
| SAMPLE DATE | 20091013 | 20090916 | 20090916 | 20090916 | 20090916 | 20040924 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 2 | 2 | 2 | 0 |
| BOTTOM DEPTH | 1 | 1 | 2 | 2 | 2 | 0 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| M+P-XYLENES | NA | NA | NA | NA | NA | 12 UL |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | 6 UL |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | 6 UL |
| NAPHTHALENE | NA | NA | NA | NA | NA | 6 UL |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| O-XYLENE | NA | NA | NA | NA | NA | 6 UL |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| STYRENE | NA | NA | NA | NA | NA | 6 UL |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | 6 UL |
| TOLUENE | NA | NA | NA | NA | NA | 6 UL |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 UL |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 UL |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | 6 UL |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | 6 UL |
| VINYL ACETATE | NA | NA | NA | NA | NA | 6 UL |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | 6 UL |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | 4200 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | 4200 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 11000 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 4200 U |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | 4200 U |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | 4200 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | 11000 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | 4200 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | 4200 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | 4200 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | 4200 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | 4200 U |
| 2-NITROANILINE | NA | NA | NA | NA | NA | 11000 U |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | 4200 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | 4200 U |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | 4200 U |
| 3-NITROANILINE | NA | NA | NA | NA | NA | 11000 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | 9700 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 4200 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | 4200 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | 4200 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 4200 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | 11000 U |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060D | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RED-1 | D-SB-61RE-1 | D-SB-61RE-2 | D-SB-61RE-2-AVG | D-SB-61RE-2-D | SB-61-SS |
| SAMPLE DATE | 20091013 | 20090916 | 20090916 | 20090916 | 20090916 | 20040924 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 2 | 2 | 2 | 0 |
| BOTTOM DEPTH | 1 | 1 | 2 | 2 | 2 | 0 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | 11000 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | 4200 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | 4200 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | 4200 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | 4200 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | 4200 U |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | 4200 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | 4200 U |
| CARBAZOLE | NA | NA | NA | NA | NA | 4200 U |
| DIBENZOFURAN | NA | NA | NA | NA | NA | 4200 U |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | 4200 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | 4200 U |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | 4200 U |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | 4200 U |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | 4200 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | 4200 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | 4200 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | 4200 U |
| ISOPHORONE | NA | NA | NA | NA | NA | 4200 U |
| NITROBENZENE | NA | NA | NA | NA | NA | 4200 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | 4200 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | 4200 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | 11000 U |
| PHENOL | NA | NA | NA | NA | NA | 4200 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | 4200 U |
| ACENAPHTHENE | NA | NA | NA | NA | NA | 4200 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | 4200 U |
| ANTHRACENE | NA | NA | NA | NA | NA | 4200 U |
| BAP EQUIVALENT-HALFND | 9774 | 17.3 | 1.6 U | 5.91 | 11.0 | 4200 U |
| BAP EQUIVALENT-POS | 9774 | 16.5 | 1.6 U | 5.46 | 10.1 | 4200 U |
| BENZO(A)ANTHRACENE | 8600 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 4200 U |
| BENZO(A)PYRENE | 6900 | 13 | 1.6 UJ | 5 | 9.2 J | 4200 U |
| BENZO(B)FLUORANTHENE | 7200 | 14 | 1.5 UJ | 4.925 | 9.1 J | 4200 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | 4200 U |
| BENZO(K)FLUORANTHENE | 2600 | 2 U | 2.1 U | 2.05 U | 2 U | 4200 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060D | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RED-1 | D-SB-61RE-1 | D-SB-61RE-2 | D-SB-61RE-2-AVG | D-SB-61RE-2-D | SB-61-SS |
| SAMPLE DATE | 20091013 | 20090916 | 20090916 | 20090916 | 20090916 | 20040924 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 2 | 2 | 2 | 0 |
| BOTTOM DEPTH | 1 | 1 | 2 | 2 | 2 | 0 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 8400 | 1.1 U | 1.1 U | 1.05 U | 1 U | 4200 U |
| DIBENZO(A,H)ANTHRACENE | 940 | 1.5 U | 1.6 U | 1.55 U | 1.5 U | 4200 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | 4200 U |
| FLUORENE | NA | NA | NA | NA | NA | 4200 U |
| INDENO(1,2,3-CD)PYRENE | 3200 | 21 | 1.8 U | 1.75 U | 1.7 U | 4200 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | 4200 U |
| PHENANTHRENE | NA | NA | NA | NA | NA | 4200 U |
| PYRENE | NA | NA | NA | NA | NA | 510 J |
| TOTAL PAHS | 37840 | 48 | 0 U | 9.15 | 18.3 | 510 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | 310 U |
| AROCLOR-1221 | NA | NA | NA | NA | NA | 310 U |
| AROCLOR-1232 | NA | NA | NA | NA | NA | 310 U |
| AROCLOR-1242 | NA | NA | NA | NA | NA | 310 U |
| AROCLOR-1248 | NA | NA | NA | NA | NA | 310 U |
| AROCLOR-1254 | NA | NA | NA | NA | NA | 310 U |
| AROCLOR-1260 | NA | NA | NA | NA | NA | 310 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | 2.8 UL |
| ARSENIC | NA | NA | NA | NA | NA | 0.56 U |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060D | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RED-1 | D-SB-61RE-1 | D-SB-61RE-2 | D-SB-61RE-2-AVG | D-SB-61RE-2-D | SB-61-SS |
| SAMPLE DATE | 20091013 | 20090916 | 20090916 | 20090916 | 20090916 | 20040924 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 2 | 2 | 2 | 0 |
| BOTTOM DEPTH | 1 | 1 | 2 | 2 | 2 | 0 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | 2.8 U |
| CADMIUM | NA | NA | NA | NA | NA | 2.8 U |
| CHROMIUM | NA | NA | NA | NA | NA | 18 J |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | 7.5 J |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | 23 K |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | 0.11 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | 8.1 K |
| SELENIUM | NA | NA | NA | NA | NA | 2.8 U |
| SILVER | NA | NA | NA | NA | NA | 2.8 UR |
| THALLIUM | NA | NA | NA | NA | NA | 2.2 U |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | 38 L |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | 16000 |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | 400 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061A | SB-061B | SB-061C | SB-061D | SB-062 | SB-062 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-1 | D-SB-61REB-1 | D-SB-61REC-1 | D-SB-61RED-1 | D-SB-62RE-1 | D-SB-62RE-2 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 2 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061A | SB-061B | SB-061C | SB-061D | SB-062 | SB-062 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-1 | D-SB-61REB-1 | D-SB-61REC-1 | D-SB-61RED-1 | D-SB-62RE-1 | D-SB-62RE-2 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 2 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-061A | SB-061B | SB-061C | SB-061D | SB-062 | SB-062 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-1 | D-SB-61REB-1 | D-SB-61REC-1 | D-SB-61RED-1 | D-SB-62RE-1 | D-SB-62RE-2 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 2 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 153 | 23.0 | 386 | 81.5 | 6418 | 1065 |
| BAP EQUIVALENT-POS | 153 | 22.2 | 386 | 81.5 | 6410 | 1065 |
| BENZO(A)ANTHRACENE | 110 | 8.3 | 240 | 59 | 2900 | 850 |
| BENZO(A)PYRENE | 110 | 18 | 270 | 54 | 5200 | 730 |
| BENZO(B)FLUORANTHENE | 130 | 22 | 350 | 70 | 5500 | 880 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 55 | 2 U | 110 | 26 | 2600 | 380 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-061A | SB-061B | SB-061C | SB-061D | SB-062 | SB-062 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-1 | D-SB-61REB-1 | D-SB-61REC-1 | D-SB-61RED-1 | D-SB-62RE-1 | D-SB-62RE-2 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 2 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 110 | 13 | 270 | 64 | 3500 | 730 |
| DIBENZO(A,H)ANTHRACENE | 13 | 1.5 U | 40 | 11 | 16 U | 120 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 52 | 12 | 160 | 33 | 3400 | 370 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 580 | 73.3 | 1440 | 317 | 23100 | 4060 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061A | SB-061B | SB-061C | SB-061D | SB-062 | SB-062 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-1 | D-SB-61REB-1 | D-SB-61REC-1 | D-SB-61RED-1 | D-SB-62RE-1 | D-SB-62RE-2 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 2 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062A | SB-062B | SB-062C | SB-062D | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-62-SS | D-SB-62REA-1 | D-SB-62REB-1 | D-SB-62REC-1 | D-SB-62RED-1 | D-SB-63RE-1 |
| SAMPLE DATE | 20040923 | 20091015 | 20091015 | 20091015 | 20091014 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 0 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 U | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 2-BUTANONE | 55 U | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 U | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 U | NA | NA | NA | NA | NA |
| 2-HEXANONE | 55 U | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 U | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 U | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 55 U | NA | NA | NA | NA | NA |
| ACETONE | 55 U | NA | NA | NA | NA | NA |
| BENZENE | 6 U | NA | NA | NA | NA | NA |
| BROMOBENZENE | 6 U | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| BROMOFORM | 6 U | NA | NA | NA | NA | NA |
| BROMOMETHANE | 6 U | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 6 U | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 U | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 U | NA | NA | NA | NA | NA |
| CHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| CHLOROFORM | 6 U | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 U | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 6 U | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062A | SB-062B | SB-062C | SB-062D | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-62-SS | D-SB-62REA-1 | D-SB-62REB-1 | D-SB-62REC-1 | D-SB-62RED-1 | D-SB-63RE-1 |
| SAMPLE DATE | 20040923 | 20091015 | 20091015 | 20091015 | 20091014 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 0 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| M+P-XYLENES | 11 U | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 6 U | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 8 J | NA | NA | NA | NA | NA |
| NAPHTHALENE | 6 U | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| O-XYLENE | 6 U | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| STYRENE | 6 U | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| TOLUENE | 6 U | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 U | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| VINYL ACETATE | 6 U | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 6 U | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 3700 U | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 3700 U | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 9300 U | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 3700 U | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 3700 U | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 3700 U | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 9300 U | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 3700 U | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 3700 U | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 3700 U | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 3700 U | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 3700 U | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 9300 U | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 3700 U | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 3700 U | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 3700 U | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 9300 U | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 8600 U | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 3700 U | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 3700 U | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 3700 U | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 3700 U | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 9300 U | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062A | SB-062B | SB-062C | SB-062D | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-62-SS | D-SB-62REA-1 | D-SB-62REB-1 | D-SB-62REC-1 | D-SB-62RED-1 | D-SB-63RE-1 |
| SAMPLE DATE | 20040923 | 20091015 | 20091015 | 20091015 | 20091014 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 0 | 1 | 1 | 1 | 1 | 1 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 9300 U | NA | NA | NA | NA | NA |
| ACETOPHENONE | 3700 U | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 3700 U | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 3700 U | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 3700 U | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 3700 U | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 3700 U | NA | NA | NA | NA | NA |
| CAPROLACTAM | 3700 U | NA | NA | NA | NA | NA |
| CARBAZOLE | 3700 U | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 3700 U | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 3700 U | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 3700 U | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 3700 U | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 3700 U | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 3700 U | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 3700 U | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 3700 U | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 3700 U | NA | NA | NA | NA | NA |
| ISOPHORONE | 3700 U | NA | NA | NA | NA | NA |
| NITROBENZENE | 3700 U | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 3700 U | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 3700 U | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 9300 U | NA | NA | NA | NA | NA |
| PHENOL | 3700 U | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3700 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 3700 U | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 950 J | NA | NA | NA | NA | NA |
| ANTHRACENE | 3700 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 7569 | 44.9 | 548 | 2595 | 16660 | 138 |
| BAP EQUIVALENT-POS | 7569 | 44.1 | 546 | 2578 | 16660 | 138 |
| BENZO(A)ANTHRACENE | 2300 J | 28 | 330 | 1300 | 8100 | 70 |
| BENZO(A)PYRENE | 5200 | 35 | 440 | 2100 | 12000 | 99 |
| BENZO(B)FLUORANTHENE | 3000 J | 39 | 430 | 2000 | 11000 | 110 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 5400 | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 4600 | 13 | 160 | 650 | 4100 | 41 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-062 | SB-062A | SB-062B | SB-062C | SB-062D | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-62-SS | D-SB-62REA-1 | D-SB-62REB-1 | D-SB-62REC-1 | D-SB-62RED-1 | D-SB-63RE-1 |
| SAMPLE DATE | 20040923 | 20091015 | 20091015 | 20091015 | 20091014 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 0 | 1 | 1 | 1 | 1 | 1 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 3400 J | 15 | 330 | 1000 | 9300 | 84 |
| DIBENZO(A,H)ANTHRACENE | 1400 J | 1.5 U | 3.6 U | 35 U | 2000 | 15 |
| FLUORANTHENE | 2100 J | NA | NA | NA | NA | NA |
| FLUORENE | 3700 U | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 3900 | 23 | 280 | 1400 | 7000 | 55 |
| NAPHTHALENE | 3700 U | NA | NA | NA | NA | NA |
| PHENANTHRENE | 410 J | NA | NA | NA | NA | NA |
| PYRENE | 6200 | NA | NA | NA | NA | NA |
| TOTAL PAHS | 38860 | 153 | 1970 | 8450 | 53500 | 474 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 270 U | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 270 U | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 270 U | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 270 U | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 270 U | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 270 U | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 270 U | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 2.5 UL | NA | NA | NA | NA | NA |
| ARSENIC | 0.62 | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-062 | SB-062A | SB-062B | SB-062C | SB-062D | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-62-SS | D-SB-62REA-1 | D-SB-62REB-1 | D-SB-62REC-1 | D-SB-62RED-1 | D-SB-63RE-1 |
| SAMPLE DATE | 20040923 | 20091015 | 20091015 | 20091015 | 20091014 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 0 | 1 | 1 | 1 | 1 | 1 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 2.5 U | NA | NA | NA | NA | NA |
| CADMIUM | 2.5 U | NA | NA | NA | NA | NA |
| CHROMIUM | 13 J | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | 4.1 | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | 23 | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.1 U | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | 10 | NA | NA | NA | NA | NA |
| SELENIUM | 3.5 | NA | NA | NA | NA | NA |
| SILVER | 2.5 UR | NA | NA | NA | NA | NA |
| THALLIUM | 2 U | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | 34 J | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 12000 | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 110 U | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063 | SB-063 | SB-063 | SB-063A | SB-063B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-2 | D-SB-63RE-2-AVG | D-SB-63RE-2-D | SB-63-SS | D-SB-63REA-2 | D-SB-63REB-2 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20040924 | 20091013 | 20091013 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SS | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 0 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 0 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | 7 UL | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | 7 UL | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | 7 UL | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | 7 UL | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | 7 UL | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | 7 UL | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | 7 UL | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | 7 UL | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | 7 UL | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | 7 UL | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | 7 UL | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | 7 UL | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | 7 UL | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | 7 UL | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | 7 UL | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | 7 UL | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | 7 UL | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | 7 UL | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | 7 UL | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | 7 UL | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | 7 UL | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | 7 UL | NA | NA |
| 2-BUTANONE | NA | NA | NA | 72 UL | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | 7 UL | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | 7 UL | NA | NA |
| 2-HEXANONE | NA | NA | NA | 72 UL | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | 7 UL | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | 7 UL | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | 72 UL | NA | NA |
| ACETONE | NA | NA | NA | 72 UL | NA | NA |
| BENZENE | NA | NA | NA | 7 UL | NA | NA |
| BROMOBENZENE | NA | NA | NA | 7 UL | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | 7 UL | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | 7 UL | NA | NA |
| BROMOFORM | NA | NA | NA | 7 UL | NA | NA |
| BROMOMETHANE | NA | NA | NA | 7 UL | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | 7 UL | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | 7 UL | NA | NA |
| CHLOROBENZENE | NA | NA | NA | 7 UL | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | 7 UL | NA | NA |
| CHLOROETHANE | NA | NA | NA | 7 UL | NA | NA |
| CHLOROFORM | NA | NA | NA | 7 UL | NA | NA |
| CHLOROMETHANE | NA | NA | NA | 7 UL | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | 7 UL | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | 7 UL | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | 7 UL | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | 7 UL | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | 7 UL | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063 | SB-063 | SB-063 | SB-063A | SB-063B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-2 | D-SB-63RE-2-AVG | D-SB-63RE-2-D | SB-63-SS | D-SB-63REA-2 | D-SB-63REB-2 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20040924 | 20091013 | 20091013 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SS | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 0 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 0 | 2 | 2 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | 7 UL | NA | NA |
| M+P-XYLENES | NA | NA | NA | 14 UL | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | 7 UL | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | 7 UL | NA | NA |
| NAPHTHALENE | NA | NA | NA | 7 UL | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | 7 UL | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | 7 UL | NA | NA |
| O-XYLENE | NA | NA | NA | 7 UL | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | 7 UL | NA | NA |
| STYRENE | NA | NA | NA | 7 UL | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | 7 UL | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | 7 UL | NA | NA |
| TOLUENE | NA | NA | NA | 7 UL | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | 7 UL | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | 7 UL | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | 7 UL | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | 7 UL | NA | NA |
| VINYL ACETATE | NA | NA | NA | 7 UL | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | 7 UL | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | 4800 U | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | 4800 U | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | 12000 U | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | 4800 U | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | 4800 U | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | 4800 U | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | 12000 U | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | 4800 U | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | 4800 U | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | 4800 U | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | 4800 U | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | 4800 U | NA | NA |
| 2-NITROANILINE | NA | NA | NA | 12000 U | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | 4800 U | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | 4800 U | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | 4800 U | NA | NA |
| 3-NITROANILINE | NA | NA | NA | 12000 U | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | 11000 U | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | 4800 U | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | 4800 U | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | 4800 U | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | 4800 U | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | 12000 U | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063 | SB-063 | SB-063 | SB-063A | SB-063B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-2 | D-SB-63RE-2-AVG | D-SB-63RE-2-D | SB-63-SS | D-SB-63REA-2 | D-SB-63REB-2 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20040924 | 20091013 | 20091013 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SS | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 0 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 0 | 2 | 2 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | 12000 U | NA | NA |
| ACETOPHENONE | NA | NA | NA | 4800 U | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | 4800 U | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | 4800 U | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | 4800 U | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | 4800 U | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | 4800 U | NA | NA |
| CAPROLACTAM | NA | NA | NA | 4800 U | NA | NA |
| CARBAZOLE | NA | NA | NA | 4800 U | NA | NA |
| DIBENZOFURAN | NA | NA | NA | 4800 U | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | 4800 U | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | 4800 U | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | 4800 U | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | 4800 U | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | 4800 U | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | 4800 U | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | 4800 U | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | 4800 U | NA | NA |
| ISOPHORONE | NA | NA | NA | 4800 U | NA | NA |
| NITROBENZENE | NA | NA | NA | 4800 U | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | 4800 U | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | 4800 U | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | 12000 U | NA | NA |
| PHENOL | NA | NA | NA | 4800 U | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | 4800 U | NA | NA |
| ACENAPHTHENE | NA | NA | NA | 4800 U | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | 4800 U | NA | NA |
| ANTHRACENE | NA | NA | NA | 4800 U | NA | NA |
| BAP EQUIVALENT-HALFND | 106 | 66.7 | 27.2 | 5545 | 17.4 | 1.5 U |
| BAP EQUIVALENT-POS | 106 | 66.3 | 26.4 | 0.53 | 16.6 | 1.5 U |
| BENZO(A)ANTHRACENE | 54 J | 35.5 | 17 J | 4800 U | 17 | 1.1 U |
| BENZO(A)PYRENE | 76 J | 48.5 | 21 J | 4800 U | 13 | 1.5 U |
| BENZO(B)FLUORANTHENE | 85 J | 54.5 | 24 J | 4800 U | 18 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | 4800 U | NA | NA |
| BENZO(K)FLUORANTHENE | 30 J | 19.45 | 8.9 J | 4800 U | 8.2 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063 | SB-063 | SB-063 | SB-063A | SB-063B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-2 | D-SB-63RE-2-AVG | D-SB-63RE-2-D | SB-63-SS | D-SB-63REA-2 | D-SB-63REB-2 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20040924 | 20091013 | 20091013 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SS | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 0 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 0 | 2 | 2 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 72 J | 46 | 20 J | 530 J | 17 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 12 J | 6.375 | 1.5 UJ | 4800 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | 4800 U | NA | NA |
| FLUORENE | NA | NA | NA | 4800 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 40 J | 26 | 12 J | 4800 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | 4800 U | NA | NA |
| PHENANTHRENE | NA | NA | NA | 4800 U | NA | NA |
| PYRENE | NA | NA | NA | 740 J | NA | NA |
| TOTAL PAHS | 369 | 235.95 | 102.9 | 1270 | 73.2 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | 350 U | NA | NA |
| AROCLOR-1221 | NA | NA | NA | 350 U | NA | NA |
| AROCLOR-1232 | NA | NA | NA | 350 U | NA | NA |
| AROCLOR-1242 | NA | NA | NA | 350 U | NA | NA |
| AROCLOR-1248 | NA | NA | NA | 350 U | NA | NA |
| AROCLOR-1254 | NA | NA | NA | 350 U | NA | NA |
| AROCLOR-1260 | NA | NA | NA | 350 U | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | 0 U | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | 3.3 UL | NA | NA |
| ARSENIC | NA | NA | NA | 0.94 K | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063 | SB-063 | SB-063 | SB-063A | SB-063B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-2 | D-SB-63RE-2-AVG | D-SB-63RE-2-D | SB-63-SS | D-SB-63REA-2 | D-SB-63REB-2 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20040924 | 20091013 | 20091013 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SS | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 0 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 0 | 2 | 2 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | 3.5 | NA | NA |
| CADMIUM | NA | NA | NA | 3.3 U | NA | NA |
| CHROMIUM | NA | NA | NA | 25 J | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | 12 J | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | 36 K | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | 0.13 U | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | 13 K | NA | NA |
| SELENIUM | NA | NA | NA | 3.3 U | NA | NA |
| SILVER | NA | NA | NA | 3.3 UR | NA | NA |
| THALLIUM | NA | NA | NA | 2.6 U | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | 71 L | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | 110000 | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | 140 U | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-063C | SB-063D | SB-064 | SB-065 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63REC-2 | D-SB-63RED-2 | SB-64-SS | D-SB-65RE-1 | D-SB-65RE-2 | SB-65-SS |
| SAMPLE DATE | 20091013 | 20091013 | 20040924 | 20090916 | 20090916 | 20040917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SS |
| TOP DEPTH | 2 | 2 | 0 | 1 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 0 | 1 | 2 | 0 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,1-DICHLOROETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,1-DICHLOROETHENE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,1-DICHLOROPROPENE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,2-DIBROMOETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,2-DICHLOROBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,2-DICHLOROETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,2-DICHLOROPROPANE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,3-DICHLOROBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,3-DICHLOROPROPANE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | 6 UL | NA | NA | 5 U |
| 2-BUTANONE | NA | NA | 65 UL | NA | NA | 53 U |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | 6 UL | NA | NA | 5 U |
| 2-CHLOROTOLUENE | NA | NA | 6 UL | NA | NA | 5 U |
| 2-HEXANONE | NA | NA | 65 UL | NA | NA | 53 U |
| 4-CHLOROTOLUENE | NA | NA | 6 UL | NA | NA | 5 U |
| 4-ISOPROPYLTOLUENE | NA | NA | 6 UL | NA | NA | 5 U |
| 4-METHYL-2-PENTANONE | NA | NA | 65 UL | NA | NA | 53 U |
| ACETONE | NA | NA | 65 UL | NA | NA | 53 U |
| BENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| BROMOBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| BROMOCHLOROMETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| BROMODICHLOROMETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| BROMOFORM | NA | NA | 6 UL | NA | NA | 5 U |
| BROMOMETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| CARBON DISULFIDE | NA | NA | 6 UL | NA | NA | 5 U |
| CARBON TETRACHLORIDE | NA | NA | 6 UL | NA | NA | 5 U |
| CHLOROBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| CHLORODIBROMOMETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| CHLOROETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| CHLOROFORM | NA | NA | 6 UL | NA | NA | 5 U |
| CHLOROMETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | 6 UL | NA | NA | 5 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | 6 UL | NA | NA | 5 U |
| DIBROMOMETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| DICHLORODIFLUOROMETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063C | SB-063D | SB-064 | SB-065 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63REC-2 | D-SB-63RED-2 | SB-64-SS | D-SB-65RE-1 | D-SB-65RE-2 | SB-65-SS |
| SAMPLE DATE | 20091013 | 20091013 | 20040924 | 20090916 | 20090916 | 20040917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SS |
| TOP DEPTH | 2 | 2 | 0 | 1 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 0 | 1 | 2 | 0 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| M+P-XYLENES | NA | NA | 13 UL | NA | NA | 11 U |
| METHYL TERT-BUTYL ETHER | NA | NA | 6 UL | NA | NA | 5 U |
| METHYLENE CHLORIDE | NA | NA | 6 UL | NA | NA | 7 J |
| NAPHTHALENE | NA | NA | 6 UL | NA | NA | 5 U |
| N-BUTYLBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| N-PROPYLBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| O-XYLENE | NA | NA | 6 UL | NA | NA | 5 U |
| SEC-BUTYLBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| STYRENE | NA | NA | 6 UL | NA | NA | 5 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | 6 UL | NA | NA | 5 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | 6 UL | NA | NA | 5 U |
| TOLUENE | NA | NA | 6 UL | NA | NA | 5 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | 6 UL | NA | NA | 5 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | 6 UL | NA | NA | 5 U |
| TRICHLOROETHENE | NA | NA | 6 UL | NA | NA | 5 U |
| TRICHLOROFLUOROMETHANE | NA | NA | 6 UL | NA | NA | 5 U |
| VINYL ACETATE | NA | NA | 6 UL | NA | NA | 5 U |
| VINYL CHLORIDE | NA | NA | 6 UL | NA | NA | 5 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | 4400 U | NA | NA | 3600 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | 4400 U | NA | NA | 3600 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | 11000 U | NA | NA | 9000 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | 4400 U | NA | NA | 3600 U |
| 2,4-DICHLOROPHENOL | NA | NA | 4400 U | NA | NA | 3600 U |
| 2,4-DIMETHYLPHENOL | NA | NA | 4400 U | NA | NA | 3600 U |
| 2,4-DINITROPHENOL | NA | NA | 11000 U | NA | NA | 9000 U |
| 2,4-DINITROTOLUENE | NA | NA | 4400 U | NA | NA | 3600 U |
| 2,6-DINITROTOLUENE | NA | NA | 4400 U | NA | NA | 3600 U |
| 2-CHLORONAPHTHALENE | NA | NA | 4400 U | NA | NA | 3600 U |
| 2-CHLOROPHENOL | NA | NA | 4400 U | NA | NA | 3600 U |
| 2-METHYLPHENOL | NA | NA | 4400 U | NA | NA | 3600 U |
| 2-NITROANILINE | NA | NA | 11000 U | NA | NA | 9000 U |
| 2-NITROPHENOL | NA | NA | 4400 U | NA | NA | 3600 U |
| 3&4-METHYLPHENOL | NA | NA | 4400 U | NA | NA | 3600 U |
| 3,3'-DICHLOROBENZIDINE | NA | NA | 4400 U | NA | NA | 3600 U |
| 3-NITROANILINE | NA | NA | 11000 U | NA | NA | 9000 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | 10000 U | NA | NA | 8300 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | 4400 U | NA | NA | 3600 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | 4400 U | NA | NA | 3600 U |
| 4-CHLOROANILINE | NA | NA | 4400 U | NA | NA | 3600 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | 4400 U | NA | NA | 3600 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | 11000 U | NA | NA | 9000 U |

| LOCATION | SB-063C | SB-063D | SB-064 | SB-065 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63REC-2 | D-SB-63RED-2 | SB-64-SS | D-SB-65RE-1 | D-SB-65RE-2 | SB-65-SS |
| SAMPLE DATE | 20091013 | 20091013 | 20040924 | 20090916 | 20090916 | 20040917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SS |
| TOP DEPTH | 2 | 2 | 0 | 1 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 0 | 1 | 2 | 0 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | 11000 U | NA | NA | 9000 U |
| ACETOPHENONE | NA | NA | 4400 U | NA | NA | 3600 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | 4400 U | NA | NA | 3600 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | 4400 U | NA | NA | 3600 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | 4400 U | NA | NA | 3600 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | 4400 U | NA | NA | 3600 U |
| BUTYL BENZYL PHTHALATE | NA | NA | 4400 U | NA | NA | 3600 U |
| CAPROLACTAM | NA | NA | 4400 U | NA | NA | 3600 U |
| CARBAZOLE | NA | NA | 4400 U | NA | NA | 3600 U |
| DIBENZOFURAN | NA | NA | 4400 U | NA | NA | 3600 U |
| DIETHYL PHTHALATE | NA | NA | 4400 U | NA | NA | 3600 U |
| DIMETHYL PHTHALATE | NA | NA | 4400 U | NA | NA | 3600 U |
| DI-N-BUTYL PHTHALATE | NA | NA | 4400 U | NA | NA | 3600 U |
| DI-N-OCTYL PHTHALATE | NA | NA | 4400 U | NA | NA | 3600 UJ |
| HEXACHLOROBENZENE | NA | NA | 4400 U | NA | NA | 3600 U |
| HEXACHLOROBUTADIENE | NA | NA | 4400 U | NA | NA | 3600 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | 4400 U | NA | NA | 3600 U |
| HEXACHLOROETHANE | NA | NA | 4400 U | NA | NA | 3600 U |
| ISOPHORONE | NA | NA | 4400 U | NA | NA | 3600 U |
| NITROBENZENE | NA | NA | 4400 U | NA | NA | 3600 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | 4400 U | NA | NA | 3600 U |
| N-NITROSODIPHENYLAMINE | NA | NA | 4400 U | NA | NA | 3600 U |
| PENTACHLOROPHENOL | NA | NA | 11000 U | NA | NA | 9000 U |
| PHENOL | NA | NA | 4400 U | NA | NA | 3600 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | 4400 U | NA | NA | 3600 U |
| ACENAPHTHENE | NA | NA | 4400 U | NA | NA | 3600 U |
| ACENAPHTHYLENE | NA | NA | 450 J | NA | NA | 3600 U |
| ANTHRACENE | NA | NA | 4400 U | NA | NA | 3600 U |
| BAP EQUIVALENT-HALFND | 2.74 | 1.6 U | 4207 | 1.4 U | 18.5 | 3600 U |
| BAP EQUIVALENT-POS | 0.98 | 1.6 U | 2007 | 1.4 U | 17.8 | 3600 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.2 U | 1300 J | 1 U | 13 | 3600 U |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1600 J | 1.4 U | 13 | 3600 UJ |
| BENZO(B)FLUORANTHENE | 9.7 | 1.5 U | 1400 J | 1.3 U | 24 | 3600 UJ |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | 1900 J | NA | NA | 3600 UJ |
| BENZO(K)FLUORANTHENE | 2.1 U | 2.1 U | 1500 J | 1.8 U | 9.4 | 3600 UJ |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063C | SB-063D | SB-064 | SB-065 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63REC-2 | D-SB-63RED-2 | SB-64-SS | D-SB-65RE-1 | D-SB-65RE-2 | SB-65-SS |
| SAMPLE DATE | 20091013 | 20091013 | 20040924 | 20090916 | 20090916 | 20040917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SS |
| TOP DEPTH | 2 | 2 | 0 | 1 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 0 | 1 | 2 | 0 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 14 | 1.1 U | 1700 J | 0.96 U | 22 | 3600 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 4400 U | 1.4 U | 1.5 U | 3600 UJ |
| FLUORANTHENE | NA | NA | 2100 J | NA | NA | 3600 U |
| FLUORENE | NA | NA | 4400 U | NA | NA | 3600 U |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.9 U | 1200 J | 1.6 U | 9.4 | 3600 UJ |
| NAPHTHALENE | NA | NA | 4400 U | NA | NA | 3600 U |
| PHENANTHRENE | NA | NA | 4400 U | NA | NA | 3600 U |
| PYRENE | NA | NA | 3600 J | NA | NA | 3600 U |
| TOTAL PAHS | 23.7 | 0 U | 16750 | 0 U | 90.8 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | 320 U | NA | NA | 270 U |
| AROCLOR-1221 | NA | NA | 320 U | NA | NA | 270 U |
| AROCLOR-1232 | NA | NA | 320 U | NA | NA | 270 U |
| AROCLOR-1242 | NA | NA | 320 U | NA | NA | 270 U |
| AROCLOR-1248 | NA | NA | 320 U | NA | NA | 270 U |
| AROCLOR-1254 | NA | NA | 320 U | NA | NA | 270 U |
| AROCLOR-1260 | NA | NA | 320 U | NA | NA | 270 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | 0 U | NA | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | 3 UL | NA | NA | 2.6 UR |
| ARSENIC | NA | NA | 0.73 K | NA | NA | 0.54 L |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063C | SB-063D | SB-064 | SB-065 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63REC-2 | D-SB-63RED-2 | SB-64-SS | D-SB-65RE-1 | D-SB-65RE-2 | SB-65-SS |
| SAMPLE DATE | 20091013 | 20091013 | 20040924 | 20090916 | 20090916 | 20040917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SS |
| TOP DEPTH | 2 | 2 | 0 | 1 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 0 | 1 | 2 | 0 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | 3.5 | NA | NA | 2.6 UL |
| CADMIUM | NA | NA | 3 U | NA | NA | 2.6 UL |
| CHROMIUM | NA | NA | 18 J | NA | NA | 3.1 K |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | 9.7 J | NA | NA | 2.6 UL |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | 75 K | NA | NA | 2.8 L |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | 0.12 U | NA | NA | 0.11 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | 15 K | NA | NA | 9.6 |
| SELENIUM | NA | NA | 3.5 | NA | NA | 2.6 UL |
| SILVER | NA | NA | 3 UR | NA | NA | 2.6 UR |
| THALLIUM | NA | NA | 2.4 U | NA | NA | 2.1 UL |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | 55 L | NA | NA | 26 U |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | 330000 | NA | NA | 11000 U |
| GASOLINE RANGE ORGANICS | NA | NA | 140 U | NA | NA | 250 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066 | SB-066 | SB-066A | SB-066B | SB-066C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RE-1 | D-SB-66RE-2 | SB-66-SS | D-SB-66REA-2 | D-SB-66REB-2 | D-SB-66REC-2 |
| SAMPLE DATE | 20090914 | 20090914 | 20040923 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 0 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 2 | 0 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | 6 U | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | 6 U | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | 6 U | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | 6 U | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | 6 U | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | 6 U | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | 6 U | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | 6 U | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | 6 U | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | 6 U | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | 6 U | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | 33 | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | 6 U | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | 6 U | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | 6 U | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | 6 U | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | 6 U | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | 23 | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | 6 U | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | 6 U | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | 6 U | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | 6 U | NA | NA | NA |
| 2-BUTANONE | NA | NA | 59 U | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | 6 U | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | 6 U | NA | NA | NA |
| 2-HEXANONE | NA | NA | 59 U | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | 6 U | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | 6 U | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | 59 U | NA | NA | NA |
| ACETONE | NA | NA | 59 U | NA | NA | NA |
| BENZENE | NA | NA | 6 U | NA | NA | NA |
| BROMOBENZENE | NA | NA | 6 U | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | 6 U | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | 6 U | NA | NA | NA |
| BROMOFORM | NA | NA | 6 U | NA | NA | NA |
| BROMOMETHANE | NA | NA | 6 U | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | 6 U | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | 6 U | NA | NA | NA |
| CHLOROBENZENE | NA | NA | 6 U | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | 6 U | NA | NA | NA |
| CHLOROETHANE | NA | NA | 6 U | NA | NA | NA |
| CHLOROFORM | NA | NA | 6 U | NA | NA | NA |
| CHLOROMETHANE | NA | NA | 6 U | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | 6 U | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | 6 U | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | 6 U | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | 6 U | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | 8 | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-066 | SB-066 | SB-066 | SB-066A | SB-066B | SB-066C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RE-1 | D-SB-66RE-2 | SB-66-SS | D-SB-66REA-2 | D-SB-66REB-2 | D-SB-66REC-2 |
| SAMPLE DATE | 20090914 | 20090914 | 20040923 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 0 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 2 | 0 | 2 | 2 | 2 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | 6 U | NA | NA | NA |
| M+P-XYLENES | NA | NA | 10 J | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | 6 U | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | 10 J | NA | NA | NA |
| NAPHTHALENE | NA | NA | 260 | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | 6 U | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | 6 U | NA | NA | NA |
| O-XYLENE | NA | NA | 23 | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | 6 U | NA | NA | NA |
| STYRENE | NA | NA | 6 U | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | 6 U | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | 6 U | NA | NA | NA |
| TOLUENE | NA | NA | 6 U | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | 6 U | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | 6 U | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | 6 U | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | 6 U | NA | NA | NA |
| VINYL ACETATE | NA | NA | 6 U | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | 6 U | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | 4000 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | 4000 U | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | 10000 U | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | 4000 U | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | 4000 U | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | 4000 U | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | 10000 U | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | 4000 U | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | 4000 U | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | 4000 U | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | 4000 U | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | 4000 U | NA | NA | NA |
| 2-NITROANILINE | NA | NA | 10000 U | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | 4000 U | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | 4000 U | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | 4000 U | NA | NA | NA |
| 3-NITROANILINE | NA | NA | 10000 U | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | 9300 U | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | 4000 U | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | 4000 U | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | 4000 U | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | 4000 U | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | 10000 U | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066 | SB-066 | SB-066A | SB-066B | SB-066C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RE-1 | D-SB-66RE-2 | SB-66-SS | D-SB-66REA-2 | D-SB-66REB-2 | D-SB-66REC-2 |
| SAMPLE DATE | 20090914 | 20090914 | 20040923 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 0 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 2 | 0 | 2 | 2 | 2 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | 10000 U | NA | NA | NA |
| ACETOPHENONE | NA | NA | 4000 U | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | 4000 U | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | 4000 U | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | 4000 U | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | 4000 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | 4000 U | NA | NA | NA |
| CAPROLACTAM | NA | NA | 4000 U | NA | NA | NA |
| CARBAZOLE | NA | NA | 4000 U | NA | NA | NA |
| DIBENZOFURAN | NA | NA | 4000 U | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | 4000 U | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | 4000 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | 4000 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | 4000 U | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | 4000 U | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | 4000 U | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | 4000 U | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | 4000 U | NA | NA | NA |
| ISOPHORONE | NA | NA | 4000 U | NA | NA | NA |
| NITROBENZENE | NA | NA | 4000 U | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | 4000 U | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | 4000 U | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | 10000 U | NA | NA | NA |
| PHENOL | NA | NA | 4000 U | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | 990 J | NA | NA | NA |
| ACENAPHTHENE | NA | NA | 4000 U | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | 4000 U | NA | NA | NA |
| ANTHRACENE | NA | NA | 4000 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 52.7 | 1461 | 4621 | 17.4 | 2.60 | 38.0 |
| BAP EQUIVALENT-POS | 51.9 | 1461 | 0.64 | 16.6 | 0.94 | 37.3 |
| BENZO(A)ANTHRACENE | 58 | 1300 | 4000 U | 16 | 1.1 U | 30 |
| BENZO(A)PYRENE | 40 | 1000 | 4000 U | 12 | 1.5 U | 29 |
| BENZO(B)FLUORANTHENE | 38 | 1000 | 4000 U | 18 | 9.4 | 36 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | 4000 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 24 | 450 | 4000 U | 11 | 2 U | 14 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066 | SB-066 | SB-066A | SB-066B | SB-066C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RE-1 | D-SB-66RE-2 | SB-66-SS | D-SB-66REA-2 | D-SB-66REB-2 | D-SB-66REC-2 |
| SAMPLE DATE | 20090914 | 20090914 | 20040923 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 0 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 2 | 0 | 2 | 2 | 2 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 61 | 1300 | 640 J | 1.1 U | 1.1 U | 21 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 170 | 4000 U | 1.6 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | 730 J | NA | NA | NA |
| FLUORENE | NA | NA | 610 J | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 20 | 550 | 4000 U | 11 | 1.8 U | 15 |
| NAPHTHALENE | NA | NA | 690 J | NA | NA | NA |
| PHENANTHRENE | NA | NA | 1700 J | NA | NA | NA |
| PYRENE | NA | NA | 1200 J | NA | NA | NA |
| TOTAL PAHS | 241 | 5770 | 6560 | 68 | 9.4 | 145 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | 300 U | NA | NA | NA |
| AROCLOR-1221 | NA | NA | 300 U | NA | NA | NA |
| AROCLOR-1232 | NA | NA | 300 U | NA | NA | NA |
| AROCLOR-1242 | NA | NA | 300 U | NA | NA | NA |
| AROCLOR-1248 | NA | NA | 300 U | NA | NA | NA |
| AROCLOR-1254 | NA | NA | 300 U | NA | NA | NA |
| AROCLOR-1260 | NA | NA | 300 U | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | 0 U | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | 2.8 UL | NA | NA | NA |
| ARSENIC | NA | NA | 4.9 | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066 | SB-066 | SB-066A | SB-066B | SB-066C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RE-1 | D-SB-66RE-2 | SB-66-SS | D-SB-66REA-2 | D-SB-66REB-2 | D-SB-66REC-2 |
| SAMPLE DATE | 20090914 | 20090914 | 20040923 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 0 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 2 | 0 | 2 | 2 | 2 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | 2.8 U | NA | NA | NA |
| CADMIUM | NA | NA | 2.8 U | NA | NA | NA |
| CHROMIUM | NA | NA | 36 J | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | 22 | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | 14 | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | 0.11 U | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | 8.6 | NA | NA | NA |
| SELENIUM | NA | NA | 2.8 U | NA | NA | NA |
| SILVER | NA | NA | 2.8 UR | NA | NA | NA |
| THALLIUM | NA | NA | 2.2 U | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | 28 UL | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | 12000 U | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | 4800 | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066D | SB-067 | SB-239 | SB-239 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RED-2 | SB-67-SS | D-SB-239RE-2 | D-SB-239RE-2-AVG | D-SB-239RE-2-D | SB-239-SS[12] |
| SAMPLE DATE | 20091014 | 20040927 | 20090914 | 20090914 | 20090914 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SB | SB |
| TOP DEPTH | 2 | 0 | 2 | 2 | 2 | 1 |
| BOTTOM DEPTH | 2 | 0 | 2 | 2 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | 5 UL | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | 5 UL | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | 5 UL | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | 5 UL | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | 5 UL | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | 5 UL | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | 5 UL | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | 5 UL | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | 5 UL | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | 5 UL | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | 5 UL | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | 5 UL | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | 5 UL | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | 5 UL | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | 5 UL | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | 5 UL | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | 5 UL | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | 5 UL | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | 5 UL | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | 5 UL | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | 5 UL | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | 5 UL | NA | NA | NA | NA |
| 2-BUTANONE | NA | 53 UL | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | 5 UL | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | 5 UL | NA | NA | NA | NA |
| 2-HEXANONE | NA | 53 UL | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | 5 UL | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | 5 UL | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | 53 UL | NA | NA | NA | NA |
| ACETONE | NA | 53 UL | NA | NA | NA | NA |
| BENZENE | NA | 5 UL | NA | NA | NA | NA |
| BROMOBENZENE | NA | 5 UL | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | 5 UL | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | 5 UL | NA | NA | NA | NA |
| BROMOFORM | NA | 5 UL | NA | NA | NA | NA |
| BROMOMETHANE | NA | 5 UL | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | 5 UL | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | 5 UL | NA | NA | NA | NA |
| CHLOROBENZENE | NA | 5 UL | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | 5 UL | NA | NA | NA | NA |
| CHLOROETHANE | NA | 5 UL | NA | NA | NA | NA |
| CHLOROFORM | NA | 5 UL | NA | NA | NA | NA |
| CHLOROMETHANE | NA | 5 UL | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | 5 UL | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | 5 UL | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | 5 UL | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | 5 UL | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | 5 UL | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-066D | SB-067 | SB-239 | SB-239 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RED-2 | SB-67-SS | D-SB-239RE-2 | D-SB-239RE-2-AVG | D-SB-239RE-2-D | SB-239-SS[12] |
| SAMPLE DATE | 20091014 | 20040927 | 20090914 | 20090914 | 20090914 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SB | SB |
| TOP DEPTH | 2 | 0 | 2 | 2 | 2 | 1 |
| BOTTOM DEPTH | 2 | 0 | 2 | 2 | 2 | 1 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | 5 UL | NA | NA | NA | NA |
| M+P-XYLENES | NA | 11 UL | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | 5 UL | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | 5 UL | NA | NA | NA | NA |
| NAPHTHALENE | NA | 5 UL | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | 5 UL | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | 5 UL | NA | NA | NA | NA |
| O-XYLENE | NA | 5 UL | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | 5 UL | NA | NA | NA | NA |
| STYRENE | NA | 5 UL | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | 5 UL | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | 5 UL | NA | NA | NA | NA |
| TOLUENE | NA | 5 UL | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | 5 UL | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | 5 UL | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | 5 UL | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | 5 UL | NA | NA | NA | NA |
| VINYL ACETATE | NA | 5 UL | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | 5 UL | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | 3500 U | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | 3500 U | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | 8800 U | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | 3500 U | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | 3500 U | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | 3500 U | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | 8800 U | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | 3500 U | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | 3500 U | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | 3500 U | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | 3500 U | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | 3500 U | NA | NA | NA | NA |
| 2-NITROANILINE | NA | 8800 U | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | 3500 U | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | 3500 U | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | 3500 UJ | NA | NA | NA | NA |
| 3-NITROANILINE | NA | 8800 U | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | 8100 U | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | 3500 U | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | 3500 U | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | 3500 U | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | 3500 U | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | 8800 U | NA | NA | NA | NA |

| LOCATION | SB-066D | SB-067 | SB-239 | SB-239 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RED-2 | SB-67-SS | D-SB-239RE-2 | D-SB-239RE-2-AVG | D-SB-239RE-2-D | SB-239-SS[12] |
| SAMPLE DATE | 20091014 | 20040927 | 20090914 | 20090914 | 20090914 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SB | SB |
| TOP DEPTH | 2 | 0 | 2 | 2 | 2 | 1 |
| BOTTOM DEPTH | 2 | 0 | 2 | 2 | 2 | 1 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | 8800 U | NA | NA | NA | NA |
| ACETOPHENONE | NA | 3500 U | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | 3500 U | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | 3500 U | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | 3500 U | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | 3500 U | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | 3500 UJ | NA | NA | NA | NA |
| CAPROLACTAM | NA | 3500 U | NA | NA | NA | NA |
| CARBAZOLE | NA | 3500 U | NA | NA | NA | NA |
| DIBENZOFURAN | NA | 3500 U | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | 3500 U | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | 3500 U | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | 3500 U | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | 3500 UJ | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | 3500 U | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | 3500 U | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | 3500 U | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | 3500 U | NA | NA | NA | NA |
| ISOPHORONE | NA | 3500 U | NA | NA | NA | NA |
| NITROBENZENE | NA | 3500 U | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | 3500 U | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | 3500 U | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | 8800 U | NA | NA | NA | NA |
| PHENOL | NA | 3500 U | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | 3500 U | NA | NA | NA | NA |
| ACENAPHTHENE | NA | 470 J | NA | NA | NA | 205 |
| ACENAPHTHYLENE | NA | 1600 J | NA | NA | NA | 187 |
| ANTHRACENE | NA | 1300 J | NA | NA | NA | 136 J |
| BAP EQUIVALENT-HALFND | 1.5 U | 9391 | 297 | 158 | 18.7 | 340 |
| BAP EQUIVALENT-POS | 1.5 U | 9391 | 297 | 157 | 18.0 | 340 |
| BENZO(A)ANTHRACENE | 1.1 U | 5700 J | 230 J | 120.5 | 11 J | 157 J |
| BENZO(A)PYRENE | 1.5 U | 5800 J | 200 J | 107 | 14 J | 229 |
| BENZO(B)FLUORANTHENE | 1.4 U | 5300 J | 290 J | 155 | 20 J | 151 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | 6900 J | NA | NA | NA | 263 |
| BENZO(K)FLUORANTHENE | 2 U | 4400 J | 100 J | 50.5 | 2 UJ | 176 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066D | SB-067 | SB-239 | SB-239 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RED-2 | SB-67-SS | D-SB-239RE-2 | D-SB-239RE-2-AVG | D-SB-239RE-2-D | SB-239-SS[12] |
| SAMPLE DATE | 20091014 | 20040927 | 20090914 | 20090914 | 20090914 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SB | SB |
| TOP DEPTH | 2 | 0 | 2 | 2 | 2 | 1 |
| BOTTOM DEPTH | 2 | 0 | 2 | 2 | 2 | 1 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 7300 J | 210 J | 112 | 14 J | 187 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 2000 J | 34 J | 17.375 | 1.5 UJ | 60 J |
| FLUORANTHENE | NA | 8700 | NA | NA | NA | 307 |
| FLUORENE | NA | 1100 J | NA | NA | NA | 192 |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 4400 J | 98 J | 53.35 | 8.7 J | 187 |
| NAPHTHALENE | NA | 3500 U | NA | NA | NA | 49 J |
| PHENANTHRENE | NA | 9000 | NA | NA | NA | 539 |
| PYRENE | NA | 20000 J | NA | NA | NA | 383 |
| TOTAL PAHS | 0 U | 83970 | 1162 | 614.85 | 67.7 | 3408 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | 260 U | NA | NA | NA | NA |
| AROCLOR-1221 | NA | 260 U | NA | NA | NA | NA |
| AROCLOR-1232 | NA | 260 U | NA | NA | NA | NA |
| AROCLOR-1242 | NA | 260 U | NA | NA | NA | NA |
| AROCLOR-1248 | NA | 260 U | NA | NA | NA | NA |
| AROCLOR-1254 | NA | 260 U | NA | NA | NA | NA |
| AROCLOR-1260 | NA | 260 U | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | 0 U | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | 3 J | NA | NA | NA | NA |
| ARSENIC | NA | 1.1 | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066D | SB-067 | SB-239 | SB-239 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RED-2 | SB-67-SS | D-SB-239RE-2 | D-SB-239RE-2-AVG | D-SB-239RE-2-D | SB-239-SS[12] |
| SAMPLE DATE | 20091014 | 20040927 | 20090914 | 20090914 | 20090914 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SB | SB |
| TOP DEPTH | 2 | 0 | 2 | 2 | 2 | 1 |
| BOTTOM DEPTH | 2 | 0 | 2 | 2 | 2 | 1 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | 4.6 | NA | NA | NA | NA |
| CADMIUM | NA | 2.6 U | NA | NA | NA | NA |
| CHROMIUM | NA | 21 J | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | 9.8 J | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | 56 K | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | 0.11 U | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | 15 K | NA | NA | NA | NA |
| SELENIUM | NA | 4.4 | NA | NA | NA | NA |
| SILVER | NA | 2.6 UR | NA | NA | NA | NA |
| THALLIUM | NA | 2.1 U | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | 71 | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | 11000 U | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | 110 U | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-239 | SB-239 | SB-240 | SB-240 | SB-240 | SB-240 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-239-SS[18] | SB-239-SS[6] | D-SB-240RE-1 | D-SB-240RE-2 | SB-240-SS[12] | SB-240-SS[18] |
| SAMPLE DATE | 20050607 | 20050607 | 20090914 | 20090914 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SB | SB |
| TOP DEPTH | 1.5 | 0.5 | 1 | 2 | 1 | 1.5 |
| BOTTOM DEPTH | 1.5 | 0.5 | 1 | 2 | 1 | 1.5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-239 | SB-239 | SB-240 | SB-240 | SB-240 | SB-240 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-239-SS[18] | SB-239-SS[6] | D-SB-240RE-1 | D-SB-240RE-2 | SB-240-SS[12] | SB-240-SS[18] |
| SAMPLE DATE | 20050607 | 20050607 | 20090914 | 20090914 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SB | SB |
| TOP DEPTH | 1.5 | 0.5 | 1 | 2 | 1 | 1.5 |
| BOTTOM DEPTH | 1.5 | 0.5 | 1 | 2 | 1 | 1.5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-239 | SB-239 | SB-240 | SB-240 | SB-240 | SB-240 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-239-SS[18] | SB-239-SS[6] | D-SB-240RE-1 | D-SB-240RE-2 | SB-240-SS[12] | SB-240-SS[18] |
| SAMPLE DATE | 20050607 | 20050607 | 20090914 | 20090914 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SB | SB |
| TOP DEPTH | 1.5 | 0.5 | 1 | 2 | 1 | 1.5 |
| BOTTOM DEPTH | 1.5 | 0.5 | 1 | 2 | 1 | 1.5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 32 J | 163 U | NA | NA | 163 U | 164 U |
| ACENAPHTHYLENE | 375 | 69 J | NA | NA | 68 J | 94 J |
| ANTHRACENE | 102 J | 163 U | NA | NA | 28 J | 164 U |
| BAP EQUIVALENT-HALFND | 537 | 130 | 2378 | 1.5 U | 165 | 175 |
| BAP EQUIVALENT-POS | 537 | 130 | 2378 | 1.5 U | 82.5 | 175 |
| BENZO(A)ANTHRACENE | 217 | 49 J | 1300 | 1.1 U | 44 J | 71 J |
| BENZO(A)PYRENE | 368 | 79 J | 1600 | 1.5 U | 67 J | 130 J |
| BENZO(B)FLUORANTHENE | 237 | 43 J | 2000 | 1.4 U | 51 J | 81 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 448 | 83 J | NA | NA | 78 J | 120 J |
| BENZO(K)FLUORANTHENE | 245 | 61 J | 590 | 2 U | 163 U | 111 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-239 | SB-239 | SB-240 | SB-240 | SB-240 | SB-240 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-239-SS[18] | SB-239-SS[6] | D-SB-240RE-1 | D-SB-240RE-2 | SB-240-SS[12] | SB-240-SS[18] |
| SAMPLE DATE | 20050607 | 20050607 | 20090914 | 20090914 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SB | SB |
| TOP DEPTH | 1.5 | 0.5 | 1 | 2 | 1 | 1.5 |
| BOTTOM DEPTH | 1.5 | 0.5 | 1 | 2 | 1 | 1.5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 264 | 55 J | 1600 | 1.1 U | 55 J | 94 J |
| DIBENZO(A,H)ANTHRACENE | 90 J | 34 J | 330 | 1.5 U | 163 U | 20 J |
| FLUORANTHENE | 303 | 54 J | NA | NA | 52 J | 86 J |
| FLUORENE | 28 J | 163 U | NA | NA | 163 U | 164 U |
| INDENO(1,2,3-CD)PYRENE | 312 | 67 J | 1100 | 1.8 U | 59 J | 89 J |
| NAPHTHALENE | 34 J | 163 U | NA | NA | 163 U | 164 U |
| PHENANTHRENE | 115 J | 163 U | NA | NA | 90 J | 34 J |
| PYRENE | 534 | 105 J | NA | NA | 109 J | 212 |
| TOTAL PAHS | 3704 | 699 | 8520 | 0 U | 701 | 1142 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-239 | SB-239 | SB-240 | SB-240 | SB-240 | SB-240 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-239-SS[18] | SB-239-SS[6] | D-SB-240RE-1 | D-SB-240RE-2 | SB-240-SS[12] | SB-240-SS[18] |
| SAMPLE DATE | 20050607 | 20050607 | 20090914 | 20090914 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SB | SB |
| TOP DEPTH | 1.5 | 0.5 | 1 | 2 | 1 | 1.5 |
| BOTTOM DEPTH | 1.5 | 0.5 | 1 | 2 | 1 | 1.5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-240 | SB-240A | SB-240B | SB-240C | SB-240D | SB-241 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-240-SS[6] | D-SB-240REA-1 | D-SB-240REB-1 | D-SB-240REC-1 | D-SB-240RED-1 | SB-241-SS[12] |
| SAMPLE DATE | 20050607 | 20091014 | 20091013 | 20091013 | 20091013 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240A | SB-240B | SB-240C | SB-240D | SB-241 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-240-SS[6] | D-SB-240REA-1 | D-SB-240REB-1 | D-SB-240REC-1 | D-SB-240RED-1 | SB-241-SS[12] |
| SAMPLE DATE | 20050607 | 20091014 | 20091013 | 20091013 | 20091013 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240A | SB-240B | SB-240C | SB-240D | SB-241 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-240-SS[6] | D-SB-240REA-1 | D-SB-240REB-1 | D-SB-240REC-1 | D-SB-240RED-1 | SB-241-SS[12] |
| SAMPLE DATE | 20050607 | 20091014 | 20091013 | 20091013 | 20091013 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 159 U | NA | NA | NA | NA | 43 J |
| ACENAPHTHYLENE | 52 J | NA | NA | NA | NA | 157 U |
| ANTHRACENE | 165 | NA | NA | NA | NA | 47 J |
| BAP EQUIVALENT-HALFND | 152 | 372 | 13461 | 44.0 | 44.7 | 156 |
| BAP EQUIVALENT-POS | 72.3 | 372 | 13461 | 43.3 | 44.0 | 77.1 |
| BENZO(A)ANTHRACENE | 43 J | 180 | 11000 | 24 | 22 | 65 J |
| BENZO(A)PYRENE | 58 J | 270 | 9300 | 34 | 35 | 60 J |
| BENZO(B)FLUORANTHENE | 48 J | 280 | 11000 | 43 | 41 | 54 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 63 J | NA | NA | NA | NA | 51 J |
| BENZO(K)FLUORANTHENE | 52 J | 75 | 4000 | 14 | 15 | 47 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240A | SB-240B | SB-240C | SB-240D | SB-241 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-240-SS[6] | D-SB-240REA-1 | D-SB-240REB-1 | D-SB-240REC-1 | D-SB-240RED-1 | SB-241-SS[12] |
| SAMPLE DATE | 20050607 | 20091014 | 20091013 | 20091013 | 20091013 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 48 J | 260 | 11000 | 29 | 33 | 62 J |
| DIBENZO(A,H)ANTHRACENE | 159 U | 39 | 1400 | 1.5 U | 1.5 U | 157 U |
| FLUORANTHENE | 347 | NA | NA | NA | NA | 131 J |
| FLUORENE | 80 J | NA | NA | NA | NA | 55 J |
| INDENO(1,2,3-CD)PYRENE | 46 J | 160 | 5100 | 24 | 25 | 47 J |
| NAPHTHALENE | 159 U | NA | NA | NA | NA | 70 J |
| PHENANTHRENE | 186 | NA | NA | NA | NA | 218 |
| PYRENE | 267 | NA | NA | NA | NA | 105 J |
| TOTAL PAHS | 1455 | 1264 | 52800 | 168 | 171 | 1055 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-240 | SB-240A | SB-240B | SB-240C | SB-240D | SB-241 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-240-SS[6] | D-SB-240REA-1 | D-SB-240REB-1 | D-SB-240REC-1 | D-SB-240RED-1 | SB-241-SS[12] |
| SAMPLE DATE | 20050607 | 20091014 | 20091013 | 20091013 | 20091013 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-241 | SB-241 | SB-242 | SB-242 | SB-242 | SB-243 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-241-SS[18] | SB-241-SS[6] | SB-242-SS[12] | SB-242-SS[18] | SB-242-SS[6] | D-SB-243RE-1 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| BOTTOM DEPTH | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-241 | SB-241 | SB-242 | SB-242 | SB-242 | SB-243 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-241-SS[18] | SB-241-SS[6] | SB-242-SS[12] | SB-242-SS[18] | SB-242-SS[6] | D-SB-243RE-1 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| BOTTOM DEPTH | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-241 | SB-241 | SB-242 | SB-242 | SB-242 | SB-243 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-241-SS[18] | SB-241-SS[6] | SB-242-SS[12] | SB-242-SS[18] | SB-242-SS[6] | D-SB-243RE-1 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| BOTTOM DEPTH | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 68 J | 48 J | 164 U | 161 U | 162 U | NA |
| ACENAPHTHYLENE | 156 U | 151 U | 34 J | 161 U | 162 U | NA |
| ANTHRACENE | 59 J | 37 J | 164 U | 161 U | 162 U | NA |
| BAP EQUIVALENT-HALFND | 135 | 165 | 153 | 161 U | 181 | 3300 |
| BAP EQUIVALENT-POS | 135 | 89.1 | 61.9 | 161 U | 100 | 3300 |
| BENZO(A)ANTHRACENE | 59 J | 76 J | 63 J | 161 U | 91 J | 1600 |
| BENZO(A)PYRENE | 73 J | 70 J | 52 J | 161 U | 79 J | 2400 |
| BENZO(B)FLUORANTHENE | 53 J | 56 J | 164 U | 161 U | 70 J | 2400 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 60 J | 57 J | 43 J | 161 U | 52 J | NA |
| BENZO(K)FLUORANTHENE | 67 J | 64 J | 164 U | 161 U | 72 J | 760 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-241 | SB-241 | SB-242 | SB-242 | SB-242 | SB-243 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-241-SS[18] | SB-241-SS[6] | SB-242-SS[12] | SB-242-SS[18] | SB-242-SS[6] | D-SB-243RE-1 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| BOTTOM DEPTH | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 64 J | 83 J | 76 J | 161 U | 101 J | 1900 |
| DIBENZO(A,H)ANTHRACENE | 44 J | 151 U | 164 U | 161 U | 162 U | 330 |
| FLUORANTHENE | 153 J | 149 J | 139 J | 161 U | 180 | NA |
| FLUORENE | 84 J | 151 U | 164 U | 161 U | 162 U | NA |
| INDENO(1,2,3-CD)PYRENE | 65 J | 52 J | 35 J | 161 U | 42 J | 1600 |
| NAPHTHALENE | 51 J | 88 J | 62 J | 161 U | 384 | NA |
| PHENANTHRENE | 305 | 126 J | 252 | 161 U | 158 J | NA |
| PYRENE | 134 J | 123 J | 167 | 161 U | 163 | NA |
| TOTAL PAHS | 1339 | 1029 | 923 | 0 U | 1392 | 10990 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-241 | SB-241 | SB-242 | SB-242 | SB-242 | SB-243 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-241-SS[18] | SB-241-SS[6] | SB-242-SS[12] | SB-242-SS[18] | SB-242-SS[6] | D-SB-243RE-1 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| BOTTOM DEPTH | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243A | SB-243B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-2 | SB-243-SS[12] | SB-243-SS[18] | SB-243-SS[6] | D-SB-243REA-2 | D-SB-243REB-2 |
| SAMPLE DATE | 20090915 | 20050607 | 20050607 | 20050607 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SS | SB | SB |
| TOP DEPTH | 2 | 1 | 1.5 | 0.5 | 2 | 2 |
| BOTTOM DEPTH | 2 | 1 | 1.5 | 0.5 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243A | SB-243B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-2 | SB-243-SS[12] | SB-243-SS[18] | SB-243-SS[6] | D-SB-243REA-2 | D-SB-243REB-2 |
| SAMPLE DATE | 20090915 | 20050607 | 20050607 | 20050607 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SS | SB | SB |
| TOP DEPTH | 2 | 1 | 1.5 | 0.5 | 2 | 2 |
| BOTTOM DEPTH | 2 | 1 | 1.5 | 0.5 | 2 | 2 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243A | SB-243B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-2 | SB-243-SS[12] | SB-243-SS[18] | SB-243-SS[6] | D-SB-243REA-2 | D-SB-243REB-2 |
| SAMPLE DATE | 20090915 | 20050607 | 20050607 | 20050607 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SS | SB | SB |
| TOP DEPTH | 2 | 1 | 1.5 | 0.5 | 2 | 2 |
| BOTTOM DEPTH | 2 | 1 | 1.5 | 0.5 | 2 | 2 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | 160 U | 166 U | 162 U | NA | NA |
| ACENAPHTHYLENE | NA | 98 J | 60 J | 162 U | NA | NA |
| ANTHRACENE | NA | 41 J | 166 U | 25 J | NA | NA |
| BAP EQUIVALENT-HALFND | 20.4 | 243 | 174 | 166 | 134 | 1.6 U |
| BAP EQUIVALENT-POS | 19.6 | 163 | 90.9 | 84.8 | 134 | 1.6 U |
| BENZO(A)ANTHRACENE | 11 | 96 J | 50 J | 68 J | 110 | 1.2 U |
| BENZO(A)PYRENE | 16 | 132 J | 75 J | 68 J | 91 | 1.6 U |
| BENZO(B)FLUORANTHENE | 15 | 108 J | 45 J | 47 J | 110 | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | 118 J | 80 J | 58 J | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 97 J | 55 J | 65 J | 51 | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243A | SB-243B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-2 | SB-243-SS[12] | SB-243-SS[18] | SB-243-SS[6] | D-SB-243REA-2 | D-SB-243REB-2 |
| SAMPLE DATE | 20090915 | 20050607 | 20050607 | 20050607 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SS | SB | SB |
| TOP DEPTH | 2 | 1 | 1.5 | 0.5 | 2 | 2 |
| BOTTOM DEPTH | 2 | 1 | 1.5 | 0.5 | 2 | 2 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 13 | 143 J | 63 J | 69 J | 98 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 160 U | 166 U | 162 U | 16 | 1.6 U |
| FLUORANTHENE | NA | 183 | 71 J | 140 J | NA | NA |
| FLUORENE | NA | 160 U | 166 U | 162 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 9.5 | 94 J | 58 J | 46 J | 47 | 1.8 U |
| NAPHTHALENE | NA | 40 J | 39 J | 37 J | NA | NA |
| PHENANTHRENE | NA | 80 J | 53 J | 49 J | NA | NA |
| PYRENE | NA | 287 | 128 J | 133 J | NA | NA |
| TOTAL PAHS | 64.5 | 1517 | 777 | 805 | 523 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243A | SB-243B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-2 | SB-243-SS[12] | SB-243-SS[18] | SB-243-SS[6] | D-SB-243REA-2 | D-SB-243REB-2 |
| SAMPLE DATE | 20090915 | 20050607 | 20050607 | 20050607 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SS | SB | SB |
| TOP DEPTH | 2 | 1 | 1.5 | 0.5 | 2 | 2 |
| BOTTOM DEPTH | 2 | 1 | 1.5 | 0.5 | 2 | 2 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243C | SB-243D | SB-592 | SB-592A | SB-592B | SB-592D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243REC-2 | D-SB-243RED-2 | D-SB-592-2 | D-SB-592A-2 | D-SB-592B-2 | D-SB-592D-2 |
| SAMPLE DATE | 20091012 | 20091012 | 20090914 | 20091015 | 20091016 | 20091016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-243C | SB-243D | SB-592 | SB-592A | SB-592B | SB-592D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243REC-2 | D-SB-243RED-2 | D-SB-592-2 | D-SB-592A-2 | D-SB-592B-2 | D-SB-592D-2 |
| SAMPLE DATE | 20091012 | 20091012 | 20090914 | 20091015 | 20091016 | 20091016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-243C | SB-243D | SB-592 | SB-592A | SB-592B | SB-592D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243REC-2 | D-SB-243RED-2 | D-SB-592-2 | D-SB-592A-2 | D-SB-592B-2 | D-SB-592D-2 |
| SAMPLE DATE | 20091012 | 20091012 | 20090914 | 20091015 | 20091016 | 20091016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 14.5 | 16.0 | 36.7 | 7.06 | 31.5 | 52.9 |
| BAP EQUIVALENT-POS | 13.6 | 15.2 | 35.9 | 0.05 | 30.7 | 52.1 |
| BENZO(A)ANTHRACENE | 14 | 10 | 20 | 4.5 U | 15 | 23 |
| BENZO(A)PYRENE | 11 | 12 | 29 | 6.1 U | 25 | 43 |
| BENZO(B)FLUORANTHENE | 12 | 13 | 30 | 5.7 U | 24 | 39 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2.1 U | 13 | 8 U | 11 | 14 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243C | SB-243D | SB-592 | SB-592A | SB-592B | SB-592D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243REC-2 | D-SB-243RED-2 | D-SB-592-2 | D-SB-592A-2 | D-SB-592B-2 | D-SB-592D-2 |
| SAMPLE DATE | 20091012 | 20091012 | 20090914 | 20091015 | 20091016 | 20091016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 14 | 10 | 28 | 52 | 23 | 33 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.6 U | 6.1 U | 1.5 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 8.9 | 17 | 7.1 U | 17 | 27 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 51 | 53.9 | 137 | 52 | 115 | 179 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243C | SB-243D | SB-592 | SB-592A | SB-592B | SB-592D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243REC-2 | D-SB-243RED-2 | D-SB-592-2 | D-SB-592A-2 | D-SB-592B-2 | D-SB-592D-2 |
| SAMPLE DATE | 20091012 | 20091012 | 20090914 | 20091015 | 20091016 | 20091016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-593 | SB-594 | SB-595 |
|---|---|---|---|
| SAMPLE ID | D-SB-593-2 | D-SB-594-2 | D-SB-595-2 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA |
| ACETONE | NA | NA | NA |
| BENZENE | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA |
| BROMOFORM | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA |
| CHLOROFORM | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA |

| LOCATION | SB-593 | SB-594 | SB-595 |
|---|---|---|---|
| SAMPLE ID | D-SB-593-2 | D-SB-594-2 | D-SB-595-2 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA |
| O-XYLENE | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA |
| STYRENE | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA |
| TOLUENE | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | |
| 1,1-BIPHENYL | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA |

| LOCATION | SB-593 | SB-594 | SB-595 |
|---|---|---|---|
| SAMPLE ID | D-SB-593-2 | D-SB-594-2 | D-SB-595-2 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | |
| 4-NITROPHENOL | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA |
| ANILINE | NA | NA | NA |
| ATRAZINE | NA | NA | NA |
| AZOBENZENE | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA |
| BENZIDINE | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA |
| CARBAZOLE | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA |
| ISOPHORONE | NA | NA | NA |
| NITROBENZENE | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA |
| PHENOL | NA | NA | NA |
| PYRIDINE | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA |
| ANTHRACENE | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 32.5 | 92.3 | 85.4 |
| BAP EQUIVALENT-POS | 31.7 | 92.3 | 84.6 |
| BENZO(A)ANTHRACENE | 25 | 54 | 59 |
| BENZO(A)PYRENE | 25 | 64 | 67 |
| BENZO(B)FLUORANTHENE | 26 | 82 | 77 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 12 | 27 | 28 |
| C1-CHRYSENES | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-593 | SB-594 | SB-595 |
|---|---|---|---|
| SAMPLE ID | D-SB-593-2 | D-SB-594-2 | D-SB-595-2 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUE** | | | |
| C2-NAPHTHALENES | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA |
| CHRYSENE | 24 | 61 | 56 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 11 | 1.5 U |
| FLUORANTHENE | NA | NA | NA |
| FLUORENE | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 15 | 34 | 37 |
| NAPHTHALENE | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA |
| PYRENE | NA | NA | NA |
| TOTAL PAHS | 127 | 333 | 324 |
| **PESTICIDES/PCBS (UG/KG)** | | | |
| 4,4'-DDD | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA |
| ALDRIN | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA |
| BETA-BHC | NA | NA | NA |
| DELTA-BHC | NA | NA | NA |
| DIELDRIN | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA |
| ENDRIN | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA |
| TOXAPHENE | NA | NA | NA |
| **METALS (MG/KG)** | | | |
| ANTIMONY | NA | NA | NA |
| ARSENIC | NA | NA | NA |
| BARIUM | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-593 | SB-594 | SB-595 |
|---|---|---|---|
| SAMPLE ID | D-SB-593-2 | D-SB-594-2 | D-SB-595-2 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 |
| **METALS (CONTINUED) (MG/KG)** | | | |
| BERYLLIUM | NA | NA | NA |
| CADMIUM | NA | NA | NA |
| CHROMIUM | NA | NA | NA |
| COBALT | NA | NA | NA |
| COPPER | NA | NA | NA |
| IRON | NA | NA | NA |
| LEAD | NA | NA | NA |
| MANGANESE | NA | NA | NA |
| MERCURY | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA |
| NICKEL | NA | NA | NA |
| SELENIUM | NA | NA | NA |
| SILVER | NA | NA | NA |
| THALLIUM | NA | NA | NA |
| VANADIUM | NA | NA | NA |
| ZINC | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-766 | SB-767 | SB-768 | SB-769 | SB-770 | SB-771 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-766-SS | D-SS-767-01 | D-SS-768-01 | D-SS-769-01 | D-SS-770-01 | D-SB-771-SS |
| SAMPLE DATE | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-766 | SB-767 | SB-768 | SB-769 | SB-770 | SB-771 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-766-SS | D-SS-767-01 | D-SS-768-01 | D-SS-769-01 | D-SS-770-01 | D-SB-771-SS |
| SAMPLE DATE | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-766 | SB-767 | SB-768 | SB-769 | SB-770 | SB-771 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-766-SS | D-SS-767-01 | D-SS-768-01 | D-SS-769-01 | D-SS-770-01 | D-SB-771-SS |
| SAMPLE DATE | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 3.6 U | 3.8 U | 3.6 U | 28 | 3.8 U | 480 |
| 2-METHYLNAPHTHALENE | 3.6 U | 3.8 U | 3.6 U | 3.6 U | 9.3 | 980 |
| ACENAPHTHENE | 3.6 U | 3.8 U | 31 J | 29 J | 3.8 U | 4500 |
| ACENAPHTHYLENE | 3.6 U | 3.8 U | 3.6 U | 3.6 U | 3.8 U | 70 U |
| ANTHRACENE | 3.6 U | 3.8 U | 48 J | 3.6 U | 3.8 U | 5900 |
| BAP EQUIVALENT-HALFND | 3.6 U | 31.3 | 77.9 | 39.2 | 17.9 | 11308 |
| BAP EQUIVALENT-POS | 3.6 U | 29.0 | 75.9 | 37.2 | 16.0 | 11308 |
| BENZO(A)ANTHRACENE | 3.6 U | 3.8 U | 62 | 44 | 14 | 11000 |
| BENZO(A)PYRENE | 3.6 U | 27 J | 61 J | 29 | 11 | 7400 |
| BENZO(B)FLUORANTHENE | 3.6 U | 20 J | 82 J | 36 | 18 J | 10000 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.6 U | 3.8 U | 3.6 U | 3.6 U | 8.9 | 4200 |
| BENZO(K)FLUORANTHENE | 3.6 U | 3.8 U | 47 J | 17 | 3.8 U | 3800 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 73 U | NA | NA | NA | 77 U | NA |
| C1-FLUORANTHENES/PYRENES | 73 U | NA | NA | NA | 77 U | NA |
| C1-FLUORENES | 73 U | NA | NA | NA | 77 U | NA |
| C1-PHENANTHRENES/ANTHRACENES | 73 U | NA | NA | NA | 77 U | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 73 U | NA | NA | NA | 77 U | NA |
| C2-FLUORENES | 73 U | NA | NA | NA | 77 U | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-766 | SB-767 | SB-768 | SB-769 | SB-770 | SB-771 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-766-SS | D-SS-767-01 | D-SS-768-01 | D-SS-769-01 | D-SS-770-01 | D-SB-771-SS |
| SAMPLE DATE | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | |
| C2-NAPHTHALENES | 73 U | NA | NA | NA | 77 U | NA |
| C2-PHENANTHRENES/ANTHRACENES | 73 U | NA | NA | NA | 77 U | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 73 U | NA | NA | NA | 77 U | NA |
| C3-FLUORENES | 73 U | NA | NA | NA | 77 U | NA |
| C3-NAPHTHALENES | 73 U | NA | NA | NA | 77 U | NA |
| C3-PHENANTHRENES/ANTHRACENES | 73 U | NA | NA | NA | 77 U | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | 73 U | NA | NA | NA | 77 U | NA |
| C4-NAPHTHALENES | 73 U | NA | NA | NA | 77 U | NA |
| C4-PHENANTHRENES/ANTHRACENES | 73 U | NA | NA | NA | 77 U | NA |
| CHRYSENE | 1.2 U | 1.3 U | 53 | 34 | 14 | 9600 |
| DIBENZO(A,H)ANTHRACENE | 3.6 U | 3.8 U | 3.6 U | 3.6 U | 3.8 U | 1400 |
| FLUORANTHENE | 20 | 26 J | 170 J | 75 J | 27 | 27000 |
| FLUORENE | 3.6 U | 3.8 U | 33 J | 3.6 U | 3.8 U | 3100 |
| INDENO(1,2,3-CD)PYRENE | 3.6 U | 3.8 U | 3.6 U | 3.6 U | 18 J | 3600 |
| NAPHTHALENE | 3.6 U | 3.8 U | 18 | 3.6 U | 8.1 | 3100 |
| PHENANTHRENE | 3.6 U | 3.8 U | 120 J | 54 | 20 | 23000 |
| PYRENE | 7 J | 12 | 140 | 68 | 24 | 19000 |
| TOTAL PAHS | 27 | 85 | 865 | 386 | 172.3 | 137580 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-766 | SB-767 | SB-768 | SB-769 | SB-770 | SB-771 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-766-SS | D-SS-767-01 | D-SS-768-01 | D-SS-769-01 | D-SS-770-01 | D-SB-771-SS |
| SAMPLE DATE | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-772 | SB-773 | SB-774 | SB-775 | SB-776 | SB-777 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-772-01 | D-SS-773-01 | D-SB-774-SS | D-SS-775-01 | D-SS-776-01 | D-SB-777-SS |
| SAMPLE DATE | 20100830 | 20100831 | 20100910 | 20100831 | 20100831 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-772 | SB-773 | SB-774 | SB-775 | SB-776 | SB-777 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-772-01 | D-SS-773-01 | D-SB-774-SS | D-SS-775-01 | D-SS-776-01 | D-SB-777-SS |
| SAMPLE DATE | 20100830 | 20100831 | 20100910 | 20100831 | 20100831 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-772 | SB-773 | SB-774 | SB-775 | SB-776 | SB-777 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-772-01 | D-SS-773-01 | D-SB-774-SS | D-SS-775-01 | D-SS-776-01 | D-SB-777-SS |
| SAMPLE DATE | 20100830 | 20100831 | 20100910 | 20100831 | 20100831 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 15 | 3.9 U | 83 U | 4 U | 4 U | 15 U |
| 2-METHYLNAPHTHALENE | 11 | 3.9 U | 83 U | 4 U | 4 U | 15 U |
| ACENAPHTHENE | 11 | 3.9 U | 1700 | 4 U | 4 U | 34 |
| ACENAPHTHYLENE | 3.6 U | 3.9 U | 83 U | 4 U | 4 U | 15 U |
| ANTHRACENE | 15 | 3.9 U | 4900 | 4 U | 4 U | 89 |
| BAP EQUIVALENT-HALFND | 45.0 | 3.9 U | 11379 | 4 U | 4 U | 460 |
| BAP EQUIVALENT-POS | 43.2 | 3.9 U | 11379 | 4 U | 4 U | 452 |
| BENZO(A)ANTHRACENE | 43 | 3.9 U | 13000 | 4 U | 4 U | 400 |
| BENZO(A)PYRENE | 31 | 3.9 U | 7400 | 4 U | 4 U | 340 |
| BENZO(B)FLUORANTHENE | 47 J | 3.9 U | 11000 | 4 U | 4 U | 510 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 22 | 3.9 U | 3500 | 4 U | 4 U | 270 |
| BENZO(K)FLUORANTHENE | 12 | 3.9 U | 5600 | 4 U | 4 U | 180 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 500 J | 80 U | NA | 1600 J |
| C1-FLUORANTHENES/PYRENES | NA | NA | 710 J | 80 U | NA | 2300 J |
| C1-FLUORENES | NA | NA | 85 U | 80 U | NA | 150 U |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | 290 J | 80 U | NA | 1300 J |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 220 J | 80 U | NA | 780 J |
| C2-FLUORENES | NA | NA | 85 U | 80 U | NA | 150 U |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-772 | SB-773 | SB-774 | SB-775 | SB-776 | SB-777 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-772-01 | D-SS-773-01 | D-SB-774-SS | D-SS-775-01 | D-SS-776-01 | D-SB-777-SS |
| SAMPLE DATE | 20100830 | 20100831 | 20100910 | 20100831 | 20100831 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | 85 U | 80 U | NA | 150 U |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | 170 J | 80 U | NA | 590 J |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 110 J | 80 U | NA | 420 J |
| C3-FLUORENES | NA | NA | 85 U | 80 U | NA | 150 U |
| C3-NAPHTHALENES | NA | NA | 85 U | 80 U | NA | 150 U |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | 110 J | 80 U | NA | 310 J |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 85 U | 80 U | NA | 300 J |
| C4-NAPHTHALENES | NA | NA | 85 U | 80 U | NA | 150 U |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | 85 U | 80 U | NA | 150 U |
| CHRYSENE | 34 | 1.3 U | 13000 | 1.3 U | 1.3 U | 470 |
| DIBENZO(A,H)ANTHRACENE | 3.6 U | 3.9 U | 1200 | 4 U | 4 U | 15 U |
| FLUORANTHENE | 68 | 3.9 U | 37000 | 4 U | 4 U | 710 |
| FLUORENE | 10 | 3.9 U | 2000 | 4 U | 4 U | 15 U |
| INDENO(1,2,3-CD)PYRENE | 30 J | 3.9 U | 3100 | 4 U | 4 U | 190 |
| NAPHTHALENE | 84 | 9.8 | 83 U | 4 U | 4 U | 15 U |
| PHENANTHRENE | 44 | 3.9 U | 27000 | 4 U | 4 U | 320 |
| PYRENE | 59 | 3.9 U | 27000 | 4 U | 4 U | 880 |
| TOTAL PAHS | 521 | 9.8 | 157400 | 0 U | 0 U | 4393 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-772 | SB-773 | SB-774 | SB-775 | SB-776 | SB-777 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-772-01 | D-SS-773-01 | D-SB-774-SS | D-SS-775-01 | D-SS-776-01 | D-SB-777-SS |
| SAMPLE DATE | 20100830 | 20100831 | 20100910 | 20100831 | 20100831 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-778 | SB-779 | SB-780 | SB-781 | SB-782 | SB-783 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-778-01 | D-SS-779-01 | D-SS-780-01 | D-SS-781-01 | D-SS-782-01 | D-SS-783-01 |
| SAMPLE DATE | 20100831 | 20100901 | 20100901 | 20100901 | 20100902 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | 0.63 U | 0.46 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | 0.57 U | 0.42 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | 0.35 U | 0.25 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | 1.3 U | 0.97 U |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | 0.37 U | 0.27 U |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | 0.53 U | 0.39 U |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | 0.31 U | 0.22 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | 0.39 U | 0.28 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | 0.92 U | 0.67 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | 0.17 U | 0.13 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | 0.28 U | 0.2 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | 0.66 U | 0.49 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | 1.3 U | 0.97 U |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | 0.51 U | 0.37 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | 0.37 U | 0.27 U |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | 0.35 U | 0.25 U |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | 0.7 U | 0.51 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | 0.36 U | 0.26 U |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | 0.35 U | 0.25 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | 0.67 U | 0.49 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | 0.96 U | 0.7 U |
| 2-BUTANONE | NA | NA | NA | NA | 1.4 U | 1 U |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | 1.4 U | 1 U |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | 0.41 U | 0.3 U |
| 2-HEXANONE | NA | NA | NA | NA | 0.64 U | 0.47 U |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | 0.42 U | 0.31 U |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | 0.21 U | 0.16 U |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | 0.55 U | 0.4 U |
| ACETONE | NA | NA | NA | NA | 6.4 U | 4.7 U |
| BENZENE | NA | NA | NA | NA | 0.23 U | 0.17 U |
| BROMOBENZENE | NA | NA | NA | NA | 0.34 U | 0.25 U |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | 0.72 U | 0.53 U |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | 0.29 U | 0.21 U |
| BROMOFORM | NA | NA | NA | NA | 0.34 U | 0.25 U |
| BROMOMETHANE | NA | NA | NA | NA | 0.55 U | 0.4 U |
| CARBON DISULFIDE | NA | NA | NA | NA | 0.45 U | 0.33 U |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | 0.38 U | 0.28 U |
| CHLOROBENZENE | NA | NA | NA | NA | 0.34 U | 0.25 U |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | 0.56 U | 0.41 U |
| CHLOROETHANE | NA | NA | NA | NA | 0.88 U | 0.64 U |
| CHLOROFORM | NA | NA | NA | NA | 0.3 U | 0.22 U |
| CHLOROMETHANE | NA | NA | NA | NA | 0.42 U | 0.31 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | 0.37 U | 0.27 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | 0.35 U | 0.25 U |
| DIBROMOMETHANE | NA | NA | NA | NA | 0.64 U | 0.47 U |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | 0.51 U | 0.37 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | 1.5 U | 1.1 U |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | 0.22 U | 0.16 U |
| ETHYLBENZENE | NA | NA | NA | NA | 0.27 U | 0.19 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-778 | SB-779 | SB-780 | SB-781 | SB-782 | SB-783 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-778-01 | D-SS-779-01 | D-SS-780-01 | D-SS-781-01 | D-SS-782-01 | D-SS-783-01 |
| SAMPLE DATE | 20100831 | 20100901 | 20100901 | 20100901 | 20100902 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | 1.2 U | 0.9 U |
| ISOPROPYLBENZENE | NA | NA | NA | NA | 0.16 U | 0.12 U |
| M+P-XYLENES | NA | NA | NA | NA | 1.2 U | 0.9 U |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | 0.44 U | 0.32 U |
| METHYLENE CHLORIDE | NA | NA | NA | NA | 0.68 U | 0.5 U |
| NAPHTHALENE | NA | NA | NA | NA | 0.19 U | 0.14 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | 0.23 U | 0.17 U |
| N-PROPYLBENZENE | NA | NA | NA | NA | 0.41 U | 0.3 U |
| O-XYLENE | NA | NA | NA | NA | 0.36 U | 0.26 U |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | 0.18 U | 0.13 U |
| STYRENE | NA | NA | NA | NA | 0.15 U | 0.11 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | 0.38 U | 0.28 U |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | 0.3 U | 0.22 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | 7.8 UR | 5.7 UR |
| TETRACHLOROETHENE | NA | NA | NA | NA | 0.53 U | 0.39 U |
| TOLUENE | NA | NA | NA | NA | 0.28 U | 0.2 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | 0.68 U | 0.5 U |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | 0.42 U | 0.31 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | 0.55 U | 0.4 U |
| TRICHLOROETHENE | NA | NA | NA | NA | 0.43 U | 0.31 U |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | 0.35 U | 0.25 U |
| VINYL ACETATE | NA | NA | NA | NA | 0.26 U | 0.19 U |
| VINYL CHLORIDE | NA | NA | NA | NA | 0.4 U | 0.29 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | 28 U | 30 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | 23 U | 25 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | 9.9 U | 11 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | 26 U | 28 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | 83 U | 89 U |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | 21 U | 22 U |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | 21 U | 22 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | 83 U | 89 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | 28 U | 30 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | 22 U | 23 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | 3.4 U | 3.7 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | 28 UJ | 30 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | 83 U | 89 U |
| 2-NITROANILINE | NA | NA | NA | NA | 9.5 U | 10 U |
| 2-NITROPHENOL | NA | NA | NA | NA | 28 U | 30 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | 19 U | 20 U |
| 3-NITROANILINE | NA | NA | NA | NA | 17 U | 18 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | 83 U | 89 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | 14 U | 14 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | 22 U | 23 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | 18 U | 19 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | 14 U | 14 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | 83 U | 89 U |
| 4-NITROANILINE | NA | NA | NA | NA | 27 U | 29 U |

| LOCATION | SB-778 | SB-779 | SB-780 | SB-781 | SB-782 | SB-783 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-778-01 | D-SS-779-01 | D-SS-780-01 | D-SS-781-01 | D-SS-782-01 | D-SS-783-01 |
| SAMPLE DATE | 20100831 | 20100901 | 20100901 | 20100901 | 20100902 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | 83 U | 89 U |
| ACETOPHENONE | NA | NA | NA | NA | 9.6 U | 10 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | 9.5 U | 10 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | 12 U | 13 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | 23 U | 25 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | 2.1 U | 2.2 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | 20 U | 21 U |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | 10 U | 11 U |
| CAPROLACTAM | NA | NA | NA | NA | 39 U | 41 U |
| CARBAZOLE | NA | NA | NA | NA | 28 U | 30 U |
| DIBENZOFURAN | NA | NA | NA | NA | 3.4 U | 15 J |
| DIETHYL PHTHALATE | NA | NA | NA | NA | 17 U | 18 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | 18 U | 19 U |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | 16 U | 17 U |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | 28 U | 30 U |
| HEXACHLOROBENZENE | NA | NA | NA | NA | 2.2 U | 2.3 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | 28 U | 30 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | 28 U | 30 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | 9.4 U | 10 U |
| ISOPHORONE | NA | NA | NA | NA | 14 U | 14 U |
| NITROBENZENE | NA | NA | NA | NA | 2.3 U | 2.5 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | 17 U | 18 U |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | 28 U | 30 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | 22 U | 23 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | 83 U | 89 U |
| PHENOL | NA | NA | NA | NA | 28 U | 30 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 3.8 U | 3.9 U | 4 U | 51 U | NA | NA |
| 2-METHYLNAPHTHALENE | 3.8 U | 3.9 U | 4 U | 110 | 3.4 U | 8.9 |
| ACENAPHTHENE | 3.8 U | 3.9 U | 4 U | 1600 | 11 | 15 |
| ACENAPHTHYLENE | 3.8 U | 3.9 U | 4 U | 51 U | 12 | 12 |
| ANTHRACENE | 3.8 U | 3.9 U | 4 U | 6000 | 26 | 29 |
| BAP EQUIVALENT-HALFND | 3.8 U | 5.21015 | 4 U | 8311 | 130 | 216 |
| BAP EQUIVALENT-POS | 3.8 U | 0.9 | 4 U | 8311 | 130 | 216 |
| BENZO(A)ANTHRACENE | 3.8 U | 3.9 U | 4 U | 7000 | 86 | 140 |
| BENZO(A)PYRENE | 3.8 U | 3.9 U | 4 U | 5600 | 77 | 140 |
| BENZO(B)FLUORANTHENE | 3.8 U | 9 J | 4 U | 7300 J | 110 | 190 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.8 U | 3.9 U | 4 U | 2900 | 60 | 90 |
| BENZO(K)FLUORANTHENE | 3.8 U | 3.9 U | 4 U | 2500 | 46 | 60 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | 80 U | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | 80 U | NA | NA | NA | NA |
| C1-FLUORENES | NA | 80 U | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | 80 U | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | 80 U | NA | NA | NA | NA |
| C2-FLUORENES | NA | 80 U | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-778 | SB-779 | SB-780 | SB-781 | SB-782 | SB-783 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-778-01 | D-SS-779-01 | D-SS-780-01 | D-SS-781-01 | D-SS-782-01 | D-SS-783-01 |
| SAMPLE DATE | 20100831 | 20100901 | 20100901 | 20100901 | 20100902 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | 80 U | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | 80 U | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | 80 U | NA | NA | NA | NA |
| C3-FLUORENES | NA | 80 U | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | 80 U | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | 80 U | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | 80 U | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | 80 U | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | 80 U | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 1.3 U | 6400 | 91 | 150 |
| DIBENZO(A,H)ANTHRACENE | 3.8 U | 3.9 U | 4 U | 1000 J | 28 | 35 |
| FLUORANTHENE | 3.8 U | 9.9 | 15 | 19000 | 180 | 370 |
| FLUORENE | 3.8 U | 3.9 U | 4 U | 2000 | 10 | 16 |
| INDENO(1,2,3-CD)PYRENE | 3.8 U | 3.9 U | 4 U | 2500 J | 49 | 75 |
| NAPHTHALENE | 3.8 U | 3.9 U | 4 U | 51 U | 3.4 U | 11 |
| PHENANTHRENE | 3.8 U | 3.9 U | 17 | 17000 | 96 | 290 |
| PYRENE | 3.8 U | 9.2 | 11 | 13000 | 150 | 320 |
| TOTAL PAHS | 0 U | 28.1 | 43 | 93910 | 1032 | 1951.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | 3.2 U | 3.5 U |
| 4,4'-DDE | NA | NA | NA | NA | 2 U | 7.8 J |
| 4,4'-DDT | NA | NA | NA | NA | 3.3 U | 3.5 U |
| ALDRIN | NA | NA | NA | NA | 6.2 U | 6.7 U |
| ALPHA-BHC | NA | NA | NA | NA | 3.8 U | 4.1 U |
| ALPHA-CHLORDANE | NA | NA | NA | NA | 4.9 U | 5.2 U |
| AROCLOR-1016 | NA | NA | NA | NA | 22 U | 23 U |
| AROCLOR-1221 | NA | NA | NA | NA | 17 U | 18 U |
| AROCLOR-1232 | NA | NA | NA | NA | 15 U | 16 U |
| AROCLOR-1242 | NA | NA | NA | NA | 14 U | 14 U |
| AROCLOR-1248 | NA | NA | NA | NA | 18 U | 19 U |
| AROCLOR-1254 | NA | NA | NA | NA | 18 U | 19 U |
| AROCLOR-1260 | NA | NA | NA | NA | 18 U | 19 U |
| BETA-BHC | NA | NA | NA | NA | 5.7 U | 9.1 J |
| DELTA-BHC | NA | NA | NA | NA | 6.2 U | 6.7 U |
| DIELDRIN | NA | NA | NA | NA | 2.4 U | 2.6 U |
| ENDOSULFAN I | NA | NA | NA | NA | 2.7 U | 2.9 U |
| ENDOSULFAN II | NA | NA | NA | NA | 4.3 U | 4.6 U |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | 4.5 U | 4.8 U |
| ENDRIN | NA | NA | NA | NA | 2.6 U | 2.8 U |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | 5.2 U | 5.6 U |
| ENDRIN KETONE | NA | NA | NA | NA | 3.3 U | 3.5 U |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | 3.9 U | 4.1 U |
| GAMMA-CHLORDANE | NA | NA | NA | NA | 2.2 U | 2.3 U |
| HEPTACHLOR | NA | NA | NA | NA | 5.7 U | 6.1 U |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | 4.2 U | 4.5 U |
| METHOXYCHLOR | NA | NA | NA | NA | 7.8 U | 8.4 U |
| TOTAL AROCLOR | NA | NA | NA | NA | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | 99 U | 110 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | 0.15 J | 0.25 B |
| ARSENIC | NA | NA | NA | NA | 2.2 J | 2.4 J |
| BARIUM | NA | NA | NA | NA | 40.7 | 17.3 |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-778 | SB-779 | SB-780 | SB-781 | SB-782 | SB-783 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-778-01 | D-SS-779-01 | D-SS-780-01 | D-SS-781-01 | D-SS-782-01 | D-SS-783-01 |
| SAMPLE DATE | 20100831 | 20100901 | 20100901 | 20100901 | 20100902 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | 0.28 | 0.28 |
| CADMIUM | NA | NA | NA | NA | 0.24 K | 0.11 K |
| CHROMIUM | NA | NA | NA | NA | 9 J | 9.1 J |
| COBALT | NA | NA | NA | NA | 2 J | 3.2 J |
| COPPER | NA | NA | NA | NA | 6 J | 9 J |
| IRON | NA | NA | NA | NA | 7620 J | 6110 J |
| LEAD | NA | NA | NA | NA | 45.5 | 25.1 |
| MANGANESE | NA | NA | NA | NA | 102 | 30.8 |
| MERCURY | NA | NA | NA | NA | 0.08 J | 0.077 J |
| MOLYBDENUM | NA | NA | NA | NA | 0.45 | 0.38 |
| NICKEL | NA | NA | NA | NA | 5.1 J | 5.2 J |
| SELENIUM | NA | NA | NA | NA | 0.4 J | 0.46 J |
| SILVER | NA | NA | NA | NA | 0.099 J | 0.097 J |
| THALLIUM | NA | NA | NA | NA | 0.042 B | 0.069 B |
| VANADIUM | NA | NA | NA | NA | 14.2 J | 15.7 J |
| ZINC | NA | NA | NA | NA | 23.4 J | 27.8 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | 26000 | 18000 B |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | 48 U | 51 U |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | 0.28 U | 0.3 U |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-784 | SB-785 | SB-786 | SB-787 | SB-788 | SB-789 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-784-01 | D-SS-785-01 | D-SS-786-01 | D-SS-787-01 | D-SB-788-SS | D-SB-789-SS |
| SAMPLE DATE | 20100902 | 20100903 | 20100903 | 20100903 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.57 U | 0.71 U | 0.56 U | 0.57 U | 0.54 U | 0.51 U |
| 1,1,1-TRICHLOROETHANE | 0.51 U | 0.64 U | 0.51 U | 0.51 U | 0.49 U | 0.46 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.31 U | 0.39 U | 0.31 U | 0.31 U | 0.3 U | 0.28 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U | 1.5 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U |
| 1,1-DICHLOROETHANE | 0.33 U | 0.41 U | 0.33 U | 0.33 U | 0.31 U | 0.3 U |
| 1,1-DICHLOROETHENE | 0.48 U | 0.6 U | 0.47 U | 0.48 U | 0.45 U | 0.43 U |
| 1,1-DICHLOROPROPENE | 0.28 U | 0.34 U | 0.27 U | 0.27 U | 0.26 U | 0.25 U |
| 1,2,3-TRICHLOROBENZENE | 0.35 U | 0.44 U | 0.34 U | 0.35 U | 0.33 U | 0.31 U |
| 1,2,3-TRICHLOROPROPANE | 0.83 U | 1 U | 0.81 U | 0.82 U | 0.79 U | 0.74 U |
| 1,2,3-TRIMETHYLBENZENE | 0.16 U | 0.2 U | 0.15 U | 0.16 U | 0.15 U | 0.14 U |
| 1,2,4-TRICHLOROBENZENE | 0.25 U | 0.31 U | 0.24 U | 0.25 U | 0.24 U | 0.22 U |
| 1,2,4-TRIMETHYLBENZENE | 0.6 U | 0.75 U | 0.59 U | 0.6 U | 0.57 U | 0.53 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U | 1.5 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U |
| 1,2-DIBROMOETHANE | 0.46 U | 0.57 U | 0.45 U | 0.46 U | 0.44 U | 0.41 U |
| 1,2-DICHLOROBENZENE | 0.33 U | 0.41 U | 0.33 U | 0.33 U | 0.31 U | 0.3 U |
| 1,2-DICHLOROETHANE | 0.31 U | 0.39 U | 0.31 U | 0.31 U | 0.3 U | 0.28 U |
| 1,2-DICHLOROPROPANE | 0.63 U | 0.79 U | 0.62 U | 0.63 U | 0.6 U | 0.57 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.32 U | 0.4 U | 0.32 U | 0.32 U | 0.31 U | 0.29 U |
| 1,3-DICHLOROPROPANE | 0.31 U | 0.39 U | 0.31 U | 0.31 U | 0.3 U | 0.28 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.61 U | 0.76 U | 0.6 U | 0.6 U | 0.58 U | 0.54 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.86 U | 1.1 U | 0.85 U | 0.86 U | 0.82 U | 0.77 U |
| 2-BUTANONE | 1.3 U | 1.6 U | 2.1 B | 2.8 B | 1.6 J | 6 J |
| 2-CHLOROETHYL VINYL ETHER | 1.3 U | 1.6 U | 1.3 U | 1.3 U | 1.2 U | 1.2 U |
| 2-CHLOROTOLUENE | 0.37 U | 0.46 U | 0.36 U | 0.37 U | 0.35 U | 0.33 U |
| 2-HEXANONE | 0.58 U | 0.72 U | 0.57 U | 0.58 U | 0.55 U | 0.52 U |
| 4-CHLOROTOLUENE | 0.38 U | 0.47 U | 0.37 U | 0.38 U | 0.36 U | 0.34 U |
| 4-ISOPROPYLTOLUENE | 0.19 U | 0.24 U | 0.19 U | 0.19 U | 0.18 U | 0.17 U |
| 4-METHYL-2-PENTANONE | 0.5 U | 0.62 U | 0.49 U | 0.49 U | 0.47 U | 0.44 U |
| ACETONE | 5.8 U | 18 B | 21 B | 17 B | 440 J | 210 B |
| BENZENE | 0.21 U | 0.26 U | 0.72 J | 0.21 U | 0.2 U | 0.19 U |
| BROMOBENZENE | 0.3 U | 0.38 U | 0.3 U | 0.3 U | 0.29 U | 0.27 U |
| BROMOCHLOROMETHANE | 0.65 U | 0.81 U | 0.64 U | 0.65 U | 0.62 U | 0.58 U |
| BROMODICHLOROMETHANE | 0.26 U | 0.32 U | 0.25 U | 0.26 U | 0.24 U | 0.23 U |
| BROMOFORM | 0.3 U | 0.38 U | 0.3 U | 0.3 U | 0.29 U | 0.27 U |
| BROMOMETHANE | 0.5 U | 0.62 U | 0.49 U | 0.49 U | 0.47 U | 0.44 U |
| CARBON DISULFIDE | 0.4 U | 0.5 U | 2.2 B | 1 B | 0.65 J | 0.82 J |
| CARBON TETRACHLORIDE | 0.34 U | 0.42 U | 0.33 U | 0.34 U | 0.32 U | 0.3 U |
| CHLOROBENZENE | 0.3 U | 0.38 U | 0.3 U | 0.3 U | 0.29 U | 0.27 U |
| CHLORODIBROMOMETHANE | 0.5 U | 0.63 U | 0.5 U | 0.5 U | 0.48 U | 0.45 U |
| CHLOROETHANE | 0.79 U | 0.99 U | 0.78 U | 0.79 U | 0.75 U | 0.71 U |
| CHLOROFORM | 0.27 U | 0.33 U | 0.26 U | 0.27 U | 0.25 U | 0.24 U |
| CHLOROMETHANE | 0.38 U | 0.47 U | 0.37 U | 0.38 U | 0.36 U | 0.34 U |
| CIS-1,2-DICHLOROETHENE | 0.33 U | 0.41 U | 0.33 U | 0.33 U | 0.31 U | 0.3 U |
| CIS-1,3-DICHLOROPROPENE | 0.31 U | 0.39 U | 0.31 U | 0.31 U | 0.3 U | 0.28 U |
| DIBROMOMETHANE | 0.58 U | 0.72 U | 0.57 U | 0.58 U | 0.55 U | 0.52 U |
| DICHLORODIFLUOROMETHANE | 0.46 U | 0.57 U | 0.45 U | 0.46 U | 0.44 U | 0.41 U |
| DIISOPROPYL ETHER | 1.4 U | 1.7 U | 1.4 U | 1.4 U | 1.3 U | 1.2 U |
| ETHYL TERT-BUTYL ETHER | 0.2 U | 0.25 U | 0.2 U | 0.2 U | 0.19 U | 0.18 U |
| ETHYLBENZENE | 0.24 U | 0.3 U | 0.23 U | 0.24 U | 0.23 U | 0.21 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-784 | SB-785 | SB-786 | SB-787 | SB-788 | SB-789 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-784-01 | D-SS-785-01 | D-SS-786-01 | D-SS-787-01 | D-SB-788-SS | D-SB-789-SS |
| SAMPLE DATE | 20100902 | 20100903 | 20100903 | 20100903 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | 1.1 U | 1.4 U | 1.1 U | 1.1 U | 1 U | 0.99 U |
| ISOPROPYLBENZENE | 0.15 U | 0.18 U | 0.14 U | 0.15 U | 0.14 U | 0.13 U |
| M+P-XYLENES | 1.1 U | 1.4 U | 1.1 U | 1.1 U | 1 U | 0.99 U |
| METHYL TERT-BUTYL ETHER | 0.39 U | 0.49 U | 0.39 U | 0.39 U | 0.38 UJ | 0.35 UJ |
| METHYLENE CHLORIDE | 0.61 U | 1.5 B | 3.9 B | 2.8 B | 0.59 U | 0.55 U |
| NAPHTHALENE | 0.17 U | 1.1 B | 2.2 B | 1.7 B | 0.17 U | 0.16 U |
| N-BUTYLBENZENE | 0.21 U | 0.26 U | 0.21 U | 0.21 U | 0.2 U | 0.19 U |
| N-PROPYLBENZENE | 0.37 U | 0.46 U | 0.36 U | 0.37 U | 0.35 U | 0.33 U |
| O-XYLENE | 0.32 U | 0.4 U | 0.32 U | 0.32 U | 0.31 U | 0.29 U |
| SEC-BUTYLBENZENE | 0.17 U | 0.21 U | 0.16 U | 0.16 U | 0.16 U | 0.15 U |
| STYRENE | 0.14 U | 0.17 U | 0.14 U | 0.14 U | 0.13 U | 0.12 U |
| TERT-AMYL METHYL ETHER | 0.34 U | 0.42 U | 0.33 U | 0.34 U | 0.32 U | 0.3 U |
| TERT-BUTYLBENZENE | 0.27 U | 0.33 U | 0.26 U | 0.27 U | 0.25 U | 0.24 U |
| TERTIARY-BUTYL ALCOHOL | 7 UR | 61 B | 49 B | 48 B | 6.6 UR | 6.3 UR |
| TETRACHLOROETHENE | 0.48 U | 0.6 U | 0.47 U | 0.48 U | 0.45 U | 0.43 U |
| TOLUENE | 0.25 U | 0.31 U | 0.24 U | 0.25 U | 0.24 U | 0.22 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.61 U | 0.77 U | 0.61 U | 0.61 U | 0.59 U | 0.55 U |
| TRANS-1,2-DICHLOROETHENE | 0.38 U | 0.47 U | 0.37 U | 0.38 U | 0.36 U | 0.34 U |
| TRANS-1,3-DICHLOROPROPENE | 0.5 U | 0.62 U | 0.49 U | 0.49 U | 0.47 U | 0.44 U |
| TRICHLOROETHENE | 0.39 U | 0.48 U | 0.38 U | 0.38 U | 0.37 U | 0.35 U |
| TRICHLOROFLUOROMETHANE | 0.31 U | 0.39 U | 0.31 U | 0.31 U | 0.3 U | 0.28 U |
| VINYL ACETATE | 0.23 U | 0.29 U | 0.23 U | 0.23 U | 0.22 U | 0.21 U |
| VINYL CHLORIDE | 0.36 U | 0.45 U | 0.35 U | 0.36 U | 0.34 U | 0.32 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 30 U | 29 UL | 32 U | 31 U | 29 U | 29 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 24 U | 24 UL | 26 U | 26 U | 23 U | 24 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 10 U | 10 UL | 11 U | 11 U | 10 U | 10 U |
| 2,4,5-TRICHLOROPHENOL | 28 U | 27 U | 30 U | 29 U | 27 U | 27 U |
| 2,4,6-TRICHLOROPHENOL | 88 U | 87 U | 95 U | 93 U | 85 U | 85 U |
| 2,4-DICHLOROPHENOL | 22 U | 22 U | 24 U | 23 U | 21 U | 21 U |
| 2,4-DIMETHYLPHENOL | 22 U | 22 U | 24 U | 23 U | 21 U | 21 U |
| 2,4-DINITROPHENOL | 88 U | 87 U | 95 U | 93 U | 85 U | 85 U |
| 2,4-DINITROTOLUENE | 30 U | 29 UL | 32 U | 31 U | 29 U | 29 U |
| 2,6-DINITROTOLUENE | 23 U | 23 UL | 25 U | 24 U | 22 U | 22 U |
| 2-CHLORONAPHTHALENE | 3.6 U | 3.6 UL | 3.9 U | 3.8 U | 3.5 U | 3.5 U |
| 2-CHLOROPHENOL | 30 U | 29 U | 32 U | 31 U | 29 U | 29 U |
| 2-METHYLPHENOL | 88 U | 87 U | 95 U | 93 U | 85 U | 85 U |
| 2-NITROANILINE | 10 U | 9.8 UL | 11 U | 11 U | 9.7 U | 9.7 U |
| 2-NITROPHENOL | 30 U | 29 U | 32 U | 31 U | 29 U | 29 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 20 U | 19 UL | 21 U | 21 U | 19 U | 19 U |
| 3-NITROANILINE | 18 U | 17 UL | 19 U | 19 U | 17 U | 17 U |
| 4,6-DINITRO-2-METHYLPHENOL | 88 U | 87 U | 95 U | 93 U | 85 U | 85 U |
| 4-BROMOPHENYL PHENYL ETHER | 14 U | 14 UL | 15 U | 15 U | 14 U | 14 U |
| 4-CHLORO-3-METHYLPHENOL | 23 U | 23 U | 25 U | 24 U | 22 U | 22 U |
| 4-CHLOROANILINE | 19 U | 18 UL | 20 U | 20 U | 18 U | 18 U |
| 4-CHLOROPHENYL PHENYL ETHER | 14 U | 14 UL | 15 U | 15 U | 14 U | 14 U |
| 4-METHYLPHENOL | 88 U | 87 U | 95 U | 93 U | 85 U | 85 U |
| 4-NITROANILINE | 29 U | 28 UL | 31 U | 30 U | 28 U | 28 U |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-784 | SB-785 | SB-786 | SB-787 | SB-788 | SB-789 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-784-01 | D-SS-785-01 | D-SS-786-01 | D-SS-787-01 | D-SB-788-SS | D-SB-789-SS |
| SAMPLE DATE | 20100902 | 20100903 | 20100903 | 20100903 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 88 U | 87 U | 95 U | 93 U | 85 U | 85 U |
| ACETOPHENONE | 10 U | 10 UL | 11 U | 11 U | 9.8 U | 9.8 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 10 U | 9.8 UL | 11 U | 11 U | 9.7 U | 9.7 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 13 U | 13 UL | 14 U | 14 U | 13 U | 13 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 24 U | 24 UL | 26 U | 26 U | 23 U | 24 U |
| BIS(2-CHLOROETHYL)ETHER | 2.2 U | 2.2 UL | 2.4 U | 2.3 U | 2.1 U | 2.1 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 21 U | 21 UL | 23 U | 22 U | 20 J | 20 U |
| BUTYL BENZYL PHTHALATE | 11 U | 11 UL | 12 U | 12 U | 11 U | 11 U |
| CAPROLACTAM | 41 U | 40 UL | 44 U | 43 U | 39 U | 40 U |
| CARBAZOLE | 30 U | 29 UL | 62 | 31 U | 29 U | 29 U |
| DIBENZOFURAN | 3.6 U | 3.6 UL | 34 J | 3.8 U | 11 J | 3.5 U |
| DIETHYL PHTHALATE | 18 U | 17 UL | 19 U | 19 U | 17 U | 17 U |
| DIMETHYL PHTHALATE | 19 U | 18 UL | 20 U | 20 U | 18 U | 18 U |
| DI-N-BUTYL PHTHALATE | 17 U | 16 UL | 18 U | 17 U | 16 U | 16 U |
| DI-N-OCTYL PHTHALATE | 30 U | 29 UL | 32 U | 31 U | 29 U | 29 U |
| HEXACHLOROBENZENE | 2.3 U | 2.3 UL | 2.5 U | 2.4 U | 2.2 U | 2.2 U |
| HEXACHLOROBUTADIENE | 30 U | 29 UL | 32 U | 31 U | 29 U | 29 U |
| HEXACHLOROCYCLOPENTADIENE | 30 U | 29 UL | 32 U | 31 U | 29 U | 29 U |
| HEXACHLOROETHANE | 9.9 U | 9.7 UL | 11 U | 10 U | 9.6 U | 9.6 U |
| ISOPHORONE | 14 U | 14 UL | 15 U | 15 U | 14 U | 14 U |
| NITROBENZENE | 2.4 U | 2.4 UL | 2.6 U | 2.6 U | 2.3 U | 2.4 U |
| N-NITROSODIMETHYLAMINE | 18 U | 17 UL | 19 U | 19 U | 17 U | 17 U |
| N-NITROSO-DI-N-PROPYLAMINE | 30 U | 29 UL | 32 U | 31 U | 29 U | 29 U |
| N-NITROSODIPHENYLAMINE | 23 U | 23 UL | 25 U | 24 U | 22 U | 22 U |
| PENTACHLOROPHENOL | 88 U | 87 U | 95 U | 93 U | 85 U | 85 U |
| PHENOL | 30 U | 29 U | 32 U | 31 U | 29 U | 29 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3.6 U | 3.6 UL | 27 | 3.8 U | 10 | 3.5 U |
| ACENAPHTHENE | 3.6 U | 3.6 UL | 100 | 11 | 16 | 3.5 U |
| ACENAPHTHYLENE | 3.6 U | 3.6 UL | 10 | 3.8 U | 3.5 U | 3.5 U |
| ANTHRACENE | 3.6 U | 3.6 UL | 190 | 20 | 20 | 3.5 U |
| BAP EQUIVALENT-HALFND | 40 | 3.6 U | 574 | 72.4 | 105 | 22.2 |
| BAP EQUIVALENT-POS | 39 | 3.6 U | 574 | 72.4 | 105 | 20.3 |
| BENZO(A)ANTHRACENE | 27 | 3.6 UL | 520 | 49 | 53 | 3.5 U |
| BENZO(A)PYRENE | 30 | 3.6 UL | 380 | 40 | 63 | 17 |
| BENZO(B)FLUORANTHENE | 40 | 3.6 UL | 440 | 58 | 83 | 15 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 24 | 3.6 UL | 210 | 26 | 36 | 3.5 U |
| BENZO(K)FLUORANTHENE | 13 | 3.6 UL | 220 | 22 | 29 | 3.5 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-784 | SB-785 | SB-786 | SB-787 | SB-788 | SB-789 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-784-01 | D-SS-785-01 | D-SS-786-01 | D-SS-787-01 | D-SB-788-SS | D-SB-789-SS |
| SAMPLE DATE | 20100902 | 20100903 | 20100903 | 20100903 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 32 | 1.2 UL | 480 | 44 | 62 | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 3.6 U | 3.6 UL | 76 | 19 | 24 | 3.5 U |
| FLUORANTHENE | 60 | 3.6 UL | 890 | 93 | 110 | 14 |
| FLUORENE | 3.6 U | 3.6 UL | 93 | 9.8 | 18 | 3.5 U |
| INDENO(1,2,3-CD)PYRENE | 17 | 3.6 UL | 190 | 24 | 45 | 18 |
| NAPHTHALENE | 3.6 U | 3.6 UL | 85 | 3.8 U | 19 | 3.5 U |
| PHENANTHRENE | 20 | 3.6 UL | 630 | 53 | 87 | 3.5 U |
| PYRENE | 65 | 3.6 UL | 850 | 73 | 93 | 14 |
| TOTAL PAHS | 328 | 0 U | 5391 | 541.8 | 768 | 78 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | 0.68 UJ | 6.7 U | 15 U | 0.72 U | 1.3 UJ | 0.66 UJ |
| 4,4'-DDE | 1.5 J | 4.2 UJ | 9.3 U | 0.45 UJ | 0.83 U | 0.42 U |
| 4,4'-DDT | 0.7 U | 6.8 U | 15 U | 0.73 U | 1.3 UJ | 0.67 U |
| ALDRIN | 1.3 UJ | 13 U | 29 U | 1.4 U | 2.6 U | 1.3 U |
| ALPHA-BHC | 0.81 UJ | 7.9 UJ | 17 UJ | 0.85 UJ | 1.6 U | 0.78 U |
| ALPHA-CHLORDANE | 1 UJ | 10 UJ | 22 U | 1.1 UJ | 2 U | 1 U |
| AROCLOR-1016 | 23 U | 23 U | 25 U | 24 U | 22 U | 22 U |
| AROCLOR-1221 | 18 U | 17 U | 19 U | 19 U | 17 U | 17 U |
| AROCLOR-1232 | 15 U | 15 U | 17 U | 16 U | 15 U | 15 U |
| AROCLOR-1242 | 14 U | 14 U | 15 U | 15 U | 14 U | 14 U |
| AROCLOR-1248 | 19 U | 18 U | 20 U | 20 U | 18 U | 18 U |
| AROCLOR-1254 | 19 U | 18 U | 20 U | 20 U | 18 U | 18 U |
| AROCLOR-1260 | 19 U | 18 U | 20 U | 20 U | 18 U | 18 U |
| BETA-BHC | 1.2 UJ | 12 UJ | 26 UJ | 1.3 UJ | 6.4 J | 1.2 U |
| DELTA-BHC | 1.3 UJ | 13 UJ | 29 U | 1.4 UJ | 2.6 U | 1.3 U |
| DIELDRIN | 0.52 UJ | 5.1 UJ | 11 U | 0.54 UJ | 1 U | 0.5 U |
| ENDOSULFAN I | 0.57 UJ | 5.6 UJ | 12 U | 0.6 UJ | 1.1 U | 0.56 U |
| ENDOSULFAN II | 0.91 UJ | 8.9 U | 19 U | 0.95 U | 1.7 U | 0.88 U |
| ENDOSULFAN SULFATE | 0.96 UJ | 9.4 U | 21 U | 1 U | 1.9 U | 0.93 U |
| ENDRIN | 0.55 UJ | 5.4 UJ | 12 U | 0.58 UJ | 1.1 UJ | 0.53 UJ |
| ENDRIN ALDEHYDE | 1.1 U | 11 U | 24 U | 1.2 U | 2.1 U | 1.1 U |
| ENDRIN KETONE | 0.7 U | 6.8 U | 15 U | 0.73 U | 1.3 U | 0.67 U |
| GAMMA-BHC (LINDANE) | 0.82 UJ | 8 UJ | 18 UJ | 0.86 UJ | 1.6 U | 0.79 U |
| GAMMA-CHLORDANE | 0.46 UJ | 4.5 UJ | 10 U | 0.49 UJ | 0.89 U | 0.45 U |
| HEPTACHLOR | 1.2 UJ | 12 UJ | 26 UJ | 1.3 UJ | 2.3 UJ | 1.2 UJ |
| HEPTACHLOR EPOXIDE | 0.88 UJ | 8.7 UJ | 19 UJ | 0.93 UJ | 1.7 U | 0.85 U |
| METHOXYCHLOR | 1.7 U | 16 U | 36 U | 1.7 U | 3.2 UJ | 1.6 UJ |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 21 U | 210 U | 450 U | 22 U | 40 U | 20 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 0.076 B | 0.063 J | 0.24 J | 0.19 J | 0.034 J | 0.056 J |
| ARSENIC | 2.8 J | 1.6 | 6 | 5.3 | 0.95 | 1.7 |
| BARIUM | 17 | 4.1 J | 37.1 J | 30.7 J | 6.8 | 17.3 |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-784 | SB-785 | SB-786 | SB-787 | SB-788 | SB-789 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-784-01 | D-SS-785-01 | D-SS-786-01 | D-SS-787-01 | D-SB-788-SS | D-SB-789-SS |
| SAMPLE DATE | 20100902 | 20100903 | 20100903 | 20100903 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 0.19 | 0.065 J | 2 | 1.9 | 0.087 J | 0.2 |
| CADMIUM | 0.046 B | 0.0084 UL | 0.11 J | 0.4 L | 0.0083 UL | 0.024 B |
| CHROMIUM | 8.5 J | 14.2 | 20.8 | 18.6 | 12.4 | 11.3 |
| COBALT | 6.4 J | 0.65 | 8.9 | 27.5 | 1.5 | 1.8 |
| COPPER | 6.7 J | 5.1 J | 22.4 J | 21.6 J | 4.2 L | 9.6 L |
| IRON | 5100 J | 6620 J | 25400 J | 21500 J | 5460 | 4680 |
| LEAD | 16.4 | 1.1 J | 26.5 J | 21.4 J | 2.2 | 7.8 |
| MANGANESE | 24.9 | 9.4 J | 102 J | 70.5 J | 28.6 | 10.8 |
| MERCURY | 0.05 J | 0.016 U | 0.25 K | 0.48 K | 0.016 U | 0.019 J |
| MOLYBDENUM | 0.33 | 0.4 | 0.56 | 0.45 | 0.23 | 0.31 |
| NICKEL | 5.6 J | 0.84 J | 20.7 J | 40.6 J | 3.3 | 3.1 |
| SELENIUM | 0.51 J | 0.25 J | 3.1 L | 2.3 L | 0.16 J | 0.58 J |
| SILVER | 0.023 J | 0.017 U | 0.38 | 0.28 K | 0.017 U | 0.025 B |
| THALLIUM | 0.07 B | 0.014 UL | 0.034 J | 0.054 J | 0.014 U | 0.067 B |
| VANADIUM | 15.1 J | 18.7 | 34.2 | 29.2 | 12.1 | 17.4 |
| ZINC | 15.5 J | 3.3 J | 48.5 J | 139 J | 4.8 J | 11.8 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 8600 J | 9700 J | 520000 | 59000 | 24000 | 9700 J |
| GASOLINE RANGE ORGANICS | 51 U | 50 U | 71 J | 53 U | 49 U | 49 U |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | 1.3 | 0.52 J | 0.32 U | 0.31 U | 0.53 J | 0.57 J |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-790 | SB-791 | SB-792 | SB-793 | SB-794 | SB-795 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-790-SS | D-SB-791-SS | D-SB-792-SS | D-SB-793-SS | D-SB-794-SS | D-SB-795-SS |
| SAMPLE DATE | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.57 U | 0.64 U | 0.57 U | 0.52 U | 0.5 U | 0.53 U |
| 1,1,1-TRICHLOROETHANE | 0.52 U | 0.58 U | 0.52 U | 0.47 U | 0.45 U | 0.47 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.31 U | 0.35 U | 0.31 U | 0.29 U | 0.27 U | 0.29 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U | 1.3 U | 1.2 U | 1.1 U | 1 U | 1.1 U |
| 1,1-DICHLOROETHANE | 0.33 U | 0.37 U | 0.33 U | 0.3 U | 0.29 U | 0.3 U |
| 1,1-DICHLOROETHENE | 0.48 U | 0.54 U | 0.48 U | 0.44 U | 0.42 U | 0.44 U |
| 1,1-DICHLOROPROPENE | 0.28 U | 0.31 U | 0.28 U | 0.25 U | 0.24 U | 0.25 U |
| 1,2,3-TRICHLOROBENZENE | 0.35 U | 0.39 U | 0.35 U | 0.32 U | 0.31 U | 0.32 U |
| 1,2,3-TRICHLOROPROPANE | 0.83 U | 0.93 U | 0.83 U | 0.76 U | 0.72 U | 0.76 U |
| 1,2,3-TRIMETHYLBENZENE | 0.16 U | 0.18 U | 0.16 U | 0.14 U | 0.14 U | 0.14 U |
| 1,2,4-TRICHLOROBENZENE | 0.25 U | 0.28 U | 0.25 U | 0.23 U | 0.22 U | 0.23 U |
| 1,2,4-TRIMETHYLBENZENE | 0.6 U | 0.67 U | 0.6 U | 0.55 U | 0.52 U | 0.55 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U | 1.3 U | 1.2 U | 1.1 U | 1 U | 1.1 U |
| 1,2-DIBROMOETHANE | 0.46 U | 0.52 U | 0.46 U | 0.42 U | 0.4 U | 0.42 U |
| 1,2-DICHLOROBENZENE | 0.33 U | 0.37 U | 0.33 U | 0.3 U | 0.29 U | 0.3 U |
| 1,2-DICHLOROETHANE | 0.31 U | 0.35 U | 0.31 U | 0.29 U | 0.27 U | 0.29 U |
| 1,2-DICHLOROPROPANE | 0.64 U | 0.71 U | 0.64 U | 0.58 U | 0.55 U | 0.58 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.32 U | 0.36 U | 0.32 U | 0.3 U | 0.28 U | 0.3 U |
| 1,3-DICHLOROPROPANE | 0.31 U | 0.35 U | 0.31 U | 0.29 U | 0.27 U | 0.29 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.61 U | 0.68 U | 0.61 U | 0.56 U | 0.53 U | 0.56 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.87 U | 0.97 U | 0.87 U | 0.79 U | 0.76 U | 0.8 U |
| 2-BUTANONE | 1.3 U | 1.7 J | 7.6 J | 12 | 1.1 U | 17 |
| 2-CHLOROETHYL VINYL ETHER | 1.3 U | 1.5 U | 1.3 U | 1.2 U | 1.1 U | 1.2 U |
| 2-CHLOROTOLUENE | 0.37 U | 0.41 U | 0.37 U | 0.34 U | 0.32 U | 0.34 U |
| 2-HEXANONE | 0.58 U | 0.65 U | 0.58 U | 0.53 U | 0.51 U | 0.53 U |
| 4-CHLOROTOLUENE | 0.38 U | 0.42 U | 0.38 U | 0.35 U | 0.33 U | 0.35 U |
| 4-ISOPROPYLTOLUENE | 0.19 U | 0.22 U | 0.19 U | 0.18 U | 0.17 U | 0.18 U |
| 4-METHYL-2-PENTANONE | 0.5 U | 0.56 U | 0.5 U | 0.46 U | 0.43 U | 0.46 U |
| ACETONE | 110 | 14 B | 43 B | 130 B | 21 B | 96 B |
| BENZENE | 0.21 U | 0.24 U | 0.21 U | 0.19 U | 0.18 U | 0.19 U |
| BROMOBENZENE | 0.3 U | 0.34 U | 0.31 U | 0.28 U | 0.27 U | 0.28 U |
| BROMOCHLOROMETHANE | 0.65 U | 0.74 U | 0.66 U | 0.6 U | 0.57 U | 0.6 U |
| BROMODICHLOROMETHANE | 0.26 U | 0.29 U | 0.26 U | 0.24 U | 0.23 U | 0.24 U |
| BROMOFORM | 0.3 U | 0.34 U | 0.31 U | 0.28 U | 0.27 U | 0.28 U |
| BROMOMETHANE | 0.5 U | 0.56 U | 0.5 U | 0.46 U | 0.43 U | 0.46 U |
| CARBON DISULFIDE | 0.41 U | 0.65 J | 1.4 B | 1.7 B | 1.1 B | 1.9 B |
| CARBON TETRACHLORIDE | 0.34 U | 0.38 U | 0.34 U | 0.31 U | 0.3 U | 0.31 U |
| CHLOROBENZENE | 0.3 U | 0.34 U | 0.31 U | 0.28 U | 0.27 U | 0.28 U |
| CHLORODIBROMOMETHANE | 0.51 U | 0.57 U | 0.51 U | 0.47 U | 0.44 U | 0.47 U |
| CHLOROETHANE | 0.79 U | 0.89 U | 0.8 U | 0.73 U | 0.69 U | 0.73 U |
| CHLOROFORM | 0.27 U | 0.3 U | 0.27 U | 0.25 U | 0.23 U | 0.25 U |
| CHLOROMETHANE | 0.38 U | 0.42 U | 0.38 U | 0.35 U | 0.33 U | 0.35 U |
| CIS-1,2-DICHLOROETHENE | 0.33 U | 0.37 U | 0.33 U | 0.3 U | 0.29 U | 0.3 U |
| CIS-1,3-DICHLOROPROPENE | 0.31 U | 0.35 U | 0.31 U | 0.29 U | 0.27 U | 0.29 U |
| DIBROMOMETHANE | 0.58 U | 0.65 U | 0.58 U | 0.53 U | 0.51 U | 0.53 U |
| DICHLORODIFLUOROMETHANE | 0.46 U | 0.52 U | 0.46 U | 0.42 U | 0.4 U | 0.42 U |
| DIISOPROPYL ETHER | 1.4 U | 1.6 U | 1.4 U | 1.3 U | 1.2 U | 1.3 U |
| ETHYL TERT-BUTYL ETHER | 0.2 U | 0.23 U | 0.2 U | 0.19 U | 0.18 U | 0.19 U |
| ETHYLBENZENE | 0.24 U | 0.27 U | 0.24 U | 0.22 U | 0.21 U | 0.22 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-790 | SB-791 | SB-792 | SB-793 | SB-794 | SB-795 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-790-SS | D-SB-791-SS | D-SB-792-SS | D-SB-793-SS | D-SB-794-SS | D-SB-795-SS |
| SAMPLE DATE | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | 1.1 U | 1.2 U | 1.1 U | 1 U | 0.96 U | 1 U |
| ISOPROPYLBENZENE | 0.15 U | 0.17 U | 0.15 U | 0.14 U | 0.13 U | 0.14 U |
| M+P-XYLENES | 1.1 U | 1.2 U | 1.1 U | 1 U | 0.96 U | 1 U |
| METHYL TERT-BUTYL ETHER | 0.4 U | 0.45 U | 0.4 UJ | 0.36 UJ | 0.35 UJ | 0.36 UJ |
| METHYLENE CHLORIDE | 0.62 U | 0.69 U | 0.72 B | 1 B | 0.54 U | 2.1 B |
| NAPHTHALENE | 0.18 U | 0.2 U | 0.85 B | 2.2 B | 0.15 U | 0.78 B |
| N-BUTYLBENZENE | 0.21 U | 0.24 U | 0.21 U | 0.19 U | 0.18 U | 0.19 U |
| N-PROPYLBENZENE | 0.37 U | 0.41 U | 0.37 U | 0.34 U | 0.32 U | 0.34 U |
| O-XYLENE | 0.32 U | 0.36 U | 0.32 U | 0.3 U | 0.28 U | 0.3 U |
| SEC-BUTYLBENZENE | 0.17 U | 0.19 U | 0.17 U | 0.15 U | 0.14 U | 0.15 U |
| STYRENE | 0.14 U | 0.16 U | 0.14 U | 0.13 U | 0.12 U | 0.13 U |
| TERT-AMYL METHYL ETHER | 0.34 U | 0.38 U | 0.34 U | 0.31 U | 0.3 UJ | 0.31 UJ |
| TERT-BUTYLBENZENE | 0.27 U | 0.3 U | 0.27 U | 0.25 U | 0.23 U | 0.25 U |
| TERTIARY-BUTYL ALCOHOL | 7 UR | 7.9 UR | 49 B | 46 B | 6.1 UR | 46 B |
| TETRACHLOROETHENE | 0.48 U | 0.54 U | 0.48 U | 0.44 U | 0.42 U | 0.44 U |
| TOLUENE | 0.25 U | 0.28 U | 0.38 J | 0.23 U | 0.22 U | 0.23 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.62 U | 0.69 U | 0.62 U | 0.57 U | 0.54 U | 0.57 U |
| TRANS-1,2-DICHLOROETHENE | 0.38 U | 0.42 U | 0.38 U | 0.35 U | 0.33 U | 0.35 U |
| TRANS-1,3-DICHLOROPROPENE | 0.5 U | 0.56 U | 0.5 U | 0.46 U | 0.43 U | 0.46 U |
| TRICHLOROETHENE | 0.39 U | 0.44 U | 0.39 U | 0.36 U | 0.34 U | 0.36 U |
| TRICHLOROFLUOROMETHANE | 0.31 U | 0.35 U | 0.31 U | 0.29 U | 0.85 J | 0.29 U |
| VINYL ACETATE | 0.23 U | 0.26 U | 0.23 U | 0.21 U | 0.2 U | 0.21 U |
| VINYL CHLORIDE | 0.36 U | 0.4 U | 0.36 U | 0.33 U | 0.31 U | 0.33 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 29 U | 29 U | 29 U | 31 U | 42 U | 31 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 24 U | 23 U | 24 U | 25 U | 34 U | 25 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 10 U | 10 U | 10 U | 11 U | 15 U | 11 U |
| 2,4,5-TRICHLOROPHENOL | 27 U | 26 U | 27 U | 29 U | 39 U | 29 U |
| 2,4,6-TRICHLOROPHENOL | 86 U | 85 U | 86 U | 91 U | 120 U | 92 U |
| 2,4-DICHLOROPHENOL | 21 U | 21 U | 22 U | 23 U | 31 U | 23 U |
| 2,4-DIMETHYLPHENOL | 21 U | 21 U | 22 U | 23 U | 31 U | 23 U |
| 2,4-DINITROPHENOL | 86 U | 85 U | 86 U | 91 U | 120 U | 92 U |
| 2,4-DINITROTOLUENE | 29 U | 29 U | 29 U | 31 U | 42 U | 31 U |
| 2,6-DINITROTOLUENE | 23 U | 22 U | 23 U | 24 U | 33 U | 24 U |
| 2-CHLORONAPHTHALENE | 3.5 U | 3.5 U | 3.6 U | 3.8 U | 5.1 U | 3.8 U |
| 2-CHLOROPHENOL | 29 U | 29 U | 29 U | 31 U | 42 U | 31 U |
| 2-METHYLPHENOL | 86 U | 85 U | 86 U | 91 U | 120 U | 92 U |
| 2-NITROANILINE | 9.8 U | 9.6 U | 9.8 U | 10 U | 14 U | 10 U |
| 2-NITROPHENOL | 29 U | 29 U | 29 U | 31 U | 42 U | 31 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 19 U | 19 U | 19 U | 21 U | 28 U | 21 U |
| 3-NITROANILINE | 17 U | 17 U | 17 U | 18 U | 25 U | 18 U |
| 4,6-DINITRO-2-METHYLPHENOL | 86 U | 85 U | 86 U | 91 U | 120 U | 92 U |
| 4-BROMOPHENYL PHENYL ETHER | 14 U | 14 U | 14 U | 15 U | 20 U | 15 U |
| 4-CHLORO-3-METHYLPHENOL | 23 U | 22 U | 23 U | 24 U | 33 U | 24 U |
| 4-CHLOROANILINE | 18 U | 18 U | 18 U | 19 U | 26 U | 19 U |
| 4-CHLOROPHENYL PHENYL ETHER | 14 U | 14 U | 14 U | 15 U | 20 U | 15 U |
| 4-METHYLPHENOL | 86 U | 85 U | 86 U | 91 U | 120 U | 92 U |
| 4-NITROANILINE | 28 U | 27 U | 28 U | 30 U | 40 U | 30 U |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-790 | SB-791 | SB-792 | SB-793 | SB-794 | SB-795 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-790-SS | D-SB-791-SS | D-SB-792-SS | D-SB-793-SS | D-SB-794-SS | D-SB-795-SS |
| SAMPLE DATE | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 86 U | 85 U | 86 U | 91 U | 120 U | 92 U |
| ACETOPHENONE | 9.9 U | 9.7 U | 9.9 U | 11 U | 14 U | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 9.8 U | 9.6 U | 9.8 U | 10 U | 14 U | 10 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 13 U | 13 U | 13 U | 14 U | 19 U | 14 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 24 U | 23 U | 24 U | 25 U | 34 U | 25 U |
| BIS(2-CHLOROETHYL)ETHER | 2.1 U | 2.1 U | 2.2 U | 2.3 U | 3.1 U | 2.3 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 20 U | 20 U | 20 U | 22 U | 29 U | 22 U |
| BUTYL BENZYL PHTHALATE | 11 U | 11 U | 11 U | 11 U | 15 U | 11 U |
| CAPROLACTAM | 40 U | 39 U | 40 U | 42 U | 57 U | 42 U |
| CARBAZOLE | 29 U | 29 U | 29 U | 31 U | 120 | 31 U |
| DIBENZOFURAN | 3.5 U | 3.5 U | 3.6 U | 3.8 U | 110 | 3.8 U |
| DIETHYL PHTHALATE | 17 U | 17 U | 17 U | 18 U | 25 U | 18 U |
| DIMETHYL PHTHALATE | 18 U | 18 U | 18 U | 19 U | 26 U | 19 U |
| DI-N-BUTYL PHTHALATE | 16 U | 16 U | 16 U | 17 U | 23 U | 17 U |
| DI-N-OCTYL PHTHALATE | 29 U | 29 U | 29 U | 31 U | 42 U | 31 U |
| HEXACHLOROBENZENE | 2.3 U | 2.2 U | 2.3 U | 2.4 U | 3.3 U | 2.4 U |
| HEXACHLOROBUTADIENE | 29 U | 29 U | 29 U | 31 U | 42 U | 31 U |
| HEXACHLOROCYCLOPENTADIENE | 29 U | 29 U | 29 U | 31 U | 42 U | 31 U |
| HEXACHLOROETHANE | 9.6 U | 9.5 U | 9.7 U | 10 U | 14 U | 10 U |
| ISOPHORONE | 14 U | 14 U | 14 U | 15 U | 20 U | 15 U |
| NITROBENZENE | 2.4 U | 2.3 U | 2.4 U | 2.5 U | 3.4 U | 2.5 U |
| N-NITROSODIMETHYLAMINE | 17 U | 17 U | 17 U | 18 U | 25 U | 18 U |
| N-NITROSO-DI-N-PROPYLAMINE | 29 U | 29 U | 29 U | 31 U | 42 U | 31 U |
| N-NITROSODIPHENYLAMINE | 23 U | 22 U | 23 U | 24 U | 33 U | 24 U |
| PENTACHLOROPHENOL | 86 U | 85 U | 86 U | 91 U | 120 U | 92 U |
| PHENOL | 29 U | 29 U | 29 U | 31 U | 42 U | 31 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3.5 U | 3.5 U | 3.6 U | 3.8 U | 69 | 3.8 U |
| ACENAPHTHENE | 3.5 U | 3.5 U | 3.6 U | 3.8 U | 160 | 3.8 U |
| ACENAPHTHYLENE | 3.5 U | 3.5 U | 3.6 U | 3.8 U | 5.1 U | 3.8 U |
| ANTHRACENE | 3.5 U | 3.5 U | 3.6 U | 3.8 U | 460 | 3.8 U |
| BAP EQUIVALENT-HALFND | 18.5 | 3.5 U | 4.2 | 16.8 | 714 | 38.9 |
| BAP EQUIVALENT-POS | 16.4 | 3.5 U | 0.01 | 14.9 | 711 | 37.0 |
| BENZO(A)ANTHRACENE | 3.5 U | 3.5 U | 3.6 U | 12 | 740 | 16 |
| BENZO(A)PYRENE | 15 | 3.5 U | 3.6 U | 11 | 540 | 29 |
| BENZO(B)FLUORANTHENE | 14 | 3.5 U | 3.6 U | 17 | 650 | 33 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.5 U | 3.5 U | 3.6 U | 10 | 310 | 17 |
| BENZO(K)FLUORANTHENE | 3.5 U | 3.5 U | 3.6 U | 11 | 370 | 13 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-790 | SB-791 | SB-792 | SB-793 | SB-794 | SB-795 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-790-SS | D-SB-791-SS | D-SB-792-SS | D-SB-793-SS | D-SB-794-SS | D-SB-795-SS |
| SAMPLE DATE | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.2 U | 1.2 U | 7.2 | 15 | 640 | 26 |
| DIBENZO(A,H)ANTHRACENE | 3.5 U | 3.5 U | 3.6 U | 3.8 U | 5.1 U | 3.8 U |
| FLUORANTHENE | 8.5 | 8.4 | 8.4 | 20 | 1700 | 36 |
| FLUORENE | 3.5 U | 3.5 U | 3.6 U | 3.8 U | 210 | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 3.5 U | 3.5 U | 3.6 U | 8.7 | 280 | 29 |
| NAPHTHALENE | 3.5 U | 3.5 U | 3.6 U | 3.8 U | 82 | 3.8 U |
| PHENANTHRENE | 3.5 U | 3.5 U | 3.6 U | 12 | 1600 | 27 |
| PYRENE | 9.6 | 8.2 | 8 | 16 | 1200 | 37 |
| TOTAL PAHS | 47.1 | 16.6 | 23.6 | 132.7 | 9011 | 263 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | 0.66 U | 0.66 U | 1.3 U | 3.5 U | 4 J | 3.5 UJ |
| 4,4'-DDE | 0.42 U | 0.41 U | 0.84 U | 2.2 U | 7.1 J | 2.2 UJ |
| 4,4'-DDT | 0.68 U | 0.67 U | 1.4 U | 3.6 U | 3.7 U | 3.6 U |
| ALDRIN | 1.3 U | 1.3 U | 2.6 U | 6.9 U | 7 U | 6.9 UJ |
| ALPHA-BHC | 0.78 U | 0.77 U | 1.6 U | 4.2 UJ | 4.3 UJ | 4.2 UJ |
| ALPHA-CHLORDANE | 1 U | 0.99 U | 2 U | 5.4 U | 5.5 U | 5.4 UJ |
| AROCLOR-1016 | 23 U | 22 U | 23 U | 24 U | 24 U | 24 U |
| AROCLOR-1221 | 17 U | 17 U | 17 U | 18 U | 19 U | 18 U |
| AROCLOR-1232 | 15 U | 15 U | 15 U | 16 U | 16 U | 16 U |
| AROCLOR-1242 | 14 U | 14 U | 14 U | 15 U | 15 U | 15 U |
| AROCLOR-1248 | 18 U | 18 U | 18 U | 19 U | 20 U | 19 U |
| AROCLOR-1254 | 18 U | 18 U | 18 U | 19 U | 20 U | 19 U |
| AROCLOR-1260 | 18 U | 18 U | 18 U | 19 U | 20 J | 19 U |
| BETA-BHC | 1.2 U | 1.2 U | 2.4 U | 6.3 U | 6.4 U | 6.3 UJ |
| DELTA-BHC | 1.3 U | 1.3 U | 2.6 U | 6.9 U | 7 U | 6.9 UJ |
| DIELDRIN | 0.5 U | 0.5 U | 1 U | 2.7 U | 2.7 U | 2.7 U |
| ENDOSULFAN I | 0.56 U | 0.55 U | 1.1 U | 3 U | 3 U | 3 U |
| ENDOSULFAN II | 0.88 U | 0.87 U | 1.8 U | 4.7 U | 4.8 U | 4.7 U |
| ENDOSULFAN SULFATE | 0.93 U | 0.92 U | 1.9 U | 5 U | 5.1 U | 5 U |
| ENDRIN | 0.54 U | 0.53 U | 1.1 U | 2.9 U | 2.9 U | 2.9 U |
| ENDRIN ALDEHYDE | 1.1 U | 1.1 U | 2.2 U | 5.7 U | 5.8 U | 5.7 U |
| ENDRIN KETONE | 0.68 U | 0.67 U | 1.4 U | 3.6 U | 3.7 U | 3.6 U |
| GAMMA-BHC (LINDANE) | 0.79 UJ | 0.78 U | 1.6 U | 4.2 U | 4.3 U | 4.2 UJ |
| GAMMA-CHLORDANE | 0.45 U | 0.44 U | 0.9 U | 2.4 U | 2.4 U | 2.4 UJ |
| HEPTACHLOR | 1.2 U | 1.2 UJ | 2.4 UJ | 6.3 UJ | 6.4 U | 6.3 U |
| HEPTACHLOR EPOXIDE | 0.86 U | 0.85 U | 1.7 U | 4.6 U | 4.7 U | 4.6 UJ |
| METHOXYCHLOR | 1.6 UJ | 1.6 UJ | 3.2 UJ | 8.6 UJ | 8.7 U | 8.6 U |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 20 | 0 U |
| TOXAPHENE | 20 U | 20 U | 41 U | 110 U | 110 U | 110 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 0.026 U | 0.025 UL | 0.11 B | 0.2 B | 0.41 J | 0.085 B |
| ARSENIC | 0.71 | 0.72 L | 2.3 L | 4.5 L | 4.3 J | 2.6 J |
| BARIUM | 3.7 | 3.9 | 23.6 | 27.4 | 54.4 | 12.6 |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-790 | SB-791 | SB-792 | SB-793 | SB-794 | SB-795 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-790-SS | D-SB-791-SS | D-SB-792-SS | D-SB-793-SS | D-SB-794-SS | D-SB-795-SS |
| SAMPLE DATE | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 0.05 U | 0.055 J | 0.59 J | 1.5 J | 1.6 J | 0.15 J |
| CADMIUM | 0.0084 UL | 0.0082 UL | 0.081 B | 0.094 B | 0.27 B | 0.011 B |
| CHROMIUM | 8.2 | 8.6 | 11.6 | 21.6 | 16.2 J | 26.2 J |
| COBALT | 0.52 | 0.5 | 4 | 7.7 | 14.1 J | 1.4 J |
| COPPER | 2.9 | 3.2 | 9.4 | 21.5 | 33.6 J | 4.5 J |
| IRON | 3870 | 4450 | 9890 | 21500 | 20200 J | 10200 J |
| LEAD | 0.98 | 1.1 | 9.8 | 15.8 | 56.2 | 2 |
| MANGANESE | 14 | 9.4 J | 124 J | 39.3 J | 183 J | 15.6 J |
| MERCURY | 0.016 U | 0.016 U | 0.17 | 0.069 J | 1.7 | 0.091 J |
| MOLYBDENUM | 0.14 J | 0.14 B | 0.5 | 0.45 | 0.52 | 0.26 |
| NICKEL | 0.64 | 0.76 | 7.7 | 15 | 21.3 J | 2.7 J |
| SELENIUM | 0.16 J | 0.11 J | 0.61 L | 1.7 L | 1.2 L | 0.29 J |
| SILVER | 0.017 U | 0.017 U | 0.18 | 0.24 K | 1.4 | 0.018 U |
| THALLIUM | 0.014 U | 0.014 U | 0.038 J | 0.053 J | 0.094 B | 0.015 U |
| VANADIUM | 10.9 | 12.2 | 16.6 | 43.3 | 25.8 J | 19.4 J |
| ZINC | 2.9 | 3.1 B | 28.4 | 49 | 119 L | 5.4 L |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 33000 | 11000 | 36000 | 40000 | 39000 | 34000 |
| GASOLINE RANGE ORGANICS | 49 U | 49 U | 49 U | 53 U | 54 U | 53 UJ |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | 0.8 J | 0.54 J | 0.32 J | 0.62 J | 0.31 U | 0.31 U |

| LOCATION | **SB-796** |
|---|---|
| SAMPLE ID | **D-SB-796-SS** |
| SAMPLE DATE | **20100910** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SS** |
| TOP DEPTH | **0** |
| BOTTOM DEPTH | **1** |
| **VOLATILES (UG/KG)** | |
| 1,1,1,2-TETRACHLOROETHANE | 0.46 U |
| 1,1,1-TRICHLOROETHANE | 0.42 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.25 U |
| 1,1,2-TRICHLOROETHANE | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.96 U |
| 1,1-DICHLOROETHANE | 0.27 U |
| 1,1-DICHLOROETHENE | 0.39 U |
| 1,1-DICHLOROPROPENE | 0.22 U |
| 1,2,3-TRICHLOROBENZENE | 0.28 U |
| 1,2,3-TRICHLOROPROPANE | 0.67 U |
| 1,2,3-TRIMETHYLBENZENE | 0.13 U |
| 1,2,4-TRICHLOROBENZENE | 0.2 U |
| 1,2,4-TRIMETHYLBENZENE | 0.48 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.96 U |
| 1,2-DIBROMOETHANE | 0.37 U |
| 1,2-DICHLOROBENZENE | 0.27 U |
| 1,2-DICHLOROETHANE | 0.25 U |
| 1,2-DICHLOROPROPANE | 0.51 U |
| 1,3,5-TRIMETHYLBENZENE | NA |
| 1,3-DICHLOROBENZENE | 0.26 U |
| 1,3-DICHLOROPROPANE | 0.25 U |
| 1,3-DICHLOROPROPENE | NA |
| 1,4-DICHLOROBENZENE | 0.49 U |
| 1,4-DIOXANE | NA |
| 2,2-DICHLOROPROPANE | 0.7 U |
| 2-BUTANONE | 2.2 J |
| 2-CHLOROETHYL VINYL ETHER | 1 U |
| 2-CHLOROTOLUENE | 0.3 U |
| 2-HEXANONE | 0.47 U |
| 4-CHLOROTOLUENE | 0.3 U |
| 4-ISOPROPYLTOLUENE | 0.16 U |
| 4-METHYL-2-PENTANONE | 0.4 U |
| ACETONE | 17 B |
| BENZENE | 0.17 U |
| BROMOBENZENE | 0.24 U |
| BROMOCHLOROMETHANE | 0.53 U |
| BROMODICHLOROMETHANE | 0.21 U |
| BROMOFORM | 0.24 U |
| BROMOMETHANE | 0.4 U |
| CARBON DISULFIDE | 0.73 B |
| CARBON TETRACHLORIDE | 0.27 U |
| CHLOROBENZENE | 0.24 U |
| CHLORODIBROMOMETHANE | 0.41 U |
| CHLOROETHANE | 0.64 U |
| CHLOROFORM | 0.21 U |
| CHLOROMETHANE | 0.3 U |
| CIS-1,2-DICHLOROETHENE | 0.27 U |
| CIS-1,3-DICHLOROPROPENE | 0.25 U |
| DIBROMOMETHANE | 0.47 U |
| DICHLORODIFLUOROMETHANE | 0.37 U |
| DIISOPROPYL ETHER | 1.1 U |
| ETHYL TERT-BUTYL ETHER | 0.16 U |
| ETHYLBENZENE | 0.19 U |
| FLUORODICHLOROMETHANE | NA |

| LOCATION | **SB-796** |
|---|---|
| SAMPLE ID | **D-SB-796-SS** |
| SAMPLE DATE | **20100910** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SS** |
| TOP DEPTH | **0** |
| BOTTOM DEPTH | **1** |
| **VOLATILES (CONTINUED) (UG/KG)** | |
| HEXACHLOROBUTADIENE | 0.89 U |
| ISOPROPYLBENZENE | 0.12 U |
| M+P-XYLENES | 0.89 U |
| METHYL TERT-BUTYL ETHER | 0.32 UJ |
| METHYLENE CHLORIDE | 0.82 B |
| NAPHTHALENE | 0.71 B |
| N-BUTYLBENZENE | 0.17 U |
| N-PROPYLBENZENE | 0.3 U |
| O-XYLENE | 0.26 U |
| SEC-BUTYLBENZENE | 0.13 U |
| STYRENE | 0.11 U |
| TERT-AMYL METHYL ETHER | 0.27 U |
| TERT-BUTYLBENZENE | 0.21 U |
| TERTIARY-BUTYL ALCOHOL | 5.6 UR |
| TETRACHLOROETHENE | 0.39 U |
| TOLUENE | 0.2 U |
| TOTAL 1,2-DICHLOROETHENE | NA |
| TOTAL XYLENES | 0.5 U |
| TRANS-1,2-DICHLOROETHENE | 0.3 U |
| TRANS-1,3-DICHLOROPROPENE | 0.4 U |
| TRICHLOROETHENE | 0.31 U |
| TRICHLOROFLUOROMETHANE | 0.25 U |
| VINYL ACETATE | 0.19 U |
| VINYL CHLORIDE | 0.29 U |
| **SEMIVOLATILES (UG/KG)** | |
| 1,1-BIPHENYL | 32 U |
| 1,2,4-TRICHLOROBENZENE | NA |
| 1,2-DICHLOROBENZENE | NA |
| 1,3-DICHLOROBENZENE | NA |
| 1,4-DICHLOROBENZENE | NA |
| 1,4-DIOXANE | 26 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 11 U |
| 2,4,5-TRICHLOROPHENOL | 30 U |
| 2,4,6-TRICHLOROPHENOL | 96 U |
| 2,4-DICHLOROPHENOL | 24 U |
| 2,4-DIMETHYLPHENOL | 24 U |
| 2,4-DINITROPHENOL | 96 U |
| 2,4-DINITROTOLUENE | 32 U |
| 2,6-DINITROTOLUENE | 25 U |
| 2-CHLORONAPHTHALENE | 3.9 U |
| 2-CHLOROPHENOL | 32 U |
| 2-METHYLPHENOL | 96 U |
| 2-NITROANILINE | 11 U |
| 2-NITROPHENOL | 32 U |
| 3&4-METHYLPHENOL | NA |
| 3,3'-DICHLOROBENZIDINE | 22 U |
| 3-NITROANILINE | 19 U |
| 4,6-DINITRO-2-METHYLPHENOL | 96 U |
| 4-BROMOPHENYL PHENYL ETHER | 16 U |
| 4-CHLORO-3-METHYLPHENOL | 25 U |
| 4-CHLOROANILINE | 20 U |
| 4-CHLOROPHENYL PHENYL ETHER | 16 U |
| 4-METHYLPHENOL | 96 U |
| 4-NITROANILINE | 31 U |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | **SB-796** |
|---|---|
| SAMPLE ID | **D-SB-796-SS** |
| SAMPLE DATE | **20100910** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SS** |
| TOP DEPTH | **0** |
| BOTTOM DEPTH | **1** |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | |
| 4-NITROPHENOL | 96 U |
| ACETOPHENONE | 11 U |
| ANILINE | NA |
| ATRAZINE | 11 U |
| AZOBENZENE | NA |
| BENZALDEHYDE | 14 U |
| BENZIDINE | NA |
| BENZOIC ACID | NA |
| BENZYL ALCOHOL | NA |
| BIS(2-CHLOROETHOXY)METHANE | 26 U |
| BIS(2-CHLOROETHYL)ETHER | 2.4 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 23 U |
| BUTYL BENZYL PHTHALATE | 12 U |
| CAPROLACTAM | 44 U |
| CARBAZOLE | 32 U |
| DIBENZOFURAN | 3.9 U |
| DIETHYL PHTHALATE | 19 U |
| DIMETHYL PHTHALATE | 20 U |
| DI-N-BUTYL PHTHALATE | 18 U |
| DI-N-OCTYL PHTHALATE | 32 U |
| HEXACHLOROBENZENE | 2.5 U |
| HEXACHLOROBUTADIENE | 32 U |
| HEXACHLOROCYCLOPENTADIENE | 32 U |
| HEXACHLOROETHANE | 11 U |
| ISOPHORONE | 16 U |
| NITROBENZENE | 2.6 U |
| N-NITROSODIMETHYLAMINE | 19 U |
| N-NITROSO-DI-N-PROPYLAMINE | 32 U |
| N-NITROSODIPHENYLAMINE | 25 U |
| PENTACHLOROPHENOL | 96 U |
| PHENOL | 32 U |
| PYRIDINE | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | |
| 1-METHYLNAPHTHALENE | NA |
| 2-METHYLNAPHTHALENE | 10 |
| ACENAPHTHENE | 13 |
| ACENAPHTHYLENE | 3.9 U |
| ANTHRACENE | 15 |
| BAP EQUIVALENT-HALFND | 79.2 |
| BAP EQUIVALENT-POS | 77.3 |
| BENZO(A)ANTHRACENE | 49 |
| BENZO(A)PYRENE | 60 |
| BENZO(B)FLUORANTHENE | 74 |
| BENZO(B+K)FLUORANTHENE | NA |
| BENZO(G,H,I)PERYLENE | 40 |
| BENZO(K)FLUORANTHENE | 31 |
| C1-CHRYSENES | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C1-FLUORANTHENES/PYRENES | NA |
| C1-FLUORENES | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA |
| C2-CHRYSENES | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C2-FLUORENES | NA |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| | |
|---|---|
| LOCATION | **SB-796** |
| SAMPLE ID | **D-SB-796-SS** |
| SAMPLE DATE | **20100910** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SS** |
| TOP DEPTH | **0** |
| BOTTOM DEPTH | **1** |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | |
| C2-NAPHTHALENES | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA |
| C3-CHRYSENES | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C3-FLUORENES | NA |
| C3-NAPHTHALENES | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA |
| C4-CHRYSENES | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C4-NAPHTHALENES | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA |
| CHRYSENE | 59 |
| DIBENZO(A,H)ANTHRACENE | 3.9 U |
| FLUORANTHENE | 96 |
| FLUORENE | 12 |
| INDENO(1,2,3-CD)PYRENE | 46 |
| NAPHTHALENE | 18 |
| PHENANTHRENE | 60 |
| PYRENE | 81 |
| TOTAL PAHS | 664 |
| **PESTICIDES/PCBS (UG/KG)** | |
| 4,4'-DDD | 0.74 U |
| 4,4'-DDE | 0.47 U |
| 4,4'-DDT | 0.75 U |
| ALDRIN | 1.4 U |
| ALPHA-BHC | 0.87 U |
| ALPHA-CHLORDANE | 1.1 U |
| AROCLOR-1016 | 25 U |
| AROCLOR-1221 | 19 U |
| AROCLOR-1232 | 17 U |
| AROCLOR-1242 | 16 U |
| AROCLOR-1248 | 20 U |
| AROCLOR-1254 | 20 U |
| AROCLOR-1260 | 20 U |
| BETA-BHC | 1.3 U |
| DELTA-BHC | 1.4 U |
| DIELDRIN | 0.56 U |
| ENDOSULFAN I | 0.62 U |
| ENDOSULFAN II | 0.98 U |
| ENDOSULFAN SULFATE | 1 U |
| ENDRIN | 0.6 U |
| ENDRIN ALDEHYDE | 1.2 U |
| ENDRIN KETONE | 0.75 U |
| GAMMA-BHC (LINDANE) | 0.88 U |
| GAMMA-CHLORDANE | 0.5 U |
| HEPTACHLOR | 1.3 U |
| HEPTACHLOR EPOXIDE | 0.96 U |
| METHOXYCHLOR | 1.8 U |
| TOTAL AROCLOR | 0 U |
| TOXAPHENE | 23 U |
| **METALS (MG/KG)** | |
| ANTIMONY | 0.37 J |
| ARSENIC | 4.9 |
| BARIUM | 34.3 |

**Table A-1**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | **SB-796** |
|---|---|
| SAMPLE ID | **D-SB-796-SS** |
| SAMPLE DATE | **20100910** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SS** |
| TOP DEPTH | **0** |
| BOTTOM DEPTH | **1** |
| **METALS (CONTINUED) (MG/KG)** | |
| BERYLLIUM | 2.1 |
| CADMIUM | 0.053 J |
| CHROMIUM | 19.3 |
| COBALT | 10.9 |
| COPPER | 26.6 |
| IRON | 22900 |
| LEAD | 29.8 |
| MANGANESE | 80.2 |
| MERCURY | 0.56 |
| MOLYBDENUM | 0.61 |
| NICKEL | 24.6 |
| SELENIUM | 2.2 |
| SILVER | 0.35 |
| THALLIUM | 0.078 U |
| VANADIUM | 28.8 |
| ZINC | 46.1 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | |
| DIESEL RANGE ORGANICS | 64000 |
| GASOLINE RANGE ORGANICS | 55 U |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | |
| HEXAVALENT CHROMIUM | 0.36 J |

**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-031 | SB-032 | SB-033 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-31A-SS | SB-32A-SS | SB-33A-SS | F-SB-57RE-1 | F-SB-57RE-2 |
| SAMPLE DATE | | | | 20040913 | 20040924 | 20040917 | 20090917 | 20090917 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SS | SS | SB | SB |
| TOP DEPTH | | | | 0 | 0 | 0 | 1 | 2 |
| BOTTOM DEPTH | | | | 0 | 0 | 0 | 1 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 5 U | 6 UL | 5 U | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | 5 U | 6 UL | 5 U | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 55 U | 55 UL | 54 U | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 55 U | 55 UL | 54 U | NA | NA |
| BENZENE | 12000 | 1100 | C | 5 U | 6 UL | 5 U | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 5 U | 6 UL | 5 U | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 5 U | 6 UL | 5 U | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 11 U | 11 UL | 10 J | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 5 U | 6 UL | 8 J | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 5 U | 6 UL | 5 U | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 5 U | 6 UL | 5 U | NA | NA |
| TOLUENE | 630000 | 500000 | N | 5 U | 6 UL | 5 U | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 5 U | 6 UL | 5 U | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 370 U | 3700 U | 3600 U | NA | NA |
| CARBAZOLE | 32000 | NC | | 370 U | 3700 U | 3600 U | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 370 U | 3700 U | 3600 U | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 370 U | 3700 U | 3600 U | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 370 U | 3700 U | 3600 U | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 370 U | 3700 U | 3600 U | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 370 U | 3700 U | 3600 U | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 370 U | 3700 U | 3600 U | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | 370 U | 3700 U | 3600 U | **20.4** | 1.5 U |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | 370 U | 3700 U | 3600 U | **19.6** | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 370 U | 3700 U | 3600 U | 13 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 370 U | 3700 U | 3600 UJ | 14 | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 370 U | 3700 U | 3600 UJ | 22 | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 370 U | 3700 U | 3600 UJ | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 370 U | 3700 U | 3600 UJ | 9.2 | 1.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 370 U | 3700 U | 3600 U | 18 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 370 U | 3700 U | 3600 UJ | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | 370 U | 3700 U | 3600 U | NA | NA |
| FLUORENE | 310000 | 230000 | N | 370 U | 3700 U | 3600 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 370 U | 3700 U | 3600 UJ | 20 | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | 370 U | 3700 U | 3600 U | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 370 U | 3700 U | 3600 U | NA | NA |
| PYRENE | 230000 | 170000 | N | 37 J | 3700 U | 3600 U | NA | NA |
| TOTAL PAHS | NC | NC | | 37 | 0 U | 0 U | 96.2 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 270 U | 270 U | 270 U | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-031<br>SB-31A-SS<br>20040913<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-032<br>SB-32A-SS<br>20040924<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-033<br>SB-33A-SS<br>20040917<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-057<br>F-SB-57RE-1<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-057<br>F-SB-57RE-2<br>20090917<br>ORIG<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 2.6 UR | 2.4 UL | 2.4 UR | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **1.8 L** | 0.48 U | **1 L** | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 2.6 U | 2.4 U | 2.4 UL | NA | NA |
| CADMIUM | 3.9 | 7 | N | 2.6 UL | 2.4 U | 2.4 UL | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 7.9 L | 14 J | 7.1 K | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 7.4 | 15 J | 34 L | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 2.8 J | 13 K | 12 L | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.11 UL | 0.096 U | 0.098 U | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 3.6 K | 14 K | 25 | NA | NA |
| SELENIUM | 39 | 39 | N | 2.6 UL | 2.5 | 2.4 UL | NA | NA |
| SILVER | 39 | 39 | N | 2.6 UR | 2.4 UR | 2.4 UR | NA | NA |
| THALLIUM | 0.55 | NC | | 2.1 UL | 1.9 U | 2 UL | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 26 UL | 24 UL | 24 U | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 11000 U | **1800000** | 11000 U | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 110 U | 1100 | 3200 | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-057 | SB-057 | SB-057 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-57RE-2-AVG | F-SB-57RE-2-D | SB-57-SS | F-SB-58RE-1 | F-SB-58RE-2 |
| SAMPLE DATE | | | | 20090917 | 20090917 | 20040913 | 20090917 | 20090917 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SS | SB | SB |
| TOP DEPTH | | | | 2 | 2 | 0 | 1 | 2 |
| BOTTOM DEPTH | | | | 2 | 2 | 0 | 1 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | 7 U | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | 7 U | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | 67 U | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | 67 U | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | 7 U | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | 7 U | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | 7 U | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | 13 U | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | 7 U | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | 7 U | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | 7 U | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | 7 U | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | 7 U | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | 450 U | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | 450 U | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | 450 U | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | 450 U | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | 450 U | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | 450 U | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | 450 U | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | 450 U | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | 1.5 U | 1.5 U | **520** | **715** | **8596** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | 1.5 U | 1.5 U | 0.06 | **714** | **8591** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 450 U | **380** | **5200** |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 450 U | **560** | **6900** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 450 U | **780** | **7400** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | 450 U | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 1.9 U | 450 U | 290 | **3600** |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1 U | 60 J | 530 | 4600 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 450 U | 1.7 U | 11 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | 98 J | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | 450 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.7 U | 450 U | **350** | **3900** |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | 450 U | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | 54 J | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | 94 J | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 306 | 2890 | 31600 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | 53 U | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | 53 U | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | 330 U | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | 53 U | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | 0 U | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-057 | SB-057 | SB-057 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-57RE-2-AVG | F-SB-57RE-2-D | SB-57-SS | F-SB-58RE-1 | F-SB-58RE-2 |
| SAMPLE DATE | | | | 20090917 | 20090917 | 20040913 | 20090917 | 20090917 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SS | SB | SB |
| TOP DEPTH | | | | 2 | 2 | 0 | 1 | 2 |
| BOTTOM DEPTH | | | | 2 | 2 | 0 | 1 | 2 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | 3.1 UR | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | **2.2 L** | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | 3.1 U | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | 3.1 UL | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | 11 L | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | 7.5 | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | 8.6 J | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | 0.13 UL | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | 7.4 | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | 3.1 UL | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | 3.1 UR | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | 2.5 UL | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | 31 UL | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | 14000 U | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | 130 U | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058 | SB-058A | SB-058A | SB-058A | SB-058B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-58-SS | F-SB-58REA-2 | F-SB-58REA-2-AVG | F-SB-58REA-2-D | F-SB-58REB-2 |
| SAMPLE DATE | | | | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SB | SB | SB | SB |
| TOP DEPTH | | | | 0 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | | | | 0 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 5 U | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | 5 U | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 53 U | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 53 U | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 5 U | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 5 U | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 5 U | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 11 U | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 5 U | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 5 U | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 5 U | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 5 U | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 5 U | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 3600 U | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 3600 U | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 3600 U | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 2000 J | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3600 U | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 3600 U | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 3600 U | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 3600 U | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | 3600 U | **33.9** | **121** | **209** | **3019** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | 3600 U | **33.2** | **121** | **209** | **3019** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3600 U | 23 J | 71.5 | 120 J | **1700** |
| BENZO(A)PYRENE | 22 | 15 | C | 3600 U | **23 J** | **76.5** | **130 J** | **2000** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3600 U | 56 J | 123 | **190 J** | **2300** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 3600 U | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3600 U | 16 J | 37 | 58 J | 740 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 3600 U | 37 J | 78.5 | 120 J | 1700 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3600 U | 1.5 UJ | **19.875** | **39 J** | **480** |
| FLUORANTHENE | 310000 | 230000 | N | 630 J | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 3600 U | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3600 U | 21 J | 51 | 81 J | **1300** |
| NAPHTHALENE | 160000 | 3600 | C | 3600 U | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 3600 U | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 540 J | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 1170 | 176 | 457 | 738 | 10220 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | 42 U | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | 42 U | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 260 U | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | 42 U | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-058**<br>**SB-58-SS**<br>**20040913**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0** | **SB-058A**<br>**F-SB-58REA-2**<br>**20091103**<br>**ORIG**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-058A**<br>**F-SB-58REA-2-AVG**<br>**20091103**<br>**AVG**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-058A**<br>**F-SB-58REA-2-D**<br>**20091103**<br>**DUP**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-058B**<br>**F-SB-58REB-2**<br>**20091103**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** |
|---|---|---|---|---|---|---|---|---|---|
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 2.6 UR | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **1.5 L** | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 2.6 U | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 2.6 UL | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 24 L | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 9.4 | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 41 J | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.1 UL | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 8.4 | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 2.6 UL | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | 2.6 UR | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 2.1 UL | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 43 J | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 100000 L | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 110 U | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058C<br>F-SB-58REC-2<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-058D<br>F-SB-58RED-2<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-059<br>SB-59-SS<br>20040923<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-060<br>D-SB-60RE-1<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-060<br>D-SB-60RE-2<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | 5 U | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | 5 U | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | 52 U | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | 52 U | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | 5 U | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | 5 U | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | 5 U | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | 10 U | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | 7 J | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | 5 U | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | 5 U | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | 5 U | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | 5 U | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | 3500 U | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | 3500 U | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | 3500 U | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | 3500 U | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | 3500 U | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | 3500 U | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | 3500 U | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | 3500 U | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **6424** | **131** | 3500 U | **22517** | **46.1** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **6424** | **131** | 3500 U | **22517** | **45.3** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **4300** | 55 | 3500 U | **23000** | 42 |
| BENZO(A)PYRENE | 22 | 15 | C | **4300** | **79** | 3500 U | **16000** | **35** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **5800** | 110 | 3500 U | **16000** | 42 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | 3500 U | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | **2000** | 28 | 3500 U | **6300** | 20 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 3900 | 58 | 3500 U | **24000** | 43 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **850** | **29** | 3500 U | **1900** | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | 3500 U | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | 3500 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **2400** | 58 | 3500 U | **6300** | 17 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | 3500 U | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | 3500 U | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | 3500 U | NA | NA |
| TOTAL PAHS | NC | NC | | 23550 | 417 | 0 U | 93500 | 199 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | 260 U | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | 0 U | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058C | SB-058D | SB-059 | SB-060 | SB-060 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-58REC-2 | F-SB-58RED-2 | SB-59-SS | D-SB-60RE-1 | D-SB-60RE-2 |
| SAMPLE DATE | | | | 20091103 | 20091103 | 20040923 | 20090915 | 20090915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SS | SB | SB |
| TOP DEPTH | | | | 2 | 2 | 0 | 1 | 2 |
| BOTTOM DEPTH | | | | 2 | 2 | 0 | 1 | 2 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | 2.5 UL | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | **1.7** | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | 2.5 U | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | 2.5 U | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | 9.4 J | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | 4.8 | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | 5.1 | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | 0.099 U | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | 5.6 | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | 2.5 U | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | 2.5 UR | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | 2 U | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | 25 UL | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | 21000 | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | 1400 | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060<br>SB-60-SS<br>20040924<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-060A<br>D-SB-60REA-1<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-060B<br>D-SB-60REB-1<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-060C<br>D-SB-60REC-1<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-060D<br>D-SB-60RED-1<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 UL | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | 6 UL | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 56 UL | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 56 UL | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 6 UL | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 UL | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 UL | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 11 UL | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 6 UL | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 UL | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 UL | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 UL | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 6 UL | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 3800 U | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 3800 U | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 3800 U | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 3800 U | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3800 U | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 3800 U | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 3800 U | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 3800 U | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **4243** | **17997** | **23.7** | **646** | **9774** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **43.7** | **17997** | **22.9** | **646** | **9774** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **430 J** | **15000** | 16 | **490** | **8600** |
| BENZO(A)PYRENE | 22 | 15 | C | 3800 U | **13000** | **18** | **450** | **6900** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3800 U | **12000** | 20 | **560** | **7200** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 3800 U | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3800 U | **4300** | 9.5 | 210 | **2600** |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 650 J | 14000 | 18 | 440 | 8400 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3800 U | **1700** | 1.6 U | **66** | **940** |
| FLUORANTHENE | 310000 | 230000 | N | 980 J | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 3800 U | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3800 U | **5400** | 12 | **220** | **3200** |
| NAPHTHALENE | 160000 | 3600 | C | 3800 U | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 610 J | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 1800 J | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 4470 | 65400 | 93.5 | 2436 | 37840 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 280 U | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060 | SB-060A | SB-060B | SB-060C | SB-060D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-60-SS | D-SB-60REA-1 | D-SB-60REB-1 | D-SB-60REC-1 | D-SB-60RED-1 |
| SAMPLE DATE | | | | 20040924 | 20091012 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SB | SB | SB | SB |
| TOP DEPTH | | | | 0 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 0 | 1 | 1 | 1 | 1 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 2.7 UL | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **0.62 K** | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 2.7 U | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 2.7 U | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 13 J | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 20 J | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 22 K | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.11 U | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 16 K | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 2.7 U | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | 2.7 UR | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 2.2 U | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 29 L | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | **660000 K** | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 590 | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-061<br>D-SB-61RE-1<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1** | **SB-061<br>D-SB-61RE-2<br>20090916<br>ORIG<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-061<br>D-SB-61RE-2-AVG<br>20090916<br>AVG<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-061<br>D-SB-61RE-2-D<br>20090916<br>DUP<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-061<br>SB-61-SS<br>20040924<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0** |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | 6 UL |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | 6 UL |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | 62 UL |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | 62 UL |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | 6 UL |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | 6 UL |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | 6 UL |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | 12 UL |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | 6 UL |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | 6 UL |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | 6 UL |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | 6 UL |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | 6 UL |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | 4200 U |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | 4200 U |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | 4200 U |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | 4200 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | 4200 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | 4200 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | 4200 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | 4200 U |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **17.3** | 1.6 U | 5.91 | 11.01 | 4200 U |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **16.5** | 1.6 U | 5.46 | 10.11 | 4200 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 4200 U |
| BENZO(A)PYRENE | 22 | 15 | C | 13 | 1.6 UJ | 5 | 9.2 J | 4200 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 14 | 1.5 UJ | 4.925 | 9.1 J | 4200 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | 4200 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2.1 U | 2.05 U | 2 U | 4200 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1.05 U | 1 U | 4200 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.55 U | 1.5 U | 4200 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | 4200 U |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | 4200 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 21 | 1.8 U | 1.75 U | 1.7 U | 4200 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | 4200 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | 4200 U |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | 510 J |
| TOTAL PAHS | NC | NC | | 48 | 0 U | 9.15 | 18.3 | 510 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | 310 U |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | 0 U |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-61RE-1 | D-SB-61RE-2 | D-SB-61RE-2-AVG | D-SB-61RE-2-D | SB-61-SS |
| SAMPLE DATE | | | | 20090916 | 20090916 | 20090916 | 20090916 | 20040924 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SS |
| TOP DEPTH | | | | 1 | 2 | 2 | 2 | 0 |
| BOTTOM DEPTH | | | | 1 | 2 | 2 | 2 | 0 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | 2.8 UL |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | 0.56 U |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | 2.8 U |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | 2.8 U |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | 18 J |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | 7.5 J |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | 23 K |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | 0.11 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | 8.1 K |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | 2.8 U |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | 2.8 UR |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | 2.2 U |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | 38 L |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | 16000 |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | 400 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061A | SB-061B | SB-061C | SB-061D | SB-062 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-61REA-1 | D-SB-61REB-1 | D-SB-61REC-1 | D-SB-61RED-1 | D-SB-62RE-1 |
| SAMPLE DATE | | | | 20091012 | 20091012 | 20091012 | 20091012 | 20090914 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **153** | **23.0** | **386** | **81.5** | **6418** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **153** | **22.2** | **386** | **81.5** | **6410** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 110 | 8.3 | **240** | 59 | **2900** |
| BENZO(A)PYRENE | 22 | 15 | C | **110** | **18** | **270** | **54** | **5200** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 130 | 22 | **350** | 70 | **5500** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 55 | 2 U | 110 | 26 | **2600** |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 110 | 13 | 270 | 64 | 3500 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 13 | 1.5 U | **40** | 11 | 16 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 52 | 12 | **160** | 33 | **3400** |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 580 | 73.3 | 1440 | 317 | 23100 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061A | SB-061B | SB-061C | SB-061D | SB-062 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-61REA-1 | D-SB-61REB-1 | D-SB-61REC-1 | D-SB-61RED-1 | D-SB-62RE-1 |
| SAMPLE DATE | | | | 20091012 | 20091012 | 20091012 | 20091012 | 20090914 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1 | 1 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062 | SB-062 | SB-062A | SB-062B | SB-062C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-62RE-2 | SB-62-SS | D-SB-62REA-1 | D-SB-62REB-1 | D-SB-62REC-1 |
| SAMPLE DATE | | | | 20090914 | 20040923 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SS | SB | SB | SB |
| TOP DEPTH | | | | 2 | 0 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 2 | 0 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | 6 U | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | 6 U | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | 55 U | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | 55 U | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | 6 U | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | 6 U | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | 6 U | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | 11 U | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | 8 J | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | 6 U | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | 6 U | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | 6 U | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | 6 U | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | 3700 U | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | 3700 U | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | 3700 U | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | 3700 U | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | 3700 U | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | 3700 U | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | 950 J | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | 3700 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **1065** | **7569** | **44.9** | **548** | **2595** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **1065** | **7569** | **44.1** | **546** | **2578** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **850** | **2300 J** | 28 | **330** | **1300** |
| BENZO(A)PYRENE | 22 | 15 | C | **730** | **5200** | **35** | **440** | **2100** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **880** | **3000 J** | 39 | **430** | **2000** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | 5400 | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 380 | **4600** | 13 | 160 | 650 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 730 | 3400 J | 15 | 330 | 1000 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **120** | **1400 J** | 1.5 U | 3.6 U | 35 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | 2100 J | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | 3700 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **370** | **3900** | 23 | **280** | **1400** |
| NAPHTHALENE | 160000 | 3600 | C | NA | 3700 U | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | 410 J | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | 6200 | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 4060 | 38860 | 153 | 1970 | 8450 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | 270 U | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | 0 U | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062 | SB-062 | SB-062A | SB-062B | SB-062C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-62RE-2 | SB-62-SS | D-SB-62REA-1 | D-SB-62REB-1 | D-SB-62REC-1 |
| SAMPLE DATE | | | | 20090914 | 20040923 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SS | SB | SB | SB |
| TOP DEPTH | | | | 2 | 0 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 2 | 0 | 1 | 1 | 1 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | 2.5 UL | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | **0.62** | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | 2.5 U | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | 2.5 U | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | 13 J | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | 4.1 | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | 23 | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | 0.1 U | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | 10 | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | 3.5 | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | 2.5 UR | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | 2 U | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | 34 J | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | 12000 | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | 110 U | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062D | SB-063 | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-62RED-1 | D-SB-63RE-1 | D-SB-63RE-2 | D-SB-63RE-2-AVG | D-SB-63RE-2-D |
| SAMPLE DATE | | | | 20091014 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 2 | 2 | 2 |
| BOTTOM DEPTH | | | | 1 | 1 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **16660** | **138** | **106** | **66.7** | **27.2** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **16660** | **138** | **106** | **66.3** | **26.4** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **8100** | 70 | 54 J | 35.5 | 17 J |
| BENZO(A)PYRENE | 22 | 15 | C | **12000** | **99** | **76 J** | **48.5** | **21 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **11000** | 110 | 85 J | 54.5 | 24 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | **4100** | 41 | 30 J | 19.45 | 8.9 J |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 9300 | 84 | 72 J | 46 | 20 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **2000** | 15 | 12 J | 6.375 | 1.5 UJ |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **7000** | 55 | 40 J | 26 | 12 J |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 53500 | 474 | 369 | 235.95 | 102.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062D | SB-063 | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-62RED-1 | D-SB-63RE-1 | D-SB-63RE-2 | D-SB-63RE-2-AVG | D-SB-63RE-2-D |
| SAMPLE DATE | | | | 20091014 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 2 | 2 | 2 |
| BOTTOM DEPTH | | | | 1 | 1 | 2 | 2 | 2 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-063 | SB-063A | SB-063B | SB-063C | SB-063D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-63-SS | D-SB-63REA-2 | D-SB-63REB-2 | D-SB-63REC-2 | D-SB-63RED-2 |
| SAMPLE DATE | | | | 20040924 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SB | SB | SB | SB |
| TOP DEPTH | | | | 0 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | | | | 0 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 7 UL | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | 7 UL | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 72 UL | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 72 UL | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 7 UL | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 7 UL | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 7 UL | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 14 UL | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 7 UL | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 7 UL | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 7 UL | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 7 UL | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 7 UL | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 4800 U | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 4800 U | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 4800 U | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 4800 U | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4800 U | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 4800 U | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 4800 U | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 4800 U | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **5545** | **17.4** | 1.5 U | 2.74 | 1.6 U |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | 0.53 | **16.6** | 1.5 U | 0.98 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4800 U | 17 | 1.1 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 4800 U | 13 | 1.5 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4800 U | 18 | 1.4 U | 9.7 | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4800 U | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4800 U | 8.2 | 2 U | 2.1 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 530 J | 17 | 1.1 U | 14 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4800 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | 4800 U | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 4800 U | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4800 U | 1.8 U | 1.8 U | 1.8 U | 1.9 U |
| NAPHTHALENE | 160000 | 3600 | C | 4800 U | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 4800 U | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 740 J | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 1270 | 73.2 | 0 U | 23.7 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 350 U | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-063 | SB-063A | SB-063B | SB-063C | SB-063D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-63-SS | D-SB-63REA-2 | D-SB-63REB-2 | D-SB-63REC-2 | D-SB-63RED-2 |
| SAMPLE DATE | | | | 20040924 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SB | SB | SB | SB |
| TOP DEPTH | | | | 0 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | | | | 0 | 2 | 2 | 2 | 2 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 3.3 UL | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **0.94 K** | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 3.5 | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 3.3 U | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 25 J | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 12 J | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 36 K | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.13 U | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 13 K | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 3.3 U | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | 3.3 UR | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 2.6 U | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 71 L | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 110000 | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 140 U | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-064 | SB-065 | SB-065 | SB-065 | SB-066 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-64-SS | D-SB-65RE-1 | D-SB-65RE-2 | SB-65-SS | D-SB-66RE-1 |
| SAMPLE DATE | | | | 20040924 | 20090916 | 20090916 | 20040917 | 20090914 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SB | SB | SS | SB |
| TOP DEPTH | | | | 0 | 1 | 2 | 0 | 1 |
| BOTTOM DEPTH | | | | 0 | 1 | 2 | 0 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 UL | NA | NA | 5 U | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | 6 UL | NA | NA | 5 U | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 65 UL | NA | NA | 53 U | NA |
| ACETONE | 7000000 | 6100000 | N | 65 UL | NA | NA | 53 U | NA |
| BENZENE | 12000 | 1100 | C | 6 UL | NA | NA | 5 U | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 UL | NA | NA | 5 U | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 UL | NA | NA | 5 U | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 13 UL | NA | NA | 11 U | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 6 UL | NA | NA | 7 J | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 UL | NA | NA | 5 U | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 UL | NA | NA | 5 U | NA |
| TOLUENE | 630000 | 500000 | N | 6 UL | NA | NA | 5 U | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 6 UL | NA | NA | 5 U | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 4400 U | NA | NA | 3600 U | NA |
| CARBAZOLE | 32000 | NC | | 4400 U | NA | NA | 3600 U | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 4400 U | NA | NA | 3600 U | NA |
| DIMETHYL PHTHALATE | NC | NC | | 4400 U | NA | NA | 3600 U | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4400 U | NA | NA | 3600 U | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 4400 U | NA | NA | 3600 U | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 450 J | NA | NA | 3600 U | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 4400 U | NA | NA | 3600 U | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **4207** | 1.4 U | **18.5** | 3600 U | **52.7** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **2007** | 1.4 U | **17.8** | 3600 U | **51.9** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **1300 J** | 1 U | 13 | 3600 U | 58 |
| BENZO(A)PYRENE | 22 | 15 | C | **1600 J** | 1.4 U | 13 | 3600 UJ | **40** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **1400 J** | 1.3 U | 24 | 3600 UJ | 38 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 1900 J | NA | NA | 3600 UJ | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1500 J | 1.8 U | 9.4 | 3600 UJ | 24 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1700 J | 0.96 U | 22 | 3600 U | 61 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4400 U | 1.4 U | 1.5 U | 3600 UJ | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | 2100 J | NA | NA | 3600 U | NA |
| FLUORENE | 310000 | 230000 | N | 4400 U | NA | NA | 3600 U | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **1200 J** | 1.6 U | 9.4 | 3600 UJ | 20 |
| NAPHTHALENE | 160000 | 3600 | C | 4400 U | NA | NA | 3600 U | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 4400 U | NA | NA | 3600 U | NA |
| PYRENE | 230000 | 170000 | N | 3600 J | NA | NA | 3600 U | NA |
| TOTAL PAHS | NC | NC | | 16750 | 0 U | 90.8 | 0 U | 241 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 320 U | NA | NA | 270 U | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | NA | NA | 0 U | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-064 | SB-065 | SB-065 | SB-065 | SB-066 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-64-SS | D-SB-65RE-1 | D-SB-65RE-2 | SB-65-SS | D-SB-66RE-1 |
| SAMPLE DATE | | | | 20040924 | 20090916 | 20090916 | 20040917 | 20090914 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SB | SB | SS | SB |
| TOP DEPTH | | | | 0 | 1 | 2 | 0 | 1 |
| BOTTOM DEPTH | | | | 0 | 1 | 2 | 0 | 1 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 3 UL | NA | NA | 2.6 UR | NA |
| ARSENIC | 0.43 | 0.39 | C | **0.73 K** | NA | NA | **0.54 L** | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 3.5 | NA | NA | 2.6 UL | NA |
| CADMIUM | 3.9 | 7 | N | 3 U | NA | NA | 2.6 UL | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 18 J | NA | NA | 3.1 K | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 9.7 J | NA | NA | 2.6 UL | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 75 K | NA | NA | 2.8 L | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.12 U | NA | NA | 0.11 U | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 15 K | NA | NA | 9.6 | NA |
| SELENIUM | 39 | 39 | N | 3.5 | NA | NA | 2.6 UL | NA |
| SILVER | 39 | 39 | N | 3 UR | NA | NA | 2.6 UR | NA |
| THALLIUM | 0.55 | NC | | 2.4 U | NA | NA | 2.1 UL | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 55 L | NA | NA | 26 U | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | **330000** | NA | NA | 11000 U | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 140 U | NA | NA | 250 | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-066 | SB-066 | SB-066A | SB-066B | SB-066C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-66RE-2 | SB-66-SS | D-SB-66REA-2 | D-SB-66REB-2 | D-SB-66REC-2 |
| SAMPLE DATE | | | | 20090914 | 20040923 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SS | SB | SB | SB |
| TOP DEPTH | | | | 2 | 0 | 2 | 2 | 2 |
| BOTTOM DEPTH | | | | 2 | 0 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | 33 | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | 23 | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | 59 U | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | 59 U | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | 6 U | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | 6 U | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | 8 | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | 10 J | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | 10 J | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | 260 | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | 23 | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | 6 U | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | 6 U | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | 4000 U | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | 4000 U | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | 4000 U | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | 4000 U | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | 990 J | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | 4000 U | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | 4000 U | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | 4000 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **1461** | **4621** | **17.4** | 2.6 | **38.0** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **1461** | 0.64 | **16.6** | 0.9 | **37.3** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **1300** | 4000 U | 16 | 1.1 U | 30 |
| BENZO(A)PYRENE | 22 | 15 | C | **1000** | 4000 U | 12 | 1.5 U | **29** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **1000** | 4000 U | 18 | 9.4 | 36 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | 4000 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 450 | 4000 U | 11 | 2 U | 14 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1300 | 640 J | 1.1 U | 1.1 U | 21 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **170** | 4000 U | 1.6 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | 730 J | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | 610 J | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **550** | 4000 U | 11 | 1.8 U | 15 |
| NAPHTHALENE | 160000 | 3600 | C | NA | 690 J | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | 1700 J | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | 1200 J | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 5770 | 6560 | 68 | 9.4 | 145 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | 300 U | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | 0 U | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-066 | SB-066 | SB-066A | SB-066B | SB-066C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-66RE-2 | SB-66-SS | D-SB-66REA-2 | D-SB-66REB-2 | D-SB-66REC-2 |
| SAMPLE DATE | | | | 20090914 | 20040923 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SS | SB | SB | SB |
| TOP DEPTH | | | | 2 | 0 | 2 | 2 | 2 |
| BOTTOM DEPTH | | | | 2 | 0 | 2 | 2 | 2 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | 2.8 UL | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | **4.9** | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | 2.8 U | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | 2.8 U | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | 36 J | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | 22 | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | 14 | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | 0.11 U | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | 8.6 | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | 2.8 U | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | 2.8 UR | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | 2.2 U | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | 28 UL | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | 12000 U | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | 4800 | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-066D | SB-067 | SB-239 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-66RED-2 | SB-67-SS | D-SB-239RE-2 | D-SB-239RE-2-AVG | D-SB-239RE-2-D |
| SAMPLE DATE | | | | 20091014 | 20040927 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | | | | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SS | SB | SB | SB |
| TOP DEPTH | | | | 2 | 0 | 2 | 2 | 2 |
| BOTTOM DEPTH | | | | 2 | 0 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | 5 UL | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | 5 UL | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | 53 UL | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | 53 UL | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | 5 UL | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | 5 UL | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | 5 UL | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | 11 UL | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | 5 UL | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | 5 UL | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | 5 UL | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | 5 UL | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | 5 UL | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | 3500 U | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | 3500 U | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | 3500 U | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | 3500 U | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | 3500 U | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | 470 J | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | 1600 J | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | 1300 J | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | 1.5 U | **9391** | **297** | **158** | **18.7** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | 1.5 U | **9391** | **297** | **157** | **18.0** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | **5700 J** | **230 J** | 120.5 | 11 J |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | **5800 J** | **200 J** | **107** | 14 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | **5300 J** | **290 J** | **155** | 20 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | 6900 J | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | **4400 J** | 100 J | 50.5 | 2 UJ |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1 U | 7300 J | 210 J | 112 | 14 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | **2000 J** | **34 J** | **17.375** | 1.5 UJ |
| FLUORANTHENE | 310000 | 230000 | N | NA | 8700 | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | 1100 J | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | **4400 J** | 98 J | 53.35 | 8.7 J |
| NAPHTHALENE | 160000 | 3600 | C | NA | 3500 U | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | 9000 | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | 20000 J | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 83970 | 1162 | 614.85 | 67.7 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | 260 U | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | 0 U | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-066D<br>D-SB-66RED-2<br>20091014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-067<br>SB-67-SS<br>20040927<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0** | **SB-239<br>D-SB-239RE-2<br>20090914<br>ORIG<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-239<br>D-SB-239RE-2-AVG<br>20090914<br>AVG<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-239<br>D-SB-239RE-2-D<br>20090914<br>DUP<br>SO<br>NORMAL<br>SB<br>2<br>2** |
|---|---|---|---|---|---|---|---|---|
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | 3 J | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | **1.1** | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | 4.6 | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | 2.6 U | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | 21 J | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | 9.8 J | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | 56 K | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | 0.11 U | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | 15 K | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | 4.4 | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | 2.6 UR | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | 2.1 U | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | 71 | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | 11000 U | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | 110 U | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-239 | SB-239 | SB-239 | SB-240 | SB-240 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-239-SS[12] | SB-239-SS[18] | SB-239-SS[6] | D-SB-240RE-1 | D-SB-240RE-2 |
| SAMPLE DATE | | | | 20050607 | 20050607 | 20050607 | 20090914 | 20090914 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SS | SB | SB |
| TOP DEPTH | | | | 1 | 1.5 | 0.5 | 1 | 2 |
| BOTTOM DEPTH | | | | 1 | 1.5 | 0.5 | 1 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 205 | 32 J | 163 U | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 187 | 375 | 69 J | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 136 J | 102 J | 163 U | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **340** | **537** | **130** | **2378** | 1.5 U |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **340** | **537** | **130** | **2378** | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **157 J** | **217** | 49 J | **1300** | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | **229** | **368** | **79 J** | **1600** | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **151 J** | **237** | 43 J | **2000** | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 263 | 448 | 83 J | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 176 | 245 | 61 J | 590 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 187 | 264 | 55 J | 1600 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **60 J** | **90 J** | **34 J** | **330** | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | 307 | 303 | 54 J | NA | NA |
| FLUORENE | 310000 | 230000 | N | 192 | 28 J | 163 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **187** | **312** | 67 J | **1100** | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | 49 J | 34 J | 163 U | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 539 | 115 J | 163 U | NA | NA |
| PYRENE | 230000 | 170000 | N | 383 | 534 | 105 J | NA | NA |
| TOTAL PAHS | NC | NC | | 3408 | 3704 | 699 | 8520 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-239 | SB-239 | SB-239 | SB-240 | SB-240 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-239-SS[12] | SB-239-SS[18] | SB-239-SS[6] | D-SB-240RE-1 | D-SB-240RE-2 |
| SAMPLE DATE | | | | 20050607 | 20050607 | 20050607 | 20090914 | 20090914 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SS | SB | SB |
| TOP DEPTH | | | | 1 | 1.5 | 0.5 | 1 | 2 |
| BOTTOM DEPTH | | | | 1 | 1.5 | 0.5 | 1 | 2 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240<br>SB-240-SS[12]<br>20050607<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-240<br>SB-240-SS[18]<br>20050607<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1.5<br>1.5 | SB-240<br>SB-240-SS[6]<br>20050607<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>0.5 | SB-240A<br>D-SB-240REA-1<br>20091014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-240B<br>D-SB-240REB-1<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 163 U | 164 U | 159 U | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 68 J | 94 J | 52 J | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 28 J | 164 U | 165 | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **165** | **175** | **152** | **372** | **13461** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **82.5** | **175** | **72.3** | **372** | **13461** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 44 J | 71 J | 43 J | **180** | **11000** |
| BENZO(A)PYRENE | 22 | 15 | C | **67 J** | **130 J** | **58 J** | **270** | **9300** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 51 J | 81 J | 48 J | **280** | **11000** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 78 J | 120 J | 63 J | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 163 U | 111 J | 52 J | 75 | **4000** |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 55 J | 94 J | 48 J | 260 | 11000 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 163 U | **20 J** | 159 U | **39** | **1400** |
| FLUORANTHENE | 310000 | 230000 | N | 52 J | 86 J | 347 | NA | NA |
| FLUORENE | 310000 | 230000 | N | 163 U | 164 U | 80 J | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 59 J | 89 J | 46 J | **160** | **5100** |
| NAPHTHALENE | 160000 | 3600 | C | 163 U | 164 U | 159 U | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 90 J | 34 J | 186 | NA | NA |
| PYRENE | 230000 | 170000 | N | 109 J | 212 | 267 | NA | NA |
| TOTAL PAHS | NC | NC | | 701 | 1142 | 1455 | 1264 | 52800 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240 | SB-240 | SB-240 | SB-240A | SB-240B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-240-SS[12] | SB-240-SS[18] | SB-240-SS[6] | D-SB-240REA-1 | D-SB-240REB-1 |
| SAMPLE DATE | | | | 20050607 | 20050607 | 20050607 | 20091014 | 20091013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SS | SB | SB |
| TOP DEPTH | | | | 1 | 1.5 | 0.5 | 1 | 1 |
| BOTTOM DEPTH | | | | 1 | 1.5 | 0.5 | 1 | 1 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240C | SB-240D | SB-241 | SB-241 | SB-241 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-240REC-1 | D-SB-240RED-1 | SB-241-SS[12] | SB-241-SS[18] | SB-241-SS[6] |
| SAMPLE DATE | | | | 20091013 | 20091013 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SS |
| TOP DEPTH | | | | 1 | 1 | 1 | 1.5 | 0.5 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1.5 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | 43 J | 68 J | 48 J |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | 157 U | 156 U | 151 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | 47 J | 59 J | 37 J |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **44.0** | **44.7** | **156** | **135** | **165** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **43.3** | **44.0** | **77.1** | **135** | **89.1** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 24 | 22 | 65 J | 59 J | 76 J |
| BENZO(A)PYRENE | 22 | 15 | C | **34** | **35** | **60 J** | **73 J** | **70 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 43 | 41 | 54 J | 53 J | 56 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | 51 J | 60 J | 57 J |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 14 | 15 | 47 J | 67 J | 64 J |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 29 | 33 | 62 J | 64 J | 83 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 157 U | **44 J** | 151 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | 131 J | 153 J | 149 J |
| FLUORENE | 310000 | 230000 | N | NA | NA | 55 J | 84 J | 151 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 24 | 25 | 47 J | 65 J | 52 J |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | 70 J | 51 J | 88 J |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | 218 | 305 | 126 J |
| PYRENE | 230000 | 170000 | N | NA | NA | 105 J | 134 J | 123 J |
| TOTAL PAHS | NC | NC | | 168 | 171 | 1055 | 1339 | 1029 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240C | SB-240D | SB-241 | SB-241 | SB-241 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-240REC-1 | D-SB-240RED-1 | SB-241-SS[12] | SB-241-SS[18] | SB-241-SS[6] |
| SAMPLE DATE | | | | 20091013 | 20091013 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SS |
| TOP DEPTH | | | | 1 | 1 | 1 | 1.5 | 0.5 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1.5 | 0.5 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-242<br>SB-242-SS[12]<br>20050607<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-242<br>SB-242-SS[18]<br>20050607<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1.5<br>1.5 | SB-242<br>SB-242-SS[6]<br>20050607<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>0.5 | SB-243<br>D-SB-243RE-1<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-243<br>D-SB-243RE-2<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 164 U | 161 U | 162 U | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 34 J | 161 U | 162 U | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 164 U | 161 U | 162 U | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **153** | 161 U | **181** | **3300** | **20.4** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **61.9** | 161 U | **100** | **3300** | **19.6** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 63 J | 161 U | 91 J | **1600** | 11 |
| BENZO(A)PYRENE | 22 | 15 | C | **52 J** | 161 U | **79 J** | **2400** | **16** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 164 U | 161 U | 70 J | **2400** | 15 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 43 J | 161 U | 52 J | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 164 U | 161 U | 72 J | 760 | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 76 J | 161 U | 101 J | 1900 | 13 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 164 U | 161 U | 162 U | **330** | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | 139 J | 161 U | 180 | NA | NA |
| FLUORENE | 310000 | 230000 | N | 164 U | 161 U | 162 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 35 J | 161 U | 42 J | **1600** | 9.5 |
| NAPHTHALENE | 160000 | 3600 | C | 62 J | 161 U | 384 | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 252 | 161 U | 158 J | NA | NA |
| PYRENE | 230000 | 170000 | N | 167 | 161 U | 163 | NA | NA |
| TOTAL PAHS | NC | NC | | 923 | 0 U | 1392 | 10990 | 64.5 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-242 | SB-242 | SB-242 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-242-SS[12] | SB-242-SS[18] | SB-242-SS[6] | D-SB-243RE-1 | D-SB-243RE-2 |
| SAMPLE DATE | | | | 20050607 | 20050607 | 20050607 | 20090915 | 20090915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SS | SB | SB |
| TOP DEPTH | | | | 1 | 1.5 | 0.5 | 1 | 2 |
| BOTTOM DEPTH | | | | 1 | 1.5 | 0.5 | 1 | 2 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-243 | SB-243 | SB-243 | SB-243A | SB-243B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-243-SS[12] | SB-243-SS[18] | SB-243-SS[6] | D-SB-243REA-2 | D-SB-243REB-2 |
| SAMPLE DATE | | | | 20050607 | 20050607 | 20050607 | 20091012 | 20091012 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SS | SB | SB |
| TOP DEPTH | | | | 1 | 1.5 | 0.5 | 2 | 2 |
| BOTTOM DEPTH | | | | 1 | 1.5 | 0.5 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 160 U | 166 U | 162 U | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 98 J | 60 J | 162 U | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 41 J | 166 U | 25 J | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **243** | **174** | **166** | **134** | 1.6 U |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **163** | **90.9** | **84.8** | **134** | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 96 J | 50 J | 68 J | 110 | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | **132 J** | **75 J** | **68 J** | **91** | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 108 J | 45 J | 47 J | 110 | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 118 J | 80 J | 58 J | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 97 J | 55 J | 65 J | 51 | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 143 J | 63 J | 69 J | 98 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 160 U | 166 U | 162 U | **16** | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | 183 | 71 J | 140 J | NA | NA |
| FLUORENE | 310000 | 230000 | N | 160 U | 166 U | 162 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 94 J | 58 J | 46 J | 47 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | 40 J | 39 J | 37 J | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 80 J | 53 J | 49 J | NA | NA |
| PYRENE | 230000 | 170000 | N | 287 | 128 J | 133 J | NA | NA |
| TOTAL PAHS | NC | NC | | 1517 | 777 | 805 | 523 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-243 | SB-243 | SB-243 | SB-243A | SB-243B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-243-SS[12] | SB-243-SS[18] | SB-243-SS[6] | D-SB-243REA-2 | D-SB-243REB-2 |
| SAMPLE DATE | | | | 20050607 | 20050607 | 20050607 | 20091012 | 20091012 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SS | SB | SB |
| TOP DEPTH | | | | 1 | 1.5 | 0.5 | 2 | 2 |
| BOTTOM DEPTH | | | | 1 | 1.5 | 0.5 | 2 | 2 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-243C | SB-243D | SB-592 | SB-592A | SB-592B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-243REC-2 | D-SB-243RED-2 | D-SB-592-2 | D-SB-592A-2 | D-SB-592B-2 |
| SAMPLE DATE | | | | 20091012 | 20091012 | 20090914 | 20091015 | 20091016 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | | | | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | 14.5 | **16.0** | **36.7** | 7.1 | **31.5** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | 13.6 | **15.2** | **35.9** | 0.1 | **30.7** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 14 | 10 | 20 | 4.5 U | 15 |
| BENZO(A)PYRENE | 22 | 15 | C | 11 | 12 | **29** | 6.1 U | **25** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 12 | 13 | 30 | 5.7 U | 24 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2.1 U | 13 | 8 U | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 14 | 10 | 28 | 52 | 23 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 6.1 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 8.9 | 17 | 7.1 U | 17 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 51 | 53.9 | 137 | 52 | 115 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-243C | SB-243D | SB-592 | SB-592A | SB-592B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-243REC-2 | D-SB-243RED-2 | D-SB-592-2 | D-SB-592A-2 | D-SB-592B-2 |
| SAMPLE DATE | | | | 20091012 | 20091012 | 20090914 | 20091015 | 20091016 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | | | | 2 | 2 | 2 | 2 | 2 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-592D**<br>**D-SB-592D-2**<br>**20091016**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-593**<br>**D-SB-593-2**<br>**20090914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-594**<br>**D-SB-594-2**<br>**20090914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-595**<br>**D-SB-595-2**<br>**20090914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** |
|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22.0 | 15.0 | C | **52.9** | **32.5** | **92.3** | **85.4** |
| BAP EQUIVALENT-POS | 22.0 | 15.0 | C | **52.1** | **31.7** | **92.3** | **84.6** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 23 | 25 | 54 | 59 |
| BENZO(A)PYRENE | 22 | 15 | C | **43** | **25** | **64** | **67** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 39 | 26 | 82 | 77 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 14 | 12 | 27 | 28 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 33 | 24 | 61 | 56 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 11 | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 27 | 15 | 34 | 37 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 179 | 127 | 333 | 324 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-592D**<br>**D-SB-592D-2**<br>**20091016**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-593**<br>**D-SB-593-2**<br>**20090914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-594**<br>**D-SB-594-2**<br>**20090914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-595**<br>**D-SB-595-2**<br>**20090914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** |
|---|---|---|---|---|---|---|---|
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-766<br>D-SB-766-SS<br>20100827<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-767<br>D-SS-767-01<br>20100830<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-768<br>D-SS-768-01<br>20100830<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-769<br>D-SS-769-01<br>20100830<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-770<br>D-SS-770-01<br>20100830<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 3.6 U | 3.8 U | 3.6 U | 28 | 3.8 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.6 U | 3.8 U | 3.6 U | 3.6 U | 9.3 |
| ACENAPHTHENE | 470000 | 340000 | N | 3.6 U | 3.8 U | 31 J | 29 J | 3.8 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 3.6 U | 3.8 U | 3.6 U | 3.6 U | 3.8 U |
| ANTHRACENE | 2300000 | 1700000 | N | 3.6 U | 3.8 U | 48 J | 3.6 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 3.6 U | **31.3** | **77.9** | **39.2** | **17.9** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3.6 U | **29.0** | **75.9** | **37.2** | **16.0** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.6 U | 3.8 U | 62 | 44 | 14 |
| BENZO(A)PYRENE | 22 | 15 | C | 3.6 U | **27 J** | **61 J** | **29** | 11 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3.6 U | 20 J | 82 J | 36 | 18 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 3.6 U | 3.8 U | 3.6 U | 3.6 U | 8.9 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.6 U | 3.8 U | 47 J | 17 | 3.8 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 73 U | NA | NA | NA | 77 U |
| C1-FLUORANTHENES/PYRENES | NC | NC | | 73 U | NA | NA | NA | 77 U |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | 73 U | NA | NA | NA | 77 U |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 73 U | NA | NA | NA | 77 U |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | 73 U | NA | NA | NA | 77 U |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 73 U | NA | NA | NA | 77 U |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | 73 U | NA | NA | NA | 77 U |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 73 U | NA | NA | NA | 77 U |
| CHRYSENE | 22000 | 15000 | C | 1.2 U | 1.3 U | 53 | 34 | 14 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.6 U | 3.8 U | 3.6 U | 3.6 U | 3.8 U |
| FLUORANTHENE | 310000 | 230000 | N | 20 | 26 J | 170 J | 75 J | 27 |
| FLUORENE | 310000 | 230000 | N | 3.6 U | 3.8 U | 33 J | 3.6 U | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.6 U | 3.8 U | 3.6 U | 3.6 U | 18 J |
| NAPHTHALENE | 160000 | 3600 | C | 3.6 U | 3.8 U | 18 | 3.6 U | 8.1 |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 3.6 U | 3.8 U | 120 J | 54 | 20 |
| PYRENE | 230000 | 170000 | N | 7 J | 12 | 140 | 68 | 24 |
| TOTAL PAHS | NC | NC | | 27 | 85 | 865 | 386 | 172.3 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-766 | SB-767 | SB-768 | SB-769 | SB-770 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-766-SS | D-SS-767-01 | D-SS-768-01 | D-SS-769-01 | D-SS-770-01 |
| SAMPLE DATE | | | | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SS | SS | SS | SS |
| TOP DEPTH | | | | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1 | 1 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-771<br>D-SB-771-SS<br>20100910<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-772<br>D-SS-772-01<br>20100830<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-773<br>D-SS-773-01<br>20100831<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-774<br>D-SB-774-SS<br>20100910<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-775<br>D-SS-775-01<br>20100831<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 480 | 15 | 3.9 U | 83 U | 4 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 980 | 11 | 3.9 U | 83 U | 4 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4500 | 11 | 3.9 U | 1700 | 4 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 70 U | 3.6 U | 3.9 U | 83 U | 4 U |
| ANTHRACENE | 2300000 | 1700000 | N | 5900 | 15 | 3.9 U | 4900 | 4 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **11308** | **45.0** | 3.9 U | **11379** | 4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **11308** | **43.2** | 3.9 U | **11379** | 4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **11000** | 43 | 3.9 U | **13000** | 4 U |
| BENZO(A)PYRENE | 22 | 15 | C | **7400** | **31** | 3.9 U | **7400** | 4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **10000** | 47 J | 3.9 U | **11000** | 4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4200 | 22 | 3.9 U | 3500 | 4 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | **3800** | 12 | 3.9 U | **5600** | 4 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | 500 J | 80 U |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | 710 J | 80 U |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | 290 J | 80 U |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | 220 J | 80 U |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | 170 J | 80 U |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | 110 J | 80 U |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | 110 J | 80 U |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | 85 U | 80 U |
| CHRYSENE | 22000 | 15000 | C | 9600 | 34 | 1.3 U | 13000 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **1400** | 3.6 U | 3.9 U | **1200** | 4 U |
| FLUORANTHENE | 310000 | 230000 | N | 27000 | 68 | 3.9 U | 37000 | 4 U |
| FLUORENE | 310000 | 230000 | N | 3100 | 10 | 3.9 U | 2000 | 4 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **3600** | 30 J | 3.9 U | **3100** | 4 U |
| NAPHTHALENE | 160000 | 3600 | C | 3100 | 84 | 9.8 | 83 U | 4 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 23000 | 44 | 3.9 U | 27000 | 4 U |
| PYRENE | 230000 | 170000 | N | 19000 | 59 | 3.9 U | 27000 | 4 U |
| TOTAL PAHS | NC | NC | | 137580 | 521 | 9.8 | 157400 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-771 | SB-772 | SB-773 | SB-774 | SB-775 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-771-SS | D-SS-772-01 | D-SS-773-01 | D-SB-774-SS | D-SS-775-01 |
| SAMPLE DATE | | | | 20100910 | 20100830 | 20100831 | 20100910 | 20100831 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SS | SS | SS | SS |
| TOP DEPTH | | | | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1 | 1 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-776<br>D-SS-776-01<br>20100831<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-777<br>D-SB-777-SS<br>20100910<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-778<br>D-SS-778-01<br>20100831<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-779<br>D-SS-779-01<br>20100901<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-780<br>D-SS-780-01<br>20100901<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 4 U | 15 U | 3.8 U | 3.9 U | 4 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4 U | 15 U | 3.8 U | 3.9 U | 4 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4 U | 34 | 3.8 U | 3.9 U | 4 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 4 U | 15 U | 3.8 U | 3.9 U | 4 U |
| ANTHRACENE | 2300000 | 1700000 | N | 4 U | 89 | 3.8 U | 3.9 U | 4 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 4 U | **460** | 3.8 U | 5.21015 | 4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 4 U | **452** | 3.8 U | 0.9 | 4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4 U | **400** | 3.8 U | 3.9 U | 4 U |
| BENZO(A)PYRENE | 22 | 15 | C | 4 U | **340** | 3.8 U | 3.9 U | 4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4 U | **510** | 3.8 U | 9 J | 4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4 U | 270 | 3.8 U | 3.9 U | 4 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4 U | 180 | 3.8 U | 3.9 U | 4 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 1600 J | NA | 80 U | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | 2300 J | NA | 80 U | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 1300 J | NA | 80 U | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 780 J | NA | 80 U | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 590 J | NA | 80 U | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 420 J | NA | 80 U | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 310 J | NA | 80 U | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 300 J | NA | 80 U | NA |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 470 | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4 U | 15 U | 3.8 U | 3.9 U | 4 U |
| FLUORANTHENE | 310000 | 230000 | N | 4 U | 710 | 3.8 U | 9.9 | 15 |
| FLUORENE | 310000 | 230000 | N | 4 U | 15 U | 3.8 U | 3.9 U | 4 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4 U | **190** | 3.8 U | 3.9 U | 4 U |
| NAPHTHALENE | 160000 | 3600 | C | 4 U | 15 U | 3.8 U | 3.9 U | 4 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 4 U | 320 | 3.8 U | 3.9 U | 17 |
| PYRENE | 230000 | 170000 | N | 4 U | 880 | 3.8 U | 9.2 | 11 |
| TOTAL PAHS | NC | NC | | 0 U | 4393 | 0 U | 28.1 | 43 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | NA | NA | NA | NA |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-776 | SB-777 | SB-778 | SB-779 | SB-780 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SS-776-01 | D-SB-777-SS | D-SS-778-01 | D-SS-779-01 | D-SS-780-01 |
| SAMPLE DATE | | | | 20100831 | 20100910 | 20100831 | 20100901 | 20100901 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SS | SS | SS | SS |
| TOP DEPTH | | | | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1 | 1 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-781<br>D-SS-781-01<br>20100901<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-782<br>D-SS-782-01<br>20100902<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-783<br>D-SS-783-01<br>20100902<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-784<br>D-SS-784-01<br>20100902<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-785<br>D-SS-785-01<br>20100903<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | 0.66 U | 0.49 U | 0.6 U | 0.75 U |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | 1.4 U | 1 U | 1.3 U | 1.6 U |
| ACETONE | 7000000 | 6100000 | N | NA | 6.4 U | 4.7 U | 5.8 U | 18 B |
| BENZENE | 12000 | 1100 | C | NA | 0.23 U | 0.17 U | 0.21 U | 0.26 U |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | 0.45 U | 0.33 U | 0.4 U | 0.5 U |
| ETHYLBENZENE | 780000 | 5400 | C | NA | 0.27 U | 0.19 U | 0.24 U | 0.3 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | 1.2 U | 0.9 U | 1.1 U | 1.4 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | 0.68 U | 0.5 U | 0.61 U | 1.5 B |
| NAPHTHALENE | 160000 | 3600 | C | NA | 0.19 U | 0.14 U | 0.17 U | 1.1 B |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | 0.36 U | 0.26 U | 0.32 U | 0.4 U |
| TOLUENE | 630000 | 500000 | N | NA | 0.28 U | 0.2 U | 0.25 U | 0.31 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | 0.35 U | 0.25 U | 0.31 U | 0.39 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | 20 U | 21 U | 21 U | 21 UL |
| CARBAZOLE | 32000 | NC | | NA | 28 U | 30 U | 30 U | 29 UL |
| DIBENZOFURAN | 7800 | 7800 | N | NA | 3.4 U | 15 J | 3.6 U | 3.6 UL |
| DIMETHYL PHTHALATE | NC | NC | | NA | 18 U | 19 U | 19 U | 18 UL |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 51 U | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 110 | 3.4 U | 8.9 | 3.6 U | 3.6 UL |
| ACENAPHTHENE | 470000 | 340000 | N | 1600 | 11 | 15 | 3.6 U | 3.6 UL |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 51 U | 12 | 12 | 3.6 U | 3.6 UL |
| ANTHRACENE | 2300000 | 1700000 | N | 6000 | 26 | 29 | 3.6 U | 3.6 UL |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **8311** | **130** | **216** | **40.4** | 3.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **8311** | **130** | **216** | **38.6** | 3.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **7000** | 86 | 140 | 27 | 3.6 UL |
| BENZO(A)PYRENE | 22 | 15 | C | **5600** | **77** | **140** | **30** | 3.6 UL |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **7300 J** | 110 | **190** | 40 | 3.6 UL |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 2900 | 60 | 90 | 24 | 3.6 UL |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | **2500** | 46 | 60 | 13 | 3.6 UL |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 6400 | 91 | 150 | 32 | 1.2 UL |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **1000 J** | **28** | **35** | 3.6 U | 3.6 UL |
| FLUORANTHENE | 310000 | 230000 | N | 19000 | 180 | 370 | 60 | 3.6 UL |
| FLUORENE | 310000 | 230000 | N | 2000 | 10 | 16 | 3.6 U | 3.6 UL |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **2500 J** | 49 | 75 | 17 | 3.6 UL |
| NAPHTHALENE | 160000 | 3600 | C | 51 U | 3.4 U | 11 | 3.6 U | 3.6 UL |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 17000 | 96 | 290 | 20 | 3.6 UL |
| PYRENE | 230000 | 170000 | N | 13000 | 150 | 320 | 65 | 3.6 UL |
| TOTAL PAHS | NC | NC | | 93910 | 1032 | 1951.9 | 328 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | NA | 3.2 U | 3.5 U | 0.68 UJ | 6.7 U |
| 4,4'-DDE | 1900 | 1400 | C | NA | 2 U | 7.8 J | 1.5 J | 4.2 UJ |
| AROCLOR-1260 | 320 | 220 | C | NA | 18 U | 19 U | 19 U | 18 U |
| BETA-BHC | 350 | 270 | C | NA | 5.7 U | 9.1 J | 1.2 UJ | 12 UJ |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | 0 U | 0 U | 0 U | 0 U |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-781 | SB-782 | SB-783 | SB-784 | SB-785 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SS-781-01 | D-SS-782-01 | D-SS-783-01 | D-SS-784-01 | D-SS-785-01 |
| SAMPLE DATE | | | | 20100901 | 20100902 | 20100902 | 20100902 | 20100903 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SS | SS | SS | SS |
| TOP DEPTH | | | | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1 | 1 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | 0.15 J | 0.25 B | 0.076 B | 0.063 J |
| ARSENIC | 0.43 | 0.39 | C | NA | **2.2 J** | **2.4 J** | **2.8 J** | **1.6** |
| BARIUM | 1600 | 1500 | N | NA | 40.7 | 17.3 | 17 | 4.1 J |
| BERYLLIUM | 16 | 16 | N | NA | 0.28 | 0.28 | 0.19 | 0.065 J |
| CADMIUM | 3.9 | 7 | N | NA | 0.24 K | 0.11 K | 0.046 B | 0.0084 UL |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | 9 J | 9.1 J | 8.5 J | 14.2 |
| COBALT | NC | 2.3 | N | NA | 2 J | **3.2 J** | **6.4 J** | 0.65 |
| COPPER | 310 | 310 | N | NA | 6 J | 9 J | 6.7 J | 5.1 J |
| IRON | 5500 | 5500 | N | NA | **7620 J** | **6110 J** | 5100 J | **6620 J** |
| LEAD | 400 | 400 | | NA | 45.5 | 25.1 | 16.4 | 1.1 J |
| MANGANESE | 160 | 180 | N | NA | 102 | 30.8 | 24.9 | 9.4 J |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | 0.08 J | 0.077 J | 0.05 J | 0.016 U |
| MOLYBDENUM | NC | 39 | N | NA | 0.45 | 0.38 | 0.33 | 0.4 |
| NICKEL | 160 | 150 | N | NA | 5.1 J | 5.2 J | 5.6 J | 0.84 J |
| SELENIUM | 39 | 39 | N | NA | 0.4 J | 0.46 J | 0.51 J | 0.25 J |
| SILVER | 39 | 39 | N | NA | 0.099 J | 0.097 J | 0.023 J | 0.017 U |
| THALLIUM | 0.55 | NC | | NA | 0.042 B | 0.069 B | 0.07 B | 0.014 UL |
| VANADIUM | 7.8 | 39 | N[13] | NA | **14.2 J** | **15.7 J** | **15.1 J** | **18.7** |
| ZINC | 2300 | 2300 | N | NA | 23.4 J | 27.8 J | 15.5 J | 3.3 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | 26000 | 18000 B | 8600 J | 9700 J |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | 48 U | 51 U | 51 U | 50 U |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | 0.28 U | 0.3 U | **1.3** | **0.52 J** |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-786<br>D-SS-786-01<br>20100903<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-787<br>D-SS-787-01<br>20100903<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-788<br>D-SB-788-SS<br>20100908<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-789<br>D-SB-789-SS<br>20100908<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-790<br>D-SB-790-SS<br>20100908<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 0.59 U | 0.6 U | 0.57 U | 0.53 U | 0.6 U |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 2.1 B | 2.8 B | 1.6 J | 6 J | 1.3 U |
| ACETONE | 7000000 | 6100000 | N | 21 B | 17 B | 440 J | 210 B | 110 |
| BENZENE | 12000 | 1100 | C | 0.72 J | 0.21 U | 0.2 U | 0.19 U | 0.21 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 2.2 B | 1 B | 0.65 J | 0.82 J | 0.41 U |
| ETHYLBENZENE | 780000 | 5400 | C | 0.23 U | 0.24 U | 0.23 U | 0.21 U | 0.24 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 1.1 U | 1.1 U | 1 U | 0.99 U | 1.1 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 3.9 B | 2.8 B | 0.59 U | 0.55 U | 0.62 U |
| NAPHTHALENE | 160000 | 3600 | C | 2.2 B | 1.7 B | 0.17 U | 0.16 U | 0.18 U |
| O-XYLENE | 1600000 [4] | 380000 | N | 0.32 U | 0.32 U | 0.31 U | 0.29 U | 0.32 U |
| TOLUENE | 630000 | 500000 | N | 0.24 U | 0.25 U | 0.24 U | 0.22 U | 0.25 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 0.31 U | 0.31 U | 0.3 U | 0.28 U | 0.31 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 23 U | 22 U | 20 J | 20 U | 20 U |
| CARBAZOLE | 32000 | NC | | 62 | 31 U | 29 U | 29 U | 29 U |
| DIBENZOFURAN | 7800 | 7800 | N | 34 J | 3.8 U | 11 J | 3.5 U | 3.5 U |
| DIMETHYL PHTHALATE | NC | NC | | 20 U | 20 U | 18 U | 18 U | 18 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 27 | 3.8 U | 10 | 3.5 U | 3.5 U |
| ACENAPHTHENE | 470000 | 340000 | N | 100 | 11 | 16 | 3.5 U | 3.5 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 10 | 3.8 U | 3.5 U | 3.5 U | 3.5 U |
| ANTHRACENE | 2300000 | 1700000 | N | 190 | 20 | 20 | 3.5 U | 3.5 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **574** | **72.4** | **105** | **22.2** | **18.5** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **574** | **72.4** | **105** | **20.3** | **16.4** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **520** | 49 | 53 | 3.5 U | 3.5 U |
| BENZO(A)PYRENE | 22 | 15 | C | **380** | **40** | **63** | **17** | 15 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **440** | 58 | 83 | 15 | 14 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 210 | 26 | 36 | 3.5 U | 3.5 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 220 | 22 | 29 | 3.5 U | 3.5 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 480 | 44 | 62 | 1.2 U | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **76** | **19** | **24** | 3.5 U | 3.5 U |
| FLUORANTHENE | 310000 | 230000 | N | 890 | 93 | 110 | 14 | 8.5 |
| FLUORENE | 310000 | 230000 | N | 93 | 9.8 | 18 | 3.5 U | 3.5 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **190** | 24 | 45 | 18 | 3.5 U |
| NAPHTHALENE | 160000 | 3600 | C | 85 | 3.8 U | 19 | 3.5 U | 3.5 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 630 | 53 | 87 | 3.5 U | 3.5 U |
| PYRENE | 230000 | 170000 | N | 850 | 73 | 93 | 14 | 9.6 |
| TOTAL PAHS | NC | NC | | 5391 | 541.8 | 768 | 78 | 47.1 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | 15 U | 0.72 U | 1.3 UJ | 0.66 UJ | 0.66 U |
| 4,4'-DDE | 1900 | 1400 | C | 9.3 U | 0.45 UJ | 0.83 U | 0.42 U | 0.42 U |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 20 U | 18 U | 18 U | 18 U |
| BETA-BHC | 350 | 270 | C | 26 UJ | 1.3 UJ | 6.4 J | 1.2 U | 1.2 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-786 | SB-787 | SB-788 | SB-789 | SB-790 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SS-786-01 | D-SS-787-01 | D-SB-788-SS | D-SB-789-SS | D-SB-790-SS |
| SAMPLE DATE | | | | 20100903 | 20100903 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SS | SS | SS | SS |
| TOP DEPTH | | | | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1 | 1 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.24 J | 0.19 J | 0.034 J | 0.056 J | 0.026 U |
| ARSENIC | 0.43 | 0.39 | C | **6** | **5.3** | **0.95** | **1.7** | **0.71** |
| BARIUM | 1600 | 1500 | N | 37.1 J | 30.7 J | 6.8 | 17.3 | 3.7 |
| BERYLLIUM | 16 | 16 | N | 2 | 1.9 | 0.087 J | 0.2 | 0.05 U |
| CADMIUM | 3.9 | 7 | N | 0.11 J | 0.4 L | 0.0083 UL | 0.024 B | 0.0084 UL |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 20.8 | 18.6 | 12.4 | 11.3 | 8.2 |
| COBALT | NC | 2.3 | N | **8.9** | **27.5** | 1.5 | 1.8 | 0.52 |
| COPPER | 310 | 310 | N | 22.4 J | 21.6 J | 4.2 L | 9.6 L | 2.9 |
| IRON | 5500 | 5500 | N | **25400 J** | **21500 J** | 5460 | 4680 | 3870 |
| LEAD | 400 | 400 | | 26.5 J | 21.4 J | 2.2 | 7.8 | 0.98 |
| MANGANESE | 160 | 180 | N | 102 J | 70.5 J | 28.6 | 10.8 | 14 |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.25 K | 0.48 K | 0.016 U | 0.019 J | 0.016 U |
| MOLYBDENUM | NC | 39 | N | 0.56 | 0.45 | 0.23 | 0.31 | 0.14 J |
| NICKEL | 160 | 150 | N | 20.7 J | 40.6 J | 3.3 | 3.1 | 0.64 |
| SELENIUM | 39 | 39 | N | 3.1 L | 2.3 L | 0.16 J | 0.58 J | 0.16 J |
| SILVER | 39 | 39 | N | 0.38 | 0.28 K | 0.017 U | 0.025 B | 0.017 U |
| THALLIUM | 0.55 | NC | | 0.034 J | 0.054 J | 0.014 U | 0.067 B | 0.014 U |
| VANADIUM | 7.8 | 39 | N[13] | **34.2** | **29.2** | **12.1** | **17.4** | **10.9** |
| ZINC | 2300 | 2300 | N | 48.5 J | 139 J | 4.8 J | 11.8 J | 2.9 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | **520000** | 59000 | 24000 | 9700 J | 33000 |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 71 J | 53 U | 49 U | 49 U | 49 U |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | 0.32 U | 0.31 U | **0.53 J** | **0.57 J** | **0.8 J** |

**Table A-2**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-791<br>D-SB-791-SS<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-792<br>D-SB-792-SS<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-793<br>D-SB-793-SS<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-794<br>D-SB-794-SS<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-795<br>D-SB-795-SS<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 0.67 U | 0.6 U | 0.55 U | 0.52 U | 0.55 U |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 1.7 J | 7.6 J | 12 | 1.1 U | 17 |
| ACETONE | 7000000 | 6100000 | N | 14 B | 43 B | 130 B | 21 B | 96 B |
| BENZENE | 12000 | 1100 | C | 0.24 U | 0.21 U | 0.19 U | 0.18 U | 0.19 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 0.65 J | 1.4 B | 1.7 B | 1.1 B | 1.9 B |
| ETHYLBENZENE | 780000 | 5400 | C | 0.27 U | 0.24 U | 0.22 U | 0.21 U | 0.22 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 1.2 U | 1.1 U | 1 U | 0.96 U | 1 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.69 U | 0.72 B | 1 B | 0.54 U | 2.1 B |
| NAPHTHALENE | 160000 | 3600 | C | 0.2 U | 0.85 B | 2.2 B | 0.15 U | 0.78 B |
| O-XYLENE | 1600000 [4] | 380000 | N | 0.36 U | 0.32 U | 0.3 U | 0.28 U | 0.3 U |
| TOLUENE | 630000 | 500000 | N | 0.28 U | 0.38 J | 0.23 U | 0.22 U | 0.23 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 0.35 U | 0.31 U | 0.29 U | 0.85 J | 0.29 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 20 U | 20 U | 22 U | 29 U | 22 U |
| CARBAZOLE | 32000 | NC | | 29 U | 29 U | 31 U | 120 | 31 U |
| DIBENZOFURAN | 7800 | 7800 | N | 3.5 U | 3.6 U | 3.8 U | 110 | 3.8 U |
| DIMETHYL PHTHALATE | NC | NC | | 18 U | 18 U | 19 U | 26 U | 19 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.5 U | 3.6 U | 3.8 U | 69 | 3.8 U |
| ACENAPHTHENE | 470000 | 340000 | N | 3.5 U | 3.6 U | 3.8 U | 160 | 3.8 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 3.5 U | 3.6 U | 3.8 U | 5.1 U | 3.8 U |
| ANTHRACENE | 2300000 | 1700000 | N | 3.5 U | 3.6 U | 3.8 U | 460 | 3.8 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 3.5 U | 4.2 | **16.8** | **714** | **38.9** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3.5 U | 0.01 | 14.9 | **711** | **37.0** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.5 U | 3.6 U | 12 | **740** | 16 |
| BENZO(A)PYRENE | 22 | 15 | C | 3.5 U | 3.6 U | 11 | **540** | **29** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3.5 U | 3.6 U | 17 | **650** | 33 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 3.5 U | 3.6 U | 10 | 310 | 17 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.5 U | 3.6 U | 11 | 370 | 13 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.2 U | 7.2 | 15 | 640 | 26 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.5 U | 3.6 U | 3.8 U | 5.1 U | 3.8 U |
| FLUORANTHENE | 310000 | 230000 | N | 8.4 | 8.4 | 20 | 1700 | 36 |
| FLUORENE | 310000 | 230000 | N | 3.5 U | 3.6 U | 3.8 U | 210 | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.5 U | 3.6 U | 8.7 | **280** | 29 |
| NAPHTHALENE | 160000 | 3600 | C | 3.5 U | 3.6 U | 3.8 U | 82 | 3.8 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 3.5 U | 3.6 U | 12 | 1600 | 27 |
| PYRENE | 230000 | 170000 | N | 8.2 | 8 | 16 | 1200 | 37 |
| TOTAL PAHS | NC | NC | | 16.6 | 23.6 | 132.7 | 9011 | 263 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | 2700 | 2000 | C | 0.66 U | 1.3 U | 3.5 U | 4 J | 3.5 UJ |
| 4,4'-DDE | 1900 | 1400 | C | 0.41 U | 0.84 U | 2.2 U | 7.1 J | 2.2 UJ |
| AROCLOR-1260 | 320 | 220 | C | 18 U | 18 U | 19 U | 20 J | 19 U |
| BETA-BHC | 350 | 270 | C | 1.2 U | 2.4 U | 6.3 U | 6.4 U | 6.3 UJ |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 20 | 0 U |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-791 | SB-792 | SB-793 | SB-794 | SB-795 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-791-SS | D-SB-792-SS | D-SB-793-SS | D-SB-794-SS | D-SB-795-SS |
| SAMPLE DATE | | | | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SS | SS | SS | SS |
| TOP DEPTH | | | | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1 | 1 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.025 UL | 0.11 B | 0.2 B | 0.41 J | 0.085 B |
| ARSENIC | 0.43 | 0.39 | C | **0.72 L** | **2.3 L** | **4.5 L** | **4.3 J** | **2.6 J** |
| BARIUM | 1600 | 1500 | N | 3.9 | 23.6 | 27.4 | 54.4 | 12.6 |
| BERYLLIUM | 16 | 16 | N | 0.055 J | 0.59 J | 1.5 J | 1.6 J | 0.15 J |
| CADMIUM | 3.9 | 7 | N | 0.0082 UL | 0.081 B | 0.094 B | 0.27 B | 0.011 B |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 8.6 | 11.6 | 21.6 | 16.2 J | 26.2 J |
| COBALT | NC | 2.3 | N | 0.5 | **4** | **7.7** | **14.1 J** | 1.4 J |
| COPPER | 310 | 310 | N | 3.2 | 9.4 | 21.5 | 33.6 J | 4.5 J |
| IRON | 5500 | 5500 | N | 4450 | **9890** | **21500** | **20200 J** | **10200 J** |
| LEAD | 400 | 400 | | 1.1 | 9.8 | 15.8 | 56.2 | 2 |
| MANGANESE | 160 | 180 | N | 9.4 J | 124 J | 39.3 J | **183 J** | 15.6 J |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.016 U | 0.17 | 0.069 J | 1.7 | 0.091 J |
| MOLYBDENUM | NC | 39 | N | 0.14 B | 0.5 | 0.45 | 0.52 | 0.26 |
| NICKEL | 160 | 150 | N | 0.76 | 7.7 | 15 | 21.3 J | 2.7 J |
| SELENIUM | 39 | 39 | N | 0.11 J | 0.61 L | 1.7 L | 1.2 L | 0.29 J |
| SILVER | 39 | 39 | N | 0.017 U | 0.18 | 0.24 K | 1.4 | 0.018 U |
| THALLIUM | 0.55 | NC | | 0.014 U | 0.038 J | 0.053 J | 0.094 B | 0.015 U |
| VANADIUM | 7.8 | 39 | N[13] | **12.2** | **16.6** | **43.3** | **25.8 J** | **19.4 J** |
| ZINC | 2300 | 2300 | N | 3.1 B | 28.4 | 49 | 119 L | 5.4 L |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 11000 | 36000 | 40000 | 39000 | 34000 |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 49 U | 49 U | 53 U | 54 U | 53 UJ |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | **0.54 J** | **0.32 J** | **0.62 J** | 0.31 U | 0.31 U |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-796**<br>**D-SB-796-SS**<br>**20100910**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** |
|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 0.48 U |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 2.2 J |
| ACETONE | 7000000 | 6100000 | N | 17 B |
| BENZENE | 12000 | 1100 | C | 0.17 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 0.73 B |
| ETHYLBENZENE | 780000 | 5400 | C | 0.19 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 0.89 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.82 B |
| NAPHTHALENE | 160000 | 3600 | C | 0.71 B |
| O-XYLENE | 1600000 [4] | 380000 | N | 0.26 U |
| TOLUENE | 630000 | 500000 | N | 0.2 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 0.25 U |
| **SEMIVOLATILES (UG/KG)** | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 23 U |
| CARBAZOLE | 32000 | NC | | 32 U |
| DIBENZOFURAN | 7800 | 7800 | N | 3.9 U |
| DIMETHYL PHTHALATE | NC | NC | | 20 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 10 |
| ACENAPHTHENE | 470000 | 340000 | N | 13 |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 3.9 U |
| ANTHRACENE | 2300000 | 1700000 | N | 15 |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **79.2** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **77.3** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 49 |
| BENZO(A)PYRENE | 22 | 15 | C | **60** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 74 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 40 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 31 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA |
| CHRYSENE | 22000 | 15000 | C | 59 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.9 U |
| FLUORANTHENE | 310000 | 230000 | N | 96 |
| FLUORENE | 310000 | 230000 | N | 12 |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 46 |
| NAPHTHALENE | 160000 | 3600 | C | 18 |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 60 |
| PYRENE | 230000 | 170000 | N | 81 |
| TOTAL PAHS | NC | NC | | 664 |
| **PESTICIDES/PCBS (UG/KG)** | | | | |
| 4,4'-DDD | 2700 | 2000 | C | 0.74 U |
| 4,4'-DDE | 1900 | 1400 | C | 0.47 U |
| AROCLOR-1260 | 320 | 220 | C | 20 U |
| BETA-BHC | 350 | 270 | C | 1.3 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-796**<br>**D-SB-796-SS**<br>**20100910**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** |
|---|---|---|---|---|
| **METALS (MG/KG)** | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.37 J |
| ARSENIC | 0.43 | 0.39 | C | **4.9** |
| BARIUM | 1600 | 1500 | N | 34.3 |
| BERYLLIUM | 16 | 16 | N | 2.1 |
| CADMIUM | 3.9 | 7 | N | 0.053 J |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 19.3 |
| COBALT | NC | 2.3 | N | **10.9** |
| COPPER | 310 | 310 | N | 26.6 |
| IRON | 5500 | 5500 | N | **22900** |
| LEAD | 400 | 400 | | 29.8 |
| MANGANESE | 160 | 180 | N | 80.2 |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.56 |
| MOLYBDENUM | NC | 39 | N | 0.61 |
| NICKEL | 160 | 150 | N | 24.6 |
| SELENIUM | 39 | 39 | N | 2.2 |
| SILVER | 39 | 39 | N | 0.35 |
| THALLIUM | 0.55 | NC | | 0.078 U |
| VANADIUM | 7.8 | 39 | N[13] | **28.8** |
| ZINC | 2300 | 2300 | N | 46.1 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 64000 |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 55 U |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | **0.36 J** |

**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - The value is for xylenes.
5 - The value is for xylene, mixture.
6 - The value for acenaphthene is used as a surrogate for acenaphthylene.
7 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
8 - The value is for PCB (total).
9 - The value is for polychlorinated biphenyls (high risk).
10 - The value is for trivalent chromium.
11 - The value is for mercury (inorganic/mercuric dichloride).
12 - The value is for mercuric chloride.
13 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31-05 | SB-32-05 | SB-33-05 | F-SB-57RE-10 | F-SB-57RE-3 | F-SB-57RE-4 |
| SAMPLE DATE | 20031118 | 20031121 | 20031121 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 10 | 3 | 4 |
| BOTTOM DEPTH | 5 | 5 | 5 | 10 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | 7 U | 7 U | NA | NA | NA |
| 2-BUTANONE | 59 U | 13 J | 6 J | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 U | 7 U | 7 U | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 U | 7 U | 7 U | NA | NA | NA |
| 2-HEXANONE | 59 U | 67 U | 68 U | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 U | 7 U | 7 U | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 U | 7 U | 7 U | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 59 U | 67 U | 68 U | NA | NA | NA |
| ACETONE | 59 U | 77 J | 59 J | NA | NA | NA |
| BENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| BROMOBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| BROMOFORM | 6 U | 7 U | 7 U | NA | NA | NA |
| BROMOMETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| CARBON DISULFIDE | 6 U | 7 U | 7 U | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 U | 7 U | 7 U | NA | NA | NA |
| CHLOROBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| CHLOROETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| CHLOROFORM | 6 U | 7 U | 7 U | NA | NA | NA |
| CHLOROMETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 U | 7 U | 7 U | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 U | 7 U | 7 U | NA | NA | NA |
| DIBROMOMETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31-05 | SB-32-05 | SB-33-05 | F-SB-57RE-10 | F-SB-57RE-3 | F-SB-57RE-4 |
| SAMPLE DATE | 20031118 | 20031121 | 20031121 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 10 | 3 | 4 |
| BOTTOM DEPTH | 5 | 5 | 5 | 10 | 3 | 4 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | 6 U | 7 U | 7 U | NA | NA | NA |
| ISOPROPYLBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| M+P-XYLENES | 18 U | 20 U | 20 U | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 6 U | 7 U | 7 U | NA | NA | NA |
| METHYLENE CHLORIDE | 5 J | 12 J | 11 J | NA | NA | NA |
| NAPHTHALENE | 6 U | 7 U | 7 U | NA | NA | NA |
| N-BUTYLBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| N-PROPYLBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| O-XYLENE | 18 U | 20 U | 20 U | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| STYRENE | 6 U | 7 U | 7 U | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 U | 7 U | 7 U | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 U | 7 U | 7 U | NA | NA | NA |
| TOLUENE | 6 U | 7 U | 7 U | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 U | 7 U | 7 U | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 U | 7 U | 7 U | NA | NA | NA |
| TRICHLOROETHENE | 6 U | 7 U | 7 U | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 6 U | 7 U | 7 U | NA | NA | NA |
| VINYL ACETATE | 6 U | 7 U | 7 U | NA | NA | NA |
| VINYL CHLORIDE | 6 U | 7 U | 7 U | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 400 U | 450 U | 450 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 400 U | 450 U | 450 U | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 990 U | 1100 U | 1100 U | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 400 U | 450 U | 450 U | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 400 U | 450 U | 450 U | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 400 U | 450 U | 450 U | NA | NA | NA |
| 2,4-DINITROPHENOL | 990 U | 1100 U | 1100 U | NA | NA | NA |
| 2,4-DINITROTOLUENE | 400 U | 450 U | 450 U | NA | NA | NA |
| 2,6-DINITROTOLUENE | 400 U | 450 U | 450 U | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 400 U | 450 U | 450 U | NA | NA | NA |
| 2-CHLOROPHENOL | 400 U | 450 U | 450 U | NA | NA | NA |
| 2-METHYLPHENOL | 400 U | 450 U | 450 U | NA | NA | NA |
| 2-NITROANILINE | 990 U | 1100 U | 1100 U | NA | NA | NA |
| 2-NITROPHENOL | 400 U | 450 U | 450 U | NA | NA | NA |
| 3&4-METHYLPHENOL | 400 U | 450 U | 450 U | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 400 U | 450 U | 450 U | NA | NA | NA |
| 3-NITROANILINE | 990 U | 1100 U | 1100 U | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 910 U | 1000 U | 1000 U | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 400 U | 450 U | 450 U | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 400 U | 450 U | 450 U | NA | NA | NA |
| 4-CHLOROANILINE | 400 U | 450 U | 450 U | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 400 U | 450 U | 450 U | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 990 U | 1100 U | 1100 U | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31-05 | SB-32-05 | SB-33-05 | F-SB-57RE-10 | F-SB-57RE-3 | F-SB-57RE-4 |
| SAMPLE DATE | 20031118 | 20031121 | 20031121 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 10 | 3 | 4 |
| BOTTOM DEPTH | 5 | 5 | 5 | 10 | 3 | 4 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 990 U | 1100 U | 1100 U | NA | NA | NA |
| ACETOPHENONE | 400 U | 450 U | 450 U | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 400 U | 450 U | 450 U | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 400 U | 450 U | 450 U | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 400 U | 450 U | 450 U | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 400 U | 450 U | 450 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 400 U | 450 U | 450 U | NA | NA | NA |
| CAPROLACTAM | 400 U | 450 U | 450 U | NA | NA | NA |
| CARBAZOLE | 400 U | 450 U | 120 J | NA | NA | NA |
| DIBENZOFURAN | 400 U | 450 U | 65 J | NA | NA | NA |
| DIETHYL PHTHALATE | 400 U | 450 U | 450 U | NA | NA | NA |
| DIMETHYL PHTHALATE | 400 U | 450 U | 450 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 400 U | 450 U | 450 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 400 U | 450 U | 450 U | NA | NA | NA |
| HEXACHLOROBENZENE | 400 U | 450 U | 450 U | NA | NA | NA |
| HEXACHLOROBUTADIENE | 400 U | 450 U | 450 U | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 400 U | 450 U | 450 U | NA | NA | NA |
| HEXACHLOROETHANE | 400 U | 450 U | 450 U | NA | NA | NA |
| ISOPHORONE | 400 U | 450 U | 450 U | NA | NA | NA |
| NITROBENZENE | 400 U | 450 U | 450 U | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 400 U | 450 U | 450 U | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 400 U | 450 U | 450 U | NA | NA | NA |
| PENTACHLOROPHENOL | 990 U | 1100 U | 1100 U | NA | NA | NA |
| PHENOL | 400 U | 450 U | 450 U | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 400 U | 450 U | 450 U | NA | NA | NA |
| ACENAPHTHENE | 400 U | 110 J | 110 J | NA | NA | NA |
| ACENAPHTHYLENE | 400 U | 450 U | 450 U | NA | NA | NA |
| ANTHRACENE | 400 U | 84 J | 260 J | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 400 U | 441 | 944 | 1.7 U | 1.4 U | 1.6 U |
| BAP EQUIVALENT-POS | 400 U | 216 | 696 | 1.7 U | 1.4 U | 1.6 U |
| BENZO(A)ANTHRACENE | 400 U | 190 J | 640 | 1.2 U | 1 U | 1.2 U |
| BENZO(A)PYRENE | 400 U | 170 J | 570 | 1.7 U | 1.4 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 400 U | 170 J | 560 | 1.6 U | 1.3 U | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 400 U | 450 U | 220 J | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 400 U | 180 J | 580 | 2.2 U | 1.8 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31-05 | SB-32-05 | SB-33-05 | F-SB-57RE-10 | F-SB-57RE-3 | F-SB-57RE-4 |
| SAMPLE DATE | 20031118 | 20031121 | 20031121 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 10 | 3 | 4 |
| BOTTOM DEPTH | 5 | 5 | 5 | 10 | 3 | 4 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 400 U | 200 J | 610 | 1.2 U | 0.98 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 400 U | 450 U | 450 U | 1.7 U | 1.4 U | 1.6 U |
| FLUORANTHENE | 400 U | 430 J | 1000 | NA | NA | NA |
| FLUORENE | 400 U | 83 J | 150 J | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 400 U | 79 J | 450 U | 2 U | 1.6 U | 1.9 U |
| NAPHTHALENE | 400 U | 95 J | 450 U | NA | NA | NA |
| PHENANTHRENE | 400 U | 380 J | 910 | NA | NA | NA |
| PYRENE | 400 U | 450 | 1000 | NA | NA | NA |
| TOTAL PAHS | 0 U | 2621 | 6610 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 59 U | 67 U | 68 U | NA | NA | NA |
| AROCLOR-1221 | 59 U | 67 U | 68 U | NA | NA | NA |
| AROCLOR-1232 | 59 U | 67 U | 68 U | NA | NA | NA |
| AROCLOR-1242 | 59 U | 67 U | 68 U | NA | NA | NA |
| AROCLOR-1248 | 59 U | 67 U | 68 U | NA | NA | NA |
| AROCLOR-1254 | 59 U | 67 U | 68 U | NA | NA | NA |
| AROCLOR-1260 | 59 U | 67 U | 68 U | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 3 UL | 3.4 UL | 3.4 UL | NA | NA | NA |
| ARSENIC | 0.59 UR | 2.5 L | 4.9 L | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31-05 | SB-32-05 | SB-33-05 | F-SB-57RE-10 | F-SB-57RE-3 | F-SB-57RE-4 |
| SAMPLE DATE | 20031118 | 20031121 | 20031121 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 10 | 3 | 4 |
| BOTTOM DEPTH | 5 | 5 | 5 | 10 | 3 | 4 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 4.9 | 3.4 U | 3.4 U | NA | NA | NA |
| CADMIUM | 3 U | 3.4 U | 3.4 U | NA | NA | NA |
| CHROMIUM | 27 L | 18 J | 23 J | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | 22 | 33 | 54 | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | 24 L | 68 | 120 | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.12 U | 1.7 | 3.3 | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | 46 L | 22 | 23 | NA | NA | NA |
| SELENIUM | 11 L | 3.4 U | 3.4 U | NA | NA | NA |
| SILVER | 3 U | 3.4 UR | 3.4 UR | NA | NA | NA |
| THALLIUM | 2.4 UL | 2.7 U | 2.7 U | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | 130 J | 140 | 180 | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 24000 U | 43000 | 27000 U | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 120 U | 130 U | 140 U | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 84 | 74 | 73 | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-57RE-5 | F-SB-57RE-6 | F-SB-57RE-7 | F-SB-57RE-8 | F-SB-57RE-9 | SB-57-05 |
| SAMPLE DATE | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 2-BUTANONE | NA | NA | NA | NA | NA | 56 U |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | 6 U |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | 6 U |
| 2-HEXANONE | NA | NA | NA | NA | NA | 56 U |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | 6 U |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | 6 U |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | 56 U |
| ACETONE | NA | NA | NA | NA | NA | 56 U |
| BENZENE | NA | NA | NA | NA | NA | 6 U |
| BROMOBENZENE | NA | NA | NA | NA | NA | 6 U |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| BROMOFORM | NA | NA | NA | NA | NA | 6 U |
| BROMOMETHANE | NA | NA | NA | NA | NA | 6 U |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | 6 U |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | 6 U |
| CHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | 6 U |
| CHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| CHLOROFORM | NA | NA | NA | NA | NA | 6 U |
| CHLOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 U |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | 6 U |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-57RE-5 | F-SB-57RE-6 | F-SB-57RE-7 | F-SB-57RE-8 | F-SB-57RE-9 | SB-57-05 |
| SAMPLE DATE | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| M+P-XYLENES | NA | NA | NA | NA | NA | 11 U |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | 6 U |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | 6 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | 6 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| O-XYLENE | NA | NA | NA | NA | NA | 6 U |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| STYRENE | NA | NA | NA | NA | NA | 6 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| TOLUENE | NA | NA | NA | NA | NA | 6 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 U |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| VINYL ACETATE | NA | NA | NA | NA | NA | 6 U |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | 6 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | 370 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | 370 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 930 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 370 U |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | 370 U |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | 370 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | 930 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | 370 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | 370 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | 370 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | 370 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | 370 U |
| 2-NITROANILINE | NA | NA | NA | NA | NA | 930 U |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | 370 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | 370 U |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | 370 U |
| 3-NITROANILINE | NA | NA | NA | NA | NA | 930 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | 860 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 370 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | 370 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | 370 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 370 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | 930 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-57RE-5 | F-SB-57RE-6 | F-SB-57RE-7 | F-SB-57RE-8 | F-SB-57RE-9 | SB-57-05 |
| SAMPLE DATE | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | 930 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | 370 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | 370 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | 370 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | 370 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | 370 U |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | 370 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | 370 U |
| CARBAZOLE | NA | NA | NA | NA | NA | 370 U |
| DIBENZOFURAN | NA | NA | NA | NA | NA | 370 U |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | 370 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | 370 U |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | 370 U |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | 370 U |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | 370 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | 370 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | 370 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | 370 U |
| ISOPHORONE | NA | NA | NA | NA | NA | 370 U |
| NITROBENZENE | NA | NA | NA | NA | NA | 370 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | 370 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | 370 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | 930 U |
| PHENOL | NA | NA | NA | NA | NA | 370 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | 370 U |
| ACENAPHTHENE | NA | NA | NA | NA | NA | 370 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | 370 U |
| ANTHRACENE | NA | NA | NA | NA | NA | 370 U |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 370 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 370 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 370 U |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 370 U |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.5 U | 370 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | 370 U |
| BENZO(K)FLUORANTHENE | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 370 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-57RE-5 | F-SB-57RE-6 | F-SB-57RE-7 | F-SB-57RE-8 | F-SB-57RE-9 | SB-57-05 |
| SAMPLE DATE | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 370 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 370 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | 370 U |
| FLUORENE | NA | NA | NA | NA | NA | 370 U |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 1.9 U | 1.8 U | 1.8 U | 370 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | 370 U |
| PHENANTHRENE | NA | NA | NA | NA | NA | 370 U |
| PYRENE | NA | NA | NA | NA | NA | 370 U |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | 22 U |
| 4,4'-DDE | NA | NA | NA | NA | NA | 22 U |
| 4,4'-DDT | NA | NA | NA | NA | NA | 22 U |
| ALDRIN | NA | NA | NA | NA | NA | 22 U |
| ALPHA-BHC | NA | NA | NA | NA | NA | 22 U |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | 22 U |
| AROCLOR-1016 | NA | NA | NA | NA | NA | 280 U |
| AROCLOR-1221 | NA | NA | NA | NA | NA | 280 U |
| AROCLOR-1232 | NA | NA | NA | NA | NA | 280 U |
| AROCLOR-1242 | NA | NA | NA | NA | NA | 280 U |
| AROCLOR-1248 | NA | NA | NA | NA | NA | 280 U |
| AROCLOR-1254 | NA | NA | NA | NA | NA | 280 U |
| AROCLOR-1260 | NA | NA | NA | NA | NA | 280 U |
| BETA-BHC | NA | NA | NA | NA | NA | 22 U |
| DELTA-BHC | NA | NA | NA | NA | NA | 22 U |
| DIELDRIN | NA | NA | NA | NA | NA | 22 U |
| ENDOSULFAN I | NA | NA | NA | NA | NA | 22 U |
| ENDOSULFAN II | NA | NA | NA | NA | NA | 22 U |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | 22 U |
| ENDRIN | NA | NA | NA | NA | NA | 22 U |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | 22 U |
| ENDRIN KETONE | NA | NA | NA | NA | NA | 22 U |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | 22 U |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | 22 U |
| HEPTACHLOR | NA | NA | NA | NA | NA | 22 U |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | 22 U |
| METHOXYCHLOR | NA | NA | NA | NA | NA | 22 U |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | 550 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | 2.7 UR |
| ARSENIC | NA | NA | NA | NA | NA | 0.65 L |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-57RE-5 | F-SB-57RE-6 | F-SB-57RE-7 | F-SB-57RE-8 | F-SB-57RE-9 | SB-57-05 |
| SAMPLE DATE | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | 2.7 U |
| CADMIUM | NA | NA | NA | NA | NA | 2.7 UL |
| CHROMIUM | NA | NA | NA | NA | NA | 8.6 L |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | 16 |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | 3.2 J |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | 0.11 UL |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | 2.7 U |
| SELENIUM | NA | NA | NA | NA | NA | 2.7 UL |
| SILVER | NA | NA | NA | NA | NA | 2.7 UR |
| THALLIUM | NA | NA | NA | NA | NA | 2.2 UL |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | 27 UL |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | 11000 U |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | 110 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-57-10 | F-SB-58RE-10 | F-SB-58RE-3 | F-SB-58RE-4 | F-SB-58RE-5 | F-SB-58RE-6 |
| SAMPLE DATE | 20040913 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 10 | 10 | 3 | 4 | 5 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 U | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 2-BUTANONE | 64 U | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 U | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 U | NA | NA | NA | NA | NA |
| 2-HEXANONE | 64 U | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 U | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 U | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 64 U | NA | NA | NA | NA | NA |
| ACETONE | 64 U | NA | NA | NA | NA | NA |
| BENZENE | 6 U | NA | NA | NA | NA | NA |
| BROMOBENZENE | 6 U | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| BROMOFORM | 6 U | NA | NA | NA | NA | NA |
| BROMOMETHANE | 6 U | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 6 U | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 U | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 U | NA | NA | NA | NA | NA |
| CHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| CHLOROFORM | 6 U | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 U | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 6 U | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-57-10 | F-SB-58RE-10 | F-SB-58RE-3 | F-SB-58RE-4 | F-SB-58RE-5 | F-SB-58RE-6 |
| SAMPLE DATE | 20040913 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 10 | 10 | 3 | 4 | 5 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| M+P-XYLENES | 13 U | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 6 U | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 6 U | NA | NA | NA | NA | NA |
| NAPHTHALENE | 6 U | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| O-XYLENE | 6 U | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| STYRENE | 6 U | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| TOLUENE | 6 U | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 U | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| VINYL ACETATE | 6 U | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 6 U | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 430 U | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 430 U | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 1100 U | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 430 U | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 430 U | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 430 U | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 1100 U | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 430 U | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 430 U | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 430 U | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 430 U | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 430 U | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 1100 U | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 430 U | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 430 U | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 430 U | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 1100 U | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 990 U | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 430 U | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 430 U | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 430 U | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 430 U | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 1100 U | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-57-10 | F-SB-58RE-10 | F-SB-58RE-3 | F-SB-58RE-4 | F-SB-58RE-5 | F-SB-58RE-6 |
| SAMPLE DATE | 20040913 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 10 | 10 | 3 | 4 | 5 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 1100 U | NA | NA | NA | NA | NA |
| ACETOPHENONE | 430 U | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 430 U | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 430 U | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 430 U | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 430 U | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 430 U | NA | NA | NA | NA | NA |
| CAPROLACTAM | 430 U | NA | NA | NA | NA | NA |
| CARBAZOLE | 430 U | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 430 U | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 430 U | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 430 U | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 430 U | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 430 U | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 430 U | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 430 U | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 430 U | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 430 U | NA | NA | NA | NA | NA |
| ISOPHORONE | 430 U | NA | NA | NA | NA | NA |
| NITROBENZENE | 430 U | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 430 U | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 430 U | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 1100 U | NA | NA | NA | NA | NA |
| PHENOL | 670 | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 430 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 430 U | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 430 U | NA | NA | NA | NA | NA |
| ANTHRACENE | 430 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 430 U | 41.6 | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 430 U | 40.7 | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 430 U | 35 | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 430 U | 30 | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 430 U | 42 | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 430 U | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 430 U | 17 | 2 U | 2 U | 1.9 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-57-10 | F-SB-58RE-10 | F-SB-58RE-3 | F-SB-58RE-4 | F-SB-58RE-5 | F-SB-58RE-6 |
| SAMPLE DATE | 20040913 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 10 | 10 | 3 | 4 | 5 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 430 U | 40 | 1.1 U | 1 U | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 430 U | 1.8 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 430 U | NA | NA | NA | NA | NA |
| FLUORENE | 430 U | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 430 U | 28 | 1.8 U | 1.7 U | 1.7 U | 1.7 U |
| NAPHTHALENE | 430 U | NA | NA | NA | NA | NA |
| PHENANTHRENE | 430 U | NA | NA | NA | NA | NA |
| PYRENE | 430 U | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 192 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 320 U | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 320 U | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 320 U | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 320 U | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 320 U | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 320 U | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 U | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 3.1 UR | NA | NA | NA | NA | NA |
| ARSENIC | 1.8 L | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-57-10 | F-SB-58RE-10 | F-SB-58RE-3 | F-SB-58RE-4 | F-SB-58RE-5 | F-SB-58RE-6 |
| SAMPLE DATE | 20040913 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 10 | 10 | 3 | 4 | 5 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 3.1 U | NA | NA | NA | NA | NA |
| CADMIUM | 3.1 UL | NA | NA | NA | NA | NA |
| CHROMIUM | 9.5 L | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | 6.4 | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | 3.7 J | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.12 UL | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | 3.8 K | NA | NA | NA | NA | NA |
| SELENIUM | 3.1 UL | NA | NA | NA | NA | NA |
| SILVER | 3.1 UR | NA | NA | NA | NA | NA |
| THALLIUM | 2.4 UL | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | 31 UL | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 12000 U | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 130 U | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RE-7 | F-SB-58RE-8 | F-SB-58RE-8-AVG | F-SB-58RE-8-D | F-SB-58RE-9 | SB-58-05 |
| SAMPLE DATE | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 8 | 8 | 9 | 5 |
| BOTTOM DEPTH | 7 | 8 | 8 | 8 | 9 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 2-BUTANONE | NA | NA | NA | NA | NA | 63 U |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | 6 U |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | 6 U |
| 2-HEXANONE | NA | NA | NA | NA | NA | 63 U |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | 6 U |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | 6 U |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | 63 U |
| ACETONE | NA | NA | NA | NA | NA | 63 U |
| BENZENE | NA | NA | NA | NA | NA | 6 U |
| BROMOBENZENE | NA | NA | NA | NA | NA | 6 U |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| BROMOFORM | NA | NA | NA | NA | NA | 6 U |
| BROMOMETHANE | NA | NA | NA | NA | NA | 6 U |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | 6 U |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | 6 U |
| CHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | 6 U |
| CHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| CHLOROFORM | NA | NA | NA | NA | NA | 6 U |
| CHLOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 U |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | 6 U |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RE-7 | F-SB-58RE-8 | F-SB-58RE-8-AVG | F-SB-58RE-8-D | F-SB-58RE-9 | SB-58-05 |
| SAMPLE DATE | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 8 | 8 | 9 | 5 |
| BOTTOM DEPTH | 7 | 8 | 8 | 8 | 9 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| M+P-XYLENES | NA | NA | NA | NA | NA | 13 U |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | 6 U |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | 6 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | 6 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| O-XYLENE | NA | NA | NA | NA | NA | 6 U |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| STYRENE | NA | NA | NA | NA | NA | 6 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| TOLUENE | NA | NA | NA | NA | NA | 6 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 U |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| VINYL ACETATE | NA | NA | NA | NA | NA | 6 U |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | 6 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | 420 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | 420 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 1100 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 420 U |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | 420 U |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | 420 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | 1100 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | 420 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | 420 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | 420 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | 420 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | 420 U |
| 2-NITROANILINE | NA | NA | NA | NA | NA | 1100 U |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | 420 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | 420 U |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | 420 U |
| 3-NITROANILINE | NA | NA | NA | NA | NA | 1100 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | 970 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 420 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | 420 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | 420 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 420 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | 1100 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RE-7 | F-SB-58RE-8 | F-SB-58RE-8-AVG | F-SB-58RE-8-D | F-SB-58RE-9 | SB-58-05 |
| SAMPLE DATE | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 8 | 8 | 9 | 5 |
| BOTTOM DEPTH | 7 | 8 | 8 | 8 | 9 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | 1100 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | 420 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | 420 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | 420 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | 420 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | 420 U |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | 420 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | 420 U |
| CARBAZOLE | NA | NA | NA | NA | NA | 420 U |
| DIBENZOFURAN | NA | NA | NA | NA | NA | 420 U |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | 420 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | 62 J |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | 420 U |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | 420 U |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | 420 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | 420 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | 420 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | 420 U |
| ISOPHORONE | NA | NA | NA | NA | NA | 420 U |
| NITROBENZENE | NA | NA | NA | NA | NA | 420 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | 420 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | 420 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | 1100 U |
| PHENOL | NA | NA | NA | NA | NA | 420 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | 420 U |
| ACENAPHTHENE | NA | NA | NA | NA | NA | 420 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | 420 U |
| ANTHRACENE | NA | NA | NA | NA | NA | 420 U |
| BAP EQUIVALENT-HALFND | 158 | 1.6 U | 6.2 | 11.6 | 438 | 331 |
| BAP EQUIVALENT-POS | 157 | 1.6 U | 5.8 | 10.7 | 437 | 100 |
| BENZO(A)ANTHRACENE | 98 | 1.2 U | 1.2 U | 1.2 U | 290 | 99 J |
| BENZO(A)PYRENE | 120 | 1.6 U | 4.9 | 9 | 340 | 83 J |
| BENZO(B)FLUORANTHENE | 180 | 1.5 U | 1.5 U | 1.5 U | 460 | 66 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | 420 U |
| BENZO(K)FLUORANTHENE | 77 | 2.1 U | 2.1 U | 2.1 U | 180 | 86 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RE-7 | F-SB-58RE-8 | F-SB-58RE-8-AVG | F-SB-58RE-8-D | F-SB-58RE-9 | SB-58-05 |
| SAMPLE DATE | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 8 | 8 | 9 | 5 |
| BOTTOM DEPTH | 7 | 8 | 8 | 8 | 9 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 98 | 1.1 U | 1.1 U | 1.1 U | 310 | 100 J |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 420 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | 150 J |
| FLUORENE | NA | NA | NA | NA | NA | 420 U |
| INDENO(1,2,3-CD)PYRENE | 87 | 1.9 UJ | 8.975 | 17 J | 200 | 420 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | 420 U |
| PHENANTHRENE | NA | NA | NA | NA | NA | 80 J |
| PYRENE | NA | NA | NA | NA | NA | 140 J |
| TOTAL PAHS | 660 | 0 U | 13 | 26 | 1780 | 804 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | 25 U |
| 4,4'-DDE | NA | NA | NA | NA | NA | 25 U |
| 4,4'-DDT | NA | NA | NA | NA | NA | 25 U |
| ALDRIN | NA | NA | NA | NA | NA | 25 U |
| ALPHA-BHC | NA | NA | NA | NA | NA | 25 U |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | 25 U |
| AROCLOR-1016 | NA | NA | NA | NA | NA | 310 U |
| AROCLOR-1221 | NA | NA | NA | NA | NA | 310 U |
| AROCLOR-1232 | NA | NA | NA | NA | NA | 310 U |
| AROCLOR-1242 | NA | NA | NA | NA | NA | 310 U |
| AROCLOR-1248 | NA | NA | NA | NA | NA | 310 U |
| AROCLOR-1254 | NA | NA | NA | NA | NA | 310 U |
| AROCLOR-1260 | NA | NA | NA | NA | NA | 310 U |
| BETA-BHC | NA | NA | NA | NA | NA | 25 U |
| DELTA-BHC | NA | NA | NA | NA | NA | 25 U |
| DIELDRIN | NA | NA | NA | NA | NA | 25 U |
| ENDOSULFAN I | NA | NA | NA | NA | NA | 25 U |
| ENDOSULFAN II | NA | NA | NA | NA | NA | 25 U |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | 25 U |
| ENDRIN | NA | NA | NA | NA | NA | 25 U |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | 25 U |
| ENDRIN KETONE | NA | NA | NA | NA | NA | 25 U |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | 25 U |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | 25 U |
| HEPTACHLOR | NA | NA | NA | NA | NA | 25 U |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | 25 U |
| METHOXYCHLOR | NA | NA | NA | NA | NA | 25 U |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | 620 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | 3.1 UR |
| ARSENIC | NA | NA | NA | NA | NA | 2.3 L |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RE-7 | F-SB-58RE-8 | F-SB-58RE-8-AVG | F-SB-58RE-8-D | F-SB-58RE-9 | SB-58-05 |
| SAMPLE DATE | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 8 | 8 | 9 | 5 |
| BOTTOM DEPTH | 7 | 8 | 8 | 8 | 9 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | 3.1 U |
| CADMIUM | NA | NA | NA | NA | NA | 3.1 UL |
| CHROMIUM | NA | NA | NA | NA | NA | 19 L |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | 13 |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | 9.3 J |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | 0.12 UL |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | 8.6 |
| SELENIUM | NA | NA | NA | NA | NA | 3.1 UL |
| SILVER | NA | NA | NA | NA | NA | 3.1 UR |
| THALLIUM | NA | NA | NA | NA | NA | 2.5 UL |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | 68 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | 13000 U |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | 130 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058A | SB-058A | SB-058A | SB-058A | SB-058B |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-58-10 | F-SB-58REA-10 | F-SB-58REA-4 | F-SB-58REA-6 | F-SB-58REA-8 | F-SB-58REB-10 |
| SAMPLE DATE | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 10 | 10 | 4 | 6 | 8 | 10 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 U | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 2-BUTANONE | 63 U | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 U | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 U | NA | NA | NA | NA | NA |
| 2-HEXANONE | 63 U | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 U | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 U | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 63 U | NA | NA | NA | NA | NA |
| ACETONE | 63 U | NA | NA | NA | NA | NA |
| BENZENE | 6 U | NA | NA | NA | NA | NA |
| BROMOBENZENE | 6 U | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| BROMOFORM | 6 U | NA | NA | NA | NA | NA |
| BROMOMETHANE | 6 U | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 6 U | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 U | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 U | NA | NA | NA | NA | NA |
| CHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| CHLOROFORM | 6 U | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 U | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 6 U | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058A | SB-058A | SB-058A | SB-058A | SB-058B |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-58-10 | F-SB-58REA-10 | F-SB-58REA-4 | F-SB-58REA-6 | F-SB-58REA-8 | F-SB-58REB-10 |
| SAMPLE DATE | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 10 | 10 | 4 | 6 | 8 | 10 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| M+P-XYLENES | 13 U | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 6 U | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 6 U | NA | NA | NA | NA | NA |
| NAPHTHALENE | 6 U | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| O-XYLENE | 6 U | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| STYRENE | 6 U | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| TOLUENE | 6 U | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 U | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| VINYL ACETATE | 6 U | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 6 U | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 420 U | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 420 U | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 1100 U | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 420 U | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 420 U | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 420 U | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 1100 U | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 420 U | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 420 U | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 420 U | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 420 U | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 420 U | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 1100 U | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 420 U | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 420 U | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 420 U | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 1100 U | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 980 U | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 420 U | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 420 U | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 420 U | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 420 U | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 1100 U | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058A | SB-058A | SB-058A | SB-058A | SB-058B |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-58-10 | F-SB-58REA-10 | F-SB-58REA-4 | F-SB-58REA-6 | F-SB-58REA-8 | F-SB-58REB-10 |
| SAMPLE DATE | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 10 | 10 | 4 | 6 | 8 | 10 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 1100 U | NA | NA | NA | NA | NA |
| ACETOPHENONE | 420 U | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 420 U | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 420 U | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 420 U | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 420 U | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 420 U | NA | NA | NA | NA | NA |
| CAPROLACTAM | 420 U | NA | NA | NA | NA | NA |
| CARBAZOLE | 420 U | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 420 U | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 420 U | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 420 U | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 420 U | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 420 U | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 420 U | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 420 U | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 420 U | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 420 U | NA | NA | NA | NA | NA |
| ISOPHORONE | 420 U | NA | NA | NA | NA | NA |
| NITROBENZENE | 420 U | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 420 U | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 420 U | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 1100 U | NA | NA | NA | NA | NA |
| PHENOL | 690 | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 420 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 420 U | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 420 U | NA | NA | NA | NA | NA |
| ANTHRACENE | 420 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 420 U | 27.2 | 15.9 | 121 | 29.8 | 15.7 |
| BAP EQUIVALENT-POS | 420 U | 26.4 | 15.0 | 121 | 29.0 | 14.6 |
| BENZO(A)ANTHRACENE | 420 U | 11 | 15 | 74 | 22 | 13 |
| BENZO(A)PYRENE | 420 U | 20 | 12 | 73 | 22 | 12 |
| BENZO(B)FLUORANTHENE | 420 U | 30 | 15 | 84 | 35 | 13 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 420 U | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 420 U | 2 U | 2.1 U | 26 | 9.7 | 2.6 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058A | SB-058A | SB-058A | SB-058A | SB-058B |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-58-10 | F-SB-58REA-10 | F-SB-58REA-4 | F-SB-58REA-6 | F-SB-58REA-8 | F-SB-58REB-10 |
| SAMPLE DATE | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 10 | 10 | 4 | 6 | 8 | 10 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 420 U | 15 | 15 | 82 | 29 | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 420 U | 1.5 U | 1.6 U | 27 | 1.6 U | 2 U |
| FLUORANTHENE | 420 U | NA | NA | NA | NA | NA |
| FLUORENE | 420 U | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 420 U | 23 | 1.8 U | 47 | 12 | 2.3 U |
| NAPHTHALENE | 420 U | NA | NA | NA | NA | NA |
| PHENANTHRENE | 420 U | NA | NA | NA | NA | NA |
| PYRENE | 420 U | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 99 | 57 | 413 | 129.7 | 38 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 310 U | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 310 U | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 310 U | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 310 U | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 310 U | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 310 U | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 310 U | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 2.9 UR | NA | NA | NA | NA | NA |
| ARSENIC | 4.1 L | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058A | SB-058A | SB-058A | SB-058A | SB-058B |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-58-10 | F-SB-58REA-10 | F-SB-58REA-4 | F-SB-58REA-6 | F-SB-58REA-8 | F-SB-58REB-10 |
| SAMPLE DATE | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 10 | 10 | 4 | 6 | 8 | 10 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 2.9 U | NA | NA | NA | NA | NA |
| CADMIUM | 2.9 UL | NA | NA | NA | NA | NA |
| CHROMIUM | 15 L | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | 21 | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | 7.9 J | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.11 UL | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | 18 | NA | NA | NA | NA | NA |
| SELENIUM | 2.9 UL | NA | NA | NA | NA | NA |
| SILVER | 2.9 UR | NA | NA | NA | NA | NA |
| THALLIUM | 2.3 UL | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | 41 J | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 13000 U | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 130 U | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058B | SB-058B | SB-058B | SB-058B | SB-058B | SB-058C |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REB-4 | F-SB-58REB-4-AVG | F-SB-58REB-4-D | F-SB-58REB-6 | F-SB-58REB-8 | F-SB-58REC-10 |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 4 | 4 | 4 | 6 | 8 | 10 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058B | SB-058B | SB-058B | SB-058B | SB-058B | SB-058C |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REB-4 | F-SB-58REB-4-AVG | F-SB-58REB-4-D | F-SB-58REB-6 | F-SB-58REB-8 | F-SB-58REC-10 |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 4 | 4 | 4 | 6 | 8 | 10 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058B | SB-058B | SB-058B | SB-058B | SB-058B | SB-058C |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REB-4 | F-SB-58REB-4-AVG | F-SB-58REB-4-D | F-SB-58REB-6 | F-SB-58REB-8 | F-SB-58REC-10 |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 4 | 4 | 4 | 6 | 8 | 10 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 40.6 | 29.8 | 19.1 | 84.8 | 2.7 | 16.7 |
| BAP EQUIVALENT-POS | 39.8 | 29.1 | 18.3 | 84.8 | 0.9 | 15.7 |
| BENZO(A)ANTHRACENE | 23 | 18.5 | 14 | 60 | 1.1 U | 1.2 U |
| BENZO(A)PYRENE | 30 | 22 | 14 | 58 | 1.6 U | 14 |
| BENZO(B)FLUORANTHENE | 44 | 30.5 | 17 | 77 | 9 | 17 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 12 | 11.5 | 11 | 30 | 2 U | 2.2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058B | SB-058B | SB-058B | SB-058B | SB-058B | SB-058C |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REB-4 | F-SB-58REB-4-AVG | F-SB-58REB-4-D | F-SB-58REB-6 | F-SB-58REB-8 | F-SB-58REC-10 |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 4 | 4 | 4 | 6 | 8 | 10 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 21 | 18 | 15 | 65 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 9.3 | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 30 | 20.5 | 11 | 34 | 1.8 U | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 160 | 121 | 82 | 333.3 | 9 | 31 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058B | SB-058B | SB-058B | SB-058B | SB-058B | SB-058C |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REB-4 | F-SB-58REB-4-AVG | F-SB-58REB-4-D | F-SB-58REB-6 | F-SB-58REB-8 | F-SB-58REC-10 |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 4 | 4 | 4 | 6 | 8 | 10 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058C | SB-058C | SB-058C | SB-058D | SB-058D | SB-058D |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REC-4 | F-SB-58REC-6 | F-SB-58REC-8 | F-SB-58RED-10 | F-SB-58RED-4 | F-SB-58RED-6 |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058C | SB-058C | SB-058C | SB-058D | SB-058D | SB-058D |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REC-4 | F-SB-58REC-6 | F-SB-58REC-8 | F-SB-58RED-10 | F-SB-58RED-4 | F-SB-58RED-6 |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058C | SB-058C | SB-058C | SB-058D | SB-058D | SB-058D |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REC-4 | F-SB-58REC-6 | F-SB-58REC-8 | F-SB-58RED-10 | F-SB-58RED-4 | F-SB-58RED-6 |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 25.0 | 43.6 | 4.9 | 16.7 | 92.6 | 475 |
| BAP EQUIVALENT-POS | 24.2 | 42.8 | 3.2 | 15.8 | 91.9 | 475 |
| BENZO(A)ANTHRACENE | 7.8 J | 23 | 8.4 | 1.1 U | 55 | 360 |
| BENZO(A)PYRENE | 19 | 33 | 1.6 U | 14 | 71 | 320 |
| BENZO(B)FLUORANTHENE | 23 | 44 | 23 | 18 | 100 | 380 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 12 | 2.1 U | 2 U | 37 | 160 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058C | SB-058C | SB-058C | SB-058D | SB-058D | SB-058D |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REC-4 | F-SB-58REC-6 | F-SB-58REC-8 | F-SB-58RED-10 | F-SB-58RED-4 | F-SB-58RED-6 |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 10 | 23 | 13 | 1.1 U | 63 | 300 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U | 62 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 21 | 30 | 1.9 U | 1.8 U | 50 | 170 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 80.8 | 165 | 44.4 | 32 | 376 | 1752 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058C | SB-058C | SB-058C | SB-058D | SB-058D | SB-058D |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REC-4 | F-SB-58REC-6 | F-SB-58REC-8 | F-SB-58RED-10 | F-SB-58RED-4 | F-SB-58RED-6 |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058D | SB-059 | SB-059 | SB-060 | SB-060 | SB-060 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RED-8 | SB-59-05 | SB-59-10 | D-SB-60RE-10 | D-SB-60RE-3 | D-SB-60RE-4 |
| SAMPLE DATE | 20091103 | 20040923 | 20040923 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 5 | 10 | 10 | 3 | 4 |
| BOTTOM DEPTH | 8 | 5 | 10 | 10 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA |
| 2-BUTANONE | NA | 56 U | 58 U | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | 6 U | 6 U | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | 6 U | 6 U | NA | NA | NA |
| 2-HEXANONE | NA | 56 U | 58 U | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | 6 U | 6 U | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | 6 U | 6 U | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | 56 U | 58 U | NA | NA | NA |
| ACETONE | NA | 56 U | 58 U | NA | NA | NA |
| BENZENE | NA | 6 U | 6 U | NA | NA | NA |
| BROMOBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| BROMOFORM | NA | 6 U | 6 U | NA | NA | NA |
| BROMOMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| CARBON DISULFIDE | NA | 6 U | 6 U | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | 6 U | 6 U | NA | NA | NA |
| CHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| CHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| CHLOROFORM | NA | 6 U | 6 U | NA | NA | NA |
| CHLOROMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | 6 U | 6 U | NA | NA | NA |
| DIBROMOMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058D | SB-059 | SB-059 | SB-060 | SB-060 | SB-060 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RED-8 | SB-59-05 | SB-59-10 | D-SB-60RE-10 | D-SB-60RE-3 | D-SB-60RE-4 |
| SAMPLE DATE | 20091103 | 20040923 | 20040923 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 5 | 10 | 10 | 3 | 4 |
| BOTTOM DEPTH | 8 | 5 | 10 | 10 | 3 | 4 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| M+P-XYLENES | NA | 11 U | 12 U | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | 6 U | 6 U | NA | NA | NA |
| METHYLENE CHLORIDE | NA | 6 J | 11 J | NA | NA | NA |
| NAPHTHALENE | NA | 6 U | 6 U | NA | NA | NA |
| N-BUTYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| N-PROPYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| O-XYLENE | NA | 6 U | 6 U | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| STYRENE | NA | 6 U | 6 U | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA |
| TOLUENE | NA | 6 U | 6 U | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | 6 U | 6 U | NA | NA | NA |
| TRICHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| VINYL ACETATE | NA | 6 U | 6 U | NA | NA | NA |
| VINYL CHLORIDE | NA | 6 U | 6 U | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | 3800 U | 3900 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | 3800 U | 3900 U | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | 9500 U | 9900 U | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | 3800 U | 3900 U | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | 3800 U | 3900 U | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | 3800 U | 3900 U | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | 9500 U | 9900 U | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | 3800 U | 3900 U | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | 3800 U | 3900 U | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | 3800 U | 3900 U | NA | NA | NA |
| 2-CHLOROPHENOL | NA | 3800 U | 3900 U | NA | NA | NA |
| 2-METHYLPHENOL | NA | 3800 U | 3900 U | NA | NA | NA |
| 2-NITROANILINE | NA | 9500 U | 9900 U | NA | NA | NA |
| 2-NITROPHENOL | NA | 3800 U | 3900 U | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | 3800 U | 3900 U | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | 3800 U | 3900 U | NA | NA | NA |
| 3-NITROANILINE | NA | 9500 U | 9900 U | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | 8700 U | 9100 U | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | 3800 U | 3900 U | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | 3800 U | 3900 U | NA | NA | NA |
| 4-CHLOROANILINE | NA | 3800 U | 3900 U | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | 3800 U | 3900 U | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | 9500 U | 9900 U | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058D | SB-059 | SB-059 | SB-060 | SB-060 | SB-060 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RED-8 | SB-59-05 | SB-59-10 | D-SB-60RE-10 | D-SB-60RE-3 | D-SB-60RE-4 |
| SAMPLE DATE | 20091103 | 20040923 | 20040923 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 5 | 10 | 10 | 3 | 4 |
| BOTTOM DEPTH | 8 | 5 | 10 | 10 | 3 | 4 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | 9500 U | 9900 U | NA | NA | NA |
| ACETOPHENONE | NA | 3800 U | 3900 U | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | 3800 U | 3900 U | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | 3800 U | 3900 U | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | 3800 U | 3900 U | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | 3800 U | 3900 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | 3800 U | 3900 U | NA | NA | NA |
| CAPROLACTAM | NA | 3800 U | 3900 U | NA | NA | NA |
| CARBAZOLE | NA | 3800 U | 3900 U | NA | NA | NA |
| DIBENZOFURAN | NA | 3800 U | 3900 U | NA | NA | NA |
| DIETHYL PHTHALATE | NA | 3800 U | 3900 U | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | 3800 U | 3900 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | 3800 U | 3900 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | 3800 U | 3900 U | NA | NA | NA |
| HEXACHLOROBENZENE | NA | 3800 U | 3900 U | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | 3800 U | 3900 U | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | 3800 U | 3900 U | NA | NA | NA |
| HEXACHLOROETHANE | NA | 3800 U | 3900 U | NA | NA | NA |
| ISOPHORONE | NA | 3800 U | 3900 U | NA | NA | NA |
| NITROBENZENE | NA | 3800 U | 3900 U | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | 3800 U | 3900 U | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | 3800 U | 3900 U | NA | NA | NA |
| PENTACHLOROPHENOL | NA | 9500 U | 9900 U | NA | NA | NA |
| PHENOL | NA | 3800 U | 3900 U | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | 3800 U | 3900 U | NA | NA | NA |
| ACENAPHTHENE | NA | 3800 U | 3900 U | NA | NA | NA |
| ACENAPHTHYLENE | NA | 3800 U | 3900 U | NA | NA | NA |
| ANTHRACENE | NA | 3800 U | 3900 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 38.0 | 3098 | 2918 | 1.5 U | 3.4 | 27.3 |
| BAP EQUIVALENT-POS | 37.2 | 799 | 773 | 1.5 U | 1.8 | 26.5 |
| BENZO(A)ANTHRACENE | 24 | 480 J | 490 J | 1.1 U | 8.8 | 20 |
| BENZO(A)PYRENE | 29 | 750 J | 670 J | 1.5 U | 1.5 U | 21 |
| BENZO(B)FLUORANTHENE | 34 | 3800 U | 480 J | 1.4 U | 9.2 | 22 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | 3800 U | 3900 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 10 | 3800 U | 560 J | 1.9 U | 2 U | 10 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058D | SB-059 | SB-059 | SB-060 | SB-060 | SB-060 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RED-8 | SB-59-05 | SB-59-10 | D-SB-60RE-10 | D-SB-60RE-3 | D-SB-60RE-4 |
| SAMPLE DATE | 20091103 | 20040923 | 20040923 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 5 | 10 | 10 | 3 | 4 |
| BOTTOM DEPTH | 8 | 5 | 10 | 10 | 3 | 4 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 24 | 760 J | 690 J | 1 U | 9.7 | 26 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 3800 U | 3900 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | 730 J | 670 J | NA | NA | NA |
| FLUORENE | NA | 3800 U | 3900 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 23 | 3800 U | 3900 U | 1.7 U | 1.8 U | 12 |
| NAPHTHALENE | NA | 3800 U | 3900 U | NA | NA | NA |
| PHENANTHRENE | NA | 3800 U | 3900 U | NA | NA | NA |
| PYRENE | NA | 1700 J | 1500 J | NA | NA | NA |
| TOTAL PAHS | 144 | 4420 | 5060 | 0 U | 27.7 | 111 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | 280 U | 290 U | NA | NA | NA |
| AROCLOR-1221 | NA | 280 U | 290 U | NA | NA | NA |
| AROCLOR-1232 | NA | 280 U | 290 U | NA | NA | NA |
| AROCLOR-1242 | NA | 280 U | 290 U | NA | NA | NA |
| AROCLOR-1248 | NA | 280 U | 290 U | NA | NA | NA |
| AROCLOR-1254 | NA | 280 U | 290 U | NA | NA | NA |
| AROCLOR-1260 | NA | 280 U | 290 U | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | 0 U | 0 U | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | 2.6 UL | 2.9 UL | NA | NA | NA |
| ARSENIC | NA | 3.9 | 2.5 | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058D | SB-059 | SB-059 | SB-060 | SB-060 | SB-060 |
|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RED-8 | SB-59-05 | SB-59-10 | D-SB-60RE-10 | D-SB-60RE-3 | D-SB-60RE-4 |
| SAMPLE DATE | 20091103 | 20040923 | 20040923 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 5 | 10 | 10 | 3 | 4 |
| BOTTOM DEPTH | 8 | 5 | 10 | 10 | 3 | 4 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | 2.6 U | 2.9 U | NA | NA | NA |
| CADMIUM | NA | 2.6 U | 2.9 U | NA | NA | NA |
| CHROMIUM | NA | 30 J | 14 J | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | 8.3 | 8.1 | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | 9.5 | 6.4 | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | 0.11 U | 0.11 U | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | 8 | 7.4 | NA | NA | NA |
| SELENIUM | NA | 2.6 U | 2.9 U | NA | NA | NA |
| SILVER | NA | 2.6 UR | 2.9 UR | NA | NA | NA |
| THALLIUM | NA | 2.1 U | 2.3 U | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | 26 UL | 29 UL | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | 12000 | 12000 U | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | 110 U | 120 U | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-5 | D-SB-60RE-6 | D-SB-60RE-7 | D-SB-60RE-8 | D-SB-60RE-8-AVG | D-SB-60RE-8-D |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 8 | 8 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 8 | 8 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-5 | D-SB-60RE-6 | D-SB-60RE-7 | D-SB-60RE-8 | D-SB-60RE-8-AVG | D-SB-60RE-8-D |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 8 | 8 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 8 | 8 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-5 | D-SB-60RE-6 | D-SB-60RE-7 | D-SB-60RE-8 | D-SB-60RE-8-AVG | D-SB-60RE-8-D |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 8 | 8 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 8 | 8 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2034 | 1.6 U | 1.7 U | 1.7 U | 1.65 U | 1.6 U |
| BAP EQUIVALENT-POS | 2034 | 1.6 U | 1.7 U | 1.7 U | 1.65 U | 1.6 U |
| BENZO(A)ANTHRACENE | 1700 | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 1400 | 1.6 U | 1.7 U | 1.7 U | 1.65 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 1800 | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 660 | 2.1 U | 2.2 U | 2.2 U | 2.15 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-5 | D-SB-60RE-6 | D-SB-60RE-7 | D-SB-60RE-8 | D-SB-60RE-8-AVG | D-SB-60RE-8-D |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 8 | 8 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 8 | 8 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1300 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 210 | 1.6 U | 1.7 U | 1.7 U | 1.65 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 660 | 1.8 U | 1.9 U | 1.9 U | 1.85 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 7730 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-5 | D-SB-60RE-6 | D-SB-60RE-7 | D-SB-60RE-8 | D-SB-60RE-8-AVG | D-SB-60RE-8-D |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 8 | 8 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 8 | 8 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060A | SB-060A | SB-060A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-9 | SB-60-05 | SB-60-10 | D-SB-60REA-3 | D-SB-60REA-3-AVG | D-SB-60REA-3-D |
| SAMPLE DATE | 20090915 | 20040924 | 20040924 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 3 | 3 | 3 |
| BOTTOM DEPTH | 9 | 5 | 10 | 3 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | 6 UL | 6 UL | NA | NA | NA |
| 2-BUTANONE | NA | 60 UL | 59 UL | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | 6 UL | 6 UL | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | 6 UL | 6 UL | NA | NA | NA |
| 2-HEXANONE | NA | 60 UL | 59 UL | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | 6 UL | 6 UL | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | 6 UL | 6 UL | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | 60 UL | 59 UL | NA | NA | NA |
| ACETONE | NA | 60 UL | 59 UL | NA | NA | NA |
| BENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| BROMOBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| BROMOFORM | NA | 6 UL | 6 UL | NA | NA | NA |
| BROMOMETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| CARBON DISULFIDE | NA | 6 UL | 6 UL | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | 6 UL | 6 UL | NA | NA | NA |
| CHLOROBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| CHLOROETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| CHLOROFORM | NA | 6 UL | 6 UL | NA | NA | NA |
| CHLOROMETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | 6 UL | 6 UL | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | 6 UL | 6 UL | NA | NA | NA |
| DIBROMOMETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-060 | SB-060 | SB-060 | SB-060A | SB-060A | SB-060A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-9 | SB-60-05 | SB-60-10 | D-SB-60REA-3 | D-SB-60REA-3-AVG | D-SB-60REA-3-D |
| SAMPLE DATE | 20090915 | 20040924 | 20040924 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 3 | 3 | 3 |
| BOTTOM DEPTH | 9 | 5 | 10 | 3 | 3 | 3 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| M+P-XYLENES | NA | 12 UL | 12 UL | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | 6 UL | 6 UL | NA | NA | NA |
| METHYLENE CHLORIDE | NA | 6 UL | 6 UL | NA | NA | NA |
| NAPHTHALENE | NA | 6 UL | 6 UL | NA | NA | NA |
| N-BUTYLBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| N-PROPYLBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| O-XYLENE | NA | 6 UL | 6 UL | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| STYRENE | NA | 6 UL | 6 UL | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | 6 UL | 6 UL | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | 6 UL | 6 UL | NA | NA | NA |
| TOLUENE | NA | 6 UL | 6 UL | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | 6 UL | 6 UL | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | 6 UL | 6 UL | NA | NA | NA |
| TRICHLOROETHENE | NA | 6 UL | 6 UL | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | 6 UL | 6 UL | NA | NA | NA |
| VINYL ACETATE | NA | 6 UL | 6 UL | NA | NA | NA |
| VINYL CHLORIDE | NA | 6 UL | 6 UL | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | 420 U | 400 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | 420 U | 400 U | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | 1000 U | 1000 U | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | 1000 U | 1000 U | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | 420 U | 400 U | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | 420 U | 400 U | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | 420 U | 400 U | NA | NA | NA |
| 2-CHLOROPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 2-METHYLPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 2-NITROANILINE | NA | 1000 U | 1000 U | NA | NA | NA |
| 2-NITROPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | 420 U | 400 U | NA | NA | NA |
| 3-NITROANILINE | NA | 1000 U | 1000 U | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | 960 U | 920 U | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | 420 U | 400 U | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 4-CHLOROANILINE | NA | 420 U | 400 U | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | 420 U | 400 U | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | 1000 U | 1000 U | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060A | SB-060A | SB-060A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-9 | SB-60-05 | SB-60-10 | D-SB-60REA-3 | D-SB-60REA-3-AVG | D-SB-60REA-3-D |
| SAMPLE DATE | 20090915 | 20040924 | 20040924 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 3 | 3 | 3 |
| BOTTOM DEPTH | 9 | 5 | 10 | 3 | 3 | 3 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | 1000 U | 1000 U | NA | NA | NA |
| ACETOPHENONE | NA | 420 U | 400 U | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | 420 U | 400 U | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | 420 U | 400 U | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | 420 U | 400 U | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | 420 U | 400 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | 420 U | 400 U | NA | NA | NA |
| CAPROLACTAM | NA | 420 U | 400 U | NA | NA | NA |
| CARBAZOLE | NA | 420 U | 400 U | NA | NA | NA |
| DIBENZOFURAN | NA | 420 U | 400 U | NA | NA | NA |
| DIETHYL PHTHALATE | NA | 420 U | 400 U | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | 420 U | 400 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | 420 U | 400 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | 420 U | 400 U | NA | NA | NA |
| HEXACHLOROBENZENE | NA | 420 U | 400 U | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | 420 U | 400 U | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | 420 U | 400 U | NA | NA | NA |
| HEXACHLOROETHANE | NA | 420 U | 400 U | NA | NA | NA |
| ISOPHORONE | NA | 420 U | 400 U | NA | NA | NA |
| NITROBENZENE | NA | 420 U | 400 U | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | 420 U | 400 U | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | 420 U | 400 U | NA | NA | NA |
| PENTACHLOROPHENOL | NA | 1000 U | 1000 U | NA | NA | NA |
| PHENOL | NA | 420 U | 400 U | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | 420 U | 400 U | NA | NA | NA |
| ACENAPHTHENE | NA | 420 U | 400 U | NA | NA | NA |
| ACENAPHTHYLENE | NA | 420 U | 400 U | NA | NA | NA |
| ANTHRACENE | NA | 420 U | 400 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 420 U | 400 U | 361 | 852 | 1343 |
| BAP EQUIVALENT-POS | 1.5 U | 420 U | 400 U | 361 | 852 | 1343 |
| BENZO(A)ANTHRACENE | 1.1 U | 420 U | 400 U | 240 J | 495 | 750 J |
| BENZO(A)PYRENE | 1.5 U | 420 U | 400 U | 240 J | 530 | 820 J |
| BENZO(B)FLUORANTHENE | 1.4 U | 420 U | 400 U | 300 J | 900 | 1500 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | 420 U | 400 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 420 U | 400 U | 140 J | 310 | 480 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060A | SB-060A | SB-060A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-9 | SB-60-05 | SB-60-10 | D-SB-60REA-3 | D-SB-60REA-3-AVG | D-SB-60REA-3-D |
| SAMPLE DATE | 20090915 | 20040924 | 20040924 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 3 | 3 | 3 |
| BOTTOM DEPTH | 9 | 5 | 10 | 3 | 3 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 420 U | 400 U | 270 J | 685 | 1100 J |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 420 U | 400 U | 50 J | 140 | 230 J |
| FLUORANTHENE | NA | 420 U | 45 J | NA | NA | NA |
| FLUORENE | NA | 420 U | 400 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 420 U | 400 U | 150 J | 385 | 620 J |
| NAPHTHALENE | NA | 420 U | 400 U | NA | NA | NA |
| PHENANTHRENE | NA | 420 U | 400 U | NA | NA | NA |
| PYRENE | NA | 420 U | 400 U | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 45 | 1390 | 3445 | 5500 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | 300 U | 290 U | NA | NA | NA |
| AROCLOR-1221 | NA | 300 U | 290 U | NA | NA | NA |
| AROCLOR-1232 | NA | 300 U | 290 U | NA | NA | NA |
| AROCLOR-1242 | NA | 300 U | 290 U | NA | NA | NA |
| AROCLOR-1248 | NA | 300 U | 290 U | NA | NA | NA |
| AROCLOR-1254 | NA | 300 U | 290 U | NA | NA | NA |
| AROCLOR-1260 | NA | 300 U | 290 U | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | 0 U | 0 U | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | 3.1 UL | 2.6 UL | NA | NA | NA |
| ARSENIC | NA | 1 K | 2.4 | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060A | SB-060A | SB-060A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-9 | SB-60-05 | SB-60-10 | D-SB-60REA-3 | D-SB-60REA-3-AVG | D-SB-60REA-3-D |
| SAMPLE DATE | 20090915 | 20040924 | 20040924 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 3 | 3 | 3 |
| BOTTOM DEPTH | 9 | 5 | 10 | 3 | 3 | 3 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | 3.1 U | 2.6 U | NA | NA | NA |
| CADMIUM | NA | 3.1 U | 2.6 U | NA | NA | NA |
| CHROMIUM | NA | 60 J | 120 J | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | 15 J | 21 J | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | 11 K | 24 K | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | 0.12 U | 0.14 | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | 21 K | 10 K | NA | NA | NA |
| SELENIUM | NA | 3.1 U | 2.6 U | NA | NA | NA |
| SILVER | NA | 3.1 UR | 2.6 UR | NA | NA | NA |
| THALLIUM | NA | 2.5 U | 2.1 U | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | 58 L | 110 | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | 12000 U | 12000 U | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | 120 U | 120 U | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060A | SB-060A | SB-060B | SB-060B | SB-060B | SB-060C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60REA-5 | D-SB-60REA-7 | D-SB-60REB-3 | D-SB-60REB-5 | D-SB-60REB-7 | D-SB-60REC-3 |
| SAMPLE DATE | 20091012 | 20091012 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 3 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060A | SB-060A | SB-060B | SB-060B | SB-060B | SB-060C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60REA-5 | D-SB-60REA-7 | D-SB-60REB-3 | D-SB-60REB-5 | D-SB-60REB-7 | D-SB-60REC-3 |
| SAMPLE DATE | 20091012 | 20091012 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 3 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060A | SB-060A | SB-060B | SB-060B | SB-060B | SB-060C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60REA-5 | D-SB-60REA-7 | D-SB-60REB-3 | D-SB-60REB-5 | D-SB-60REB-7 | D-SB-60REC-3 |
| SAMPLE DATE | 20091012 | 20091012 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 3 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 19.9 | 1.5 U | 1.5 U | 44.8 | 32.7 | 1.6 U |
| BAP EQUIVALENT-POS | 18.9 | 1.5 U | 1.5 U | 44.0 | 31.9 | 1.6 U |
| BENZO(A)ANTHRACENE | 14 | 1.1 U | 1.1 U | 29 | 25 | 1.2 U |
| BENZO(A)PYRENE | 16 | 1.5 U | 1.5 U | 35 | 25 | 1.6 U |
| BENZO(B)FLUORANTHENE | 15 | 1.4 U | 1.4 U | 39 | 28 | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.2 U | 2 U | 1.9 U | 17 | 14 | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060A | SB-060A | SB-060B | SB-060B | SB-060B | SB-060C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60REA-5 | D-SB-60REA-7 | D-SB-60REB-3 | D-SB-60REB-5 | D-SB-60REB-7 | D-SB-60REC-3 |
| SAMPLE DATE | 20091012 | 20091012 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 20 | 1.1 U | 1 U | 26 | 25 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.9 U | 1.8 U | 1.7 U | 20 | 14 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 65 | 0 U | 0 U | 166 | 131 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060A | SB-060A | SB-060B | SB-060B | SB-060B | SB-060C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60REA-5 | D-SB-60REA-7 | D-SB-60REB-3 | D-SB-60REB-5 | D-SB-60REB-7 | D-SB-60REC-3 |
| SAMPLE DATE | 20091012 | 20091012 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 3 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060C | SB-060C | SB-060D | SB-060D | SB-060D | SB-060D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60REC-5 | D-SB-60REC-7 | D-SB-60RED-3 | D-SB-60RED-5 | D-SB-60RED-7 | D-SB-60RED-7-AVG |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060C | SB-060C | SB-060D | SB-060D | SB-060D | SB-060D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60REC-5 | D-SB-60REC-7 | D-SB-60RED-3 | D-SB-60RED-5 | D-SB-60RED-7 | D-SB-60RED-7-AVG |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060C | SB-060C | SB-060D | SB-060D | SB-060D | SB-060D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60REC-5 | D-SB-60REC-7 | D-SB-60RED-3 | D-SB-60RED-5 | D-SB-60RED-7 | D-SB-60RED-7-AVG |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 13.8 | 1.5 U | 203 | 42.3 | 1.6 U | 1.55 U |
| BAP EQUIVALENT-POS | 12.8 | 1.5 U | 203 | 42.3 | 1.6 U | 1.55 U |
| BENZO(A)ANTHRACENE | 8.2 | 1.1 U | 170 | 31 | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 12 | 1.5 U | 140 | 26 | 1.6 U | 1.55 U |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.4 U | 140 | 27 | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2 U | 59 | 16 | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060C | SB-060C | SB-060D | SB-060D | SB-060D | SB-060D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60REC-5 | D-SB-60REC-7 | D-SB-60RED-3 | D-SB-60RED-5 | D-SB-60RED-7 | D-SB-60RED-7-AVG |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 13 | 1.1 U | 180 | 32 | 1.1 U | 1.05 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.5 U | 24 | 8.6 | 1.6 U | 1.55 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 70 | 17 | 1.8 U | 1.75 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 33.2 | 0 U | 783 | 157.6 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060C | SB-060C | SB-060D | SB-060D | SB-060D | SB-060D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60REC-5 | D-SB-60REC-7 | D-SB-60RED-3 | D-SB-60RED-5 | D-SB-60RED-7 | D-SB-60RED-7-AVG |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060D | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RED-7-D | D-SB-61RE-10 | D-SB-61RE-3 | D-SB-61RE-4 | D-SB-61RE-5 | D-SB-61RE-6 |
| SAMPLE DATE | 20091013 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 10 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 7 | 10 | 3 | 4 | 5 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060D | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RED-7-D | D-SB-61RE-10 | D-SB-61RE-3 | D-SB-61RE-4 | D-SB-61RE-5 | D-SB-61RE-6 |
| SAMPLE DATE | 20091013 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 10 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 7 | 10 | 3 | 4 | 5 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060D | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RED-7-D | D-SB-61RE-10 | D-SB-61RE-3 | D-SB-61RE-4 | D-SB-61RE-5 | D-SB-61RE-6 |
| SAMPLE DATE | 20091013 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 10 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 7 | 10 | 3 | 4 | 5 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 346 | 2.9 | 3.2 | 101.4 | 1.6 U |
| BAP EQUIVALENT-POS | 1.5 U | 346 | 1.3 | 1.6 | 101.4 | 1.6 U |
| BENZO(A)ANTHRACENE | 1.1 U | 120 | 1.1 U | 1.1 U | 28 | 1.2 U |
| BENZO(A)PYRENE | 1.5 U | 250 | 1.5 U | 1.5 U | 73 | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 290 | 1.4 U | 1.4 U | 84 | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 99 | 1.9 U | 1.9 U | 21 | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060D | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RED-7-D | D-SB-61RE-10 | D-SB-61RE-3 | D-SB-61RE-4 | D-SB-61RE-5 | D-SB-61RE-6 |
| SAMPLE DATE | 20091013 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 10 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 7 | 10 | 3 | 4 | 5 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 150 | 1 U | 1 U | 55 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 36 | 1.5 U | 1.5 U | 12 | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 180 | 13 | 16 | 49 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 1125 | 13 | 16 | 322 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060D | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RED-7-D | D-SB-61RE-10 | D-SB-61RE-3 | D-SB-61RE-4 | D-SB-61RE-5 | D-SB-61RE-6 |
| SAMPLE DATE | 20091013 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 10 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 7 | 10 | 3 | 4 | 5 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61RE-7 | D-SB-61RE-8 | D-SB-61RE-9 | SB-61-05 | SB-61-10 | D-SB-61REA-3 |
| SAMPLE DATE | 20090916 | 20090916 | 20090916 | 20040924 | 20040924 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 9 | 5 | 10 | 3 |
| BOTTOM DEPTH | 7 | 8 | 9 | 5 | 10 | 3 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | 7 UL | 6 UL | NA |
| 2-BUTANONE | NA | NA | NA | 66 UL | 60 UL | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | 7 UL | 6 UL | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | 7 UL | 6 UL | NA |
| 2-HEXANONE | NA | NA | NA | 66 UL | 60 UL | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | 7 UL | 6 UL | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | 7 UL | 6 UL | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | 66 UL | 60 UL | NA |
| ACETONE | NA | NA | NA | 66 UL | 60 UL | NA |
| BENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| BROMOBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| BROMOFORM | NA | NA | NA | 7 UL | 6 UL | NA |
| BROMOMETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| CARBON DISULFIDE | NA | NA | NA | 7 UL | 6 UL | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | 7 UL | 6 UL | NA |
| CHLOROBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| CHLOROETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| CHLOROFORM | NA | NA | NA | 7 UL | 6 UL | NA |
| CHLOROMETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | 7 UL | 6 UL | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | 7 UL | 6 UL | NA |
| DIBROMOMETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61RE-7 | D-SB-61RE-8 | D-SB-61RE-9 | SB-61-05 | SB-61-10 | D-SB-61REA-3 |
| SAMPLE DATE | 20090916 | 20090916 | 20090916 | 20040924 | 20040924 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 9 | 5 | 10 | 3 |
| BOTTOM DEPTH | 7 | 8 | 9 | 5 | 10 | 3 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| M+P-XYLENES | NA | NA | NA | 13 UL | 12 UL | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | 7 UL | 6 UL | NA |
| METHYLENE CHLORIDE | NA | NA | NA | 7 UL | 6 UL | NA |
| NAPHTHALENE | NA | NA | NA | 7 UL | 6 UL | NA |
| N-BUTYLBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| N-PROPYLBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| O-XYLENE | NA | NA | NA | 7 UL | 6 UL | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| STYRENE | NA | NA | NA | 7 UL | 6 UL | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | 7 UL | 6 UL | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | 7 UL | 6 UL | NA |
| TOLUENE | NA | NA | NA | 7 UL | 6 UL | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | 7 UL | 6 UL | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | 7 UL | 6 UL | NA |
| TRICHLOROETHENE | NA | NA | NA | 7 UL | 6 UL | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | 7 UL | 6 UL | NA |
| VINYL ACETATE | NA | NA | NA | 7 UL | 6 UL | NA |
| VINYL CHLORIDE | NA | NA | NA | 7 UL | 6 UL | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | 450 U | 400 U | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | 450 U | 400 U | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | 1100 U | 1000 U | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | 450 U | 400 U | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | 450 U | 400 U | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | 450 U | 400 U | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | 1100 U | 1000 U | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | 450 U | 400 U | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | 450 U | 400 U | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | 450 U | 400 U | NA |
| 2-CHLOROPHENOL | NA | NA | NA | 450 U | 400 U | NA |
| 2-METHYLPHENOL | NA | NA | NA | 450 U | 400 U | NA |
| 2-NITROANILINE | NA | NA | NA | 1100 U | 1000 U | NA |
| 2-NITROPHENOL | NA | NA | NA | 450 U | 400 U | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | 450 U | 400 U | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | 450 U | 400 U | NA |
| 3-NITROANILINE | NA | NA | NA | 1100 U | 1000 U | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | 1000 U | 930 U | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | 450 U | 400 U | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | 450 U | 400 U | NA |
| 4-CHLOROANILINE | NA | NA | NA | 450 U | 400 U | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | 450 U | 400 U | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | 1100 U | 1000 U | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61RE-7 | D-SB-61RE-8 | D-SB-61RE-9 | SB-61-05 | SB-61-10 | D-SB-61REA-3 |
| SAMPLE DATE | 20090916 | 20090916 | 20090916 | 20040924 | 20040924 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 9 | 5 | 10 | 3 |
| BOTTOM DEPTH | 7 | 8 | 9 | 5 | 10 | 3 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | 1100 U | 1000 U | NA |
| ACETOPHENONE | NA | NA | NA | 450 U | 400 U | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | 450 U | 400 U | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | 450 U | 400 U | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | 450 U | 400 U | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | 450 U | 41 J | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | 450 U | 400 U | NA |
| CAPROLACTAM | NA | NA | NA | 450 U | 400 U | NA |
| CARBAZOLE | NA | NA | NA | 450 U | 400 U | NA |
| DIBENZOFURAN | NA | NA | NA | 450 U | 400 U | NA |
| DIETHYL PHTHALATE | NA | NA | NA | 450 U | 400 U | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | 450 U | 400 U | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | 450 U | 400 U | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | 450 U | 400 U | NA |
| HEXACHLOROBENZENE | NA | NA | NA | 450 U | 400 U | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | 450 U | 400 U | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | 450 U | 400 U | NA |
| HEXACHLOROETHANE | NA | NA | NA | 450 U | 400 U | NA |
| ISOPHORONE | NA | NA | NA | 450 U | 400 U | NA |
| NITROBENZENE | NA | NA | NA | 450 U | 400 U | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | 450 U | 400 U | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | 450 U | 400 U | NA |
| PENTACHLOROPHENOL | NA | NA | NA | 1100 U | 1000 U | NA |
| PHENOL | NA | NA | NA | 450 U | 400 U | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | 450 U | 400 U | NA |
| ACENAPHTHENE | NA | NA | NA | 450 U | 400 U | NA |
| ACENAPHTHYLENE | NA | NA | NA | 450 U | 400 U | NA |
| ANTHRACENE | NA | NA | NA | 450 U | 400 U | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.6 U | 1.5 U | 450 U | 400 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.6 U | 1.5 U | 450 U | 400 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 450 U | 400 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.6 U | 1.5 U | 450 U | 400 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.4 U | 450 U | 400 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | 450 U | 400 U | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 2 U | 450 U | 400 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61RE-7 | D-SB-61RE-8 | D-SB-61RE-9 | SB-61-05 | SB-61-10 | D-SB-61REA-3 |
| SAMPLE DATE | 20090916 | 20090916 | 20090916 | 20040924 | 20040924 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 9 | 5 | 10 | 3 |
| BOTTOM DEPTH | 7 | 8 | 9 | 5 | 10 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 450 U | 400 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.5 U | 450 U | 400 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | 450 U | 400 U | NA |
| FLUORENE | NA | NA | NA | 450 U | 400 U | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 1.8 U | 450 U | 400 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | 450 U | 400 U | NA |
| PHENANTHRENE | NA | NA | NA | 450 U | 400 U | NA |
| PYRENE | NA | NA | NA | 450 U | 400 U | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | 330 U | 290 U | NA |
| AROCLOR-1221 | NA | NA | NA | 330 U | 290 U | NA |
| AROCLOR-1232 | NA | NA | NA | 330 U | 290 U | NA |
| AROCLOR-1242 | NA | NA | NA | 330 U | 290 U | NA |
| AROCLOR-1248 | NA | NA | NA | 330 U | 290 U | NA |
| AROCLOR-1254 | NA | NA | NA | 330 U | 290 U | NA |
| AROCLOR-1260 | NA | NA | NA | 330 U | 290 U | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | 0 U | 0 U | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | 3.2 UL | 2.6 UL | NA |
| ARSENIC | NA | NA | NA | 1.8 | 0.51 U | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61RE-7 | D-SB-61RE-8 | D-SB-61RE-9 | SB-61-05 | SB-61-10 | D-SB-61REA-3 |
| SAMPLE DATE | 20090916 | 20090916 | 20090916 | 20040924 | 20040924 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 9 | 5 | 10 | 3 |
| BOTTOM DEPTH | 7 | 8 | 9 | 5 | 10 | 3 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | 3.2 U | 2.6 U | NA |
| CADMIUM | NA | NA | NA | 3.2 U | 2.6 U | NA |
| CHROMIUM | NA | NA | NA | 19 J | 12 J | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | 8.7 J | 4 J | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | 6.3 K | 2.6 U | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | 0.13 U | 0.1 U | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | 3.2 U | 3.7 K | NA |
| SELENIUM | NA | NA | NA | 3.2 U | 2.6 U | NA |
| SILVER | NA | NA | NA | 3.2 UR | 2.6 UR | NA |
| THALLIUM | NA | NA | NA | 2.6 U | 2.1 U | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | 32 UL | 26 UL | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | 13000 U | 12000 U | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | 140 U | 120 U | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061A | SB-061A | SB-061A | SB-061A | SB-061A | SB-061B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-3-AVG | D-SB-61REA-3-D | D-SB-61REA-5 | D-SB-61REA-7 | D-SB-61REA-9 | D-SB-61REB-3 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061A | SB-061A | SB-061A | SB-061A | SB-061A | SB-061B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-3-AVG | D-SB-61REA-3-D | D-SB-61REA-5 | D-SB-61REA-7 | D-SB-61REA-9 | D-SB-61REB-3 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061A | SB-061A | SB-061A | SB-061A | SB-061A | SB-061B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-3-AVG | D-SB-61REA-3-D | D-SB-61REA-5 | D-SB-61REA-7 | D-SB-61REA-9 | D-SB-61REB-3 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.55 U | 1.6 U | 1.5 U | 1.5 U | 48.1 | 1.5 U |
| BAP EQUIVALENT-POS | 1.55 U | 1.6 U | 1.5 U | 1.5 U | 47.3 | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 21 | 1.1 U |
| BENZO(A)PYRENE | 1.55 U | 1.6 U | 1.5 U | 1.5 U | 39 | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 39 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 2 U | 2 U | 17 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061A | SB-061A | SB-061A | SB-061A | SB-061A | SB-061B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-3-AVG | D-SB-61REA-3-D | D-SB-61REA-5 | D-SB-61REA-7 | D-SB-61REA-9 | D-SB-61REB-3 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 1 U | 34 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.55 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 21 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 171 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061A | SB-061A | SB-061A | SB-061A | SB-061A | SB-061B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-3-AVG | D-SB-61REA-3-D | D-SB-61REA-5 | D-SB-61REA-7 | D-SB-61REA-9 | D-SB-61REB-3 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061B | SB-061B | SB-061B | SB-061C | SB-061C | SB-061C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REB-5 | D-SB-61REB-7 | D-SB-61REB-9 | D-SB-61REC-3 | D-SB-61REC-5 | D-SB-61REC-7 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061B | SB-061B | SB-061B | SB-061C | SB-061C | SB-061C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REB-5 | D-SB-61REB-7 | D-SB-61REB-9 | D-SB-61REC-3 | D-SB-61REC-5 | D-SB-61REC-7 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061B | SB-061B | SB-061B | SB-061C | SB-061C | SB-061C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REB-5 | D-SB-61REB-7 | D-SB-61REB-9 | D-SB-61REC-3 | D-SB-61REC-5 | D-SB-61REC-7 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 256 | 1.5 U | 14.1 | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 256 | 1.5 U | 13.2 | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 91 | 1.1 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 180 | 1.5 U | 11 | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 210 | 1.4 U | 12 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 65 | 2 U | 2.2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061B | SB-061B | SB-061B | SB-061C | SB-061C | SB-061C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REB-5 | D-SB-61REB-7 | D-SB-61REB-9 | D-SB-61REC-3 | D-SB-61REC-5 | D-SB-61REC-7 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1 U | 110 | 1.1 U | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 33 | 1.5 U | 1.7 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.7 U | 120 | 1.8 U | 10 | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 809 | 0 U | 33 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061B | SB-061B | SB-061B | SB-061C | SB-061C | SB-061C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REB-5 | D-SB-61REB-7 | D-SB-61REB-9 | D-SB-61REC-3 | D-SB-61REC-5 | D-SB-61REC-7 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061C | SB-061D | SB-061D | SB-061D | SB-061D |
|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REC-9 | D-SB-61RED-3 | D-SB-61RED-5 | D-SB-61RED-7 | D-SB-61RED-9 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061C | SB-061D | SB-061D | SB-061D | SB-061D |
|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REC-9 | D-SB-61RED-3 | D-SB-61RED-5 | D-SB-61RED-7 | D-SB-61RED-9 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA |

| LOCATION | SB-061C | SB-061D | SB-061D | SB-061D | SB-061D |
|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REC-9 | D-SB-61RED-3 | D-SB-61RED-5 | D-SB-61RED-7 | D-SB-61RED-9 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 656 | 1.6 U | 10.4 | 1.5 U | 31.2 |
| BAP EQUIVALENT-POS | 656 | 1.6 U | 9.5 | 1.5 U | 30.4 |
| BENZO(A)ANTHRACENE | 150 | 1.1 U | 1.1 U | 1.1 U | 22 |
| BENZO(A)PYRENE | 450 | 1.6 U | 8.4 | 1.5 U | 24 |
| BENZO(B)FLUORANTHENE | 440 | 1.4 U | 11 | 1.4 U | 28 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 150 | 2 U | 2 U | 1.9 U | 11 |
| C1-CHRYSENES | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061C | SB-061D | SB-061D | SB-061D | SB-061D |
|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REC-9 | D-SB-61RED-3 | D-SB-61RED-5 | D-SB-61RED-7 | D-SB-61RED-9 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA |
| CHRYSENE | 220 | 1.1 U | 8.7 | 1 U | 25 |
| DIBENZO(A,H)ANTHRACENE | 110 | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 350 | 1.8 U | 1.8 U | 1.7 U | 13 |
| NAPHTHALENE | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1870 | 0 U | 28.1 | 0 U | 123 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061C | SB-061D | SB-061D | SB-061D | SB-061D |
|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REC-9 | D-SB-61RED-3 | D-SB-61RED-5 | D-SB-61RED-7 | D-SB-61RED-9 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 |
| **METALS (CONTINUED) (MG/KG)** | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-10 | D-SB-62RE-3 | D-SB-62RE-4 | D-SB-62RE-5 | D-SB-62RE-6 | D-SB-62RE-7 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-10 | D-SB-62RE-3 | D-SB-62RE-4 | D-SB-62RE-5 | D-SB-62RE-6 | D-SB-62RE-7 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-10 | D-SB-62RE-3 | D-SB-62RE-4 | D-SB-62RE-5 | D-SB-62RE-6 | D-SB-62RE-7 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 44.1 | 69.4 | 153 | 214 | 77.1 |
| BAP EQUIVALENT-POS | 1.5 U | 43.3 | 68.7 | 152 | 213 | 76.4 |
| BENZO(A)ANTHRACENE | 1.1 U | 29 | 48 | 92 | 130 | 54 |
| BENZO(A)PYRENE | 1.5 U | 34 | 54 | 120 | 170 | 59 |
| BENZO(B)FLUORANTHENE | 1.4 U | 41 | 63 | 140 | 180 | 76 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 17 | 30 | 60 | 89 | 34 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-10 | D-SB-62RE-3 | D-SB-62RE-4 | D-SB-62RE-5 | D-SB-62RE-6 | D-SB-62RE-7 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 34 | 52 | 100 | 140 | 57 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 21 | 32 | 82 | 110 | 40 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 176 | 279 | 594 | 819 | 320 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-10 | D-SB-62RE-3 | D-SB-62RE-4 | D-SB-62RE-5 | D-SB-62RE-6 | D-SB-62RE-7 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062A | SB-062A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-8 | D-SB-62RE-9 | SB-62-05 | SB-62-10 | D-SB-62REA-3 | D-SB-62REA-5 |
| SAMPLE DATE | 20090914 | 20090914 | 20040923 | 20040923 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 5 | 10 | 3 | 5 |
| BOTTOM DEPTH | 8 | 9 | 5 | 10 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | 6 U | 6 U | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | 6 U | 6 U | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | 6 U | 6 U | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | 6 U | 6 U | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | 6 U | 6 U | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | 6 U | 6 U | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | 6 U | 6 U | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | 6 U | 6 U | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | 6 U | 6 U | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | 6 U | 6 U | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | 6 U | 6 U | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | 6 U | 6 U | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | 6 U | 6 U | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | 6 U | 6 U | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | 6 U | 6 U | NA | NA |
| 2-BUTANONE | NA | NA | 58 U | 58 U | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | 6 U | 6 U | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | 6 U | 6 U | NA | NA |
| 2-HEXANONE | NA | NA | 58 U | 58 U | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | 6 U | 6 U | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | 6 U | 6 U | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | 58 U | 58 U | NA | NA |
| ACETONE | NA | NA | 58 U | 58 U | NA | NA |
| BENZENE | NA | NA | 6 U | 6 U | NA | NA |
| BROMOBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | 6 U | 6 U | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | 6 U | 6 U | NA | NA |
| BROMOFORM | NA | NA | 6 U | 6 U | NA | NA |
| BROMOMETHANE | NA | NA | 6 U | 6 U | NA | NA |
| CARBON DISULFIDE | NA | NA | 6 U | 6 U | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | 6 U | 6 U | NA | NA |
| CHLOROBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | 6 U | 6 U | NA | NA |
| CHLOROETHANE | NA | NA | 6 U | 6 U | NA | NA |
| CHLOROFORM | NA | NA | 6 U | 6 U | NA | NA |
| CHLOROMETHANE | NA | NA | 6 U | 6 U | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | 6 U | 6 U | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | 6 U | 6 U | NA | NA |
| DIBROMOMETHANE | NA | NA | 6 U | 6 U | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | 6 U | 6 U | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062A | SB-062A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-8 | D-SB-62RE-9 | SB-62-05 | SB-62-10 | D-SB-62REA-3 | D-SB-62REA-5 |
| SAMPLE DATE | 20090914 | 20090914 | 20040923 | 20040923 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 5 | 10 | 3 | 5 |
| BOTTOM DEPTH | 8 | 9 | 5 | 10 | 3 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| M+P-XYLENES | NA | NA | 12 U | 12 U | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | 6 U | 6 U | NA | NA |
| METHYLENE CHLORIDE | NA | NA | 6 U | 10 J | NA | NA |
| NAPHTHALENE | NA | NA | 6 U | 6 U | NA | NA |
| N-BUTYLBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| N-PROPYLBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| O-XYLENE | NA | NA | 6 U | 6 U | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| STYRENE | NA | NA | 6 U | 6 U | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | 6 U | 6 U | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | 6 U | 6 U | NA | NA |
| TOLUENE | NA | NA | 6 U | 6 U | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | 6 U | 6 U | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | 6 U | 6 U | NA | NA |
| TRICHLOROETHENE | NA | NA | 6 U | 6 U | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | 6 U | 6 U | NA | NA |
| VINYL ACETATE | NA | NA | 6 U | 6 U | NA | NA |
| VINYL CHLORIDE | NA | NA | 6 U | 6 U | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | 400 U | 390 U | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | 400 U | 390 U | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | 990 U | 980 U | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | 400 U | 390 U | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | 400 U | 390 U | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | 400 U | 390 U | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | 990 U | 980 U | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | 400 U | 390 U | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | 400 U | 390 U | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | 400 U | 390 U | NA | NA |
| 2-CHLOROPHENOL | NA | NA | 400 U | 390 U | NA | NA |
| 2-METHYLPHENOL | NA | NA | 400 U | 390 U | NA | NA |
| 2-NITROANILINE | NA | NA | 990 U | 980 U | NA | NA |
| 2-NITROPHENOL | NA | NA | 400 U | 390 U | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | 400 U | 390 U | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | 400 U | 390 U | NA | NA |
| 3-NITROANILINE | NA | NA | 990 U | 980 U | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | 910 U | 900 U | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | 400 U | 390 U | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | 400 U | 390 U | NA | NA |
| 4-CHLOROANILINE | NA | NA | 400 U | 390 U | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | 400 U | 390 U | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | 990 U | 980 U | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062A | SB-062A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-8 | D-SB-62RE-9 | SB-62-05 | SB-62-10 | D-SB-62REA-3 | D-SB-62REA-5 |
| SAMPLE DATE | 20090914 | 20090914 | 20040923 | 20040923 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 5 | 10 | 3 | 5 |
| BOTTOM DEPTH | 8 | 9 | 5 | 10 | 3 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | 990 U | 980 U | NA | NA |
| ACETOPHENONE | NA | NA | 400 U | 390 U | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | 400 U | 390 U | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | 400 U | 390 U | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | 400 U | 390 U | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | 400 U | 390 U | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | 400 U | 390 U | NA | NA |
| CAPROLACTAM | NA | NA | 400 U | 390 U | NA | NA |
| CARBAZOLE | NA | NA | 400 U | 390 U | NA | NA |
| DIBENZOFURAN | NA | NA | 400 U | 390 U | NA | NA |
| DIETHYL PHTHALATE | NA | NA | 400 U | 390 U | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | 400 U | 390 U | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | 400 U | 390 U | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | 400 U | 390 U | NA | NA |
| HEXACHLOROBENZENE | NA | NA | 400 U | 390 U | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | 400 U | 390 U | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | 400 U | 390 U | NA | NA |
| HEXACHLOROETHANE | NA | NA | 400 U | 390 U | NA | NA |
| ISOPHORONE | NA | NA | 400 U | 390 U | NA | NA |
| NITROBENZENE | NA | NA | 400 U | 390 U | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | 400 U | 390 U | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | 400 U | 390 U | NA | NA |
| PENTACHLOROPHENOL | NA | NA | 990 U | 980 U | NA | NA |
| PHENOL | NA | NA | 400 U | 390 U | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | 400 U | 390 U | NA | NA |
| ACENAPHTHENE | NA | NA | 400 U | 390 U | NA | NA |
| ACENAPHTHYLENE | NA | NA | 400 U | 390 U | NA | NA |
| ANTHRACENE | NA | NA | 400 U | 390 U | NA | NA |
| BAP EQUIVALENT-HALFND | 65.6 | 1347 | 400 U | 390 U | 61.3 | 4212 |
| BAP EQUIVALENT-POS | 64.8 | 1346 | 400 U | 390 U | 60.5 | 4212 |
| BENZO(A)ANTHRACENE | 46 | 590 | 400 U | 390 U | 46 | 2400 |
| BENZO(A)PYRENE | 51 | 1100 | 400 U | 390 U | 47 | 3000 |
| BENZO(B)FLUORANTHENE | 57 | 1100 | 400 U | 390 U | 61 | 3100 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | 400 U | 390 U | NA | NA |
| BENZO(K)FLUORANTHENE | 30 | 460 | 400 U | 390 U | 27 | 970 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062A | SB-062A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-8 | D-SB-62RE-9 | SB-62-05 | SB-62-10 | D-SB-62REA-3 | D-SB-62REA-5 |
| SAMPLE DATE | 20090914 | 20090914 | 20040923 | 20040923 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 5 | 10 | 3 | 5 |
| BOTTOM DEPTH | 8 | 9 | 5 | 10 | 3 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 48 | 670 | 400 U | 390 U | 47 | 2100 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 400 U | 390 U | 1.5 U | 520 |
| FLUORANTHENE | NA | NA | 400 U | 390 U | NA | NA |
| FLUORENE | NA | NA | 400 U | 390 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 32 | 720 | 400 U | 390 U | 25 | 1300 |
| NAPHTHALENE | NA | NA | 400 U | 390 U | NA | NA |
| PHENANTHRENE | NA | NA | 400 U | 390 U | NA | NA |
| PYRENE | NA | NA | 45 J | 390 U | NA | NA |
| TOTAL PAHS | 264 | 4640 | 45 | 0 U | 253 | 13390 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | 290 U | 290 U | NA | NA |
| AROCLOR-1221 | NA | NA | 290 U | 290 U | NA | NA |
| AROCLOR-1232 | NA | NA | 290 U | 290 U | NA | NA |
| AROCLOR-1242 | NA | NA | 290 U | 290 U | NA | NA |
| AROCLOR-1248 | NA | NA | 290 U | 290 U | NA | NA |
| AROCLOR-1254 | NA | NA | 290 U | 290 U | NA | NA |
| AROCLOR-1260 | NA | NA | 290 U | 290 U | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | 0 U | 0 U | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | 2.5 UL | 2.7 UL | NA | NA |
| ARSENIC | NA | NA | 1.7 | 0.53 U | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062A | SB-062A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-8 | D-SB-62RE-9 | SB-62-05 | SB-62-10 | D-SB-62REA-3 | D-SB-62REA-5 |
| SAMPLE DATE | 20090914 | 20090914 | 20040923 | 20040923 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 5 | 10 | 3 | 5 |
| BOTTOM DEPTH | 8 | 9 | 5 | 10 | 3 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | 2.5 U | 2.7 U | NA | NA |
| CADMIUM | NA | NA | 2.5 U | 2.7 U | NA | NA |
| CHROMIUM | NA | NA | 16 J | 3.6 J | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | 11 | 2.7 U | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | 7.8 | 2.7 U | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | 0.1 U | 0.11 U | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | 11 | 2.7 U | NA | NA |
| SELENIUM | NA | NA | 2.5 U | 2.7 U | NA | NA |
| SILVER | NA | NA | 2.5 UR | 2.7 UR | NA | NA |
| THALLIUM | NA | NA | 2 U | 2.1 U | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | 38 J | 27 UL | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | 12000 U | 12000 U | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | 120 U | 120 U | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062A | SB-062A | SB-062B | SB-062B | SB-062B | SB-062B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REA-7 | D-SB-62REA-9 | D-SB-62REB-3 | D-SB-62REB-5 | D-SB-62REB-7 | D-SB-62REB-7-AVG |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062A | SB-062A | SB-062B | SB-062B | SB-062B | SB-062B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REA-7 | D-SB-62REA-9 | D-SB-62REB-3 | D-SB-62REB-5 | D-SB-62REB-7 | D-SB-62REB-7-AVG |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062A | SB-062A | SB-062B | SB-062B | SB-062B | SB-062B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REA-7 | D-SB-62REA-9 | D-SB-62REB-3 | D-SB-62REB-5 | D-SB-62REB-7 | D-SB-62REB-7-AVG |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 239 | 4863 | 62.3 | 282 | 434 | 264 |
| BAP EQUIVALENT-POS | 239 | 4863 | 61.5 | 282 | 434 | 264 |
| BENZO(A)ANTHRACENE | 130 | 4500 | 46 | 200 | 320 J | 185 |
| BENZO(A)PYRENE | 170 | 3300 | 47 | 200 | 300 J | 184 |
| BENZO(B)FLUORANTHENE | 190 | 5300 | 64 | 220 | 340 J | 200.5 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 70 | 950 | 26 | 110 | 160 J | 99.5 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062A | SB-062A | SB-062B | SB-062B | SB-062B | SB-062B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REA-7 | D-SB-62REA-9 | D-SB-62REB-3 | D-SB-62REB-5 | D-SB-62REB-7 | D-SB-62REB-7-AVG |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 140 | 3800 | 47 | 180 | 310 J | 181 |
| DIBENZO(A,H)ANTHRACENE | 27 | 430 | 1.5 U | 28 | 51 J | 31 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 92 | 1400 | 32 | 110 | 150 J | 96.5 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 819 | 19680 | 262 | 1048 | 1631 | 977.5 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062A | SB-062A | SB-062B | SB-062B | SB-062B | SB-062B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REA-7 | D-SB-62REA-9 | D-SB-62REB-3 | D-SB-62REB-5 | D-SB-62REB-7 | D-SB-62REB-7-AVG |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062B | SB-062B | SB-062C | SB-062C | SB-062C | SB-062C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REB-7-D | D-SB-62REB-9 | D-SB-62REC-3 | D-SB-62REC-5 | D-SB-62REC-7 | D-SB-62REC-9 |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062B | SB-062B | SB-062C | SB-062C | SB-062C | SB-062C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REB-7-D | D-SB-62REB-9 | D-SB-62REC-3 | D-SB-62REC-5 | D-SB-62REC-7 | D-SB-62REC-9 |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062B | SB-062B | SB-062C | SB-062C | SB-062C | SB-062C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REB-7-D | D-SB-62REB-9 | D-SB-62REC-3 | D-SB-62REC-5 | D-SB-62REC-7 | D-SB-62REC-9 |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 95 | 1.5 U | 174 | 45.8 | 131 | 1.5 U |
| BAP EQUIVALENT-POS | 95 | 1.5 U | 174 | 45.1 | 121 | 1.5 U |
| BENZO(A)ANTHRACENE | 50 J | 1.1 U | 130 | 32 | 110 | 1.1 U |
| BENZO(A)PYRENE | 68 J | 1.5 U | 120 | 35 | 110 | 1.5 U |
| BENZO(B)FLUORANTHENE | 61 J | 1.4 U | 160 | 40 | 15 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 39 J | 2 U | 60 | 16 | 21 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062B | SB-062B | SB-062C | SB-062C | SB-062C | SB-062C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REB-7-D | D-SB-62REB-9 | D-SB-62REC-3 | D-SB-62REC-5 | D-SB-62REC-7 | D-SB-62REC-9 |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 52 J | 1.1 U | 130 | 22 | 11 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 11 J | 1.5 U | 18 | 1.5 U | 16 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 43 J | 1.8 U | 59 | 27 | 18 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 324 | 0 U | 677 | 172 | 220 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062B | SB-062B | SB-062C | SB-062C | SB-062C | SB-062C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REB-7-D | D-SB-62REB-9 | D-SB-62REC-3 | D-SB-62REC-5 | D-SB-62REC-7 | D-SB-62REC-9 |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062D | SB-062D | SB-062D | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RED-5 | D-SB-62RED-7 | D-SB-62RED-9 | D-SB-63RE-10 | D-SB-63RE-3 | D-SB-63RE-4 |
| SAMPLE DATE | 20091014 | 20091014 | 20091014 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 10 | 3 | 4 |
| BOTTOM DEPTH | 5 | 7 | 9 | 10 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062D | SB-062D | SB-062D | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RED-5 | D-SB-62RED-7 | D-SB-62RED-9 | D-SB-63RE-10 | D-SB-63RE-3 | D-SB-63RE-4 |
| SAMPLE DATE | 20091014 | 20091014 | 20091014 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 10 | 3 | 4 |
| BOTTOM DEPTH | 5 | 7 | 9 | 10 | 3 | 4 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062D | SB-062D | SB-062D | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RED-5 | D-SB-62RED-7 | D-SB-62RED-9 | D-SB-63RE-10 | D-SB-63RE-3 | D-SB-63RE-4 |
| SAMPLE DATE | 20091014 | 20091014 | 20091014 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 10 | 3 | 4 |
| BOTTOM DEPTH | 5 | 7 | 9 | 10 | 3 | 4 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 58.1 | 26.5 | 1.5 U | 1.7 U | 379 | 157 |
| BAP EQUIVALENT-POS | 57.3 | 9.9 | 1.5 U | 1.7 U | 379 | 157 |
| BENZO(A)ANTHRACENE | 36 | 11 U | 1.1 U | 1.2 U | 260 | 90 |
| BENZO(A)PYRENE | 45 | 15 U | 1.5 U | 1.7 U | 260 | 110 |
| BENZO(B)FLUORANTHENE | 57 | 99 | 1.4 U | 1.6 U | 340 | 110 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 15 | 20 U | 2 U | 2.2 U | 100 | 61 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062D | SB-062D | SB-062D | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RED-5 | D-SB-62RED-7 | D-SB-62RED-9 | D-SB-63RE-10 | D-SB-63RE-3 | D-SB-63RE-4 |
| SAMPLE DATE | 20091014 | 20091014 | 20091014 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 10 | 3 | 4 |
| BOTTOM DEPTH | 5 | 7 | 9 | 10 | 3 | 4 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 30 | 11 U | 1 U | 1.2 U | 270 | 110 |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 15 U | 1.5 U | 1.7 U | 44 | 19 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 28 | 18 U | 1.7 U | 1.9 U | 140 | 69 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 211 | 99 | 0 U | 0 U | 1414 | 569 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062D | SB-062D | SB-062D | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RED-5 | D-SB-62RED-7 | D-SB-62RED-9 | D-SB-63RE-10 | D-SB-63RE-3 | D-SB-63RE-4 |
| SAMPLE DATE | 20091014 | 20091014 | 20091014 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 10 | 3 | 4 |
| BOTTOM DEPTH | 5 | 7 | 9 | 10 | 3 | 4 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063 | SB-063 | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-5 | D-SB-63RE-6 | D-SB-63RE-7 | D-SB-63RE-8 | D-SB-63RE-9 | SB-63-05 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20040924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 UL |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 UL |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | 6 UL |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | 6 UL |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 UL |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 UL |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 UL |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 UL |
| 2-BUTANONE | NA | NA | NA | NA | NA | 60 UL |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | 6 UL |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | 6 UL |
| 2-HEXANONE | NA | NA | NA | NA | NA | 60 UL |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | 6 UL |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | 6 UL |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | 60 UL |
| ACETONE | NA | NA | NA | NA | NA | 60 UL |
| BENZENE | NA | NA | NA | NA | NA | 6 UL |
| BROMOBENZENE | NA | NA | NA | NA | NA | 6 UL |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | 6 UL |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | 6 UL |
| BROMOFORM | NA | NA | NA | NA | NA | 6 UL |
| BROMOMETHANE | NA | NA | NA | NA | NA | 6 UL |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | 6 UL |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | 6 UL |
| CHLOROBENZENE | NA | NA | NA | NA | NA | 6 UL |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | 6 UL |
| CHLOROETHANE | NA | NA | NA | NA | NA | 6 UL |
| CHLOROFORM | NA | NA | NA | NA | NA | 6 UL |
| CHLOROMETHANE | NA | NA | NA | NA | NA | 6 UL |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 UL |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 UL |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | 6 UL |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | 6 UL |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063 | SB-063 | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-5 | D-SB-63RE-6 | D-SB-63RE-7 | D-SB-63RE-8 | D-SB-63RE-9 | SB-63-05 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20040924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| M+P-XYLENES | NA | NA | NA | NA | NA | 12 UL |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | 6 UL |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | 6 UL |
| NAPHTHALENE | NA | NA | NA | NA | NA | 6 UL |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| O-XYLENE | NA | NA | NA | NA | NA | 6 UL |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| STYRENE | NA | NA | NA | NA | NA | 6 UL |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 UL |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | 6 UL |
| TOLUENE | NA | NA | NA | NA | NA | 6 UL |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 UL |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 UL |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | 6 UL |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | 6 UL |
| VINYL ACETATE | NA | NA | NA | NA | NA | 6 UL |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | 6 UL |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | 410 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | 410 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 1000 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 410 U |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | 410 U |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | 410 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | 1000 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | 410 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | 410 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | 410 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | 410 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | 410 U |
| 2-NITROANILINE | NA | NA | NA | NA | NA | 1000 U |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | 410 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | 410 U |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | 410 U |
| 3-NITROANILINE | NA | NA | NA | NA | NA | 1000 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | 940 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 410 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | 410 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | 410 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 410 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | 1000 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063 | SB-063 | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-5 | D-SB-63RE-6 | D-SB-63RE-7 | D-SB-63RE-8 | D-SB-63RE-9 | SB-63-05 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20040924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | 1000 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | 410 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | 410 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | 410 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | 410 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | 410 U |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | 410 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | 410 U |
| CARBAZOLE | NA | NA | NA | NA | NA | 410 U |
| DIBENZOFURAN | NA | NA | NA | NA | NA | 410 U |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | 410 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | 410 U |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | 410 U |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | 76 J |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | 410 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | 410 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | 410 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | 410 U |
| ISOPHORONE | NA | NA | NA | NA | NA | 410 U |
| NITROBENZENE | NA | NA | NA | NA | NA | 410 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | 410 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | 410 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | 1000 U |
| PHENOL | NA | NA | NA | NA | NA | 410 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | 410 U |
| ACENAPHTHENE | NA | NA | NA | NA | NA | 410 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | 410 U |
| ANTHRACENE | NA | NA | NA | NA | NA | 410 U |
| BAP EQUIVALENT-HALFND | 9.4 | 1.7 U | 40.4 | 20.9 | 1.7 U | 354 |
| BAP EQUIVALENT-POS | 8.4 | 1.7 U | 39.7 | 20.0 | 1.7 U | 149 |
| BENZO(A)ANTHRACENE | 1.2 U | 1.2 U | 21 | 13 | 1.3 U | 110 J |
| BENZO(A)PYRENE | 8.4 | 1.7 U | 32 | 16 | 1.7 U | 120 J |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.5 U | 36 | 17 | 1.6 U | 84 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | 110 J |
| BENZO(K)FLUORANTHENE | 2.1 U | 2.2 U | 13 | 2.2 U | 2.3 U | 140 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063 | SB-063 | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-5 | D-SB-63RE-6 | D-SB-63RE-7 | D-SB-63RE-8 | D-SB-63RE-9 | SB-63-05 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20040924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 32 | 18 | 1.2 U | 150 J |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.7 U | 1.5 U | 1.7 U | 1.7 U | 410 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | 150 J |
| FLUORENE | NA | NA | NA | NA | NA | 410 U |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.9 U | 18 | 9.9 | 2 U | 79 J |
| NAPHTHALENE | NA | NA | NA | NA | NA | 410 U |
| PHENANTHRENE | NA | NA | NA | NA | NA | 49 J |
| PYRENE | NA | NA | NA | NA | NA | 250 J |
| TOTAL PAHS | 8.4 | 0 U | 152 | 73.9 | 0 U | 1242 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | 300 U |
| AROCLOR-1221 | NA | NA | NA | NA | NA | 300 U |
| AROCLOR-1232 | NA | NA | NA | NA | NA | 300 U |
| AROCLOR-1242 | NA | NA | NA | NA | NA | 300 U |
| AROCLOR-1248 | NA | NA | NA | NA | NA | 300 U |
| AROCLOR-1254 | NA | NA | NA | NA | NA | 300 U |
| AROCLOR-1260 | NA | NA | NA | NA | NA | 300 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | 3 UL |
| ARSENIC | NA | NA | NA | NA | NA | 1.2 K |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063 | SB-063 | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-5 | D-SB-63RE-6 | D-SB-63RE-7 | D-SB-63RE-8 | D-SB-63RE-9 | SB-63-05 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20040924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | 3 U |
| CADMIUM | NA | NA | NA | NA | NA | 3 U |
| CHROMIUM | NA | NA | NA | NA | NA | 22 J |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | 13 J |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | 9 K |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | 0.12 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | 16 K |
| SELENIUM | NA | NA | NA | NA | NA | 3 U |
| SILVER | NA | NA | NA | NA | NA | 3 UR |
| THALLIUM | NA | NA | NA | NA | NA | 2.4 U |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | 36 L |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | 12000 U |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | 120 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063A | SB-063A | SB-063B | SB-063B | SB-063C |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-63-10 | D-SB-63REA-4 | D-SB-63REA-6 | D-SB-63REB-4 | D-SB-63REB-6 | D-SB-63REC-4 |
| SAMPLE DATE | 20040924 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 4 | 6 | 4 | 6 | 4 |
| BOTTOM DEPTH | 10 | 4 | 6 | 4 | 6 | 4 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 7 UL | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 7 UL | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 7 UL | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 7 UL | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 7 UL | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 7 UL | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 7 UL | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 7 UL | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 7 UL | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 7 UL | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 7 UL | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 7 UL | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 7 UL | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 7 UL | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 7 UL | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7 UL | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 7 UL | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 7 UL | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 7 UL | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 7 UL | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 7 UL | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 7 UL | NA | NA | NA | NA | NA |
| 2-BUTANONE | 68 UL | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 7 UL | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 7 UL | NA | NA | NA | NA | NA |
| 2-HEXANONE | 68 UL | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 7 UL | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 7 UL | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 68 UL | NA | NA | NA | NA | NA |
| ACETONE | 68 UL | NA | NA | NA | NA | NA |
| BENZENE | 7 UL | NA | NA | NA | NA | NA |
| BROMOBENZENE | 7 UL | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 7 UL | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 7 UL | NA | NA | NA | NA | NA |
| BROMOFORM | 7 UL | NA | NA | NA | NA | NA |
| BROMOMETHANE | 7 UL | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 7 UL | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 7 UL | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 7 UL | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 7 UL | NA | NA | NA | NA | NA |
| CHLOROETHANE | 7 UL | NA | NA | NA | NA | NA |
| CHLOROFORM | 7 UL | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 7 UL | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 7 UL | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 7 UL | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 7 UL | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 7 UL | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 7 UL | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063A | SB-063A | SB-063B | SB-063B | SB-063C |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-63-10 | D-SB-63REA-4 | D-SB-63REA-6 | D-SB-63REB-4 | D-SB-63REB-6 | D-SB-63REC-4 |
| SAMPLE DATE | 20040924 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 4 | 6 | 4 | 6 | 4 |
| BOTTOM DEPTH | 10 | 4 | 6 | 4 | 6 | 4 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 7 UL | NA | NA | NA | NA | NA |
| M+P-XYLENES | 14 UL | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 7 UL | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 7 UL | NA | NA | NA | NA | NA |
| NAPHTHALENE | 7 UL | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 7 UL | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 7 UL | NA | NA | NA | NA | NA |
| O-XYLENE | 7 UL | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 7 UL | NA | NA | NA | NA | NA |
| STYRENE | 7 UL | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 7 UL | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 7 UL | NA | NA | NA | NA | NA |
| TOLUENE | 7 UL | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 7 UL | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 7 UL | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 7 UL | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 7 UL | NA | NA | NA | NA | NA |
| VINYL ACETATE | 7 UL | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 7 UL | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 450 U | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 450 U | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 1100 U | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 450 U | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 450 U | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 450 U | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 1100 U | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 450 U | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 450 U | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 450 U | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 450 U | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 450 U | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 1100 U | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 450 U | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 450 U | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 450 U | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 1100 U | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 1000 U | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 450 U | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 450 U | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 450 U | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 450 U | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 1100 U | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063A | SB-063A | SB-063B | SB-063B | SB-063C |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-63-10 | D-SB-63REA-4 | D-SB-63REA-6 | D-SB-63REB-4 | D-SB-63REB-6 | D-SB-63REC-4 |
| SAMPLE DATE | 20040924 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 4 | 6 | 4 | 6 | 4 |
| BOTTOM DEPTH | 10 | 4 | 6 | 4 | 6 | 4 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 1100 U | NA | NA | NA | NA | NA |
| ACETOPHENONE | 450 U | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 450 U | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 450 U | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 450 U | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 450 U | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 450 U | NA | NA | NA | NA | NA |
| CAPROLACTAM | 450 U | NA | NA | NA | NA | NA |
| CARBAZOLE | 450 U | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 450 U | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 450 U | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 450 U | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 450 U | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 450 U | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 450 U | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 450 U | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 450 U | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 450 U | NA | NA | NA | NA | NA |
| ISOPHORONE | 450 U | NA | NA | NA | NA | NA |
| NITROBENZENE | 450 U | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 450 U | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 450 U | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 1100 U | NA | NA | NA | NA | NA |
| PHENOL | 450 U | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 450 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 450 U | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 450 U | NA | NA | NA | NA | NA |
| ANTHRACENE | 450 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 450 U | 11.5 | 1.5 U | 1.6 U | 1.6 U | 46.3 |
| BAP EQUIVALENT-POS | 450 U | 10.5 | 1.5 U | 1.6 U | 1.6 U | 45.5 |
| BENZO(A)ANTHRACENE | 450 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 36 |
| BENZO(A)PYRENE | 450 U | 9.4 | 1.5 U | 1.6 U | 1.6 U | 35 |
| BENZO(B)FLUORANTHENE | 450 U | 11 | 1.4 U | 1.5 U | 1.5 U | 49 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 450 U | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 450 U | 2 U | 2 U | 2.1 U | 2.1 U | 12 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063A | SB-063A | SB-063B | SB-063B | SB-063C |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-63-10 | D-SB-63REA-4 | D-SB-63REA-6 | D-SB-63REB-4 | D-SB-63REB-6 | D-SB-63REC-4 |
| SAMPLE DATE | 20040924 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 4 | 6 | 4 | 6 | 4 |
| BOTTOM DEPTH | 10 | 4 | 6 | 4 | 6 | 4 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 450 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 37 |
| DIBENZO(A,H)ANTHRACENE | 450 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 450 U | NA | NA | NA | NA | NA |
| FLUORENE | 450 U | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 450 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 18 |
| NAPHTHALENE | 450 U | NA | NA | NA | NA | NA |
| PHENANTHRENE | 450 U | NA | NA | NA | NA | NA |
| PYRENE | 450 U | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 20.4 | 0 U | 0 U | 0 U | 187 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 330 U | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 330 U | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 330 U | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 330 U | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 330 U | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 330 U | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 330 U | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 3.2 UL | NA | NA | NA | NA | NA |
| ARSENIC | 0.65 U | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063A | SB-063A | SB-063B | SB-063B | SB-063C |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-63-10 | D-SB-63REA-4 | D-SB-63REA-6 | D-SB-63REB-4 | D-SB-63REB-6 | D-SB-63REC-4 |
| SAMPLE DATE | 20040924 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 4 | 6 | 4 | 6 | 4 |
| BOTTOM DEPTH | 10 | 4 | 6 | 4 | 6 | 4 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 3.2 U | NA | NA | NA | NA | NA |
| CADMIUM | 3.2 U | NA | NA | NA | NA | NA |
| CHROMIUM | 22 J | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | 13 J | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | 4.5 K | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.12 U | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | 15 K | NA | NA | NA | NA | NA |
| SELENIUM | 3.2 U | NA | NA | NA | NA | NA |
| SILVER | 3.2 UR | NA | NA | NA | NA | NA |
| THALLIUM | 2.6 U | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | 32 UL | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 13000 U | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 140 U | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063C | SB-063D | SB-063D | SB-064 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63REC-6 | D-SB-63RED-4 | D-SB-63RED-6 | SB-64-05 | D-SB-65RE-10 | D-SB-65RE-3 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20040924 | 20090916 | 20090916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 4 | 6 | 5 | 10 | 3 |
| BOTTOM DEPTH | 6 | 4 | 6 | 5 | 10 | 3 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | 6 UL | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | 6 UL | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | 6 UL | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | 6 UL | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | 6 UL | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | 6 UL | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | 6 UL | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | 6 UL | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | 6 UL | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | 6 UL | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | 6 UL | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | 6 UL | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | 6 UL | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | 6 UL | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | 6 UL | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | 6 UL | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | 6 UL | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | 6 UL | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | 6 UL | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | 6 UL | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | 6 UL | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | 6 UL | NA | NA |
| 2-BUTANONE | NA | NA | NA | 61 UL | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | 6 UL | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | 6 UL | NA | NA |
| 2-HEXANONE | NA | NA | NA | 61 UL | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | 6 UL | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | 6 UL | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | 61 UL | NA | NA |
| ACETONE | NA | NA | NA | 61 UL | NA | NA |
| BENZENE | NA | NA | NA | 6 UL | NA | NA |
| BROMOBENZENE | NA | NA | NA | 6 UL | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | 6 UL | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | 6 UL | NA | NA |
| BROMOFORM | NA | NA | NA | 6 UL | NA | NA |
| BROMOMETHANE | NA | NA | NA | 6 UL | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | 6 UL | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | 6 UL | NA | NA |
| CHLOROBENZENE | NA | NA | NA | 6 UL | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | 6 UL | NA | NA |
| CHLOROETHANE | NA | NA | NA | 6 UL | NA | NA |
| CHLOROFORM | NA | NA | NA | 6 UL | NA | NA |
| CHLOROMETHANE | NA | NA | NA | 6 UL | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | 6 UL | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | 6 UL | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | 6 UL | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | 6 UL | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | 6 UL | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063C | SB-063D | SB-063D | SB-064 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63REC-6 | D-SB-63RED-4 | D-SB-63RED-6 | SB-64-05 | D-SB-65RE-10 | D-SB-65RE-3 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20040924 | 20090916 | 20090916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 4 | 6 | 5 | 10 | 3 |
| BOTTOM DEPTH | 6 | 4 | 6 | 5 | 10 | 3 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | 6 UL | NA | NA |
| M+P-XYLENES | NA | NA | NA | 12 UL | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | 6 UL | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | 6 UL | NA | NA |
| NAPHTHALENE | NA | NA | NA | 6 UL | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | 6 UL | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | 6 UL | NA | NA |
| O-XYLENE | NA | NA | NA | 6 UL | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | 6 UL | NA | NA |
| STYRENE | NA | NA | NA | 6 UL | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | 6 UL | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | 6 UL | NA | NA |
| TOLUENE | NA | NA | NA | 6 UL | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | 6 UL | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | 6 UL | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | 6 UL | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | 6 UL | NA | NA |
| VINYL ACETATE | NA | NA | NA | 6 UL | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | 6 UL | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | 410 U | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | 410 U | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | 1000 U | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | 410 U | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | 410 U | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | 410 U | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | 1000 U | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | 410 U | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | 410 U | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | 410 U | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | 410 U | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | 410 U | NA | NA |
| 2-NITROANILINE | NA | NA | NA | 1000 U | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | 410 U | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | 410 U | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | 410 U | NA | NA |
| 3-NITROANILINE | NA | NA | NA | 1000 U | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | 940 U | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | 410 U | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | 410 U | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | 410 U | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | 410 U | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | 1000 U | NA | NA |

| LOCATION | SB-063C | SB-063D | SB-063D | SB-064 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63REC-6 | D-SB-63RED-4 | D-SB-63RED-6 | SB-64-05 | D-SB-65RE-10 | D-SB-65RE-3 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20040924 | 20090916 | 20090916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 4 | 6 | 5 | 10 | 3 |
| BOTTOM DEPTH | 6 | 4 | 6 | 5 | 10 | 3 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | 1000 U | NA | NA |
| ACETOPHENONE | NA | NA | NA | 410 U | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | 410 U | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | 410 U | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | 410 U | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | 410 U | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | 410 U | NA | NA |
| CAPROLACTAM | NA | NA | NA | 410 U | NA | NA |
| CARBAZOLE | NA | NA | NA | 410 U | NA | NA |
| DIBENZOFURAN | NA | NA | NA | 410 U | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | 410 U | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | 410 U | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | 410 U | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | 410 U | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | 410 U | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | 410 U | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | 410 U | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | 410 U | NA | NA |
| ISOPHORONE | NA | NA | NA | 410 U | NA | NA |
| NITROBENZENE | NA | NA | NA | 410 U | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | 410 U | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | 410 U | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | 1000 U | NA | NA |
| PHENOL | NA | NA | NA | 410 U | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | 410 U | NA | NA |
| ACENAPHTHENE | NA | NA | NA | 410 U | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | 410 U | NA | NA |
| ANTHRACENE | NA | NA | NA | 410 U | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.6 U | 1.5 U | 410 U | 1.5 U | 15.1 |
| BAP EQUIVALENT-POS | 1.5 U | 1.6 U | 1.5 U | 410 U | 1.5 U | 14.3 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.2 U | 1.1 U | 410 U | 1.1 U | 9.1 |
| BENZO(A)PYRENE | 1.5 U | 1.6 U | 1.5 U | 410 U | 1.5 U | 11 |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.5 U | 1.4 U | 410 U | 1.4 U | 14 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | 410 U | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2.1 U | 2 U | 410 U | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063C | SB-063D | SB-063D | SB-064 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63REC-6 | D-SB-63RED-4 | D-SB-63RED-6 | SB-64-05 | D-SB-65RE-10 | D-SB-65RE-3 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20040924 | 20090916 | 20090916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 4 | 6 | 5 | 10 | 3 |
| BOTTOM DEPTH | 6 | 4 | 6 | 5 | 10 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1.1 U | 1.1 U | 410 U | 1.1 U | 11 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.5 U | 410 U | 1.5 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | 410 U | NA | NA |
| FLUORENE | NA | NA | NA | 410 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.8 U | 1.8 U | 410 U | 1.8 U | 9.8 |
| NAPHTHALENE | NA | NA | NA | 410 U | NA | NA |
| PHENANTHRENE | NA | NA | NA | 410 U | NA | NA |
| PYRENE | NA | NA | NA | 410 U | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 54.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | 300 U | NA | NA |
| AROCLOR-1221 | NA | NA | NA | 300 U | NA | NA |
| AROCLOR-1232 | NA | NA | NA | 300 U | NA | NA |
| AROCLOR-1242 | NA | NA | NA | 300 U | NA | NA |
| AROCLOR-1248 | NA | NA | NA | 300 U | NA | NA |
| AROCLOR-1254 | NA | NA | NA | 300 U | NA | NA |
| AROCLOR-1260 | NA | NA | NA | 300 U | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | 0 U | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | 3 UL | NA | NA |
| ARSENIC | NA | NA | NA | 0.79 K | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063C | SB-063D | SB-063D | SB-064 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63REC-6 | D-SB-63RED-4 | D-SB-63RED-6 | SB-64-05 | D-SB-65RE-10 | D-SB-65RE-3 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20040924 | 20090916 | 20090916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 4 | 6 | 5 | 10 | 3 |
| BOTTOM DEPTH | 6 | 4 | 6 | 5 | 10 | 3 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | 3 U | NA | NA |
| CADMIUM | NA | NA | NA | 3 U | NA | NA |
| CHROMIUM | NA | NA | NA | 26 J | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | 22 J | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | 13 K | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | 0.14 | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | 18 K | NA | NA |
| SELENIUM | NA | NA | NA | 3 U | NA | NA |
| SILVER | NA | NA | NA | 3 UR | NA | NA |
| THALLIUM | NA | NA | NA | 2.4 U | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | 30 UL | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | 12000 U | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | 120 U | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-65RE-5 | D-SB-65RE-5-AVG | D-SB-65RE-5-D | D-SB-65RE-6 | D-SB-65RE-7 | D-SB-65RE-8 |
| SAMPLE DATE | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 5 | 5 | 5 | 6 | 7 | 8 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-65RE-5 | D-SB-65RE-5-AVG | D-SB-65RE-5-D | D-SB-65RE-6 | D-SB-65RE-7 | D-SB-65RE-8 |
| SAMPLE DATE | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 5 | 5 | 5 | 6 | 7 | 8 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-65RE-5 | D-SB-65RE-5-AVG | D-SB-65RE-5-D | D-SB-65RE-6 | D-SB-65RE-7 | D-SB-65RE-8 |
| SAMPLE DATE | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 5 | 5 | 5 | 6 | 7 | 8 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2.1 U | 2.1 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-65RE-5 | D-SB-65RE-5-AVG | D-SB-65RE-5-D | D-SB-65RE-6 | D-SB-65RE-7 | D-SB-65RE-8 |
| SAMPLE DATE | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 5 | 5 | 5 | 6 | 7 | 8 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.9 U | 1.9 U | 1.9 U | 1.8 U | 1.7 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-65RE-5 | D-SB-65RE-5-AVG | D-SB-65RE-5-D | D-SB-65RE-6 | D-SB-65RE-7 | D-SB-65RE-8 |
| SAMPLE DATE | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 5 | 5 | 5 | 6 | 7 | 8 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-065 | SB-065 | SB-065 | SB-066 | SB-066 | SB-066 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-65RE-9 | SB-65-05 | SB-65-10 | D-SB-66RE-3 | D-SB-66RE-4 | D-SB-66RE-5 |
| SAMPLE DATE | 20090916 | 20040917 | 20040917 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 9 | 5 | 10 | 3 | 4 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA |
| 2-BUTANONE | NA | 62 U | 60 U | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | 6 U | 6 U | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | 6 U | 6 U | NA | NA | NA |
| 2-HEXANONE | NA | 62 U | 60 U | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | 6 U | 6 U | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | 6 U | 6 U | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | 62 U | 60 U | NA | NA | NA |
| ACETONE | NA | 62 U | 60 U | NA | NA | NA |
| BENZENE | NA | 6 U | 6 U | NA | NA | NA |
| BROMOBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| BROMOFORM | NA | 6 U | 6 U | NA | NA | NA |
| BROMOMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| CARBON DISULFIDE | NA | 6 U | 6 U | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | 6 U | 6 U | NA | NA | NA |
| CHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| CHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA |
| CHLOROFORM | NA | 6 U | 6 U | NA | NA | NA |
| CHLOROMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | 6 U | 6 U | NA | NA | NA |
| DIBROMOMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-065 | SB-065 | SB-065 | SB-066 | SB-066 | SB-066 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-65RE-9 | SB-65-05 | SB-65-10 | D-SB-66RE-3 | D-SB-66RE-4 | D-SB-66RE-5 |
| SAMPLE DATE | 20090916 | 20040917 | 20040917 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 9 | 5 | 10 | 3 | 4 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| M+P-XYLENES | NA | 12 U | 12 U | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | 6 U | 6 U | NA | NA | NA |
| METHYLENE CHLORIDE | NA | 8 J | 8 J | NA | NA | NA |
| NAPHTHALENE | NA | 6 U | 6 U | NA | NA | NA |
| N-BUTYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| N-PROPYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| O-XYLENE | NA | 6 U | 6 U | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| STYRENE | NA | 6 U | 6 U | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | 6 U | 6 U | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA |
| TOLUENE | NA | 6 U | 6 U | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | 6 U | 6 U | NA | NA | NA |
| TRICHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | 6 U | 6 U | NA | NA | NA |
| VINYL ACETATE | NA | 6 U | 6 U | NA | NA | NA |
| VINYL CHLORIDE | NA | 6 U | 6 U | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | 420 U | 400 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | 420 U | 400 U | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | 1100 U | 1000 U | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | 1100 U | 1000 U | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | 420 U | 400 U | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | 420 U | 400 U | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | 420 U | 400 U | NA | NA | NA |
| 2-CHLOROPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 2-METHYLPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 2-NITROANILINE | NA | 1100 U | 1000 U | NA | NA | NA |
| 2-NITROPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | 420 U | 400 U | NA | NA | NA |
| 3-NITROANILINE | NA | 1100 U | 1000 U | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | 970 U | 920 U | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | 420 U | 400 U | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | 420 U | 400 U | NA | NA | NA |
| 4-CHLOROANILINE | NA | 420 U | 400 U | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | 420 U | 400 U | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | 1100 U | 1000 U | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-065 | SB-065 | SB-065 | SB-066 | SB-066 | SB-066 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-65RE-9 | SB-65-05 | SB-65-10 | D-SB-66RE-3 | D-SB-66RE-4 | D-SB-66RE-5 |
| SAMPLE DATE | 20090916 | 20040917 | 20040917 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 9 | 5 | 10 | 3 | 4 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | 1100 U | 1000 U | NA | NA | NA |
| ACETOPHENONE | NA | 420 U | 400 U | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | 420 U | 400 U | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | 420 U | 400 U | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | 420 U | 400 U | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | 420 U | 400 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | 420 U | 400 U | NA | NA | NA |
| CAPROLACTAM | NA | 420 U | 400 U | NA | NA | NA |
| CARBAZOLE | NA | 420 U | 400 U | NA | NA | NA |
| DIBENZOFURAN | NA | 420 U | 400 U | NA | NA | NA |
| DIETHYL PHTHALATE | NA | 420 U | 400 U | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | 420 U | 400 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | 420 U | 400 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | 420 UJ | 400 UJ | NA | NA | NA |
| HEXACHLOROBENZENE | NA | 420 U | 400 U | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | 420 U | 400 U | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | 420 U | 400 U | NA | NA | NA |
| HEXACHLOROETHANE | NA | 420 U | 400 U | NA | NA | NA |
| ISOPHORONE | NA | 420 U | 400 U | NA | NA | NA |
| NITROBENZENE | NA | 420 U | 400 U | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | 420 U | 400 U | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | 420 U | 400 U | NA | NA | NA |
| PENTACHLOROPHENOL | NA | 1100 U | 1000 U | NA | NA | NA |
| PHENOL | NA | 420 U | 400 U | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | 420 U | 400 U | NA | NA | NA |
| ACENAPHTHENE | NA | 420 U | 400 U | NA | NA | NA |
| ACENAPHTHYLENE | NA | 420 U | 400 U | NA | NA | NA |
| ANTHRACENE | NA | 420 U | 400 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 420 U | 400 U | 1.5 U | 1.5 U | 46.9 |
| BAP EQUIVALENT-POS | 1.6 U | 420 U | 400 U | 1.5 U | 1.5 U | 46.1 |
| BENZO(A)ANTHRACENE | 1.2 U | 420 U | 400 U | 1.1 U | 1.1 U | 53 |
| BENZO(A)PYRENE | 1.6 U | 420 UJ | 400 UJ | 1.5 U | 1.5 U | 35 |
| BENZO(B)FLUORANTHENE | 1.5 U | 420 UJ | 400 UJ | 1.4 U | 1.4 U | 39 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | 420 UJ | 400 UJ | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 420 UJ | 400 UJ | 1.9 U | 2 U | 17 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-065 | SB-065 | SB-065 | SB-066 | SB-066 | SB-066 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-65RE-9 | SB-65-05 | SB-65-10 | D-SB-66RE-3 | D-SB-66RE-4 | D-SB-66RE-5 |
| SAMPLE DATE | 20090916 | 20040917 | 20040917 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 9 | 5 | 10 | 3 | 4 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 420 U | 400 U | 1 U | 1.1 U | 58 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 420 UJ | 400 UJ | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | NA | 420 U | 400 U | NA | NA | NA |
| FLUORENE | NA | 420 U | 400 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.9 U | 420 UJ | 400 UJ | 1.7 U | 1.8 U | 17 |
| NAPHTHALENE | NA | 420 U | 400 U | NA | NA | NA |
| PHENANTHRENE | NA | 420 U | 400 U | NA | NA | NA |
| PYRENE | NA | 420 U | 400 U | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 219 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | 310 U | 290 U | NA | NA | NA |
| AROCLOR-1221 | NA | 310 U | 290 U | NA | NA | NA |
| AROCLOR-1232 | NA | 310 U | 290 U | NA | NA | NA |
| AROCLOR-1242 | NA | 310 U | 290 U | NA | NA | NA |
| AROCLOR-1248 | NA | 310 U | 290 U | NA | NA | NA |
| AROCLOR-1254 | NA | 310 U | 290 U | NA | NA | NA |
| AROCLOR-1260 | NA | 310 U | 290 U | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | 0 U | 0 U | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | 3.1 UR | 2.9 UR | NA | NA | NA |
| ARSENIC | NA | 2 L | 0.58 UL | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-065 | SB-065 | SB-065 | SB-066 | SB-066 | SB-066 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-65RE-9 | SB-65-05 | SB-65-10 | D-SB-66RE-3 | D-SB-66RE-4 | D-SB-66RE-5 |
| SAMPLE DATE | 20090916 | 20040917 | 20040917 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 9 | 5 | 10 | 3 | 4 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | 3.1 UL | 2.9 UL | NA | NA | NA |
| CADMIUM | NA | 3.1 UL | 2.9 UL | NA | NA | NA |
| CHROMIUM | NA | 35 | 16 | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | 23 L | 17 L | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | 6.5 L | 3 L | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | 0.12 U | 0.12 U | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | 23 | 14 | NA | NA | NA |
| SELENIUM | NA | 3.1 UL | 2.9 UL | NA | NA | NA |
| SILVER | NA | 3.1 UR | 2.9 UR | NA | NA | NA |
| THALLIUM | NA | 2.5 UL | 2.3 UL | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | 31 U | 29 U | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | 13000 U | 12000 | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | 130 U | 120 U | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066 | SB-066 | SB-066 | SB-066 | SB-066 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RE-6 | D-SB-66RE-7 | D-SB-66RE-8 | D-SB-66RE-8-AVG | D-SB-66RE-8-D | SB-66-05 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20040923 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 8 | 8 | 8 | 5 |
| BOTTOM DEPTH | 6 | 7 | 8 | 8 | 8 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 6 U |
| 2-BUTANONE | NA | NA | NA | NA | NA | 57 U |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | 6 U |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | 6 U |
| 2-HEXANONE | NA | NA | NA | NA | NA | 57 U |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | 6 U |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | 6 U |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | 57 U |
| ACETONE | NA | NA | NA | NA | NA | 57 U |
| BENZENE | NA | NA | NA | NA | NA | 6 U |
| BROMOBENZENE | NA | NA | NA | NA | NA | 6 U |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| BROMOFORM | NA | NA | NA | NA | NA | 6 U |
| BROMOMETHANE | NA | NA | NA | NA | NA | 6 U |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | 6 U |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | 6 U |
| CHLOROBENZENE | NA | NA | NA | NA | NA | 6 U |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | 6 U |
| CHLOROETHANE | NA | NA | NA | NA | NA | 6 U |
| CHLOROFORM | NA | NA | NA | NA | NA | 6 U |
| CHLOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 U |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | 6 U |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066 | SB-066 | SB-066 | SB-066 | SB-066 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RE-6 | D-SB-66RE-7 | D-SB-66RE-8 | D-SB-66RE-8-AVG | D-SB-66RE-8-D | SB-66-05 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20040923 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 8 | 8 | 8 | 5 |
| BOTTOM DEPTH | 6 | 7 | 8 | 8 | 8 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| M+P-XYLENES | NA | NA | NA | NA | NA | 11 U |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | 6 U |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | 10 J |
| NAPHTHALENE | NA | NA | NA | NA | NA | 6 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| O-XYLENE | NA | NA | NA | NA | NA | 6 U |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| STYRENE | NA | NA | NA | NA | NA | 6 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | 6 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| TOLUENE | NA | NA | NA | NA | NA | 6 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 6 U |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | 6 U |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | 6 U |
| VINYL ACETATE | NA | NA | NA | NA | NA | 6 U |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | 6 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | 390 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | 390 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 970 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 390 U |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | 390 U |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | 390 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | 970 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | 390 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | 390 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | 390 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | 390 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | 390 U |
| 2-NITROANILINE | NA | NA | NA | NA | NA | 970 U |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | 390 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | 390 U |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | 390 U |
| 3-NITROANILINE | NA | NA | NA | NA | NA | 970 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | 890 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 390 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | 390 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | 390 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 390 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | 970 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066 | SB-066 | SB-066 | SB-066 | SB-066 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RE-6 | D-SB-66RE-7 | D-SB-66RE-8 | D-SB-66RE-8-AVG | D-SB-66RE-8-D | SB-66-05 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20040923 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 8 | 8 | 8 | 5 |
| BOTTOM DEPTH | 6 | 7 | 8 | 8 | 8 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | 970 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | 390 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | 390 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | 390 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | 390 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | 390 U |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | 390 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | 390 U |
| CARBAZOLE | NA | NA | NA | NA | NA | 390 U |
| DIBENZOFURAN | NA | NA | NA | NA | NA | 390 U |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | 390 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | 390 U |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | 61 J |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | 390 U |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | 390 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | 390 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | 390 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | 390 U |
| ISOPHORONE | NA | NA | NA | NA | NA | 390 U |
| NITROBENZENE | NA | NA | NA | NA | NA | 390 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | 390 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | 390 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | 970 U |
| PHENOL | NA | NA | NA | NA | NA | 390 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | 390 U |
| ACENAPHTHENE | NA | NA | NA | NA | NA | 390 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | 390 U |
| ANTHRACENE | NA | NA | NA | NA | NA | 390 U |
| BAP EQUIVALENT-HALFND | 45.4 | 1.6 U | 1.5 U | 1.55 U | 1.6 U | 390 U |
| BAP EQUIVALENT-POS | 44.6 | 1.6 U | 1.5 U | 1.55 U | 1.6 U | 390 U |
| BENZO(A)ANTHRACENE | 61 | 1.2 U | 1.1 U | 1.15 U | 1.2 U | 390 U |
| BENZO(A)PYRENE | 33 | 1.6 U | 1.5 U | 1.55 U | 1.6 U | 390 U |
| BENZO(B)FLUORANTHENE | 38 | 1.5 U | 1.4 U | 1.45 U | 1.5 U | 390 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | 390 U |
| BENZO(K)FLUORANTHENE | 15 | 2.1 U | 2 U | 2.05 U | 2.1 U | 390 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066 | SB-066 | SB-066 | SB-066 | SB-066 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RE-6 | D-SB-66RE-7 | D-SB-66RE-8 | D-SB-66RE-8-AVG | D-SB-66RE-8-D | SB-66-05 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20040923 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 8 | 8 | 8 | 5 |
| BOTTOM DEPTH | 6 | 7 | 8 | 8 | 8 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 75 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 390 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.5 U | 1.55 U | 1.6 U | 390 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | 390 U |
| FLUORENE | NA | NA | NA | NA | NA | 390 U |
| INDENO(1,2,3-CD)PYRENE | 15 | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 390 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | 390 U |
| PHENANTHRENE | NA | NA | NA | NA | NA | 390 U |
| PYRENE | NA | NA | NA | NA | NA | 390 U |
| TOTAL PAHS | 237 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | 290 U |
| AROCLOR-1221 | NA | NA | NA | NA | NA | 290 U |
| AROCLOR-1232 | NA | NA | NA | NA | NA | 290 U |
| AROCLOR-1242 | NA | NA | NA | NA | NA | 290 U |
| AROCLOR-1248 | NA | NA | NA | NA | NA | 290 U |
| AROCLOR-1254 | NA | NA | NA | NA | NA | 290 U |
| AROCLOR-1260 | NA | NA | NA | NA | NA | 290 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | 2.7 UL |
| ARSENIC | NA | NA | NA | NA | NA | 1.4 |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066 | SB-066 | SB-066 | SB-066 | SB-066 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RE-6 | D-SB-66RE-7 | D-SB-66RE-8 | D-SB-66RE-8-AVG | D-SB-66RE-8-D | SB-66-05 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20040923 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 8 | 8 | 8 | 5 |
| BOTTOM DEPTH | 6 | 7 | 8 | 8 | 8 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | 2.7 U |
| CADMIUM | NA | NA | NA | NA | NA | 2.7 U |
| CHROMIUM | NA | NA | NA | NA | NA | 22 J |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | 23 |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | 7.8 |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | 0.11 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | 2.7 U |
| SELENIUM | NA | NA | NA | NA | NA | 4 |
| SILVER | NA | NA | NA | NA | NA | 2.7 UR |
| THALLIUM | NA | NA | NA | NA | NA | 2.2 U |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | 27 UL |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | 12000 U |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | 110 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066A | SB-066B | SB-066C | SB-066D | SB-066D |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-66-10 | D-SB-66REA-4 | D-SB-66REB-4 | D-SB-66REC-4 | D-SB-66RED-3 | D-SB-66RED-4 |
| SAMPLE DATE | 20040923 | 20091014 | 20091014 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 4 | 4 | 4 | 3 | 4 |
| BOTTOM DEPTH | 10 | 4 | 4 | 4 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 U | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | NA | NA | NA | NA | NA |
| 2-BUTANONE | 59 U | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 U | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 U | NA | NA | NA | NA | NA |
| 2-HEXANONE | 59 U | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 U | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 U | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 59 U | NA | NA | NA | NA | NA |
| ACETONE | 59 U | NA | NA | NA | NA | NA |
| BENZENE | 6 U | NA | NA | NA | NA | NA |
| BROMOBENZENE | 6 U | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| BROMOFORM | 6 U | NA | NA | NA | NA | NA |
| BROMOMETHANE | 6 U | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 6 U | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 U | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 6 U | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 U | NA | NA | NA | NA | NA |
| CHLOROETHANE | 6 U | NA | NA | NA | NA | NA |
| CHLOROFORM | 6 U | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 U | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 6 U | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066A | SB-066B | SB-066C | SB-066D | SB-066D |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-66-10 | D-SB-66REA-4 | D-SB-66REB-4 | D-SB-66REC-4 | D-SB-66RED-3 | D-SB-66RED-4 |
| SAMPLE DATE | 20040923 | 20091014 | 20091014 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 4 | 4 | 4 | 3 | 4 |
| BOTTOM DEPTH | 10 | 4 | 4 | 4 | 3 | 4 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| M+P-XYLENES | 12 U | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 6 U | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 8 J | NA | NA | NA | NA | NA |
| NAPHTHALENE | 6 U | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| O-XYLENE | 6 U | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| STYRENE | 6 U | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 U | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| TOLUENE | 6 U | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 U | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 6 U | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 6 U | NA | NA | NA | NA | NA |
| VINYL ACETATE | 6 U | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 6 U | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 400 U | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 400 U | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 990 U | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 400 U | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 400 U | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 400 U | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 990 U | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 400 U | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 400 U | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 400 U | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 400 U | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 400 U | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 990 U | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 400 U | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 400 U | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 400 U | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 990 U | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 920 U | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 400 U | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 400 U | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 400 U | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 400 U | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 990 U | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066A | SB-066B | SB-066C | SB-066D | SB-066D |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-66-10 | D-SB-66REA-4 | D-SB-66REB-4 | D-SB-66REC-4 | D-SB-66RED-3 | D-SB-66RED-4 |
| SAMPLE DATE | 20040923 | 20091014 | 20091014 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 4 | 4 | 4 | 3 | 4 |
| BOTTOM DEPTH | 10 | 4 | 4 | 4 | 3 | 4 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 990 U | NA | NA | NA | NA | NA |
| ACETOPHENONE | 400 U | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 400 U | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 400 U | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 400 U | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 400 U | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 400 U | NA | NA | NA | NA | NA |
| CAPROLACTAM | 400 U | NA | NA | NA | NA | NA |
| CARBAZOLE | 400 U | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 400 U | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 400 U | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 400 U | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 76 J | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 400 U | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 400 U | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 400 U | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 400 U | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 400 U | NA | NA | NA | NA | NA |
| ISOPHORONE | 400 U | NA | NA | NA | NA | NA |
| NITROBENZENE | 400 U | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 400 U | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 400 U | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 990 U | NA | NA | NA | NA | NA |
| PHENOL | 400 U | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 400 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 400 U | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 400 U | NA | NA | NA | NA | NA |
| ANTHRACENE | 400 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 400 U | 1.5 U | 3.335 | 1.5 U | 62.2 | 1.5 U |
| BAP EQUIVALENT-POS | 400 U | 1.5 U | 1.74 | 1.5 U | 62.2 | 1.5 U |
| BENZO(A)ANTHRACENE | 400 U | 1.1 U | 7.7 | 1.1 U | 37 | 1.1 U |
| BENZO(A)PYRENE | 400 U | 1.5 U | 1.5 U | 1.5 U | 39 | 1.5 U |
| BENZO(B)FLUORANTHENE | 400 U | 1.4 U | 9.7 | 1.4 U | 47 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 400 U | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 400 U | 2 U | 1.9 U | 1.9 U | 23 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066A | SB-066B | SB-066C | SB-066D | SB-066D |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-66-10 | D-SB-66REA-4 | D-SB-66REB-4 | D-SB-66REC-4 | D-SB-66RED-3 | D-SB-66RED-4 |
| SAMPLE DATE | 20040923 | 20091014 | 20091014 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 4 | 4 | 4 | 3 | 4 |
| BOTTOM DEPTH | 10 | 4 | 4 | 4 | 3 | 4 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 400 U | 1 U | 1 U | 1 U | 32 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 400 U | 1.5 U | 1.5 U | 1.5 U | 12 | 1.5 U |
| FLUORANTHENE | 400 U | NA | NA | NA | NA | NA |
| FLUORENE | 400 U | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 400 U | 1.7 U | 1.7 U | 1.7 U | 25 | 1.8 U |
| NAPHTHALENE | 400 U | NA | NA | NA | NA | NA |
| PHENANTHRENE | 400 U | NA | NA | NA | NA | NA |
| PYRENE | 400 U | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 17.4 | 0 U | 215 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 290 U | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 290 U | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 290 U | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 290 U | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 290 U | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 290 U | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 290 U | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 3 UL | NA | NA | NA | NA | NA |
| ARSENIC | 1.5 | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066 | SB-066A | SB-066B | SB-066C | SB-066D | SB-066D |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-66-10 | D-SB-66REA-4 | D-SB-66REB-4 | D-SB-66REC-4 | D-SB-66RED-3 | D-SB-66RED-4 |
| SAMPLE DATE | 20040923 | 20091014 | 20091014 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 4 | 4 | 4 | 3 | 4 |
| BOTTOM DEPTH | 10 | 4 | 4 | 4 | 3 | 4 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 3 U | NA | NA | NA | NA | NA |
| CADMIUM | 3 U | NA | NA | NA | NA | NA |
| CHROMIUM | 11 J | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | 7.7 | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | 6.3 | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.12 U | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | 7.7 | NA | NA | NA | NA | NA |
| SELENIUM | 3 U | NA | NA | NA | NA | NA |
| SILVER | 3 UR | NA | NA | NA | NA | NA |
| THALLIUM | 2.4 U | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | 35 J | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 12000 U | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 120 U | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066D | SB-066D | SB-067 | SB-067 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RED-4-AVG | D-SB-66RED-4-D | SB-67-05 | SB-67-10 | D-SB-239RE-10 | D-SB-239RE-3 |
| SAMPLE DATE | 20091014 | 20091014 | 20040927 | 20040927 | 20091006 | 20090914 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 5 | 10 | 10 | 3 |
| BOTTOM DEPTH | 4 | 4 | 5 | 10 | 10 | 3 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | 7 UL | 6 UL | NA | NA |
| 2-BUTANONE | NA | NA | 72 UL | 59 UL | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | 7 UL | 6 UL | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | 7 UL | 6 UL | NA | NA |
| 2-HEXANONE | NA | NA | 72 UL | 59 UL | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | 7 UL | 6 UL | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | 7 UL | 6 UL | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | 72 UL | 59 UL | NA | NA |
| ACETONE | NA | NA | 72 UL | 59 UL | NA | NA |
| BENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| BROMOBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| BROMOFORM | NA | NA | 7 UL | 6 UL | NA | NA |
| BROMOMETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| CARBON DISULFIDE | NA | NA | 7 UL | 6 UL | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | 7 UL | 6 UL | NA | NA |
| CHLOROBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| CHLOROETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| CHLOROFORM | NA | NA | 7 UL | 6 UL | NA | NA |
| CHLOROMETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | 7 UL | 6 UL | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | 7 UL | 6 UL | NA | NA |
| DIBROMOMETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066D | SB-066D | SB-067 | SB-067 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RED-4-AVG | D-SB-66RED-4-D | SB-67-05 | SB-67-10 | D-SB-239RE-10 | D-SB-239RE-3 |
| SAMPLE DATE | 20091014 | 20091014 | 20040927 | 20040927 | 20091006 | 20090914 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 5 | 10 | 10 | 3 |
| BOTTOM DEPTH | 4 | 4 | 5 | 10 | 10 | 3 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| M+P-XYLENES | NA | NA | 14 UL | 12 UL | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | 7 UL | 6 UL | NA | NA |
| METHYLENE CHLORIDE | NA | NA | 7 UL | 6 UL | NA | NA |
| NAPHTHALENE | NA | NA | 7 UL | 6 UL | NA | NA |
| N-BUTYLBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| N-PROPYLBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| O-XYLENE | NA | NA | 7 UL | 6 UL | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| STYRENE | NA | NA | 7 UL | 6 UL | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | 7 UL | 6 UL | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | 7 UL | 6 UL | NA | NA |
| TOLUENE | NA | NA | 7 UL | 6 UL | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | 7 UL | 6 UL | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | 7 UL | 6 UL | NA | NA |
| TRICHLOROETHENE | NA | NA | 7 UL | 6 UL | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | 7 UL | 6 UL | NA | NA |
| VINYL ACETATE | NA | NA | 7 UL | 6 UL | NA | NA |
| VINYL CHLORIDE | NA | NA | 7 UL | 6 UL | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | 490 U | 410 U | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | 490 U | 410 U | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | 1200 U | 1000 U | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | 490 U | 410 U | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | 490 U | 410 U | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | 490 U | 410 U | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | 1200 U | 1000 U | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | 490 U | 410 U | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | 490 U | 410 U | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | 490 U | 410 U | NA | NA |
| 2-CHLOROPHENOL | NA | NA | 490 U | 410 U | NA | NA |
| 2-METHYLPHENOL | NA | NA | 490 U | 410 U | NA | NA |
| 2-NITROANILINE | NA | NA | 1200 U | 1000 U | NA | NA |
| 2-NITROPHENOL | NA | NA | 490 U | 410 U | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | 490 U | 410 U | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | 490 U | 410 U | NA | NA |
| 3-NITROANILINE | NA | NA | 1200 U | 1000 U | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | 1100 U | 930 U | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | 490 U | 410 U | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | 490 U | 410 U | NA | NA |
| 4-CHLOROANILINE | NA | NA | 490 U | 410 U | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | 490 U | 410 U | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | 1200 U | 1000 U | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066D | SB-066D | SB-067 | SB-067 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RED-4-AVG | D-SB-66RED-4-D | SB-67-05 | SB-67-10 | D-SB-239RE-10 | D-SB-239RE-3 |
| SAMPLE DATE | 20091014 | 20091014 | 20040927 | 20040927 | 20091006 | 20090914 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 5 | 10 | 10 | 3 |
| BOTTOM DEPTH | 4 | 4 | 5 | 10 | 10 | 3 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | 1200 U | 1000 U | NA | NA |
| ACETOPHENONE | NA | NA | 490 U | 410 U | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | 490 U | 410 U | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | 490 U | 410 U | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | 490 U | 410 U | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | 490 U | 410 U | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | 490 U | 410 U | NA | NA |
| CAPROLACTAM | NA | NA | 490 U | 410 U | NA | NA |
| CARBAZOLE | NA | NA | 490 U | 410 U | NA | NA |
| DIBENZOFURAN | NA | NA | 490 U | 410 U | NA | NA |
| DIETHYL PHTHALATE | NA | NA | 490 U | 410 U | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | 490 U | 410 U | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | 490 U | 410 U | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | 490 U | 410 U | NA | NA |
| HEXACHLOROBENZENE | NA | NA | 490 U | 410 U | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | 490 U | 410 U | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | 490 U | 410 U | NA | NA |
| HEXACHLOROETHANE | NA | NA | 490 U | 410 U | NA | NA |
| ISOPHORONE | NA | NA | 490 U | 410 U | NA | NA |
| NITROBENZENE | NA | NA | 490 U | 410 U | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | 490 U | 410 U | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | 490 U | 410 U | NA | NA |
| PENTACHLOROPHENOL | NA | NA | 1200 U | 1000 U | NA | NA |
| PHENOL | NA | NA | 490 U | 410 U | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | 490 U | 410 U | NA | NA |
| ACENAPHTHENE | NA | NA | 490 U | 410 U | NA | NA |
| ACENAPHTHYLENE | NA | NA | 490 U | 410 U | NA | NA |
| ANTHRACENE | NA | NA | 490 U | 410 U | NA | NA |
| BAP EQUIVALENT-HALFND | 8.4 | 16.0 | 490 U | 410 U | 26.3 | 3.3 |
| BAP EQUIVALENT-POS | 8.0 | 15.2 | 490 U | 410 U | 21.2 | 1.7 |
| BENZO(A)ANTHRACENE | 6.775 | 13 | 490 U | 410 U | 14 J | 8.3 |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 490 U | 410 U | 16 J | 1.5 U |
| BENZO(B)FLUORANTHENE | 7.85 | 15 | 490 U | 410 U | 22 J | 8.6 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | 490 U | 410 U | NA | NA |
| BENZO(K)FLUORANTHENE | 7 | 13 | 490 U | 410 U | 9.8 U | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066D | SB-066D | SB-067 | SB-067 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RED-4-AVG | D-SB-66RED-4-D | SB-67-05 | SB-67-10 | D-SB-239RE-10 | D-SB-239RE-3 |
| SAMPLE DATE | 20091014 | 20091014 | 20040927 | 20040927 | 20091006 | 20090914 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 5 | 10 | 10 | 3 |
| BOTTOM DEPTH | 4 | 4 | 5 | 10 | 10 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 490 U | 410 U | 14 J | 1 U |
| DIBENZO(A,H)ANTHRACENE | 5.875 | 11 | 490 U | 410 U | 10 U | 1.5 U |
| FLUORANTHENE | NA | NA | 490 U | 410 U | NA | NA |
| FLUORENE | NA | NA | 490 U | 410 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 6.95 | 13 | 490 U | 410 U | 16 J | 1.7 U |
| NAPHTHALENE | NA | NA | 490 U | 410 U | NA | NA |
| PHENANTHRENE | NA | NA | 490 U | 410 U | NA | NA |
| PYRENE | NA | NA | 490 U | 410 U | NA | NA |
| TOTAL PAHS | 32.5 | 65 | 0 U | 0 U | 82 | 16.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | 360 U | 300 U | NA | NA |
| AROCLOR-1221 | NA | NA | 360 U | 300 U | NA | NA |
| AROCLOR-1232 | NA | NA | 360 U | 300 U | NA | NA |
| AROCLOR-1242 | NA | NA | 360 U | 300 U | NA | NA |
| AROCLOR-1248 | NA | NA | 360 U | 300 U | NA | NA |
| AROCLOR-1254 | NA | NA | 360 U | 300 U | NA | NA |
| AROCLOR-1260 | NA | NA | 360 U | 300 U | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | 0 U | 0 U | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | 3.6 UL | 2.7 UL | NA | NA |
| ARSENIC | NA | NA | 1.2 K | 1.2 K | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-066D | SB-066D | SB-067 | SB-067 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RED-4-AVG | D-SB-66RED-4-D | SB-67-05 | SB-67-10 | D-SB-239RE-10 | D-SB-239RE-3 |
| SAMPLE DATE | 20091014 | 20091014 | 20040927 | 20040927 | 20091006 | 20090914 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 5 | 10 | 10 | 3 |
| BOTTOM DEPTH | 4 | 4 | 5 | 10 | 10 | 3 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | 3.6 U | 2.7 U | NA | NA |
| CADMIUM | NA | NA | 3.6 U | 2.7 U | NA | NA |
| CHROMIUM | NA | NA | 41 J | 13 J | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | 9.1 J | 31 J | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | 4.3 K | 11 K | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | 0.14 U | 0.11 U | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | 3.6 U | 27 K | NA | NA |
| SELENIUM | NA | NA | 3.6 U | 2.7 U | NA | NA |
| SILVER | NA | NA | 3.6 UR | 2.7 UR | NA | NA |
| THALLIUM | NA | NA | 2.9 U | 2.2 U | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | 36 UL | 50 L | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | 17000 | 12000 U | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | 150 U | 120 U | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-239 | SB-239 | SB-239 | SB-239 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-239RE-4 | D-SB-239RE-5 | D-SB-239RE-6 | D-SB-239RE-7 | D-SB-239RE-8 | D-SB-239RE-9 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-239 | SB-239 | SB-239 | SB-239 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-239RE-4 | D-SB-239RE-5 | D-SB-239RE-6 | D-SB-239RE-7 | D-SB-239RE-8 | D-SB-239RE-9 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-239 | SB-239 | SB-239 | SB-239 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-239RE-4 | D-SB-239RE-5 | D-SB-239RE-6 | D-SB-239RE-7 | D-SB-239RE-8 | D-SB-239RE-9 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 26.2 | 23.6 | 208 | 417 | 367 | 1801 |
| BAP EQUIVALENT-POS | 26.2 | 22.9 | 208 | 417 | 367 | 1801 |
| BENZO(A)ANTHRACENE | 13 | 21 | 120 | 190 | 180 | 930 |
| BENZO(A)PYRENE | 12 | 17 | 140 | 300 | 260 | 1200 |
| BENZO(B)FLUORANTHENE | 14 | 22 | 170 | 350 | 300 | 1400 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 13 | 14 | 67 | 8.4 U | 8.2 U | 8.2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-239 | SB-239 | SB-239 | SB-239 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-239RE-4 | D-SB-239RE-5 | D-SB-239RE-6 | D-SB-239RE-7 | D-SB-239RE-8 | D-SB-239RE-9 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 15 | 23 | 130 | 190 | 180 | 850 |
| DIBENZO(A,H)ANTHRACENE | 10 | 1.5 U | 30 | 42 | 41 | 270 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 14 | 14 | 84 | 210 | 180 | 970 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 91 | 111 | 741 | 1282 | 1141 | 5620 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-239 | SB-239 | SB-239 | SB-239 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-239RE-4 | D-SB-239RE-5 | D-SB-239RE-6 | D-SB-239RE-7 | D-SB-239RE-8 | D-SB-239RE-9 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240RE-10 | D-SB-240RE-3 | D-SB-240RE-4 | D-SB-240RE-6 | D-SB-240RE-7 | D-SB-240RE-8 |
| SAMPLE DATE | 20090915 | 20090914 | 20090914 | 20090915 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 6 | 7 | 8 |
| BOTTOM DEPTH | 10 | 3 | 4 | 6 | 7 | 8 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240RE-10 | D-SB-240RE-3 | D-SB-240RE-4 | D-SB-240RE-6 | D-SB-240RE-7 | D-SB-240RE-8 |
| SAMPLE DATE | 20090915 | 20090914 | 20090914 | 20090915 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 6 | 7 | 8 |
| BOTTOM DEPTH | 10 | 3 | 4 | 6 | 7 | 8 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240RE-10 | D-SB-240RE-3 | D-SB-240RE-4 | D-SB-240RE-6 | D-SB-240RE-7 | D-SB-240RE-8 |
| SAMPLE DATE | 20090915 | 20090914 | 20090914 | 20090915 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 6 | 7 | 8 |
| BOTTOM DEPTH | 10 | 3 | 4 | 6 | 7 | 8 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 112 | 203 | 135 | 187 | 5503 | 2.8 |
| BAP EQUIVALENT-POS | 112 | 203 | 135 | 187 | 5503 | 1.0 |
| BENZO(A)ANTHRACENE | 88 | 160 | 91 | 130 | 4600 | 1.2 UJ |
| BENZO(A)PYRENE | 76 | 140 | 91 | 130 | 3800 | 1.6 UJ |
| BENZO(B)FLUORANTHENE | 110 | 190 | 120 | 160 | 4700 | 9.9 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 36 | 81 | 49 | 61 | 1900 | 2.1 UJ |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240RE-10 | D-SB-240RE-3 | D-SB-240RE-4 | D-SB-240RE-6 | D-SB-240RE-7 | D-SB-240RE-8 |
| SAMPLE DATE | 20090915 | 20090914 | 20090914 | 20090915 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 6 | 7 | 8 |
| BOTTOM DEPTH | 10 | 3 | 4 | 6 | 7 | 8 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 80 | 160 | 100 | 140 | 3900 | 1.1 UJ |
| DIBENZO(A,H)ANTHRACENE | 12 | 21 | 17 | 20 | 570 | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 41 | 65 | 52 | 77 | 1800 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 443 | 817 | 520 | 718 | 21270 | 9.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240RE-10 | D-SB-240RE-3 | D-SB-240RE-4 | D-SB-240RE-6 | D-SB-240RE-7 | D-SB-240RE-8 |
| SAMPLE DATE | 20090915 | 20090914 | 20090914 | 20090915 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 6 | 7 | 8 |
| BOTTOM DEPTH | 10 | 3 | 4 | 6 | 7 | 8 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240 | SB-240A | SB-240A | SB-240A | SB-240A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240RE-8-AVG | D-SB-240RE-8-D | D-SB-240REA-3 | D-SB-240REA-5 | D-SB-240REA-7 | D-SB-240REA-7-AVG |
| SAMPLE DATE | 20090914 | 20090914 | 20091014 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 8 | 8 | 3 | 5 | 7 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240 | SB-240A | SB-240A | SB-240A | SB-240A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240RE-8-AVG | D-SB-240RE-8-D | D-SB-240REA-3 | D-SB-240REA-5 | D-SB-240REA-7 | D-SB-240REA-7-AVG |
| SAMPLE DATE | 20090914 | 20090914 | 20091014 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 8 | 8 | 3 | 5 | 7 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240 | SB-240A | SB-240A | SB-240A | SB-240A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240RE-8-AVG | D-SB-240RE-8-D | D-SB-240REA-3 | D-SB-240REA-5 | D-SB-240REA-7 | D-SB-240REA-7-AVG |
| SAMPLE DATE | 20090914 | 20090914 | 20091014 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 8 | 8 | 3 | 5 | 7 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 15.5 | 28.3 | 46.8 | 326 | 4.6 | 10.0 |
| BAP EQUIVALENT-POS | 14.3 | 27.6 | 46.0 | 326 | 2.9 | 8.7 |
| BENZO(A)ANTHRACENE | 12.3 | 24 J | 40 | 240 | 15 | 15 |
| BENZO(A)PYRENE | 10.9 | 21 J | 35 | 230 | 1.6 U | 5.4 |
| BENZO(B)FLUORANTHENE | 16.95 | 24 J | 48 | 240 | 14 | 17 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 9.025 | 17 J | 20 | 86 | 2.1 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240 | SB-240A | SB-240A | SB-240A | SB-240A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240RE-8-AVG | D-SB-240RE-8-D | D-SB-240REA-3 | D-SB-240REA-5 | D-SB-240REA-7 | D-SB-240REA-7-AVG |
| SAMPLE DATE | 20090914 | 20090914 | 20091014 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 8 | 8 | 3 | 5 | 7 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 11.775 | 23 J | 36 | 310 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.55 U | 1.5 U | 1.5 U | 36 | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 8.45 | 16 | 20 | 110 | 1.8 U | 5.45 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 67.45 | 125 | 199 | 1252 | 29 | 42 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240 | SB-240 | SB-240A | SB-240A | SB-240A | SB-240A |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240RE-8-AVG | D-SB-240RE-8-D | D-SB-240REA-3 | D-SB-240REA-5 | D-SB-240REA-7 | D-SB-240REA-7-AVG |
| SAMPLE DATE | 20090914 | 20090914 | 20091014 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 8 | 8 | 3 | 5 | 7 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240A | SB-240A | SB-240B | SB-240B | SB-240B | SB-240B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REA-7-D | D-SB-240REA-9 | D-SB-240REB-3 | D-SB-240REB-5 | D-SB-240REB-7 | D-SB-240REB-9 |
| SAMPLE DATE | 20091014 | 20091014 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240A | SB-240A | SB-240B | SB-240B | SB-240B | SB-240B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REA-7-D | D-SB-240REA-9 | D-SB-240REB-3 | D-SB-240REB-5 | D-SB-240REB-7 | D-SB-240REB-9 |
| SAMPLE DATE | 20091014 | 20091014 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240A | SB-240A | SB-240B | SB-240B | SB-240B | SB-240B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REA-7-D | D-SB-240REA-9 | D-SB-240REB-3 | D-SB-240REB-5 | D-SB-240REB-7 | D-SB-240REB-9 |
| SAMPLE DATE | 20091014 | 20091014 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 15.3 | 3.4 | 37.9 | 2.4 | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 14.5 | 1.8 | 37.1 | 0.8 | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 15 | 8.7 | 29 | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 10 | 1.5 U | 29 | 1.5 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 20 | 9.2 | 37 | 7.9 | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2 U | 17 | 2 U | 2.1 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240A | SB-240A | SB-240B | SB-240B | SB-240B | SB-240B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REA-7-D | D-SB-240REA-9 | D-SB-240REB-3 | D-SB-240REB-5 | D-SB-240REB-7 | D-SB-240REB-9 |
| SAMPLE DATE | 20091014 | 20091014 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 42 | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 10 | 1.8 U | 13 | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 55 | 17.9 | 167 | 7.9 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240A | SB-240A | SB-240B | SB-240B | SB-240B | SB-240B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REA-7-D | D-SB-240REA-9 | D-SB-240REB-3 | D-SB-240REB-5 | D-SB-240REB-7 | D-SB-240REB-9 |
| SAMPLE DATE | 20091014 | 20091014 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240C | SB-240C | SB-240C | SB-240C | SB-240C | SB-240C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REC-3 | D-SB-240REC-3-AVG | D-SB-240REC-3-D | D-SB-240REC-5 | D-SB-240REC-7 | D-SB-240REC-9 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240C | SB-240C | SB-240C | SB-240C | SB-240C | SB-240C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REC-3 | D-SB-240REC-3-AVG | D-SB-240REC-3-D | D-SB-240REC-5 | D-SB-240REC-7 | D-SB-240REC-9 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240C | SB-240C | SB-240C | SB-240C | SB-240C | SB-240C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REC-3 | D-SB-240REC-3-AVG | D-SB-240REC-3-D | D-SB-240REC-5 | D-SB-240REC-7 | D-SB-240REC-9 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 9 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 108 | 67.4 | 26.7 | 4899 | 1.5 U | 17.1 |
| BAP EQUIVALENT-POS | 108 | 67.0 | 25.9 | 4899 | 1.5 U | 16.3 |
| BENZO(A)ANTHRACENE | 65 J | 42.5 | 20 J | 4100 | 1.1 U | 10 |
| BENZO(A)PYRENE | 71 J | 45.5 | 20 J | 3400 | 1.5 U | 13 |
| BENZO(B)FLUORANTHENE | 110 J | 68 | 26 J | 4600 | 1.3 U | 13 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 31 J | 21.5 | 12 J | 1500 | 1.9 U | 8 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240C | SB-240C | SB-240C | SB-240C | SB-240C | SB-240C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REC-3 | D-SB-240REC-3-AVG | D-SB-240REC-3-D | D-SB-240REC-5 | D-SB-240REC-7 | D-SB-240REC-9 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 66 J | 43.5 | 21 J | 3500 | 1 U | 13 |
| DIBENZO(A,H)ANTHRACENE | 15 J | 7.875 | 1.5 UJ | 440 | 1.5 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 42 J | 27 | 12 J | 1700 | 1.7 U | 8.8 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 400 | 255.5 | 111 | 19240 | 0 U | 65.8 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240C | SB-240C | SB-240C | SB-240C | SB-240C | SB-240C |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REC-3 | D-SB-240REC-3-AVG | D-SB-240REC-3-D | D-SB-240REC-5 | D-SB-240REC-7 | D-SB-240REC-9 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 9 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240D | SB-240D | SB-240D | SB-240D |
|---|---|---|---|---|
| SAMPLE ID | D-SB-240RED-3 | D-SB-240RED-5 | D-SB-240RED-7 | D-SB-240RED-9 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240D | SB-240D | SB-240D | SB-240D |
|---|---|---|---|---|
| SAMPLE ID | D-SB-240RED-3 | D-SB-240RED-5 | D-SB-240RED-7 | D-SB-240RED-9 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240D | SB-240D | SB-240D | SB-240D |
|---|---|---|---|---|
| SAMPLE ID | D-SB-240RED-3 | D-SB-240RED-5 | D-SB-240RED-7 | D-SB-240RED-9 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 49.6 | 5759 | 14.1 | 809 |
| BAP EQUIVALENT-POS | 48.8 | 5759 | 13.2 | 809 |
| BENZO(A)ANTHRACENE | 39 | 1700 | 8.8 | 410 |
| BENZO(A)PYRENE | 38 | 3800 | 11 | 560 |
| BENZO(B)FLUORANTHENE | 44 | 4500 | 13 | 610 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 27 | 1700 | 2.1 U | 230 |
| C1-CHRYSENES | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240D | SB-240D | SB-240D | SB-240D |
|---|---|---|---|---|
| SAMPLE ID | D-SB-240RED-3 | D-SB-240RED-5 | D-SB-240RED-7 | D-SB-240RED-9 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED** | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| CHRYSENE | 41 | 2000 | 9.7 | 420 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1000 | 1.6 U | 110 |
| FLUORANTHENE | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 22 | 3200 | 1.8 U | 340 |
| NAPHTHALENE | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA |
| TOTAL PAHS | 211 | 17900 | 42.5 | 2680 |
| **PESTICIDES/PCBS (UG/KG)** | | | | |
| 4,4'-DDD | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | |
| ANTIMONY | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240D | SB-240D | SB-240D | SB-240D |
|---|---|---|---|---|
| SAMPLE ID | D-SB-240RED-3 | D-SB-240RED-5 | D-SB-240RED-7 | D-SB-240RED-9 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 |
| **METALS (CONTINUED) (MG/KG)** | | | | |
| BERYLLIUM | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-10 | D-SB-243RE-3 | D-SB-243RE-4 | D-SB-243RE-5 | D-SB-243RE-6 | D-SB-243RE-7 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-10 | D-SB-243RE-3 | D-SB-243RE-4 | D-SB-243RE-5 | D-SB-243RE-6 | D-SB-243RE-7 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-10 | D-SB-243RE-3 | D-SB-243RE-4 | D-SB-243RE-5 | D-SB-243RE-6 | D-SB-243RE-7 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 61.8 | 21.5 | 20.4 | 32.2 | 15.31 |
| BAP EQUIVALENT-POS | 1.6 U | 60.9 | 20.7 | 19.6 | 31.4 | 14.41 |
| BENZO(A)ANTHRACENE | 1.2 U | 29 | 11 | 11 | 22 | 10 |
| BENZO(A)PYRENE | 1.6 U | 50 | 17 | 16 | 24 | 12 |
| BENZO(B)FLUORANTHENE | 1.5 U | 48 | 15 | 12 | 27 | 14 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.2 U | 18 | 2.1 U | 12 | 20 | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-10 | D-SB-243RE-3 | D-SB-243RE-4 | D-SB-243RE-5 | D-SB-243RE-6 | D-SB-243RE-7 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 39 | 12 | 12 | 28 | 12 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.7 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.9 U | 30 | 11 | 12 | 23 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 214 | 66 | 75 | 144 | 48 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-10 | D-SB-243RE-3 | D-SB-243RE-4 | D-SB-243RE-5 | D-SB-243RE-6 | D-SB-243RE-7 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243A | SB-243B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-8 | D-SB-243RE-8-AVG | D-SB-243RE-8-D | D-SB-243RE-9 | D-SB-243REA-4 | D-SB-243REB-4 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20091012 | 20091012 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 8 | 9 | 4 | 4 |
| BOTTOM DEPTH | 8 | 8 | 8 | 9 | 4 | 4 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243A | SB-243B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-8 | D-SB-243RE-8-AVG | D-SB-243RE-8-D | D-SB-243RE-9 | D-SB-243REA-4 | D-SB-243REB-4 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20091012 | 20091012 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 8 | 9 | 4 | 4 |
| BOTTOM DEPTH | 8 | 8 | 8 | 9 | 4 | 4 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243A | SB-243B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-8 | D-SB-243RE-8-AVG | D-SB-243RE-8-D | D-SB-243RE-9 | D-SB-243REA-4 | D-SB-243REB-4 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20091012 | 20091012 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 8 | 9 | 4 | 4 |
| BOTTOM DEPTH | 8 | 8 | 8 | 9 | 4 | 4 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 2.5 | 4.2 | 1.7 U | 85.9 | 2.6 |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 | 2.3 | 1.7 U | 85.9 | 0.9 |
| BENZO(A)ANTHRACENE | 1.2 UJ | 5.8 | 11 J | 1.2 U | 50 | 1.2 U |
| BENZO(A)PYRENE | 1.6 U | 1.7 U | 1.8 U | 1.7 U | 56 | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.5 UJ | 6.375 | 12 J | 1.6 U | 95 | 8.6 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2.25 U | 2.4 U | 2.2 U | 28 | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243A | SB-243B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-8 | D-SB-243RE-8-AVG | D-SB-243RE-8-D | D-SB-243RE-9 | D-SB-243REA-4 | D-SB-243REB-4 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20091012 | 20091012 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 8 | 9 | 4 | 4 |
| BOTTOM DEPTH | 8 | 8 | 8 | 9 | 4 | 4 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 UJ | 5.775 | 11 J | 1.2 U | 74 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.7 U | 1.8 U | 1.7 U | 11 | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.95 U | 2.1 U | 2 U | 40 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 17 | 34 | 0 U | 354 | 8.6 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-243 | SB-243 | SB-243A | SB-243B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-8 | D-SB-243RE-8-AVG | D-SB-243RE-8-D | D-SB-243RE-9 | D-SB-243REA-4 | D-SB-243REB-4 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20091012 | 20091012 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 8 | 9 | 4 | 4 |
| BOTTOM DEPTH | 8 | 8 | 8 | 9 | 4 | 4 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243C | SB-243D | SB-243D | SB-243D | SB-244 | SB-244 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243REC-4 | D-SB-243RED-4 | D-SB-243RED-4-AVG | D-SB-243RED-4-D | SB-244-05 | SB-244-10 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 4 | 5 | 10 |
| BOTTOM DEPTH | 4 | 4 | 4 | 4 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243C | SB-243D | SB-243D | SB-243D | SB-244 | SB-244 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243REC-4 | D-SB-243RED-4 | D-SB-243RED-4-AVG | D-SB-243RED-4-D | SB-244-05 | SB-244-10 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 4 | 5 | 10 |
| BOTTOM DEPTH | 4 | 4 | 4 | 4 | 5 | 10 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-243C | SB-243D | SB-243D | SB-243D | SB-244 | SB-244 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243REC-4 | D-SB-243RED-4 | D-SB-243RED-4-AVG | D-SB-243RED-4-D | SB-244-05 | SB-244-10 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 4 | 5 | 10 |
| BOTTOM DEPTH | 4 | 4 | 4 | 4 | 5 | 10 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.7 U | 25.6 | 21.6 | 17.7 | NA | NA |
| BAP EQUIVALENT-POS | 1.7 U | 24.8 | 20.8 | 16.8 | NA | NA |
| BENZO(A)ANTHRACENE | 1.2 U | 20 J | 15 | 10 J | NA | NA |
| BENZO(A)PYRENE | 1.7 U | 19 | 16.5 | 14 | NA | NA |
| BENZO(B)FLUORANTHENE | 1.5 U | 21 | 19.5 | 18 | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.2 U | 10 | 5.5 | 2 U | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243C | SB-243D | SB-243D | SB-243D | SB-244 | SB-244 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243REC-4 | D-SB-243RED-4 | D-SB-243RED-4-AVG | D-SB-243RED-4-D | SB-244-05 | SB-244-10 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 4 | 5 | 10 |
| BOTTOM DEPTH | 4 | 4 | 4 | 4 | 5 | 10 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 20 | 18 | 16 | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.6 U | 1.55 U | 1.5 U | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.9 U | 16 J | 8.45 | 1.8 UJ | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 106 | 82 | 58 | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | 38 U | 38 U |
| AROCLOR-1221 | NA | NA | NA | NA | 38 U | 38 U |
| AROCLOR-1232 | NA | NA | NA | NA | 38 U | 38 U |
| AROCLOR-1242 | NA | NA | NA | NA | 38 U | 38 U |
| AROCLOR-1248 | NA | NA | NA | NA | 38 U | 38 U |
| AROCLOR-1254 | NA | NA | NA | NA | 38 U | 38 U |
| AROCLOR-1260 | NA | NA | NA | NA | 38 U | 38 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243C | SB-243D | SB-243D | SB-243D | SB-244 | SB-244 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243REC-4 | D-SB-243RED-4 | D-SB-243RED-4-AVG | D-SB-243RED-4-D | SB-244-05 | SB-244-10 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 4 | 5 | 10 |
| BOTTOM DEPTH | 4 | 4 | 4 | 4 | 5 | 10 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-245 | SB-245 | SB-246 | SB-246 | SB-247 | SB-247 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-245-05 | SB-245-10 | SB-246-05 | SB-246-10 | SB-247-05 | SB-247-10 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-245 | SB-245 | SB-246 | SB-246 | SB-247 | SB-247 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-245-05 | SB-245-10 | SB-246-05 | SB-246-10 | SB-247-05 | SB-247-10 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-245 | SB-245 | SB-246 | SB-246 | SB-247 | SB-247 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-245-05 | SB-245-10 | SB-246-05 | SB-246-10 | SB-247-05 | SB-247-10 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-245 | SB-245 | SB-246 | SB-246 | SB-247 | SB-247 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-245-05 | SB-245-10 | SB-246-05 | SB-246-10 | SB-247-05 | SB-247-10 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 39 U | 38 U | 38 U | 40 U | 40 U | 42 U |
| AROCLOR-1221 | 39 U | 38 U | 38 U | 40 U | 40 U | 42 U |
| AROCLOR-1232 | 39 U | 38 U | 38 U | 40 U | 40 U | 42 U |
| AROCLOR-1242 | 39 U | 38 U | 38 U | 40 U | 40 U | 42 U |
| AROCLOR-1248 | 39 U | 38 U | 38 U | 40 U | 40 U | 42 U |
| AROCLOR-1254 | 39 U | 38 U | 38 U | 40 U | 40 U | 42 U |
| AROCLOR-1260 | 39 U | 38 U | 38 U | 40 U | 40 U | 42 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | 0.7 | 1 |
| ARSENIC | NA | NA | NA | NA | 4 | 0.8 U |
| BARIUM | NA | NA | NA | NA | 30 | 24 |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-245 | SB-245 | SB-246 | SB-246 | SB-247 | SB-247 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-245-05 | SB-245-10 | SB-246-05 | SB-246-10 | SB-247-05 | SB-247-10 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | 2.5 | 1.3 |
| CADMIUM | NA | NA | NA | NA | 0.2 | 0.4 |
| CHROMIUM | NA | NA | NA | NA | 22.1 | 20.4 |
| COBALT | NA | NA | NA | NA | 10.7 | 6.2 |
| COPPER | NA | NA | NA | NA | 21 | 34 |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | 18 | 7 |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | 0.1 K | 0.002 U |
| MOLYBDENUM | NA | NA | NA | NA | 0.5 U | 0.6 U |
| NICKEL | NA | NA | NA | NA | 30 | 12 |
| SELENIUM | NA | NA | NA | NA | 2 | 4 |
| SILVER | NA | NA | NA | NA | 0.05 U | 0.06 U |
| THALLIUM | NA | NA | NA | NA | 1 U | 1 U |
| VANADIUM | NA | NA | NA | NA | 33 | 28.4 |
| ZINC | NA | NA | NA | NA | 57 | 83 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | 0.37 UL | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | 0.31 K | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-248 | SB-248 | SB-249 | SB-249 | SB-318 | SB-318 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-248-05 | SB-248-10 | SB-249-05 | SB-249-10 | SB-318-0203 | SB-318-0506 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 2 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-248 | SB-248 | SB-249 | SB-249 | SB-318 | SB-318 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-248-05 | SB-248-10 | SB-249-05 | SB-249-10 | SB-318-0203 | SB-318-0506 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 2 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-248 | SB-248 | SB-249 | SB-249 | SB-318 | SB-318 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-248-05 | SB-248-10 | SB-249-05 | SB-249-10 | SB-318-0203 | SB-318-0506 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 2 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-248 | SB-248 | SB-249 | SB-249 | SB-318 | SB-318 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-248-05 | SB-248-10 | SB-249-05 | SB-249-10 | SB-318-0203 | SB-318-0506 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 2 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 40 U | 38 U | 40 U | 39 U | NA | NA |
| AROCLOR-1221 | 40 U | 38 U | 40 U | 39 U | NA | NA |
| AROCLOR-1232 | 40 U | 38 U | 40 U | 39 U | NA | NA |
| AROCLOR-1242 | 40 U | 38 U | 40 U | 39 U | NA | NA |
| AROCLOR-1248 | 40 U | 38 U | 40 U | 39 U | NA | NA |
| AROCLOR-1254 | 40 U | 38 U | 40 U | 39 U | NA | NA |
| AROCLOR-1260 | 40 U | 38 U | 40 U | 39 U | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 0.8 | 0.3 U | 0.4 | 0.4 U | NA | NA |
| ARSENIC | 6 | 8 | 3 B | 7 | NA | NA |
| BARIUM | 31 | 13 | 42 | 17 | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-248 | SB-248 | SB-249 | SB-249 | SB-318 | SB-318 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-248-05 | SB-248-10 | SB-249-05 | SB-249-10 | SB-318-0203 | SB-318-0506 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 2 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 1.8 | 2.5 | 2.7 | 2.7 | NA | NA |
| CADMIUM | 0.1 | 0.1 | 0.3 | 0.2 | NA | NA |
| CHROMIUM | 24.6 | 37.2 | 18 | 49.3 | NA | NA |
| COBALT | 11.4 | 30.1 | 19.6 | 3.4 | NA | NA |
| COPPER | 21 | 16 | 20 | 7 | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | 9 | 6 | 13 | 18 | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.06 K | 0.002 U | 0.4 K | 0.002 U | 0.02 UL | 0.029 L |
| MOLYBDENUM | 0.6 B | 0.5 B | 0.6 U | 0.9 B | NA | NA |
| NICKEL | 13 | 52 | 37 | 12 | NA | NA |
| SELENIUM | 5 | 4 | 4 | 5 | NA | NA |
| SILVER | 0.06 U | 0.05 U | 0.06 U | 0.06 U | NA | NA |
| THALLIUM | 1 U | 1 U | 1 U | 1 U | NA | NA |
| VANADIUM | 40.3 | 51 | 24.5 | 90.5 | NA | NA |
| ZINC | 65 | 39 | 137 | 10 | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | 85.3 | 88.6 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | 0.36 UL | 0.35 UL | NA | 0.35 UL | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | 0.474 K | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-318 | SB-319 | SB-319 | SB-319 | SB-320 | SB-320 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-318-0809 | SB-319-0203 | SB-319-0506 | SB-319-0809 | SB-320-0203 | SB-320-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-318 | SB-319 | SB-319 | SB-319 | SB-320 | SB-320 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-318-0809 | SB-319-0203 | SB-319-0506 | SB-319-0809 | SB-320-0203 | SB-320-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-318 | SB-319 | SB-319 | SB-319 | SB-320 | SB-320 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-318-0809 | SB-319-0203 | SB-319-0506 | SB-319-0809 | SB-320-0203 | SB-320-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 15 | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 15 | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 15 J | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-318 | SB-319 | SB-319 | SB-319 | SB-320 | SB-320 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-318-0809 | SB-319-0203 | SB-319-0506 | SB-319-0809 | SB-320-0203 | SB-320-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 15 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-318 | SB-319 | SB-319 | SB-319 | SB-320 | SB-320 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-318-0809 | SB-319-0203 | SB-319-0506 | SB-319-0809 | SB-320-0203 | SB-320-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.055 L | 0.043 L | 0.024 L | 0.026 L | 0.028 L | 0.019 UL |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 85.2 | 89.3 | 87.9 | 85.1 | 88.4 | 88.9 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-320 | SB-321 | SB-321 | SB-321 | SB-322 | SB-322 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-320-0809 | SB-321-0203 | SB-321-0506 | SB-321-0809 | SB-322-0203 | SB-322-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-320 | SB-321 | SB-321 | SB-321 | SB-322 | SB-322 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-320-0809 | SB-321-0203 | SB-321-0506 | SB-321-0809 | SB-322-0203 | SB-322-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-320 | SB-321 | SB-321 | SB-321 | SB-322 | SB-322 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-320-0809 | SB-321-0203 | SB-321-0506 | SB-321-0809 | SB-322-0203 | SB-322-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 940 | 1.5 U | 1.5 U | 13.0 | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 940 | 1.5 U | 1.5 U | 13.0 | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 940 | 1.5 U | 1.5 U | 13 J | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-320 | SB-321 | SB-321 | SB-321 | SB-322 | SB-322 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-320-0809 | SB-321-0203 | SB-321-0506 | SB-321-0809 | SB-322-0203 | SB-322-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 940 | 0 U | 0 U | 13 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-320 | SB-321 | SB-321 | SB-321 | SB-322 | SB-322 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-320-0809 | SB-321-0203 | SB-321-0506 | SB-321-0809 | SB-322-0203 | SB-322-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.035 L | 0.06 L | 0.02 UL | 0.02 UL | 0.019 UL | 0.035 L |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 86.9 | 89.2 | 85.4 | 85 | 85.5 | 86.8 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-322 | SB-323 | SB-323 | SB-323 | SB-324 | SB-324 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-322-0809 | SB-323-0203 | SB-323-0506 | SB-323-0809 | SB-324-0203 | SB-324-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-322 | SB-323 | SB-323 | SB-323 | SB-324 | SB-324 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-322-0809 | SB-323-0203 | SB-323-0506 | SB-323-0809 | SB-324-0203 | SB-324-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-322 | SB-323 | SB-323 | SB-323 | SB-324 | SB-324 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-322-0809 | SB-323-0203 | SB-323-0506 | SB-323-0809 | SB-324-0203 | SB-324-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-322 | SB-323 | SB-323 | SB-323 | SB-324 | SB-324 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-322-0809 | SB-323-0203 | SB-323-0506 | SB-323-0809 | SB-324-0203 | SB-324-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-322 | SB-323 | SB-323 | SB-323 | SB-324 | SB-324 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-322-0809 | SB-323-0203 | SB-323-0506 | SB-323-0809 | SB-324-0203 | SB-324-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.019 UL | 0.019 UL | 0.019 UL | 0.057 L | 0.036 L | 0.031 L |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 86.5 | 89.6 | 86.6 | 83.1 | 89.6 | 87.5 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-324 | SB-325 | SB-325 | SB-325 | SB-326 | SB-326 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-324-0809 | SB-325-0203 | SB-325-0506 | SB-325-0809 | SB-326-0203 | SB-326-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-324 | SB-325 | SB-325 | SB-325 | SB-326 | SB-326 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-324-0809 | SB-325-0203 | SB-325-0506 | SB-325-0809 | SB-326-0203 | SB-326-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-324 | SB-325 | SB-325 | SB-325 | SB-326 | SB-326 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-324-0809 | SB-325-0203 | SB-325-0506 | SB-325-0809 | SB-326-0203 | SB-326-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 72.0 | 1.5 U | 1.5 U | 25.0 | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 72.0 | 1.5 U | 1.5 U | 25.0 | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 72 J | 1.5 U | 1.5 U | 25 J | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-324 | SB-325 | SB-325 | SB-325 | SB-326 | SB-326 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-324-0809 | SB-325-0203 | SB-325-0506 | SB-325-0809 | SB-326-0203 | SB-326-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 72 | 0 U | 0 U | 25 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-324 | SB-325 | SB-325 | SB-325 | SB-326 | SB-326 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-324-0809 | SB-325-0203 | SB-325-0506 | SB-325-0809 | SB-326-0203 | SB-326-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.034 L | 0.057 L | 0.019 UL | 0.02 UL | 0.093 L | 0.021 L |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 87 | 88.2 | 89.2 | 84.6 | 88 | 88.8 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-326 | SB-327 | SB-327 | SB-327 | SB-328 | SB-328 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-326-0809 | SB-327-0203 | SB-327-0506 | SB-327-0809 | SB-328-0203 | SB-328-0506 |
| SAMPLE DATE | 20071031 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-326 | SB-327 | SB-327 | SB-327 | SB-328 | SB-328 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-326-0809 | SB-327-0203 | SB-327-0506 | SB-327-0809 | SB-328-0203 | SB-328-0506 |
| SAMPLE DATE | 20071031 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-326 | SB-327 | SB-327 | SB-327 | SB-328 | SB-328 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-326-0809 | SB-327-0203 | SB-327-0506 | SB-327-0809 | SB-328-0203 | SB-328-0506 |
| SAMPLE DATE | 20071031 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 110 | 130 | 380 U | 390 U | 170 | 400 U |
| BAP EQUIVALENT-POS | 110 | 130 | 380 U | 390 U | 170 | 400 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 110 J | 130 J | 380 U | 390 U | 170 J | 400 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-326 | SB-327 | SB-327 | SB-327 | SB-328 | SB-328 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-326-0809 | SB-327-0203 | SB-327-0506 | SB-327-0809 | SB-328-0203 | SB-328-0506 |
| SAMPLE DATE | 20071031 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 110 | 130 | 0 U | 0 U | 170 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-326 | SB-327 | SB-327 | SB-327 | SB-328 | SB-328 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-326-0809 | SB-327-0203 | SB-327-0506 | SB-327-0809 | SB-328-0203 | SB-328-0506 |
| SAMPLE DATE | 20071031 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.064 L | 0.27 | 0.029 B | 0.02 B | 0.33 | 0.023 B |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 84.2 | 82.8 | 85.9 | 84.6 | 86.9 | 82.6 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-328 | SB-329 | SB-329 | SB-329 | SB-330 | SB-330 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-328-0809 | SB-329-0203 | SB-329-0506 | SB-329-0809 | SB-330-0203 | SB-330-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-328 | SB-329 | SB-329 | SB-329 | SB-330 | SB-330 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-328-0809 | SB-329-0203 | SB-329-0506 | SB-329-0809 | SB-330-0203 | SB-330-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-328 | SB-329 | SB-329 | SB-329 | SB-330 | SB-330 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-328-0809 | SB-329-0203 | SB-329-0506 | SB-329-0809 | SB-330-0203 | SB-330-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 35.0 | 27.0 | 410 U | 390 U | 110 | 110 |
| BAP EQUIVALENT-POS | 35.0 | 27.0 | 410 U | 390 U | 110 | 110 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 35 J | 27 J | 410 U | 390 U | 110 J | 110 J |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-328 | SB-329 | SB-329 | SB-329 | SB-330 | SB-330 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-328-0809 | SB-329-0203 | SB-329-0506 | SB-329-0809 | SB-330-0203 | SB-330-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 35 | 27 | 0 U | 0 U | 110 | 110 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-328 | SB-329 | SB-329 | SB-329 | SB-330 | SB-330 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-328-0809 | SB-329-0203 | SB-329-0506 | SB-329-0809 | SB-330-0203 | SB-330-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.025 B | 0.031 B | 0.041 B | 0.025 B | 0.041 B | 0.1 B |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 84.2 | 82.1 | 80.1 | 84.1 | 82.4 | 80.1 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-330 | SB-331 | SB-331 | SB-331 | SB-332 | SB-332 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-330-0809 | SB-331-0203 | SB-331-0506 | SB-331-0809 | SB-332-0203 | SB-332-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-330 | SB-331 | SB-331 | SB-331 | SB-332 | SB-332 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-330-0809 | SB-331-0203 | SB-331-0506 | SB-331-0809 | SB-332-0203 | SB-332-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-330 | SB-331 | SB-331 | SB-331 | SB-332 | SB-332 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-330-0809 | SB-331-0203 | SB-331-0506 | SB-331-0809 | SB-332-0203 | SB-332-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 380 U | 20.0 | 390 U | 400 U | 38.0 | 410 U |
| BAP EQUIVALENT-POS | 380 U | 20.0 | 390 U | 400 U | 38.0 | 410 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 380 U | 20 J | 390 U | 400 U | 38 J | 410 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-330 | SB-331 | SB-331 | SB-331 | SB-332 | SB-332 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-330-0809 | SB-331-0203 | SB-331-0506 | SB-331-0809 | SB-332-0203 | SB-332-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 20 | 0 U | 0 U | 38 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-330 | SB-331 | SB-331 | SB-331 | SB-332 | SB-332 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-330-0809 | SB-331-0203 | SB-331-0506 | SB-331-0809 | SB-332-0203 | SB-332-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.035 B | 0.059 B | 0.035 B | 0.04 B | 0.064 B | 0.034 B |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 86.7 | 86.1 | 84.9 | 82.7 | 86.1 | 80.8 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-332 | SB-333 | SB-333 | SB-333 | SB-334 | SB-334 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-332-0809 | SB-333-0203 | SB-333-0506 | SB-333-0809 | SB-334-0203 | SB-334-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-332 | SB-333 | SB-333 | SB-333 | SB-334 | SB-334 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-332-0809 | SB-333-0203 | SB-333-0506 | SB-333-0809 | SB-334-0203 | SB-334-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-332 | SB-333 | SB-333 | SB-333 | SB-334 | SB-334 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-332-0809 | SB-333-0203 | SB-333-0506 | SB-333-0809 | SB-334-0203 | SB-334-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 64.0 | 410 U | 380 U | 380 U | 88.0 | 64.0 |
| BAP EQUIVALENT-POS | 64.0 | 410 U | 380 U | 380 U | 88.0 | 64.0 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 64 J | 410 U | 380 U | 380 U | 88 J | 64 J |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-332 | SB-333 | SB-333 | SB-333 | SB-334 | SB-334 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-332-0809 | SB-333-0203 | SB-333-0506 | SB-333-0809 | SB-334-0203 | SB-334-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 64 | 0 U | 0 U | 0 U | 88 | 64 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-332 | SB-333 | SB-333 | SB-333 | SB-334 | SB-334 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-332-0809 | SB-333-0203 | SB-333-0506 | SB-333-0809 | SB-334-0203 | SB-334-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.035 B | 0.062 B | 0.036 B | 0.025 B | 0.38 | 0.07 B |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 82.3 | 81 | 86.4 | 86.6 | 86.3 | 80.7 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-334 | SB-335 | SB-335 | SB-335 | SB-336 | SB-336 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-334-0809 | SB-335-0203 | SB-335-0506 | SB-335-0809 | SB-336-0203 | SB-336-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-334 | SB-335 | SB-335 | SB-335 | SB-336 | SB-336 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-334-0809 | SB-335-0203 | SB-335-0506 | SB-335-0809 | SB-336-0203 | SB-336-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-334 | SB-335 | SB-335 | SB-335 | SB-336 | SB-336 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-334-0809 | SB-335-0203 | SB-335-0506 | SB-335-0809 | SB-336-0203 | SB-336-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 30.0 | 20.0 | 13.0 | 400 U | 380 U | 420 U |
| BAP EQUIVALENT-POS | 30.0 | 20.0 | 13.0 | 400 U | 380 U | 420 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 30 J | 20 J | 13 J | 400 U | 380 U | 420 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-334 | SB-335 | SB-335 | SB-335 | SB-336 | SB-336 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-334-0809 | SB-335-0203 | SB-335-0506 | SB-335-0809 | SB-336-0203 | SB-336-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 30 | 20 | 13 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-334 | SB-335 | SB-335 | SB-335 | SB-336 | SB-336 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-334-0809 | SB-335-0203 | SB-335-0506 | SB-335-0809 | SB-336-0203 | SB-336-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.061 B | 0.3 | 0.06 B | 0.027 B | 0.066 B | 0.04 B |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 78.4 | 83.5 | 82.6 | 83.2 | 87.3 | 79.2 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-336 | SB-337 | SB-337 | SB-337 | SB-338 | SB-338 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-336-0809 | SB-337-0203 | SB-337-0506 | SB-337-0809 | SB-338-0203 | SB-338-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-336 | SB-337 | SB-337 | SB-337 | SB-338 | SB-338 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-336-0809 | SB-337-0203 | SB-337-0506 | SB-337-0809 | SB-338-0203 | SB-338-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-336 | SB-337 | SB-337 | SB-337 | SB-338 | SB-338 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-336-0809 | SB-337-0203 | SB-337-0506 | SB-337-0809 | SB-338-0203 | SB-338-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 24.0 | 13.0 | 700 | 4200 U | 40.0 | 50.0 |
| BAP EQUIVALENT-POS | 24.0 | 13.0 | 700 | 4200 U | 40.0 | 50.0 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 24 J | 13 J | 700 J | 4200 U | 40 J | 50 J |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-336 | SB-337 | SB-337 | SB-337 | SB-338 | SB-338 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-336-0809 | SB-337-0203 | SB-337-0506 | SB-337-0809 | SB-338-0203 | SB-338-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 24 | 13 | 700 | 0 U | 40 | 50 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-336 | SB-337 | SB-337 | SB-337 | SB-338 | SB-338 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-336-0809 | SB-337-0203 | SB-337-0506 | SB-337-0809 | SB-338-0203 | SB-338-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.35 | 0.4 | 0.093 B | 0.82 | 0.42 | 0.042 B |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 81.7 | 84.8 | 80.3 | 79.4 | 82.4 | 81.7 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-338 | SB-339 | SB-339 | SB-339 | SB-340 | SB-340 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-338-0809 | SB-339-0203 | SB-339-0506 | SB-339-0809 | SB-340-0203 | SB-340-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-338 | SB-339 | SB-339 | SB-339 | SB-340 | SB-340 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-338-0809 | SB-339-0203 | SB-339-0506 | SB-339-0809 | SB-340-0203 | SB-340-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-338 | SB-339 | SB-339 | SB-339 | SB-340 | SB-340 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-338-0809 | SB-339-0203 | SB-339-0506 | SB-339-0809 | SB-340-0203 | SB-340-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 400 U | 14.0 | 1.6 U | 1.5 U | 110 | 30.0 |
| BAP EQUIVALENT-POS | 400 U | 14 | 1.6 U | 1.5 U | 110 | 30.0 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 400 U | 14 J | 1.6 U | 1.5 U | 110 J | 30 J |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-338 | SB-339 | SB-339 | SB-339 | SB-340 | SB-340 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-338-0809 | SB-339-0203 | SB-339-0506 | SB-339-0809 | SB-340-0203 | SB-340-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 14 | 0 U | 0 U | 110 | 30 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-338 | SB-339 | SB-339 | SB-339 | SB-340 | SB-340 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-338-0809 | SB-339-0203 | SB-339-0506 | SB-339-0809 | SB-340-0203 | SB-340-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.055 B | 0.13 B | 0.22 J | 0.025 B | 0.11 B | 0.39 L |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 81.8 | 88.4 | 80.2 | 86.7 | 87.3 | 82.3 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-340 | SB-341 | SB-341 | SB-341 | SB-342 | SB-342 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-340-0809 | SB-341-0203 | SB-341-0506 | SB-341-0809 | SB-342-0203 | SB-342-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-340 | SB-341 | SB-341 | SB-341 | SB-342 | SB-342 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-340-0809 | SB-341-0203 | SB-341-0506 | SB-341-0809 | SB-342-0203 | SB-342-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-340 | SB-341 | SB-341 | SB-341 | SB-342 | SB-342 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-340-0809 | SB-341-0203 | SB-341-0506 | SB-341-0809 | SB-342-0203 | SB-342-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.7 U | 23.0 | 25.0 | 38.0 | 78.0 | 17.0 |
| BAP EQUIVALENT-POS | 1.7 U | 23.0 | 25.0 | 38.0 | 78.0 | 17.0 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.7 U | 23 J | 25 J | 38 J | 78 J | 17 J |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-340 | SB-341 | SB-341 | SB-341 | SB-342 | SB-342 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-340-0809 | SB-341-0203 | SB-341-0506 | SB-341-0809 | SB-342-0203 | SB-342-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 23 | 25 | 38 | 78 | 17 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-340 | SB-341 | SB-341 | SB-341 | SB-342 | SB-342 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-340-0809 | SB-341-0203 | SB-341-0506 | SB-341-0809 | SB-342-0203 | SB-342-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.042 B | 0.073 B | 0.29 L | 0.31 L | 0.19 J | 0.84 L |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 77.7 | 85.3 | 77.8 | 66.1 | 84.1 | 73.7 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-342 | SB-343 | SB-343 | SB-343 | SB-344 | SB-344 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-342-0809 | SB-343-0203 | SB-343-0506 | SB-343-0809 | SB-344-0203 | SB-344-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-342 | SB-343 | SB-343 | SB-343 | SB-344 | SB-344 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-342-0809 | SB-343-0203 | SB-343-0506 | SB-343-0809 | SB-344-0203 | SB-344-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-342 | SB-343 | SB-343 | SB-343 | SB-344 | SB-344 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-342-0809 | SB-343-0203 | SB-343-0506 | SB-343-0809 | SB-344-0203 | SB-344-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2.1 U | 11.0 | 1.7 U | 1.6 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 2.1 U | 11.0 | 1.7 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 2.1 U | 11 J | 1.7 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-342 | SB-343 | SB-343 | SB-343 | SB-344 | SB-344 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-342-0809 | SB-343-0203 | SB-343-0506 | SB-343-0809 | SB-344-0203 | SB-344-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 11 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-342 | SB-343 | SB-343 | SB-343 | SB-344 | SB-344 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-342-0809 | SB-343-0203 | SB-343-0506 | SB-343-0809 | SB-344-0203 | SB-344-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.043 B | 0.15 B | 0.19 J | 0.034 B | 0.14 B | 0.034 B |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 62.5 | 79.6 | 75.4 | 79.4 | 81.3 | 80.1 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

| LOCATION | **SB-344** |
|---|---|
| SAMPLE ID | **SB-344-0809** |
| SAMPLE DATE | **20071101** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SB** |
| TOP DEPTH | **8** |
| BOTTOM DEPTH | **9** |
| **VOLATILES (UG/KG)** | |
| 1,1,1,2-TETRACHLOROETHANE | NA |
| 1,1,1-TRICHLOROETHANE | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA |
| 1,1,2-TRICHLOROETHANE | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA |
| 1,1-DICHLOROETHANE | NA |
| 1,1-DICHLOROETHENE | NA |
| 1,1-DICHLOROPROPENE | NA |
| 1,2,3-TRICHLOROBENZENE | NA |
| 1,2,3-TRICHLOROPROPANE | NA |
| 1,2,3-TRIMETHYLBENZENE | NA |
| 1,2,4-TRICHLOROBENZENE | NA |
| 1,2,4-TRIMETHYLBENZENE | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA |
| 1,2-DIBROMOETHANE | NA |
| 1,2-DICHLOROBENZENE | NA |
| 1,2-DICHLOROETHANE | NA |
| 1,2-DICHLOROPROPANE | NA |
| 1,3,5-TRIMETHYLBENZENE | NA |
| 1,3-DICHLOROBENZENE | NA |
| 1,3-DICHLOROPROPANE | NA |
| 1,3-DICHLOROPROPENE | NA |
| 1,4-DICHLOROBENZENE | NA |
| 1,4-DIOXANE | NA |
| 2,2-DICHLOROPROPANE | NA |
| 2-BUTANONE | NA |
| 2-CHLOROETHYL VINYL ETHER | NA |
| 2-CHLOROTOLUENE | NA |
| 2-HEXANONE | NA |
| 4-CHLOROTOLUENE | NA |
| 4-ISOPROPYLTOLUENE | NA |
| 4-METHYL-2-PENTANONE | NA |
| ACETONE | NA |
| BENZENE | NA |
| BROMOBENZENE | NA |
| BROMOCHLOROMETHANE | NA |
| BROMODICHLOROMETHANE | NA |
| BROMOFORM | NA |
| BROMOMETHANE | NA |
| CARBON DISULFIDE | NA |
| CARBON TETRACHLORIDE | NA |
| CHLOROBENZENE | NA |
| CHLORODIBROMOMETHANE | NA |
| CHLOROETHANE | NA |
| CHLOROFORM | NA |
| CHLOROMETHANE | NA |
| CIS-1,2-DICHLOROETHENE | NA |
| CIS-1,3-DICHLOROPROPENE | NA |
| DIBROMOMETHANE | NA |
| DICHLORODIFLUOROMETHANE | NA |
| DIISOPROPYL ETHER | NA |
| ETHYL TERT-BUTYL ETHER | NA |
| ETHYLBENZENE | NA |
| FLUORODICHLOROMETHANE | NA |

| LOCATION | SB-344 |
|---|---|
| SAMPLE ID | SB-344-0809 |
| SAMPLE DATE | 20071101 |
| SAMPLE CODE | NORMAL |
| MATRIX | SO |
| SAMPLE TYPE | NORMAL |
| SUBMATRIX | SB |
| TOP DEPTH | 8 |
| BOTTOM DEPTH | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | |
| HEXACHLOROBUTADIENE | NA |
| ISOPROPYLBENZENE | NA |
| M+P-XYLENES | NA |
| METHYL TERT-BUTYL ETHER | NA |
| METHYLENE CHLORIDE | NA |
| NAPHTHALENE | NA |
| N-BUTYLBENZENE | NA |
| N-PROPYLBENZENE | NA |
| O-XYLENE | NA |
| SEC-BUTYLBENZENE | NA |
| STYRENE | NA |
| TERT-AMYL METHYL ETHER | NA |
| TERT-BUTYLBENZENE | NA |
| TERTIARY-BUTYL ALCOHOL | NA |
| TETRACHLOROETHENE | NA |
| TOLUENE | NA |
| TOTAL 1,2-DICHLOROETHENE | NA |
| TOTAL XYLENES | NA |
| TRANS-1,2-DICHLOROETHENE | NA |
| TRANS-1,3-DICHLOROPROPENE | NA |
| TRICHLOROETHENE | NA |
| TRICHLOROFLUOROMETHANE | NA |
| VINYL ACETATE | NA |
| VINYL CHLORIDE | NA |
| **SEMIVOLATILES (UG/KG)** | |
| 1,1-BIPHENYL | NA |
| 1,2,4-TRICHLOROBENZENE | NA |
| 1,2-DICHLOROBENZENE | NA |
| 1,3-DICHLOROBENZENE | NA |
| 1,4-DICHLOROBENZENE | NA |
| 1,4-DIOXANE | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA |
| 2,4,5-TRICHLOROPHENOL | NA |
| 2,4,6-TRICHLOROPHENOL | NA |
| 2,4-DICHLOROPHENOL | NA |
| 2,4-DIMETHYLPHENOL | NA |
| 2,4-DINITROPHENOL | NA |
| 2,4-DINITROTOLUENE | NA |
| 2,6-DINITROTOLUENE | NA |
| 2-CHLORONAPHTHALENE | NA |
| 2-CHLOROPHENOL | NA |
| 2-METHYLPHENOL | NA |
| 2-NITROANILINE | NA |
| 2-NITROPHENOL | NA |
| 3&4-METHYLPHENOL | NA |
| 3,3'-DICHLOROBENZIDINE | NA |
| 3-NITROANILINE | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA |
| 4-CHLORO-3-METHYLPHENOL | NA |
| 4-CHLOROANILINE | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA |
| 4-METHYLPHENOL | NA |
| 4-NITROANILINE | NA |

| LOCATION | SB-344 |
|---|---|
| SAMPLE ID | SB-344-0809 |
| SAMPLE DATE | 20071101 |
| SAMPLE CODE | NORMAL |
| MATRIX | SO |
| SAMPLE TYPE | NORMAL |
| SUBMATRIX | SB |
| TOP DEPTH | 8 |
| BOTTOM DEPTH | 9 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | |
| 4-NITROPHENOL | NA |
| ACETOPHENONE | NA |
| ANILINE | NA |
| ATRAZINE | NA |
| AZOBENZENE | NA |
| BENZALDEHYDE | NA |
| BENZIDINE | NA |
| BENZOIC ACID | NA |
| BENZYL ALCOHOL | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA |
| BIS(2-CHLOROETHYL)ETHER | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA |
| BUTYL BENZYL PHTHALATE | NA |
| CAPROLACTAM | NA |
| CARBAZOLE | NA |
| DIBENZOFURAN | NA |
| DIETHYL PHTHALATE | NA |
| DIMETHYL PHTHALATE | NA |
| DI-N-BUTYL PHTHALATE | NA |
| DI-N-OCTYL PHTHALATE | NA |
| HEXACHLOROBENZENE | NA |
| HEXACHLOROBUTADIENE | NA |
| HEXACHLOROCYCLOPENTADIENE | NA |
| HEXACHLOROETHANE | NA |
| ISOPHORONE | NA |
| NITROBENZENE | NA |
| N-NITROSODIMETHYLAMINE | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA |
| N-NITROSODIPHENYLAMINE | NA |
| PENTACHLOROPHENOL | NA |
| PHENOL | NA |
| PYRIDINE | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | |
| 1-METHYLNAPHTHALENE | NA |
| 2-METHYLNAPHTHALENE | NA |
| ACENAPHTHENE | NA |
| ACENAPHTHYLENE | NA |
| ANTHRACENE | NA |
| BAP EQUIVALENT-HALFND | 1.8 U |
| BAP EQUIVALENT-POS | 1.8 U |
| BENZO(A)ANTHRACENE | NA |
| BENZO(A)PYRENE | 1.8 U |
| BENZO(B)FLUORANTHENE | NA |
| BENZO(B+K)FLUORANTHENE | NA |
| BENZO(G,H,I)PERYLENE | NA |
| BENZO(K)FLUORANTHENE | NA |
| C1-CHRYSENES | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C1-FLUORANTHENES/PYRENES | NA |
| C1-FLUORENES | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA |
| C2-CHRYSENES | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C2-FLUORENES | NA |

| LOCATION | SB-344 |
|---|---|
| SAMPLE ID | SB-344-0809 |
| SAMPLE DATE | 20071101 |
| SAMPLE CODE | NORMAL |
| MATRIX | SO |
| SAMPLE TYPE | NORMAL |
| SUBMATRIX | SB |
| TOP DEPTH | 8 |
| BOTTOM DEPTH | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | |
| C2-NAPHTHALENES | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA |
| C3-CHRYSENES | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C3-FLUORENES | NA |
| C3-NAPHTHALENES | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA |
| C4-CHRYSENES | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C4-NAPHTHALENES | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA |
| CHRYSENE | NA |
| DIBENZO(A,H)ANTHRACENE | NA |
| FLUORANTHENE | NA |
| FLUORENE | NA |
| INDENO(1,2,3-CD)PYRENE | NA |
| NAPHTHALENE | NA |
| PHENANTHRENE | NA |
| PYRENE | NA |
| TOTAL PAHS | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | |
| 4,4'-DDD | NA |
| 4,4'-DDE | NA |
| 4,4'-DDT | NA |
| ALDRIN | NA |
| ALPHA-BHC | NA |
| ALPHA-CHLORDANE | NA |
| AROCLOR-1016 | NA |
| AROCLOR-1221 | NA |
| AROCLOR-1232 | NA |
| AROCLOR-1242 | NA |
| AROCLOR-1248 | NA |
| AROCLOR-1254 | NA |
| AROCLOR-1260 | NA |
| BETA-BHC | NA |
| DELTA-BHC | NA |
| DIELDRIN | NA |
| ENDOSULFAN I | NA |
| ENDOSULFAN II | NA |
| ENDOSULFAN SULFATE | NA |
| ENDRIN | NA |
| ENDRIN ALDEHYDE | NA |
| ENDRIN KETONE | NA |
| GAMMA-BHC (LINDANE) | NA |
| GAMMA-CHLORDANE | NA |
| HEPTACHLOR | NA |
| HEPTACHLOR EPOXIDE | NA |
| METHOXYCHLOR | NA |
| TOTAL AROCLOR | NA |
| TOXAPHENE | NA |
| **METALS (MG/KG)** | |
| ANTIMONY | NA |
| ARSENIC | NA |
| BARIUM | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | **SB-344** |
|---|---|
| SAMPLE ID | **SB-344-0809** |
| SAMPLE DATE | **20071101** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SB** |
| TOP DEPTH | **8** |
| BOTTOM DEPTH | **9** |
| **METALS (CONTINUED) (MG/KG)** | |
| BERYLLIUM | NA |
| CADMIUM | NA |
| CHROMIUM | NA |
| COBALT | NA |
| COPPER | NA |
| IRON | NA |
| LEAD | NA |
| MANGANESE | NA |
| MERCURY | 0.052 B |
| MOLYBDENUM | NA |
| NICKEL | NA |
| SELENIUM | NA |
| SILVER | NA |
| THALLIUM | NA |
| VANADIUM | NA |
| ZINC | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | |
| DIESEL RANGE ORGANICS | NA |
| GASOLINE RANGE ORGANICS | NA |
| TPH (C09-C36) | NA |
| TPH (C10-C32) | NA |
| **MISCELLANEOUS PARAMETERS (%)** | |
| PERCENT SOLIDS | 73.4 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | |
| HEXAVALENT CHROMIUM | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | |
| MERCURY (METHYL) | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592 | SB-592 | SB-592 | SB-592 | SB-592 | SB-592 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592-10 | D-SB-592-10-AVG | D-SB-592-10-D | D-SB-592-3 | D-SB-592-4 | D-SB-592-5 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 10 | 10 | 10 | 3 | 4 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592 | SB-592 | SB-592 | SB-592 | SB-592 | SB-592 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592-10 | D-SB-592-10-AVG | D-SB-592-10-D | D-SB-592-3 | D-SB-592-4 | D-SB-592-5 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 10 | 10 | 10 | 3 | 4 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592 | SB-592 | SB-592 | SB-592 | SB-592 | SB-592 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592-10 | D-SB-592-10-AVG | D-SB-592-10-D | D-SB-592-3 | D-SB-592-4 | D-SB-592-5 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 10 | 10 | 10 | 3 | 4 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 7.0 | 17.4 | 27.8 | 851 | 931 | 693 |
| BAP EQUIVALENT-POS | 5.8 | 16.8 | 27.8 | 851 | 931 | 693 |
| BENZO(A)ANTHRACENE | 4 J | 9.5 | 15 | 510 | 660 | 320 |
| BENZO(A)PYRENE | 4.5 J | 10.75 | 17 | 620 | 630 | 470 |
| BENZO(B)FLUORANTHENE | 6.1 J | 17.05 | 28 J | 510 | 730 | 460 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.2 U | 1.9 U | 1.6 U | 320 | 330 | 210 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592 | SB-592 | SB-592 | SB-592 | SB-592 | SB-592 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592-10 | D-SB-592-10-AVG | D-SB-592-10-D | D-SB-592-3 | D-SB-592-4 | D-SB-592-5 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 10 | 10 | 10 | 3 | 4 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 4.7 J | 10.35 | 16 | 500 | 570 | 390 |
| DIBENZO(A,H)ANTHRACENE | 2.4 U | 3.05 | 4.9 J | 89 | 120 | 110 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 2.5 J | 9.25 | 16 | 360 | 380 | 330 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 21.8 | 59.35 | 96.9 | 2909 | 3420 | 2290 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592 | SB-592 | SB-592 | SB-592 | SB-592 | SB-592 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592-10 | D-SB-592-10-AVG | D-SB-592-10-D | D-SB-592-3 | D-SB-592-4 | D-SB-592-5 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 10 | 10 | 10 | 3 | 4 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592 | SB-592 | SB-592A | SB-592A | SB-592A | SB-592B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592-6 | D-SB-592-9 | D-SB-592A-4 | D-SB-592A-6 | D-SB-592A-8 | D-SB-592B-4 |
| SAMPLE DATE | 20090914 | 20091006 | 20091015 | 20091015 | 20091015 | 20091016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 9 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 9 | 4 | 6 | 8 | 4 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592 | SB-592 | SB-592A | SB-592A | SB-592A | SB-592B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592-6 | D-SB-592-9 | D-SB-592A-4 | D-SB-592A-6 | D-SB-592A-8 | D-SB-592B-4 |
| SAMPLE DATE | 20090914 | 20091006 | 20091015 | 20091015 | 20091015 | 20091016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 9 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 9 | 4 | 6 | 8 | 4 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592 | SB-592 | SB-592A | SB-592A | SB-592A | SB-592B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592-6 | D-SB-592-9 | D-SB-592A-4 | D-SB-592A-6 | D-SB-592A-8 | D-SB-592B-4 |
| SAMPLE DATE | 20090914 | 20091006 | 20091015 | 20091015 | 20091015 | 20091016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 9 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 9 | 4 | 6 | 8 | 4 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 113 | 5.3 | 15.4 | 623 | 239 | 185 |
| BAP EQUIVALENT-POS | 113 | 4.4 | 14.6 | 623 | 239 | 185 |
| BENZO(A)ANTHRACENE | 55 | 5 J | 11 | 330 | 190 | 88 |
| BENZO(A)PYRENE | 79 | 3 J | 11 | 440 | 170 | 130 |
| BENZO(B)FLUORANTHENE | 74 | 6.4 J | 16 | 520 | 210 | 120 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 45 | 1.7 U | 2 U | 180 | 100 | 54 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592 | SB-592 | SB-592A | SB-592A | SB-592A | SB-592B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592-6 | D-SB-592-9 | D-SB-592A-4 | D-SB-592A-6 | D-SB-592A-8 | D-SB-592B-4 |
| SAMPLE DATE | 20090914 | 20091006 | 20091015 | 20091015 | 20091015 | 20091016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 9 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 9 | 4 | 6 | 8 | 4 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 76 | 6 J | 12 | 370 | 170 | 97 |
| DIBENZO(A,H)ANTHRACENE | 15 | 1.8 U | 1.5 U | 72 | 21 | 25 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 57 | 2.6 J | 8.9 | 240 | 72 | 88 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 401 | 23 | 58.9 | 2152 | 933 | 602 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592 | SB-592 | SB-592A | SB-592A | SB-592A | SB-592B |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592-6 | D-SB-592-9 | D-SB-592A-4 | D-SB-592A-6 | D-SB-592A-8 | D-SB-592B-4 |
| SAMPLE DATE | 20090914 | 20091006 | 20091015 | 20091015 | 20091015 | 20091016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 9 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 9 | 4 | 6 | 8 | 4 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592B | SB-592B | SB-592B | SB-592B | SB-592D | SB-592D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592B-6 | D-SB-592B-6-AVG | D-SB-592B-6-D | D-SB-592B-8 | D-SB-592D-4 | D-SB-592D-6 |
| SAMPLE DATE | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 6 | 6 | 8 | 4 | 6 |
| BOTTOM DEPTH | 6 | 6 | 6 | 8 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592B | SB-592B | SB-592B | SB-592B | SB-592D | SB-592D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592B-6 | D-SB-592B-6-AVG | D-SB-592B-6-D | D-SB-592B-8 | D-SB-592D-4 | D-SB-592D-6 |
| SAMPLE DATE | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 6 | 6 | 8 | 4 | 6 |
| BOTTOM DEPTH | 6 | 6 | 6 | 8 | 4 | 6 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592B | SB-592B | SB-592B | SB-592B | SB-592D | SB-592D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592B-6 | D-SB-592B-6-AVG | D-SB-592B-6-D | D-SB-592B-8 | D-SB-592D-4 | D-SB-592D-6 |
| SAMPLE DATE | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 6 | 6 | 8 | 4 | 6 |
| BOTTOM DEPTH | 6 | 6 | 6 | 8 | 4 | 6 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 193 | 315 | 438 | 26.0 | 52.3 | 510 |
| BAP EQUIVALENT-POS | 193 | 315 | 438 | 25.1 | 51.6 | 510 |
| BENZO(A)ANTHRACENE | 91 J | 150.5 | 210 J | 15 | 26 | 220 |
| BENZO(A)PYRENE | 130 J | 220 | 310 J | 20 | 42 | 360 |
| BENZO(B)FLUORANTHENE | 130 J | 210 | 290 J | 22 | 42 | 350 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 63 J | 96.5 | 130 J | 11 | 15 | 150 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592B | SB-592B | SB-592B | SB-592B | SB-592D | SB-592D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592B-6 | D-SB-592B-6-AVG | D-SB-592B-6-D | D-SB-592B-8 | D-SB-592D-4 | D-SB-592D-6 |
| SAMPLE DATE | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 6 | 6 | 8 | 4 | 6 |
| BOTTOM DEPTH | 6 | 6 | 6 | 8 | 4 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 110 J | 180 | 250 J | 15 | 35 | 260 |
| DIBENZO(A,H)ANTHRACENE | 31 J | 43.5 | 56 J | 1.8 U | 1.5 U | 67 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 87 J | 143.5 | 200 J | 13 | 26 | 240 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 642 | 1044 | 1446 | 96 | 186 | 1647 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592B | SB-592B | SB-592B | SB-592B | SB-592D | SB-592D |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592B-6 | D-SB-592B-6-AVG | D-SB-592B-6-D | D-SB-592B-8 | D-SB-592D-4 | D-SB-592D-6 |
| SAMPLE DATE | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 6 | 6 | 8 | 4 | 6 |
| BOTTOM DEPTH | 6 | 6 | 6 | 8 | 4 | 6 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592D | SB-593 | SB-594 | SB-595 | SB-766 | SB-766 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592D-8 | D-SB-593-3 | D-SB-594-3 | D-SB-595-3 | D-SB-766-03 | D-SB-766-05 |
| SAMPLE DATE | 20091016 | 20090914 | 20090914 | 20090914 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 3 | 3 | 3 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 3 | 3 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592D | SB-593 | SB-594 | SB-595 | SB-766 | SB-766 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592D-8 | D-SB-593-3 | D-SB-594-3 | D-SB-595-3 | D-SB-766-03 | D-SB-766-05 |
| SAMPLE DATE | 20091016 | 20090914 | 20090914 | 20090914 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 3 | 3 | 3 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 3 | 3 | 3 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592D | SB-593 | SB-594 | SB-595 | SB-766 | SB-766 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592D-8 | D-SB-593-3 | D-SB-594-3 | D-SB-595-3 | D-SB-766-03 | D-SB-766-05 |
| SAMPLE DATE | 20091016 | 20090914 | 20090914 | 20090914 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 3 | 3 | 3 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 3 | 3 | 3 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | 3.6 U | 16 |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | 3.6 U | 23 |
| ACENAPHTHENE | NA | NA | NA | NA | 3.6 U | 3.7 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | 3.6 U | 33 |
| ANTHRACENE | NA | NA | NA | NA | 3.6 U | 37 |
| BAP EQUIVALENT-HALFND | 208 | 86.6 | 83.9 | 19.6 | 3.6 U | 97.4 |
| BAP EQUIVALENT-POS | 208 | 86.6 | 83.1 | 18.8 | 3.6 U | 95.6 |
| BENZO(A)ANTHRACENE | 140 | 44 | 44 | 1.1 U | 3.6 U | 57 |
| BENZO(A)PYRENE | 140 | 63 | 68 | 16 | 3.6 U | 76 |
| BENZO(B)FLUORANTHENE | 160 | 62 | 66 | 19 | 3.6 U | 81 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | 3.6 U | 63 |
| BENZO(K)FLUORANTHENE | 80 | 22 | 18 | 1.9 U | 3.6 U | 33 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592D | SB-593 | SB-594 | SB-595 | SB-766 | SB-766 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592D-8 | D-SB-593-3 | D-SB-594-3 | D-SB-595-3 | D-SB-766-03 | D-SB-766-05 |
| SAMPLE DATE | 20091016 | 20090914 | 20090914 | 20090914 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 3 | 3 | 3 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 3 | 3 | 3 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 150 | 52 | 46 | 1 U | 1.2 U | 61 |
| DIBENZO(A,H)ANTHRACENE | 29 | 8.9 | 1.5 U | 1.5 U | 3.6 U | 3.7 U |
| FLUORANTHENE | NA | NA | NA | NA | 3.6 U | 95 |
| FLUORENE | NA | NA | NA | NA | 3.6 U | 3.7 U |
| INDENO(1,2,3-CD)PYRENE | 80 | 38 | 39 | 9.2 | 3.6 U | 54 |
| NAPHTHALENE | NA | NA | NA | NA | 3.6 U | 16 |
| PHENANTHRENE | NA | NA | NA | NA | 3.6 U | 53 |
| PYRENE | NA | NA | NA | NA | 3.6 U | 140 |
| TOTAL PAHS | 779 | 289.9 | 281 | 44.2 | 0 U | 822 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-592D | SB-593 | SB-594 | SB-595 | SB-766 | SB-766 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592D-8 | D-SB-593-3 | D-SB-594-3 | D-SB-595-3 | D-SB-766-03 | D-SB-766-05 |
| SAMPLE DATE | 20091016 | 20090914 | 20090914 | 20090914 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 3 | 3 | 3 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 3 | 3 | 3 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-766 | SB-766 | SB-767 | SB-767 | SB-767 | SB-767 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-766-07 | D-SB-766-09 | D-SB-767-03 | D-SB-767-05 | D-SB-767-07 | D-SB-767-09 |
| SAMPLE DATE | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-766 | SB-766 | SB-767 | SB-767 | SB-767 | SB-767 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-766-07 | D-SB-766-09 | D-SB-767-03 | D-SB-767-05 | D-SB-767-07 | D-SB-767-09 |
| SAMPLE DATE | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-766 | SB-766 | SB-767 | SB-767 | SB-767 | SB-767 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-766-07 | D-SB-766-09 | D-SB-767-03 | D-SB-767-05 | D-SB-767-07 | D-SB-767-09 |
| SAMPLE DATE | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 3.7 U | 73 | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 3.7 U | 89 | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| ACENAPHTHENE | 3.7 U | 47 | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| ACENAPHTHYLENE | 3.7 U | 170 | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| ANTHRACENE | 3.7 U | 140 | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 3.7 U | 474 | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| BAP EQUIVALENT-POS | 3.7 U | 472 | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| BENZO(A)ANTHRACENE | 3.7 U | 350 | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| BENZO(A)PYRENE | 3.7 U | 370 J | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| BENZO(B)FLUORANTHENE | 3.7 U | 460 J | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.7 U | 250 J | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| BENZO(K)FLUORANTHENE | 3.7 U | 190 J | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 76 U | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | 76 U | NA | NA | NA | NA | NA |
| C1-FLUORENES | 76 U | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | 76 U | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 76 U | NA | NA | NA | NA | NA |
| C2-FLUORENES | 76 U | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-766 | SB-766 | SB-767 | SB-767 | SB-767 | SB-767 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-766-07 | D-SB-766-09 | D-SB-767-03 | D-SB-767-05 | D-SB-767-07 | D-SB-767-09 |
| SAMPLE DATE | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | 76 U | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | 76 U | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 76 U | NA | NA | NA | NA | NA |
| C3-FLUORENES | 76 U | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | 76 U | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | 76 U | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | 76 U | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | 76 U | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | 76 U | NA | NA | NA | NA | NA |
| CHRYSENE | 1.2 U | 330 | 1.3 U | 1.3 U | 1.5 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 3.7 U | 3.8 UJ | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| FLUORANTHENE | 3.7 U | 500 | 22 J | 24 J | 4.4 U | 3.9 U |
| FLUORENE | 3.7 U | 65 | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 3.7 U | 190 J | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| NAPHTHALENE | 10 | 190 | 3.8 U | 3.9 U | 4.4 U | 3.9 U |
| PHENANTHRENE | 3.7 U | 270 | 18 J | 23 J | 4.4 U | 3.9 U |
| PYRENE | 3.7 U | 810 | 7.8 | 8.5 | 4.4 U | 3.9 U |
| TOTAL PAHS | 10 | 4421 | 47.8 | 55.5 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-766 | SB-766 | SB-767 | SB-767 | SB-767 | SB-767 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-766-07 | D-SB-766-09 | D-SB-767-03 | D-SB-767-05 | D-SB-767-07 | D-SB-767-09 |
| SAMPLE DATE | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-768 | SB-768 | SB-768 | SB-768 | SB-769 | SB-769 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-768-03 | D-SB-768-05 | D-SB-768-07 | D-SB-768-09 | D-SB-769-03 | D-SB-769-05 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-768 | SB-768 | SB-768 | SB-768 | SB-769 | SB-769 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-768-03 | D-SB-768-05 | D-SB-768-07 | D-SB-768-09 | D-SB-769-03 | D-SB-769-05 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-768 | SB-768 | SB-768 | SB-768 | SB-769 | SB-769 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-768-03 | D-SB-768-05 | D-SB-768-07 | D-SB-768-09 | D-SB-769-03 | D-SB-769-05 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 3.8 U | 28 | 4 U | 3.9 U | 4 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 3.8 U | 59 | 4 U | 3.9 U | 11 | 3.9 U |
| ACENAPHTHENE | 3.8 U | 35 J | 4 U | 3.9 U | 31 J | 3.9 U |
| ACENAPHTHYLENE | 3.8 U | 30 | 4 U | 3.9 U | 4 U | 3.9 U |
| ANTHRACENE | 3.8 U | 42 J | 4 U | 3.9 U | 35 J | 3.9 U |
| BAP EQUIVALENT-HALFND | 3.8 U | 86.7 | 4 U | 3.9 U | 4 U | 3.9 U |
| BAP EQUIVALENT-POS | 3.8 U | 84.6 | 4 U | 3.9 U | 4 U | 3.9 U |
| BENZO(A)ANTHRACENE | 3.8 UJ | 44 | 4 U | 3.9 U | 4 UJ | 3.9 U |
| BENZO(A)PYRENE | 3.8 UJ | 72 J | 4 U | 3.9 U | 4 UJ | 3.9 U |
| BENZO(B)FLUORANTHENE | 3.8 UJ | 77 J | 4 U | 3.9 U | 4 UJ | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.8 UJ | 3.9 U | 4 U | 3.9 U | 4 UJ | 3.9 U |
| BENZO(K)FLUORANTHENE | 3.8 UJ | 43 J | 4 U | 3.9 U | 4 UJ | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-768 | SB-768 | SB-768 | SB-768 | SB-769 | SB-769 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-768-03 | D-SB-768-05 | D-SB-768-07 | D-SB-768-09 | D-SB-769-03 | D-SB-769-05 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 UJ | 49 | 1.3 U | 1.3 U | 1.3 UJ | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 3.8 UJ | 3.9 U | 4 U | 3.9 U | 4 UJ | 3.9 U |
| FLUORANTHENE | 3.8 U | 110 J | 4 U | 3.9 U | 91 J | 3.9 U |
| FLUORENE | 3.8 U | 38 J | 4 U | 3.9 U | 32 J | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 3.8 UJ | 3.9 U | 4 U | 3.9 U | 4 UJ | 3.9 U |
| NAPHTHALENE | 3.8 U | 43 | 4 U | 3.9 U | 21 | 3.9 U |
| PHENANTHRENE | 33 J | 87 J | 4 U | 3.9 U | 85 | 3.9 U |
| PYRENE | 17 J | 110 | 4 U | 11 | 40 J | 3.9 U |
| TOTAL PAHS | 50 | 839 | 0 U | 11 | 346 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-768 | SB-768 | SB-768 | SB-768 | SB-769 | SB-769 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-768-03 | D-SB-768-05 | D-SB-768-07 | D-SB-768-09 | D-SB-769-03 | D-SB-769-05 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-769 | SB-769 | SB-770 | SB-770 | SB-770 | SB-770 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-769-07 | D-SB-769-09 | D-SB-770-03 | D-SB-770-05 | D-SB-770-07 | D-SB-770-09 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-769 | SB-769 | SB-770 | SB-770 | SB-770 | SB-770 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-769-07 | D-SB-769-09 | D-SB-770-03 | D-SB-770-05 | D-SB-770-07 | D-SB-770-09 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-769 | SB-769 | SB-770 | SB-770 | SB-770 | SB-770 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-769-07 | D-SB-769-09 | D-SB-770-03 | D-SB-770-05 | D-SB-770-07 | D-SB-770-09 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 3.9 U | 4.1 U | 55 | 4 U | 11 | 4 U |
| 2-METHYLNAPHTHALENE | 3.9 U | 4.1 U | 97 | 4 U | 25 | 4 U |
| ACENAPHTHENE | 3.9 U | 4.1 U | 200 | 4 U | 42 | 4 U |
| ACENAPHTHYLENE | 3.9 U | 4.1 U | 3.7 U | 4 U | 3.8 U | 4 U |
| ANTHRACENE | 3.9 U | 4.1 U | 470 | 4 U | 56 | 4 U |
| BAP EQUIVALENT-HALFND | 3.9 U | 4.1 U | 668.5 | 4 U | 150.1 | 4 U |
| BAP EQUIVALENT-POS | 3.9 U | 4.1 U | 666.7 | 4 U | 148.2 | 4 U |
| BENZO(A)ANTHRACENE | 3.9 U | 4.1 U | 670 | 4 U | 150 | 4 U |
| BENZO(A)PYRENE | 3.9 U | 4.1 U | 500 | 4 U | 110 | 4 U |
| BENZO(B)FLUORANTHENE | 3.9 U | 4.1 U | 710 J | 4 U | 160 J | 4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.9 U | 4.1 U | 270 | 4 U | 72 | 4 U |
| BENZO(K)FLUORANTHENE | 3.9 U | 4.1 U | 310 | 4 U | 39 | 4 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 77 U | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | 77 U | NA |
| C1-FLUORENES | NA | NA | NA | NA | 77 U | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 77 U | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 77 U | NA |
| C2-FLUORENES | NA | NA | NA | NA | 77 U | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-769 | SB-769 | SB-770 | SB-770 | SB-770 | SB-770 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-769-07 | D-SB-769-09 | D-SB-770-03 | D-SB-770-05 | D-SB-770-07 | D-SB-770-09 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | 77 U | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 77 U | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 77 U | NA |
| C3-FLUORENES | NA | NA | NA | NA | 77 U | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | 77 U | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 77 U | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 77 U | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | 77 U | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 77 U | NA |
| CHRYSENE | 1.3 U | 1.4 U | 590 | 1.3 U | 130 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 3.9 U | 4.1 U | 3.7 U | 4 U | 3.8 U | 4 U |
| FLUORANTHENE | 3.9 U | 4.1 U | 1600 | 44 | 300 | 4 U |
| FLUORENE | 3.9 U | 4.1 U | 210 | 4 U | 41 | 4 U |
| INDENO(1,2,3-CD)PYRENE | 3.9 U | 4.1 U | 250 J | 4 U | 67 J | 4 U |
| NAPHTHALENE | 3.9 U | 4.1 U | 260 | 4 U | 57 | 4 U |
| PHENANTHRENE | 3.9 U | 4.1 U | 1300 | 4 U | 230 | 4 U |
| PYRENE | 3.9 U | 4.1 U | 1200 | 18 | 230 | 12 |
| TOTAL PAHS | 0 U | 0 U | 8637 | 62 | 1709 | 12 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-769 | SB-769 | SB-770 | SB-770 | SB-770 | SB-770 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-769-07 | D-SB-769-09 | D-SB-770-03 | D-SB-770-05 | D-SB-770-07 | D-SB-770-09 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-771 | SB-771 | SB-771 | SB-771 | SB-772 | SB-772 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-771-03 | D-SB-771-05 | D-SB-771-07 | D-SB-771-09 | D-SB-772-03 | D-SB-772-05 |
| SAMPLE DATE | 20100910 | 20100910 | 20100910 | 20100910 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-771 | SB-771 | SB-771 | SB-771 | SB-772 | SB-772 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-771-03 | D-SB-771-05 | D-SB-771-07 | D-SB-771-09 | D-SB-772-03 | D-SB-772-05 |
| SAMPLE DATE | 20100910 | 20100910 | 20100910 | 20100910 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-771 | SB-771 | SB-771 | SB-771 | SB-772 | SB-772 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-771-03 | D-SB-771-05 | D-SB-771-07 | D-SB-771-09 | D-SB-772-03 | D-SB-772-05 |
| SAMPLE DATE | 20100910 | 20100910 | 20100910 | 20100910 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 3.5 U | 3.8 U | 4 U | 4 U | 3.9 U | 4 U |
| 2-METHYLNAPHTHALENE | 3.5 U | 3.8 U | 4 U | 4 U | 3.9 U | 4 U |
| ACENAPHTHENE | 8.8 | 18 | 4 U | 4 U | 3.9 U | 4 U |
| ACENAPHTHYLENE | 15 | 3.8 U | 4 U | 4 U | 3.9 U | 4 U |
| ANTHRACENE | 33 | 41 | 4 U | 4 U | 3.9 U | 4 U |
| BAP EQUIVALENT-HALFND | 131 | 223 | 13.2 | 4 U | 3.9 U | 4 U |
| BAP EQUIVALENT-POS | 131 | 223 | 10.9 | 4 U | 3.9 U | 4 U |
| BENZO(A)ANTHRACENE | 96 | 190 | 8.3 | 4 U | 3.9 U | 4 U |
| BENZO(A)PYRENE | 89 | 150 | 8.7 | 4 U | 3.9 U | 4 U |
| BENZO(B)FLUORANTHENE | 130 | 220 | 14 | 4 U | 3.9 U | 4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 92 | 100 | 4 U | 4 U | 3.9 U | 4 U |
| BENZO(K)FLUORANTHENE | 51 | 110 | 4 U | 4 U | 3.9 U | 4 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-771 | SB-771 | SB-771 | SB-771 | SB-772 | SB-772 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-771-03 | D-SB-771-05 | D-SB-771-07 | D-SB-771-09 | D-SB-772-03 | D-SB-772-05 |
| SAMPLE DATE | 20100910 | 20100910 | 20100910 | 20100910 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 110 | 220 | 8.6 | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 12 J | 22 | 4 U | 4 U | 3.9 U | 4 U |
| FLUORANTHENE | 200 | 520 | 11 | 4 U | 3.9 U | 4 U |
| FLUORENE | 8.5 | 18 | 4 U | 4 U | 3.9 U | 4 U |
| INDENO(1,2,3-CD)PYRENE | 67 | 90 | 4 U | 4 U | 3.9 U | 4 U |
| NAPHTHALENE | 9 | 3.8 U | 4 U | 4 U | 3.9 U | 8.9 |
| PHENANTHRENE | 99 | 270 | 4 U | 4 U | 3.9 U | 11 |
| PYRENE | 170 | 390 | 10 | 4 U | 3.9 U | 8.1 |
| TOTAL PAHS | 1190.3 | 2359 | 60.6 | 0 U | 0 U | 28 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-771 | SB-771 | SB-771 | SB-771 | SB-772 | SB-772 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-771-03 | D-SB-771-05 | D-SB-771-07 | D-SB-771-09 | D-SB-772-03 | D-SB-772-05 |
| SAMPLE DATE | 20100910 | 20100910 | 20100910 | 20100910 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-772 | SB-772 | SB-773 | SB-773 | SB-773 | SB-773 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-772-07 | D-SB-772-09 | D-SB-773-03 | D-SB-773-05 | D-SB-773-05-AVG | D-SB-773-05-D |
| SAMPLE DATE | 20100830 | 20100830 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-772 | SB-772 | SB-773 | SB-773 | SB-773 | SB-773 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-772-07 | D-SB-772-09 | D-SB-773-03 | D-SB-773-05 | D-SB-773-05-AVG | D-SB-773-05-D |
| SAMPLE DATE | 20100830 | 20100830 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 5 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-772 | SB-772 | SB-773 | SB-773 | SB-773 | SB-773 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-772-07 | D-SB-772-09 | D-SB-773-03 | D-SB-773-05 | D-SB-773-05-AVG | D-SB-773-05-D |
| SAMPLE DATE | 20100830 | 20100830 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 5 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 8.6 | 28 | 3.9 U | 3.9 U | 4 U | 4.1 U |
| 2-METHYLNAPHTHALENE | 16 | 30 | 3.9 U | 3.9 U | 4 U | 4.1 U |
| ACENAPHTHENE | 59 | 19 | 3.9 U | 3.9 U | 4 U | 4.1 U |
| ACENAPHTHYLENE | 3.9 U | 4 U | 17 | 3.9 U | 4 U | 4.1 U |
| ANTHRACENE | 20 | 39 | 3.9 U | 3.9 U | 4 U | 4.1 U |
| BAP EQUIVALENT-HALFND | 22.1 | 94.8 | 38.2 | 3.9 U | 4 U | 4.1 U |
| BAP EQUIVALENT-POS | 20.1 | 92.8 | 36.0 | 3.9 U | 4 U | 4.1 U |
| BENZO(A)ANTHRACENE | 18 | 100 | 3.9 U | 3.9 U | 4 U | 4.1 U |
| BENZO(A)PYRENE | 14 | 68 | 28 | 3.9 U | 4 U | 4.1 U |
| BENZO(B)FLUORANTHENE | 22 J | 96 J | 44 | 3.9 U | 4 U | 4.1 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 11 | 43 | 32 | 3.9 U | 4 U | 4.1 U |
| BENZO(K)FLUORANTHENE | 3.9 U | 33 | 19 | 3.9 U | 4 U | 4.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-772 | SB-772 | SB-773 | SB-773 | SB-773 | SB-773 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-772-07 | D-SB-772-09 | D-SB-773-03 | D-SB-773-05 | D-SB-773-05-AVG | D-SB-773-05-D |
| SAMPLE DATE | 20100830 | 20100830 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 5 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 18 | 87 | 30 | 1.3 U | 1.35 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4.1 U |
| FLUORANTHENE | 48 | 170 | 28 | 3.9 U | 4 U | 4.1 U |
| FLUORENE | 34 | 42 | 3.9 U | 3.9 U | 4 U | 4.1 U |
| INDENO(1,2,3-CD)PYRENE | 21 J | 48 J | 34 | 3.9 U | 4 U | 4.1 U |
| NAPHTHALENE | 19 | 13 | 3.9 U | 3.9 U | 4 U | 4.1 U |
| PHENANTHRENE | 98 | 210 | 3.9 U | 3.9 U | 4 U | 4.1 U |
| PYRENE | 37 | 190 | 51 | 3.9 U | 4 U | 4.1 U |
| TOTAL PAHS | 435 | 1188 | 283 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-772 | SB-772 | SB-773 | SB-773 | SB-773 | SB-773 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-772-07 | D-SB-772-09 | D-SB-773-03 | D-SB-773-05 | D-SB-773-05-AVG | D-SB-773-05-D |
| SAMPLE DATE | 20100830 | 20100830 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 5 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-773 | SB-774 | SB-774 | SB-774 | SB-774 | SB-775 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-773-09 | D-SB-774-03 | D-SB-774-05 | D-SB-774-07 | D-SB-774-09 | D-SB-775-03 |
| SAMPLE DATE | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-773 | SB-774 | SB-774 | SB-774 | SB-774 | SB-775 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-773-09 | D-SB-774-03 | D-SB-774-05 | D-SB-774-07 | D-SB-774-09 | D-SB-775-03 |
| SAMPLE DATE | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-773 | SB-774 | SB-774 | SB-774 | SB-774 | SB-775 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-773-09 | D-SB-774-03 | D-SB-774-05 | D-SB-774-07 | D-SB-774-09 | D-SB-775-03 |
| SAMPLE DATE | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 4.2 U | 200 U | 34 | 22 | 3.8 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 4.2 U | 200 U | 27 | 32 | 9.4 | 3.9 U |
| ACENAPHTHENE | 4.2 U | 2400 | 120 | 140 | 17 | 3.9 U |
| ACENAPHTHYLENE | 4.2 U | 200 U | 7.8 U | 7.7 U | 3.8 U | 3.9 U |
| ANTHRACENE | 4.2 U | 9200 | 60 | 270 | 52 | 3.9 U |
| BAP EQUIVALENT-HALFND | 5.6 | 24437 | 196 | 570 | 169 | 3.9 U |
| BAP EQUIVALENT-POS | 1.0 | 24437 | 192 | 566 | 169 | 3.9 U |
| BENZO(A)ANTHRACENE | 9.8 | 26000 | 160 | 480 | 150 | 3.9 U |
| BENZO(A)PYRENE | 4.2 U | 16000 | 160 | 450 | 110 | 3.9 U |
| BENZO(B)FLUORANTHENE | 4.2 U | 25000 | 140 | 460 | 160 | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4.2 U | 7500 | 7.8 U | 210 | 70 | 3.9 U |
| BENZO(K)FLUORANTHENE | 4.2 U | 10000 | 150 | 290 | 66 | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 140 J | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | 240 J | NA | NA |
| C1-FLUORENES | NA | NA | NA | 79 U | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 93 J | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 79 U | NA | NA |
| C2-FLUORENES | NA | NA | NA | 79 U | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-773 | SB-774 | SB-774 | SB-774 | SB-774 | SB-775 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-773-09 | D-SB-774-03 | D-SB-774-05 | D-SB-774-07 | D-SB-774-09 | D-SB-775-03 |
| SAMPLE DATE | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | 79 U | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 79 U | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 79 U | NA | NA |
| C3-FLUORENES | NA | NA | NA | 79 U | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | 79 U | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 79 U | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 79 U | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | 79 U | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 79 U | NA | NA |
| CHRYSENE | 11 | 27000 | 180 | 500 | 150 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 4.2 U | 2500 | 7.8 U | 7.7 U | 21 | 3.9 U |
| FLUORANTHENE | 22 | 73000 | 370 | 1100 | 360 | 8.9 |
| FLUORENE | 10 | 3200 | 57 | 120 | 20 | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 4.2 U | 7100 | 7.8 U | 190 | 62 | 3.9 U |
| NAPHTHALENE | 4.2 U | 200 U | 98 | 75 | 15 | 3.9 U |
| PHENANTHRENE | 41 | 44000 | 280 | 840 | 220 | 3.9 U |
| PYRENE | 27 | 54000 | 310 | 800 | 270 | 3.9 U |
| TOTAL PAHS | 120.8 | 306900 | 2112 | 5957 | 1752.4 | 8.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-773 | SB-774 | SB-774 | SB-774 | SB-774 | SB-775 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-773-09 | D-SB-774-03 | D-SB-774-05 | D-SB-774-07 | D-SB-774-09 | D-SB-775-03 |
| SAMPLE DATE | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-775 | | SB-775 | SB-776 | SB-776 | SB-776 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-775-05 | SB-775 | D-SB-775-09 | D-SB-776-03 | D-SB-776-05 | D-SB-776-07 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-775 | | SB-775 | SB-776 | SB-776 | SB-776 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-775-05 | SB-775 | D-SB-775-09 | D-SB-776-03 | D-SB-776-05 | D-SB-776-07 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-775 | SB-775 | SB-775 | SB-776 | SB-776 | SB-776 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-775-05 | D-SB-775-09 | D-SB-776-03 | D-SB-776-05 | D-SB-776-07 | |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 4 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 4 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U |
| ACENAPHTHENE | 4 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U |
| ACENAPHTHYLENE | 53 | 3.8 U | 3.9 U | 3.9 U | 9 | 3.9 U |
| ANTHRACENE | 25 | 3.8 U | 3.9 U | 11 | 4 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 274 | 27.7 | 3.9 U | 58.8 | 23.7 | 3.9 U |
| BAP EQUIVALENT-POS | 274 | 25.6 | 3.9 U | 58.8 | 21.7 | 3.9 U |
| BENZO(A)ANTHRACENE | 110 | 3.8 U | 3.9 U | 33 | 8.6 | 3.9 U |
| BENZO(A)PYRENE | 180 | 22 | 3.9 U | 29 | 18 | 3.9 U |
| BENZO(B)FLUORANTHENE | 190 | 17 | 3.9 U | 37 | 17 | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 160 | 9.4 | 3.9 U | 17 | 14 | 3.9 U |
| BENZO(K)FLUORANTHENE | 80 | 3.8 U | 3.9 U | 15 | 4 U | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | 130 J | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | 140 J | NA | NA | NA | NA |
| C1-FLUORENES | NA | 78 U | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | 78 U | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | 86 J | NA | NA | NA | NA |
| C2-FLUORENES | NA | 78 U | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-775 | | SB-775 | SB-776 | SB-776 | SB-776 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-775-05 | SB-775 | D-SB-775-09 | D-SB-776-03 | D-SB-776-05 | D-SB-776-07 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | 78 U | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | 78 U | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | 78 U | NA | NA | NA | NA |
| C3-FLUORENES | NA | 78 U | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | 78 U | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | 78 U | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | 78 U | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | 78 U | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | 78 U | NA | NA | NA | NA |
| CHRYSENE | 140 | 1.3 U | 1.3 U | 31 | 13 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 51 | 3.8 U | 3.9 U | 21 | 4 U | 3.9 U |
| FLUORANTHENE | 130 | 3.8 U | 3.9 U | 62 | 8.9 | 3.9 U |
| FLUORENE | 4 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 120 | 19 | 3.9 U | 16 | 11 | 3.9 U |
| NAPHTHALENE | 4 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U |
| PHENANTHRENE | 11 | 3.8 U | 3.9 U | 36 | 4 U | 3.9 U |
| PYRENE | 320 | 16 | 3.9 U | 55 | 42 | 3.9 U |
| TOTAL PAHS | 1570 | 83.4 | 0 U | 363 | 141.5 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-775 | | SB-775 | SB-776 | SB-776 | SB-776 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-775-05 | SB-775 | D-SB-775-09 | D-SB-776-03 | D-SB-776-05 | D-SB-776-07 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-776 | SB-776 | SB-776 | SB-777 | SB-777 | SB-777 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-776-09 | D-SB-776-09-AVG | D-SB-776-09-D | D-SB-777-03 | D-SB-777-05 | D-SB-777-07 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-776 | SB-776 | SB-776 | SB-777 | SB-777 | SB-777 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-776-09 | D-SB-776-09-AVG | D-SB-776-09-D | D-SB-777-03 | D-SB-777-05 | D-SB-777-07 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-776 | SB-776 | SB-776 | SB-777 | SB-777 | SB-777 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-776-09 | D-SB-776-09-AVG | D-SB-776-09-D | D-SB-777-03 | D-SB-777-05 | D-SB-777-07 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 4.1 U | 4.05 U | 4 U | 15 U | 9.6 U | 310 |
| 2-METHYLNAPHTHALENE | 4.1 U | 4.05 U | 4 U | 15 U | 9.6 U | 600 |
| ACENAPHTHENE | 4.1 U | 4.05 U | 4 U | 150 | 27 | 1700 |
| ACENAPHTHYLENE | 21 J | 11.5 | 4 UJ | 15 U | 9.6 U | 20 U |
| ANTHRACENE | 8.5 | 5.25 | 4 U | 270 | 62 | 2100 |
| BAP EQUIVALENT-HALFND | 70.1 | 36.0 | 4 U | 1021 | 176 | 4873 |
| BAP EQUIVALENT-POS | 70.1 | 36.0 | 4 U | 1013 | 171 | 4873 |
| BENZO(A)ANTHRACENE | 19 J | 10.5 | 4 UJ | 880 | 170 | 3800 |
| BENZO(A)PYRENE | 38 J | 20 | 4 UJ | 770 | 140 | 3300 |
| BENZO(B)FLUORANTHENE | 37 J | 19.5 | 4 UJ | 1100 | 130 | 4000 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 30 J | 16 | 4 UJ | 470 | 9.6 U | 2000 |
| BENZO(K)FLUORANTHENE | 14 | 8 | 4 U | 450 | 100 | 1900 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 2300 J |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | 4300 J |
| C1-FLUORENES | NA | NA | NA | NA | NA | 81 U |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 2100 J |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 840 J |
| C2-FLUORENES | NA | NA | NA | NA | NA | 81 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-776 | SB-776 | SB-776 | SB-777 | SB-777 | SB-777 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-776-09 | D-SB-776-09-AVG | D-SB-776-09-D | D-SB-777-03 | D-SB-777-05 | D-SB-777-07 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | 81 U |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 870 J |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 380 J |
| C3-FLUORENES | NA | NA | NA | NA | NA | 81 U |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | 81 U |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 360 J |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 81 U |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | 81 U |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 81 U |
| CHRYSENE | 25 J | 12.825 | 1.3 UJ | 880 | 160 | 3500 |
| DIBENZO(A,H)ANTHRACENE | 24 J | 13 | 4 UJ | 15 U | 9.6 U | 610 |
| FLUORANTHENE | 20 J | 11 | 4 UJ | 1900 | 350 | 7500 |
| FLUORENE | 4.1 U | 4.05 U | 4 U | 90 | 25 | 1600 |
| INDENO(1,2,3-CD)PYRENE | 23 J | 12.5 | 4 UJ | 400 | 9.6 U | 1600 |
| NAPHTHALENE | 4.1 U | 4.05 U | 4 U | 32 | 9.6 U | 1600 |
| PHENANTHRENE | 4.1 U | 4.05 U | 4 U | 1000 | 210 | 6800 |
| PYRENE | 87 J | 44.5 | 4 UJ | 1500 | 290 | 5600 |
| TOTAL PAHS | 346.5 | 173.25 | 0 U | 9892 | 1664 | 48210 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-776 | SB-776 | SB-776 | SB-777 | SB-777 | SB-777 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-776-09 | D-SB-776-09-AVG | D-SB-776-09-D | D-SB-777-03 | D-SB-777-05 | D-SB-777-07 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-777 | SB-778 | SB-778 | SB-778 | SB-778 | SB-779 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-777-09 | D-SB-778-03 | D-SB-778-05 | D-SB-778-07 | D-SB-778-09 | D-SB-779-03 |
| SAMPLE DATE | 20100910 | 20100831 | 20100831 | 20100831 | 20100831 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-777 | SB-778 | SB-778 | SB-778 | SB-778 | SB-779 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-777-09 | D-SB-778-03 | D-SB-778-05 | D-SB-778-07 | D-SB-778-09 | D-SB-779-03 |
| SAMPLE DATE | 20100910 | 20100831 | 20100831 | 20100831 | 20100831 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-777 | SB-778 | SB-778 | SB-778 | SB-778 | SB-779 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-777-09 | D-SB-778-03 | D-SB-778-05 | D-SB-778-07 | D-SB-778-09 | D-SB-779-03 |
| SAMPLE DATE | 20100910 | 20100831 | 20100831 | 20100831 | 20100831 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 10 | 3.8 U | 4 U | 4.1 U | 3.7 U | 4 U |
| 2-METHYLNAPHTHALENE | 16 | 3.8 U | 4 U | 4.1 U | 3.7 U | 4 U |
| ACENAPHTHENE | 52 | 3.8 U | 4 U | 4.1 U | 3.7 U | 4 U |
| ACENAPHTHYLENE | 4.1 U | 3.8 U | 60 | 15 | 15 | 4 U |
| ANTHRACENE | 56 | 3.8 U | 24 | 4.1 U | 3.7 U | 4 U |
| BAP EQUIVALENT-HALFND | 197 | 3.8 U | 133 | 27.1 | 31.5 | 4 U |
| BAP EQUIVALENT-POS | 197 | 3.8 U | 133 | 25.0 | 29.6 | 4 U |
| BENZO(A)ANTHRACENE | 150 | 3.8 U | 56 | 15 | 16 | 4 U |
| BENZO(A)PYRENE | 130 | 3.8 U | 82 | 20 | 24 | 4 U |
| BENZO(B)FLUORANTHENE | 190 | 3.8 U | 86 | 21 | 24 | 4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 95 | 3.8 U | 75 | 17 | 20 | 4 U |
| BENZO(K)FLUORANTHENE | 77 | 3.8 U | 36 | 10 | 9.8 | 4 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-777 | SB-778 | SB-778 | SB-778 | SB-778 | SB-779 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-777-09 | D-SB-778-03 | D-SB-778-05 | D-SB-778-07 | D-SB-778-09 | D-SB-779-03 |
| SAMPLE DATE | 20100910 | 20100831 | 20100831 | 20100831 | 20100831 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 160 | 1.3 U | 68 | 14 | 16 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 24 | 3.8 U | 31 | 4.1 U | 3.7 U | 4 U |
| FLUORANTHENE | 320 | 3.8 U | 53 | 12 | 12 | 4 U |
| FLUORENE | 48 | 3.8 U | 4 U | 4.1 U | 3.7 U | 4 U |
| INDENO(1,2,3-CD)PYRENE | 83 | 3.8 U | 51 | 13 | 15 | 4 U |
| NAPHTHALENE | 27 | 3.8 U | 4 U | 4.1 U | 3.7 U | 4 U |
| PHENANTHRENE | 250 | 3.8 U | 9.2 | 4.1 U | 3.7 U | 4 U |
| PYRENE | 260 | 3.8 U | 110 | 25 | 28 | 4 U |
| TOTAL PAHS | 1938 | 0 U | 741.2 | 162 | 179.8 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-777 | SB-778 | SB-778 | SB-778 | SB-778 | SB-779 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-777-09 | D-SB-778-03 | D-SB-778-05 | D-SB-778-07 | D-SB-778-09 | D-SB-779-03 |
| SAMPLE DATE | 20100910 | 20100831 | 20100831 | 20100831 | 20100831 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-779 | SB-779 | SB-779 | SB-780 | SB-780 | SB-780 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-779-05 | D-SB-779-07 | D-SB-779-09 | D-SB-780-03 | D-SB-780-05 | D-SB-780-07 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-779 | SB-779 | SB-779 | SB-780 | SB-780 | SB-780 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-779-05 | D-SB-779-07 | D-SB-779-09 | D-SB-780-03 | D-SB-780-05 | D-SB-780-07 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-779 | SB-779 | SB-779 | SB-780 | SB-780 | SB-780 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-779-05 | D-SB-779-07 | D-SB-779-09 | D-SB-780-03 | D-SB-780-05 | D-SB-780-07 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 3.9 U | 3.8 U | 4 U | 3.7 UL | 3.9 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 3.9 U | 3.8 U | 4 U | 3.7 UL | 3.9 U | 3.9 U |
| ACENAPHTHENE | 3.9 U | 3.8 U | 4 U | 3.7 UL | 3.9 U | 3.9 U |
| ACENAPHTHYLENE | 15 | 3.8 U | 4 U | 3.7 UL | 3.9 U | 3.9 U |
| ANTHRACENE | 3.9 U | 3.8 U | 4 U | 3.7 UL | 3.9 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 72.1 | 3.8 U | 4 U | 3.7 U | 15.5 | 3.9 U |
| BAP EQUIVALENT-POS | 72.1 | 3.8 U | 4 U | 3.7 U | 13.3 | 3.9 U |
| BENZO(A)ANTHRACENE | 26 | 3.8 U | 4 U | 3.7 UL | 12 | 3.9 U |
| BENZO(A)PYRENE | 43 | 3.8 U | 4 U | 3.7 UL | 11 | 3.9 U |
| BENZO(B)FLUORANTHENE | 49 J | 3.8 U | 4 U | 3.7 UL | 11 J | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 33 | 3.8 U | 4 U | 3.7 UL | 8.1 | 3.9 U |
| BENZO(K)FLUORANTHENE | 14 | 3.8 U | 4 U | 3.7 UL | 3.9 U | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | 77 U | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | 77 U | NA | NA | NA | NA |
| C1-FLUORENES | NA | 77 U | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | 77 U | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | 77 U | NA | NA | NA | NA |
| C2-FLUORENES | NA | 77 U | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-779 | SB-779 | SB-779 | SB-780 | SB-780 | SB-780 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-779-05 | D-SB-779-07 | D-SB-779-09 | D-SB-780-03 | D-SB-780-05 | D-SB-780-07 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | 77 U | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | 77 U | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | 77 U | NA | NA | NA | NA |
| C3-FLUORENES | NA | 77 U | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | 77 U | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | 77 U | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | 77 U | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | 77 U | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | 77 U | NA | NA | NA | NA |
| CHRYSENE | 33 | 1.3 U | 1.3 U | 1.2 UL | 13 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 19 J | 3.8 U | 4 U | 3.7 UL | 3.9 U | 3.9 U |
| FLUORANTHENE | 31 | 3.8 U | 4 U | 3.7 UL | 21 | 3.9 U |
| FLUORENE | 3.9 U | 3.8 U | 4 U | 3.7 UL | 3.9 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 24 J | 3.8 U | 4 U | 3.7 UL | 3.9 U | 3.9 U |
| NAPHTHALENE | 3.9 U | 3.8 U | 4 U | 3.7 UL | 3.9 U | 3.9 U |
| PHENANTHRENE | 3.9 U | 3.8 U | 4 U | 3.7 UL | 3.9 U | 3.9 U |
| PYRENE | 65 | 3.8 U | 4 U | 7.8 L | 35 | 3.9 U |
| TOTAL PAHS | 352 | 0 U | 0 U | 7.8 | 111.1 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-779 | SB-779 | SB-779 | SB-780 | SB-780 | SB-780 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-779-05 | D-SB-779-07 | D-SB-779-09 | D-SB-780-03 | D-SB-780-05 | D-SB-780-07 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-780 | SB-781 | SB-781 | SB-781 | SB-781 | SB-782 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-780-09 | D-SB-781-03 | D-SB-781-05 | D-SB-781-07 | D-SB-781-09 | D-SB-782-03 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 0.53 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | 0.48 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | 0.29 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | 1.1 U |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | 0.31 U |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | 0.45 U |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | 0.26 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 0.33 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | 0.78 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 0.15 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | 0.23 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 0.56 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | 1.1 U |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | 0.43 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | 0.31 U |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | 0.29 U |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 0.59 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | 0.3 U |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | 0.29 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | 0.57 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | 0.81 U |
| 2-BUTANONE | NA | NA | NA | NA | NA | 1.2 U |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | 1.2 U |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | 0.34 U |
| 2-HEXANONE | NA | NA | NA | NA | NA | 0.54 U |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | 0.35 U |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | 0.18 U |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | 0.47 U |
| ACETONE | NA | NA | NA | NA | NA | 5.4 U |
| BENZENE | NA | NA | NA | NA | NA | 0.2 U |
| BROMOBENZENE | NA | NA | NA | NA | NA | 0.28 U |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | 0.61 U |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | 0.24 U |
| BROMOFORM | NA | NA | NA | NA | NA | 0.28 U |
| BROMOMETHANE | NA | NA | NA | NA | NA | 0.47 U |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | 0.38 U |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | 0.32 U |
| CHLOROBENZENE | NA | NA | NA | NA | NA | 0.28 U |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | 0.47 U |
| CHLOROETHANE | NA | NA | NA | NA | NA | 0.74 U |
| CHLOROFORM | NA | NA | NA | NA | NA | 0.25 U |
| CHLOROMETHANE | NA | NA | NA | NA | NA | 0.35 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 0.31 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 0.29 U |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | 0.54 U |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | 0.43 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | 1.3 U |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | 0.19 U |
| ETHYLBENZENE | NA | NA | NA | NA | NA | 0.22 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-780 | SB-781 | SB-781 | SB-781 | SB-781 | SB-782 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-780-09 | D-SB-781-03 | D-SB-781-05 | D-SB-781-07 | D-SB-781-09 | D-SB-782-03 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | 1 U |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | 0.14 U |
| M+P-XYLENES | NA | NA | NA | NA | NA | 1 U |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | 0.37 U |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | 0.58 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | 0.16 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | 0.2 U |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | 0.34 U |
| O-XYLENE | NA | NA | NA | NA | NA | 0.3 U |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | 0.16 U |
| STYRENE | NA | NA | NA | NA | NA | 0.13 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | 0.32 U |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | 0.25 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | 6.6 UR |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | 0.45 U |
| TOLUENE | NA | NA | NA | NA | NA | 0.23 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | 0.58 U |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | 0.35 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | 0.47 U |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | 0.36 U |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | 0.29 U |
| VINYL ACETATE | NA | NA | NA | NA | NA | 0.22 U |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | 0.34 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | 31 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | 25 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | 11 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 29 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | 92 U |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | 23 U |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | 23 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | 92 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | 31 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | 24 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | 3.8 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | 31 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | 92 U |
| 2-NITROANILINE | NA | NA | NA | NA | NA | 10 U |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | 31 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | 21 U |
| 3-NITROANILINE | NA | NA | NA | NA | NA | 18 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | 92 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 15 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | 24 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | 20 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | 15 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | 92 U |
| 4-NITROANILINE | NA | NA | NA | NA | NA | 30 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-780 | SB-781 | SB-781 | SB-781 | SB-781 | SB-782 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-780-09 | D-SB-781-03 | D-SB-781-05 | D-SB-781-07 | D-SB-781-09 | D-SB-782-03 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | 92 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | 10 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | 14 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | 25 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | 2.3 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | 59 |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | 11 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | 43 U |
| CARBAZOLE | NA | NA | NA | NA | NA | 31 U |
| DIBENZOFURAN | NA | NA | NA | NA | NA | 3.8 U |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | 18 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | 20 U |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | 17 U |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | 31 U |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | 2.4 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | 31 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | 31 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | 10 U |
| ISOPHORONE | NA | NA | NA | NA | NA | 15 U |
| NITROBENZENE | NA | NA | NA | NA | NA | 2.5 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | 18 U |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | 31 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | 24 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | 92 U |
| PHENOL | NA | NA | NA | NA | NA | 31 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 4 U | 4 U | 8.9 | 4 U | 3.8 U | NA |
| 2-METHYLNAPHTHALENE | 4 U | 4 U | 19 | 4 U | 3.8 U | 3.8 U |
| ACENAPHTHENE | 4 U | 4 U | 72 | 4 U | 3.8 U | 3.8 U |
| ACENAPHTHYLENE | 33 | 4 U | 4.1 U | 4 U | 3.8 U | 3.8 U |
| ANTHRACENE | 19 | 4 U | 150 | 4 U | 3.8 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 121.3 | 4 U | 808.1 | 4 U | 3.8 U | 59.7 |
| BAP EQUIVALENT-POS | 121.3 | 4 U | 808.1 | 4 U | 3.8 U | 59.7 |
| BENZO(A)ANTHRACENE | 71 | 4 U | 480 | 4 U | 3.8 U | 29 |
| BENZO(A)PYRENE | 80 | 4 U | 560 | 4 U | 3.8 U | 30 |
| BENZO(B)FLUORANTHENE | 75 J | 4 U | 640 J | 4 U | 3.8 U | 38 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 60 | 4 U | 380 | 4 U | 3.8 U | 19 |
| BENZO(K)FLUORANTHENE | 36 | 4 U | 270 | 4 U | 3.8 U | 19 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-780 | SB-781 | SB-781 | SB-781 | SB-781 | SB-782 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-780-09 | D-SB-781-03 | D-SB-781-05 | D-SB-781-07 | D-SB-781-09 | D-SB-782-03 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 76 | 1.3 U | 420 | 1.3 U | 1.3 U | 31 |
| DIBENZO(A,H)ANTHRACENE | 22 J | 4 U | 100 J | 4 U | 3.8 U | 21 |
| FLUORANTHENE | 120 | 4 U | 690 | 4 U | 3.8 U | 49 |
| FLUORENE | 9.5 | 4 U | 55 | 4 U | 3.8 U | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 43 J | 4 U | 330 J | 4 U | 3.8 U | 18 |
| NAPHTHALENE | 4 U | 4 U | 55 | 4 U | 3.8 U | 3.8 U |
| PHENANTHRENE | 26 | 4 U | 440 | 4 U | 3.8 U | 24 |
| PYRENE | 180 | 4 U | 560 | 4 U | 3.8 U | 39 |
| TOTAL PAHS | 850.5 | 0 U | 5221 | 0 U | 0 U | 317 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | 0.71 U |
| 4,4'-DDE | NA | NA | NA | NA | NA | 0.45 U |
| 4,4'-DDT | NA | NA | NA | NA | NA | 0.72 U |
| ALDRIN | NA | NA | NA | NA | NA | 1.4 U |
| ALPHA-BHC | NA | NA | NA | NA | NA | 0.84 U |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | 1.1 U |
| AROCLOR-1016 | NA | NA | NA | NA | NA | 24 U |
| AROCLOR-1221 | NA | NA | NA | NA | NA | 18 U |
| AROCLOR-1232 | NA | NA | NA | NA | NA | 16 U |
| AROCLOR-1242 | NA | NA | NA | NA | NA | 15 U |
| AROCLOR-1248 | NA | NA | NA | NA | NA | 20 U |
| AROCLOR-1254 | NA | NA | NA | NA | NA | 20 U |
| AROCLOR-1260 | NA | NA | NA | NA | NA | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | 1.3 U |
| DELTA-BHC | NA | NA | NA | NA | NA | 1.4 U |
| DIELDRIN | NA | NA | NA | NA | NA | 0.54 U |
| ENDOSULFAN I | NA | NA | NA | NA | NA | 0.6 U |
| ENDOSULFAN II | NA | NA | NA | NA | NA | 0.94 U |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | 1 U |
| ENDRIN | NA | NA | NA | NA | NA | 0.57 U |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | 1.1 U |
| ENDRIN KETONE | NA | NA | NA | NA | NA | 0.72 U |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | 0.85 U |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | 0.48 U |
| HEPTACHLOR | NA | NA | NA | NA | NA | 1.3 U |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | 0.92 U |
| METHOXYCHLOR | NA | NA | NA | NA | NA | 1.7 U |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | 22 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | 0.14 UL |
| ARSENIC | NA | NA | NA | NA | NA | 2.1 J |
| BARIUM | NA | NA | NA | NA | NA | 18.6 |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-780 | SB-781 | SB-781 | SB-781 | SB-781 | SB-782 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-780-09 | D-SB-781-03 | D-SB-781-05 | D-SB-781-07 | D-SB-781-09 | D-SB-782-03 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | 0.69 |
| CADMIUM | NA | NA | NA | NA | NA | 0.13 K |
| CHROMIUM | NA | NA | NA | NA | NA | 9.7 J |
| COBALT | NA | NA | NA | NA | NA | 6.6 J |
| COPPER | NA | NA | NA | NA | NA | 12.2 J |
| IRON | NA | NA | NA | NA | NA | 9290 J |
| LEAD | NA | NA | NA | NA | NA | 20.4 |
| MANGANESE | NA | NA | NA | NA | NA | 34.2 |
| MERCURY | NA | NA | NA | NA | NA | 0.53 |
| MOLYBDENUM | NA | NA | NA | NA | NA | 0.24 |
| NICKEL | NA | NA | NA | NA | NA | 11 J |
| SELENIUM | NA | NA | NA | NA | NA | 1.2 |
| SILVER | NA | NA | NA | NA | NA | 0.27 |
| THALLIUM | NA | NA | NA | NA | NA | 0.12 B |
| VANADIUM | NA | NA | NA | NA | NA | 16.8 J |
| ZINC | NA | NA | NA | NA | NA | 52 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | 140000 |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | 53 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | 0.36 J |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-782 | SB-782 | SB-782 | SB-783 | SB-783 | SB-783 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-782-05 | D-SB-782-07 | D-SB-782-09 | D-SB-783-03 | D-SB-783-05 | D-SB-783-07 |
| SAMPLE DATE | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.57 U | 0.61 U | 0.51 U | 0.43 U | 0.59 U | 0.57 U |
| 1,1,1-TRICHLOROETHANE | 0.52 U | 0.55 U | 0.46 U | 0.39 U | 0.53 U | 0.51 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.31 U | 0.33 U | 0.28 U | 0.24 U | 0.32 U | 0.31 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U | 1.3 U | 1.1 U | 0.91 U | 1.2 U | 1.2 U |
| 1,1-DICHLOROETHANE | 0.33 U | 0.35 U | 0.29 U | 0.25 U | 0.34 U | 0.33 U |
| 1,1-DICHLOROETHENE | 0.48 U | 0.51 U | 0.43 U | 0.36 U | 0.49 U | 0.47 U |
| 1,1-DICHLOROPROPENE | 0.28 U | 0.3 U | 0.25 U | 0.21 U | 0.28 U | 0.27 U |
| 1,2,3-TRICHLOROBENZENE | 0.35 U | 0.37 U | 0.31 U | 0.26 U | 0.36 U | 0.35 U |
| 1,2,3-TRICHLOROPROPANE | 0.83 U | 0.89 U | 0.74 U | 0.63 U | 0.85 U | 0.82 U |
| 1,2,3-TRIMETHYLBENZENE | 0.16 U | 0.17 U | 0.14 U | 0.12 U | 0.16 U | 0.16 U |
| 1,2,4-TRICHLOROBENZENE | 0.25 U | 0.27 U | 0.22 U | 0.19 U | 0.26 U | 0.25 U |
| 1,2,4-TRIMETHYLBENZENE | 0.6 U | 0.64 U | 0.53 U | 0.45 U | 0.61 U | 0.59 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U | 1.3 U | 1.1 U | 0.91 U | 1.2 U | 1.2 U |
| 1,2-DIBROMOETHANE | 0.46 U | 0.49 U | 0.41 U | 0.35 U | 0.47 U | 0.46 U |
| 1,2-DICHLOROBENZENE | 0.33 U | 0.35 U | 0.29 U | 0.25 U | 0.34 U | 0.33 U |
| 1,2-DICHLOROETHANE | 0.31 U | 0.33 U | 0.28 U | 0.24 U | 0.32 U | 0.31 U |
| 1,2-DICHLOROPROPANE | 0.64 U | 0.68 U | 0.56 U | 0.48 U | 0.65 U | 0.63 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.32 U | 0.34 U | 0.29 U | 0.24 U | 0.33 U | 0.32 U |
| 1,3-DICHLOROPROPANE | 0.31 U | 0.33 U | 0.28 U | 0.24 U | 0.32 U | 0.31 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.61 U | 0.65 U | 0.54 U | 0.46 U | 0.62 U | 0.6 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.87 U | 0.93 U | 0.77 U | 0.66 U | 0.89 U | 0.86 U |
| 2-BUTANONE | 3.5 J | 1.4 U | 2.2 J | 0.98 U | 1.3 U | 2.7 J |
| 2-CHLOROETHYL VINYL ETHER | 1.3 U | 1.4 U | 1.1 U | 0.98 U | 1.3 U | 1.3 U |
| 2-CHLOROTOLUENE | 0.37 U | 0.39 U | 0.33 U | 0.28 U | 0.38 U | 0.37 U |
| 2-HEXANONE | 0.58 U | 0.62 U | 0.52 U | 0.44 U | 0.6 U | 0.58 U |
| 4-CHLOROTOLUENE | 0.38 U | 0.4 U | 0.34 U | 0.29 U | 0.39 U | 0.37 U |
| 4-ISOPROPYLTOLUENE | 0.19 U | 0.21 U | 0.17 U | 0.15 U | 0.2 U | 0.19 U |
| 4-METHYL-2-PENTANONE | 0.5 U | 0.53 U | 0.44 U | 0.38 U | 0.51 U | 0.49 U |
| ACETONE | 42 B | 6.2 U | 21 B | 4.4 U | 6 U | 59 B |
| BENZENE | 0.21 U | 0.23 U | 0.19 U | 0.16 U | 0.22 U | 0.21 U |
| BROMOBENZENE | 0.3 U | 0.32 U | 0.27 U | 0.23 U | 0.31 U | 0.3 U |
| BROMOCHLOROMETHANE | 0.66 U | 0.7 U | 0.58 U | 0.49 U | 0.67 U | 0.65 U |
| BROMODICHLOROMETHANE | 0.26 U | 0.28 U | 0.23 U | 0.2 U | 0.26 U | 0.26 U |
| BROMOFORM | 0.3 U | 0.32 U | 0.27 U | 0.23 U | 0.31 U | 0.3 U |
| BROMOMETHANE | 0.5 U | 0.53 U | 0.44 U | 0.38 U | 0.51 U | 0.49 U |
| CARBON DISULFIDE | 0.41 U | 0.43 U | 0.36 U | 0.31 U | 0.42 U | 0.4 U |
| CARBON TETRACHLORIDE | 0.34 U | 0.36 U | 0.3 U | 0.26 U | 0.35 U | 0.34 U |
| CHLOROBENZENE | 0.3 U | 0.32 U | 0.27 U | 0.23 U | 0.31 U | 0.3 U |
| CHLORODIBROMOMETHANE | 0.51 U | 0.54 U | 0.45 U | 0.38 U | 0.52 U | 0.5 U |
| CHLOROETHANE | 0.79 U | 0.85 U | 0.7 U | 0.6 U | 0.81 U | 0.79 U |
| CHLOROFORM | 0.27 U | 0.29 U | 0.24 U | 0.2 U | 0.27 U | 0.26 U |
| CHLOROMETHANE | 0.38 U | 0.4 U | 0.34 U | 0.29 U | 0.39 U | 0.37 U |
| CIS-1,2-DICHLOROETHENE | 0.33 U | 0.35 U | 0.29 U | 0.25 U | 0.34 U | 0.33 U |
| CIS-1,3-DICHLOROPROPENE | 0.31 U | 0.33 U | 0.28 U | 0.24 U | 0.32 U | 0.31 U |
| DIBROMOMETHANE | 0.58 U | 0.62 U | 0.52 U | 0.44 U | 0.6 U | 0.58 U |
| DICHLORODIFLUOROMETHANE | 0.46 U | 0.49 U | 0.41 U | 0.35 U | 0.47 U | 0.46 U |
| DIISOPROPYL ETHER | 1.4 U | 1.5 U | 1.2 U | 1 U | 1.4 U | 1.4 U |
| ETHYL TERT-BUTYL ETHER | 0.2 U | 0.22 U | 0.18 U | 0.15 U | 0.21 U | 0.2 U |
| ETHYLBENZENE | 0.24 U | 0.26 U | 0.21 U | 0.18 U | 0.25 U | 0.24 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-782 | SB-782 | SB-782 | SB-783 | SB-783 | SB-783 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-782-05 | D-SB-782-07 | D-SB-782-09 | D-SB-783-03 | D-SB-783-05 | D-SB-783-07 |
| SAMPLE DATE | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | 1.1 U | 1.2 U | 0.98 U | 0.84 U | 1.1 U | 1.1 U |
| ISOPROPYLBENZENE | 0.15 U | 0.16 U | 0.13 U | 0.11 U | 0.15 U | 0.15 U |
| M+P-XYLENES | 1.1 U | 1.2 U | 0.98 U | 0.84 U | 1.1 U | 1.1 U |
| METHYL TERT-BUTYL ETHER | 0.4 U | 0.42 U | 0.35 U | 0.3 U | 0.41 U | 0.39 U |
| METHYLENE CHLORIDE | 0.62 U | 0.66 U | 0.55 U | 0.47 U | 0.63 U | 0.61 U |
| NAPHTHALENE | 0.18 U | 0.19 U | 0.16 U | 0.13 U | 0.18 U | 0.17 U |
| N-BUTYLBENZENE | 0.21 U | 0.23 U | 0.19 U | 0.16 U | 0.22 U | 0.21 U |
| N-PROPYLBENZENE | 0.37 U | 0.39 U | 0.33 U | 0.28 U | 0.38 U | 0.37 U |
| O-XYLENE | 0.32 U | 0.34 U | 0.29 U | 0.24 U | 0.33 U | 0.32 U |
| SEC-BUTYLBENZENE | 0.17 U | 0.18 U | 0.15 U | 0.13 U | 0.17 U | 0.16 U |
| STYRENE | 0.14 U | 0.15 U | 0.12 U | 0.1 U | 0.14 U | 0.14 U |
| TERT-AMYL METHYL ETHER | 0.34 U | 0.36 U | 0.3 U | 0.26 U | 0.35 U | 0.34 U |
| TERT-BUTYLBENZENE | 0.27 U | 0.29 U | 0.24 U | 0.2 U | 0.27 U | 0.26 U |
| TERTIARY-BUTYL ALCOHOL | 7 UR | 7.5 UR | 6.2 UR | 5.3 UR | 7.2 UR | 6.9 UR |
| TETRACHLOROETHENE | 0.48 U | 0.51 U | 0.43 U | 0.36 U | 0.49 U | 0.47 U |
| TOLUENE | 0.25 U | 0.27 U | 0.22 U | 0.19 U | 0.26 U | 0.25 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.62 U | 0.66 U | 0.55 U | 0.47 U | 0.63 U | 0.61 U |
| TRANS-1,2-DICHLOROETHENE | 0.38 U | 0.4 U | 0.34 U | 0.29 U | 0.39 U | 0.37 U |
| TRANS-1,3-DICHLOROPROPENE | 0.5 U | 0.53 U | 0.44 U | 0.38 U | 0.51 U | 0.49 U |
| TRICHLOROETHENE | 0.39 U | 0.41 U | 0.34 U | 0.29 U | 0.4 U | 0.38 U |
| TRICHLOROFLUOROMETHANE | 0.31 U | 0.33 U | 0.28 U | 0.24 U | 0.32 U | 0.31 U |
| VINYL ACETATE | 0.23 U | 0.25 U | 0.2 U | 0.17 U | 0.24 U | 0.23 U |
| VINYL CHLORIDE | 0.36 U | 0.38 U | 0.32 U | 0.27 U | 0.37 U | 0.36 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 33 U | 33 U | 32 U | 30 UJ | 34 U | 32 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 27 U | 27 U | 26 U | 24 UJ | 27 U | 26 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 12 U | 12 U | 11 U | 11 UJ | 12 U | 11 U |
| 2,4,5-TRICHLOROPHENOL | 30 U | 30 U | 30 U | 28 U | 31 U | 30 U |
| 2,4,6-TRICHLOROPHENOL | 97 U | 97 U | 96 U | 89 U | 100 U | 95 U |
| 2,4-DICHLOROPHENOL | 24 U | 24 U | 24 U | 22 U | 25 U | 24 U |
| 2,4-DIMETHYLPHENOL | 24 U | 24 U | 24 U | 22 U | 25 U | 24 U |
| 2,4-DINITROPHENOL | 97 U | 97 U | 96 U | 89 U | 100 U | 95 U |
| 2,4-DINITROTOLUENE | 33 U | 33 U | 32 U | 30 UJ | 34 U | 32 U |
| 2,6-DINITROTOLUENE | 26 U | 26 U | 25 U | 23 UJ | 26 U | 25 U |
| 2-CHLORONAPHTHALENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| 2-CHLOROPHENOL | 33 U | 33 U | 32 U | 30 U | 34 U | 32 U |
| 2-METHYLPHENOL | 97 U | 97 U | 96 U | 89 U | 100 U | 95 U |
| 2-NITROANILINE | 11 U | 11 U | 11 U | 10 UJ | 11 U | 11 U |
| 2-NITROPHENOL | 33 U | 33 U | 32 U | 30 U | 34 U | 32 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 22 U | 22 U | 22 U | 20 UJ | 22 U | 21 U |
| 3-NITROANILINE | 19 U | 19 U | 19 U | 18 UJ | 20 U | 19 U |
| 4,6-DINITRO-2-METHYLPHENOL | 97 U | 97 U | 96 U | 89 U | 100 U | 95 U |
| 4-BROMOPHENYL PHENYL ETHER | 16 U | 16 U | 16 U | 14 UJ | 16 U | 15 U |
| 4-CHLORO-3-METHYLPHENOL | 26 U | 26 U | 25 U | 23 U | 26 U | 25 U |
| 4-CHLOROANILINE | 21 U | 21 U | 20 U | 19 UJ | 21 U | 20 U |
| 4-CHLOROPHENYL PHENYL ETHER | 16 U | 16 U | 16 U | 14 UJ | 16 U | 15 U |
| 4-METHYLPHENOL | 97 U | 97 U | 96 U | 89 U | 100 U | 95 U |
| 4-NITROANILINE | 32 U | 32 U | 31 U | 29 UJ | 32 U | 31 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-782 | SB-782 | SB-782 | SB-783 | SB-783 | SB-783 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-782-05 | D-SB-782-07 | D-SB-782-09 | D-SB-783-03 | D-SB-783-05 | D-SB-783-07 |
| SAMPLE DATE | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 97 U | 97 U | 96 U | 89 U | 100 U | 95 U |
| ACETOPHENONE | 11 U | 11 U | 11 U | 10 UJ | 11 U | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 11 U | 11 U | 11 U | 10 UJ | 11 U | 11 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 15 U | 15 U | 14 U | 13 UJ | 15 U | 14 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 27 U | 27 U | 26 U | 24 UJ | 27 U | 26 U |
| BIS(2-CHLOROETHYL)ETHER | 2.4 U | 2.4 U | 2.4 U | 2.2 UJ | 2.5 U | 2.4 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 23 U | 23 U | 23 U | 21 UJ | 24 U | 23 U |
| BUTYL BENZYL PHTHALATE | 12 U | 12 U | 12 U | 11 UJ | 12 U | 12 U |
| CAPROLACTAM | 45 U | 45 U | 45 U | 41 UJ | 46 U | 44 U |
| CARBAZOLE | 33 U | 33 U | 32 U | 30 UJ | 34 U | 32 U |
| DIBENZOFURAN | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| DIETHYL PHTHALATE | 19 U | 19 U | 19 U | 18 UJ | 20 U | 19 U |
| DIMETHYL PHTHALATE | 21 U | 21 U | 20 U | 19 UJ | 21 U | 20 U |
| DI-N-BUTYL PHTHALATE | 18 U | 18 U | 18 U | 17 UJ | 19 U | 18 U |
| DI-N-OCTYL PHTHALATE | 33 U | 33 U | 32 U | 30 UJ | 34 U | 32 U |
| HEXACHLOROBENZENE | 2.6 U | 2.6 U | 2.5 U | 2.3 UJ | 2.6 U | 2.5 U |
| HEXACHLOROBUTADIENE | 33 U | 33 U | 32 U | 30 UJ | 34 U | 32 U |
| HEXACHLOROCYCLOPENTADIENE | 33 U | 33 U | 32 U | 30 UJ | 34 U | 32 U |
| HEXACHLOROETHANE | 11 U | 11 U | 11 U | 10 UJ | 11 U | 11 U |
| ISOPHORONE | 16 U | 16 U | 16 U | 14 UJ | 16 U | 15 U |
| NITROBENZENE | 2.7 U | 2.7 U | 2.6 U | 2.4 UJ | 2.7 U | 2.6 U |
| N-NITROSODIMETHYLAMINE | 19 U | 19 U | 19 U | 18 UJ | 20 U | 19 U |
| N-NITROSO-DI-N-PROPYLAMINE | 33 U | 33 U | 32 U | 30 UJ | 34 U | 32 U |
| N-NITROSODIPHENYLAMINE | 26 U | 26 U | 25 U | 23 UJ | 26 U | 25 U |
| PENTACHLOROPHENOL | 97 U | 97 U | 96 U | 89 U | 100 U | 95 U |
| PHENOL | 33 U | 33 U | 32 U | 30 U | 34 U | 32 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| ACENAPHTHENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| ACENAPHTHYLENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| ANTHRACENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 4 U | 4 U | 4 U | 3.7 U | 4.1 U | 3.9 U |
| BAP EQUIVALENT-POS | 4 U | 4 U | 4 U | 3.7 U | 4.1 U | 3.9 U |
| BENZO(A)ANTHRACENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| BENZO(A)PYRENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| BENZO(B)FLUORANTHENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| BENZO(K)FLUORANTHENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-782 | SB-782 | SB-782 | SB-783 | SB-783 | SB-783 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-782-05 | D-SB-782-07 | D-SB-782-09 | D-SB-783-03 | D-SB-783-05 | D-SB-783-07 |
| SAMPLE DATE | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 1.3 U | 1.2 UJ | 1.4 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| FLUORANTHENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| FLUORENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| NAPHTHALENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| PHENANTHRENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| PYRENE | 4 U | 4 U | 4 U | 3.7 UJ | 4.1 U | 3.9 U |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | 0.75 U | 0.75 U | 0.75 U | 0.69 U | 0.77 UJ | 0.74 UJ |
| 4,4'-DDE | 0.47 U | 0.47 U | 0.47 U | 0.43 U | 0.49 U | 0.46 U |
| 4,4'-DDT | 0.77 U | 0.77 U | 0.76 U | 0.7 U | 0.78 U | 0.75 U |
| ALDRIN | 1.5 U | 1.5 U | 1.4 U | 1.3 U | 1.5 UJ | 1.4 UJ |
| ALPHA-BHC | 0.89 U | 0.89 U | 0.88 U | 0.81 U | 0.91 UJ | 0.87 UJ |
| ALPHA-CHLORDANE | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.2 UJ | 1.1 UJ |
| AROCLOR-1016 | 26 U | 26 U | 25 U | 23 U | 26 U | 25 U |
| AROCLOR-1221 | 19 U | 19 U | 19 U | 18 U | 20 U | 19 U |
| AROCLOR-1232 | 17 U | 17 U | 17 U | 15 U | 17 U | 17 U |
| AROCLOR-1242 | 16 U | 16 U | 16 U | 14 U | 16 U | 15 U |
| AROCLOR-1248 | 21 U | 21 U | 20 U | 19 U | 21 U | 20 U |
| AROCLOR-1254 | 21 U | 21 U | 20 U | 19 U | 21 U | 20 U |
| AROCLOR-1260 | 21 U | 21 U | 20 U | 19 U | 21 U | 20 U |
| BETA-BHC | 1.3 U | 1.3 U | 1.3 U | 1.2 U | 1.4 UJ | 1.3 UJ |
| DELTA-BHC | 1.5 U | 1.5 U | 1.4 U | 1.3 U | 1.5 UJ | 1.4 UJ |
| DIELDRIN | 0.57 U | 0.57 U | 0.57 U | 0.52 U | 0.58 UJ | 0.56 UJ |
| ENDOSULFAN I | 0.63 U | 0.63 U | 0.63 U | 0.58 U | 0.65 UJ | 0.62 UJ |
| ENDOSULFAN II | 1 U | 1 U | 0.99 U | 0.91 U | 1 UJ | 0.97 UJ |
| ENDOSULFAN SULFATE | 1.1 U | 1.1 U | 1 U | 0.96 U | 1.1 UJ | 1 UJ |
| ENDRIN | 0.61 U | 0.61 U | 0.6 U | 0.55 U | 0.62 UJ | 0.59 UJ |
| ENDRIN ALDEHYDE | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 1.2 U |
| ENDRIN KETONE | 0.77 U | 0.77 U | 0.76 U | 0.7 U | 0.78 U | 0.75 U |
| GAMMA-BHC (LINDANE) | 0.9 U | 0.9 U | 0.89 U | 0.82 U | 0.92 UJ | 0.88 UJ |
| GAMMA-CHLORDANE | 0.51 U | 0.51 U | 0.51 U | 0.46 U | 0.52 UJ | 0.5 UJ |
| HEPTACHLOR | 1.3 U | 1.3 U | 1.3 U | 1.2 U | 1.4 UJ | 1.3 UJ |
| HEPTACHLOR EPOXIDE | 0.97 U | 0.97 U | 0.96 U | 0.89 U | 1 UJ | 0.95 UJ |
| METHOXYCHLOR | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.9 U | 1.8 U |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 23 U | 23 U | 23 U | 21 U | 24 U | 23 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 0.15 UL | 0.3 J | 0.25 B | 0.35 J | 0.15 B | 0.31 J |
| ARSENIC | 2.5 J | 7.5 J | 5 J | 5 J | 6.1 J | 9.2 J |
| BARIUM | 30.3 | 14.5 | 13.9 | 48.1 | 8.1 | 7.8 |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-782 | SB-782 | SB-782 | SB-783 | SB-783 | SB-783 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-782-05 | D-SB-782-07 | D-SB-782-09 | D-SB-783-03 | D-SB-783-05 | D-SB-783-07 |
| SAMPLE DATE | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 1.6 | 4 | 3.2 | 0.9 | 1.2 | 2.4 |
| CADMIUM | 0.017 J | 0.025 J | 0.019 B | 0.55 K | 0.0097 UL | 0.0093 UL |
| CHROMIUM | 12.7 J | 30.7 J | 24.3 J | 14.6 J | 23.2 J | 29.5 J |
| COBALT | 4 J | 8.1 J | 6.5 J | 11.8 J | 4.3 J | 5.1 J |
| COPPER | 13.9 J | 20.3 J | 15.9 J | 17.3 J | 36.3 J | 37.6 J |
| IRON | 11300 J | 37500 J | 30600 J | 19100 J | 34500 J | 45200 J |
| LEAD | 7.3 | 7.9 | 7.1 | 1010 | 4.5 | 6.2 |
| MANGANESE | 11.1 | 81 | 42.8 | 97.8 | 16.5 | 46.5 |
| MERCURY | 0.018 U | 0.018 U | 0.018 U | 0.47 | 0.019 U | 0.018 U |
| MOLYBDENUM | 0.35 | 0.57 | 0.45 | 0.48 | 0.52 | 0.73 |
| NICKEL | 8.9 J | 28.5 J | 19.3 J | 18.2 J | 14.7 J | 14.4 J |
| SELENIUM | 1.3 | 2.1 | 1.7 | 1 | 0.6 J | 0.93 |
| SILVER | 0.019 U | 0.019 U | 0.019 UL | 0.25 | 0.02 UL | 0.019 UL |
| THALLIUM | 0.15 J | 0.17 J | 0.14 B | 0.072 U | 0.067 B | 0.05 B |
| VANADIUM | 17.7 J | 53.2 J | 44.1 J | 24.5 J | 46 J | 65.7 J |
| ZINC | 51 J | 45.8 J | 37.1 J | 58 J | 50.9 J | 27.7 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 9500 B | 6200 B | 5900 B | 33000 | 10000 J | 6100 J |
| GASOLINE RANGE ORGANICS | 56 U | 56 U | 55 U | 51 U | 57 U | 55 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | 0.33 U | 0.4 J | 0.32 U | 0.86 J | 0.34 U | 0.71 J |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-783 | SB-784 | SB-784 | SB-784 | SB-784 | SB-785 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-783-09 | D-SB-784-03 | D-SB-784-05 | D-SB-784-07 | D-SB-784-09 | D-SB-785-03 |
| SAMPLE DATE | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100903 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.56 U | 0.56 U | 0.53 U | 0.56 U | 0.53 U | 0.45 U |
| 1,1,1-TRICHLOROETHANE | 0.5 U | 0.51 U | 0.48 U | 0.51 U | 0.48 U | 0.41 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.31 U | 0.31 U | 0.29 U | 0.31 U | 0.29 U | 0.25 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 1.1 U | 0.95 U |
| 1,1-DICHLOROETHANE | 0.32 U | 0.32 U | 0.31 U | 0.33 U | 0.31 U | 0.26 U |
| 1,1-DICHLOROETHENE | 0.47 U | 0.47 U | 0.44 U | 0.47 U | 0.44 U | 0.38 U |
| 1,1-DICHLOROPROPENE | 0.27 U | 0.27 U | 0.26 U | 0.27 U | 0.26 U | 0.22 U |
| 1,2,3-TRICHLOROBENZENE | 0.34 U | 0.34 U | 0.32 U | 0.34 U | 0.32 U | 0.28 U |
| 1,2,3-TRICHLOROPROPANE | 0.81 U | 0.81 U | 0.77 U | 0.81 U | 0.77 U | 0.66 U |
| 1,2,3-TRIMETHYLBENZENE | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.12 U |
| 1,2,4-TRICHLOROBENZENE | 0.24 U | 0.24 U | 0.23 U | 0.24 U | 0.23 U | 0.2 U |
| 1,2,4-TRIMETHYLBENZENE | 0.58 U | 0.59 U | 0.55 U | 0.59 U | 0.56 U | 0.47 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 1.1 U | 0.95 U |
| 1,2-DIBROMOETHANE | 0.45 U | 0.45 U | 0.43 U | 0.45 U | 0.43 U | 0.37 U |
| 1,2-DICHLOROBENZENE | 0.32 U | 0.32 U | 0.31 U | 0.33 U | 0.31 U | 0.26 U |
| 1,2-DICHLOROETHANE | 0.31 U | 0.31 U | 0.29 U | 0.31 U | 0.29 U | 0.25 U |
| 1,2-DICHLOROPROPANE | 0.62 U | 0.62 U | 0.59 U | 0.62 U | 0.59 U | 0.5 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.31 U | 0.32 U | 0.3 U | 0.32 U | 0.3 U | 0.26 U |
| 1,3-DICHLOROPROPANE | 0.31 U | 0.31 U | 0.29 U | 0.31 U | 0.29 U | 0.25 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.59 U | 0.6 U | 0.56 U | 0.6 U | 0.56 U | 0.48 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.85 U | 0.85 U | 0.8 U | 0.85 U | 0.8 U | 0.69 U |
| 2-BUTANONE | 1.3 U | 1.3 U | 5.5 J | 1.3 U | 1.2 U | 4.3 B |
| 2-CHLOROETHYL VINYL ETHER | 1.3 U | 1.3 U | 1.2 U | 1.3 U | 1.2 U | 1 U |
| 2-CHLOROTOLUENE | 0.36 U | 0.36 U | 0.34 U | 0.36 U | 0.34 U | 0.29 U |
| 2-HEXANONE | 0.57 U | 0.57 U | 0.54 U | 0.57 U | 0.54 U | 0.46 U |
| 4-CHLOROTOLUENE | 0.37 U | 0.37 U | 0.35 U | 0.37 U | 0.35 U | 0.3 U |
| 4-ISOPROPYLTOLUENE | 0.19 U | 0.19 U | 0.18 U | 0.19 U | 0.18 U | 0.15 U |
| 4-METHYL-2-PENTANONE | 0.49 U | 0.49 U | 0.46 U | 0.49 U | 0.46 U | 0.39 U |
| ACETONE | 5.7 U | 6.1 B | 71 | 13 B | 5.4 U | 320 B |
| BENZENE | 0.21 U | 0.21 U | 0.2 U | 0.21 U | 0.2 U | 0.17 U |
| BROMOBENZENE | 0.3 U | 0.3 U | 0.28 U | 0.3 U | 0.28 U | 0.24 U |
| BROMOCHLOROMETHANE | 0.64 U | 0.64 U | 0.61 U | 0.64 U | 0.61 U | 0.52 U |
| BROMODICHLOROMETHANE | 0.25 U | 0.25 U | 0.24 U | 0.25 U | 0.24 U | 0.2 U |
| BROMOFORM | 0.3 U | 0.3 U | 0.28 U | 0.3 U | 0.28 U | 0.24 U |
| BROMOMETHANE | 0.49 | 0.49 U | 0.46 U | 0.49 U | 0.46 U | 0.39 U |
| CARBON DISULFIDE | 0.4 U | 0.4 U | 1.4 J | 0.4 U | 0.38 U | 0.81 B |
| CARBON TETRACHLORIDE | 0.33 U | 0.33 U | 0.32 U | 0.33 U | 0.32 U | 0.27 U |
| CHLOROBENZENE | 0.3 U | 0.3 U | 0.28 U | 0.3 U | 0.28 U | 0.24 U |
| CHLORODIBROMOMETHANE | 0.49 U | 0.5 U | 0.47 U | 0.5 U | 0.47 U | 0.4 U |
| CHLOROETHANE | 0.77 U | 0.78 U | 0.73 U | 0.78 U | 0.74 U | 0.63 U |
| CHLOROFORM | 0.26 U | 0.26 U | 0.25 U | 0.26 U | 0.25 U | 0.21 U |
| CHLOROMETHANE | 0.37 U | 0.37 U | 0.35 U | 0.37 U | 0.35 U | 0.3 U |
| CIS-1,2-DICHLOROETHENE | 0.32 U | 0.32 U | 0.31 U | 0.33 U | 0.31 U | 0.26 U |
| CIS-1,3-DICHLOROPROPENE | 0.31 U | 0.31 U | 0.29 U | 0.31 U | 0.29 U | 0.25 U |
| DIBROMOMETHANE | 0.57 U | 0.57 U | 0.54 U | 0.57 U | 0.54 U | 0.46 U |
| DICHLORODIFLUOROMETHANE | 0.45 U | 0.45 U | 0.43 U | 0.45 U | 0.43 U | 0.37 U |
| DIISOPROPYL ETHER | 1.3 U | 1.4 U | 1.3 U | 1.4 U | 1.3 U | 1.1 U |
| ETHYL TERT-BUTYL ETHER | 0.2 U | 0.2 U | 0.19 U | 0.2 U | 0.19 U | 0.16 U |
| ETHYLBENZENE | 0.23 U | 0.23 U | 0.22 U | 0.24 U | 0.22 U | 0.19 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-783 | SB-784 | SB-784 | SB-784 | SB-784 | SB-785 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-783-09 | D-SB-784-03 | D-SB-784-05 | D-SB-784-07 | D-SB-784-09 | D-SB-785-03 |
| SAMPLE DATE | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100903 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | 1.1 U | 1.1 U | 1 U | 1.1 U | 1 U | 0.88 U |
| ISOPROPYLBENZENE | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.12 U |
| M+P-XYLENES | 1.1 U | 1.1 U | 1 U | 1.1 U | 1 U | 0.88 U |
| METHYL TERT-BUTYL ETHER | 0.39 U | 0.39 U | 0.37 U | 0.39 U | 0.37 U | 0.31 UJ |
| METHYLENE CHLORIDE | 0.6 U | 0.6 U | 0.57 U | 0.61 U | 0.57 U | 1 B |
| NAPHTHALENE | 0.17 U | 0.17 U | 0.16 U | 0.17 U | 0.16 U | 0.75 B |
| N-BUTYLBENZENE | 0.21 U | 0.21 U | 0.2 U | 0.21 U | 0.2 U | 0.17 U |
| N-PROPYLBENZENE | 0.36 U | 0.36 U | 0.34 U | 0.36 U | 0.34 U | 0.29 U |
| O-XYLENE | 0.31 U | 0.32 U | 0.3 U | 0.32 U | 0.3 U | 0.26 U |
| SEC-BUTYLBENZENE | 0.16 U | 0.16 U | 0.15 U | 0.16 U | 0.15 U | 0.13 U |
| STYRENE | 0.13 U | 0.14 U | 0.13 U | 0.14 U | 0.13 U | 0.11 U |
| TERT-AMYL METHYL ETHER | 0.33 U | 0.33 U | 0.32 U | 0.33 U | 0.32 U | 0.27 UJ |
| TERT-BUTYLBENZENE | 0.26 U | 0.26 U | 0.25 U | 0.26 U | 0.25 U | 0.21 U |
| TERTIARY-BUTYL ALCOHOL | 6.8 UR | 6.9 UR | 6.5 UR | 6.9 UR | 6.5 UR | 44 B |
| TETRACHLOROETHENE | 0.47 U | 0.47 U | 0.44 U | 0.47 U | 0.44 U | 0.38 U |
| TOLUENE | 0.24 U | 0.24 U | 0.23 U | 0.24 U | 0.23 U | 0.2 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.6 U | 0.6 U | 0.57 U | 0.61 U | 0.57 U | 0.49 U |
| TRANS-1,2-DICHLOROETHENE | 0.37 U | 0.37 U | 0.35 U | 0.37 U | 0.35 U | 0.3 U |
| TRANS-1,3-DICHLOROPROPENE | 0.49 U | 0.49 U | 0.46 U | 0.49 U | 0.46 U | 0.39 U |
| TRICHLOROETHENE | 0.38 U | 0.38 U | 0.36 U | 0.38 U | 0.36 U | 0.31 U |
| TRICHLOROFLUOROMETHANE | 0.31 U | 0.31 U | 0.29 U | 0.31 U | 0.29 U | 0.25 U |
| VINYL ACETATE | 0.22 U | 0.23 U | 0.21 U | 0.23 U | 0.21 U | 0.18 U |
| VINYL CHLORIDE | 0.35 U | 0.35 U | 0.33 U | 0.35 U | 0.33 U | 0.28 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 32 U | 32 U | 33 U | 32 U | 31 U | 32 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 26 U | 26 U | 27 U | 26 U | 25 U | 26 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 11 U | 11 U | 12 U | 11 U | 11 U | 11 U |
| 2,4,5-TRICHLOROPHENOL | 30 U | 29 U | 31 U | 30 U | 29 U | 30 U |
| 2,4,6-TRICHLOROPHENOL | 95 U | 94 U | 99 U | 95 U | 91 U | 96 U |
| 2,4-DICHLOROPHENOL | 24 U | 23 U | 25 U | 24 U | 23 U | 24 U |
| 2,4-DIMETHYLPHENOL | 24 U | 23 U | 25 U | 24 U | 23 U | 24 U |
| 2,4-DINITROPHENOL | 95 U | 94 U | 99 U | 95 U | 91 U | 96 U |
| 2,4-DINITROTOLUENE | 32 U | 32 U | 33 U | 32 U | 31 U | 32 U |
| 2,6-DINITROTOLUENE | 25 U | 25 U | 26 U | 25 U | 24 U | 25 U |
| 2-CHLORONAPHTHALENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 3.9 U |
| 2-CHLOROPHENOL | 32 U | 32 U | 33 U | 32 U | 31 U | 32 U |
| 2-METHYLPHENOL | 95 U | 94 U | 99 U | 95 U | 91 U | 96 U |
| 2-NITROANILINE | 11 U | 11 U | 11 U | 11 U | 10 U | 11 U |
| 2-NITROPHENOL | 32 U | 32 U | 33 U | 32 U | 31 U | 32 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 21 U | 21 U | 22 U | 21 U | 21 U | 22 U |
| 3-NITROANILINE | 19 U | 19 U | 20 U | 19 U | 18 U | 19 U |
| 4,6-DINITRO-2-METHYLPHENOL | 95 U | 94 U | 99 U | 95 U | 91 U | 96 U |
| 4-BROMOPHENYL PHENYL ETHER | 15 U | 15 U | 16 U | 15 U | 15 U | 16 U |
| 4-CHLORO-3-METHYLPHENOL | 25 U | 25 U | 26 U | 25 U | 24 U | 25 U |
| 4-CHLOROANILINE | 20 U | 20 U | 21 U | 20 U | 19 U | 20 U |
| 4-CHLOROPHENYL PHENYL ETHER | 15 U | 15 U | 16 U | 15 U | 15 U | 16 U |
| 4-METHYLPHENOL | 95 U | 94 U | 99 U | 95 U | 91 U | 96 U |
| 4-NITROANILINE | 31 U | 30 U | 32 U | 31 U | 30 U | 31 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-783 | SB-784 | SB-784 | SB-784 | SB-784 | SB-785 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-783-09 | D-SB-784-03 | D-SB-784-05 | D-SB-784-07 | D-SB-784-09 | D-SB-785-03 |
| SAMPLE DATE | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100903 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 95 U | 94 U | 99 U | 95 U | 91 U | 96 U |
| ACETOPHENONE | 11 U | 11 U | 11 U | 11 U | 10 U | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 11 U | 11 U | 11 U | 11 U | 10 U | 11 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 14 U | 14 U | 15 U | 14 U | 14 U | 14 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 26 U | 26 U | 27 U | 26 U | 25 U | 26 U |
| BIS(2-CHLOROETHYL)ETHER | 2.4 U | 2.3 U | 2.5 U | 2.4 U | 2.3 U | 2.4 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 22 U | 35 J | 24 U | 23 U | 110 | 23 U |
| BUTYL BENZYL PHTHALATE | 12 U | 12 U | 12 U | 12 U | 11 U | 12 U |
| CAPROLACTAM | 44 U | 43 U | 46 U | 44 U | 42 U | 44 U |
| CARBAZOLE | 32 U | 32 U | 33 U | 32 U | 31 U | 32 U |
| DIBENZOFURAN | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 3.9 U |
| DIETHYL PHTHALATE | 19 U | 19 U | 20 U | 19 U | 18 U | 19 U |
| DIMETHYL PHTHALATE | 20 U | 20 U | 21 U | 20 U | 19 U | 20 U |
| DI-N-BUTYL PHTHALATE | 18 U | 18 U | 19 U | 18 U | 17 U | 18 U |
| DI-N-OCTYL PHTHALATE | 32 U | 32 U | 33 U | 32 U | 31 U | 32 U |
| HEXACHLOROBENZENE | 2.5 U | 2.5 U | 2.6 U | 2.5 U | 2.4 U | 2.5 U |
| HEXACHLOROBUTADIENE | 32 U | 32 U | 33 U | 32 U | 31 U | 32 U |
| HEXACHLOROCYCLOPENTADIENE | 32 U | 32 U | 33 U | 32 U | 31 U | 32 U |
| HEXACHLOROETHANE | 11 U | 11 U | 11 U | 11 U | 10 U | 11 U |
| ISOPHORONE | 15 U | 15 U | 16 U | 15 U | 15 U | 16 U |
| NITROBENZENE | 2.6 U | 2.6 U | 2.7 U | 2.6 U | 2.5 U | 2.6 U |
| N-NITROSODIMETHYLAMINE | 19 U | 19 U | 20 U | 19 U | 18 U | 19 U |
| N-NITROSO-DI-N-PROPYLAMINE | 32 U | 32 U | 33 U | 32 U | 31 U | 32 U |
| N-NITROSODIPHENYLAMINE | 25 U | 25 U | 26 U | 25 U | 24 U | 25 U |
| PENTACHLOROPHENOL | 95 U | 94 U | 99 U | 95 U | 91 U | 96 U |
| PHENOL | 32 U | 32 U | 33 U | 32 U | 31 U | 32 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 3.9 U |
| ACENAPHTHENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 3.9 U |
| ACENAPHTHYLENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 3.9 U |
| ANTHRACENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 8.5 |
| BAP EQUIVALENT-HALFND | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 38.6 |
| BAP EQUIVALENT-POS | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 38.6 |
| BENZO(A)ANTHRACENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 21 |
| BENZO(A)PYRENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 17 |
| BENZO(B)FLUORANTHENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 25 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 12 |
| BENZO(K)FLUORANTHENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-783 | SB-784 | SB-784 | SB-784 | SB-784 | SB-785 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-783-09 | D-SB-784-03 | D-SB-784-05 | D-SB-784-07 | D-SB-784-09 | D-SB-785-03 |
| SAMPLE DATE | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100903 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 1.4 U | 1.3 U | 1.3 U | 17 |
| DIBENZO(A,H)ANTHRACENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 16 |
| FLUORANTHENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 35 |
| FLUORENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 10 |
| NAPHTHALENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 3.9 U |
| PHENANTHRENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 36 |
| PYRENE | 3.9 U | 3.9 U | 4.1 U | 3.9 U | 3.8 U | 28 |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 225.5 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | 0.73 UJ | 0.73 UJ | 3.8 UJ | 0.74 UJ | 0.71 U | 37 U |
| 4,4'-DDE | 0.46 U | 0.46 U | 2.4 U | 0.46 U | 0.44 U | 23 UJ |
| 4,4'-DDT | 0.75 U | 0.74 U | 3.9 U | 0.75 U | 0.72 U | 38 U |
| ALDRIN | 1.4 UJ | 1.4 UJ | 7.4 U | 1.4 UJ | 1.4 U | 72 U |
| ALPHA-BHC | 0.86 UJ | 0.86 UJ | 4.5 U | 0.87 UJ | 0.83 U | 44 UJ |
| ALPHA-CHLORDANE | 1.1 UJ | 1.1 UJ | 5.8 U | 1.1 UJ | 1.1 U | 56 UJ |
| AROCLOR-1016 | 25 U | 25 U | 26 U | 25 U | 24 U | 25 U |
| AROCLOR-1221 | 19 U | 19 U | 20 U | 19 U | 18 U | 19 U |
| AROCLOR-1232 | 17 U | 16 U | 17 U | 17 U | 16 U | 17 U |
| AROCLOR-1242 | 15 U | 15 U | 16 U | 15 U | 15 U | 16 U |
| AROCLOR-1248 | 20 U | 20 U | 21 U | 20 U | 19 U | 20 U |
| AROCLOR-1254 | 20 U | 20 U | 21 U | 20 U | 19 U | 20 U |
| AROCLOR-1260 | 20 U | 20 U | 21 U | 20 U | 19 U | 20 U |
| BETA-BHC | 1.3 UJ | 1.3 UJ | 6.8 U | 1.3 UJ | 1.3 U | 66 UJ |
| DELTA-BHC | 1.4 UJ | 1.4 UJ | 7.4 U | 1.4 UJ | 1.4 U | 72 UJ |
| DIELDRIN | 0.56 UJ | 0.55 UJ | 2.9 U | 0.56 UJ | 0.54 U | 28 UJ |
| ENDOSULFAN I | 0.62 UJ | 0.61 UJ | 3.2 U | 0.62 UJ | 0.59 U | 31 UJ |
| ENDOSULFAN II | 0.97 UJ | 0.96 UJ | 5.1 U | 0.98 UJ | 0.93 U | 49 U |
| ENDOSULFAN SULFATE | 1 UJ | 1 UJ | 5.4 U | 1 UJ | 0.99 U | 52 U |
| ENDRIN | 0.59 UJ | 0.59 UJ | 3.1 U | 0.59 UJ | 0.57 U | 30 UJ |
| ENDRIN ALDEHYDE | 1.2 U | 1.2 U | 6.2 U | 1.2 U | 1.1 U | 60 U |
| ENDRIN KETONE | 0.75 U | 0.74 U | 3.9 U | 0.75 U | 0.72 U | 38 U |
| GAMMA-BHC (LINDANE) | 0.88 UJ | 0.87 UJ | 4.6 U | 0.88 UJ | 0.84 U | 44 UJ |
| GAMMA-CHLORDANE | 0.5 UJ | 0.49 UJ | 2.6 U | 0.5 UJ | 0.48 U | 25 UJ |
| HEPTACHLOR | 1.3 UJ | 1.3 UJ | 6.8 U | 1.3 UJ | 1.3 U | 66 UJ |
| HEPTACHLOR EPOXIDE | 0.95 UJ | 0.94 UJ | 4.9 U | 0.95 UJ | 0.91 U | 48 UJ |
| METHOXYCHLOR | 1.8 U | 1.8 U | 9.3 U | 1.8 U | 1.7 U | 90 U |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 22 U | 22 U | 120 U | 23 U | 22 U | 1100 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 0.059 B | 0.19 B | 0.34 J | 0.31 J | 0.027 UJ | 0.21 J |
| ARSENIC | 1.8 J | 3 J | 8 J | 5.8 J | 2.6 J | 4.6 |
| BARIUM | 8.4 | 14.8 | 13.4 | 16.4 | 7.5 | 24.8 J |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-783 | SB-784 | SB-784 | SB-784 | SB-784 | SB-785 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-783-09 | D-SB-784-03 | D-SB-784-05 | D-SB-784-07 | D-SB-784-09 | D-SB-785-03 |
| SAMPLE DATE | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100903 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 0.66 | 1.5 | 2.2 | 2.8 | 0.77 | 2.2 |
| CADMIUM | 0.0092 UL | 0.024 B | 0.023 B | 0.036 J | 0.0089 UL | 0.037 J |
| CHROMIUM | 8.7 J | 14.7 J | 23.9 J | 21.9 J | 6.8 J | 17 |
| COBALT | 2 J | 7.7 J | 6.5 J | 5.6 J | 3.1 J | 9.8 |
| COPPER | 5.7 J | 15.7 J | 36.2 J | 110 J | 9.7 J | 25.8 J |
| IRON | 4670 J | 17600 J | 45800 J | 35400 J | 2570 J | 20600 J |
| LEAD | 3.2 | 9.4 | 7.7 | 7.4 | 4.4 | 13.8 J |
| MANGANESE | 9.4 | 67.3 | 118 | 61.5 | 14.9 | 94.3 J |
| MERCURY | 0.018 U | 0.018 U | 0.019 U | 0.018 U | 0.017 U | 0.3 K |
| MOLYBDENUM | 0.075 U | 0.29 | 0.89 | 0.54 | 0.072 U | 0.54 |
| NICKEL | 4.5 J | 21.4 J | 16.6 J | 24.8 J | 4.4 J | 14.6 J |
| SELENIUM | 1.5 | 2.5 | 0.86 | 2.7 | 3.3 | 2.6 L |
| SILVER | 0.019 UL | 0.019 UL | 0.02 UL | 0.019 UL | 0.018 UL | 0.2 K |
| THALLIUM | 0.07 B | 0.081 B | 0.038 B | 0.12 B | 0.1 B | 0.064 J |
| VANADIUM | 10.4 J | 25.3 J | 57.7 J | 38.3 J | 9.7 J | 25.7 |
| ZINC | 13.4 J | 35 J | 31.2 J | 71.3 J | 10.8 J | 28.6 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 3300 U | 3400 J | 37000 | 6700 J | 3200 U | 73000 |
| GASOLINE RANGE ORGANICS | 54 U | 54 U | 57 U | 55 U | 52 U | 55 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | 0.32 U | 0.73 J | 0.94 J | 0.5 J | 0.31 U | 0.91 J |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-785 | SB-785 | SB-785 | SB-786 | SB-786 | SB-786 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-05 | D-SB-785-07 | D-SB-785-09 | D-SB-786-03 | D-SB-786-05 | D-SB-786-07 |
| SAMPLE DATE | 20100903 | 20100903 | 20100908 | 20100903 | 20100903 | 20100903 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.57 U | 0.71 UJ | 0.58 U | 6.9 U | 8.5 U | 0.68 U |
| 1,1,1-TRICHLOROETHANE | 0.51 U | 0.64 UJ | 0.53 U | 16 U | 20 U | 0.62 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.31 U | 0.39 UJ | 0.32 U | 6.8 U | 8.3 U | 0.38 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U | 1.5 UJ | 1.2 U | 30 U | 36 U | 1.4 U |
| 1,1-DICHLOROETHANE | 0.33 U | 0.41 UJ | 0.34 U | 13 U | 16 U | 0.4 U |
| 1,1-DICHLOROETHENE | 0.48 U | 0.6 UJ | 0.49 U | 14 U | 17 U | 0.57 U |
| 1,1-DICHLOROPROPENE | 0.28 U | 0.35 UJ | 0.28 U | 7.6 U | 9.3 U | 0.33 U |
| 1,2,3-TRICHLOROBENZENE | 0.35 U | 0.44 UJ | 0.36 U | 7.6 U | 9.3 U | 0.42 U |
| 1,2,3-TRICHLOROPROPANE | 0.83 U | 1 UJ | 0.85 U | 16 U | 20 U | 0.99 U |
| 1,2,3-TRIMETHYLBENZENE | 0.16 U | 0.2 UJ | 0.16 U | 23 J | 8.3 J | 3.4 J |
| 1,2,4-TRICHLOROBENZENE | 0.25 U | 0.31 UJ | 0.25 U | 5.6 U | 6.8 U | 0.3 U |
| 1,2,4-TRIMETHYLBENZENE | 0.6 U | 0.75 UJ | 0.61 U | 41 J | 4.7 U | 19 |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U | 1.5 UJ | 1.2 U | 38 U | 47 U | 1.4 U |
| 1,2-DIBROMOETHANE | 0.46 U | 0.58 UJ | 0.47 U | 7.6 U | 9.3 U | 0.55 U |
| 1,2-DICHLOROBENZENE | 0.33 U | 0.41 UJ | 0.34 U | 6.6 U | 8 U | 0.4 U |
| 1,2-DICHLOROETHANE | 0.31 U | 0.39 UJ | 0.32 U | 7.6 U | 9.3 U | 0.38 U |
| 1,2-DICHLOROPROPANE | 0.63 U | 0.79 UJ | 0.65 U | 6.3 U | 7.6 U | 0.76 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.32 U | 0.4 UJ | 0.33 U | 3.7 U | 4.5 U | 0.39 U |
| 1,3-DICHLOROPROPANE | 0.31 U | 0.39 UJ | 0.32 U | 17 U | 20 U | 0.38 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.61 U | 0.76 UJ | 0.62 U | 6.1 U | 7.4 U | 0.73 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.86 U | 1.1 UJ | 0.88 U | 18 U | 21 U | 1 U |
| 2-BUTANONE | 1.4 J | 5 J | 1.3 U | 120 B | 40 U | 5.9 B |
| 2-CHLOROETHYL VINYL ETHER | 1.3 U | 1.6 UJ | 1.3 U | 33 U | 40 U | 1.5 U |
| 2-CHLOROTOLUENE | 0.37 U | 0.46 UJ | 0.38 U | 6.9 U | 8.4 U | 0.44 U |
| 2-HEXANONE | 0.58 U | 0.73 UJ | 0.59 U | 15 U | 19 U | 0.7 U |
| 4-CHLOROTOLUENE | 0.38 U | 0.47 UJ | 0.39 U | 7.6 U | 9.2 U | 0.45 U |
| 4-ISOPROPYLTOLUENE | 0.19 U | 0.24 UJ | 0.2 U | 3.7 U | 4.5 U | 0.34 J |
| 4-METHYL-2-PENTANONE | 0.5 U | 0.62 UJ | 0.51 U | 37 U | 45 U | 0.6 U |
| ACETONE | 11 B | 390 B | 220 B | 130 U | 160 U | 35 B |
| BENZENE | 0.21 U | 0.26 UJ | 0.22 U | 9.2 U | 11 U | 0.25 U |
| BROMOBENZENE | 0.3 U | 0.38 UJ | 0.31 U | 9.9 U | 12 U | 0.36 U |
| BROMOCHLOROMETHANE | 0.65 U | 0.82 UJ | 0.67 U | 9.9 U | 12 U | 0.78 U |
| BROMODICHLOROMETHANE | 0.26 U | 0.32 UJ | 0.26 U | 7.6 U | 9.2 U | 0.31 U |
| BROMOFORM | 0.3 U | 0.38 UJ | 0.31 U | 15 U | 18 U | 0.36 U |
| BROMOMETHANE | 0.5 U | 0.62 UJ | 0.51 U | 22 U | 27 U | 0.6 U |
| CARBON DISULFIDE | 0.9 B | 2.3 B | 0.97 B | 35 J | 11 U | 1.4 B |
| CARBON TETRACHLORIDE | 0.34 U | 0.43 UJ | 0.35 U | 4.9 U | 6 U | 0.41 U |
| CHLOROBENZENE | 0.3 U | 0.38 UJ | 0.31 U | 4.9 U | 6 U | 0.36 U |
| CHLORODIBROMOMETHANE | 0.5 U | 0.63 UJ | 0.52 U | 9.2 U | 11 U | 0.61 U |
| CHLOROETHANE | 0.79 U | 0.99 UJ | 0.81 U | 47 U | 57 U | 0.95 U |
| CHLOROFORM | 0.27 U | 0.33 UJ | 0.27 U | 6.7 U | 8.2 U | 0.32 U |
| CHLOROMETHANE | 0.38 U | 0.47 UJ | 0.39 U | 11 U | 13 U | 0.45 U |
| CIS-1,2-DICHLOROETHENE | 0.33 U | 0.41 UJ | 0.34 U | 5.3 U | 6.4 U | 0.4 U |
| CIS-1,3-DICHLOROPROPENE | 0.31 U | 0.39 UJ | 0.32 U | 6 U | 7.4 U | 0.38 U |
| DIBROMOMETHANE | 0.58 U | 0.73 UJ | 0.59 U | 11 U | 13 U | 0.7 U |
| DICHLORODIFLUOROMETHANE | 0.46 U | 0.58 UJ | 0.47 U | 12 U | 15 U | 0.55 U |
| DIISOPROPYL ETHER | 1.4 U | 1.7 UJ | 1.4 U | 38 U | 47 U | 1.7 U |
| ETHYL TERT-BUTYL ETHER | 0.2 U | 0.25 UJ | 0.21 U | 0.17 U | 0.2 U | 0.24 U |
| ETHYLBENZENE | 0.24 U | 0.3 UJ | 0.24 U | 40 J | 13 J | 0.67 J |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-785 | SB-785 | SB-785 | SB-786 | SB-786 | SB-786 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-05 | D-SB-785-07 | D-SB-785-09 | D-SB-786-03 | D-SB-786-05 | D-SB-786-07 |
| SAMPLE DATE | 20100903 | 20100903 | 20100908 | 20100903 | 20100903 | 20100903 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | 1.1 U | 1.4 UJ | 1.1 U | 11 U | 13 U | 1.3 U |
| ISOPROPYLBENZENE | 0.15 U | 0.18 UJ | 0.15 U | 5.2 J | 6.1 U | 3.1 J |
| M+P-XYLENES | 1.1 U | 1.4 UJ | 1.1 U | 68 J | 21 J | 6 J |
| METHYL TERT-BUTYL ETHER | 0.39 U | 0.49 UJ | 0.4 UJ | 5.4 U | 6.6 U | 0.47 U |
| METHYLENE CHLORIDE | 1.3 B | 3.8 B | 0.63 U | 120 J | 120 J | 5.2 B |
| NAPHTHALENE | 0.95 B | 1.1 B | 0.85 B | 4000 | 1900 | 4.1 B |
| N-BUTYLBENZENE | 0.21 U | 0.26 UJ | 0.22 U | 6.1 U | 7.4 U | 0.25 U |
| N-PROPYLBENZENE | 0.37 U | 0.46 UJ | 0.38 U | 11 U | 13 U | 1.2 J |
| O-XYLENE | 0.32 U | 0.4 UJ | 0.33 U | 50 J | 20 J | 35 |
| SEC-BUTYLBENZENE | 0.17 U | 0.21 UJ | 0.17 U | 3.6 U | 4.4 U | 0.2 U |
| STYRENE | 0.14 U | 0.17 UJ | 0.14 U | 4.3 U | 5.2 U | 0.17 U |
| TERT-AMYL METHYL ETHER | 0.34 U | 0.43 UJ | 0.35 UJ | 0.28 U | 0.34 U | 0.41 U |
| TERT-BUTYLBENZENE | 0.27 U | 0.33 UJ | 0.27 U | 5 U | 6.1 U | 0.32 U |
| TERTIARY-BUTYL ALCOHOL | 49 B | 67 B | 51 B | 2200 B | 2600 B | 59 B |
| TETRACHLOROETHENE | 0.48 U | 0.6 UJ | 0.49 U | 9.2 U | 11 U | 0.57 U |
| TOLUENE | 0.25 U | 0.31 UJ | 0.25 U | 13 U | 16 U | 0.3 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.61 U | 0.77 UJ | 0.63 U | 120 J | 41 J | 42 |
| TRANS-1,2-DICHLOROETHENE | 0.38 U | 0.47 UJ | 0.39 U | 7 U | 8.6 U | 0.45 U |
| TRANS-1,3-DICHLOROPROPENE | 0.5 U | 0.62 UJ | 0.51 U | 15 U | 19 U | 0.6 U |
| TRICHLOROETHENE | 0.39 U | 0.48 UJ | 0.39 U | 7.4 U | 9 U | 0.46 U |
| TRICHLOROFLUOROMETHANE | 0.31 U | 0.39 UJ | 0.32 U | 12 U | 15 U | 0.38 U |
| VINYL ACETATE | 0.23 U | 0.29 UJ | 0.23 U | 18 U | 21 U | 0.28 U |
| VINYL CHLORIDE | 0.36 U | 0.45 UJ | 0.37 U | 14 U | 17 U | 0.43 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 33 U | 34 U | 33 U | 32 U | 34 U | 33 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 27 U | 28 U | 27 U | 26 U | 28 U | 27 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 11 U | 12 U | 12 U | 11 U | 12 U | 12 U |
| 2,4,5-TRICHLOROPHENOL | 30 U | 31 U | 31 U | 29 U | 31 U | 31 U |
| 2,4,6-TRICHLOROPHENOL | 97 U | 100 U | 98 U | 94 U | 100 U | 99 U |
| 2,4-DICHLOROPHENOL | 24 U | 25 U | 24 U | 23 U | 25 U | 25 U |
| 2,4-DIMETHYLPHENOL | 24 U | 25 U | 24 U | 23 U | 25 U | 25 U |
| 2,4-DINITROPHENOL | 97 U | 100 U | 98 U | 94 U | 100 U | 99 U |
| 2,4-DINITROTOLUENE | 33 U | 34 U | 33 U | 32 U | 34 U | 33 U |
| 2,6-DINITROTOLUENE | 25 U | 26 U | 26 U | 25 U | 26 U | 26 U |
| 2-CHLORONAPHTHALENE | 4 U | 4.1 U | 4 U | 3.9 U | 4.2 U | 4.1 U |
| 2-CHLOROPHENOL | 33 U | 34 U | 33 U | 32 U | 34 U | 33 U |
| 2-METHYLPHENOL | 97 U | 100 U | 98 U | 94 U | 100 U | 99 U |
| 2-NITROANILINE | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U |
| 2-NITROPHENOL | 33 U | 34 U | 33 U | 32 U | 34 U | 33 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 22 U | 23 U | 22 U | 21 U | 23 U | 22 U |
| 3-NITROANILINE | 19 U | 20 U | 20 U | 19 U | 20 U | 20 U |
| 4,6-DINITRO-2-METHYLPHENOL | 97 U | 100 U | 98 U | 94 U | 100 U | 99 U |
| 4-BROMOPHENYL PHENYL ETHER | 16 U | 16 U | 16 U | 15 U | 16 U | 16 U |
| 4-CHLORO-3-METHYLPHENOL | 25 U | 26 U | 26 U | 25 U | 26 U | 26 U |
| 4-CHLOROANILINE | 21 U | 21 U | 21 U | 20 U | 21 U | 21 U |
| 4-CHLOROPHENYL PHENYL ETHER | 16 U | 16 U | 16 U | 15 U | 16 U | 16 U |
| 4-METHYLPHENOL | 97 U | 100 U | 98 U | 94 U | 100 U | 99 U |
| 4-NITROANILINE | 31 U | 33 U | 32 U | 31 U | 33 U | 32 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-785 | SB-785 | SB-785 | SB-786 | SB-786 | SB-786 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-05 | D-SB-785-07 | D-SB-785-09 | D-SB-786-03 | D-SB-786-05 | D-SB-786-07 |
| SAMPLE DATE | 20100903 | 20100903 | 20100908 | 20100903 | 20100903 | 20100903 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 97 U | 100 U | 98 U | 94 U | 100 U | 99 U |
| ACETOPHENONE | 11 U | 12 U | 11 U | 11 U | 12 U | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 14 U | 15 U | 15 U | 14 U | 15 U | 15 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 27 U | 28 U | 27 U | 26 U | 28 U | 27 U |
| BIS(2-CHLOROETHYL)ETHER | 2.4 U | 2.5 U | 2.4 U | 2.3 U | 2.5 U | 2.5 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 23 U | 24 U | 23 U | 22 J | 24 U | 24 U |
| BUTYL BENZYL PHTHALATE | 12 U | 13 U | 12 U | 12 U | 13 U | 12 U |
| CAPROLACTAM | 45 U | 46 U | 45 U | 43 U | 47 U | 46 U |
| CARBAZOLE | 33 U | 34 U | 33 U | 33 J | 34 U | 33 U |
| DIBENZOFURAN | 4 U | 4.1 U | 4 U | 18 J | 8.9 J | 4.1 U |
| DIETHYL PHTHALATE | 19 U | 20 U | 20 U | 19 U | 20 U | 20 U |
| DIMETHYL PHTHALATE | 21 U | 21 U | 21 U | 20 U | 21 U | 21 U |
| DI-N-BUTYL PHTHALATE | 18 U | 19 U | 18 U | 18 U | 19 U | 19 U |
| DI-N-OCTYL PHTHALATE | 33 U | 34 U | 33 U | 32 U | 34 U | 33 U |
| HEXACHLOROBENZENE | 2.5 U | 2.6 U | 2.6 U | 2.5 U | 2.6 U | 2.6 U |
| HEXACHLOROBUTADIENE | 33 U | 34 U | 33 U | 32 U | 34 U | 33 U |
| HEXACHLOROCYCLOPENTADIENE | 33 U | 34 U | 33 U | 32 U | 34 U | 33 U |
| HEXACHLOROETHANE | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U |
| ISOPHORONE | 16 U | 16 U | 16 U | 15 U | 16 U | 16 U |
| NITROBENZENE | 2.7 U | 2.8 U | 2.7 U | 2.6 U | 2.8 U | 2.7 U |
| N-NITROSODIMETHYLAMINE | 19 U | 20 U | 20 U | 19 U | 20 U | 20 U |
| N-NITROSO-DI-N-PROPYLAMINE | 33 U | 34 U | 33 U | 32 U | 34 U | 33 U |
| N-NITROSODIPHENYLAMINE | 25 U | 26 U | 26 U | 25 U | 26 U | 26 U |
| PENTACHLOROPHENOL | 97 U | 100 U | 98 U | 94 U | 100 U | 99 U |
| PHENOL | 33 U | 34 U | 33 U | 32 U | 34 U | 33 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 4 U | 4.1 U | 4 U | 16 | 45 | 4.1 U |
| ACENAPHTHENE | 4 U | 4.1 U | 4 U | 32 | 23 | 11 |
| ACENAPHTHYLENE | 4 U | 4.1 U | 4 U | 3.9 U | 4.2 U | 4.1 U |
| ANTHRACENE | 4 U | 4.1 U | 4 U | 38 | 20 | 23 |
| BAP EQUIVALENT-HALFND | 4 U | 14.4 | 4 U | 161 | 50.0 | 58.2 |
| BAP EQUIVALENT-POS | 4 U | 12.2 | 4 U | 161 | 50.0 | 58.2 |
| BENZO(A)ANTHRACENE | 4 U | 8.6 | 4 U | 96 | 25 | 41 |
| BENZO(A)PYRENE | 4 U | 9.9 | 4 U | 100 | 24 | 30 |
| BENZO(B)FLUORANTHENE | 4 U | 14 | 4 U | 170 | 40 | 56 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4 U | 9.1 | 4 U | 67 | 16 | 16 |
| BENZO(K)FLUORANTHENE | 4 U | 4.1 U | 4 U | 71 | 16 | 19 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-785 | SB-785 | SB-785 | SB-786 | SB-786 | SB-786 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-05 | D-SB-785-07 | D-SB-785-09 | D-SB-786-03 | D-SB-786-05 | D-SB-786-07 |
| SAMPLE DATE | 20100903 | 20100903 | 20100908 | 20100903 | 20100903 | 20100903 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 9.1 | 1.3 U | 230 | 57 | 54 |
| DIBENZO(A,H)ANTHRACENE | 4 U | 4.1 U | 4 U | 28 | 18 | 17 |
| FLUORANTHENE | 4 U | 17 | 4 U | 140 | 84 | 140 |
| FLUORENE | 4 U | 4.1 U | 4 U | 29 | 17 | 12 |
| INDENO(1,2,3-CD)PYRENE | 4 U | 4.1 U | 4 U | 53 | 13 | 13 |
| NAPHTHALENE | 4 U | 4.1 U | 4 U | 220 | 820 | 4.1 U |
| PHENANTHRENE | 4 U | 15 | 4 U | 89 | 84 | 84 |
| PYRENE | 4 U | 13 | 4 U | 110 | 61 | 110 |
| TOTAL PAHS | 0 U | 95.7 | 0 U | 1489 | 1363 | 626 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | 0.75 U | 0.78 U | 0.76 UJ | 7.3 U | 0.78 U | 0.77 U |
| 4,4'-DDE | 0.47 UJ | 0.49 UJ | 0.48 U | 4.6 U | 0.49 U | 0.48 U |
| 4,4'-DDT | 0.76 U | 0.79 U | 0.77 UJ | 7.4 U | 0.79 U | 0.78 U |
| ALDRIN | 1.4 U | 1.5 U | 1.5 U | 14 U | 1.5 U | 1.5 U |
| ALPHA-BHC | 0.88 UJ | 0.91 UJ | 0.89 U | 8.6 UJ | 0.92 UJ | 0.91 UJ |
| ALPHA-CHLORDANE | 1.1 UJ | 1.2 UJ | 1.1 U | 11 U | 1.2 U | 1.2 U |
| AROCLOR-1016 | 25 U | 26 U | 26 U | 25 U | 26 U | 26 U |
| AROCLOR-1221 | 19 U | 20 U | 20 U | 19 U | 20 U | 20 U |
| AROCLOR-1232 | 17 U | 18 U | 17 U | 16 U | 18 U | 17 U |
| AROCLOR-1242 | 16 U | 16 U | 16 U | 15 U | 16 U | 16 U |
| AROCLOR-1248 | 21 U | 21 U | 21 U | 20 U | 21 U | 21 U |
| AROCLOR-1254 | 21 U | 21 U | 21 U | 20 U | 21 U | 21 U |
| AROCLOR-1260 | 21 U | 21 U | 21 U | 20 U | 21 U | 21 U |
| BETA-BHC | 1.3 UJ | 1.4 UJ | 1.3 U | 13 UJ | 1.4 UJ | 1.4 UJ |
| DELTA-BHC | 1.4 UJ | 1.5 UJ | 1.5 U | 14 U | 1.5 U | 1.5 U |
| DIELDRIN | 0.57 UJ | 0.59 UJ | 0.57 U | 5.5 U | 0.59 U | 0.58 U |
| ENDOSULFAN I | 0.63 UJ | 0.65 UJ | 0.63 U | 6.1 U | 0.65 U | 0.65 U |
| ENDOSULFAN II | 0.99 U | 1 U | 1 U | 9.6 U | 1 U | 1 U |
| ENDOSULFAN SULFATE | 1 U | 1.1 U | 1.1 U | 10 U | 1.1 U | 1.1 U |
| ENDRIN | 0.6 UJ | 0.63 UJ | 0.61 U | 5.9 U | 0.63 U | 0.62 U |
| ENDRIN ALDEHYDE | 1.2 U | 1.3 U | 1.2 U | 12 U | 1.3 U | 1.2 U |
| ENDRIN KETONE | 0.76 U | 0.79 U | 0.77 U | 7.4 U | 0.79 U | 0.78 U |
| GAMMA-BHC (LINDANE) | 0.89 UJ | 0.93 UJ | 0.9 U | 8.7 UJ | 0.93 UJ | 0.92 UJ |
| GAMMA-CHLORDANE | 0.51 UJ | 0.53 UJ | 0.51 U | 4.9 U | 0.53 U | 0.52 U |
| HEPTACHLOR | 1.3 UJ | 1.4 UJ | 1.3 U | 13 UJ | 1.4 UJ | 1.4 UJ |
| HEPTACHLOR EPOXIDE | 0.97 UJ | 1 UJ | 0.98 U | 9.4 UJ | 1 UJ | 0.99 UJ |
| METHOXYCHLOR | 1.8 U | 1.9 U | 1.8 U | 18 U | 1.9 U | 1.9 U |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 23 U | 24 U | 23 UJ | 220 U | 24 U | 24 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 0.32 J | 0.065 J | 0.13 J | 0.16 J | 0.32 J | 0.17 J |
| ARSENIC | 5.8 | 3.2 | 3.6 L | 3.9 | 7.7 | 14.3 |
| BARIUM | 24.8 J | 6.1 J | 10.7 J | 20.2 J | 27.7 J | 12 J |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-785 | SB-785 | SB-785 | SB-786 | SB-786 | SB-786 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-05 | D-SB-785-07 | D-SB-785-09 | D-SB-786-03 | D-SB-786-05 | D-SB-786-07 |
| SAMPLE DATE | 20100903 | 20100903 | 20100908 | 20100903 | 20100903 | 20100903 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 2.7 | 1.2 | 4.8 J | 2.4 | 4 | 1.2 |
| CADMIUM | 0.26 L | 0.022 J | 0.01 B | 0.091 J | 0.091 J | 0.038 J |
| CHROMIUM | 22.4 | 15 | 14.9 J | 18.5 | 24.3 | 18.4 |
| COBALT | 20 | 4.7 | 15.6 | 13.2 | 14.9 | 7.9 |
| COPPER | 31.5 J | 8.9 J | 89.7 | 20.3 J | 30 J | 16.1 J |
| IRON | 29600 J | 15500 J | 36600 J | 19000 J | 36400 J | 19400 J |
| LEAD | 21.7 J | 2.9 J | 6.7 | 12.2 J | 13.4 J | 5.9 J |
| MANGANESE | 95.3 J | 38 J | 63.2 | 50.1 J | 91.2 J | 33.5 J |
| MERCURY | 0.4 K | 0.019 U | 0.018 U | 0.16 K | 0.16 K | 0.021 J |
| MOLYBDENUM | 0.56 | 0.81 | 0.17 J | 0.33 | 0.52 | 0.49 |
| NICKEL | 41 J | 8.3 J | 35.4 J | 27.6 J | 39.2 J | 20.3 J |
| SELENIUM | 4 L | 0.45 J | 1.2 J | 2.4 L | 3.5 L | 1.3 L |
| SILVER | 0.33 K | 0.02 U | 0.02 UJ | 0.16 K | 0.08 J | 0.02 U |
| THALLIUM | 0.063 J | 0.016 UL | 0.12 | 0.057 J | 0.065 J | 0.033 J |
| VANADIUM | 34.4 | 21.8 | 24.5 | 28.4 | 38.4 | 33.7 |
| ZINC | 141 J | 19.8 J | 127 | 58.3 J | 90 J | 23 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 4700 J | 56000 | 3400 UJ | 26000 | 45000 | 92000 |
| GASOLINE RANGE ORGANICS | 56 U | 58 U | 56 U | 250 | 150 | 190 |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | 0.33 U | 0.34 U | 0.89 J | 0.32 U | 0.7 J | 0.54 J |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-786 | SB-787 | SB-787 | SB-787 | SB-787 | SB-788 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-786-09 | D-SB-787-03 | D-SB-787-05 | D-SB-787-07 | D-SB-787-09 | D-SB-788-03 |
| SAMPLE DATE | 20100903 | 20100908 | 20100908 | 20100903 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.54 U | 0.48 U | 0.58 U | 0.55 U | 0.53 U | 0.5 U |
| 1,1,1-TRICHLOROETHANE | 0.48 U | 0.43 U | 0.52 U | 0.5 U | 0.48 U | 0.45 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.29 U | 0.26 U | 0.32 U | 0.3 U | 0.29 U | 0.27 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.1 U | 1 U | 1.2 U | 1.2 U | 1.1 U | 1 U |
| 1,1-DICHLOROETHANE | 0.31 U | 0.28 U | 0.34 U | 0.32 U | 0.31 U | 0.29 U |
| 1,1-DICHLOROETHENE | 0.45 U | 0.4 U | 0.49 U | 0.46 U | 0.45 U | 0.42 U |
| 1,1-DICHLOROPROPENE | 0.26 U | 0.23 U | 0.28 U | 0.27 U | 0.26 U | 0.24 U |
| 1,2,3-TRICHLOROBENZENE | 0.33 U | 0.3 U | 0.36 U | 0.34 U | 0.33 U | 0.3 U |
| 1,2,3-TRICHLOROPROPANE | 0.78 U | 0.7 U | 0.84 U | 0.8 U | 0.77 U | 0.72 U |
| 1,2,3-TRIMETHYLBENZENE | 0.41 B | 0.13 U | 0.16 U | 0.15 U | 0.15 U | 0.15 J |
| 1,2,4-TRICHLOROBENZENE | 0.23 U | 0.21 U | 0.25 U | 0.24 U | 0.23 U | 0.22 U |
| 1,2,4-TRIMETHYLBENZENE | 0.74 J | 0.5 U | 0.61 U | 0.58 U | 0.56 U | 0.52 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 U | 1 U | 1.2 U | 1.2 U | 1.1 U | 1 U |
| 1,2-DIBROMOETHANE | 0.43 U | 0.39 U | 0.47 U | 0.45 U | 0.43 U | 0.4 U |
| 1,2-DICHLOROBENZENE | 0.31 U | 0.28 U | 0.34 U | 0.32 U | 0.31 U | 0.29 U |
| 1,2-DICHLOROETHANE | 0.29 U | 0.26 U | 0.32 U | 0.3 U | 0.29 U | 0.27 U |
| 1,2-DICHLOROPROPANE | 0.6 U | 0.54 U | 0.65 U | 0.62 U | 0.59 U | 0.55 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.3 U | 0.27 U | 0.33 U | 0.31 U | 0.3 U | 0.28 U |
| 1,3-DICHLOROPROPANE | 0.29 U | 0.26 U | 0.32 U | 0.3 U | 0.29 U | 0.27 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.57 U | 0.51 U | 0.62 U | 0.59 U | 0.57 U | 0.53 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.81 U | 0.73 U | 0.88 U | 0.84 U | 0.81 U | 0.75 U |
| 2-BUTANONE | 1.3 B | 5.6 J | 6.1 J | 1.9 B | 2.5 J | 19 |
| 2-CHLOROETHYL VINYL ETHER | 1.2 U | 1.1 U | 1.3 U | 1.2 U | 1.2 U | 1.1 U |
| 2-CHLOROTOLUENE | 0.35 U | 0.31 U | 0.37 U | 0.36 U | 0.34 U | 0.32 U |
| 2-HEXANONE | 0.54 U | 0.49 U | 0.59 U | 0.56 U | 0.54 U | 0.5 U |
| 4-CHLOROTOLUENE | 0.35 U | 0.32 U | 0.38 U | 0.37 U | 0.35 U | 0.33 U |
| 4-ISOPROPYLTOLUENE | 0.18 U | 0.16 U | 0.2 U | 0.19 U | 0.18 U | 0.85 J |
| 4-METHYL-2-PENTANONE | 0.47 U | 0.42 U | 0.5 U | 0.48 U | 0.46 U | 0.43 U |
| ACETONE | 26 B | 36 B | 240 B | 45 B | 290 | 110 B |
| BENZENE | 0.79 J | 0.18 U | 0.22 U | 0.21 U | 0.2 U | 0.18 U |
| BROMOBENZENE | 0.29 U | 0.26 U | 0.31 U | 0.29 U | 0.28 U | 0.26 U |
| BROMOCHLOROMETHANE | 0.61 U | 0.55 U | 0.66 U | 0.63 U | 0.61 U | 0.57 U |
| BROMODICHLOROMETHANE | 0.24 U | 0.22 U | 0.26 U | 0.25 U | 0.24 U | 0.22 U |
| BROMOFORM | 0.29 U | 0.26 U | 0.31 U | 0.29 U | 0.28 U | 0.26 U |
| BROMOMETHANE | 0.47 U | 0.42 U | 0.5 U | 0.48 U | 0.46 U | 0.43 U |
| CARBON DISULFIDE | 0.94 B | 1.2 B | 0.91 B | 0.84 B | 0.38 U | 1 B |
| CARBON TETRACHLORIDE | 0.32 U | 0.29 U | 0.35 U | 0.33 U | 0.32 U | 0.3 U |
| CHLOROBENZENE | 0.29 U | 0.26 U | 0.31 U | 0.29 U | 0.28 U | 0.26 U |
| CHLORODIBROMOMETHANE | 0.48 U | 0.43 U | 0.51 U | 0.49 U | 0.47 U | 0.44 U |
| CHLOROETHANE | 0.74 U | 0.67 U | 0.8 U | 0.77 U | 0.74 U | 0.69 U |
| CHLOROFORM | 0.25 U | 0.23 U | 0.27 U | 0.26 U | 0.25 U | 0.23 U |
| CHLOROMETHANE | 0.35 U | 0.32 U | 0.38 U | 0.37 U | 0.35 U | 0.33 U |
| CIS-1,2-DICHLOROETHENE | 0.31 U | 0.28 U | 0.34 U | 0.32 U | 0.31 U | 0.29 U |
| CIS-1,3-DICHLOROPROPENE | 0.29 U | 0.26 U | 0.32 U | 0.3 U | 0.29 U | 0.27 U |
| DIBROMOMETHANE | 0.54 U | 0.49 U | 0.59 U | 0.56 U | 0.54 U | 0.5 U |
| DICHLORODIFLUOROMETHANE | 0.43 U | 0.39 U | 0.47 U | 0.45 U | 0.43 U | 0.4 U |
| DIISOPROPYL ETHER | 1.3 U | 1.2 U | 1.4 U | 1.3 U | 1.3 U | 1.2 U |
| ETHYL TERT-BUTYL ETHER | 0.19 U | 0.17 U | 0.21 U | 0.2 U | 0.19 U | 0.18 U |
| ETHYLBENZENE | 0.22 U | 0.2 U | 0.24 U | 0.23 U | 0.22 U | 0.21 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-786 | SB-787 | SB-787 | SB-787 | SB-787 | SB-788 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-786-09 | D-SB-787-03 | D-SB-787-05 | D-SB-787-07 | D-SB-787-09 | D-SB-788-03 |
| SAMPLE DATE | 20100903 | 20100908 | 20100908 | 20100903 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | 1 U | 0.93 U | 1.1 U | 1.1 U | 1 U | 0.96 U |
| ISOPROPYLBENZENE | 0.14 U | 0.12 U | 0.15 U | 0.14 U | 0.14 U | 0.13 U |
| M+P-XYLENES | 1 U | 0.93 U | 1.1 U | 1.1 U | 1 U | 0.96 U |
| METHYL TERT-BUTYL ETHER | 0.37 U | 0.33 UJ | 0.4 UJ | 0.38 U | 0.37 UJ | 0.34 UJ |
| METHYLENE CHLORIDE | 5.4 B | 0.52 U | 0.63 U | 3.1 B | 0.57 U | 0.54 U |
| NAPHTHALENE | 16 | 0.99 B | 0.92 B | 0.92 B | 0.78 B | 6 B |
| N-BUTYLBENZENE | 0.2 U | 0.18 U | 0.22 U | 0.21 U | 0.2 U | 0.18 U |
| N-PROPYLBENZENE | 0.35 U | 0.31 U | 0.37 U | 0.36 U | 0.34 U | 0.32 U |
| O-XYLENE | 2 J | 0.27 U | 0.33 U | 0.31 U | 0.3 U | 0.28 U |
| SEC-BUTYLBENZENE | 0.16 U | 0.14 U | 0.17 U | 0.16 U | 0.15 U | 0.14 U |
| STYRENE | 0.13 U | 0.12 U | 0.14 U | 0.13 U | 0.13 U | 0.12 U |
| TERT-AMYL METHYL ETHER | 0.32 U | 0.29 UJ | 0.35 UJ | 0.33 U | 0.32 UJ | 0.3 UJ |
| TERT-BUTYLBENZENE | 0.25 U | 0.23 U | 0.27 U | 0.26 U | 0.25 U | 0.23 U |
| TERTIARY-BUTYL ALCOHOL | 46 B | 42 B | 56 B | 47 B | 48 B | 6.1 UR |
| TETRACHLOROETHENE | 0.45 U | 0.4 U | 0.49 U | 0.46 U | 0.45 U | 0.42 U |
| TOLUENE | 0.23 U | 0.26 J | 0.25 U | 0.24 U | 0.23 U | 0.69 J |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 2.9 J | 0.52 U | 0.63 U | 0.6 U | 0.57 U | 0.54 U |
| TRANS-1,2-DICHLOROETHENE | 0.35 U | 0.32 U | 0.38 U | 0.37 U | 0.35 U | 0.33 U |
| TRANS-1,3-DICHLOROPROPENE | 0.47 U | 0.42 U | 0.5 U | 0.48 U | 0.46 U | 0.43 U |
| TRICHLOROETHENE | 0.36 U | 0.33 U | 0.39 U | 0.37 U | 0.36 U | 0.34 U |
| TRICHLOROFLUOROMETHANE | 0.29 U | 0.26 U | 0.32 U | 0.3 U | 0.29 U | 0.27 U |
| VINYL ACETATE | 0.22 U | 0.19 U | 0.23 U | 0.22 U | 0.21 U | 0.2 U |
| VINYL CHLORIDE | 0.34 U | 0.3 U | 0.36 U | 0.35 U | 0.33 U | 0.31 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 32 U | 62 U | 35 U | 33 U | 32 U | 31 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 26 U | 50 U | 28 U | 27 U | 26 U | 25 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 11 U | 22 U | 12 U | 12 U | 11 U | 11 U |
| 2,4,5-TRICHLOROPHENOL | 30 U | 57 U | 32 U | 31 U | 30 U | 29 U |
| 2,4,6-TRICHLOROPHENOL | 95 U | 180 U | 100 U | 98 U | 95 U | 91 U |
| 2,4-DICHLOROPHENOL | 24 U | 46 U | 26 U | 24 U | 24 U | 23 U |
| 2,4-DIMETHYLPHENOL | 24 U | 46 U | 26 U | 24 U | 24 U | 23 U |
| 2,4-DINITROPHENOL | 95 U | 180 U | 100 U | 98 U | 95 U | 91 U |
| 2,4-DINITROTOLUENE | 32 U | 62 U | 35 U | 33 U | 32 U | 31 U |
| 2,6-DINITROTOLUENE | 25 U | 48 U | 27 U | 26 U | 25 U | 24 U |
| 2-CHLORONAPHTHALENE | 3.9 U | 7.5 U | 4.2 U | 4 U | 3.9 U | 3.8 U |
| 2-CHLOROPHENOL | 32 U | 62 U | 35 U | 33 U | 32 U | 31 U |
| 2-METHYLPHENOL | 95 U | 180 U | 100 U | 98 U | 95 U | 91 U |
| 2-NITROANILINE | 11 U | 21 U | 12 U | 11 U | 11 U | 10 U |
| 2-NITROPHENOL | 32 U | 62 U | 35 U | 33 U | 32 U | 31 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 21 U | 41 U | 23 U | 22 U | 21 U | 21 U |
| 3-NITROANILINE | 19 U | 37 U | 20 U | 20 U | 19 U | 18 U |
| 4,6-DINITRO-2-METHYLPHENOL | 95 U | 180 U | 100 U | 98 U | 95 U | 91 U |
| 4-BROMOPHENYL PHENYL ETHER | 15 U | 30 U | 17 U | 16 U | 15 U | 15 U |
| 4-CHLORO-3-METHYLPHENOL | 25 U | 48 U | 27 U | 26 U | 25 U | 24 U |
| 4-CHLOROANILINE | 20 U | 39 U | 22 U | 21 U | 20 U | 19 U |
| 4-CHLOROPHENYL PHENYL ETHER | 15 U | 30 U | 17 U | 16 U | 15 U | 15 U |
| 4-METHYLPHENOL | 95 U | 180 U | 100 U | 98 U | 95 U | 91 U |
| 4-NITROANILINE | 31 U | 59 U | 33 U | 32 U | 31 U | 30 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-786 | SB-787 | SB-787 | SB-787 | SB-787 | SB-788 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-786-09 | D-SB-787-03 | D-SB-787-05 | D-SB-787-07 | D-SB-787-09 | D-SB-788-03 |
| SAMPLE DATE | 20100903 | 20100908 | 20100908 | 20100903 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 95 U | 180 U | 100 U | 98 U | 95 U | 91 U |
| ACETOPHENONE | 11 U | 21 U | 12 U | 11 U | 11 U | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 11 U | 21 U | 12 U | 11 U | 11 U | 10 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 14 U | 27 U | 15 U | 15 U | 14 U | 14 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 26 U | 50 U | 28 U | 27 U | 26 U | 25 U |
| BIS(2-CHLOROETHYL)ETHER | 2.4 U | 4.6 U | 2.6 U | 2.4 U | 2.4 U | 2.3 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 22 U | 43 U | 24 U | 23 U | 23 U | 22 U |
| BUTYL BENZYL PHTHALATE | 12 U | 23 U | 13 U | 12 U | 12 U | 11 U |
| CAPROLACTAM | 44 U | 84 U | 47 U | 45 U | 44 U | 42 U |
| CARBAZOLE | 32 U | 180 | 35 U | 33 U | 32 U | 31 U |
| DIBENZOFURAN | 3.9 U | 120 | 4.2 U | 4 U | 3.9 U | 3.8 U |
| DIETHYL PHTHALATE | 19 U | 37 U | 20 U | 20 U | 19 U | 18 U |
| DIMETHYL PHTHALATE | 20 U | 39 U | 22 U | 21 U | 20 U | 19 U |
| DI-N-BUTYL PHTHALATE | 18 U | 34 U | 19 U | 18 U | 18 U | 17 U |
| DI-N-OCTYL PHTHALATE | 32 U | 62 U | 35 U | 33 U | 32 U | 31 U |
| HEXACHLOROBENZENE | 2.5 U | 4.8 U | 2.7 U | 2.6 U | 2.5 U | 2.4 U |
| HEXACHLOROBUTADIENE | 32 U | 62 U | 35 U | 33 U | 32 U | 31 U |
| HEXACHLOROCYCLOPENTADIENE | 32 U | 62 U | 35 U | 33 U | 32 U | 31 U |
| HEXACHLOROETHANE | 11 U | 21 U | 12 U | 11 U | 11 U | 10 U |
| ISOPHORONE | 15 U | 30 U | 17 U | 16 U | 15 U | 15 U |
| NITROBENZENE | 2.6 U | 5 U | 2.8 U | 2.7 U | 2.6 U | 2.5 U |
| N-NITROSODIMETHYLAMINE | 19 U | 37 U | 20 U | 20 U | 19 U | 18 U |
| N-NITROSO-DI-N-PROPYLAMINE | 32 U | 62 U | 35 U | 33 U | 32 U | 31 U |
| N-NITROSODIPHENYLAMINE | 25 U | 48 U | 27 U | 26 U | 25 U | 24 U |
| PENTACHLOROPHENOL | 95 U | 180 U | 100 U | 98 U | 95 U | 91 U |
| PHENOL | 32 U | 62 U | 35 U | 33 U | 32 U | 31 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3.9 U | 50 | 4.2 U | 4 U | 3.9 U | 7.9 |
| ACENAPHTHENE | 3.9 U | 230 | 4.2 U | 4 U | 3.9 U | 3.8 U |
| ACENAPHTHYLENE | 3.9 U | 7.5 U | 4.2 U | 4 U | 3.9 U | 3.8 U |
| ANTHRACENE | 3.9 U | 430 | 4.2 U | 4 U | 3.9 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 3.9 U | 772 | 4.2 U | 4 U | 3.9 U | 53.0 |
| BAP EQUIVALENT-POS | 3.9 U | 772 | 4.2 U | 4 U | 3.9 U | 51.1 |
| BENZO(A)ANTHRACENE | 3.9 U | 720 | 4.2 U | 4 U | 3.9 U | 26 |
| BENZO(A)PYRENE | 3.9 U | 520 | 4.2 U | 4 U | 3.9 U | 40 |
| BENZO(B)FLUORANTHENE | 3.9 U | 680 | 4.2 U | 4 U | 3.9 U | 48 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.9 U | 250 | 4.2 U | 4 U | 3.9 U | 25 |
| BENZO(K)FLUORANTHENE | 3.9 U | 310 | 4.2 U | 4 U | 3.9 U | 23 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-786 | SB-787 | SB-787 | SB-787 | SB-787 | SB-788 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-786-09 | D-SB-787-03 | D-SB-787-05 | D-SB-787-07 | D-SB-787-09 | D-SB-788-03 |
| SAMPLE DATE | 20100903 | 20100908 | 20100908 | 20100903 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 680 | 1.4 U | 1.3 U | 1.3 U | 32 |
| DIBENZO(A,H)ANTHRACENE | 3.9 U | 85 | 4.2 U | 4 U | 3.9 U | 3.8 U |
| FLUORANTHENE | 3.9 U | 1700 | 4.2 U | 4 U | 3.9 U | 49 |
| FLUORENE | 3.9 U | 230 | 4.2 U | 4 U | 3.9 U | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 3.9 U | 230 | 4.2 U | 4 U | 3.9 U | 34 |
| NAPHTHALENE | 3.9 U | 75 | 4.2 U | 4 U | 3.9 U | 20 |
| PHENANTHRENE | 3.9 U | 1600 | 4.2 U | 4 U | 3.9 U | 29 |
| PYRENE | 3.9 U | 1100 | 4.2 U | 4 U | 3.9 U | 46 |
| TOTAL PAHS | 0 U | 8890 | 0 U | 0 U | 0 U | 379.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | 0.73 U | 0.71 UJ | 0.79 UJ | 0.76 U | 0.74 UJ | 0.71 UJ |
| 4,4'-DDE | 0.46 U | 0.45 U | 0.5 U | 0.48 UJ | 0.46 U | 0.45 U |
| 4,4'-DDT | 0.75 U | 0.72 UJ | 0.81 UJ | 0.77 U | 0.75 UJ | 0.72 UJ |
| ALDRIN | 1.4 U | 1.4 U | 1.5 U | 1.5 U | 1.4 U | 1.4 U |
| ALPHA-BHC | 0.86 UJ | 0.83 U | 0.94 U | 0.89 UJ | 0.87 U | 0.83 U |
| ALPHA-CHLORDANE | 1.1 U | 1.1 U | 1.2 U | 1.1 UJ | 1.1 U | 1.1 U |
| AROCLOR-1016 | 25 U | 24 U | 27 U | 26 U | 25 U | 24 U |
| AROCLOR-1221 | 19 U | 18 U | 20 U | 20 U | 19 U | 18 U |
| AROCLOR-1232 | 17 U | 16 U | 18 U | 17 U | 17 U | 16 U |
| AROCLOR-1242 | 15 U | 15 U | 17 U | 16 U | 15 U | 15 U |
| AROCLOR-1248 | 20 U | 19 U | 22 U | 21 U | 20 U | 19 U |
| AROCLOR-1254 | 20 U | 19 U | 22 U | 21 U | 20 U | 19 U |
| AROCLOR-1260 | 20 U | 19 U | 22 U | 21 U | 20 U | 19 U |
| BETA-BHC | 1.3 UJ | 1.3 U | 1.4 U | 1.3 UJ | 1.3 U | 1.3 U |
| DELTA-BHC | 1.4 U | 1.4 U | 1.5 U | 1.5 UJ | 1.4 U | 1.4 U |
| DIELDRIN | 0.56 U | 0.54 U | 0.6 U | 0.57 UJ | 0.56 U | 0.54 U |
| ENDOSULFAN I | 0.62 U | 0.59 U | 0.67 U | 0.64 UJ | 0.62 U | 0.59 U |
| ENDOSULFAN II | 0.97 U | 0.94 U | 1.1 U | 1 U | 0.98 U | 0.94 U |
| ENDOSULFAN SULFATE | 1 U | 0.99 U | 1.1 U | 1.1 U | 1 U | 0.99 U |
| ENDRIN | 0.59 U | 0.57 U | 0.64 U | 0.61 UJ | 0.59 U | 0.57 UJ |
| ENDRIN ALDEHYDE | 1.2 U | 1.1 U | 1.3 U | 1.2 U | 1.2 U | 1.1 U |
| ENDRIN KETONE | 0.75 U | 0.72 U | 0.81 U | 0.77 U | 0.75 U | 0.72 U |
| GAMMA-BHC (LINDANE) | 0.88 UJ | 0.84 U | 0.95 U | 0.9 UJ | 0.88 U | 0.85 U |
| GAMMA-CHLORDANE | 0.5 U | 0.48 U | 0.54 U | 0.51 UJ | 0.5 U | 0.48 U |
| HEPTACHLOR | 1.3 UJ | 1.3 U | 1.4 U | 1.3 UJ | 1.3 U | 1.3 UJ |
| HEPTACHLOR EPOXIDE | 0.95 UJ | 0.91 U | 1 U | 0.98 UJ | 0.95 U | 0.91 U |
| METHOXYCHLOR | 1.8 U | 1.7 U | 1.9 U | 1.8 U | 1.8 U | 1.7 UJ |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 22 U | 22 UJ | 24 UJ | 23 U | 23 UJ | 22 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 0.2 J | 0.18 J | 0.33 J | 0.35 J | 0.34 J | 0.14 UJ |
| ARSENIC | 3.6 | 4.6 L | 5.3 L | 6.6 | 6.8 L | 1.9 |
| BARIUM | 5.2 J | 25.8 J | 19.2 J | 19.8 J | 11 J | 25.4 |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-786 | SB-787 | SB-787 | SB-787 | SB-787 | SB-788 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-786-09 | D-SB-787-03 | D-SB-787-05 | D-SB-787-07 | D-SB-787-09 | D-SB-788-03 |
| SAMPLE DATE | 20100903 | 20100908 | 20100908 | 20100903 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 1.1 | 1.6 J | 3.9 J | 4.5 | 4.5 J | 0.73 |
| CADMIUM | 0.025 J | 0.15 K | 0.041 J | 0.025 J | 0.067 J | 1.1 |
| CHROMIUM | 26.8 | 17.7 J | 26.4 J | 38.8 | 34.2 J | 8.8 |
| COBALT | 11.3 | 23.6 | 6.2 | 8.2 | 12.4 | 6.1 |
| COPPER | 13.6 J | 20.3 | 23.3 | 21.9 J | 20.3 | 17.2 L |
| IRON | 31300 J | 24200 J | 40500 J | 51100 J | 72900 J | 5730 |
| LEAD | 7 J | 13.1 | 9.1 | 8 J | 6.8 | 30.6 |
| MANGANESE | 16.6 J | 111 | 66.1 | 89 J | 43.4 | 17 |
| MERCURY | 0.018 U | 0.096 J | 0.019 U | 0.018 U | 0.018 U | 0.6 |
| MOLYBDENUM | 0.69 | 0.4 | 0.72 | 0.93 | 1 | 0.16 J |
| NICKEL | 23.8 J | 30 J | 22.3 J | 34 J | 51.2 J | 11.1 |
| SELENIUM | 1.2 L | 1.4 L | 1.1 J | 1.2 L | 1.7 L | 1.3 J |
| SILVER | 0.019 U | 0.14 J | 0.02 UJ | 0.02 U | 0.019 UJ | 0.65 |
| THALLIUM | 0.018 J | 0.076 B | 0.099 B | 0.079 J | 0.064 B | 0.074 U |
| VANADIUM | 68 | 32.1 | 42.5 | 50.6 | 88.5 | 13.1 |
| ZINC | 20.2 J | 49.5 | 37.8 | 38.8 J | 57.5 | 205 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 3300 U | 81000 | 9000 J | 3400 U | 3300 UJ | 26000 |
| GASOLINE RANGE ORGANICS | 54 U | 53 U | 59 U | 56 U | 55 U | 53 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | 0.71 J | 0.31 U | 0.51 J | 0.33 U | 0.32 U | 1.1 |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-788 | SB-788 | SB-788 | SB-789 | SB-789 | SB-789 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-788-05 | D-SB-788-07 | D-SB-788-09 | D-SB-789-03 | D-SB-789-05 | D-SB-789-07 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.57 U | 0.52 U | 0.55 U | 0.5 U | 0.52 U | 0.61 U |
| 1,1,1-TRICHLOROETHANE | 0.52 U | 0.47 U | 0.49 U | 0.45 U | 0.47 U | 0.55 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.31 U | 0.29 U | 0.3 U | 0.27 U | 0.28 U | 0.33 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.3 U |
| 1,1-DICHLOROETHANE | 0.33 U | 0.3 U | 0.32 U | 0.29 U | 0.3 U | 0.35 U |
| 1,1-DICHLOROETHENE | 0.48 U | 0.44 U | 0.46 U | 0.42 U | 0.43 U | 0.51 U |
| 1,1-DICHLOROPROPENE | 0.28 U | 0.25 U | 0.26 U | 0.24 U | 0.25 U | 0.3 U |
| 1,2,3-TRICHLOROBENZENE | 0.35 U | 0.32 U | 0.33 U | 0.31 U | 0.32 U | 0.37 U |
| 1,2,3-TRICHLOROPROPANE | 0.83 U | 0.76 U | 0.79 U | 0.72 U | 0.75 U | 0.89 U |
| 1,2,3-TRIMETHYLBENZENE | 0.16 U | 0.14 U | 0.15 U | 0.14 U | 0.14 U | 0.17 U |
| 1,2,4-TRICHLOROBENZENE | 0.25 U | 0.23 U | 0.24 U | 0.22 U | 0.22 U | 0.27 U |
| 1,2,4-TRIMETHYLBENZENE | 0.6 U | 0.55 U | 0.57 U | 0.52 U | 0.54 U | 0.64 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.3 U |
| 1,2-DIBROMOETHANE | 0.46 U | 0.42 U | 0.44 U | 0.4 U | 0.42 U | 0.49 U |
| 1,2-DICHLOROBENZENE | 0.33 U | 0.3 U | 0.32 U | 0.29 U | 0.3 U | 0.35 U |
| 1,2-DICHLOROETHANE | 0.31 U | 0.29 U | 0.3 U | 0.27 U | 0.28 U | 0.33 U |
| 1,2-DICHLOROPROPANE | 0.64 U | 0.58 U | 0.61 U | 0.56 U | 0.57 U | 0.68 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.32 U | 0.29 U | 0.31 U | 0.28 U | 0.29 U | 0.34 U |
| 1,3-DICHLOROPROPANE | 0.31 U | 0.29 U | 0.3 U | 0.27 U | 0.28 U | 0.33 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.61 U | 0.55 U | 0.58 U | 0.53 U | 0.55 U | 0.65 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.87 U | 0.79 U | 0.83 U | 0.76 U | 0.78 U | 0.93 U |
| 2-BUTANONE | 4.6 J | 1.2 U | 6 J | 6.6 J | 12 | 4.7 J |
| 2-CHLOROETHYL VINYL ETHER | 1.3 U | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 1.4 U |
| 2-CHLOROTOLUENE | 0.37 U | 0.34 U | 0.35 U | 0.32 U | 0.33 U | 0.39 U |
| 2-HEXANONE | 0.58 U | 0.53 U | 0.55 U | 0.51 U | 0.52 U | 0.62 U |
| 4-CHLOROTOLUENE | 0.38 U | 0.34 U | 0.36 U | 0.33 U | 0.34 U | 0.4 U |
| 4-ISOPROPYLTOLUENE | 0.19 U | 0.18 U | 0.18 U | 0.17 U | 0.17 U | 0.21 U |
| 4-METHYL-2-PENTANONE | 0.5 U | 0.45 U | 0.48 U | 0.43 U | 0.45 U | 0.53 U |
| ACETONE | 120 B | 23 B | 130 B | 78 B | 100 | 170 |
| BENZENE | 0.21 U | 0.19 U | 0.2 U | 0.19 U | 0.19 U | 0.23 U |
| BROMOBENZENE | 0.3 U | 0.28 U | 0.29 U | 0.27 U | 0.27 U | 0.33 U |
| BROMOCHLOROMETHANE | 0.65 U | 0.6 U | 0.62 U | 0.57 U | 0.59 U | 0.7 U |
| BROMODICHLOROMETHANE | 0.26 U | 0.24 U | 0.25 U | 0.23 U | 0.23 U | 0.28 U |
| BROMOFORM | 0.3 U | 0.28 U | 0.29 U | 0.27 U | 0.27 U | 0.33 U |
| BROMOMETHANE | 0.5 U | 0.45 U | 0.48 U | 0.43 U | 0.45 U | 0.53 U |
| CARBON DISULFIDE | 0.97 B | 0.81 B | 1.5 B | 0.53 J | 0.45 J | 0.43 U |
| CARBON TETRACHLORIDE | 0.34 U | 0.31 U | 0.33 U | 0.3 U | 0.31 U | 0.36 U |
| CHLOROBENZENE | 0.3 U | 0.28 U | 0.29 U | 0.27 U | 0.27 U | 0.33 U |
| CHLORODIBROMOMETHANE | 0.51 U | 0.46 U | 0.48 U | 0.44 U | 0.46 U | 0.54 U |
| CHLOROETHANE | 0.79 U | 0.72 U | 0.76 U | 0.69 U | 0.72 U | 0.85 U |
| CHLOROFORM | 0.27 U | 0.24 U | 0.26 U | 0.23 U | 0.24 U | 0.29 U |
| CHLOROMETHANE | 0.38 U | 0.34 U | 0.36 U | 0.33 U | 0.34 U | 0.4 U |
| CIS-1,2-DICHLOROETHENE | 0.33 U | 0.3 U | 0.32 U | 0.29 U | 0.3 U | 0.35 U |
| CIS-1,3-DICHLOROPROPENE | 0.31 U | 0.29 U | 0.3 U | 0.27 U | 0.28 U | 0.33 U |
| DIBROMOMETHANE | 0.58 U | 0.53 U | 0.55 U | 0.51 U | 0.52 U | 0.62 U |
| DICHLORODIFLUOROMETHANE | 0.46 U | 0.42 U | 0.44 U | 0.4 U | 0.42 U | 0.49 U |
| DIISOPROPYL ETHER | 1.4 U | 1.3 U | 1.3 U | 1.2 U | 1.2 U | 1.5 U |
| ETHYL TERT-BUTYL ETHER | 0.2 U | 0.18 U | 0.19 U | 0.18 U | 0.18 U | 0.22 U |
| ETHYLBENZENE | 0.24 U | 0.22 U | 0.23 U | 0.21 U | 0.22 U | 0.26 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-788 | SB-788 | SB-788 | SB-789 | SB-789 | SB-789 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-788-05 | D-SB-788-07 | D-SB-788-09 | D-SB-789-03 | D-SB-789-05 | D-SB-789-07 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | 1.1 U | 1 U | 1.1 U | 0.97 U | 1 U | 1.2 U |
| ISOPROPYLBENZENE | 0.15 U | 0.13 U | 0.14 U | 0.13 U | 0.13 U | 0.16 U |
| M+P-XYLENES | 1.1 U | 1 U | 1.1 U | 0.97 U | 1 U | 1.2 U |
| METHYL TERT-BUTYL ETHER | 0.4 UJ | 0.36 UJ | 0.38 UJ | 0.35 U | 0.36 U | 0.42 U |
| METHYLENE CHLORIDE | 0.62 U | 0.56 U | 0.6 B | 0.54 U | 0.56 U | 0.66 U |
| NAPHTHALENE | 0.85 B | 0.75 B | 0.8 B | 2.2 B | 0.16 U | 0.19 U |
| N-BUTYLBENZENE | 0.21 U | 0.19 U | 0.2 U | 0.19 U | 0.19 U | 0.23 U |
| N-PROPYLBENZENE | 0.37 U | 0.34 U | 0.35 U | 0.32 U | 2.6 J | 0.39 U |
| O-XYLENE | 0.32 U | 0.29 U | 0.31 U | 0.28 U | 0.29 U | 0.34 U |
| SEC-BUTYLBENZENE | 0.17 U | 0.15 U | 0.16 U | 0.14 U | 0.15 U | 0.18 U |
| STYRENE | 0.14 U | 0.13 U | 0.13 U | 0.12 U | 0.12 U | 0.15 U |
| TERT-AMYL METHYL ETHER | 0.34 UJ | 0.31 UJ | 0.33 UJ | 0.3 U | 0.31 U | 0.36 U |
| TERT-BUTYLBENZENE | 0.27 U | 0.24 U | 0.26 U | 0.23 U | 0.24 U | 0.29 U |
| TERTIARY-BUTYL ALCOHOL | 49 B | 44 B | 6.7 UR | 6.1 UR | 6.3 UR | 7.5 UR |
| TETRACHLOROETHENE | 0.48 U | 0.44 U | 0.46 U | 0.42 U | 0.43 U | 0.51 U |
| TOLUENE | 0.25 U | 0.23 U | 0.24 U | 0.22 U | 0.32 J | 0.27 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.62 U | 0.56 U | 0.59 U | 0.54 U | 0.56 U | 0.66 U |
| TRANS-1,2-DICHLOROETHENE | 0.38 U | 0.34 U | 0.36 U | 0.33 U | 0.34 U | 0.4 U |
| TRANS-1,3-DICHLOROPROPENE | 0.5 U | 0.45 U | 0.48 U | 0.43 U | 0.45 U | 0.53 U |
| TRICHLOROETHENE | 0.39 U | 0.35 U | 0.37 U | 0.34 U | 0.35 U | 0.41 U |
| TRICHLOROFLUOROMETHANE | 0.31 U | 0.29 U | 0.3 U | 0.27 U | 0.28 U | 0.33 U |
| VINYL ACETATE | 0.23 U | 0.21 U | 0.22 U | 0.2 U | 0.21 U | 0.25 U |
| VINYL CHLORIDE | 0.36 U | 0.33 U | 0.34 U | 0.31 U | 0.32 U | 0.38 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 33 U | 33 U | 33 U | 30 U | 33 U | 34 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 27 U | 27 U | 27 U | 24 U | 27 U | 27 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 12 U | 12 U | 12 U | 10 U | 11 U | 12 U |
| 2,4,5-TRICHLOROPHENOL | 31 U | 31 U | 31 U | 28 U | 30 U | 31 U |
| 2,4,6-TRICHLOROPHENOL | 98 U | 99 U | 98 U | 88 U | 97 U | 100 U |
| 2,4-DICHLOROPHENOL | 25 U | 25 U | 24 U | 22 U | 24 U | 25 U |
| 2,4-DIMETHYLPHENOL | 25 U | 25 U | 24 U | 22 U | 24 U | 25 U |
| 2,4-DINITROPHENOL | 98 U | 99 U | 98 U | 88 U | 97 U | 100 U |
| 2,4-DINITROTOLUENE | 33 U | 33 U | 33 U | 30 U | 33 U | 34 U |
| 2,6-DINITROTOLUENE | 26 U | 26 U | 26 U | 23 U | 25 U | 26 U |
| 2-CHLORONAPHTHALENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| 2-CHLOROPHENOL | 33 U | 33 U | 33 U | 30 U | 33 U | 34 U |
| 2-METHYLPHENOL | 98 U | 99 U | 98 U | 88 U | 97 U | 100 U |
| 2-NITROANILINE | 11 U | 11 U | 11 U | 10 U | 11 U | 11 U |
| 2-NITROPHENOL | 33 U | 33 U | 33 U | 30 U | 33 U | 34 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 22 U | 22 U | 22 U | 20 U | 22 U | 22 U |
| 3-NITROANILINE | 20 U | 20 U | 20 U | 18 U | 19 U | 20 U |
| 4,6-DINITRO-2-METHYLPHENOL | 98 U | 99 U | 98 U | 88 U | 97 U | 100 U |
| 4-BROMOPHENYL PHENYL ETHER | 16 U | 16 U | 16 U | 14 U | 16 U | 16 U |
| 4-CHLORO-3-METHYLPHENOL | 26 U | 26 U | 26 U | 23 U | 25 U | 26 U |
| 4-CHLOROANILINE | 21 U | 21 U | 21 U | 19 U | 21 U | 21 U |
| 4-CHLOROPHENYL PHENYL ETHER | 16 U | 16 U | 16 U | 14 U | 16 U | 16 U |
| 4-METHYLPHENOL | 98 U | 99 U | 98 U | 88 U | 97 U | 100 U |
| 4-NITROANILINE | 32 U | 32 U | 32 U | 29 U | 31 U | 32 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-788 | SB-788 | SB-788 | SB-789 | SB-789 | SB-789 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-788-05 | D-SB-788-07 | D-SB-788-09 | D-SB-789-03 | D-SB-789-05 | D-SB-789-07 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 98 U | 99 U | 98 U | 88 U | 97 U | 100 U |
| ACETOPHENONE | 11 U | 11 U | 11 U | 10 U | 11 U | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 11 U | 11 U | 11 U | 10 U | 11 U | 11 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 15 U | 15 U | 15 U | 13 U | 14 U | 15 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 27 U | 27 U | 27 U | 24 U | 27 U | 27 U |
| BIS(2-CHLOROETHYL)ETHER | 2.5 U | 2.5 U | 2.4 U | 2.2 U | 2.4 U | 2.5 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 23 U | 23 U | 23 U | 21 U | 23 U | 24 J |
| BUTYL BENZYL PHTHALATE | 12 U | 12 U | 12 U | 11 U | 12 U | 12 U |
| CAPROLACTAM | 45 U | 46 U | 45 U | 41 U | 45 U | 46 U |
| CARBAZOLE | 33 U | 33 U | 33 U | 30 U | 33 U | 34 U |
| DIBENZOFURAN | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| DIETHYL PHTHALATE | 20 U | 20 U | 20 U | 18 U | 19 U | 20 U |
| DIMETHYL PHTHALATE | 21 U | 21 U | 21 U | 19 U | 21 U | 21 U |
| DI-N-BUTYL PHTHALATE | 18 U | 19 U | 18 U | 17 U | 18 U | 19 U |
| DI-N-OCTYL PHTHALATE | 33 U | 33 U | 33 U | 30 U | 33 U | 34 U |
| HEXACHLOROBENZENE | 2.6 U | 2.6 U | 2.6 U | 2.3 U | 2.5 U | 2.6 U |
| HEXACHLOROBUTADIENE | 33 U | 33 U | 33 U | 30 U | 33 U | 34 U |
| HEXACHLOROCYCLOPENTADIENE | 33 U | 33 U | 33 U | 30 U | 33 U | 34 U |
| HEXACHLOROETHANE | 11 U | 11 U | 11 U | 9.9 U | 11 U | 11 U |
| ISOPHORONE | 16 U | 16 U | 16 U | 14 U | 16 U | 16 U |
| NITROBENZENE | 2.7 U | 2.7 U | 2.7 U | 2.4 U | 2.7 U | 2.7 U |
| N-NITROSODIMETHYLAMINE | 20 U | 20 U | 20 U | 18 U | 19 U | 20 U |
| N-NITROSO-DI-N-PROPYLAMINE | 33 U | 33 U | 33 U | 30 U | 33 U | 34 U |
| N-NITROSODIPHENYLAMINE | 26 U | 26 U | 26 U | 23 U | 25 U | 26 U |
| PENTACHLOROPHENOL | 98 U | 99 U | 98 U | 88 U | 97 U | 100 U |
| PHENOL | 33 U | 33 U | 33 U | 30 U | 33 U | 34 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| ACENAPHTHENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| ACENAPHTHYLENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| ANTHRACENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| BAP EQUIVALENT-HALFND | 4.1 U | 4.1 U | 4 U | 17.3 | 4 U | 4.1 U |
| BAP EQUIVALENT-POS | 4.1 U | 4.1 U | 4 U | 15.1 | 4 U | 4.1 U |
| BENZO(A)ANTHRACENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| BENZO(A)PYRENE | 4.1 U | 4.1 U | 4 U | 14 | 4 U | 4.1 U |
| BENZO(B)FLUORANTHENE | 4.1 U | 4.1 U | 4 U | 11 | 4 U | 4.1 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| BENZO(K)FLUORANTHENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-788 | SB-788 | SB-788 | SB-789 | SB-789 | SB-789 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-788-05 | D-SB-788-07 | D-SB-788-09 | D-SB-789-03 | D-SB-789-05 | D-SB-789-07 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.4 U | 1.4 U | 1.3 U | 1.2 U | 1.3 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| FLUORANTHENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| FLUORENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| INDENO(1,2,3-CD)PYRENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| NAPHTHALENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| PHENANTHRENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| PYRENE | 4.1 U | 4.1 U | 4 U | 3.6 U | 4 U | 4.1 U |
| TOTAL PAHS | 0 U | 0 U | 0 U | 25 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | 0.76 UJ | 0.77 UJ | 0.76 UJ | 0.68 UJ | 0.75 UJ | 0.77 UJ |
| 4,4'-DDE | 0.48 U | 0.48 U | 0.48 U | 0.43 U | 0.47 U | 0.49 U |
| 4,4'-DDT | 0.77 UJ | 0.78 UJ | 0.77 UJ | 0.69 U | 0.76 U | 0.79 U |
| ALDRIN | 1.5 U | 1.5 U | 1.5 U | 1.3 U | 1.4 U | 1.5 U |
| ALPHA-BHC | 0.9 U | 0.9 U | 0.89 U | 0.8 U | 0.88 U | 0.91 U |
| ALPHA-CHLORDANE | 1.2 U | 1.2 U | 1.1 U | 1 U | 1.1 U | 1.2 U |
| AROCLOR-1016 | 26 U | 26 U | 26 U | 23 U | 25 U | 26 U |
| AROCLOR-1221 | 20 U | 20 U | 20 U | 18 U | 19 U | 20 U |
| AROCLOR-1232 | 17 U | 17 U | 17 U | 15 U | 17 U | 17 U |
| AROCLOR-1242 | 16 U | 16 U | 16 U | 14 U | 16 U | 16 U |
| AROCLOR-1248 | 21 U | 21 U | 21 U | 19 U | 21 U | 21 U |
| AROCLOR-1254 | 21 U | 21 U | 21 U | 19 U | 21 U | 21 U |
| AROCLOR-1260 | 21 U | 21 U | 21 U | 19 U | 21 U | 21 U |
| BETA-BHC | 1.4 U | 1.4 U | 1.3 U | 1.2 U | 1.3 U | 1.4 U |
| DELTA-BHC | 1.5 U | 1.5 U | 1.5 U | 1.3 U | 1.4 U | 1.5 U |
| DIELDRIN | 0.58 U | 0.58 U | 0.57 U | 0.52 U | 0.57 U | 0.59 U |
| ENDOSULFAN I | 0.64 U | 0.64 U | 0.64 U | 0.57 U | 0.63 U | 0.65 U |
| ENDOSULFAN II | 1 U | 1 U | 1 U | 0.9 U | 0.99 U | 1 U |
| ENDOSULFAN SULFATE | 1.1 U | 1.1 U | 1.1 U | 0.96 U | 1.1 U | 1.1 U |
| ENDRIN | 0.61 UJ | 0.62 UJ | 0.61 UJ | 0.55 UJ | 0.6 UJ | 0.62 UJ |
| ENDRIN ALDEHYDE | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 1.2 U |
| ENDRIN KETONE | 0.77 U | 0.78 U | 0.77 U | 0.69 U | 0.76 U | 0.79 U |
| GAMMA-BHC (LINDANE) | 0.91 U | 0.91 U | 0.9 U | 0.82 U | 0.89 U | 0.92 U |
| GAMMA-CHLORDANE | 0.52 U | 0.52 U | 0.51 U | 0.46 U | 0.51 U | 0.52 U |
| HEPTACHLOR | 1.4 UJ | 1.4 UJ | 1.3 UJ | 1.2 UJ | 1.3 UJ | 1.4 UJ |
| HEPTACHLOR EPOXIDE | 0.98 U | 0.99 U | 0.98 U | 0.88 U | 0.97 U | 1 U |
| METHOXYCHLOR | 1.8 UJ | 1.9 UJ | 1.8 UJ | 1.7 UJ | 1.8 UJ | 1.9 UJ |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 23 U | 23 U | 23 U | 21 U | 23 U | 24 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 0.16 J | 0.11 J | 0.15 J | 0.069 J | 0.18 J | 0.24 J |
| ARSENIC | 5 | 2.8 | 4.8 | 3.1 | 5.5 | 8.8 |
| BARIUM | 9.1 | 21.2 | 13.9 | 21.5 | 13.2 | 18.8 |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-788 | SB-788 | SB-788 | SB-789 | SB-789 | SB-789 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-788-05 | D-SB-788-07 | D-SB-788-09 | D-SB-789-03 | D-SB-789-05 | D-SB-789-07 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 1.7 | 2.2 | 2.4 | 0.28 | 1.2 | 3.1 |
| CADMIUM | 0.016 B | 0.018 B | 0.052 J | 0.026 B | 0.024 B | 0.023 B |
| CHROMIUM | 24.4 | 13.8 | 19.8 | 11.3 | 22.1 | 32.6 |
| COBALT | 4 | 4.1 | 4.2 | 3.4 | 6.8 | 5.4 |
| COPPER | 19.1 L | 19.4 L | 20.2 L | 7.9 L | 22.3 L | 55.6 L |
| IRON | 28800 | 8690 | 20800 | 7830 | 28200 | 38300 |
| LEAD | 4.9 | 6.2 | 5.6 | 6.8 | 7.8 | 5.8 |
| MANGANESE | 22.5 | 10.2 | 17.8 | 21.1 | 33.5 | 29.9 |
| MERCURY | 0.018 U | 0.019 U | 0.018 U | 0.028 | 0.018 U | 0.019 U |
| MOLYBDENUM | 0.5 | 0.53 | 0.56 | 0.37 | 0.57 | 0.73 |
| NICKEL | 12.2 | 7.6 | 9.2 | 5.7 | 17 | 14.3 |
| SELENIUM | 0.5 J | 1.5 J | 1.1 J | 0.61 J | 0.6 J | 1.1 J |
| SILVER | 0.02 U | 0.02 U | 0.02 U | 0.027 B | 0.025 B | 0.026 B |
| THALLIUM | 0.04 B | 0.12 B | 0.073 B | 0.089 B | 0.075 B | 0.047 B |
| VANADIUM | 49.8 | 37.9 | 41.1 | 20.3 | 44 | 69.5 |
| ZINC | 26.7 J | 24.2 J | 32 J | 19 J | 50.3 J | 35.5 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 7500 J | 5900 J | 17000 | 17000 | 15000 | 10000 J |
| GASOLINE RANGE ORGANICS | 57 U | 57 U | 56 U | 51 U | 56 U | 57 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | 0.51 J | 0.58 J | 0.63 J | 0.3 U | 0.33 U | 0.87 J |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

| LOCATION | **SB-789** |
|---|---|
| SAMPLE ID | **D-SB-789-09** |
| SAMPLE DATE | **20100908** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SB** |
| TOP DEPTH | **9** |
| BOTTOM DEPTH | **9** |
| **VOLATILES (UG/KG)** | |
| 1,1,1,2-TETRACHLOROETHANE | 0.57 U |
| 1,1,1-TRICHLOROETHANE | 0.51 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.31 U |
| 1,1,2-TRICHLOROETHANE | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U |
| 1,1-DICHLOROETHANE | 0.33 U |
| 1,1-DICHLOROETHENE | 0.48 U |
| 1,1-DICHLOROPROPENE | 0.27 U |
| 1,2,3-TRICHLOROBENZENE | 0.35 U |
| 1,2,3-TRICHLOROPROPANE | 0.82 U |
| 1,2,3-TRIMETHYLBENZENE | 0.16 U |
| 1,2,4-TRICHLOROBENZENE | 0.25 U |
| 1,2,4-TRIMETHYLBENZENE | 0.59 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U |
| 1,2-DIBROMOETHANE | 0.46 U |
| 1,2-DICHLOROBENZENE | 0.33 U |
| 1,2-DICHLOROETHANE | 0.31 U |
| 1,2-DICHLOROPROPANE | 0.63 U |
| 1,3,5-TRIMETHYLBENZENE | NA |
| 1,3-DICHLOROBENZENE | 0.32 U |
| 1,3-DICHLOROPROPANE | 0.31 U |
| 1,3-DICHLOROPROPENE | NA |
| 1,4-DICHLOROBENZENE | 0.6 U |
| 1,4-DIOXANE | NA |
| 2,2-DICHLOROPROPANE | 0.86 U |
| 2-BUTANONE | 1.3 U |
| 2-CHLOROETHYL VINYL ETHER | 1.3 U |
| 2-CHLOROTOLUENE | 0.37 U |
| 2-HEXANONE | 0.58 U |
| 4-CHLOROTOLUENE | 0.37 U |
| 4-ISOPROPYLTOLUENE | 0.19 U |
| 4-METHYL-2-PENTANONE | 0.49 U |
| ACETONE | 250 |
| BENZENE | 0.21 U |
| BROMOBENZENE | 0.3 U |
| BROMOCHLOROMETHANE | 0.65 U |
| BROMODICHLOROMETHANE | 0.26 U |
| BROMOFORM | 0.3 U |
| BROMOMETHANE | 0.49 U |
| CARBON DISULFIDE | 0.4 U |
| CARBON TETRACHLORIDE | 0.34 U |
| CHLOROBENZENE | 0.3 U |
| CHLORODIBROMOMETHANE | 0.5 U |
| CHLOROETHANE | 0.79 U |
| CHLOROFORM | 0.27 U |
| CHLOROMETHANE | 0.37 U |
| CIS-1,2-DICHLOROETHENE | 0.33 U |
| CIS-1,3-DICHLOROPROPENE | 0.31 U |
| DIBROMOMETHANE | 0.58 U |
| DICHLORODIFLUOROMETHANE | 0.46 U |
| DIISOPROPYL ETHER | 1.4 U |
| ETHYL TERT-BUTYL ETHER | 0.2 U |
| ETHYLBENZENE | 0.24 U |
| FLUORODICHLOROMETHANE | NA |

| LOCATION | SB-789 |
|---|---|
| SAMPLE ID | D-SB-789-09 |
| SAMPLE DATE | 20100908 |
| SAMPLE CODE | NORMAL |
| MATRIX | SO |
| SAMPLE TYPE | NORMAL |
| SUBMATRIX | SB |
| TOP DEPTH | 9 |
| BOTTOM DEPTH | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | |
| HEXACHLOROBUTADIENE | 1.1 U |
| ISOPROPYLBENZENE | 0.15 U |
| M+P-XYLENES | 1.1 U |
| METHYL TERT-BUTYL ETHER | 0.39 U |
| METHYLENE CHLORIDE | 0.61 U |
| NAPHTHALENE | 0.17 U |
| N-BUTYLBENZENE | 0.21 U |
| N-PROPYLBENZENE | 0.37 U |
| O-XYLENE | 0.32 U |
| SEC-BUTYLBENZENE | 0.16 U |
| STYRENE | 0.14 U |
| TERT-AMYL METHYL ETHER | 0.34 U |
| TERT-BUTYLBENZENE | 0.27 U |
| TERTIARY-BUTYL ALCOHOL | 6.9 UR |
| TETRACHLOROETHENE | 0.48 U |
| TOLUENE | 0.25 U |
| TOTAL 1,2-DICHLOROETHENE | NA |
| TOTAL XYLENES | 0.61 U |
| TRANS-1,2-DICHLOROETHENE | 0.37 U |
| TRANS-1,3-DICHLOROPROPENE | 0.49 U |
| TRICHLOROETHENE | 0.38 U |
| TRICHLOROFLUOROMETHANE | 0.31 U |
| VINYL ACETATE | 0.23 U |
| VINYL CHLORIDE | 0.36 U |
| **SEMIVOLATILES (UG/KG)** | |
| 1,1-BIPHENYL | 32 U |
| 1,2,4-TRICHLOROBENZENE | NA |
| 1,2-DICHLOROBENZENE | NA |
| 1,3-DICHLOROBENZENE | NA |
| 1,4-DICHLOROBENZENE | NA |
| 1,4-DIOXANE | 26 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 11 U |
| 2,4,5-TRICHLOROPHENOL | 30 U |
| 2,4,6-TRICHLOROPHENOL | 95 U |
| 2,4-DICHLOROPHENOL | 24 U |
| 2,4-DIMETHYLPHENOL | 24 U |
| 2,4-DINITROPHENOL | 95 U |
| 2,4-DINITROTOLUENE | 32 U |
| 2,6-DINITROTOLUENE | 25 U |
| 2-CHLORONAPHTHALENE | 3.9 U |
| 2-CHLOROPHENOL | 32 U |
| 2-METHYLPHENOL | 95 U |
| 2-NITROANILINE | 11 U |
| 2-NITROPHENOL | 32 U |
| 3&4-METHYLPHENOL | NA |
| 3,3'-DICHLOROBENZIDINE | 21 U |
| 3-NITROANILINE | 19 U |
| 4,6-DINITRO-2-METHYLPHENOL | 95 U |
| 4-BROMOPHENYL PHENYL ETHER | 15 U |
| 4-CHLORO-3-METHYLPHENOL | 25 U |
| 4-CHLOROANILINE | 20 U |
| 4-CHLOROPHENYL PHENYL ETHER | 15 U |
| 4-METHYLPHENOL | 95 U |
| 4-NITROANILINE | 31 U |

| LOCATION | **SB-789** |
|---|---|
| SAMPLE ID | **D-SB-789-09** |
| SAMPLE DATE | **20100908** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SB** |
| TOP DEPTH | **9** |
| BOTTOM DEPTH | **9** |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | |
| 4-NITROPHENOL | 95 U |
| ACETOPHENONE | 11 U |
| ANILINE | NA |
| ATRAZINE | 11 U |
| AZOBENZENE | NA |
| BENZALDEHYDE | 14 U |
| BENZIDINE | NA |
| BENZOIC ACID | NA |
| BENZYL ALCOHOL | NA |
| BIS(2-CHLOROETHOXY)METHANE | 26 U |
| BIS(2-CHLOROETHYL)ETHER | 2.4 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 23 U |
| BUTYL BENZYL PHTHALATE | 12 U |
| CAPROLACTAM | 44 U |
| CARBAZOLE | 32 U |
| DIBENZOFURAN | 3.9 U |
| DIETHYL PHTHALATE | 19 U |
| DIMETHYL PHTHALATE | 20 U |
| DI-N-BUTYL PHTHALATE | 18 U |
| DI-N-OCTYL PHTHALATE | 32 U |
| HEXACHLOROBENZENE | 2.5 U |
| HEXACHLOROBUTADIENE | 32 U |
| HEXACHLOROCYCLOPENTADIENE | 32 U |
| HEXACHLOROETHANE | 11 U |
| ISOPHORONE | 15 U |
| NITROBENZENE | 2.6 U |
| N-NITROSODIMETHYLAMINE | 19 U |
| N-NITROSO-DI-N-PROPYLAMINE | 32 U |
| N-NITROSODIPHENYLAMINE | 25 U |
| PENTACHLOROPHENOL | 95 U |
| PHENOL | 32 U |
| PYRIDINE | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | |
| 1-METHYLNAPHTHALENE | NA |
| 2-METHYLNAPHTHALENE | 3.9 U |
| ACENAPHTHENE | 3.9 U |
| ACENAPHTHYLENE | 3.9 U |
| ANTHRACENE | 3.9 U |
| BAP EQUIVALENT-HALFND | 3.9 U |
| BAP EQUIVALENT-POS | 3.9 U |
| BENZO(A)ANTHRACENE | 3.9 U |
| BENZO(A)PYRENE | 3.9 U |
| BENZO(B)FLUORANTHENE | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA |
| BENZO(G,H,I)PERYLENE | 3.9 U |
| BENZO(K)FLUORANTHENE | 3.9 U |
| C1-CHRYSENES | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C1-FLUORANTHENES/PYRENES | NA |
| C1-FLUORENES | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA |
| C2-CHRYSENES | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C2-FLUORENES | NA |

| LOCATION | **SB-789** |
|---|---|
| SAMPLE ID | **D-SB-789-09** |
| SAMPLE DATE | **20100908** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SB** |
| TOP DEPTH | **9** |
| BOTTOM DEPTH | **9** |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | |
| C2-NAPHTHALENES | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA |
| C3-CHRYSENES | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C3-FLUORENES | NA |
| C3-NAPHTHALENES | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA |
| C4-CHRYSENES | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C4-NAPHTHALENES | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA |
| CHRYSENE | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 3.9 U |
| FLUORANTHENE | 3.9 U |
| FLUORENE | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 3.9 U |
| NAPHTHALENE | 3.9 U |
| PHENANTHRENE | 3.9 U |
| PYRENE | 3.9 U |
| TOTAL PAHS | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | |
| 4,4'-DDD | 0.74 UJ |
| 4,4'-DDE | 0.46 U |
| 4,4'-DDT | 0.75 U |
| ALDRIN | 1.4 U |
| ALPHA-BHC | 0.87 U |
| ALPHA-CHLORDANE | 1.1 U |
| AROCLOR-1016 | 25 U |
| AROCLOR-1221 | 19 U |
| AROCLOR-1232 | 17 U |
| AROCLOR-1242 | 15 U |
| AROCLOR-1248 | 20 U |
| AROCLOR-1254 | 20 U |
| AROCLOR-1260 | 20 U |
| BETA-BHC | 1.3 U |
| DELTA-BHC | 1.4 U |
| DIELDRIN | 0.56 U |
| ENDOSULFAN I | 0.62 U |
| ENDOSULFAN II | 0.97 U |
| ENDOSULFAN SULFATE | 1 U |
| ENDRIN | 0.59 UJ |
| ENDRIN ALDEHYDE | 1.2 U |
| ENDRIN KETONE | 0.75 U |
| GAMMA-BHC (LINDANE) | 0.88 U |
| GAMMA-CHLORDANE | 0.5 U |
| HEPTACHLOR | 1.3 UJ |
| HEPTACHLOR EPOXIDE | 0.95 U |
| METHOXYCHLOR | 1.8 UJ |
| TOTAL AROCLOR | 0 U |
| TOXAPHENE | 23 U |
| **METALS (MG/KG)** | |
| ANTIMONY | 0.21 J |
| ARSENIC | 4 |
| BARIUM | 11.2 |

| LOCATION | **SB-789** |
|---|---|
| SAMPLE ID | **D-SB-789-09** |
| SAMPLE DATE | **20100908** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SB** |
| TOP DEPTH | **9** |
| BOTTOM DEPTH | **9** |
| **METALS (CONTINUED) (MG/KG)** | |
| BERYLLIUM | 1.9 |
| CADMIUM | 0.013 B |
| CHROMIUM | 18.5 |
| COBALT | 6.2 |
| COPPER | 18.8 L |
| IRON | 23200 |
| LEAD | 5.3 |
| MANGANESE | 58.6 |
| MERCURY | 0.018 U |
| MOLYBDENUM | 0.33 |
| NICKEL | 17.7 |
| SELENIUM | 1.6 J |
| SILVER | 0.019 U |
| THALLIUM | 0.064 B |
| VANADIUM | 42.6 |
| ZINC | 26.8 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | |
| DIESEL RANGE ORGANICS | 4700 J |
| GASOLINE RANGE ORGANICS | 55 U |
| **MISCELLANEOUS PARAMETERS (%)** | |
| PERCENT SOLIDS | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | |
| HEXAVALENT CHROMIUM | 0.32 U |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | |
| MERCURY (METHYL) | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-TP-1-1-4-6 | D-TP-1-2-8-10 | D-TP-1-3-8-10 | D-TP-1-4-4-6 | D-TP-1-5-4-6 | D-TP-1-6-8-10 |
| SAMPLE DATE | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 8 | 4 | 4 | 8 |
| BOTTOM DEPTH | 6 | 10 | 10 | 6 | 6 | 10 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-TP-1-1-4-6 | D-TP-1-2-8-10 | D-TP-1-3-8-10 | D-TP-1-4-4-6 | D-TP-1-5-4-6 | D-TP-1-6-8-10 |
| SAMPLE DATE | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 8 | 4 | 4 | 8 |
| BOTTOM DEPTH | 6 | 10 | 10 | 6 | 6 | 10 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-TP-1-1-4-6 | D-TP-1-2-8-10 | D-TP-1-3-8-10 | D-TP-1-4-4-6 | D-TP-1-5-4-6 | D-TP-1-6-8-10 |
| SAMPLE DATE | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 8 | 4 | 4 | 8 |
| BOTTOM DEPTH | 6 | 10 | 10 | 6 | 6 | 10 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 3.8 U | 3.9 U | 280 | 3.9 U | 3.7 U | 4 U |
| 2-METHYLNAPHTHALENE | 3.8 U | 3.9 U | 420 | 8 | 3.7 U | 4 U |
| ACENAPHTHENE | 3.8 U | 3.9 U | 69 | 3.9 U | 3.7 U | 4 U |
| ACENAPHTHYLENE | 3.8 U | 3.9 U | 50 | 9.1 | 3.7 U | 95 |
| ANTHRACENE | 3.8 U | 3.9 U | 52 | 11 | 3.7 U | 38 |
| BAP EQUIVALENT-HALFND | 3.8 U | 3.9 U | 66.834 | 71.551 | 3.7 U | 177.529 |
| BAP EQUIVALENT-POS | 3.8 U | 3.9 U | 64.834 | 69.601 | 3.7 U | 177.329 |
| BENZO(A)ANTHRACENE | 3.8 U | 3.9 U | 29 | 40 | 3.7 U | 4 U |
| BENZO(A)PYRENE | 3.8 U | 3.9 U | 54 J | 54 J | 3.7 U | 120 J |
| BENZO(B)FLUORANTHENE | 3.8 U | 3.9 U | 39 | 70 | 3.7 U | 110 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.8 U | 13 | 41 | 29 | 3.7 U | 110 |
| BENZO(K)FLUORANTHENE | 3.8 U | 3.9 U | 19 | 35 | 3.7 U | 35 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 77 U | NA | NA | NA | 75 U | NA |
| C1-FLUORANTHENES/PYRENES | 77 U | NA | NA | NA | 75 U | NA |
| C1-FLUORENES | 77 U | NA | NA | NA | 75 U | NA |
| C1-PHENANTHRENES/ANTHRACENES | 77 U | NA | NA | NA | 75 U | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 77 U | NA | NA | NA | 75 U | NA |
| C2-FLUORENES | 77 U | NA | NA | NA | 75 U | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-TP-1-1-4-6 | D-TP-1-2-8-10 | D-TP-1-3-8-10 | D-TP-1-4-4-6 | D-TP-1-5-4-6 | D-TP-1-6-8-10 |
| SAMPLE DATE | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 8 | 4 | 4 | 8 |
| BOTTOM DEPTH | 6 | 10 | 10 | 6 | 6 | 10 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | |
| C2-NAPHTHALENES | 77 U | NA | NA | NA | 75 U | NA |
| C2-PHENANTHRENES/ANTHRACENES | 77 U | NA | NA | NA | 75 U | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 77 U | NA | NA | NA | 75 U | NA |
| C3-FLUORENES | 77 U | NA | NA | NA | 75 U | NA |
| C3-NAPHTHALENES | 77 U | NA | NA | NA | 75 U | NA |
| C3-PHENANTHRENES/ANTHRACENES | 77 U | NA | NA | NA | 75 U | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | 77 U | NA | NA | NA | 75 U | NA |
| C4-NAPHTHALENES | 77 U | NA | NA | NA | 75 U | NA |
| C4-PHENANTHRENES/ANTHRACENES | 77 U | NA | NA | NA | 75 U | NA |
| CHRYSENE | 1.3 U | 1.3 U | 44 | 51 | 1.2 U | 79 |
| DIBENZO(A,H)ANTHRACENE | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.7 U | 38 J |
| FLUORANTHENE | 3.8 U | 3.9 U | 60 | 110 | 3.7 U | 82 |
| FLUORENE | 3.8 U | 3.9 U | 100 | 3.9 U | 3.7 U | 4 U |
| INDENO(1,2,3-CD)PYRENE | 3.8 U | 3.9 U | 38 J | 42 J | 3.7 U | 79 J |
| NAPHTHALENE | 3.8 U | 3.9 U | 320 | 9.5 | 3.7 U | 8.9 |
| PHENANTHRENE | 3.8 U | 3.9 U | 200 | 62 | 3.7 U | 16 |
| PYRENE | 3.8 U | 13 | 95 | 86 | 3.7 U | 140 |
| TOTAL PAHS | 0 U | 26 | 1630 | 616.6 | 0 U | 950.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-TP-1-1-4-6 | D-TP-1-2-8-10 | D-TP-1-3-8-10 | D-TP-1-4-4-6 | D-TP-1-5-4-6 | D-TP-1-6-8-10 |
| SAMPLE DATE | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 8 | 4 | 4 | 8 |
| BOTTOM DEPTH | 6 | 10 | 10 | 6 | 6 | 10 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-TP-2-1-8-10 | D-TP-2-2-6-7 | D-TP-2-3-6-7 | D-TP-2-4-8-10 | D-TP-2-5-6-7 | D-TP-2-6-6-7 |
| SAMPLE DATE | 20100920 | 20100920 | 20100920 | 20100921 | 20100921 | 20100921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 6 | 6 | 8 | 6 | 6 |
| BOTTOM DEPTH | 10 | 7 | 7 | 10 | 7 | 7 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-TP-2-1-8-10 | D-TP-2-2-6-7 | D-TP-2-3-6-7 | D-TP-2-4-8-10 | D-TP-2-5-6-7 | D-TP-2-6-6-7 |
| SAMPLE DATE | 20100920 | 20100920 | 20100920 | 20100921 | 20100921 | 20100921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 6 | 6 | 8 | 6 | 6 |
| BOTTOM DEPTH | 10 | 7 | 7 | 10 | 7 | 7 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-TP-2-1-8-10 | D-TP-2-2-6-7 | D-TP-2-3-6-7 | D-TP-2-4-8-10 | D-TP-2-5-6-7 | D-TP-2-6-6-7 |
| SAMPLE DATE | 20100920 | 20100920 | 20100920 | 20100921 | 20100921 | 20100921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 6 | 6 | 8 | 6 | 6 |
| BOTTOM DEPTH | 10 | 7 | 7 | 10 | 7 | 7 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | 300 | NA | 610 | 3.8 U | 4.1 U | NA |
| 2-METHYLNAPHTHALENE | 320 | NA | 600 | 3.8 U | 4.1 U | NA |
| ACENAPHTHENE | 88 | NA | 170 | 3.8 U | 4.1 U | NA |
| ACENAPHTHYLENE | 340 | NA | 420 | 3.8 U | 4.1 U | NA |
| ANTHRACENE | 370 | NA | 490 | 3.8 U | 4.1 U | NA |
| BAP EQUIVALENT-HALFND | 506.88 | NA | 683.76 | 3.8 U | 4.1 U | NA |
| BAP EQUIVALENT-POS | 502.78 | NA | 679.76 | 3.8 U | 4.1 U | NA |
| BENZO(A)ANTHRACENE | 440 | NA | 650 | 3.8 U | 4.1 U | NA |
| BENZO(A)PYRENE | 400 J | NA | 540 J | 3.8 U | 4.1 U | NA |
| BENZO(B)FLUORANTHENE | 380 | NA | 480 | 3.8 U | 4.1 U | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230 | NA | 300 | 3.8 U | 4.1 U | NA |
| BENZO(K)FLUORANTHENE | 130 | NA | 210 | 3.8 U | 4.1 U | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | 3300 J | NA | NA | NA | 84 U |
| C1-FLUORANTHENES/PYRENES | NA | 5900 J | NA | NA | NA | 84 U |
| C1-FLUORENES | NA | 1100 J | NA | NA | NA | 84 U |
| C1-PHENANTHRENES/ANTHRACENES | NA | 6900 J | NA | NA | NA | 84 U |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | 1500 J | NA | NA | NA | 84 U |
| C2-FLUORENES | NA | 870 J | NA | NA | NA | 84 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-TP-2-1-8-10 | D-TP-2-2-6-7 | D-TP-2-3-6-7 | D-TP-2-4-8-10 | D-TP-2-5-6-7 | D-TP-2-6-6-7 |
| SAMPLE DATE | 20100920 | 20100920 | 20100920 | 20100921 | 20100921 | 20100921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 6 | 6 | 8 | 6 | 6 |
| BOTTOM DEPTH | 10 | 7 | 7 | 10 | 7 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | 4100 J | NA | NA | NA | 84 U |
| C2-PHENANTHRENES/ANTHRACENES | NA | 3900 J | NA | NA | NA | 84 U |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | 520 J | NA | NA | NA | 84 U |
| C3-FLUORENES | NA | 600 J | NA | NA | NA | 84 U |
| C3-NAPHTHALENES | NA | 2800 J | NA | NA | NA | 84 U |
| C3-PHENANTHRENES/ANTHRACENES | NA | 1700 J | NA | NA | NA | 84 U |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | 81 U | NA | NA | NA | 84 U |
| C4-NAPHTHALENES | NA | 1300 J | NA | NA | NA | 84 U |
| C4-PHENANTHRENES/ANTHRACENES | NA | 520 J | NA | NA | NA | 84 U |
| CHRYSENE | 480 | NA | 660 | 1.3 U | 1.4 U | NA |
| DIBENZO(A,H)ANTHRACENE | 8.2 U | NA | 8 U | 3.8 U | 4.1 U | NA |
| FLUORANTHENE | 990 | NA | 1500 | 3.8 U | 4.1 U | NA |
| FLUORENE | 380 | NA | 590 | 3.8 U | 4.1 U | NA |
| INDENO(1,2,3-CD)PYRENE | 190 J | NA | 240 J | 3.8 U | 4.1 U | NA |
| NAPHTHALENE | 280 | NA | 570 | 3.8 U | 4.1 U | NA |
| PHENANTHRENE | 1700 | NA | 2700 | 3.8 U | 4.1 U | NA |
| PYRENE | 1300 | NA | 2100 | 3.8 U | 4.1 U | NA |
| TOTAL PAHS | 8018 | NA | 12220 | 0 U | 0 U | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-TP-2-1-8-10 | D-TP-2-2-6-7 | D-TP-2-3-6-7 | D-TP-2-4-8-10 | D-TP-2-5-6-7 | D-TP-2-6-6-7 |
| SAMPLE DATE | 20100920 | 20100920 | 20100920 | 20100921 | 20100921 | 20100921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 6 | 6 | 8 | 6 | 6 |
| BOTTOM DEPTH | 10 | 7 | 7 | 10 | 7 | 7 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-790 | SB-790 | SB-790 | SB-790 | SB-791 | SB-791 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-790-03 | D-SB-790-05 | D-SB-790-07 | D-SB-790-09 | D-SB-791-03 | D-SB-791-05 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.53 U | 0.5 U | 0.52 U | 0.55 U | 0.56 U | 0.67 U |
| 1,1,1-TRICHLOROETHANE | 0.47 U | 0.45 U | 0.47 U | 0.5 U | 0.5 U | 0.61 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.29 U | 0.27 U | 0.29 U | 0.3 U | 0.3 U | 0.37 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.1 U | 1 U | 1.1 U | 1.2 U | 1.2 U | 1.4 U |
| 1,1-DICHLOROETHANE | 0.31 U | 0.29 U | 0.3 U | 0.32 U | 0.32 U | 0.39 U |
| 1,1-DICHLOROETHENE | 0.44 U | 0.42 U | 0.44 U | 0.46 U | 0.47 U | 0.56 U |
| 1,1-DICHLOROPROPENE | 0.25 U | 0.24 U | 0.25 U | 0.27 U | 0.27 U | 0.32 U |
| 1,2,3-TRICHLOROBENZENE | 0.32 U | 0.31 U | 0.32 U | 0.34 U | 0.34 U | 0.41 U |
| 1,2,3-TRICHLOROPROPANE | 0.76 U | 0.73 U | 0.76 U | 0.8 U | 0.81 U | 0.97 U |
| 1,2,3-TRIMETHYLBENZENE | 0.14 U | 0.14 U | 0.19 J | 0.15 U | 0.15 U | 0.18 U |
| 1,2,4-TRICHLOROBENZENE | 0.23 U | 0.22 U | 0.23 U | 0.24 U | 0.24 U | 0.29 U |
| 1,2,4-TRIMETHYLBENZENE | 0.55 U | 0.52 U | 0.55 U | 0.58 U | 0.58 U | 0.7 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 U | 1 U | 1.1 U | 1.2 U | 1.2 U | 1.4 U |
| 1,2-DIBROMOETHANE | 0.42 U | 0.4 U | 0.42 U | 0.45 U | 0.45 U | 0.54 U |
| 1,2-DICHLOROBENZENE | 0.31 U | 0.29 U | 0.3 U | 0.32 U | 0.32 U | 0.39 U |
| 1,2-DICHLOROETHANE | 0.29 U | 0.27 U | 0.29 U | 0.3 U | 0.3 U | 0.37 U |
| 1,2-DICHLOROPROPANE | 0.59 U | 0.56 U | 0.58 U | 0.62 U | 0.62 U | 0.75 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.3 U | 0.28 U | 0.29 U | 0.31 U | 0.31 U | 0.38 U |
| 1,3-DICHLOROPROPANE | 0.29 U | 0.27 U | 0.29 U | 0.3 U | 0.3 U | 0.37 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.56 U | 0.53 U | 0.55 U | 0.59 U | 0.59 U | 0.71 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.8 U | 0.76 U | 0.79 U | 0.84 U | 0.84 U | 1 U |
| 2-BUTANONE | 2 J | 1.9 J | 3.6 J | 1.3 U | 4.9 J | 14 |
| 2-CHLOROETHYL VINYL ETHER | 1.2 U | 1.1 U | 1.2 U | 1.3 U | 1.3 U | 1.5 U |
| 2-CHLOROTOLUENE | 0.34 U | 0.32 U | 0.34 U | 0.36 U | 0.36 U | 0.43 U |
| 2-HEXANONE | 0.53 U | 0.51 U | 0.53 U | 0.56 U | 0.56 U | 0.68 U |
| 4-CHLOROTOLUENE | 0.35 U | 0.33 U | 0.34 U | 0.37 U | 0.37 U | 0.44 U |
| 4-ISOPROPYLTOLUENE | 0.18 U | 0.17 U | 0.18 U | 0.19 U | 0.19 U | 0.23 U |
| 4-METHYL-2-PENTANONE | 0.46 U | 0.44 U | 0.45 U | 0.48 U | 0.59 B | 0.58 U |
| ACETONE | 29 B | 44 B | 28 B | 11 B | 49 B | 400 J |
| BENZENE | 0.2 U | 0.19 U | 0.19 U | 0.21 U | 0.21 U | 0.25 U |
| BROMOBENZENE | 0.28 U | 0.27 U | 0.28 U | 0.3 U | 0.3 U | 0.36 U |
| BROMOCHLOROMETHANE | 0.6 U | 0.57 U | 0.6 U | 0.63 U | 0.64 U | 0.77 U |
| BROMODICHLOROMETHANE | 0.24 U | 0.23 U | 0.24 U | 0.25 U | 0.25 U | 0.3 U |
| BROMOFORM | 0.28 U | 0.27 U | 0.28 U | 0.3 U | 0.3 U | 0.36 U |
| BROMOMETHANE | 0.46 U | 0.44 U | 0.45 U | 0.48 U | 0.48 U | 0.58 U |
| CARBON DISULFIDE | 0.37 U | 0.35 U | 0.67 J | 0.39 U | 0.99 B | 1.6 B |
| CARBON TETRACHLORIDE | 0.31 U | 0.3 U | 0.31 U | 0.33 U | 0.33 U | 0.4 U |
| CHLOROBENZENE | 0.28 U | 0.27 U | 0.28 U | 0.3 U | 0.3 U | 0.36 U |
| CHLORODIBROMOMETHANE | 0.47 U | 0.44 U | 0.46 U | 0.49 U | 0.49 U | 0.59 U |
| CHLOROETHANE | 0.73 U | 0.69 U | 0.72 U | 0.77 U | 0.77 U | 0.93 U |
| CHLOROFORM | 0.25 U | 0.23 U | 0.24 U | 0.26 U | 0.26 U | 0.31 U |
| CHLOROMETHANE | 0.35 U | 0.33 U | 0.34 U | 0.37 U | 0.37 U | 0.44 U |
| CIS-1,2-DICHLOROETHENE | 0.31 U | 0.29 U | 0.3 U | 0.32 U | 0.32 U | 0.39 U |
| CIS-1,3-DICHLOROPROPENE | 0.29 U | 0.27 U | 0.29 U | 0.3 U | 0.3 U | 0.37 U |
| DIBROMOMETHANE | 0.53 U | 0.51 U | 0.53 U | 0.56 U | 0.56 U | 0.68 U |
| DICHLORODIFLUOROMETHANE | 0.42 U | 0.4 U | 0.42 U | 0.45 U | 0.45 U | 0.54 U |
| DIISOPROPYL ETHER | 1.3 U | 1.2 U | 1.3 U | 1.3 U | 1.3 U | 1.6 U |
| ETHYL TERT-BUTYL ETHER | 0.19 U | 0.18 U | 0.18 U | 0.2 U | 0.2 U | 0.24 U |
| ETHYLBENZENE | 0.22 U | 0.21 U | 0.22 U | 0.23 U | 0.23 U | 0.28 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-790 | SB-790 | SB-790 | SB-790 | SB-791 | SB-791 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-790-03 | D-SB-790-05 | D-SB-790-07 | D-SB-790-09 | D-SB-791-03 | D-SB-791-05 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | 1 U | 0.97 U | 1 U | 1.1 U | 1.1 U | 1.3 U |
| ISOPROPYLBENZENE | 0.14 U | 0.13 U | 0.13 U | 0.14 U | 0.14 U | 0.17 U |
| M+P-XYLENES | 1 U | 0.97 U | 1 U | 1.1 U | 1.1 U | 1.3 U |
| METHYL TERT-BUTYL ETHER | 0.36 U | 0.35 U | 0.36 U | 0.38 U | 0.39 UJ | 0.46 UJ |
| METHYLENE CHLORIDE | 0.57 U | 0.54 U | 0.56 U | 0.6 U | 0.84 B | 1.1 B |
| NAPHTHALENE | 2.1 B | 2.2 B | 2.9 B | 0.17 U | 1.6 B | 1.1 B |
| N-BUTYLBENZENE | 0.2 U | 0.19 U | 0.19 U | 0.21 U | 0.21 U | 0.25 U |
| N-PROPYLBENZENE | 0.34 U | 0.32 U | 0.34 U | 0.36 U | 0.36 U | 0.43 U |
| O-XYLENE | 0.3 U | 0.28 U | 0.29 U | 0.31 U | 0.31 U | 0.38 U |
| SEC-BUTYLBENZENE | 0.15 U | 0.15 U | 0.15 U | 0.16 U | 0.16 U | 0.19 U |
| STYRENE | 0.13 U | 0.12 U | 0.13 U | 0.13 U | 0.13 U | 0.16 U |
| TERT-AMYL METHYL ETHER | 0.31 U | 0.3 U | 0.31 U | 0.33 U | 0.33 U | 0.4 U |
| TERT-BUTYLBENZENE | 0.25 U | 0.23 U | 0.24 U | 0.26 U | 0.26 U | 0.31 U |
| TERTIARY-BUTYL ALCOHOL | 6.4 UR | 6.1 UR | 6.4 UR | 6.8 UR | 48 B | 8.2 UR |
| TETRACHLOROETHENE | 0.44 U | 0.42 U | 0.44 U | 0.46 U | 0.47 U | 0.56 U |
| TOLUENE | 0.23 U | 0.22 U | 0.23 U | 0.24 U | 0.24 U | 0.29 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.57 U | 0.54 U | 0.56 U | 0.6 U | 0.6 U | 0.72 U |
| TRANS-1,2-DICHLOROETHENE | 0.35 U | 0.33 U | 0.34 U | 0.37 U | 0.37 U | 0.44 U |
| TRANS-1,3-DICHLOROPROPENE | 0.46 U | 0.44 U | 0.45 U | 0.48 U | 0.48 U | 0.58 U |
| TRICHLOROETHENE | 0.36 U | 0.34 U | 0.35 U | 0.38 U | 0.38 U | 0.45 U |
| TRICHLOROFLUOROMETHANE | 0.29 U | 0.27 U | 0.29 U | 0.3 U | 0.3 U | 0.37 U |
| VINYL ACETATE | 0.21 U | 0.2 U | 0.21 U | 0.22 U | 0.22 U | 0.27 U |
| VINYL CHLORIDE | 0.33 U | 0.31 U | 0.33 U | 0.35 U | 0.35 U | 0.42 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 31 U | 130 U | 33 U | 34 U | 33 U | 34 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 26 U | 100 U | 27 U | 28 U | 27 U | 28 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 11 U | 45 U | 12 U | 12 U | 12 U | 12 U |
| 2,4,5-TRICHLOROPHENOL | 29 U | 120 U | 30 U | 32 U | 30 U | 32 U |
| 2,4,6-TRICHLOROPHENOL | 93 U | 380 U | 97 U | 100 U | 97 U | 100 U |
| 2,4-DICHLOROPHENOL | 23 U | 95 U | 24 U | 26 U | 24 U | 25 U |
| 2,4-DIMETHYLPHENOL | 23 U | 95 U | 24 U | 26 U | 24 U | 25 U |
| 2,4-DINITROPHENOL | 93 U | 380 U | 97 U | 100 U | 97 U | 100 U |
| 2,4-DINITROTOLUENE | 31 U | 130 U | 33 U | 34 U | 33 U | 34 U |
| 2,6-DINITROTOLUENE | 24 U | 100 U | 26 U | 27 U | 25 U | 27 U |
| 2-CHLORONAPHTHALENE | 3.8 U | 16 U | 4 U | 4.2 U | 4 U | 4.2 U |
| 2-CHLOROPHENOL | 31 U | 130 U | 33 U | 34 U | 33 U | 34 U |
| 2-METHYLPHENOL | 93 U | 380 U | 97 U | 100 U | 97 U | 100 U |
| 2-NITROANILINE | 11 U | 43 U | 11 U | 12 U | 11 U | 12 U |
| 2-NITROPHENOL | 31 U | 130 U | 33 U | 34 U | 33 U | 34 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 21 U | 85 U | 22 U | 23 U | 22 U | 23 U |
| 3-NITROANILINE | 19 U | 76 U | 19 U | 20 U | 19 U | 20 U |
| 4,6-DINITRO-2-METHYLPHENOL | 93 U | 380 U | 97 U | 100 U | 97 U | 100 U |
| 4-BROMOPHENYL PHENYL ETHER | 15 U | 62 U | 16 U | 17 U | 16 U | 17 U |
| 4-CHLORO-3-METHYLPHENOL | 24 U | 100 U | 26 U | 27 U | 25 U | 27 U |
| 4-CHLOROANILINE | 20 U | 81 U | 21 U | 22 U | 21 U | 22 U |
| 4-CHLOROPHENYL PHENYL ETHER | 15 U | 62 U | 16 U | 17 U | 16 U | 17 U |
| 4-METHYLPHENOL | 93 U | 380 U | 97 U | 100 U | 97 U | 100 U |
| 4-NITROANILINE | 30 U | 120 U | 32 U | 33 U | 31 U | 33 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-790 | SB-790 | SB-790 | SB-790 | SB-791 | SB-791 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-790-03 | D-SB-790-05 | D-SB-790-07 | D-SB-790-09 | D-SB-791-03 | D-SB-791-05 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 93 U | 380 U | 97 U | 100 U | 97 U | 100 U |
| ACETOPHENONE | 11 U | 44 U | 11 U | 12 U | 11 U | 12 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 11 U | 43 U | 11 U | 12 U | 11 U | 12 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 14 U | 57 U | 15 U | 15 U | 15 U | 15 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 26 U | 100 U | 27 U | 28 U | 27 U | 28 U |
| BIS(2-CHLOROETHYL)ETHER | 2.3 U | 9.5 U | 2.4 U | 2.6 U | 2.4 U | 2.5 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 22 U | 90 U | 23 U | 24 U | 23 U | 52 J |
| BUTYL BENZYL PHTHALATE | 12 U | 47 U | 12 U | 13 U | 12 U | 13 U |
| CAPROLACTAM | 43 U | 180 U | 45 U | 47 U | 45 U | 47 U |
| CARBAZOLE | 31 U | 130 U | 33 U | 34 U | 33 U | 34 U |
| DIBENZOFURAN | 14 J | 58 J | 29 J | 4.2 U | 4 U | 4.2 U |
| DIETHYL PHTHALATE | 19 U | 76 U | 19 U | 20 U | 19 U | 20 U |
| DIMETHYL PHTHALATE | 20 U | 81 U | 21 U | 22 U | 21 U | 22 U |
| DI-N-BUTYL PHTHALATE | 17 U | 71 U | 18 U | 19 U | 18 U | 19 U |
| DI-N-OCTYL PHTHALATE | 31 U | 130 U | 33 U | 34 U | 33 U | 34 U |
| HEXACHLOROBENZENE | 2.4 U | 10 U | 2.6 U | 2.7 U | 2.5 U | 2.7 U |
| HEXACHLOROBUTADIENE | 31 U | 130 U | 33 U | 34 U | 33 U | 34 U |
| HEXACHLOROCYCLOPENTADIENE | 31 U | 130 U | 33 U | 34 U | 33 U | 34 U |
| HEXACHLOROETHANE | 10 U | 43 U | 11 U | 11 U | 11 U | 11 U |
| ISOPHORONE | 15 U | 62 U | 16 U | 17 U | 16 U | 17 U |
| NITROBENZENE | 2.6 U | 10 U | 2.7 U | 2.8 U | 2.7 U | 2.8 U |
| N-NITROSODIMETHYLAMINE | 19 U | 76 U | 19 U | 20 U | 19 U | 20 U |
| N-NITROSO-DI-N-PROPYLAMINE | 31 U | 130 U | 33 U | 34 U | 33 U | 34 U |
| N-NITROSODIPHENYLAMINE | 24 U | 100 U | 26 U | 27 U | 25 U | 27 U |
| PENTACHLOROPHENOL | 93 U | 380 U | 97 U | 100 U | 97 U | 100 U |
| PHENOL | 31 U | 130 U | 33 U | 34 U | 33 U | 34 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 8 | 16 U | 64 | 4.2 U | 8.6 | 4.2 U |
| ACENAPHTHENE | 34 | 140 | 20 | 4.2 U | 17 | 4.2 U |
| ACENAPHTHYLENE | 3.8 U | 16 U | 4 U | 4.2 U | 4 U | 4.2 U |
| ANTHRACENE | 72 | 620 | 28 | 4.2 U | 16 | 4.2 U |
| BAP EQUIVALENT-HALFND | 224.06 | 1353.2 | 72.682 | 4.2 U | 60.191 | 4.2 U |
| BAP EQUIVALENT-POS | 224.06 | 1345.2 | 70.682 | 4.2 U | 58.191 | 4.2 U |
| BENZO(A)ANTHRACENE | 160 | 1500 | 48 | 4.2 U | 46 | 4.2 U |
| BENZO(A)PYRENE | 140 | 1000 | 53 | 4.2 U | 44 | 4.2 U |
| BENZO(B)FLUORANTHENE | 180 | 1400 | 82 | 4.2 U | 65 | 4.2 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 77 | 490 | 34 | 4.2 U | 33 | 4.2 U |
| BENZO(K)FLUORANTHENE | 72 | 570 | 40 | 4.2 U | 24 | 4.2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-790 | SB-790 | SB-790 | SB-790 | SB-791 | SB-791 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-790-03 | D-SB-790-05 | D-SB-790-07 | D-SB-790-09 | D-SB-791-03 | D-SB-791-05 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 140 | 1500 | 82 | 1.4 U | 51 | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 41 | 16 U | 4 U | 4.2 U | 4 U | 4.2 U |
| FLUORANTHENE | 320 | 3700 | 110 | 4.2 U | 95 | 4.2 U |
| FLUORENE | 30 | 180 | 29 | 4.2 U | 15 | 4.2 U |
| INDENO(1,2,3-CD)PYRENE | 82 | 480 | 42 | 4.2 U | 28 | 4.2 U |
| NAPHTHALENE | 13 | 34 | 45 | 4.2 U | 13 | 4.2 U |
| PHENANTHRENE | 250 | 2100 | 120 | 4.2 U | 76 | 4.2 U |
| PYRENE | 240 | 2900 | 87 | 4.2 U | 75 | 4.2 U |
| TOTAL PAHS | 1859 | 16614 | 884 | 0 U | 606.6 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | 0.72 U | 15 U | 0.75 U | 0.79 U | 1.5 U | 0.79 U |
| 4,4'-DDE | 0.45 U | 34 J | 0.47 U | 0.5 U | 0.94 U | 0.5 U |
| 4,4'-DDT | 0.73 U | 15 U | 0.77 U | 0.8 U | 1.5 U | 0.8 U |
| ALDRIN | 1.4 U | 28 U | 1.5 U | 1.5 U | 2.9 U | 1.5 U |
| ALPHA-BHC | 0.85 U | 17 U | 0.89 U | 0.93 U | 1.8 U | 0.93 U |
| ALPHA-CHLORDANE | 1.1 U | 22 U | 1.1 U | 1.2 U | 2.3 U | 1.2 U |
| AROCLOR-1016 | 24 U | 50 U | 26 U | 27 U | 25 U | 27 U |
| AROCLOR-1221 | 19 U | 38 U | 19 U | 20 U | 19 U | 20 U |
| AROCLOR-1232 | 16 U | 33 U | 17 U | 18 U | 17 U | 18 U |
| AROCLOR-1242 | 15 U | 31 U | 16 U | 17 U | 16 U | 17 U |
| AROCLOR-1248 | 20 U | 40 U | 21 U | 22 U | 21 U | 22 U |
| AROCLOR-1254 | 20 U | 40 U | 21 U | 22 U | 21 U | 22 U |
| AROCLOR-1260 | 20 U | 240 | 21 U | 22 U | 21 U | 22 U |
| BETA-BHC | 1.3 U | 26 U | 1.3 U | 1.4 U | 2.7 U | 1.4 U |
| DELTA-BHC | 1.4 U | 28 U | 1.5 U | 1.5 U | 2.9 U | 1.5 U |
| DIELDRIN | 0.55 U | 11 U | 0.57 U | 0.6 U | 1.1 U | 0.6 U |
| ENDOSULFAN I | 0.6 U | 12 U | 0.63 U | 0.66 U | 1.3 U | 0.66 U |
| ENDOSULFAN II | 0.95 U | 19 U | 1 U | 1 U | 2 U | 1 U |
| ENDOSULFAN SULFATE | 1 U | 21 U | 1.1 U | 1.1 U | 2.1 U | 1.1 U |
| ENDRIN | 0.58 U | 12 U | 0.61 U | 0.64 U | 1.2 U | 0.64 U |
| ENDRIN ALDEHYDE | 1.2 U | 24 U | 1.2 U | 1.3 U | 2.4 U | 1.3 U |
| ENDRIN KETONE | 0.73 U | 15 U | 0.77 U | 0.8 U | 1.5 U | 0.8 U |
| GAMMA-BHC (LINDANE) | 0.86 UJ | 18 UJ | 0.9 UJ | 0.95 UJ | 1.8 U | 0.94 U |
| GAMMA-CHLORDANE | 0.49 U | 10 U | 0.51 U | 0.54 U | 1 U | 0.53 U |
| HEPTACHLOR | 1.3 U | 26 U | 1.3 U | 1.4 U | 2.7 UJ | 1.4 UJ |
| HEPTACHLOR EPOXIDE | 0.93 U | 19 U | 0.97 U | 1 U | 1.9 U | 1 U |
| METHOXYCHLOR | 1.7 U | 36 U | 1.8 U | 1.9 U | 3.6 UJ | 1.9 UJ |
| TOTAL AROCLOR | 0 U | 240 | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 22 U | 450 U | 23 U | 24 U | 46 U | 24 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 0.2 B | 0.2 B | 0.22 J | 0.23 J | 0.26 B | 0.14 B |
| ARSENIC | 4.5 | 4.9 | 6.3 | 4.1 | 5.4 L | 3.7 L |
| BARIUM | 33.8 | 31 | 27.8 | 19.8 | 20.6 | 14.9 |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-790 | SB-790 | SB-790 | SB-790 | SB-791 | SB-791 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-790-03 | D-SB-790-05 | D-SB-790-07 | D-SB-790-09 | D-SB-791-03 | D-SB-791-05 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 2.2 | 2 | 2.6 | 2.5 | 3.1 J | 1.6 J |
| CADMIUM | 0.12 | 0.4 | 0.12 L | 0.044 J | 0.027 B | 0.022 B |
| CHROMIUM | 19.5 | 18.3 | 18.9 | 23.7 | 23.8 | 16.9 |
| COBALT | 13.7 | 14.3 | 24.5 | 4.6 | 10.9 | 4.3 |
| COPPER | 23.2 | 22.3 | 23.4 | 30.1 L | 15.1 | 22 |
| IRON | 21900 | 20200 | 22200 | 33200 | 37400 | 22100 |
| LEAD | 16.5 | 30.9 | 20.6 | 9.3 | 13.4 | 5.5 |
| MANGANESE | 84.9 | 112 | 78.4 | 62.4 | 90.1 J | 28.4 J |
| MERCURY | 0.36 | 0.21 | 0.63 | 0.019 U | 0.018 U | 0.019 U |
| MOLYBDENUM | 0.39 | 0.49 | 0.35 | 0.46 | 0.52 | 0.63 |
| NICKEL | 28.4 | 31 | 41.4 | 15.3 | 40.7 | 10.7 |
| SELENIUM | 2.3 | 2.4 | 3.5 | 1 J | 1.4 L | 0.98 L |
| SILVER | 0.24 K | 0.25 K | 0.32 K | 0.024 B | 0.019 U | 0.024 B |
| THALLIUM | 0.042 J | 0.053 J | 0.051 J | 0.12 B | 0.082 J | 0.11 J |
| VANADIUM | 29.6 | 27.5 | 28 | 42 | 37.5 | 30.9 |
| ZINC | 61.1 | 87.5 | 77.9 | 39.2 J | 40.1 | 31.6 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 12000 | 63000 | 230000 | 9800 J | 41000 | 22000 |
| GASOLINE RANGE ORGANICS | 53 U | 55 U | 56 U | 59 U | 56 U | 59 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | 0.31 U | 0.57 J | 0.33 U | 0.55 J | 0.33 U | 0.9 J |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-791 | SB-791 | SB-792 | SB-792 | SB-792 | SB-792 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-791-07 | D-SB-791-09 | D-SB-792-03 | D-SB-792-05 | D-SB-792-07 | D-SB-792-09 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.53 U | 0.62 U | 0.52 U | 0.55 U | 0.52 U | 0.52 U |
| 1,1,1-TRICHLOROETHANE | 0.48 U | 0.56 U | 0.47 U | 0.5 U | 0.47 U | 0.47 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.29 U | 0.34 U | 0.29 U | 0.3 U | 0.28 U | 0.29 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.1 U | 1.3 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U |
| 1,1-DICHLOROETHANE | 0.31 U | 0.36 U | 0.3 U | 0.32 U | 0.3 U | 0.3 U |
| 1,1-DICHLOROETHENE | 0.44 U | 0.52 U | 0.44 U | 0.46 U | 0.44 U | 0.44 U |
| 1,1-DICHLOROPROPENE | 0.26 U | 0.3 U | 0.25 U | 0.27 U | 0.25 U | 0.25 U |
| 1,2,3-TRICHLOROBENZENE | 0.32 U | 0.38 U | 0.32 U | 0.34 U | 0.32 U | 0.32 U |
| 1,2,3-TRICHLOROPROPANE | 0.77 U | 0.9 U | 0.76 U | 0.8 U | 0.75 U | 0.76 U |
| 1,2,3-TRIMETHYLBENZENE | 0.15 U | 0.17 U | 0.21 J | 0.15 U | 0.14 U | 0.14 U |
| 1,2,4-TRICHLOROBENZENE | 0.23 U | 0.27 U | 0.23 U | 0.24 U | 0.23 U | 0.23 U |
| 1,2,4-TRIMETHYLBENZENE | 0.55 U | 0.65 U | 0.55 U | 0.58 U | 0.54 U | 0.55 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 U | 1.3 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U |
| 1,2-DIBROMOETHANE | 0.43 U | 0.5 U | 0.42 U | 0.45 U | 0.42 U | 0.42 U |
| 1,2-DICHLOROBENZENE | 0.31 U | 0.36 U | 0.3 U | 0.32 U | 0.3 U | 0.3 U |
| 1,2-DICHLOROETHANE | 0.29 U | 0.34 U | 0.29 U | 0.3 U | 0.28 U | 0.29 U |
| 1,2-DICHLOROPROPANE | 0.59 U | 0.69 U | 0.58 U | 0.62 U | 0.58 U | 0.58 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.3 U | 0.35 U | 0.29 U | 0.31 U | 0.29 U | 0.3 U |
| 1,3-DICHLOROPROPANE | 0.29 U | 0.34 U | 0.29 U | 0.3 U | 0.28 U | 0.29 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.56 U | 0.66 U | 0.56 U | 0.59 U | 0.55 U | 0.56 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.8 U | 0.94 U | 0.79 U | 0.84 U | 0.79 U | 0.79 U |
| 2-BUTANONE | 3.1 J | 1.4 U | 52 | 3.7 J | 1.6 J | 1.2 U |
| 2-CHLOROETHYL VINYL ETHER | 1.2 U | 1.4 U | 1.2 U | 1.3 U | 1.2 U | 1.2 U |
| 2-CHLOROTOLUENE | 0.34 U | 0.4 U | 0.34 U | 0.36 U | 0.34 U | 0.34 U |
| 2-HEXANONE | 0.54 U | 0.63 U | 0.53 U | 0.56 U | 0.53 U | 0.53 U |
| 4-CHLOROTOLUENE | 0.35 U | 0.41 U | 0.35 U | 0.37 U | 0.34 U | 0.35 U |
| 4-ISOPROPYLTOLUENE | 0.18 U | 0.21 U | 0.18 U | 0.19 U | 0.18 U | 0.18 U |
| 4-METHYL-2-PENTANONE | 0.46 U | 0.54 U | 0.45 U | 0.48 U | 0.45 U | 0.46 U |
| ACETONE | 220 B | 68 B | 240 J | 160 B | 18 B | 310 J |
| BENZENE | 0.2 U | 0.23 U | 0.19 U | 0.21 U | 0.19 U | 0.19 U |
| BROMOBENZENE | 0.28 U | 0.33 U | 0.28 U | 0.29 U | 0.28 U | 0.28 U |
| BROMOCHLOROMETHANE | 0.61 U | 0.71 U | 0.6 U | 0.63 U | 0.59 U | 0.6 U |
| BROMODICHLOROMETHANE | 0.24 U | 0.28 U | 0.24 U | 0.25 U | 0.23 U | 0.24 U |
| BROMOFORM | 0.28 U | 0.33 U | 0.28 U | 0.29 U | 0.28 U | 0.28 U |
| BROMOMETHANE | 0.46 U | 0.54 U | 0.45 U | 0.48 U | 0.45 U | 0.46 U |
| CARBON DISULFIDE | 0.86 B | 0.94 B | 2 B | 0.87 B | 0.83 B | 0.37 U |
| CARBON TETRACHLORIDE | 0.32 U | 0.37 U | 0.31 U | 0.33 U | 0.31 U | 0.31 U |
| CHLOROBENZENE | 0.28 U | 0.33 U | 0.28 U | 0.29 U | 0.28 U | 0.28 U |
| CHLORODIBROMOMETHANE | 0.47 U | 0.55 U | 0.46 U | 0.49 U | 0.46 U | 0.46 U |
| CHLOROETHANE | 0.73 U | 0.86 U | 0.72 U | 0.77 U | 0.72 U | 0.73 U |
| CHLOROFORM | 0.25 U | 0.29 U | 0.24 U | 0.26 U | 0.24 U | 0.24 U |
| CHLOROMETHANE | 0.35 U | 0.41 U | 0.35 U | 0.37 U | 0.34 U | 0.35 U |
| CIS-1,2-DICHLOROETHENE | 0.31 U | 0.36 U | 0.3 U | 0.32 U | 0.3 U | 0.3 U |
| CIS-1,3-DICHLOROPROPENE | 0.29 U | 0.34 U | 0.29 U | 0.3 U | 0.28 U | 0.29 U |
| DIBROMOMETHANE | 0.54 U | 0.63 U | 0.53 U | 0.56 U | 0.53 U | 0.53 U |
| DICHLORODIFLUOROMETHANE | 0.43 U | 0.5 U | 0.42 U | 0.45 U | 0.42 U | 0.42 U |
| DIISOPROPYL ETHER | 1.3 U | 1.5 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U |
| ETHYL TERT-BUTYL ETHER | 0.19 U | 0.22 U | 0.19 U | 0.2 U | 0.18 U | 0.19 U |
| ETHYLBENZENE | 0.22 U | 0.26 U | 0.22 U | 0.23 U | 0.22 U | 0.22 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-791 | SB-791 | SB-792 | SB-792 | SB-792 | SB-792 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-791-07 | D-SB-791-09 | D-SB-792-03 | D-SB-792-05 | D-SB-792-07 | D-SB-792-09 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | 1 U | 1.2 U | 1 U | 1.1 U | 1 U | 1 U |
| ISOPROPYLBENZENE | 0.14 U | 0.16 U | 0.13 U | 0.14 U | 0.13 U | 0.13 U |
| M+P-XYLENES | 1 U | 1.2 U | 1 U | 1.1 U | 1 U | 1 U |
| METHYL TERT-BUTYL ETHER | 0.37 UJ | 0.43 UJ | 0.36 UJ | 0.38 UJ | 0.36 UJ | 0.36 UJ |
| METHYLENE CHLORIDE | 0.9 B | 0.98 B | 0.79 B | 0.78 B | 0.82 B | 1 B |
| NAPHTHALENE | 0.75 B | 0.93 B | 2.1 B | 0.8 B | 0.75 B | 0.76 B |
| N-BUTYLBENZENE | 0.2 U | 0.23 U | 0.19 U | 0.21 U | 0.19 U | 0.19 U |
| N-PROPYLBENZENE | 0.34 U | 0.4 U | 0.34 U | 0.36 U | 0.34 U | 0.34 U |
| O-XYLENE | 0.3 U | 0.35 U | 0.29 U | 0.31 U | 0.29 U | 0.3 U |
| SEC-BUTYLBENZENE | 0.15 U | 0.18 U | 0.15 U | 0.16 U | 0.15 U | 0.15 U |
| STYRENE | 0.13 U | 0.15 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U |
| TERT-AMYL METHYL ETHER | 0.32 UJ | 0.37 U | 0.31 U | 0.33 U | 0.31 U | 0.31 UJ |
| TERT-BUTYLBENZENE | 0.25 U | 0.29 U | 0.24 U | 0.26 U | 0.24 U | 0.24 U |
| TERTIARY-BUTYL ALCOHOL | 47 B | 53 B | 47 B | 50 B | 44 B | 45 B |
| TETRACHLOROETHENE | 0.44 U | 0.52 U | 0.44 U | 0.46 U | 0.44 U | 0.44 U |
| TOLUENE | 0.23 U | 0.27 U | 0.71 J | 0.24 U | 0.41 J | 0.23 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.57 U | 0.67 U | 0.56 U | 0.6 U | 0.56 U | 0.57 U |
| TRANS-1,2-DICHLOROETHENE | 0.35 U | 0.41 U | 0.35 U | 0.37 U | 0.34 U | 0.35 U |
| TRANS-1,3-DICHLOROPROPENE | 0.46 U | 0.54 U | 0.45 U | 0.48 U | 0.45 U | 0.46 U |
| TRICHLOROETHENE | 0.36 U | 0.42 U | 0.35 U | 0.38 U | 0.35 U | 0.35 U |
| TRICHLOROFLUOROMETHANE | 0.29 U | 0.34 U | 0.29 U | 0.3 U | 0.28 U | 0.29 U |
| VINYL ACETATE | 0.21 U | 0.25 U | 0.21 U | 0.22 U | 0.21 U | 0.21 U |
| VINYL CHLORIDE | 0.33 U | 0.39 U | 0.33 U | 0.35 U | 0.33 U | 0.33 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 32 U | 31 U | 32 U | 33 U | 32 U | 32 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 26 U | 25 U | 26 U | 27 U | 26 U | 26 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U |
| 2,4,5-TRICHLOROPHENOL | 30 U | 29 U | 29 U | 30 U | 30 U | 29 U |
| 2,4,6-TRICHLOROPHENOL | 95 U | 92 U | 94 U | 97 U | 96 U | 94 U |
| 2,4-DICHLOROPHENOL | 24 U | 23 U | 23 U | 24 U | 24 U | 23 U |
| 2,4-DIMETHYLPHENOL | 24 U | 23 U | 23 U | 24 U | 24 U | 23 U |
| 2,4-DINITROPHENOL | 95 U | 92 U | 94 U | 97 U | 96 U | 94 U |
| 2,4-DINITROTOLUENE | 32 U | 31 U | 32 U | 33 U | 32 U | 32 U |
| 2,6-DINITROTOLUENE | 25 U | 24 U | 25 U | 25 U | 25 U | 25 U |
| 2-CHLORONAPHTHALENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| 2-CHLOROPHENOL | 32 U | 31 U | 32 U | 33 U | 32 U | 32 U |
| 2-METHYLPHENOL | 95 U | 92 U | 94 U | 97 U | 96 U | 94 U |
| 2-NITROANILINE | 11 U | 10 U | 11 U | 11 U | 11 U | 11 U |
| 2-NITROPHENOL | 32 U | 31 U | 32 U | 33 U | 32 U | 32 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 21 U | 21 U | 21 U | 22 U | 22 U | 21 U |
| 3-NITROANILINE | 19 U | 18 U | 19 U | 19 U | 19 U | 19 U |
| 4,6-DINITRO-2-METHYLPHENOL | 95 U | 92 U | 94 U | 97 U | 96 U | 94 U |
| 4-BROMOPHENYL PHENYL ETHER | 15 U | 15 U | 15 U | 16 U | 16 U | 15 U |
| 4-CHLORO-3-METHYLPHENOL | 25 U | 24 U | 25 U | 25 U | 25 U | 25 U |
| 4-CHLOROANILINE | 20 U | 19 U | 20 U | 21 U | 20 U | 20 U |
| 4-CHLOROPHENYL PHENYL ETHER | 15 U | 15 U | 15 U | 16 U | 16 U | 15 U |
| 4-METHYLPHENOL | 95 U | 92 U | 94 U | 97 U | 96 U | 94 U |
| 4-NITROANILINE | 31 U | 30 U | 30 U | 31 U | 31 U | 30 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-791 | SB-791 | SB-792 | SB-792 | SB-792 | SB-792 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-791-07 | D-SB-791-09 | D-SB-792-03 | D-SB-792-05 | D-SB-792-07 | D-SB-792-09 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 95 U | 92 U | 94 U | 97 U | 96 U | 94 U |
| ACETOPHENONE | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 11 U | 10 U | 11 U | 11 U | 11 U | 11 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 14 U | 14 U | 14 U | 14 U | 14 U | 14 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 26 U | 25 U | 26 U | 27 U | 26 U | 26 U |
| BIS(2-CHLOROETHYL)ETHER | 2.4 U | 2.3 U | 2.3 U | 2.4 U | 2.4 U | 2.3 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 23 U | 22 U | 22 U | 23 U | 23 U | 22 U |
| BUTYL BENZYL PHTHALATE | 12 U | 11 U | 12 U | 12 U | 12 U | 12 U |
| CAPROLACTAM | 44 U | 42 U | 43 U | 45 U | 44 U | 43 U |
| CARBAZOLE | 32 U | 31 U | 32 U | 33 U | 32 U | 32 U |
| DIBENZOFURAN | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| DIETHYL PHTHALATE | 19 U | 18 U | 19 U | 19 U | 19 U | 19 U |
| DIMETHYL PHTHALATE | 20 U | 19 U | 20 U | 21 U | 20 U | 20 U |
| DI-N-BUTYL PHTHALATE | 18 U | 17 U | 18 U | 18 U | 18 U | 18 U |
| DI-N-OCTYL PHTHALATE | 32 U | 31 U | 32 U | 33 U | 32 U | 32 U |
| HEXACHLOROBENZENE | 2.5 U | 2.4 U | 2.5 U | 2.5 U | 2.5 U | 2.5 U |
| HEXACHLOROBUTADIENE | 32 U | 31 U | 32 U | 33 U | 32 U | 32 U |
| HEXACHLOROCYCLOPENTADIENE | 32 U | 31 U | 32 U | 33 U | 32 U | 32 U |
| HEXACHLOROETHANE | 11 U | 10 U | 11 U | 11 U | 11 U | 11 U |
| ISOPHORONE | 15 U | 15 U | 15 U | 16 U | 16 U | 15 U |
| NITROBENZENE | 2.6 U | 2.5 U | 2.6 U | 2.7 U | 2.6 U | 2.6 U |
| N-NITROSODIMETHYLAMINE | 19 U | 18 U | 19 U | 19 U | 19 U | 19 U |
| N-NITROSO-DI-N-PROPYLAMINE | 32 U | 31 U | 32 U | 33 U | 32 U | 32 U |
| N-NITROSODIPHENYLAMINE | 25 U | 24 U | 25 U | 25 U | 25 U | 25 U |
| PENTACHLOROPHENOL | 95 U | 92 U | 94 UR | 97 U | 96 U | 94 U |
| PHENOL | 32 U | 31 U | 32 U | 33 U | 32 U | 32 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| ACENAPHTHENE | 3.9 U | 3.8 U | 8.2 | 4 U | 3.9 U | 3.9 U |
| ACENAPHTHYLENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| ANTHRACENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 3.9 U | 3.8 U | 5.1073 | 4 U | 3.9 U | 3.9 U |
| BAP EQUIVALENT-POS | 3.9 U | 3.8 U | 0.7978 | 4 U | 3.9 U | 3.9 U |
| BENZO(A)ANTHRACENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| BENZO(A)PYRENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| BENZO(B)FLUORANTHENE | 3.9 U | 3.8 U | 7.9 | 4 U | 3.9 U | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| BENZO(K)FLUORANTHENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-791 | SB-791 | SB-792 | SB-792 | SB-792 | SB-792 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-791-07 | D-SB-791-09 | D-SB-792-03 | D-SB-792-05 | D-SB-792-07 | D-SB-792-09 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 7.8 | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| FLUORANTHENE | 3.9 U | 3.8 U | 11 | 4 U | 3.9 U | 3.9 U |
| FLUORENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| NAPHTHALENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| PHENANTHRENE | 3.9 U | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| PYRENE | 3.9 U | 3.8 U | 8.1 | 4 U | 3.9 U | 3.9 U |
| TOTAL PAHS | 0 U | 0 U | 43 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | 0.73 U | 0.71 U | 0.72 U | 0.75 U | 0.74 U | 0.73 U |
| 4,4'-DDE | 0.46 U | 0.45 U | 0.46 U | 0.47 U | 0.47 U | 0.46 U |
| 4,4'-DDT | 0.75 U | 0.72 U | 0.74 U | 0.76 U | 0.75 U | 0.74 U |
| ALDRIN | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| ALPHA-BHC | 0.87 U | 0.84 U | 0.85 U | 0.88 U | 0.87 U | 0.86 U |
| ALPHA-CHLORDANE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| AROCLOR-1016 | 25 U | 24 U | 25 U | 25 U | 25 U | 25 U |
| AROCLOR-1221 | 19 U | 18 U | 19 U | 19 U | 19 U | 19 U |
| AROCLOR-1232 | 17 U | 16 U | 16 U | 17 U | 17 U | 16 U |
| AROCLOR-1242 | 15 U | 15 U | 15 U | 16 U | 16 U | 15 U |
| AROCLOR-1248 | 20 U | 19 U | 20 U | 21 U | 20 U | 20 U |
| AROCLOR-1254 | 20 U | 19 U | 20 U | 21 U | 20 U | 20 U |
| AROCLOR-1260 | 20 U | 19 U | 20 U | 21 U | 20 U | 20 U |
| BETA-BHC | 1.3 U | 1.3 U | 1.3 J | 1.3 U | 1.3 U | 1.3 U |
| DELTA-BHC | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| DIELDRIN | 0.56 U | 0.54 U | 0.55 U | 0.57 U | 0.56 U | 0.55 U |
| ENDOSULFAN I | 0.62 U | 0.59 U | 0.61 U | 0.63 U | 0.62 U | 0.61 U |
| ENDOSULFAN II | 0.97 U | 0.94 U | 0.96 U | 0.99 U | 0.98 U | 0.96 U |
| ENDOSULFAN SULFATE | 1 U | 1 U | 1 U | 1.1 U | 1 U | 1 U |
| ENDRIN | 0.59 U | 0.57 U | 0.58 U | 0.6 U | 0.6 U | 0.59 U |
| ENDRIN ALDEHYDE | 1.2 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U |
| ENDRIN KETONE | 0.75 U | 0.72 U | 0.74 U | 0.76 U | 0.75 U | 0.74 U |
| GAMMA-BHC (LINDANE) | 0.88 U | 0.85 U | 0.87 U | 0.89 U | 0.89 U | 0.87 U |
| GAMMA-CHLORDANE | 0.5 U | 0.48 U | 0.49 U | 0.51 U | 0.5 U | 0.49 U |
| HEPTACHLOR | 1.3 UJ | 1.3 UJ | 1.3 UJ | 1.3 UJ | 1.3 UJ | 1.3 UJ |
| HEPTACHLOR EPOXIDE | 0.95 U | 0.92 U | 0.94 U | 0.97 U | 0.96 U | 0.94 U |
| METHOXYCHLOR | 1.8 UJ | 1.7 UJ | 1.8 UJ | 1.8 UJ | 1.8 UJ | 1.8 UJ |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 23 U | 22 U | 22 U | 23 U | 23 U | 22 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 0.3 B | 0.027 UL | 0.28 UL | 0.23 B | 0.21 B | 0.22 B |
| ARSENIC | 7.9 L | 5 L | 5.4 L | 4.4 L | 2.9 L | 3.8 L |
| BARIUM | 12.6 | 7.4 | 40.6 | 16.7 | 12.2 | 10.3 |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-791 | SB-791 | SB-792 | SB-792 | SB-792 | SB-792 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-791-07 | D-SB-791-09 | D-SB-792-03 | D-SB-792-05 | D-SB-792-07 | D-SB-792-09 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 3.4 J | 0.82 J | 1.5 J | 1.9 J | 1.7 J | 2.7 J |
| CADMIUM | 0.019 B | 0.017 B | 0.24 B | 0.026 B | 0.0093 UL | 0.02 B |
| CHROMIUM | 31 | 2.2 | 19.6 | 22.3 | 17.9 | 24.8 |
| COBALT | 10.3 | 3.4 | 33 | 7 | 7.1 | 12.1 |
| COPPER | 24.7 | 4.7 | 31.1 | 20.4 | 13 | 18.2 |
| IRON | 50200 | 1420 | 18800 | 35700 | 27100 | 42300 |
| LEAD | 6.7 | 5.6 | 54.1 | 5.2 | 3.3 | 2.9 |
| MANGANESE | 161 J | 7.2 J | 88.8 J | 53.1 J | 40.2 J | 30 J |
| MERCURY | 0.018 U | 0.017 U | 1.3 | 0.018 U | 0.018 U | 0.018 U |
| MOLYBDENUM | 0.8 | 0.072 U | 0.53 | 0.65 | 0.57 | 0.74 |
| NICKEL | 36.2 | 5.3 | 37 | 18.7 | 19 | 30.1 |
| SELENIUM | 2.4 L | 7.2 L | 2 L | 0.84 L | 0.99 L | 1.1 L |
| SILVER | 0.019 U | 0.018 U | 1.9 | 0.019 U | 0.019 U | 0.019 U |
| THALLIUM | 0.079 J | 0.064 J | 0.15 U | 0.099 J | 0.064 J | 0.06 J |
| VANADIUM | 51.2 | 2.1 | 29 | 46 | 35.9 | 67.2 |
| ZINC | 41.3 | 8.7 | 111 | 33.6 | 19 | 31.2 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 5400 J | 3200 U | 83000 | 8000 J | 7800 J | 4100 J |
| GASOLINE RANGE ORGANICS | 55 U | 53 U | 54 U | 56 U | 55 U | 54 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | 0.32 U | 0.39 J | 0.32 U | 0.56 J | 0.32 U | 0.32 U |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-793 | SB-793 | SB-793 | SB-793 | SB-794 | SB-794 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-793-03 | D-SB-793-05 | D-SB-793-07 | D-SB-793-09 | D-SB-794-03 | D-SB-794-05 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.57 U | 0.54 U | 0.59 U | 0.54 U | 0.48 U | 0.52 U |
| 1,1,1-TRICHLOROETHANE | 0.51 U | 0.49 U | 0.53 U | 0.49 U | 0.44 U | 0.47 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.31 U | 0.3 U | 0.32 U | 0.3 U | 0.26 U | 0.28 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U | 1.1 U | 1.2 U | 1.1 U | 1 U | 1.1 U |
| 1,1-DICHLOROETHANE | 0.33 U | 0.31 U | 0.34 U | 0.31 U | 0.28 U | 0.3 U |
| 1,1-DICHLOROETHENE | 0.48 U | 0.45 U | 0.5 U | 1.1 J | 0.4 U | 0.43 U |
| 1,1-DICHLOROPROPENE | 0.27 U | 0.26 U | 0.29 U | 0.26 U | 0.23 U | 0.25 U |
| 1,2,3-TRICHLOROBENZENE | 0.35 U | 0.33 U | 0.36 U | 0.33 U | 0.3 U | 0.32 U |
| 1,2,3-TRICHLOROPROPANE | 0.82 U | 0.79 U | 0.86 U | 0.78 U | 0.7 U | 0.75 U |
| 1,2,3-TRIMETHYLBENZENE | 0.16 U | 0.15 U | 0.16 U | 0.15 U | 0.13 U | 0.14 U |
| 1,2,4-TRICHLOROBENZENE | 0.25 U | 0.24 U | 0.26 U | 0.23 U | 0.21 U | 0.22 U |
| 1,2,4-TRIMETHYLBENZENE | 0.6 U | 0.57 U | 0.62 U | 0.57 U | 0.51 U | 0.54 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U | 1.1 U | 1.2 U | 1.1 U | 1 U | 1.1 U |
| 1,2-DIBROMOETHANE | 0.46 U | 0.44 U | 0.48 U | 0.43 U | 0.39 U | 0.42 U |
| 1,2-DICHLOROBENZENE | 0.33 U | 0.31 U | 0.34 U | 0.31 U | 0.28 U | 0.3 U |
| 1,2-DICHLOROETHANE | 0.31 U | 0.3 U | 0.32 U | 0.3 U | 0.26 U | 0.28 U |
| 1,2-DICHLOROPROPANE | 0.63 U | 0.6 U | 0.66 U | 0.6 U | 0.54 U | 0.57 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.32 U | 0.31 U | 0.33 U | 0.3 U | 0.27 U | 0.29 U |
| 1,3-DICHLOROPROPANE | 0.31 U | 0.3 U | 0.32 U | 0.3 U | 0.26 U | 0.28 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.6 U | 0.58 U | 0.63 U | 0.57 U | 0.51 U | 0.55 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.86 U | 0.82 U | 0.9 U | 0.82 U | 0.73 U | 0.78 U |
| 2-BUTANONE | 22 | 1.2 U | 5.1 J | 1.2 U | 3 J | 6.8 J |
| 2-CHLOROETHYL VINYL ETHER | 1.3 U | 1.2 U | 1.3 U | 1.2 U | 1.1 U | 1.2 U |
| 2-CHLOROTOLUENE | 0.37 U | 0.35 U | 0.38 U | 0.35 U | 0.31 U | 0.33 U |
| 2-HEXANONE | 0.58 U | 0.55 U | 0.6 U | 0.55 U | 0.49 U | 0.52 U |
| 4-CHLOROTOLUENE | 0.38 U | 0.36 U | 0.39 U | 0.36 U | 0.32 U | 0.34 U |
| 4-ISOPROPYLTOLUENE | 0.19 U | 0.18 U | 0.2 U | 0.18 U | 0.16 U | 0.17 U |
| 4-METHYL-2-PENTANONE | 0.49 U | 0.47 U | 0.51 U | 0.47 U | 0.42 U | 0.45 U |
| ACETONE | 100 B | 29 B | 190 B | 5.5 U | 31 B | 62 B |
| BENZENE | 0.21 U | 0.2 U | 0.22 U | 0.2 U | 0.18 U | 0.19 U |
| BROMOBENZENE | 0.3 U | 0.29 U | 0.31 U | 0.29 U | 0.26 U | 0.27 U |
| BROMOCHLOROMETHANE | 0.65 U | 0.62 U | 0.68 U | 0.62 U | 0.55 U | 0.59 U |
| BROMODICHLOROMETHANE | 0.26 U | 0.24 U | 0.27 U | 0.24 U | 0.22 U | 0.23 U |
| BROMOFORM | 0.3 U | 0.29 U | 0.31 U | 0.29 U | 0.26 U | 0.27 U |
| BROMOMETHANE | 0.49 U | 0.47 U | 0.51 U | 0.47 U | 0.42 U | 0.45 U |
| CARBON DISULFIDE | 1.8 B | 0.81 B | 1 B | 0.38 U | 0.99 B | 1 B |
| CARBON TETRACHLORIDE | 0.34 U | 0.32 U | 0.35 U | 0.32 U | 0.29 U | 0.31 U |
| CHLOROBENZENE | 0.3 U | 0.29 U | 0.31 U | 0.29 U | 0.26 U | 0.27 U |
| CHLORODIBROMOMETHANE | 0.5 U | 0.48 U | 0.52 U | 0.48 U | 0.43 U | 0.46 U |
| CHLOROETHANE | 0.79 U | 0.75 U | 0.82 U | 0.75 U | 0.67 U | 0.72 U |
| CHLOROFORM | 0.27 U | 0.25 U | 0.28 U | 0.25 U | 0.23 U | 0.24 U |
| CHLOROMETHANE | 0.38 U | 0.36 U | 0.39 U | 0.36 U | 0.32 U | 0.34 U |
| CIS-1,2-DICHLOROETHENE | 0.33 U | 0.31 U | 0.34 U | 0.31 U | 0.28 U | 0.3 U |
| CIS-1,3-DICHLOROPROPENE | 0.31 U | 0.3 U | 0.32 U | 0.3 U | 0.26 U | 0.28 U |
| DIBROMOMETHANE | 0.58 U | 0.55 U | 0.6 U | 0.55 U | 0.49 U | 0.52 U |
| DICHLORODIFLUOROMETHANE | 0.46 U | 0.44 U | 0.48 U | 0.43 U | 0.39 U | 0.42 U |
| DIISOPROPYL ETHER | 1.4 U | 1.3 U | 1.4 U | 1.3 U | 1.2 U | 1.2 U |
| ETHYL TERT-BUTYL ETHER | 0.2 U | 0.19 U | 0.21 U | 0.19 U | 0.17 U | 0.18 U |
| ETHYLBENZENE | 0.24 U | 0.23 U | 0.25 U | 0.23 U | 0.2 U | 0.22 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-793 | SB-793 | SB-793 | SB-793 | SB-794 | SB-794 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-793-03 | D-SB-793-05 | D-SB-793-07 | D-SB-793-09 | D-SB-794-03 | D-SB-794-05 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | 1.1 U | 1 U | 1.1 U | 1 U | 0.93 U | 1 U |
| ISOPROPYLBENZENE | 0.15 U | 0.14 U | 0.15 U | 0.14 U | 0.12 U | 0.13 U |
| M+P-XYLENES | 1.1 U | 1 U | 1.1 U | 1 U | 0.93 U | 1 U |
| METHYL TERT-BUTYL ETHER | 0.39 UJ | 0.38 UJ | 0.41 UJ | 0.37 UJ | 0.33 UJ | 0.36 UJ |
| METHYLENE CHLORIDE | 0.93 B | 0.83 B | 1.2 B | 0.76 B | 0.52 U | 0.56 U |
| NAPHTHALENE | 1.1 B | 0.75 B | 0.84 B | 0.76 B | 0.15 U | 0.16 U |
| N-BUTYLBENZENE | 0.21 U | 0.2 U | 0.22 U | 0.2 U | 0.18 U | 0.19 U |
| N-PROPYLBENZENE | 0.37 U | 0.35 U | 0.38 U | 0.35 U | 0.31 U | 0.33 U |
| O-XYLENE | 0.32 U | 0.31 U | 0.33 U | 0.3 U | 0.27 U | 0.29 U |
| SEC-BUTYLBENZENE | 0.16 U | 0.16 U | 0.17 U | 0.16 U | 0.14 U | 0.15 U |
| STYRENE | 0.14 U | 0.13 U | 0.14 U | 0.13 U | 0.12 U | 0.12 U |
| TERT-AMYL METHYL ETHER | 0.34 U | 0.32 U | 0.35 U | 0.32 U | 0.29 UJ | 0.31 UJ |
| TERT-BUTYLBENZENE | 0.27 U | 0.25 U | 0.28 U | 0.25 U | 0.23 U | 0.24 U |
| TERTIARY-BUTYL ALCOHOL | 50 B | 47 B | 51 B | 46 B | 5.9 UR | 6.3 UR |
| TETRACHLOROETHENE | 0.48 U | 0.45 U | 0.5 U | 0.45 U | 0.4 U | 0.43 U |
| TOLUENE | 0.25 U | 0.24 U | 0.26 U | 0.23 U | 0.21 U | 0.22 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.61 U | 0.59 U | 0.64 U | 0.58 U | 0.52 U | 0.56 U |
| TRANS-1,2-DICHLOROETHENE | 0.38 U | 0.36 U | 0.39 U | 0.36 U | 0.32 U | 0.34 U |
| TRANS-1,3-DICHLOROPROPENE | 0.49 U | 0.47 U | 0.51 U | 0.47 U | 0.42 U | 0.45 U |
| TRICHLOROETHENE | 0.38 U | 0.37 U | 0.4 U | 0.37 U | 0.33 U | 0.35 U |
| TRICHLOROFLUOROMETHANE | 0.31 U | 0.3 U | 0.32 U | 0.3 U | 0.26 U | 0.28 U |
| VINYL ACETATE | 0.23 U | 0.22 U | 0.24 U | 0.22 U | 0.19 U | 0.21 U |
| VINYL CHLORIDE | 0.36 U | 0.34 U | 0.37 U | 0.34 U | 0.3 U | 0.32 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 33 U | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 27 U | 27 U | 27 U | 26 U | 26 UJ | 27 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 12 U | 12 U | 12 U | 11 U | 11 UJ | 12 U |
| 2,4,5-TRICHLOROPHENOL | 31 U | 31 U | 31 U | 30 U | 29 UJ | 31 U |
| 2,4,6-TRICHLOROPHENOL | 98 U | 98 U | 98 U | 95 U | 94 UJ | 99 U |
| 2,4-DICHLOROPHENOL | 24 U | 25 U | 24 U | 24 U | 24 UJ | 25 U |
| 2,4-DIMETHYLPHENOL | 24 U | 25 U | 24 U | 24 U | 24 UJ | 25 U |
| 2,4-DINITROPHENOL | 98 U | 98 U | 98 U | 95 U | 94 UJ | 99 U |
| 2,4-DINITROTOLUENE | 33 U | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| 2,6-DINITROTOLUENE | 26 U | 26 U | 26 U | 25 U | 25 UJ | 26 U |
| 2-CHLORONAPHTHALENE | 4 U | 4.1 U | 4 U | 3.9 U | 3.9 UJ | 4.1 U |
| 2-CHLOROPHENOL | 33 U | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| 2-METHYLPHENOL | 98 U | 98 U | 98 U | 95 U | 94 UJ | 99 U |
| 2-NITROANILINE | 11 U | 11 U | 11 U | 11 U | 11 UJ | 11 U |
| 2-NITROPHENOL | 33 U | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 22 U | 22 U | 22 U | 21 U | 21 UJ | 22 U |
| 3-NITROANILINE | 20 U | 20 U | 20 U | 19 U | 19 UJ | 20 U |
| 4,6-DINITRO-2-METHYLPHENOL | 98 U | 98 U | 98 U | 95 U | 94 UJ | 99 U |
| 4-BROMOPHENYL PHENYL ETHER | 16 U | 16 U | 16 U | 15 U | 15 UJ | 16 U |
| 4-CHLORO-3-METHYLPHENOL | 26 U | 26 U | 26 U | 25 U | 25 UJ | 26 U |
| 4-CHLOROANILINE | 21 U | 21 U | 21 U | 20 U | 20 UJ | 21 U |
| 4-CHLOROPHENYL PHENYL ETHER | 16 U | 16 U | 16 U | 15 U | 15 UJ | 16 U |
| 4-METHYLPHENOL | 98 U | 98 U | 98 U | 95 U | 94 UJ | 99 U |
| 4-NITROANILINE | 32 U | 32 U | 32 U | 31 U | 31 UJ | 32 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-793 | SB-793 | SB-793 | SB-793 | SB-794 | SB-794 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-793-03 | D-SB-793-05 | D-SB-793-07 | D-SB-793-09 | D-SB-794-03 | D-SB-794-05 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 98 U | 98 U | 98 U | 95 U | 94 UJ | 99 U |
| ACETOPHENONE | 11 U | 11 U | 11 U | 11 U | 11 UJ | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 11 U | 11 U | 11 U | 11 U | 11 UJ | 11 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 15 U | 15 U | 15 U | 14 U | 14 UJ | 15 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 27 U | 27 U | 27 U | 26 U | 26 UJ | 27 U |
| BIS(2-CHLOROETHYL)ETHER | 2.4 U | 2.5 U | 2.4 U | 2.4 U | 2.4 UJ | 2.5 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 30 J | 23 U | 23 U | 32 J | 22 UJ | 24 U |
| BUTYL BENZYL PHTHALATE | 12 U | 12 U | 12 U | 12 U | 12 UJ | 12 U |
| CAPROLACTAM | 45 U | 46 U | 45 U | 44 U | 44 UJ | 46 U |
| CARBAZOLE | 33 U | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| DIBENZOFURAN | 4 U | 4.1 U | 4 U | 3.9 U | 35 J | 4.1 U |
| DIETHYL PHTHALATE | 20 U | 20 U | 20 U | 19 U | 19 UJ | 20 U |
| DIMETHYL PHTHALATE | 21 U | 21 U | 21 U | 20 U | 20 UJ | 21 U |
| DI-N-BUTYL PHTHALATE | 18 U | 18 U | 18 U | 18 U | 18 UJ | 19 U |
| DI-N-OCTYL PHTHALATE | 33 U | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| HEXACHLOROBENZENE | 2.6 U | 2.6 U | 2.6 U | 2.5 U | 2.5 UJ | 2.6 U |
| HEXACHLOROBUTADIENE | 33 U | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| HEXACHLOROCYCLOPENTADIENE | 33 U | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| HEXACHLOROETHANE | 11 U | 11 U | 11 U | 11 U | 11 UJ | 11 U |
| ISOPHORONE | 16 U | 16 U | 16 U | 15 U | 15 UJ | 16 U |
| NITROBENZENE | 2.7 U | 2.7 U | 2.7 U | 2.6 U | 2.6 UJ | 2.7 U |
| N-NITROSODIMETHYLAMINE | 20 U | 20 U | 20 U | 19 U | 19 UJ | 20 U |
| N-NITROSO-DI-N-PROPYLAMINE | 33 U | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| N-NITROSODIPHENYLAMINE | 26 U | 26 U | 26 U | 25 U | 25 UJ | 26 U |
| PENTACHLOROPHENOL | 98 U | 98 U | 98 U | 95 U | 94 UJ | 99 U |
| PHENOL | 33 U | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 4 U | 4.1 U | 4 U | 3.9 U | 59 J | 4.1 U |
| ACENAPHTHENE | 4 U | 4.1 U | 4 U | 3.9 U | 39 J | 4.1 U |
| ACENAPHTHYLENE | 4 U | 4.1 U | 4 U | 3.9 U | 3.9 UJ | 4.1 U |
| ANTHRACENE | 4 U | 4.1 U | 4 U | 3.9 U | 48 J | 4.1 U |
| BAP EQUIVALENT-HALFND | 22.569 | 4.1 U | 4 U | 3.9 U | 137.41 | 4.1 U |
| BAP EQUIVALENT-POS | 20.569 | 4.1 U | 4 U | 3.9 U | 135.46 | 4.1 U |
| BENZO(A)ANTHRACENE | 17 | 4.1 U | 4 U | 3.9 U | 110 J | 4.1 U |
| BENZO(A)PYRENE | 16 | 4.1 U | 4 U | 3.9 U | 100 J | 4.1 U |
| BENZO(B)FLUORANTHENE | 18 | 4.1 U | 4 U | 3.9 U | 160 J | 4.1 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 10 | 4.1 U | 4 U | 3.9 U | 75 J | 4.1 U |
| BENZO(K)FLUORANTHENE | 13 | 4.1 U | 4 U | 3.9 U | 63 J | 4.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-793 | SB-793 | SB-793 | SB-793 | SB-794 | SB-794 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-793-03 | D-SB-793-05 | D-SB-793-07 | D-SB-793-09 | D-SB-794-03 | D-SB-794-05 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 19 | 1.4 U | 1.3 U | 1.3 U | 130 J | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 4 U | 4.1 U | 4 U | 3.9 U | 3.9 UJ | 4.1 U |
| FLUORANTHENE | 36 | 4.1 U | 4 U | 3.9 U | 210 J | 4.1 U |
| FLUORENE | 4 U | 4.1 U | 4 U | 3.9 U | 38 J | 4.1 U |
| INDENO(1,2,3-CD)PYRENE | 9.2 | 4.1 U | 4 U | 3.9 U | 77 J | 4.1 U |
| NAPHTHALENE | 4 U | 4.1 U | 4 U | 3.9 U | 47 J | 4.1 U |
| PHENANTHRENE | 22 | 4.1 U | 4 U | 3.9 U | 190 J | 4.1 U |
| PYRENE | 27 | 4.1 U | 4 U | 3.9 U | 170 J | 4.1 U |
| TOTAL PAHS | 187.2 | 0 U | 0 U | 0 U | 1516 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | 0.76 U | 7.6 U | 0.76 U | 0.74 U | 3.7 U | 0.77 U |
| 4,4'-DDE | 0.48 U | 4.8 U | 0.48 U | 0.46 U | 2.3 U | 0.48 U |
| 4,4'-DDT | 0.77 U | 7.8 U | 0.77 U | 0.75 U | 3.7 U | 0.78 U |
| ALDRIN | 1.5 U | 15 U | 1.5 U | 1.4 U | 7.1 U | 1.5 U |
| ALPHA-BHC | 0.89 U | 9 U | 0.89 U | 0.87 UJ | 4.3 UJ | 0.91 UJ |
| ALPHA-CHLORDANE | 1.1 U | 12 U | 1.1 U | 1.1 U | 5.5 U | 1.2 U |
| AROCLOR-1016 | 26 U | 26 U | 26 U | 25 U | 25 U | 26 U |
| AROCLOR-1221 | 20 U | 20 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1232 | 17 U | 17 U | 17 U | 17 U | 17 U | 17 U |
| AROCLOR-1242 | 16 U | 16 U | 16 U | 15 U | 15 U | 16 U |
| AROCLOR-1248 | 21 U | 21 U | 21 U | 20 U | 20 U | 21 U |
| AROCLOR-1254 | 21 U | 21 U | 21 U | 20 U | 20 U | 21 U |
| AROCLOR-1260 | 21 U | 21 U | 21 U | 20 U | 20 U | 21 U |
| BETA-BHC | 1.3 U | 14 U | 1.3 U | 1.3 U | 6.5 U | 1.4 U |
| DELTA-BHC | 1.5 U | 15 U | 1.5 U | 1.4 U | 7.1 U | 1.5 U |
| DIELDRIN | 0.57 U | 5.8 U | 0.57 U | 0.56 U | 2.8 U | 0.58 U |
| ENDOSULFAN I | 0.64 U | 6.4 U | 0.63 U | 0.62 U | 3.1 U | 0.65 U |
| ENDOSULFAN II | 1 U | 10 U | 1 U | 0.98 U | 4.8 U | 1 U |
| ENDOSULFAN SULFATE | 1.1 U | 11 U | 1.1 U | 1 U | 5.1 U | 1.1 U |
| ENDRIN | 0.61 U | 6.2 U | 0.61 U | 0.6 U | 2.9 U | 0.62 U |
| ENDRIN ALDEHYDE | 1.2 U | 12 U | 1.2 U | 1.2 U | 5.9 U | 1.2 U |
| ENDRIN KETONE | 0.77 U | 7.8 U | 0.77 U | 0.75 U | 3.7 U | 0.78 U |
| GAMMA-BHC (LINDANE) | 0.9 U | 9.1 U | 0.9 U | 0.88 U | 4.4 U | 0.92 U |
| GAMMA-CHLORDANE | 0.51 U | 5.2 U | 0.51 U | 0.5 U | 2.5 U | 0.52 U |
| HEPTACHLOR | 1.3 UJ | 14 UJ | 1.3 UJ | 1.3 U | 6.5 U | 1.4 U |
| HEPTACHLOR EPOXIDE | 0.98 U | 9.8 U | 0.98 U | 0.95 U | 4.7 U | 0.99 U |
| METHOXYCHLOR | 1.8 UJ | 18 UJ | 1.8 UJ | 1.8 U | 8.8 U | 1.9 U |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 23 U | 230 U | 23 U | 23 U | 110 U | 24 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 0.3 B | 0.12 B | 0.15 B | 0.3 B | 0.28 B | 0.18 B |
| ARSENIC | 5.6 L | 3.6 L | 4.1 L | 3.6 J | 5.5 J | 7 J |
| BARIUM | 26.5 | 15.6 | 10.7 | 15.7 | 40.2 | 11.3 |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-793 | SB-793 | SB-793 | SB-793 | SB-794 | SB-794 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-793-03 | D-SB-793-05 | D-SB-793-07 | D-SB-793-09 | D-SB-794-03 | D-SB-794-05 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 2.2 J | 0.92 J | 1.4 J | 2.6 J | 2.3 J | 1 J |
| CADMIUM | 0.3 B | 0.0096 UL | 0.0095 UL | 0.028 B | 0.2 B | 0.02 B |
| CHROMIUM | 20.1 | 18.7 | 23.5 | 27.3 J | 19.4 J | 25.9 J |
| COBALT | 15.7 | 5.3 | 4.7 | 18.2 J | 30 J | 4.4 J |
| COPPER | 32.8 | 21.5 | 26.2 | 27.8 J | 27.7 J | 23.1 J |
| IRON | 25900 | 27600 | 29300 | 35600 J | 30900 J | 36000 J |
| LEAD | 26.4 | 4.7 | 3.7 | 4 | 33.3 | 4.8 |
| MANGANESE | 69.5 J | 15.2 J | 20.4 J | 69.4 J | 326 J | 28.2 J |
| MERCURY | 0.47 | 0.018 U | 0.018 U | 0.018 U | 0.7 | 0.019 U |
| MOLYBDENUM | 0.49 | 0.55 | 0.4 | 0.59 | 0.63 | 0.53 |
| NICKEL | 34.2 | 10.2 | 10.9 | 39.4 J | 40.8 J | 14 J |
| SELENIUM | 3 L | 0.73 L | 0.81 L | 1.3 L | 1.8 L | 0.49 J |
| SILVER | 0.37 | 0.02 U | 0.02 U | 0.019 U | 0.88 | 0.02 U |
| THALLIUM | 0.069 J | 0.069 J | 0.044 J | 0.1 J | 0.077 U | 0.05 J |
| VANADIUM | 30.8 | 41.9 | 39.1 | 46 J | 29.9 J | 48.7 J |
| ZINC | 68.6 | 20.3 | 17.5 | 43.3 L | 94.1 L | 21.7 L |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 47000 | 7900 J | 5300 J | 7700 J | 70000 | 8400 J |
| GASOLINE RANGE ORGANICS | 56 U | 57 U | 56 U | 55 U | 54 U | 57 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | 0.42 J | 0.33 U | 0.48 J | 0.32 U | 0.32 U | 0.34 U |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-794 | SB-794 | SB-795 | SB-795 | SB-795 | SB-795 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-794-07 | D-SB-794-09 | D-SB-795-03 | D-SB-795-05 | D-SB-795-07 | D-SB-795-09 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.57 U | 0.53 U | 0.6 U | 0.72 U | 0.51 U | 0.57 U |
| 1,1,1-TRICHLOROETHANE | 0.51 U | 0.48 U | 0.54 U | 0.65 U | 0.46 U | 0.51 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.31 U | 0.29 U | 0.33 U | 0.4 U | 0.28 U | 0.31 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U | 1.1 U | 1.3 U | 1.5 U | 1.1 U | 1.2 U |
| 1,1-DICHLOROETHANE | 0.33 U | 0.31 U | 0.35 U | 0.42 U | 0.3 U | 0.33 U |
| 1,1-DICHLOROETHENE | 0.48 U | 0.44 U | 0.5 U | 0.61 U | 0.43 U | 0.48 U |
| 1,1-DICHLOROPROPENE | 0.28 U | 0.26 U | 0.29 U | 0.35 U | 0.25 U | 0.28 U |
| 1,2,3-TRICHLOROBENZENE | 0.35 U | 0.32 U | 0.37 U | 0.44 U | 0.31 U | 0.35 U |
| 1,2,3-TRICHLOROPROPANE | 0.83 U | 0.77 U | 0.87 U | 1 U | 0.74 U | 0.83 U |
| 1,2,3-TRIMETHYLBENZENE | 0.16 U | 0.15 U | 0.16 U | 0.2 U | 0.14 U | 0.16 U |
| 1,2,4-TRICHLOROBENZENE | 0.25 U | 0.23 U | 0.26 U | 0.31 U | 0.22 U | 0.25 U |
| 1,2,4-TRIMETHYLBENZENE | 0.6 U | 0.55 U | 0.63 U | 0.76 U | 0.53 U | 0.6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U | 1.1 U | 1.3 U | 1.5 U | 1.1 U | 1.2 U |
| 1,2-DIBROMOETHANE | 0.46 U | 0.43 U | 0.48 U | 0.58 U | 0.41 U | 0.46 U |
| 1,2-DICHLOROBENZENE | 0.33 U | 0.31 U | 0.35 U | 0.42 U | 0.3 U | 0.33 U |
| 1,2-DICHLOROETHANE | 0.31 U | 0.29 U | 0.33 U | 0.4 U | 0.28 U | 0.31 U |
| 1,2-DICHLOROPROPANE | 0.63 U | 0.59 U | 0.67 U | 0.8 U | 0.57 U | 0.63 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.32 U | 0.3 U | 0.34 U | 0.41 U | 0.29 U | 0.32 U |
| 1,3-DICHLOROPROPANE | 0.31 U | 0.29 U | 0.33 U | 0.4 U | 0.28 U | 0.31 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.61 U | 0.56 U | 0.64 U | 0.77 U | 0.54 U | 0.61 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.86 U | 0.8 U | 0.91 U | 1.1 U | 0.77 U | 0.86 U |
| 2-BUTANONE | 1.7 J | 1.2 U | 1.9 J | 15 | 2.2 J | 1.3 U |
| 2-CHLOROETHYL VINYL ETHER | 1.3 U | 1.2 U | 1.4 U | 1.6 U | 1.2 U | 1.3 U |
| 2-CHLOROTOLUENE | 0.37 U | 0.34 U | 0.39 U | 0.47 U | 0.33 U | 0.37 U |
| 2-HEXANONE | 0.58 U | 0.54 U | 0.61 U | 0.73 U | 0.52 U | 0.58 U |
| 4-CHLOROTOLUENE | 0.38 U | 0.35 U | 0.4 U | 0.48 U | 0.34 U | 0.38 U |
| 4-ISOPROPYLTOLUENE | 0.19 U | 0.18 U | 0.2 U | 0.24 U | 0.17 U | 0.19 U |
| 4-METHYL-2-PENTANONE | 0.5 U | 0.46 U | 0.52 U | 0.63 U | 0.44 U | 0.5 U |
| ACETONE | 15 B | 5.4 U | 9.2 B | 70 B | 15 B | 5.8 U |
| BENZENE | 0.21 U | 0.2 U | 0.22 U | 0.27 U | 0.19 U | 0.21 U |
| BROMOBENZENE | 0.3 U | 0.28 U | 0.32 U | 0.38 U | 0.27 U | 0.3 U |
| BROMOCHLOROMETHANE | 0.65 U | 0.61 U | 0.69 U | 0.83 U | 0.58 U | 0.65 U |
| BROMODICHLOROMETHANE | 0.26 U | 0.24 U | 0.27 U | 0.33 U | 0.23 U | 0.26 U |
| BROMOFORM | 0.3 U | 0.28 U | 0.32 U | 0.38 U | 0.27 U | 0.3 U |
| BROMOMETHANE | 0.5 U | 0.46 U | 0.52 U | 0.63 U | 0.44 U | 0.5 U |
| CARBON DISULFIDE | 0.87 B | 0.38 U | 0.99 B | 2 B | 0.89 B | 0.85 B |
| CARBON TETRACHLORIDE | 0.34 U | 0.32 U | 0.36 U | 0.43 U | 0.3 U | 0.34 U |
| CHLOROBENZENE | 0.3 U | 0.28 U | 0.32 U | 0.38 U | 0.27 U | 0.3 U |
| CHLORODIBROMOMETHANE | 0.51 U | 0.47 U | 0.53 U | 0.64 U | 0.45 U | 0.51 U |
| CHLOROETHANE | 0.79 U | 0.73 U | 0.83 U | 1 U | 0.71 U | 0.79 U |
| CHLOROFORM | 0.27 U | 0.25 U | 0.28 U | 0.34 U | 0.24 U | 0.27 U |
| CHLOROMETHANE | 0.38 U | 0.35 U | 0.4 U | 0.48 U | 0.34 U | 0.38 U |
| CIS-1,2-DICHLOROETHENE | 0.33 U | 0.31 U | 0.35 U | 0.42 U | 0.3 U | 0.33 U |
| CIS-1,3-DICHLOROPROPENE | 0.31 U | 0.29 U | 0.33 U | 0.4 U | 0.28 U | 0.31 U |
| DIBROMOMETHANE | 0.58 U | 0.54 U | 0.61 U | 0.73 U | 0.52 U | 0.58 U |
| DICHLORODIFLUOROMETHANE | 0.46 U | 0.43 U | 0.48 U | 0.58 U | 0.41 U | 0.46 U |
| DIISOPROPYL ETHER | 1.4 U | 1.3 U | 1.5 U | 1.7 U | 1.2 U | 1.4 U |
| ETHYL TERT-BUTYL ETHER | 0.2 U | 0.19 U | 0.21 U | 0.26 U | 0.18 U | 0.2 U |
| ETHYLBENZENE | 0.24 U | 0.22 U | 0.25 U | 0.3 U | 0.21 U | 0.24 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-794 | SB-794 | SB-795 | SB-795 | SB-795 | SB-795 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-794-07 | D-SB-794-09 | D-SB-795-03 | D-SB-795-05 | D-SB-795-07 | D-SB-795-09 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| HEXACHLOROBUTADIENE | 1.1 U | 1 U | 1.2 U | 1.4 U | 0.99 U | 1.1 U |
| ISOPROPYLBENZENE | 0.15 U | 0.14 U | 0.15 U | 0.19 U | 0.13 U | 0.15 U |
| M+P-XYLENES | 1.1 U | 1 U | 1.2 U | 1.4 U | 0.99 U | 1.1 U |
| METHYL TERT-BUTYL ETHER | 0.4 UJ | 0.37 UJ | 0.42 UJ | 0.5 UJ | 0.35 UJ | 0.4 UJ |
| METHYLENE CHLORIDE | 0.62 U | 0.57 U | 2.7 B | 0.78 U | 0.55 U | 0.93 B |
| NAPHTHALENE | 0.8 B | 0.72 B | 0.84 B | 1 B | 0.16 U | 0.8 B |
| N-BUTYLBENZENE | 0.21 U | 0.2 U | 0.22 U | 0.27 U | 0.19 U | 0.21 U |
| N-PROPYLBENZENE | 0.37 U | 0.34 U | 0.39 U | 0.47 U | 0.33 U | 0.37 U |
| O-XYLENE | 0.32 U | 0.3 U | 0.34 U | 0.41 U | 0.29 U | 0.32 U |
| SEC-BUTYLBENZENE | 0.17 U | 0.15 U | 0.17 U | 0.21 U | 0.15 U | 0.17 U |
| STYRENE | 0.14 U | 0.13 U | 0.15 U | 0.17 U | 0.12 U | 0.14 U |
| TERT-AMYL METHYL ETHER | 0.34 UJ | 0.32 UJ | 0.36 UJ | 0.43 UJ | 0.3 UJ | 0.34 U |
| TERT-BUTYLBENZENE | 0.27 U | 0.25 U | 0.28 U | 0.34 U | 0.24 U | 0.27 U |
| TERTIARY-BUTYL ALCOHOL | 7 UR | 45 B | 51 B | 62 B | 43 B | 49 B |
| TETRACHLOROETHENE | 0.48 U | 0.44 U | 0.5 U | 0.61 U | 0.43 U | 0.48 U |
| TOLUENE | 0.25 U | 0.23 U | 0.26 U | 0.31 U | 0.22 U | 0.25 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.62 U | 0.57 U | 0.65 U | 0.78 U | 0.55 U | 0.62 U |
| TRANS-1,2-DICHLOROETHENE | 0.38 U | 0.35 U | 0.4 U | 0.48 U | 0.34 U | 0.38 U |
| TRANS-1,3-DICHLOROPROPENE | 0.5 U | 0.46 U | 0.52 U | 0.63 U | 0.44 U | 0.5 U |
| TRICHLOROETHENE | 0.39 U | 0.36 U | 0.41 U | 0.49 U | 0.35 U | 0.39 U |
| TRICHLOROFLUOROMETHANE | 0.31 U | 0.29 U | 0.33 U | 0.4 U | 0.28 U | 0.31 U |
| VINYL ACETATE | 0.23 U | 0.21 U | 0.24 U | 0.29 U | 0.21 U | 0.23 U |
| VINYL CHLORIDE | 0.36 U | 0.33 U | 0.38 U | 0.45 U | 0.32 U | 0.36 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | 34 U | 31 U | 33 U | 40 U | 34 U | 32 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 27 U | 25 U | 27 U | 32 U | 27 U | 26 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 12 U | 11 U | 12 U | 14 U | 12 U | 11 U |
| 2,4,5-TRICHLOROPHENOL | 31 U | 29 U | 30 U | 37 U | 31 U | 29 U |
| 2,4,6-TRICHLOROPHENOL | 99 U | 92 U | 97 U | 120 U | 100 U | 94 U |
| 2,4-DICHLOROPHENOL | 25 U | 23 U | 24 U | 29 U | 25 U | 24 U |
| 2,4-DIMETHYLPHENOL | 25 U | 23 U | 24 U | 29 U | 25 U | 24 U |
| 2,4-DINITROPHENOL | 99 U | 92 U | 97 U | 120 U | 100 U | 94 U |
| 2,4-DINITROTOLUENE | 34 U | 31 U | 33 U | 40 U | 34 U | 32 U |
| 2,6-DINITROTOLUENE | 26 U | 24 U | 25 U | 31 U | 26 U | 25 U |
| 2-CHLORONAPHTHALENE | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| 2-CHLOROPHENOL | 34 U | 31 U | 33 U | 40 U | 34 U | 32 U |
| 2-METHYLPHENOL | 99 U | 92 U | 97 U | 120 U | 100 U | 94 U |
| 2-NITROANILINE | 11 U | 10 U | 11 U | 13 U | 11 U | 11 U |
| 2-NITROPHENOL | 34 U | 31 U | 33 U | 40 U | 34 U | 32 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 22 U | 21 U | 22 U | 27 U | 22 U | 21 U |
| 3-NITROANILINE | 20 U | 18 U | 19 U | 24 U | 20 U | 19 U |
| 4,6-DINITRO-2-METHYLPHENOL | 99 U | 92 U | 97 U | 120 U | 100 U | 94 U |
| 4-BROMOPHENYL PHENYL ETHER | 16 U | 15 U | 16 U | 19 U | 16 U | 15 U |
| 4-CHLORO-3-METHYLPHENOL | 26 U | 24 U | 25 U | 31 U | 26 U | 25 U |
| 4-CHLOROANILINE | 21 U | 20 U | 21 U | 25 U | 21 U | 20 U |
| 4-CHLOROPHENYL PHENYL ETHER | 16 U | 15 U | 16 U | 19 U | 16 U | 15 U |
| 4-METHYLPHENOL | 99 U | 92 U | 97 U | 120 U | 100 U | 94 U |
| 4-NITROANILINE | 32 U | 30 U | 31 U | 38 U | 32 U | 31 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-794 | SB-794 | SB-795 | SB-795 | SB-795 | SB-795 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-794-07 | D-SB-794-09 | D-SB-795-03 | D-SB-795-05 | D-SB-795-07 | D-SB-795-09 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | | | |
| 4-NITROPHENOL | 99 U | 92 U | 97 U | 120 U | 100 U | 94 U |
| ACETOPHENONE | 11 U | 11 U | 11 U | 14 U | 11 U | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 11 U | 10 U | 11 U | 13 U | 11 U | 11 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 15 U | 14 U | 15 U | 18 U | 15 U | 14 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 27 U | 25 U | 27 U | 32 U | 27 U | 26 U |
| BIS(2-CHLOROETHYL)ETHER | 2.5 U | 2.3 U | 2.4 U | 2.9 U | 2.5 U | 2.4 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 24 U | 23 J | 23 J | 28 U | 24 U | 22 U |
| BUTYL BENZYL PHTHALATE | 12 U | 12 U | 12 U | 15 U | 36 J | 12 U |
| CAPROLACTAM | 46 U | 43 U | 45 U | 55 U | 46 U | 44 U |
| CARBAZOLE | 34 U | 31 U | 33 U | 40 U | 34 U | 32 U |
| DIBENZOFURAN | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| DIETHYL PHTHALATE | 20 U | 18 U | 19 U | 24 U | 20 U | 19 U |
| DIMETHYL PHTHALATE | 21 U | 20 U | 21 U | 25 U | 21 U | 20 U |
| DI-N-BUTYL PHTHALATE | 19 U | 17 U | 18 U | 22 U | 19 U | 18 U |
| DI-N-OCTYL PHTHALATE | 34 U | 31 U | 33 U | 40 U | 34 U | 32 U |
| HEXACHLOROBENZENE | 2.6 U | 2.4 U | 2.5 U | 3.1 U | 2.6 U | 2.5 U |
| HEXACHLOROBUTADIENE | 34 U | 31 U | 33 U | 40 U | 34 U | 32 U |
| HEXACHLOROCYCLOPENTADIENE | 34 U | 31 U | 33 U | 40 U | 34 U | 32 U |
| HEXACHLOROETHANE | 11 U | 10 U | 11 U | 13 U | 11 U | 11 U |
| ISOPHORONE | 16 U | 15 U | 16 U | 19 U | 16 U | 15 U |
| NITROBENZENE | 2.7 U | 2.5 U | 2.7 U | 3.2 U | 2.7 U | 2.6 U |
| N-NITROSODIMETHYLAMINE | 20 U | 18 U | 19 U | 24 U | 20 U | 19 U |
| N-NITROSO-DI-N-PROPYLAMINE | 34 U | 31 U | 33 U | 40 U | 34 U | 32 U |
| N-NITROSODIPHENYLAMINE | 26 U | 24 U | 25 U | 31 U | 26 U | 25 U |
| PENTACHLOROPHENOL | 99 U | 92 U | 97 U | 120 U | 100 U | 94 U |
| PHENOL | 34 U | 31 U | 33 U | 40 U | 34 U | 32 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| ACENAPHTHENE | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| ACENAPHTHYLENE | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| ANTHRACENE | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 4.1 U | 3.8 U | 19.62065 | 7.3153 | 4.1 U | 3.9 U |
| BAP EQUIVALENT-POS | 4.1 U | 3.8 U | 17 | 1.9 | 4.1 U | 3.9 U |
| BENZO(A)ANTHRACENE | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| BENZO(A)PYRENE | 4.1 U | 3.8 U | 17 | 4.9 U | 4.1 U | 3.9 U |
| BENZO(B)FLUORANTHENE | 4.1 U | 3.8 U | 4 U | 19 | 4.1 U | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| BENZO(K)FLUORANTHENE | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-794 | SB-794 | SB-795 | SB-795 | SB-795 | SB-795 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-794-07 | D-SB-794-09 | D-SB-795-03 | D-SB-795-05 | D-SB-795-07 | D-SB-795-09 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.4 U | 1.3 U | 1.3 U | 1.6 U | 1.4 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| FLUORANTHENE | 4.1 U | 3.8 U | 10 | 10 | 4.1 U | 3.9 U |
| FLUORENE | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| NAPHTHALENE | 4.1 U | 3.8 U | 11 | 4.9 U | 4.1 U | 3.9 U |
| PHENANTHRENE | 4.1 U | 3.8 U | 9 | 4.9 U | 4.1 U | 3.9 U |
| PYRENE | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U | 3.9 U |
| TOTAL PAHS | 0 U | 0 U | 47 | 29 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | 0.77 U | 0.71 U | 0.75 UJ | 0.91 UJ | 0.77 UJ | 0.73 UJ |
| 4,4'-DDE | 0.48 U | 0.45 U | 0.47 UJ | 0.58 UJ | 0.49 UJ | 0.46 UJ |
| 4,4'-DDT | 0.78 U | 0.73 U | 0.76 U | 0.93 U | 0.78 U | 0.74 U |
| ALDRIN | 1.5 U | 1.4 U | 1.5 UJ | 1.8 UJ | 1.5 UJ | 1.4 UJ |
| ALPHA-BHC | 0.91 UJ | 0.84 UJ | 0.88 UJ | 1.1 UJ | 0.91 UJ | 0.86 UJ |
| ALPHA-CHLORDANE | 1.2 U | 1.1 U | 1.1 UJ | 1.4 UJ | 1.2 UJ | 1.1 UJ |
| AROCLOR-1016 | 26 U | 24 U | 25 U | 31 U | 26 U | 25 U |
| AROCLOR-1221 | 20 U | 18 U | 19 U | 24 U | 20 U | 19 U |
| AROCLOR-1232 | 17 U | 16 U | 17 U | 21 U | 17 U | 16 U |
| AROCLOR-1242 | 16 U | 15 U | 16 U | 19 U | 16 U | 15 U |
| AROCLOR-1248 | 21 U | 20 U | 21 U | 25 U | 21 U | 20 U |
| AROCLOR-1254 | 21 U | 20 U | 21 U | 25 U | 21 U | 20 U |
| AROCLOR-1260 | 21 U | 20 U | 21 U | 25 U | 21 U | 20 U |
| BETA-BHC | 1.4 U | 1.3 U | 1.3 UJ | 1.6 UJ | 1.4 UJ | 1.3 UJ |
| DELTA-BHC | 1.5 U | 1.4 U | 1.5 UJ | 1.8 UJ | 1.5 UJ | 1.4 UJ |
| DIELDRIN | 0.58 U | 0.54 U | 0.57 U | 0.69 U | 0.59 U | 0.55 U |
| ENDOSULFAN I | 0.65 U | 0.6 U | 0.63 U | 0.77 U | 0.65 U | 0.61 U |
| ENDOSULFAN II | 1 U | 0.95 U | 0.99 U | 1.2 U | 1 U | 0.97 U |
| ENDOSULFAN SULFATE | 1.1 U | 1 U | 1.1 U | 1.3 U | 1.1 U | 1 U |
| ENDRIN | 0.62 U | 0.58 U | 0.61 U | 0.74 U | 0.62 U | 0.59 U |
| ENDRIN ALDEHYDE | 1.2 U | 1.2 U | 1.2 U | 1.5 U | 1.2 U | 1.2 U |
| ENDRIN KETONE | 0.78 U | 0.73 U | 0.76 U | 0.93 U | 0.78 U | 0.74 U |
| GAMMA-BHC (LINDANE) | 0.92 U | 0.85 U | 0.9 UJ | 1.1 UJ | 0.92 UJ | 0.87 UJ |
| GAMMA-CHLORDANE | 0.52 U | 0.48 U | 0.51 UJ | 0.62 UJ | 0.52 UJ | 0.49 UJ |
| HEPTACHLOR | 1.4 U | 1.3 U | 1.3 U | 1.6 U | 1.4 U | 1.3 U |
| HEPTACHLOR EPOXIDE | 0.99 U | 0.92 U | 0.97 UJ | 1.2 UJ | 1 UJ | 0.94 UJ |
| METHOXYCHLOR | 1.9 U | 1.7 U | 1.8 U | 2.2 U | 1.9 U | 1.8 U |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 24 U | 22 U | 23 U | 28 U | 24 U | 22 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 0.3 B | 0.075 B | 0.29 B | 0.087 B | 0.24 B | 0.3 B |
| ARSENIC | 6.1 J | 5.6 J | 5.8 J | 3.9 J | 5.7 J | 4.4 J |
| BARIUM | 8.1 | 11.6 | 25.3 | 20.5 | 23.7 | 12.6 |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-794 | SB-794 | SB-795 | SB-795 | SB-795 | SB-795 |
|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-794-07 | D-SB-794-09 | D-SB-795-03 | D-SB-795-05 | D-SB-795-07 | D-SB-795-09 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 |
| **METALS (CONTINUED) (MG/KG)** | | | | | | |
| BERYLLIUM | 1.1 J | 0.46 J | 6.6 J | 0.97 J | 4.2 J | 1.3 J |
| CADMIUM | 0.0097 UL | 0.009 UL | 0.042 B | 0.015 B | 0.11 B | 0.012 B |
| CHROMIUM | 29.7 J | 8.1 J | 25.6 J | 16.7 J | 20.9 J | 21.7 J |
| COBALT | 6 J | 3 J | 27.3 J | 6.7 J | 20.7 J | 7.7 J |
| COPPER | 29.7 J | 6.6 J | 40.9 J | 18.1 J | 32.9 J | 16.6 J |
| IRON | 46500 J | 4650 J | 39700 J | 20800 J | 37200 J | 27300 J |
| LEAD | 4.6 | 4.1 | 12.4 | 8.2 | 10.5 | 6.4 |
| MANGANESE | 44.9 J | 5.9 J | 110 J | 28.1 J | 74.5 J | 74 J |
| MERCURY | 0.019 U | 0.017 U | 0.018 U | 0.022 U | 0.023 J | 0.018 U |
| MOLYBDENUM | 0.57 | 0.073 U | 0.45 | 0.86 | 0.39 | 0.41 |
| NICKEL | 16.7 J | 4.7 J | 53.2 J | 13.3 J | 42.5 J | 20.2 J |
| SELENIUM | 0.63 L | 2.1 L | 4.1 L | 0.69 J | 4.1 L | 1.4 L |
| SILVER | 0.02 U | 0.018 U | 0.028 B | 0.024 U | 0.034 B | 0.019 U |
| THALLIUM | 0.036 J | 0.11 J | 0.079 J | 0.084 J | 0.09 J | 0.08 J |
| VANADIUM | 55 J | 7.9 J | 42.7 J | 33.3 J | 32.7 J | 38.5 J |
| ZINC | 19.2 L | 7 L | 123 L | 28.1 L | 108 L | 24.6 L |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 5100 J | 3200 UJ | 11000 J | 33000 | 4200 J | 5300 J |
| GASOLINE RANGE ORGANICS | 57 U | 53 UJ | 56 UJ | 68 UJ | 57 UJ | 54 UJ |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | 0.45 J | 0.33 J | 0.43 J | 0.51 J | 0.34 U | 0.32 U |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-796 | SB-796 | SB-796 | SB-796 |
|---|---|---|---|---|
| SAMPLE ID | D-SB-796-03 | D-SB-796-05 | D-SB-796-07 | D-SB-796-09 |
| SAMPLE DATE | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.48 U | 0.61 U | 0.59 U | 0.55 U |
| 1,1,1-TRICHLOROETHANE | 0.43 U | 0.55 U | 0.53 U | 0.5 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.26 U | 0.33 U | 0.32 U | 0.3 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1 U | 1.3 U | 1.2 U | 1.2 U |
| 1,1-DICHLOROETHANE | 0.28 U | 0.35 U | 0.34 U | 0.32 U |
| 1,1-DICHLOROETHENE | 0.4 U | 0.51 U | 0.49 U | 0.46 U |
| 1,1-DICHLOROPROPENE | 0.23 U | 0.3 U | 0.28 U | 0.27 U |
| 1,2,3-TRICHLOROBENZENE | 0.29 U | 0.37 U | 0.36 U | 0.34 U |
| 1,2,3-TRICHLOROPROPANE | 0.69 U | 0.89 U | 0.85 U | 0.8 U |
| 1,2,3-TRIMETHYLBENZENE | 0.13 U | 0.17 U | 0.16 U | 0.15 U |
| 1,2,4-TRICHLOROBENZENE | 0.21 U | 0.27 U | 0.26 U | 0.24 U |
| 1,2,4-TRIMETHYLBENZENE | 0.5 U | 0.64 U | 0.61 U | 0.58 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1 U | 1.3 U | 1.2 U | 1.2 U |
| 1,2-DIBROMOETHANE | 0.38 U | 0.49 U | 0.47 U | 0.45 U |
| 1,2-DICHLOROBENZENE | 0.28 U | 0.35 U | 0.34 U | 0.32 U |
| 1,2-DICHLOROETHANE | 0.26 U | 0.33 U | 0.32 U | 0.3 U |
| 1,2-DICHLOROPROPANE | 0.53 U | 0.68 U | 0.65 U | 0.62 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.27 U | 0.34 U | 0.33 U | 0.31 U |
| 1,3-DICHLOROPROPANE | 0.26 U | 0.33 U | 0.32 U | 0.3 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.51 U | 0.65 U | 0.62 U | 0.59 U |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.72 U | 0.93 U | 0.89 U | 0.84 U |
| 2-BUTANONE | 2.7 J | 8.1 J | 1.3 U | 1.3 J |
| 2-CHLOROETHYL VINYL ETHER | 1.1 U | 1.4 U | 1.3 U | 1.2 U |
| 2-CHLOROTOLUENE | 0.31 U | 0.39 U | 0.38 U | 0.36 U |
| 2-HEXANONE | 0.48 U | 0.62 U | 0.6 U | 0.56 U |
| 4-CHLOROTOLUENE | 0.31 U | 0.4 U | 0.39 U | 0.37 U |
| 4-ISOPROPYLTOLUENE | 0.16 U | 0.21 U | 0.2 U | 0.19 U |
| 4-METHYL-2-PENTANONE | 0.41 U | 0.53 U | 0.51 U | 0.48 U |
| ACETONE | 35 B | 88 B | 16 B | 6.2 B |
| BENZENE | 0.18 U | 0.23 U | 0.22 U | 0.21 U |
| BROMOBENZENE | 0.25 U | 0.32 U | 0.31 U | 0.29 U |
| BROMOCHLOROMETHANE | 0.54 U | 0.7 U | 0.67 U | 0.63 U |
| BROMODICHLOROMETHANE | 0.21 U | 0.28 U | 0.26 U | 0.25 U |
| BROMOFORM | 0.25 U | 0.32 U | 0.31 U | 0.29 U |
| BROMOMETHANE | 0.41 U | 0.53 U | 0.51 U | 0.48 U |
| CARBON DISULFIDE | 0.78 B | 1.5 B | 0.88 B | 0.81 B |
| CARBON TETRACHLORIDE | 0.28 U | 0.36 U | 0.35 U | 0.33 U |
| CHLOROBENZENE | 0.25 U | 0.32 U | 0.31 U | 0.29 U |
| CHLORODIBROMOMETHANE | 0.42 U | 0.54 U | 0.52 U | 0.49 U |
| CHLOROETHANE | 0.66 U | 0.85 U | 0.81 U | 0.77 U |
| CHLOROFORM | 0.22 U | 0.29 U | 0.27 U | 0.26 U |
| CHLOROMETHANE | 0.31 U | 0.4 U | 0.39 U | 0.37 U |
| CIS-1,2-DICHLOROETHENE | 0.28 U | 0.35 U | 0.34 U | 0.32 U |
| CIS-1,3-DICHLOROPROPENE | 0.26 U | 0.33 U | 0.32 U | 0.3 U |
| DIBROMOMETHANE | 0.48 U | 0.62 U | 0.6 U | 0.56 U |
| DICHLORODIFLUOROMETHANE | 0.38 U | 0.49 U | 0.47 U | 0.45 U |
| DIISOPROPYL ETHER | 1.2 U | 1.5 U | 1.4 U | 1.3 U |
| ETHYL TERT-BUTYL ETHER | 0.17 U | 0.22 U | 0.21 U | 0.2 U |
| ETHYLBENZENE | 0.2 U | 0.26 U | 0.25 U | 0.23 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-796 | SB-796 | SB-796 | SB-796 |
|---|---|---|---|---|
| SAMPLE ID | D-SB-796-03 | D-SB-796-05 | D-SB-796-07 | D-SB-796-09 |
| SAMPLE DATE | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 |
| **VOLATILES (CONTINUED) (UG/KG)** | | | | |
| HEXACHLOROBUTADIENE | 0.92 U | 1.2 U | 1.1 U | 1.1 U |
| ISOPROPYLBENZENE | 0.12 U | 0.16 U | 0.15 U | 0.14 U |
| M+P-XYLENES | 0.92 U | 1.2 U | 1.1 U | 1.1 U |
| METHYL TERT-BUTYL ETHER | 0.33 UJ | 0.42 UJ | 0.41 UJ | 0.38 UJ |
| METHYLENE CHLORIDE | 0.75 B | 0.98 B | 1 B | 1 B |
| NAPHTHALENE | 0.7 B | 0.83 B | 0.83 B | 0.77 B |
| N-BUTYLBENZENE | 0.18 U | 0.23 U | 0.22 U | 0.21 U |
| N-PROPYLBENZENE | 0.31 U | 0.39 U | 0.38 U | 0.36 U |
| O-XYLENE | 0.27 U | 0.34 U | 0.33 U | 0.31 U |
| SEC-BUTYLBENZENE | 0.14 U | 0.18 U | 0.17 U | 0.16 U |
| STYRENE | 0.12 U | 0.15 U | 0.14 U | 0.13 U |
| TERT-AMYL METHYL ETHER | 0.28 U | 0.36 U | 0.35 U | 0.33 U |
| TERT-BUTYLBENZENE | 0.22 U | 0.29 U | 0.27 U | 0.26 U |
| TERTIARY-BUTYL ALCOHOL | 41 B | 52 B | 50 B | 47 B |
| TETRACHLOROETHENE | 0.4 U | 0.51 U | 0.49 U | 0.46 U |
| TOLUENE | 0.21 U | 0.27 U | 0.26 U | 0.24 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TOTAL XYLENES | 0.51 U | 0.66 U | 0.63 U | 0.6 U |
| TRANS-1,2-DICHLOROETHENE | 0.31 U | 0.4 U | 0.39 U | 0.37 U |
| TRANS-1,3-DICHLOROPROPENE | 0.41 U | 0.53 U | 0.51 U | 0.48 U |
| TRICHLOROETHENE | 0.32 U | 0.41 U | 0.4 U | 0.37 U |
| TRICHLOROFLUOROMETHANE | 0.26 U | 0.33 U | 0.32 U | 0.3 U |
| VINYL ACETATE | 0.19 U | 0.25 U | 0.24 U | 0.22 U |
| VINYL CHLORIDE | 0.3 U | 0.38 U | 0.37 U | 0.35 U |
| **SEMIVOLATILES (UG/KG)** | | | | |
| 1,1-BIPHENYL | 31 U | 37 U | 32 U | 31 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | 26 U | 30 U | 26 U | 25 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 11 U | 13 U | 11 U | 11 U |
| 2,4,5-TRICHLOROPHENOL | 29 U | 34 U | 29 U | 29 U |
| 2,4,6-TRICHLOROPHENOL | 93 U | 110 U | 93 U | 93 U |
| 2,4-DICHLOROPHENOL | 23 U | 27 U | 23 U | 23 U |
| 2,4-DIMETHYLPHENOL | 23 U | 27 U | 23 U | 23 U |
| 2,4-DINITROPHENOL | 93 U | 110 U | 93 U | 93 U |
| 2,4-DINITROTOLUENE | 31 U | 37 U | 32 U | 31 U |
| 2,6-DINITROTOLUENE | 24 U | 29 U | 25 U | 24 U |
| 2-CHLORONAPHTHALENE | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| 2-CHLOROPHENOL | 31 U | 37 U | 32 U | 31 U |
| 2-METHYLPHENOL | 93 U | 110 U | 93 U | 93 U |
| 2-NITROANILINE | 11 U | 12 U | 11 U | 11 U |
| 2-NITROPHENOL | 31 U | 37 U | 32 U | 31 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 21 U | 25 U | 21 U | 21 U |
| 3-NITROANILINE | 19 U | 22 U | 19 U | 19 U |
| 4,6-DINITRO-2-METHYLPHENOL | 93 U | 110 U | 93 U | 93 U |
| 4-BROMOPHENYL PHENYL ETHER | 15 U | 18 U | 15 U | 15 U |
| 4-CHLORO-3-METHYLPHENOL | 24 U | 29 U | 25 U | 24 U |
| 4-CHLOROANILINE | 20 U | 23 U | 20 U | 20 U |
| 4-CHLOROPHENYL PHENYL ETHER | 15 U | 18 U | 15 U | 15 U |
| 4-METHYLPHENOL | 93 U | 110 U | 93 U | 93 U |
| 4-NITROANILINE | 30 U | 36 U | 30 U | 30 U |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-796 | SB-796 | SB-796 | SB-796 |
|---|---|---|---|---|
| SAMPLE ID | D-SB-796-03 | D-SB-796-05 | D-SB-796-07 | D-SB-796-09 |
| SAMPLE DATE | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 |
| **SEMIVOLATILES (CONTINUED) (UG/KG)** | | | | |
| 4-NITROPHENOL | 93 U | 110 U | 93 U | 93 U |
| ACETOPHENONE | 11 U | 13 U | 11 U | 11 U |
| ANILINE | NA | NA | NA | NA |
| ATRAZINE | 11 U | 12 U | 11 U | 11 U |
| AZOBENZENE | NA | NA | NA | NA |
| BENZALDEHYDE | 14 U | 16 U | 14 U | 14 U |
| BENZIDINE | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 26 U | 30 U | 26 U | 25 U |
| BIS(2-CHLOROETHYL)ETHER | 2.3 U | 2.7 U | 2.3 U | 2.3 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 22 U | 27 J | 22 U | 22 U |
| BUTYL BENZYL PHTHALATE | 12 U | 14 U | 12 U | 12 U |
| CAPROLACTAM | 43 U | 51 U | 43 U | 43 U |
| CARBAZOLE | 31 U | 37 U | 32 U | 31 U |
| DIBENZOFURAN | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| DIETHYL PHTHALATE | 19 U | 22 U | 19 U | 19 U |
| DIMETHYL PHTHALATE | 20 U | 23 U | 20 U | 20 U |
| DI-N-BUTYL PHTHALATE | 17 U | 21 U | 18 U | 17 U |
| DI-N-OCTYL PHTHALATE | 31 U | 37 U | 32 U | 31 U |
| HEXACHLOROBENZENE | 2.4 U | 2.9 U | 2.5 U | 2.4 U |
| HEXACHLOROBUTADIENE | 31 U | 37 U | 32 U | 31 U |
| HEXACHLOROCYCLOPENTADIENE | 31 U | 37 U | 32 U | 31 U |
| HEXACHLOROETHANE | 10 U | 12 U | 11 U | 10 U |
| ISOPHORONE | 15 U | 18 U | 15 U | 15 U |
| NITROBENZENE | 2.6 U | 3 U | 2.6 U | 2.5 U |
| N-NITROSODIMETHYLAMINE | 19 U | 22 U | 19 U | 19 U |
| N-NITROSO-DI-N-PROPYLAMINE | 31 U | 37 U | 32 U | 31 U |
| N-NITROSODIPHENYLAMINE | 24 U | 29 U | 25 U | 24 U |
| PENTACHLOROPHENOL | 93 U | 110 U | 93 U | 93 U |
| PHENOL | 31 U | 37 U | 32 U | 31 U |
| PYRIDINE | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| ACENAPHTHENE | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| ACENAPHTHYLENE | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| ANTHRACENE | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 74.721 | 4.5 U | 3.9 U | 3.8 U |
| BAP EQUIVALENT-POS | 72.821 | 4.5 U | 3.9 U | 3.8 U |
| BENZO(A)ANTHRACENE | 36 | 4.5 U | 3.9 U | 3.8 U |
| BENZO(A)PYRENE | 58 | 4.5 U | 3.9 U | 3.8 U |
| BENZO(B)FLUORANTHENE | 66 | 4.5 U | 3.9 U | 3.8 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 33 | 4.5 U | 3.9 U | 3.8 U |
| BENZO(K)FLUORANTHENE | 28 | 4.5 U | 3.9 U | 3.8 U |
| C1-CHRYSENES | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-796 | SB-796 | SB-796 | SB-796 |
|---|---|---|---|---|
| SAMPLE ID | D-SB-796-03 | D-SB-796-05 | D-SB-796-07 | D-SB-796-09 |
| SAMPLE DATE | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUEI** | | | | |
| C2-NAPHTHALENES | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| CHRYSENE | 41 | 1.5 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| FLUORANTHENE | 42 | 4.5 U | 3.9 U | 3.8 U |
| FLUORENE | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 43 | 4.5 U | 3.9 U | 3.8 U |
| NAPHTHALENE | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| PHENANTHRENE | 18 | 4.5 U | 3.9 U | 3.8 U |
| PYRENE | 37 | 4.5 U | 3.9 U | 3.8 U |
| TOTAL PAHS | 402 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | |
| 4,4'-DDD | 1.4 U | 4.2 U | 0.72 U | 0.72 U |
| 4,4'-DDE | 0.91 U | 2.7 U | 0.46 U | 0.45 U |
| 4,4'-DDT | 1.5 U | 4.3 U | 0.74 U | 0.73 U |
| ALDRIN | 2.8 U | 8.2 U | 1.4 U | 1.4 U |
| ALPHA-BHC | 1.7 U | 5 U | 0.85 U | 0.85 U |
| ALPHA-CHLORDANE | 2.2 U | 6.4 U | 1.1 U | 1.1 U |
| AROCLOR-1016 | 24 U | 29 U | 25 U | 24 U |
| AROCLOR-1221 | 19 U | 22 U | 19 U | 19 U |
| AROCLOR-1232 | 16 U | 19 U | 16 U | 16 U |
| AROCLOR-1242 | 15 U | 18 U | 15 U | 15 U |
| AROCLOR-1248 | 20 U | 23 U | 20 U | 20 U |
| AROCLOR-1254 | 20 U | 23 U | 20 U | 20 U |
| AROCLOR-1260 | 20 U | 23 U | 20 U | 20 U |
| BETA-BHC | 2.6 U | 7.5 U | 1.3 U | 1.3 U |
| DELTA-BHC | 2.8 U | 8.2 U | 1.4 U | 1.4 U |
| DIELDRIN | 1.1 U | 3.2 U | 0.55 U | 0.54 U |
| ENDOSULFAN I | 1.2 U | 3.6 U | 0.61 U | 0.6 U |
| ENDOSULFAN II | 1.9 U | 5.6 U | 0.96 U | 0.95 U |
| ENDOSULFAN SULFATE | 2 U | 5.9 U | 1 U | 1 U |
| ENDRIN | 1.2 U | 3.4 U | 0.58 U | 0.58 U |
| ENDRIN ALDEHYDE | 2.3 U | 6.8 U | 1.2 U | 1.2 U |
| ENDRIN KETONE | 1.5 U | 4.3 U | 0.74 U | 0.73 U |
| GAMMA-BHC (LINDANE) | 1.7 U | 5.1 U | 0.86 U | 0.86 U |
| GAMMA-CHLORDANE | 0.98 U | 2.9 U | 0.49 U | 0.49 U |
| HEPTACHLOR | 2.6 U | 7.5 U | 1.3 U | 1.3 U |
| HEPTACHLOR EPOXIDE | 1.9 U | 5.5 U | 0.93 U | 0.93 U |
| METHOXYCHLOR | 3.5 U | 10 U | 1.8 U | 1.7 U |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 44 U | 130 U | 22 U | 22 U |
| **METALS (MG/KG)** | | | | |
| ANTIMONY | 0.19 J | 0.2 J | 0.21 J | 0.19 J |
| ARSENIC | 3.4 | 9.4 | 3.1 | 4.3 |
| BARIUM | 38.2 | 32.5 | 9.8 | 11.4 |

**Table A-3**
**Summary of Analytical Results for Subsurface Soils, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-796 | SB-796 | SB-796 | SB-796 |
|---|---|---|---|---|
| SAMPLE ID | D-SB-796-03 | D-SB-796-05 | D-SB-796-07 | D-SB-796-09 |
| SAMPLE DATE | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 |
| **METALS (CONTINUED) (MG/KG)** | | | | |
| BERYLLIUM | 1.3 | 2.3 | 1.3 | 2.3 |
| CADMIUM | 0.24 | 0.016 B | 0.016 B | 0.025 B |
| CHROMIUM | 15.3 | 32.2 | 15.8 | 22.7 |
| COBALT | 9.3 | 6.7 | 3.5 | 8.9 |
| COPPER | 16.7 | 51.9 | 17.4 | 30.3 |
| IRON | 15400 | 50200 | 28100 | 36700 |
| LEAD | 17.1 | 9.6 | 3.4 | 3.3 |
| MANGANESE | 44.6 | 23.5 | 20 | 20.9 |
| MERCURY | 0.51 | 0.021 U | 0.018 U | 0.017 U |
| MOLYBDENUM | 0.4 | 1.2 | 0.57 | 0.78 |
| NICKEL | 17.3 | 12.1 | 10.1 | 28.3 |
| SELENIUM | 1.3 | 1.6 | 1.3 | 1.4 |
| SILVER | 0.31 | 0.038 J | 0.019 U | 0.019 U |
| THALLIUM | 0.065 B | 0.13 B | 0.053 B | 0.057 B |
| VANADIUM | 24.8 | 57.6 | 41.8 | 68.5 |
| ZINC | 95.4 | 44.8 | 10.3 | 27 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | |
| DIESEL RANGE ORGANICS | 160000 | 57000 | 5600 J | 5600 J |
| GASOLINE RANGE ORGANICS | 53 U | 63 U | 54 U | 53 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | |
| HEXAVALENT CHROMIUM | 0.31 U | 0.37 U | 0.32 U | 0.37 J |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA |

**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-031<br>SB-31-05<br>20031118<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-032<br>SB-32-05<br>20031121<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-033<br>SB-33-05<br>20031121<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-057<br>F-SB-57RE-10<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-057<br>F-SB-57RE-3<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 6 U | 7 U | 7 U | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 U | 7 U | 7 U | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 59 U | 13 J | 6 J | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | 6 U | 7 U | 7 U | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 59 U | 77 J | 59 J | NA | NA |
| BENZENE | 12000 | 1100 | C | 6 U | 7 U | 7 U | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | 6 U | 7 U | 7 U | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 U | 7 U | 7 U | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 U | 7 U | 7 U | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 6 U | 7 U | 7 U | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 18 U | 20 U | 20 U | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 5 J | 12 J | 11 J | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | 7 U | 7 U | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | 6 U | 7 U | 7 U | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 18 U | 20 U | 20 U | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 U | 7 U | 7 U | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 400 U | 450 U | 450 U | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 400 U | 450 U | 450 U | NA | NA |
| CARBAZOLE | 32000 | NC | | 400 U | 450 U | 120 J | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 400 U | 450 U | 65 J | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 400 U | 450 U | 450 U | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 400 U | 450 U | 450 U | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | 400 U | 450 U | 450 U | NA | NA |
| PHENOL | 2300000 | 1800000 | N | 400 U | 450 U | 450 U | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 400 U | 450 U | 450 U | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 400 U | 110 J | 110 J | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 400 U | 450 U | 450 U | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 400 U | 84 J | 260 J | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 400 U | **441** | **944** | 1.7 U | 1.4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 400 U | **216** | **696** | 1.7 U | 1.4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 400 U | **190 J** | **640** | 1.2 U | 1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 400 U | **170 J** | **570** | 1.7 U | 1.4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 400 U | **170 J** | **560** | 1.6 U | 1.3 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 400 U | 450 U | 220 J | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 400 U | 180 J | 580 | 2.2 U | 1.8 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-031 | SB-032 | SB-033 | SB-057 | SB-057 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-31-05 | SB-32-05 | SB-33-05 | F-SB-57RE-10 | F-SB-57RE-3 |
| SAMPLE DATE | | | | 20031118 | 20031121 | 20031121 | 20090917 | 20090917 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 5 | 5 | 10 | 3 |
| BOTTOM DEPTH | | | | 5 | 5 | 5 | 10 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 400 U | 200 J | 610 | 1.2 U | 0.98 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 400 U | 450 U | 450 U | 1.7 U | 1.4 U |
| FLUORANTHENE | 310000 | 230000 | N | 400 U | 430 J | 1000 | NA | NA |
| FLUORENE | 310000 | 230000 | N | 400 U | 83 J | 150 J | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 400 U | 79 J | 450 U | 2 U | 1.6 U |
| NAPHTHALENE | 160000 | 3600 | C | 400 U | 95 J | 450 U | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 400 U | 380 J | 910 | NA | NA |
| PYRENE | 230000 | 170000 | N | 400 U | 450 | 1000 | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 2621 | 6610 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 59 U | 67 U | 68 U | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 3 UL | 3.4 UL | 3.4 UL | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 0.59 UR | **2.5 L** | **4.9 L** | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 4.9 | 3.4 U | 3.4 U | NA | NA |
| CADMIUM | 3.9 | 7 | N | 3 U | 3.4 U | 3.4 U | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 27 L | 18 J | 23 J | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 22 | 33 | 54 | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 24 L | 68 | 120 | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.12 U | 1.7 | **3.3** | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 46 L | 22 | 23 | NA | NA |
| SELENIUM | 39 | 39 | N | 11 L | 3.4 U | 3.4 U | NA | NA |
| SILVER | 39 | 39 | N | 3 U | 3.4 UR | 3.4 UR | NA | NA |
| THALLIUM | 0.55 | NC | | 2.4 UL | 2.7 U | 2.7 U | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 130 J | 140 | 180 | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 24000 U | 43000 | 27000 U | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 120 U | 130 U | 140 U | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84 | 74 | 73 | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-057<br>F-SB-57RE-4<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-057<br>F-SB-57RE-5<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-057<br>F-SB-57RE-6<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-057<br>F-SB-57RE-7<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-057<br>F-SB-57RE-8<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-057<br>F-SB-57RE-4<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-057<br>F-SB-57RE-5<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-057<br>F-SB-57RE-6<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-057<br>F-SB-57RE-7<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-057<br>F-SB-57RE-8<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 1.8 U | 1.8 U | 1.9 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-057<br>F-SB-57RE-9<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-057<br>SB-57-05<br>20040913<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-057<br>SB-57-10<br>20040913<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-058<br>F-SB-58RE-10<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-058<br>F-SB-58RE-3<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | 6 U | 6 U | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | 6 U | 6 U | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | 56 U | 64 U | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | 6 U | 6 U | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | 56 U | 64 U | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | 6 U | 6 U | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | 6 U | 6 U | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | 6 U | 6 U | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | 6 U | 6 U | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | 6 U | 6 U | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | 11 U | 13 U | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | 6 U | 6 U | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | 6 U | 6 U | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | 6 U | 6 U | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | 6 U | 6 U | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | 6 U | 6 U | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | 370 U | 430 U | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | 370 U | 430 U | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | 370 U | 430 U | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | 370 U | 430 U | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | 370 U | 430 U | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | 370 U | 430 U | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | 370 U | 430 U | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | 370 U | 670 | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | 370 U | 430 U | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | 370 U | 430 U | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | 370 U | 430 U | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | 370 U | 430 U | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.6 U | 370 U | 430 U | **41.6** | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 370 U | 430 U | **40.7** | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 370 U | 430 U | 35 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 370 U | 430 U | **30** | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 370 U | 430 U | 42 | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | 370 U | 430 U | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 370 U | 430 U | 17 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-057 | SB-057 | SB-057 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-57RE-9 | SB-57-05 | SB-57-10 | F-SB-58RE-10 | F-SB-58RE-3 |
| SAMPLE DATE | | | | 20090917 | 20040913 | 20040913 | 20090917 | 20090917 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 5 | 10 | 10 | 3 |
| BOTTOM DEPTH | | | | 9 | 5 | 10 | 10 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 370 U | 430 U | 40 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 370 U | 430 U | 1.8 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | 370 U | 430 U | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | 370 U | 430 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 370 U | 430 U | 28 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | 370 U | 430 U | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | 370 U | 430 U | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | 370 U | 430 U | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 192 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | 22 U | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | 280 U | 320 U | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | 22 U | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | 0 U | 0 U | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | 2.7 UR | 3.1 UR | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | **0.65 L** | **1.8 L** | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | 2.7 U | 3.1 U | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | 2.7 UL | 3.1 UL | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | 8.6 L | 9.5 L | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | 16 | 6.4 | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | 3.2 J | 3.7 J | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | 0.11 UL | 0.12 UL | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | 2.7 U | 3.8 K | NA | NA |
| SELENIUM | 39 | 39 | N | NA | 2.7 UL | 3.1 UL | NA | NA |
| SILVER | 39 | 39 | N | NA | 2.7 UR | 3.1 UR | NA | NA |
| THALLIUM | 0.55 | NC | | NA | 2.2 UL | 2.4 UL | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | 27 UL | 31 UL | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | 11000 U | 12000 U | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | 110 U | 130 U | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058<br>F-SB-58RE-4<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-058<br>F-SB-58RE-5<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-058<br>F-SB-58RE-6<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-058<br>F-SB-58RE-7<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-058<br>F-SB-58RE-8<br>20090917<br>ORIG<br>SO<br>NORMAL<br>SB<br>8<br>8 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 158 | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 157 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 98 | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 120 | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | 180 | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 1.9 U | 2 U | 77 | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-058<br>F-SB-58RE-4<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4** | **SB-058<br>F-SB-58RE-5<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5** | **SB-058<br>F-SB-58RE-6<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6** | **SB-058<br>F-SB-58RE-7<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7** | **SB-058<br>F-SB-58RE-8<br>20090917<br>ORIG<br>SO<br>NORMAL<br>SB<br>8<br>8** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1 U | 1 U | 98 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.7 U | 1.7 U | 87 | 1.9 UJ |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 660 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058<br>F-SB-58RE-8-AVG<br>20090917<br>AVG<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-058<br>F-SB-58RE-8-D<br>20090917<br>DUP<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-058<br>F-SB-58RE-9<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-058<br>SB-58-05<br>20040913<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-058<br>SB-58-10<br>20040913<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | 6 U | 6 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | 6 U | 6 U |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | 63 U | 63 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | 6 U | 6 U |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | 63 U | 63 U |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | 6 U | 6 U |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | 6 U | 6 U |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | 6 U | 6 U |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | 6 U | 6 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | 6 U | 6 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | 13 U | 13 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | 6 U | 6 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | 6 U | 6 U |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | 6 U | 6 U |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | 6 U | 6 U |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | 6 U | 6 U |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | 420 U | 420 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | 420 U | 420 U |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | 420 U | 420 U |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | 420 U | 420 U |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | 62 J | 420 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | 420 U | 420 U |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | 420 U | 420 U |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | 420 U | 690 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | 420 U | 420 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | 420 U | 420 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | 420 U | 420 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | 420 U | 420 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 6.2 | 11.6 | **438** | **331** | 420 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 5.8 | 10.7 | **437** | **100** | 420 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.2 U | **290** | 99 J | 420 U |
| BENZO(A)PYRENE | 22 | 15 | C | 4.9 | 9 | **340** | **83 J** | 420 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | **460** | 66 J | 420 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | 420 U | 420 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2.1 U | 180 | 86 J | 420 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058<br>F-SB-58RE-8-AVG<br>20090917<br>AVG<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-058<br>F-SB-58RE-8-D<br>20090917<br>DUP<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-058<br>F-SB-58RE-9<br>20090917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-058<br>SB-58-05<br>20040913<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-058<br>SB-58-10<br>20040913<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 310 | 100 J | 420 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 420 U | 420 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | 150 J | 420 U |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | 420 U | 420 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 8.975 | 17 J | **200** | 420 U | 420 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | 420 U | 420 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | 80 J | 420 U |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | 140 J | 420 U |
| TOTAL PAHS | NC | NC | | 13 | 26 | 1780 | 804 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | 25 U | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | 310 U | 310 U |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | 25 U | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | 3.1 UR | 2.9 UR |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | **2.3 L** | **4.1 L** |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | 3.1 U | 2.9 U |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | 3.1 UL | 2.9 UL |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | 19 L | 15 L |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | 13 | 21 |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | 9.3 J | 7.9 J |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | 0.12 UL | 0.11 UL |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | 8.6 | 18 |
| SELENIUM | 39 | 39 | N | NA | NA | NA | 3.1 UL | 2.9 UL |
| SILVER | 39 | 39 | N | NA | NA | NA | 3.1 UR | 2.9 UR |
| THALLIUM | 0.55 | NC | | NA | NA | NA | 2.5 UL | 2.3 UL |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | 68 J | 41 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | 13000 U | 13000 U |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | 130 U | 130 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058A<br>F-SB-58REA-10<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-058A<br>F-SB-58REA-4<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-058A<br>F-SB-58REA-6<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-058A<br>F-SB-58REA-8<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-058B<br>F-SB-58REB-10<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **27.2** | **15.9155** | **121** | **29.8** | **15.7** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **26.4** | **15.015** | **121** | **29.0** | 14.6 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 11 | 15 | 74 | 22 | 13 |
| BENZO(A)PYRENE | 22 | 15 | C | **20** | 12 | **73** | **22** | 12 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 30 | 15 | 84 | 35 | 13 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2.1 U | 26 | 9.7 | 2.6 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-058A<br>F-SB-58REA-10<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10** | **SB-058A<br>F-SB-58REA-4<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4** | **SB-058A<br>F-SB-58REA-6<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6** | **SB-058A<br>F-SB-58REA-8<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8** | **SB-058B<br>F-SB-58REB-10<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 15 | 15 | 82 | 29 | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 27 | 1.6 U | 2 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 23 | 1.8 U | 47 | 12 | 2.3 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 99 | 57 | 413 | 129.7 | 38 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058B<br>F-SB-58REB-4<br>20091103<br>ORIG<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-058B<br>F-SB-58REB-4-AVG<br>20091103<br>AVG<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-058B<br>F-SB-58REB-4-D<br>20091103<br>DUP<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-058B<br>F-SB-58REB-6<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-058B<br>F-SB-58REB-8<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **40.6** | **29.8** | **19.1** | **84.8** | 2.7 |
| BAP EQUIVALENT-POS | 22 | 15 | C | **39.8** | **29.1** | **18.3** | **84.8** | 0.9 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 23 | 18.5 | 14 | 60 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | **30** | **22** | 14 | **58** | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 44 | 30.5 | 17 | 77 | 9 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 12 | 11.5 | 11 | 30 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058B | SB-058B | SB-058B | SB-058B | SB-058B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-58REB-4 | F-SB-58REB-4-AVG | F-SB-58REB-4-D | F-SB-58REB-6 | F-SB-58REB-8 |
| SAMPLE DATE | | | | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 4 | 4 | 6 | 8 |
| BOTTOM DEPTH | | | | 4 | 4 | 4 | 6 | 8 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 21 | 18 | 15 | 65 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 9.3 | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 30 | 20.5 | 11 | 34 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 160 | 121 | 82 | 333.3 | 9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058C | SB-058C | SB-058C | SB-058C | SB-058D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-58REC-10 | F-SB-58REC-4 | F-SB-58REC-6 | F-SB-58REC-8 | F-SB-58RED-10 |
| SAMPLE DATE | | | | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | | | | 10 | 4 | 6 | 8 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **16.7** | **25.0** | **43.6** | 4.9 | **16.7** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **15.7** | **24.2** | **42.8** | 3.2 | **15.8** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 7.8 J | 23 | 8.4 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 14 | **19** | **33** | 1.6 U | 14 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 17 | 23 | 44 | 23 | 18 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.2 U | 2 U | 12 | 2.1 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058C | SB-058C | SB-058C | SB-058C | SB-058D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-58REC-10 | F-SB-58REC-4 | F-SB-58REC-6 | F-SB-58REC-8 | F-SB-58RED-10 |
| SAMPLE DATE | | | | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | | | | 10 | 4 | 6 | 8 | 10 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 10 | 23 | 13 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 21 | 30 | 1.9 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 31 | 80.8 | 165 | 44.4 | 32 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058D<br>F-SB-58RED-4<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-058D<br>F-SB-58RED-6<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-058D<br>F-SB-58RED-8<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-059<br>SB-59-05<br>20040923<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-059<br>SB-59-10<br>20040923<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | 6 U | 6 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | 6 U | 6 U |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | 56 U | 58 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | 6 U | 6 U |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | 56 U | 58 U |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | 6 U | 6 U |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | 6 U | 6 U |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | 6 U | 6 U |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | 6 U | 6 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | 6 U | 6 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | 11 U | 12 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | 6 J | 11 J |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | 6 U | 6 U |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | 6 U | 6 U |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | 6 U | 6 U |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | 6 U | 6 U |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | 3800 U | 3900 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | 3800 U | 3900 U |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | 3800 U | 3900 U |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | 3800 U | 3900 U |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | 3800 U | 3900 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | 3800 U | 3900 U |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | 3800 U | 3900 U |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | 3800 U | 3900 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | 3800 U | 3900 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | 3800 U | 3900 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | 3800 U | 3900 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | 3800 U | 3900 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **92.6** | **475** | **38.0** | **3098** | **2918** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **91.9** | **475** | **37.2** | **799** | **773** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 55 | **360** | 24 | **480 J** | **490 J** |
| BENZO(A)PYRENE | 22 | 15 | C | **71** | **320** | **29** | **750 J** | **670 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 100 | **380** | 34 | 3800 U | **480 J** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | 3800 U | 3900 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 37 | 160 | 10 | 3800 U | 560 J |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-058D<br>F-SB-58RED-4<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4** | **SB-058D<br>F-SB-58RED-6<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6** | **SB-058D<br>F-SB-58RED-8<br>20091103<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8** | **SB-059<br>SB-59-05<br>20040923<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5** | **SB-059<br>SB-59-10<br>20040923<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 63 | 300 | 24 | 760 J | 690 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.4 U | 62 | 1.6 U | 3800 U | 3900 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | 730 J | 670 J |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | 3800 U | 3900 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 50 | 170 | 23 | 3800 U | 3900 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | 3800 U | 3900 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | 3800 U | 3900 U |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | 1700 J | 1500 J |
| TOTAL PAHS | NC | NC | | 376 | 1752 | 144 | 4420 | 5060 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | 280 U | 290 U |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | 2.6 UL | 2.9 UL |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | 3.9 | 2.5 |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | 2.6 U | 2.9 U |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | 2.6 U | 2.9 U |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | 30 J | 14 J |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | 8.3 | 8.1 |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | 9.5 | 6.4 |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | 0.11 U | 0.11 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | 8 | 7.4 |
| SELENIUM | 39 | 39 | N | NA | NA | NA | 2.6 U | 2.9 U |
| SILVER | 39 | 39 | N | NA | NA | NA | 2.6 UR | 2.9 UR |
| THALLIUM | 0.55 | NC | | NA | NA | NA | 2.1 U | 2.3 U |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | 26 UL | 29 UL |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | 12000 | 12000 U |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | 110 U | 120 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060<br>D-SB-60RE-10<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-060<br>D-SB-60RE-3<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-060<br>D-SB-60RE-4<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-060<br>D-SB-60RE-5<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-060<br>D-SB-60RE-6<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.5 U | 3.4 | **27.3** | **2034** | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.8 | **26.5** | **2034** | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 8.8 | 20 | **1700** | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | **21** | **1400** | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 9.2 | 22 | **1800** | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 2 U | 10 | 660 | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-060**<br>**D-SB-60RE-10**<br>**20090915**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**10**<br>**10** | **SB-060**<br>**D-SB-60RE-3**<br>**20090915**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**3**<br>**3** | **SB-060**<br>**D-SB-60RE-4**<br>**20090915**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**4**<br>**4** | **SB-060**<br>**D-SB-60RE-5**<br>**20090915**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**5**<br>**5** | **SB-060**<br>**D-SB-60RE-6**<br>**20090915**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**6**<br>**6** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1 U | 9.7 | 26 | 1300 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | **210** | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.8 U | 12 | **660** | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 27.7 | 111 | 7730 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060<br>D-SB-60RE-7<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-060<br>D-SB-60RE-8<br>20090915<br>ORIG<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-060<br>D-SB-60RE-8-AVG<br>20090915<br>AVG<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-060<br>D-SB-60RE-8-D<br>20090915<br>DUP<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-060<br>D-SB-60RE-9<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.7 U | 1.7 U | 1.65 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.7 U | 1.7 U | 1.65 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.7 U | 1.7 U | 1.65 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.2 U | 2.2 U | 2.15 U | 2.1 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060<br>D-SB-60RE-7<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-060<br>D-SB-60RE-8<br>20090915<br>ORIG<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-060<br>D-SB-60RE-8-AVG<br>20090915<br>AVG<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-060<br>D-SB-60RE-8-D<br>20090915<br>DUP<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-060<br>D-SB-60RE-9<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.7 U | 1.7 U | 1.65 U | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 1.9 U | 1.85 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060<br>SB-60-05<br>20040924<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-060<br>SB-60-10<br>20040924<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-060A<br>D-SB-60REA-3<br>20091012<br>ORIG<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-060A<br>D-SB-60REA-3-AVG<br>20091012<br>AVG<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-060A<br>D-SB-60REA-3-D<br>20091012<br>DUP<br>SO<br>NORMAL<br>SB<br>3<br>3 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 6 UL | 6 UL | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 UL | 6 UL | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 60 UL | 59 UL | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | 6 UL | 6 UL | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 60 UL | 59 UL | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 6 UL | 6 UL | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | 6 UL | 6 UL | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 UL | 6 UL | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 UL | 6 UL | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 6 UL | 6 UL | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 12 UL | 12 UL | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 6 UL | 6 UL | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 UL | 6 UL | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | 6 UL | 6 UL | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 UL | 6 UL | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 UL | 6 UL | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 420 U | 400 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 420 U | 400 U | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 420 U | 400 U | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 420 U | 400 U | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 420 U | 400 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 420 U | 400 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | 420 U | 400 U | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | 420 U | 400 U | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 420 U | 400 U | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 420 U | 400 U | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 420 U | 400 U | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 420 U | 400 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 420 U | 400 U | **361** | **852** | **1343** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 420 U | 400 U | **361** | **852** | **1343** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 420 U | 400 U | **240 J** | **495** | **750 J** |
| BENZO(A)PYRENE | 22 | 15 | C | 420 U | 400 U | **240 J** | **530** | **820 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 420 U | 400 U | **300 J** | **900** | **1500 J** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 420 U | 400 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 420 U | 400 U | 140 J | 310 | 480 J |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-060**<br>**SB-60-05**<br>**20040924**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**5**<br>**5** | **SB-060**<br>**SB-60-10**<br>**20040924**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**10**<br>**10** | **SB-060A**<br>**D-SB-60REA-3**<br>**20091012**<br>**ORIG**<br>**SO**<br>**NORMAL**<br>**SB**<br>**3**<br>**3** | **SB-060A**<br>**D-SB-60REA-3-AVG**<br>**20091012**<br>**AVG**<br>**SO**<br>**NORMAL**<br>**SB**<br>**3**<br>**3** | **SB-060A**<br>**D-SB-60REA-3-D**<br>**20091012**<br>**DUP**<br>**SO**<br>**NORMAL**<br>**SB**<br>**3**<br>**3** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 420 U | 400 U | 270 J | 685 | 1100 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 420 U | 400 U | **50 J** | **140** | **230 J** |
| FLUORANTHENE | 310000 | 230000 | N | 420 U | 45 J | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 420 U | 400 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 420 U | 400 U | 150 J | **385** | **620 J** |
| NAPHTHALENE | 160000 | 3600 | C | 420 U | 400 U | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 420 U | 400 U | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 420 U | 400 U | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 45 | 1390 | 3445 | 5500 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 300 U | 290 U | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 3.1 UL | 2.6 UL | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **1 K** | **2.4** | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 3.1 U | 2.6 U | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 3.1 U | 2.6 U | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 60 J | 120 J | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 15 J | 21 J | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 11 K | 24 K | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.12 U | 0.14 | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 21 K | 10 K | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 3.1 U | 2.6 U | NA | NA | NA |
| SILVER | 39 | 39 | N | 3.1 UR | 2.6 UR | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 2.5 U | 2.1 U | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 58 L | 110 | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 12000 U | 12000 U | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 120 U | 120 U | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060A<br>D-SB-60REA-5<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-060A<br>D-SB-60REA-7<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-060B<br>D-SB-60REB-3<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-060B<br>D-SB-60REB-5<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-060B<br>D-SB-60REB-7<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **19.9** | 1.5 U | 1.5 U | **44.8** | **32.7** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **18.9** | 1.5 U | 1.5 U | **44.0** | **31.9** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 14 | 1.1 U | 1.1 U | 29 | 25 |
| BENZO(A)PYRENE | 22 | 15 | C | **16** | 1.5 U | 1.5 U | **35** | **25** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 15 | 1.4 U | 1.4 U | 39 | 28 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.2 U | 2 U | 1.9 U | 17 | 14 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060A | SB-060A | SB-060B | SB-060B | SB-060B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-60REA-5 | D-SB-60REA-7 | D-SB-60REB-3 | D-SB-60REB-5 | D-SB-60REB-7 |
| SAMPLE DATE | | | | 20091012 | 20091012 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 5 | 7 | 3 | 5 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 20 | 1.1 U | 1 U | 26 | 25 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.7 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 1.8 U | 1.7 U | 20 | 14 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 65 | 0 U | 0 U | 166 | 131 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060C | SB-060C | SB-060C | SB-060D | SB-060D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-60REC-3 | D-SB-60REC-5 | D-SB-60REC-7 | D-SB-60RED-3 | D-SB-60RED-5 |
| SAMPLE DATE | | | | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 3 | 5 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.6 U | 13.8 | 1.5 U | **203** | **42.3** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 12.8 | 1.5 U | **203** | **42.3** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 8.2 | 1.1 U | **170** | 31 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 12 | 1.5 U | **140** | **26** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | 1.4 U | 140 | 27 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2.1 U | 2 U | 59 | 16 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060C<br>D-SB-60REC-3<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-060C<br>D-SB-60REC-5<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-060C<br>D-SB-60REC-7<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-060D<br>D-SB-60RED-3<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-060D<br>D-SB-60RED-5<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 13 | 1.1 U | 180 | 32 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 24 | 8.6 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 1.8 U | 70 | 17 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 33.2 | 0 U | 783 | 157.6 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060D<br>D-SB-60RED-7<br>20091013<br>ORIG<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-060D<br>D-SB-60RED-7-AVG<br>20091013<br>AVG<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-060D<br>D-SB-60RED-7-D<br>20091013<br>DUP<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-061<br>D-SB-61RE-10<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-061<br>D-SB-61RE-3<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.6 U | 1.55 U | 1.5 U | **346** | 2.9 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.55 U | 1.5 U | **346** | 1.3 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 120 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.55 U | 1.5 U | **250** | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | **290** | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2 U | 99 | 1.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060D<br>D-SB-60RED-7<br>20091013<br>ORIG<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-060D<br>D-SB-60RED-7-AVG<br>20091013<br>AVG<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-060D<br>D-SB-60RED-7-D<br>20091013<br>DUP<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-061<br>D-SB-61RE-10<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-061<br>D-SB-61RE-3<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.05 U | 1 U | 150 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.55 U | 1.5 U | 36 | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.75 U | 1.7 U | 180 | 13 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 1125 | 13 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061<br>D-SB-61RE-4<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-061<br>D-SB-61RE-5<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-061<br>D-SB-61RE-6<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-061<br>D-SB-61RE-7<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-061<br>D-SB-61RE-8<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 3.2 | **101** | 1.6 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 | **101** | 1.6 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 28 | 1.2 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | **73** | 1.6 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 84 | 1.5 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 21 | 2.1 U | 2 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-61RE-4 | D-SB-61RE-5 | D-SB-61RE-6 | D-SB-61RE-7 | D-SB-61RE-8 |
| SAMPLE DATE | | | | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | | | | 4 | 5 | 6 | 7 | 8 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1 U | 55 | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 12 | 1.6 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 16 | 49 | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 16 | 322 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061<br>D-SB-61RE-9<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-061<br>SB-61-05<br>20040924<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-061<br>SB-61-10<br>20040924<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-061A<br>D-SB-61REA-3<br>20091012<br>ORIG<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-061A<br>D-SB-61REA-3-AVG<br>20091012<br>AVG<br>SO<br>NORMAL<br>SB<br>3<br>3 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | 7 UL | 6 UL | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | 7 UL | 6 UL | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | 66 UL | 60 UL | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | 7 UL | 6 UL | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | 66 UL | 60 UL | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | 7 UL | 6 UL | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | 7 UL | 6 UL | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | 7 UL | 6 UL | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | 7 UL | 6 UL | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | 7 UL | 6 UL | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | 13 UL | 12 UL | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | 7 UL | 6 UL | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | 7 UL | 6 UL | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | 7 UL | 6 UL | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | 7 UL | 6 UL | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | 7 UL | 6 UL | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | 450 U | 41 J | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | 450 U | 400 U | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | 450 U | 400 U | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | 450 U | 400 U | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | 450 U | 400 U | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | 450 U | 400 U | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | 450 U | 400 U | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | 450 U | 400 U | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | 450 U | 400 U | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | 450 U | 400 U | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | 450 U | 400 U | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | 450 U | 400 U | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.5 U | 450 U | 400 U | 1.5 U | 1.55 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 450 U | 400 U | 1.5 U | 1.55 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 450 U | 400 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 450 U | 400 U | 1.5 U | 1.55 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 450 U | 400 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | 450 U | 400 U | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 450 U | 400 U | 2 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061 | SB-061 | SB-061 | SB-061A | SB-061A |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-61RE-9 | SB-61-05 | SB-61-10 | D-SB-61REA-3 | D-SB-61REA-3-AVG |
| SAMPLE DATE | | | | 20090916 | 20040924 | 20040924 | 20091012 | 20091012 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 5 | 10 | 3 | 3 |
| BOTTOM DEPTH | | | | 9 | 5 | 10 | 3 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 450 U | 400 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 450 U | 400 U | 1.5 U | 1.55 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | 450 U | 400 U | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | 450 U | 400 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 450 U | 400 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | 450 U | 400 U | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | 450 U | 400 U | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | 450 U | 400 U | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | 330 U | 290 U | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | 0 U | 0 U | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | 3.2 UL | 2.6 UL | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | 1.8 | 0.51 U | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | 3.2 U | 2.6 U | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | 3.2 U | 2.6 U | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | 19 J | 12 J | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | 8.7 J | 4 J | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | 6.3 K | 2.6 U | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | 0.13 U | 0.1 U | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | 3.2 U | 3.7 K | NA | NA |
| SELENIUM | 39 | 39 | N | NA | 3.2 U | 2.6 U | NA | NA |
| SILVER | 39 | 39 | N | NA | 3.2 UR | 2.6 UR | NA | NA |
| THALLIUM | 0.55 | NC | | NA | 2.6 U | 2.1 U | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | 32 UL | 26 UL | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | 13000 U | 12000 U | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | 140 U | 120 U | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061A<br>D-SB-61REA-3-D<br>20091012<br>DUP<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-061A<br>D-SB-61REA-5<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-061A<br>D-SB-61REA-7<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-061A<br>D-SB-61REA-9<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-061B<br>D-SB-61REB-3<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | **48.1** | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | **47.3** | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 21 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | **39** | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | 39 | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2 U | 17 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061A | SB-061A | SB-061A | SB-061A | SB-061B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-61REA-3-D | D-SB-61REA-5 | D-SB-61REA-7 | D-SB-61REA-9 | D-SB-61REB-3 |
| SAMPLE DATE | | | | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | | | | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1 U | 34 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 1.7 U | 21 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 171 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061B<br>D-SB-61REB-5<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-061B<br>D-SB-61REB-7<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-061B<br>D-SB-61REB-9<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-061C<br>D-SB-61REC-3<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-061C<br>D-SB-61REC-5<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.5 U | 1.5 U | **256** | 1.5 U | 14.1 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | **256** | 1.5 U | 13.2 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 91 | 1.1 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | **180** | 1.5 U | 11 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | **210** | 1.4 U | 12 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 65 | 2 U | 2.2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-061B<br>D-SB-61REB-5<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5** | **SB-061B<br>D-SB-61REB-7<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7** | **SB-061B<br>D-SB-61REB-9<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9** | **SB-061C<br>D-SB-61REC-3<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3** | **SB-061C<br>D-SB-61REC-5<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1 U | 110 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 33 | 1.5 U | 1.7 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.7 U | 120 | 1.8 U | 10 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 809 | 0 U | 33 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061C<br>D-SB-61REC-7<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-061C<br>D-SB-61REC-9<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-061D<br>D-SB-61RED-3<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-061D<br>D-SB-61RED-5<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-061D<br>D-SB-61RED-7<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.5 U | 656 | 1.6 U | 10.4 | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 656 | 1.6 U | 9.5 | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 150 | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 450 | 1.6 U | 8.4 | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 440 | 1.4 U | 11 | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 150 | 2 U | 2 U | 1.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-061C<br>D-SB-61REC-7<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7** | **SB-061C<br>D-SB-61REC-9<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9** | **SB-061D<br>D-SB-61RED-3<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3** | **SB-061D<br>D-SB-61RED-5<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5** | **SB-061D<br>D-SB-61RED-7<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1 U | 220 | 1.1 U | 8.7 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | **110** | 1.6 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | **350** | 1.8 U | 1.8 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 1870 | 0 U | 28.1 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-061D**<br>**D-SB-61RED-9**<br>**20091012**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**9**<br>**9** |
|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA |
| ACETONE | 7000000 | 6100000 | N | NA |
| BENZENE | 12000 | 1100 | C | NA |
| BROMOMETHANE | 11000 | 730 | N | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA |
| TOLUENE | 630000 | 500000 | N | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA |
| **SEMIVOLATILES (UG/KG)** | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA |
| CARBAZOLE | 32000 | NC | | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA |
| PHENOL | 2300000 | 1800000 | N | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **31.2** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **30.4** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 22 |
| BENZO(A)PYRENE | 22 | 15 | C | **24** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 28 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA |
| C1-FLUORENES | NC | NC | | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA |
| C2-FLUORENES | NC | NC | | NA |
| C2-NAPHTHALENES | NC | NC | | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA |
| C3-FLUORENES | NC | NC | | NA |
| C3-NAPHTHALENES | NC | NC | | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA |
| C4-NAPHTHALENES | NC | NC | | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-061D**<br>**D-SB-61RED-9**<br>**20091012**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**9**<br>**9** |
|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | |
| CHRYSENE | 22000 | 15000 | C | 25 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA |
| FLUORENE | 310000 | 230000 | N | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 13 |
| NAPHTHALENE | 160000 | 3600 | C | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA |
| PYRENE | 230000 | 170000 | N | NA |
| TOTAL PAHS | NC | NC | | 123 |
| **PESTICIDES/PCBS (UG/KG)** | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA |
| AROCLOR-1260 | 320 | 220 | C | NA |
| BETA-BHC | 350 | 270 | C | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA |
| **METALS (MG/KG)** | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA |
| ARSENIC | 0.43 | 0.39 | C | NA |
| BARIUM | 1600 | 1500 | N | NA |
| BERYLLIUM | 16 | 16 | N | NA |
| CADMIUM | 3.9 | 7 | N | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA |
| COBALT | NC | 2.3 | N | NA |
| COPPER | 310 | 310 | N | NA |
| IRON | 5500 | 5500 | N | NA |
| LEAD | 400 | 400 | | NA |
| MANGANESE | 160 | 180 | N | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA |
| MOLYBDENUM | NC | 39 | N | NA |
| NICKEL | 160 | 150 | N | NA |
| SELENIUM | 39 | 39 | N | NA |
| SILVER | 39 | 39 | N | NA |
| THALLIUM | 0.55 | NC | | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA |
| ZINC | 2300 | 2300 | N | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | |
| PERCENT SOLIDS | NC | NC | | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062<br>D-SB-62RE-10<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-062<br>D-SB-62RE-3<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-062<br>D-SB-62RE-4<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-062<br>D-SB-62RE-5<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-062<br>D-SB-62RE-6<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.5 U | **44.1** | **69.4** | **153** | **214** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | **43.3** | **68.7** | **152** | **213** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 29 | 48 | 92 | 130 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | **34** | **54** | **120** | **170** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 41 | 63 | 140 | **180** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 17 | 30 | 60 | 89 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-062<br>D-SB-62RE-10<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10** | **SB-062<br>D-SB-62RE-3<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3** | **SB-062<br>D-SB-62RE-4<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4** | **SB-062<br>D-SB-62RE-5<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5** | **SB-062<br>D-SB-62RE-6<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 34 | 52 | 100 | 140 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 21 | 32 | 82 | 110 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 176 | 279 | 594 | 819 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062<br>D-SB-62RE-7<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-062<br>D-SB-62RE-8<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-062<br>D-SB-62RE-9<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-062<br>SB-62-05<br>20040923<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-062<br>SB-62-10<br>20040923<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | 6 U | 6 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | 6 U | 6 U |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | 58 U | 58 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | 6 U | 6 U |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | 58 U | 58 U |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | 6 U | 6 U |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | 6 U | 6 U |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | 6 U | 6 U |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | 6 U | 6 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | 6 U | 6 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | 12 U | 12 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | 6 U | 10 J |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | 6 U | 6 U |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | 6 U | 6 U |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | 6 U | 6 U |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | 6 U | 6 U |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | 400 U | 390 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | 400 U | 390 U |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | 400 U | 390 U |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | 400 U | 390 U |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | 400 U | 390 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | 400 U | 390 U |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | 400 U | 390 U |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | 400 U | 390 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | 400 U | 390 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | 400 U | 390 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | 400 U | 390 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | 400 U | 390 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **77.1** | **65.6** | **1347** | 400 U | 390 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **76.4** | **64.8** | **1346** | 400 U | 390 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 54 | 46 | **590** | 400 U | 390 U |
| BENZO(A)PYRENE | 22 | 15 | C | **59** | **51** | **1100** | 400 U | 390 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 76 | 57 | **1100** | 400 U | 390 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | 400 U | 390 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 34 | 30 | 460 | 400 U | 390 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-062<br>D-SB-62RE-7<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7** | **SB-062<br>D-SB-62RE-8<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8** | **SB-062<br>D-SB-62RE-9<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9** | **SB-062<br>SB-62-05<br>20040923<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5** | **SB-062<br>SB-62-10<br>20040923<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 57 | 48 | 670 | 400 U | 390 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 400 U | 390 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | 400 U | 390 U |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | 400 U | 390 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 40 | 32 | **720** | 400 U | 390 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | 400 U | 390 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | 400 U | 390 U |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | 45 J | 390 U |
| TOTAL PAHS | NC | NC | | 320 | 264 | 4640 | 45 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | 290 U | 290 U |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | 2.5 UL | 2.7 UL |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | **1.7** | 0.53 U |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | 2.5 U | 2.7 U |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | 2.5 U | 2.7 U |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | 16 J | 3.6 J |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | 11 | 2.7 U |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | 7.8 | 2.7 U |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | 0.1 U | 0.11 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | 11 | 2.7 U |
| SELENIUM | 39 | 39 | N | NA | NA | NA | 2.5 U | 2.7 U |
| SILVER | 39 | 39 | N | NA | NA | NA | 2.5 UR | 2.7 UR |
| THALLIUM | 0.55 | NC | | NA | NA | NA | 2 U | 2.1 U |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | 38 J | 27 UL |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | 12000 U | 12000 U |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | 120 U | 120 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062A<br>D-SB-62REA-3<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-062A<br>D-SB-62REA-5<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-062A<br>D-SB-62REA-7<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-062A<br>D-SB-62REA-9<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-062B<br>D-SB-62REB-3<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **61.3** | **4212** | **239** | **4863** | **62.3** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **60.5** | **4212** | **239** | **4863** | **61.5** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 46 | **2400** | 130 | **4500** | 46 |
| BENZO(A)PYRENE | 22 | 15 | C | **47** | **3000** | **170** | **3300** | **47** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 61 | **3100** | **190** | **5300** | 64 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 27 | 970 | 70 | 950 | 26 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062A<br>D-SB-62REA-3<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-062A<br>D-SB-62REA-5<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-062A<br>D-SB-62REA-7<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-062A<br>D-SB-62REA-9<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-062B<br>D-SB-62REB-3<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 47 | 2100 | 140 | 3800 | 47 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | **520** | **27** | **430** | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 25 | **1300** | 92 | **1400** | 32 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 253 | 13390 | 819 | 19680 | 262 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062B<br>D-SB-62REB-5<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-062B<br>D-SB-62REB-7<br>20091015<br>ORIG<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-062B<br>D-SB-62REB-7-AVG<br>20091015<br>AVG<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-062B<br>D-SB-62REB-7-D<br>20091015<br>DUP<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-062B<br>D-SB-62REB-9<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **282** | **434** | **264** | **94.8** | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **282** | **434** | **264** | **94.8** | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **200** | **320 J** | **185** | 50 J | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | **200** | **300 J** | **184** | **68 J** | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **220** | **340 J** | **200.5** | 61 J | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 110 | 160 J | 99.5 | 39 J | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062B<br>D-SB-62REB-5<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-062B<br>D-SB-62REB-7<br>20091015<br>ORIG<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-062B<br>D-SB-62REB-7-AVG<br>20091015<br>AVG<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-062B<br>D-SB-62REB-7-D<br>20091015<br>DUP<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-062B<br>D-SB-62REB-9<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 180 | 310 J | 181 | 52 J | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **28** | **51 J** | **31** | 11 J | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 110 | 150 J | 96.5 | 43 J | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 1048 | 1631 | 977.5 | 324 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062C<br>D-SB-62REC-3<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-062C<br>D-SB-62REC-5<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-062C<br>D-SB-62REC-7<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-062C<br>D-SB-62REC-9<br>20091015<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-062D<br>D-SB-62RED-5<br>20091014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **174** | **45.8** | **131** | 1.5 U | **58.1** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **174** | **45.1** | **121** | 1.5 U | **57.3** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 130 | 32 | 110 | 1.1 U | 36 |
| BENZO(A)PYRENE | 22 | 15 | C | **120** | **35** | **110** | 1.5 U | **45** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **160** | 40 | 15 U | 1.4 U | 57 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 60 | 16 | 21 U | 2 U | 15 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062C | SB-062C | SB-062C | SB-062C | SB-062D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-62REC-3 | D-SB-62REC-5 | D-SB-62REC-7 | D-SB-62REC-9 | D-SB-62RED-5 |
| SAMPLE DATE | | | | 20091015 | 20091015 | 20091015 | 20091015 | 20091014 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 9 | 5 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 9 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 130 | 22 | 11 U | 1.1 U | 30 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 18 | 1.5 U | 16 U | 1.5 U | 1.7 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 59 | 27 | 18 U | 1.8 U | 28 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 677 | 172 | 220 | 0 U | 211 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062D<br>D-SB-62RED-7<br>20091014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-062D<br>D-SB-62RED-9<br>20091014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-063<br>D-SB-63RE-10<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-063<br>D-SB-63RE-3<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-063<br>D-SB-63RE-4<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **26.5** | 1.5 U | 1.7 U | **379** | **157** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 9.9 | 1.5 U | 1.7 U | **379** | **157** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 11 U | 1.1 U | 1.2 U | **260** | 90 |
| BENZO(A)PYRENE | 22 | 15 | C | 15 U | 1.5 U | 1.7 U | **260** | **110** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 99 | 1.4 U | 1.6 U | **340** | 110 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 20 U | 2 U | 2.2 U | 100 | 61 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062D | SB-062D | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-62RED-7 | D-SB-62RED-9 | D-SB-63RE-10 | D-SB-63RE-3 | D-SB-63RE-4 |
| SAMPLE DATE | | | | 20091014 | 20091014 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 9 | 10 | 3 | 4 |
| BOTTOM DEPTH | | | | 7 | 9 | 10 | 3 | 4 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 11 U | 1 U | 1.2 U | 270 | 110 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 15 U | 1.5 U | 1.7 U | 44 | 19 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 18 U | 1.7 U | 1.9 U | 140 | 69 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 99 | 0 U | 0 U | 1414 | 569 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-063<br>D-SB-63RE-5<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-063<br>D-SB-63RE-6<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-063<br>D-SB-63RE-7<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-063<br>D-SB-63RE-8<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-063<br>D-SB-63RE-9<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 9.4 | 1.7 U | **40.4** | **20.9** | 1.7 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 8.4 | 1.7 U | **39.7** | **20.0** | 1.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.2 U | 21 | 13 | 1.3 U |
| BENZO(A)PYRENE | 22 | 15 | C | 8.4 | 1.7 U | **32** | **16** | 1.7 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | 36 | 17 | 1.6 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2.2 U | 13 | 2.2 U | 2.3 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-063<br>D-SB-63RE-5<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5** | **SB-063<br>D-SB-63RE-6<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6** | **SB-063<br>D-SB-63RE-7<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7** | **SB-063<br>D-SB-63RE-8<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8** | **SB-063<br>D-SB-63RE-9<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 32 | 18 | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.7 U | 1.5 U | 1.7 U | 1.7 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.9 U | 18 | 9.9 | 2 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 8.4 | 0 U | 152 | 73.9 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-063<br>SB-63-05<br>20040924<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-063<br>SB-63-10<br>20040924<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-063A<br>D-SB-63REA-4<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-063A<br>D-SB-63REA-6<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-063B<br>D-SB-63REB-4<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 6 UL | 7 UL | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 UL | 7 UL | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 60 UL | 68 UL | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | 6 UL | 7 UL | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 60 UL | 68 UL | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 6 UL | 7 UL | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | 6 UL | 7 UL | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 UL | 7 UL | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 UL | 7 UL | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 6 UL | 7 UL | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 12 UL | 14 UL | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 6 UL | 7 UL | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 UL | 7 UL | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | 6 UL | 7 UL | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 UL | 7 UL | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 UL | 7 UL | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 410 U | 450 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 410 U | 450 U | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 410 U | 450 U | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 410 U | 450 U | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 410 U | 450 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 410 U | 450 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | 76 J | 450 U | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | 410 U | 450 U | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 410 U | 450 U | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 410 U | 450 U | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 410 U | 450 U | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 410 U | 450 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **354** | 450 U | 11.5 | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **149** | 450 U | 10.5 | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 110 J | 450 U | 1.1 U | 1.1 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | **120 J** | 450 U | 9.4 | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 84 J | 450 U | 11 | 1.4 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 110 J | 450 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 140 J | 450 U | 2 U | 2 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-063 | SB-063 | SB-063A | SB-063A | SB-063B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-63-05 | SB-63-10 | D-SB-63REA-4 | D-SB-63REA-6 | D-SB-63REB-4 |
| SAMPLE DATE | | | | 20040924 | 20040924 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 10 | 4 | 6 | 4 |
| BOTTOM DEPTH | | | | 5 | 10 | 4 | 6 | 4 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 150 J | 450 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 410 U | 450 U | 1.6 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | 150 J | 450 U | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 410 U | 450 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 79 J | 450 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | 410 U | 450 U | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 49 J | 450 U | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 250 J | 450 U | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 1242 | 0 U | 20.4 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 300 U | 330 U | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 3 UL | 3.2 UL | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 1.2 K | 0.65 U | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 3 U | 3.2 U | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 3 U | 3.2 U | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 22 J | 22 J | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 13 J | 13 J | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 9 K | 4.5 K | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.12 U | 0.12 U | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 16 K | 15 K | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 3 U | 3.2 U | NA | NA | NA |
| SILVER | 39 | 39 | N | 3 UR | 3.2 UR | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 2.4 U | 2.6 U | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 36 L | 32 UL | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 12000 U | 13000 U | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 120 U | 140 U | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-063B<br>D-SB-63REB-6<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-063C<br>D-SB-63REC-4<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-063C<br>D-SB-63REC-6<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-063D<br>D-SB-63RED-4<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-063D<br>D-SB-63RED-6<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.6 U | **46.3** | 1.5 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | **45.5** | 1.5 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 36 | 1.1 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | **35** | 1.5 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 49 | 1.4 U | 1.5 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 12 | 2 U | 2.1 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-063B | SB-063C | SB-063C | SB-063D | SB-063D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-63REB-6 | D-SB-63REC-4 | D-SB-63REC-6 | D-SB-63RED-4 | D-SB-63RED-6 |
| SAMPLE DATE | | | | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 6 | 4 | 6 | 4 | 6 |
| BOTTOM DEPTH | | | | 6 | 4 | 6 | 4 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 37 | 1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 18 | 1.7 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 187 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-064<br>SB-64-05<br>20040924<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-065<br>D-SB-65RE-10<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-065<br>D-SB-65RE-3<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-065<br>D-SB-65RE-5<br>20090916<br>ORIG<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-065<br>D-SB-65RE-5-AVG<br>20090916<br>AVG<br>SO<br>NORMAL<br>SB<br>5<br>5 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 6 UL | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 UL | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 61 UL | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | 6 UL | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 61 UL | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 6 UL | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | 6 UL | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 UL | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 UL | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 6 UL | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 12 UL | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 6 UL | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 UL | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | 6 UL | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 UL | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 UL | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 410 U | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 410 U | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 410 U | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 410 U | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 410 U | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 410 U | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | 410 U | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | 410 U | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 410 U | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 410 U | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 410 U | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 410 U | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 410 U | 1.5 U | **15.1** | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 410 U | 1.5 U | 14.3 | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 410 U | 1.1 U | 9.1 | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 410 U | 1.5 U | 11 | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 410 U | 1.4 U | 14 | 1.5 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 410 U | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 410 U | 2 U | 2 U | 2.1 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-064<br>SB-64-05<br>20040924<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-065<br>D-SB-65RE-10<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-065<br>D-SB-65RE-3<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-065<br>D-SB-65RE-5<br>20090916<br>ORIG<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-065<br>D-SB-65RE-5-AVG<br>20090916<br>AVG<br>SO<br>NORMAL<br>SB<br>5<br>5 |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 410 U | 1.1 U | 11 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 410 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | 410 U | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 410 U | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 410 U | 1.8 U | 9.8 | 1.9 U | 1.9 U |
| NAPHTHALENE | 160000 | 3600 | C | 410 U | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 410 U | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 410 U | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 54.9 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 300 U | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 3 UL | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **0.79 K** | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 3 U | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 3 U | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 26 J | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 22 J | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 13 K | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.14 | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 18 K | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 3 U | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | 3 UR | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 2.4 U | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 30 UL | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 12000 U | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 120 U | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-065<br>D-SB-65RE-5-D<br>20090916<br>DUP<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-065<br>D-SB-65RE-6<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-065<br>D-SB-65RE-7<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-065<br>D-SB-65RE-8<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-065<br>D-SB-65RE-9<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2 U | 2 U | 2 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-065<br>D-SB-65RE-5-D<br>20090916<br>DUP<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-065<br>D-SB-65RE-6<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-065<br>D-SB-65RE-7<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-065<br>D-SB-65RE-8<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-065<br>D-SB-65RE-9<br>20090916<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1 U | 1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 1.8 U | 1.7 U | 1.7 U | 1.9 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-065 | SB-065 | SB-066 | SB-066 | SB-066 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-65-05 | SB-65-10 | D-SB-66RE-3 | D-SB-66RE-4 | D-SB-66RE-5 |
| SAMPLE DATE | | | | 20040917 | 20040917 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | | | | 5 | 10 | 3 | 4 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 6 U | 6 U | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 U | 6 U | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 62 U | 60 U | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | 6 U | 6 U | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 62 U | 60 U | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 6 U | 6 U | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | 6 U | 6 U | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 U | 6 U | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 U | 6 U | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 6 U | 6 U | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 12 U | 12 U | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 8 J | 8 J | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | 6 U | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | 6 U | 6 U | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 U | 6 U | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 U | 6 U | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 420 U | 400 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 420 U | 400 U | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 420 U | 400 U | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 420 U | 400 U | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 420 U | 400 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 420 U | 400 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | 420 UJ | 400 UJ | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | 420 U | 400 U | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 420 U | 400 U | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 420 U | 400 U | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 420 U | 400 U | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 420 U | 400 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 420 U | 400 U | 1.5 U | 1.5 U | **46.9** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 420 U | 400 U | 1.5 U | 1.5 U | **46.1** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 420 U | 400 U | 1.1 U | 1.1 U | 53 |
| BENZO(A)PYRENE | 22 | 15 | C | 420 UJ | 400 UJ | 1.5 U | 1.5 U | **35** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 420 UJ | 400 UJ | 1.4 U | 1.4 U | 39 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 420 UJ | 400 UJ | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 420 UJ | 400 UJ | 1.9 U | 2 U | 17 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-065**<br>**SB-65-05**<br>**20040917**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**5**<br>**5** | **SB-065**<br>**SB-65-10**<br>**20040917**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**10**<br>**10** | **SB-066**<br>**D-SB-66RE-3**<br>**20090914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**3**<br>**3** | **SB-066**<br>**D-SB-66RE-4**<br>**20090914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**4**<br>**4** | **SB-066**<br>**D-SB-66RE-5**<br>**20090914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**5**<br>**5** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 420 U | 400 U | 1 U | 1.1 U | 58 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 420 UJ | 400 UJ | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | 420 U | 400 U | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 420 U | 400 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 420 UJ | 400 UJ | 1.7 U | 1.8 U | 17 |
| NAPHTHALENE | 160000 | 3600 | C | 420 U | 400 U | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 420 U | 400 U | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 420 U | 400 U | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 219 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 310 U | 290 U | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 3.1 UR | 2.9 UR | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **2 L** | 0.58 UL | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 3.1 UL | 2.9 UL | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 3.1 UL | 2.9 UL | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 35 | 16 | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 23 L | 17 L | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 6.5 L | 3 L | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.12 U | 0.12 U | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 23 | 14 | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 3.1 UL | 2.9 UL | NA | NA | NA |
| SILVER | 39 | 39 | N | 3.1 UR | 2.9 UR | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 2.5 UL | 2.3 UL | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 31 U | 29 U | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 13000 U | 12000 | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 130 U | 120 U | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-066<br>D-SB-66RE-6<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-066<br>D-SB-66RE-7<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-066<br>D-SB-66RE-8<br>20090914<br>ORIG<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-066<br>D-SB-66RE-8-AVG<br>20090914<br>AVG<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-066<br>D-SB-66RE-8-D<br>20090914<br>DUP<br>SO<br>NORMAL<br>SB<br>8<br>8 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **45.4** | 1.6 U | 1.5 U | 1.55 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **44.6** | 1.6 U | 1.5 U | 1.55 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 61 | 1.2 U | 1.1 U | 1.15 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | **33** | 1.6 U | 1.5 U | 1.55 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 38 | 1.5 U | 1.4 U | 1.45 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 15 | 2.1 U | 2 U | 2.05 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-066 | SB-066 | SB-066 | SB-066 | SB-066 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-66RE-6 | D-SB-66RE-7 | D-SB-66RE-8 | D-SB-66RE-8-AVG | D-SB-66RE-8-D |
| SAMPLE DATE | | | | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | | | | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 6 | 7 | 8 | 8 | 8 |
| BOTTOM DEPTH | | | | 6 | 7 | 8 | 8 | 8 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 75 | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 1.55 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 15 | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 237 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-066 | SB-066 | SB-066A | SB-066B | SB-066C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-66-05 | SB-66-10 | D-SB-66REA-4 | D-SB-66REB-4 | D-SB-66REC-4 |
| SAMPLE DATE | | | | 20040923 | 20040923 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 10 | 4 | 4 | 4 |
| BOTTOM DEPTH | | | | 5 | 10 | 4 | 4 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 6 U | 6 U | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 U | 6 U | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 57 U | 59 U | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | 6 U | 6 U | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 57 U | 59 U | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 6 U | 6 U | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | 6 U | 6 U | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 U | 6 U | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 U | 6 U | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 6 U | 6 U | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 11 U | 12 U | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 10 J | 8 J | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | 6 U | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | 6 U | 6 U | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 U | 6 U | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 U | 6 U | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 390 U | 400 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 390 U | 400 U | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 390 U | 400 U | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 390 U | 400 U | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 390 U | 400 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 61 J | 76 J | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | 390 U | 400 U | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | 390 U | 400 U | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 390 U | 400 U | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 390 U | 400 U | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 390 U | 400 U | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 390 U | 400 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 390 U | 400 U | 1.5 U | 3.3 | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 390 U | 400 U | 1.5 U | 1.7 | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 390 U | 400 U | 1.1 U | 7.7 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 390 U | 400 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 390 U | 400 U | 1.4 U | 9.7 | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 390 U | 400 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 390 U | 400 U | 2 U | 1.9 U | 1.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-066**<br>**SB-66-05**<br>**20040923**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**5**<br>**5** | **SB-066**<br>**SB-66-10**<br>**20040923**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**10**<br>**10** | **SB-066A**<br>**D-SB-66REA-4**<br>**20091014**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**4**<br>**4** | **SB-066B**<br>**D-SB-66REB-4**<br>**20091014**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**4**<br>**4** | **SB-066C**<br>**D-SB-66REC-4**<br>**20091014**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**4**<br>**4** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 390 U | 400 U | 1 U | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 390 U | 400 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | 390 U | 400 U | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 390 U | 400 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 390 U | 400 U | 1.7 U | 1.7 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | 390 U | 400 U | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 390 U | 400 U | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 390 U | 400 U | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 17.4 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 290 U | 290 U | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 2.7 UL | 3 UL | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **1.4** | **1.5** | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 2.7 U | 3 U | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 2.7 U | 3 U | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 22 J | 11 J | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 23 | 7.7 | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 7.8 | 6.3 | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.11 U | 0.12 U | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 2.7 U | 7.7 | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 4 | 3 U | NA | NA | NA |
| SILVER | 39 | 39 | N | 2.7 UR | 3 UR | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 2.2 U | 2.4 U | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 27 UL | 35 J | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 12000 U | 12000 U | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 110 U | 120 U | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-066D<br>D-SB-66RED-3<br>20091014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-066D<br>D-SB-66RED-4<br>20091014<br>ORIG<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-066D<br>D-SB-66RED-4-AVG<br>20091014<br>AVG<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-066D<br>D-SB-66RED-4-D<br>20091014<br>DUP<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-067<br>SB-67-05<br>20040927<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | 7 UL |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | 7 UL |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | 72 UL |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | 7 UL |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | 72 UL |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | 7 UL |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | 7 UL |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | 7 UL |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | 7 UL |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | 7 UL |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | 14 UL |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | 7 UL |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | 7 UL |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | 7 UL |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | 7 UL |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | 7 UL |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | 490 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | 490 U |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | 490 U |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | 490 U |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | 490 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | 490 U |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | 490 U |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | 490 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | 490 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | 490 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | 490 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | 490 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **62.2** | 1.5 U | 8.4 | **16.0** | 490 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **62.2** | 1.5 U | 7.99 | **15.2** | 490 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 37 | 1.1 U | 6.775 | 13 | 490 U |
| BENZO(A)PYRENE | 22 | 15 | C | **39** | 1.5 U | 1.5 U | 1.5 U | 490 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 47 | 1.4 U | 7.85 | 15 | 490 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | 490 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 23 | 2 U | 7 | 13 | 490 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-066D | SB-066D | SB-066D | SB-066D | SB-067 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-66RED-3 | D-SB-66RED-4 | D-SB-66RED-4-AVG | D-SB-66RED-4-D | SB-67-05 |
| SAMPLE DATE | | | | 20091014 | 20091014 | 20091014 | 20091014 | 20040927 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 4 | 4 | 4 | 5 |
| BOTTOM DEPTH | | | | 3 | 4 | 4 | 4 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 32 | 1.1 U | 1.1 U | 1.1 U | 490 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 12 | 1.5 U | 5.875 | 11 | 490 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | 490 U |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | 490 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 25 | 1.8 U | 6.95 | 13 | 490 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | 490 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | 490 U |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | 490 U |
| TOTAL PAHS | NC | NC | | 215 | 0 U | 32.5 | 65 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | 360 U |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | 3.6 UL |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | **1.2 K** |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | 3.6 U |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | 3.6 U |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | 41 J |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | 9.1 J |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | 4.3 K |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | 0.14 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | 3.6 U |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | 3.6 U |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | 3.6 UR |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | 2.9 U |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | 36 UL |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | 17000 |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | 150 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-067 | SB-239 | SB-239 | SB-239 | SB-239 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-67-10 | D-SB-239RE-10 | D-SB-239RE-3 | D-SB-239RE-4 | D-SB-239RE-5 |
| SAMPLE DATE | | | | 20040927 | 20091006 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | | | | 10 | 10 | 3 | 4 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 6 UL | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 UL | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 59 UL | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | 6 UL | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 59 UL | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 6 UL | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | 6 UL | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 UL | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 UL | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 6 UL | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 12 UL | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 6 UL | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 UL | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | 6 UL | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 UL | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 UL | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 410 U | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 410 U | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 410 U | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 410 U | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 410 U | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 410 U | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | 410 U | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | 410 U | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 410 U | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 410 U | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 410 U | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 410 U | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 410 U | **26.3** | 3.3 | **26.2** | **23.6** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 410 U | **21.2** | 1.7 | **26.2** | **22.9** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 410 U | 14 J | 8.3 | 13 | 21 |
| BENZO(A)PYRENE | 22 | 15 | C | 410 U | **16 J** | 1.5 U | 12 | **17** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 410 U | 22 J | 8.6 | 14 | 22 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 410 U | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 410 U | 9.8 U | 1.9 U | 13 | 14 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-067**<br>**SB-67-10**<br>**20040927**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**10**<br>**10** | **SB-239**<br>**D-SB-239RE-10**<br>**20091006**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**10**<br>**10** | **SB-239**<br>**D-SB-239RE-3**<br>**20090914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**3**<br>**3** | **SB-239**<br>**D-SB-239RE-4**<br>**20090914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**4**<br>**4** | **SB-239**<br>**D-SB-239RE-5**<br>**20090914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**5**<br>**5** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 410 U | 14 J | 1 U | 15 | 23 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 410 U | 10 U | 1.5 U | 10 | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | 410 U | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 410 U | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 410 U | 16 J | 1.7 U | 14 | 14 |
| NAPHTHALENE | 160000 | 3600 | C | 410 U | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 410 U | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 410 U | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 82 | 16.9 | 91 | 111 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 300 U | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 2.7 UL | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **1.2 K** | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 2.7 U | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 2.7 U | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 13 J | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 31 J | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 11 K | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.11 U | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 27 K | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 2.7 U | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | 2.7 UR | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 2.2 U | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 50 L | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 12000 U | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 120 U | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-239 | SB-239 | SB-239 | SB-239 | SB-240 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-239RE-6 | D-SB-239RE-7 | D-SB-239RE-8 | D-SB-239RE-9 | D-SB-240RE-10 |
| SAMPLE DATE | | | | 20090914 | 20091006 | 20091006 | 20091006 | 20090915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 6 | 7 | 8 | 9 | 10 |
| BOTTOM DEPTH | | | | 6 | 7 | 8 | 9 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **208** | **417** | **367** | **1801** | **112** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **208** | **417** | **367** | **1801** | **112** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 120 | **190** | **180** | **930** | 88 |
| BENZO(A)PYRENE | 22 | 15 | C | **140** | **300** | **260** | **1200** | **76** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **170** | **350** | **300** | **1400** | 110 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 67 | 8.4 U | 8.2 U | 8.2 U | 36 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-239 | SB-239 | SB-239 | SB-239 | SB-240 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-239RE-6 | D-SB-239RE-7 | D-SB-239RE-8 | D-SB-239RE-9 | D-SB-240RE-10 |
| SAMPLE DATE | | | | 20090914 | 20091006 | 20091006 | 20091006 | 20090915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 6 | 7 | 8 | 9 | 10 |
| BOTTOM DEPTH | | | | 6 | 7 | 8 | 9 | 10 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 130 | 190 | 180 | 850 | 80 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 30 | 42 | 41 | 270 | 12 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 84 | 210 | 180 | 970 | 41 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 741 | 1282 | 1141 | 5620 | 443 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240<br>D-SB-240RE-3<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-240<br>D-SB-240RE-4<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-240<br>D-SB-240RE-6<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-240<br>D-SB-240RE-7<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-240<br>D-SB-240RE-8<br>20090914<br>ORIG<br>SO<br>NORMAL<br>SB<br>8<br>8 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **203** | **135** | **187** | **5503** | 2.8 |
| BAP EQUIVALENT-POS | 22 | 15 | C | **203** | **135** | **187** | **5503** | 0.99 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **160** | 91 | 130 | **4600** | 1.2 UJ |
| BENZO(A)PYRENE | 22 | 15 | C | **140** | **91** | **130** | **3800** | 1.6 UJ |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **190** | 120 | **160** | **4700** | 9.9 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 81 | 49 | 61 | **1900** | 2.1 UJ |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-240<br>D-SB-240RE-3<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3** | **SB-240<br>D-SB-240RE-4<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4** | **SB-240<br>D-SB-240RE-6<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6** | **SB-240<br>D-SB-240RE-7<br>20090914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7** | **SB-240<br>D-SB-240RE-8<br>20090914<br>ORIG<br>SO<br>NORMAL<br>SB<br>8<br>8** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 160 | 100 | 140 | 3900 | 1.1 UJ |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **21** | **17** | **20** | **570** | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 65 | 52 | 77 | **1800** | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 817 | 520 | 718 | 21270 | 9.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240<br>D-SB-240RE-8-AVG<br>20090914<br>AVG<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-240<br>D-SB-240RE-8-D<br>20090914<br>DUP<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-240A<br>D-SB-240REA-3<br>20091014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-240A<br>D-SB-240REA-5<br>20091014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-240A<br>D-SB-240REA-7<br>20091014<br>ORIG<br>SO<br>NORMAL<br>SB<br>7<br>7 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **15.5** | **28.3** | **46.8** | **326** | 4.6 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 14.3 | **27.6** | **46.0** | **326** | 2.9 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 12.3 | 24 J | 40 | **240** | 15 |
| BENZO(A)PYRENE | 22 | 15 | C | 10.9 | **21 J** | **35** | **230** | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 16.95 | 24 J | 48 | **240** | 14 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 9.025 | 17 J | 20 | 86 | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240 | SB-240 | SB-240A | SB-240A | SB-240A |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-240RE-8-AVG | D-SB-240RE-8-D | D-SB-240REA-3 | D-SB-240REA-5 | D-SB-240REA-7 |
| SAMPLE DATE | | | | 20090914 | 20090914 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL | NORMAL | ORIG |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 8 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 8 | 8 | 3 | 5 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 11.775 | 23 J | 36 | 310 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.55 U | 1.5 U | 1.5 U | 36 | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 8.45 | 16 | 20 | 110 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 67.45 | 125 | 199 | 1252 | 29 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240A<br>D-SB-240REA-7-AVG<br>20091014<br>AVG<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-240A<br>D-SB-240REA-7-D<br>20091014<br>DUP<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-240A<br>D-SB-240REA-9<br>20091014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-240B<br>D-SB-240REB-3<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-240B<br>D-SB-240REB-5<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 10.0 | **15.3** | 3.4 | **37.9** | 2.4 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 8.7 | 14.5 | 1.8 | **37.1** | 0.79 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 15 | 15 | 8.7 | 29 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 5.4 | 10 | 1.5 U | **29** | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 17 | 20 | 9.2 | 37 | 7.9 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2.1 U | 2 U | 17 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-240A<br>D-SB-240REA-7-AVG<br>20091014<br>AVG<br>SO<br>NORMAL<br>SB<br>7<br>7** | **SB-240A<br>D-SB-240REA-7-D<br>20091014<br>DUP<br>SO<br>NORMAL<br>SB<br>7<br>7** | **SB-240A<br>D-SB-240REA-9<br>20091014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9** | **SB-240B<br>D-SB-240REB-3<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3** | **SB-240B<br>D-SB-240REB-5<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1.1 U | 42 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 5.45 | 10 | 1.8 U | 13 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 42 | 55 | 17.9 | 167 | 7.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240B<br>D-SB-240REB-7<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-240B<br>D-SB-240REB-9<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-240C<br>D-SB-240REC-3<br>20091013<br>ORIG<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-240C<br>D-SB-240REC-3-AVG<br>20091013<br>AVG<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-240C<br>D-SB-240REC-3-D<br>20091013<br>DUP<br>SO<br>NORMAL<br>SB<br>3<br>3 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.6 U | 1.5 U | **108** | **67.4** | **26.7** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | **108** | **67.0** | **25.9** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 65 J | 42.5 | 20 J |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | **71 J** | **45.5** | **20 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 110 J | 68 | 26 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2 U | 31 J | 21.5 | 12 J |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240B | SB-240B | SB-240C | SB-240C | SB-240C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-240REB-7 | D-SB-240REB-9 | D-SB-240REC-3 | D-SB-240REC-3-AVG | D-SB-240REC-3-D |
| SAMPLE DATE | | | | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 9 | 3 | 3 | 3 |
| BOTTOM DEPTH | | | | 7 | 9 | 3 | 3 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 66 J | 43.5 | 21 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 15 J | 7.875 | 1.5 UJ |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 42 J | 27 | 12 J |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 400 | 255.5 | 111 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240C<br>D-SB-240REC-5<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-240C<br>D-SB-240REC-7<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-240C<br>D-SB-240REC-9<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-240D<br>D-SB-240RED-3<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-240D<br>D-SB-240RED-5<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **4899** | 1.5 U | **17.1** | **49.6** | **5759** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **4899** | 1.5 U | **16.3** | **48.8** | **5759** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **4100** | 1.1 U | 10 | 39 | **1700** |
| BENZO(A)PYRENE | 22 | 15 | C | **3400** | 1.5 U | 13 | **38** | **3800** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **4600** | 1.3 U | 13 | 44 | **4500** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1500 | 1.9 U | 8 | 27 | **1700** |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240C | SB-240C | SB-240C | SB-240D | SB-240D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-240REC-5 | D-SB-240REC-7 | D-SB-240REC-9 | D-SB-240RED-3 | D-SB-240RED-5 |
| SAMPLE DATE | | | | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | | | | 5 | 7 | 9 | 3 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 3500 | 1 U | 13 | 41 | 2000 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **440** | 1.5 U | 1.6 U | 1.5 U | **1000** |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **1700** | 1.7 U | 8.8 | 22 | **3200** |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 19240 | 0 U | 65.8 | 211 | 17900 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-240D<br>D-SB-240RED-7<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7** | **SB-240D<br>D-SB-240RED-9<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9** |
|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 14.1 | **809** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 13.2 | **809** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 8.8 | **410** |
| BENZO(A)PYRENE | 22 | 15 | C | 11 | **560** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 13 | **610** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 230 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-240D<br>D-SB-240RED-7<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7** | **SB-240D<br>D-SB-240RED-9<br>20091013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9** |
|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | |
| CHRYSENE | 22000 | 15000 | C | 9.7 | 420 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | **110** |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | **340** |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA |
| TOTAL PAHS | NC | NC | | 42.5 | 2680 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA |
| **METALS (MG/KG)** | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA |
| COPPER | 310 | 310 | N | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA |
| LEAD | 400 | 400 | | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA |
| SILVER | 39 | 39 | N | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-243RE-10 | D-SB-243RE-3 | D-SB-243RE-4 | D-SB-243RE-5 | D-SB-243RE-6 |
| SAMPLE DATE | | | | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | | | | 10 | 3 | 4 | 5 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.6 U | **61.8** | **21.5** | **20.4** | **32.2** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | **60.9** | **20.7** | **19.6** | **31.4** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 29 | 11 | 11 | 22 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | **50** | **17** | **16** | **24** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 48 | 15 | 12 | 27 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.2 U | 18 | 2.1 U | 12 | 20 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-243RE-10 | D-SB-243RE-3 | D-SB-243RE-4 | D-SB-243RE-5 | D-SB-243RE-6 |
| SAMPLE DATE | | | | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | | | | 10 | 3 | 4 | 5 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 39 | 12 | 12 | 28 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.7 U | 1.6 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 30 | 11 | 12 | 23 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 214 | 66 | 75 | 144 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-243<br>D-SB-243RE-7<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-243<br>D-SB-243RE-8<br>20090915<br>ORIG<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-243<br>D-SB-243RE-8-AVG<br>20090915<br>AVG<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-243<br>D-SB-243RE-8-D<br>20090915<br>DUP<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-243<br>D-SB-243RE-9<br>20090915<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **15.3** | 1.6 U | 2.5 | 4.2 | 1.7 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 14.4 | 1.6 U | 1.6 | 2.3 | 1.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 10 | 1.2 UJ | 5.8 | 11 J | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 12 | 1.6 U | 1.7 U | 1.8 U | 1.7 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 14 | 1.5 UJ | 6.375 | 12 J | 1.6 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2.1 U | 2.25 U | 2.4 U | 2.2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-243RE-7 | D-SB-243RE-8 | D-SB-243RE-8-AVG | D-SB-243RE-8-D | D-SB-243RE-9 |
| SAMPLE DATE | | | | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 8 | 8 | 8 | 9 |
| BOTTOM DEPTH | | | | 7 | 8 | 8 | 8 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 12 | 1.1 UJ | 5.775 | 11 J | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.7 U | 1.8 U | 1.7 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 1.95 U | 2.1 U | 2 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 48 | 0 U | 17 | 34 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-243A<br>D-SB-243REA-4<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-243B<br>D-SB-243REB-4<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-243C<br>D-SB-243REC-4<br>20091012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-243D<br>D-SB-243RED-4<br>20091012<br>ORIG<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-243D<br>D-SB-243RED-4-AVG<br>20091012<br>AVG<br>SO<br>NORMAL<br>SB<br>4<br>4 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **85.9** | 2.6 | 1.7 U | **25.6** | **21.6** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **85.9** | 0.86 | 1.7 U | **24.8** | **20.8** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 50 | 1.2 U | 1.2 U | 20 J | 15 |
| BENZO(A)PYRENE | 22 | 15 | C | **56** | 1.6 U | 1.7 U | **19** | **16.5** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 95 | 8.6 | 1.5 U | 21 | 19.5 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 28 | 2.1 U | 2.2 U | 10 | 5.5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-243A**<br>**D-SB-243REA-4**<br>**20091012**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**4**<br>**4** | **SB-243B**<br>**D-SB-243REB-4**<br>**20091012**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**4**<br>**4** | **SB-243C**<br>**D-SB-243REC-4**<br>**20091012**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**4**<br>**4** | **SB-243D**<br>**D-SB-243RED-4**<br>**20091012**<br>**ORIG**<br>**SO**<br>**NORMAL**<br>**SB**<br>**4**<br>**4** | **SB-243D**<br>**D-SB-243RED-4-AVG**<br>**20091012**<br>**AVG**<br>**SO**<br>**NORMAL**<br>**SB**<br>**4**<br>**4** |
|---|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 74 | 1.1 U | 1.1 U | 20 | 18 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 11 | 1.6 U | 1.7 U | 1.6 U | 1.55 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 40 | 1.8 U | 1.9 U | 16 J | 8.45 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 354 | 8.6 | 0 U | 106 | 82 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-243D | SB-244 | SB-244 | SB-245 | SB-245 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-243RED-4-D | SB-244-05 | SB-244-10 | SB-245-05 | SB-245-10 |
| SAMPLE DATE | | | | 20091012 | 20050607 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | | | | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | | | | 4 | 5 | 10 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **17.7** | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | **16.8** | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 10 J | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 14 | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 18 | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-243D | SB-244 | SB-244 | SB-245 | SB-245 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-243RED-4-D | SB-244-05 | SB-244-10 | SB-245-05 | SB-245-10 |
| SAMPLE DATE | | | | 20091012 | 20050607 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | | | | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | | | | 4 | 5 | 10 | 5 | 10 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 16 | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 UJ | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 58 | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | 38 U | 38 U | 39 U | 38 U |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-246<br>SB-246-05<br>20050607<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-246<br>SB-246-10<br>20050607<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-247<br>SB-247-05<br>20050607<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-247<br>SB-247-10<br>20050607<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-248<br>SB-248-05<br>20050607<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-246 | SB-246 | SB-247 | SB-247 | SB-248 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-246-05 | SB-246-10 | SB-247-05 | SB-247-10 | SB-248-05 |
| SAMPLE DATE | | | | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | | | | 5 | 10 | 5 | 10 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 38 U | 40 U | 40 U | 42 U | 40 U |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | 0.7 | 1 | 0.8 |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | **4** | 0.8 U | **6** |
| BARIUM | 1600 | 1500 | N | NA | NA | 30 | 24 | 31 |
| BERYLLIUM | 16 | 16 | N | NA | NA | 2.5 | 1.3 | 1.8 |
| CADMIUM | 3.9 | 7 | N | NA | NA | 0.2 | 0.4 | 0.1 |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | 22.1 | 20.4 | 24.6 |
| COBALT | NC | 2.3 | N | NA | NA | **10.7** | **6.2** | **11.4** |
| COPPER | 310 | 310 | N | NA | NA | 21 | 34 | 21 |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | 18 | 7 | 9 |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | 0.1 K | 0.002 U | 0.06 K |
| MOLYBDENUM | NC | 39 | N | NA | NA | 0.5 U | 0.6 U | 0.6 B |
| NICKEL | 160 | 150 | N | NA | NA | 30 | 12 | 13 |
| SELENIUM | 39 | 39 | N | NA | NA | 2 | 4 | 5 |
| SILVER | 39 | 39 | N | NA | NA | 0.05 U | 0.06 U | 0.06 U |
| THALLIUM | 0.55 | NC | | NA | NA | 1 U | 1 U | 1 U |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | **33** | **28.4** | **40.3** |
| ZINC | 2300 | 2300 | N | NA | NA | 57 | 83 | 65 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | 0.37 UL | NA | 0.36 UL |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | 0.31 K | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-248 | SB-249 | SB-249 | SB-318 | SB-318 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-248-10 | SB-249-05 | SB-249-10 | SB-318-0203 | SB-318-0506 |
| SAMPLE DATE | | | | 20050607 | 20050607 | 20050607 | 20071031 | 20071031 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 5 | 10 | 2 | 5 |
| BOTTOM DEPTH | | | | 10 | 5 | 10 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | NA | NA | NA | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-248 | SB-249 | SB-249 | SB-318 | SB-318 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-248-10 | SB-249-05 | SB-249-10 | SB-318-0203 | SB-318-0506 |
| SAMPLE DATE | | | | 20050607 | 20050607 | 20050607 | 20071031 | 20071031 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 5 | 10 | 2 | 5 |
| BOTTOM DEPTH | | | | 10 | 5 | 10 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 38 U | 40 U | 39 U | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.3 U | 0.4 | 0.4 U | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **8** | 3 B | **7** | NA | NA |
| BARIUM | 1600 | 1500 | N | 13 | 42 | 17 | NA | NA |
| BERYLLIUM | 16 | 16 | N | 2.5 | 2.7 | 2.7 | NA | NA |
| CADMIUM | 3.9 | 7 | N | 0.1 | 0.3 | 0.2 | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 37.2 | 18 | 49.3 | NA | NA |
| COBALT | NC | 2.3 | N | **30.1** | **19.6** | **3.4** | NA | NA |
| COPPER | 310 | 310 | N | 16 | 20 | 7 | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 6 | 13 | 18 | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.002 U | 0.4 K | 0.002 U | 0.02 UL | 0.029 L |
| MOLYBDENUM | NC | 39 | N | 0.5 B | 0.6 U | 0.9 B | NA | NA |
| NICKEL | 160 | 150 | N | 52 | 37 | 12 | NA | NA |
| SELENIUM | 39 | 39 | N | 4 | 4 | 5 | NA | NA |
| SILVER | 39 | 39 | N | 0.05 U | 0.06 U | 0.06 U | NA | NA |
| THALLIUM | 0.55 | NC | | 1 U | 1 U | 1 U | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | **51** | **24.5** | **90.5** | NA | NA |
| ZINC | 2300 | 2300 | N | 39 | 137 | 10 | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | 85.3 | 88.6 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | 0.35 UL | NA | 0.35 UL | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | 0.474 K | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-318 | SB-319 | SB-319 | SB-319 | SB-320 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-318-0809 | SB-319-0203 | SB-319-0506 | SB-319-0809 | SB-320-0203 |
| SAMPLE DATE | | | | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 2 | 5 | 8 | 2 |
| BOTTOM DEPTH | | | | 9 | 3 | 6 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.5 U | 15 | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 15 | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 15 J | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-318 | SB-319 | SB-319 | SB-319 | SB-320 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-318-0809 | SB-319-0203 | SB-319-0506 | SB-319-0809 | SB-320-0203 |
| SAMPLE DATE | | | | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 2 | 5 | 8 | 2 |
| BOTTOM DEPTH | | | | 9 | 3 | 6 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 15 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.055 L | 0.043 L | 0.024 L | 0.026 L | 0.028 L |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 85.2 | 89.3 | 87.9 | 85.1 | 88.4 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-320<br>SB-320-0506<br>20071031<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 | SB-320<br>SB-320-0809<br>20071031<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 | SB-321<br>SB-321-0203<br>20071031<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 | SB-321<br>SB-321-0506<br>20071031<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 | SB-321<br>SB-321-0809<br>20071031<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.5 U | 1.5 U | **940** | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | **940** | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | **940** | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-320 | SB-320 | SB-321 | SB-321 | SB-321 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-320-0506 | SB-320-0809 | SB-321-0203 | SB-321-0506 | SB-321-0809 |
| SAMPLE DATE | | | | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | | | | 6 | 9 | 3 | 6 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 940 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.019 UL | 0.035 L | 0.06 L | 0.02 UL | 0.02 UL |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 88.9 | 86.9 | 89.2 | 85.4 | 85 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-322<br>SB-322-0203<br>20071031<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 | SB-322<br>SB-322-0506<br>20071031<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 | SB-322<br>SB-322-0809<br>20071031<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 | SB-323<br>SB-323-0203<br>20071031<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 | SB-323<br>SB-323-0506<br>20071031<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 13 | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 13 | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 13 J | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-322 | SB-322 | SB-322 | SB-323 | SB-323 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-322-0203 | SB-322-0506 | SB-322-0809 | SB-323-0203 | SB-323-0506 |
| SAMPLE DATE | | | | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | | | | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 13 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.019 UL | 0.035 L | 0.019 UL | 0.019 UL | 0.019 UL |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 85.5 | 86.8 | 86.5 | 89.6 | 86.6 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-323 | SB-324 | SB-324 | SB-324 | SB-325 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-323-0809 | SB-324-0203 | SB-324-0506 | SB-324-0809 | SB-325-0203 |
| SAMPLE DATE | | | | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 2 | 5 | 8 | 2 |
| BOTTOM DEPTH | | | | 9 | 3 | 6 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 72 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 72 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 72 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-323 | SB-324 | SB-324 | SB-324 | SB-325 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-323-0809 | SB-324-0203 | SB-324-0506 | SB-324-0809 | SB-325-0203 |
| SAMPLE DATE | | | | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 2 | 5 | 8 | 2 |
| BOTTOM DEPTH | | | | 9 | 3 | 6 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 72 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.057 L | 0.036 L | 0.031 L | 0.034 L | 0.057 L |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 83.1 | 89.6 | 87.5 | 87 | 88.2 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-325 | SB-325 | SB-326 | SB-326 | SB-326 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-325-0506 | SB-325-0809 | SB-326-0203 | SB-326-0506 | SB-326-0809 |
| SAMPLE DATE | | | | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | | | | 6 | 9 | 3 | 6 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.5 U | 1.5 U | **25** | 1.5 U | **110** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | **25** | 1.5 U | **110** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | **25 J** | 1.5 U | **110 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-325 | SB-325 | SB-326 | SB-326 | SB-326 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-325-0506 | SB-325-0809 | SB-326-0203 | SB-326-0506 | SB-326-0809 |
| SAMPLE DATE | | | | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | | | | 6 | 9 | 3 | 6 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 25 | 0 U | 110 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.019 UL | 0.02 UL | 0.093 L | 0.021 L | 0.064 L |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 89.2 | 84.6 | 88 | 88.8 | 84.2 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-327 | SB-327 | SB-327 | SB-328 | SB-328 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-327-0203 | SB-327-0506 | SB-327-0809 | SB-328-0203 | SB-328-0506 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | | | | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **130** | 380 U | 390 U | **170** | 400 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **130** | 380 U | 390 U | **170** | 400 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | **130 J** | 380 U | 390 U | **170 J** | 400 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-327 | SB-327 | SB-327 | SB-328 | SB-328 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-327-0203 | SB-327-0506 | SB-327-0809 | SB-328-0203 | SB-328-0506 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | | | | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 130 | 0 U | 0 U | 170 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.27 | 0.029 B | 0.02 B | 0.33 | 0.023 B |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 82.8 | 85.9 | 84.6 | 86.9 | 82.6 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-328<br>SB-328-0809<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 | SB-329<br>SB-329-0203<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 | SB-329<br>SB-329-0506<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 | SB-329<br>SB-329-0809<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 | SB-330<br>SB-330-0203<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **35** | **27** | 410 U | 390 U | **110** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **35** | **27** | 410 U | 390 U | **110** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | **35 J** | **27 J** | 410 U | 390 U | **110 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-328 | SB-329 | SB-329 | SB-329 | SB-330 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-328-0809 | SB-329-0203 | SB-329-0506 | SB-329-0809 | SB-330-0203 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 2 | 5 | 8 | 2 |
| BOTTOM DEPTH | | | | 9 | 3 | 6 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 35 | 27 | 0 U | 0 U | 110 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.025 B | 0.031 B | 0.041 B | 0.025 B | 0.041 B |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.2 | 82.1 | 80.1 | 84.1 | 82.4 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-330 | SB-330 | SB-331 | SB-331 | SB-331 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-330-0506 | SB-330-0809 | SB-331-0203 | SB-331-0506 | SB-331-0809 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | | | | 6 | 9 | 3 | 6 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **110** | 380 U | **20** | 390 U | 400 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **110** | 380 U | **20** | 390 U | 400 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | **110 J** | 380 U | **20 J** | 390 U | 400 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-330 | SB-330 | SB-331 | SB-331 | SB-331 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-330-0506 | SB-330-0809 | SB-331-0203 | SB-331-0506 | SB-331-0809 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | | | | 6 | 9 | 3 | 6 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 110 | 0 U | 20 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.1 B | 0.035 B | 0.059 B | 0.035 B | 0.04 B |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 80.1 | 86.7 | 86.1 | 84.9 | 82.7 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-332 | SB-332 | SB-332 | SB-333 | SB-333 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-332-0203 | SB-332-0506 | SB-332-0809 | SB-333-0203 | SB-333-0506 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | | | | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **38** | 410 U | **64** | 410 U | 380 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **38** | 410 U | **64** | 410 U | 380 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | **38 J** | 410 U | **64 J** | 410 U | 380 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-332<br>SB-332-0203<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3** | **SB-332<br>SB-332-0506<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6** | **SB-332<br>SB-332-0809<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9** | **SB-333<br>SB-333-0203<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3** | **SB-333<br>SB-333-0506<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6** |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 38 | 0 U | 64 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.064 B | 0.034 B | 0.035 B | 0.062 B | 0.036 B |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 86.1 | 80.8 | 82.3 | 81 | 86.4 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-333<br>SB-333-0809<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 | SB-334<br>SB-334-0203<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 | SB-334<br>SB-334-0506<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 | SB-334<br>SB-334-0809<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 | SB-335<br>SB-335-0203<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 380 U | **88** | **64** | **30** | **20** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 380 U | **88** | **64** | **30** | **20** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 380 U | **88 J** | **64 J** | **30 J** | **20 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-333 | SB-334 | SB-334 | SB-334 | SB-335 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-333-0809 | SB-334-0203 | SB-334-0506 | SB-334-0809 | SB-335-0203 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 2 | 5 | 8 | 2 |
| BOTTOM DEPTH | | | | 9 | 3 | 6 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 88 | 64 | 30 | 20 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.025 B | 0.38 | 0.07 B | 0.061 B | 0.3 |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 86.6 | 86.3 | 80.7 | 78.4 | 83.5 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-335<br>SB-335-0506<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 | SB-335<br>SB-335-0809<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 | SB-336<br>SB-336-0203<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 | SB-336<br>SB-336-0506<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 | SB-336<br>SB-336-0809<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 13 | 400 U | 380 U | 420 U | **24** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 13 | 400 U | 380 U | 420 U | **24** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 13 J | 400 U | 380 U | 420 U | **24 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-335 | SB-335 | SB-336 | SB-336 | SB-336 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-335-0506 | SB-335-0809 | SB-336-0203 | SB-336-0506 | SB-336-0809 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | | | | 6 | 9 | 3 | 6 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 13 | 0 U | 0 U | 0 U | 24 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.06 B | 0.027 B | 0.066 B | 0.04 B | 0.35 |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 82.6 | 83.2 | 87.3 | 79.2 | 81.7 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-337<br>SB-337-0203<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 | SB-337<br>SB-337-0506<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 | SB-337<br>SB-337-0809<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 | SB-338<br>SB-338-0203<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 | SB-338<br>SB-338-0506<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 13 | **700** | 4200 U | **40** | **50** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 13 | **700** | 4200 U | **40** | **50** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 13 J | **700 J** | 4200 U | **40 J** | **50 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-337 | SB-337 | SB-337 | SB-338 | SB-338 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-337-0203 | SB-337-0506 | SB-337-0809 | SB-338-0203 | SB-338-0506 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | | | | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 13 | 700 | 0 U | 40 | 50 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.4 | 0.093 B | 0.82 | 0.42 | 0.042 B |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.8 | 80.3 | 79.4 | 82.4 | 81.7 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-338<br>SB-338-0809<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 | SB-339<br>SB-339-0203<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 | SB-339<br>SB-339-0506<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 | SB-339<br>SB-339-0809<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 | SB-340<br>SB-340-0203<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 400 U | 14 | 1.6 U | 1.5 U | **110** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 400 U | 14 | 1.6 U | 1.5 U | **110** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 400 U | 14 J | 1.6 U | 1.5 U | **110 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-338 | SB-339 | SB-339 | SB-339 | SB-340 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-338-0809 | SB-339-0203 | SB-339-0506 | SB-339-0809 | SB-340-0203 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 2 | 5 | 8 | 2 |
| BOTTOM DEPTH | | | | 9 | 3 | 6 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 14 | 0 U | 0 U | 110 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.055 B | 0.13 B | 0.22 J | 0.025 B | 0.11 B |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 81.8 | 88.4 | 80.2 | 86.7 | 87.3 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-340<br>SB-340-0506<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 | SB-340<br>SB-340-0809<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 | SB-341<br>SB-341-0203<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>3 | SB-341<br>SB-341-0506<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>6 | SB-341<br>SB-341-0809<br>20071101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>9 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **30** | 1.7 U | **23** | **25** | **38** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **30** | 1.7 U | **23** | **25** | **38** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | **30 J** | 1.7 U | **23 J** | **25 J** | **38 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-340 | SB-340 | SB-341 | SB-341 | SB-341 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-340-0506 | SB-340-0809 | SB-341-0203 | SB-341-0506 | SB-341-0809 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | | | | 6 | 9 | 3 | 6 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 30 | 0 U | 23 | 25 | 38 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.39 L | 0.042 B | 0.073 B | 0.29 L | 0.31 L |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 82.3 | 77.7 | 85.3 | 77.8 | 66.1 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-342 | SB-342 | SB-342 | SB-343 | SB-343 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-342-0203 | SB-342-0506 | SB-342-0809 | SB-343-0203 | SB-343-0506 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | | | | 3 | 6 | 9 | 3 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **78** | **17** | 2.1 U | 11 | 1.7 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **78** | **17** | 2.1 U | 11 | 1.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | **78 J** | **17 J** | 2.1 U | 11 J | 1.7 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-342 | SB-342 | SB-342 | SB-343 | SB-343 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-342-0203 | SB-342-0506 | SB-342-0809 | SB-343-0203 | SB-343-0506 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | | | | 3 | 6 | 9 | 3 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 78 | 17 | 0 U | 11 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.19 J | 0.84 L | 0.043 B | 0.15 B | 0.19 J |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.1 | 73.7 | 62.5 | 79.6 | 75.4 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-343 | SB-344 | SB-344 | SB-344 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-343-0809 | SB-344-0203 | SB-344-0506 | SB-344-0809 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | | | | 9 | 3 | 6 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.8 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.8 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.8 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-343 | SB-344 | SB-344 | SB-344 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-343-0809 | SB-344-0203 | SB-344-0506 | SB-344-0809 |
| SAMPLE DATE | | | | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | | | | 9 | 3 | 6 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.034 B | 0.14 B | 0.034 B | 0.052 B |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 79.4 | 81.3 | 80.1 | 73.4 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | D-TP-1<br>D-TP-1-1-4-6<br>20100920<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>6 | D-TP-1<br>D-TP-1-2-8-10<br>20100920<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>10 | D-TP-1<br>D-TP-1-3-8-10<br>20100920<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>10 | D-TP-1<br>D-TP-1-4-4-6<br>20100920<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>6 | D-TP-1<br>D-TP-1-5-4-6<br>20100920<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>6 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 3.8 U | 3.9 U | 280 | 3.9 U | 3.7 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.8 U | 3.9 U | 420 | 8 | 3.7 U |
| ACENAPHTHENE | 470000 | 340000 | N | 3.8 U | 3.9 U | 69 | 3.9 U | 3.7 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 3.8 U | 3.9 U | 50 | 9.1 | 3.7 U |
| ANTHRACENE | 2300000 | 1700000 | N | 3.8 U | 3.9 U | 52 | 11 | 3.7 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 3.8 U | 3.9 U | **66.8** | **71.6** | 3.7 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3.8 U | 3.9 U | **64.8** | **69.6** | 3.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.8 U | 3.9 U | 29 | 40 | 3.7 U |
| BENZO(A)PYRENE | 22 | 15 | C | 3.8 U | 3.9 U | **54 J** | **54 J** | 3.7 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3.8 U | 3.9 U | 39 | 70 | 3.7 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 3.8 U | 13 | 41 | 29 | 3.7 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.8 U | 3.9 U | 19 | 35 | 3.7 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C1-FLUORANTHENES/PYRENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C1-FLUORENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C2-FLUORENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C2-NAPHTHALENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C3-FLUORENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C3-NAPHTHALENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C4-NAPHTHALENES | NC | NC | | 77 U | NA | NA | NA | 75 U |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | 77 U | NA | NA | NA | 75 U |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 | D-TP-1 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-TP-1-1-4-6 | D-TP-1-2-8-10 | D-TP-1-3-8-10 | D-TP-1-4-4-6 | D-TP-1-5-4-6 |
| SAMPLE DATE | | | | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 8 | 8 | 4 | 4 |
| BOTTOM DEPTH | | | | 6 | 10 | 10 | 6 | 6 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 1.3 U | 44 | 51 | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.8 U | 3.9 U | 4 U | 3.9 U | 3.7 U |
| FLUORANTHENE | 310000 | 230000 | N | 3.8 U | 3.9 U | 60 | 110 | 3.7 U |
| FLUORENE | 310000 | 230000 | N | 3.8 U | 3.9 U | 100 | 3.9 U | 3.7 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.8 U | 3.9 U | 38 J | 42 J | 3.7 U |
| NAPHTHALENE | 160000 | 3600 | C | 3.8 U | 3.9 U | 320 | 9.5 | 3.7 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 3.8 U | 3.9 U | 200 | 62 | 3.7 U |
| PYRENE | 230000 | 170000 | N | 3.8 U | 13 | 95 | 86 | 3.7 U |
| TOTAL PAHS | NC | NC | | 0 U | 26 | 1630 | 616.6 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | D-TP-1<br>D-TP-1-6-8-10<br>20100920<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>10 | D-TP-2<br>D-TP-2-1-8-10<br>20100920<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>10 | D-TP-2<br>D-TP-2-2-6-7<br>20100920<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>7 | D-TP-2<br>D-TP-2-3-6-7<br>20100920<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>7 | D-TP-2<br>D-TP-2-4-8-10<br>20100921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>10 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 4 U | 300 | NA | 610 | 3.8 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4 U | 320 | NA | 600 | 3.8 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4 U | 88 | NA | 170 | 3.8 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 95 | 340 | NA | 420 | 3.8 U |
| ANTHRACENE | 2300000 | 1700000 | N | 38 | 370 | NA | 490 | 3.8 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | **178** | **507** | NA | **684** | 3.8 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **177** | **503** | NA | **680** | 3.8 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4 U | **440** | NA | **650** | 3.8 U |
| BENZO(A)PYRENE | 22 | 15 | C | **120 J** | **400 J** | NA | **540 J** | 3.8 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 110 | **380** | NA | **480** | 3.8 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 110 | 230 | NA | 300 | 3.8 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 35 | 130 | NA | 210 | 3.8 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 3300 J | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | 5900 J | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | 1100 J | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 6900 J | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 1500 J | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | 870 J | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | 4100 J | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 3900 J | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 520 J | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | 600 J | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | 2800 J | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 1700 J | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | 1300 J | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 520 J | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | D-TP-1 | D-TP-2 | D-TP-2 | D-TP-2 | D-TP-2 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-TP-1-6-8-10 | D-TP-2-1-8-10 | D-TP-2-2-6-7 | D-TP-2-3-6-7 | D-TP-2-4-8-10 |
| SAMPLE DATE | | | | 20100920 | 20100920 | 20100920 | 20100920 | 20100921 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 8 | 6 | 6 | 8 |
| BOTTOM DEPTH | | | | 10 | 10 | 7 | 7 | 10 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 79 | 480 | NA | 660 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **38 J** | 8.2 U | NA | 8 U | 3.8 U |
| FLUORANTHENE | 310000 | 230000 | N | 82 | 990 | NA | 1500 | 3.8 U |
| FLUORENE | 310000 | 230000 | N | 4 U | 380 | NA | 590 | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 79 J | **190 J** | NA | **240 J** | 3.8 U |
| NAPHTHALENE | 160000 | 3600 | C | 8.9 | 280 | NA | 570 | 3.8 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 16 | 1700 | NA | 2700 | 3.8 U |
| PYRENE | 230000 | 170000 | N | 140 | 1300 | NA | 2100 | 3.8 U |
| TOTAL PAHS | NC | NC | | 950.9 | 8018 | NA | 12220 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA |
| BETA-BHC | 350 | 270 | C | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | D-TP-2<br>D-TP-2-5-6-7<br>20100921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>7 | D-TP-2<br>D-TP-2-6-6-7<br>20100921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>7 | SB-790<br>D-SB-790-03<br>20100908<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-790<br>D-SB-790-05<br>20100908<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-790<br>D-SB-790-07<br>20100908<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | 0.44 U | 0.42 U | 0.44 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | 0.14 U | 0.14 U | 0.19 J |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | 0.55 U | 0.52 U | 0.55 U |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | 2 J | 1.9 J | 3.6 J |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | 0.18 U | 0.17 U | 0.18 U |
| ACETONE | 7000000 | 6100000 | N | NA | NA | 29 B | 44 B | 28 B |
| BENZENE | 12000 | 1100 | C | NA | NA | 0.2 U | 0.19 U | 0.19 U |
| BROMOMETHANE | 11000 | 730 | N | NA | NA | 0.46 U | 0.44 U | 0.45 U |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | 0.37 U | 0.35 U | 0.67 J |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | 0.22 U | 0.21 U | 0.22 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | 0.14 U | 0.13 U | 0.13 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | 1 U | 0.97 U | 1 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | 0.57 U | 0.54 U | 0.56 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | 2.1 B | 2.2 B | 2.9 B |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | 0.34 U | 0.32 U | 0.34 U |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | 0.3 U | 0.28 U | 0.29 U |
| TOLUENE | 630000 | 500000 | N | NA | NA | 0.23 U | 0.22 U | 0.23 U |
| TOTAL XYLENES | 1600000 | 63000 | N | NA | NA | 0.57 U | 0.54 U | 0.56 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | 22 U | 90 U | 23 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | 12 U | 47 U | 12 U |
| CARBAZOLE | 32000 | NC | | NA | NA | 31 U | 130 U | 33 U |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | 14 J | 58 J | 29 J |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | 20 U | 81 U | 21 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | 17 U | 71 U | 18 U |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | 31 U | 130 U | 33 U |
| PHENOL | 2300000 | 1800000 | N | NA | NA | 31 U | 130 U | 33 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 4.1 U | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4.1 U | NA | 8 | 16 U | 64 |
| ACENAPHTHENE | 470000 | 340000 | N | 4.1 U | NA | 34 | 140 | 20 |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 4.1 U | NA | 3.8 U | 16 U | 4 U |
| ANTHRACENE | 2300000 | 1700000 | N | 4.1 U | NA | 72 | 620 | 28 |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 4.1 U | NA | **224** | **1353** | **72.7** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 4.1 U | NA | **224** | **1345** | **70.7** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4.1 U | NA | **160** | **1500** | 48 |
| BENZO(A)PYRENE | 22 | 15 | C | 4.1 U | NA | **140** | **1000** | **53** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4.1 U | NA | **180** | **1400** | 82 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4.1 U | NA | 77 | 490 | 34 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4.1 U | NA | 72 | 570 | 40 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | 84 U | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 84 U | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | D-TP-2 | D-TP-2 | SB-790 | SB-790 | SB-790 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-TP-2-5-6-7 | D-TP-2-6-6-7 | D-SB-790-03 | D-SB-790-05 | D-SB-790-07 |
| SAMPLE DATE | | | | 20100921 | 20100921 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 6 | 6 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 7 | 7 | 3 | 5 | 7 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.4 U | NA | 140 | 1500 | 82 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4.1 U | NA | **41** | 16 U | 4 U |
| FLUORANTHENE | 310000 | 230000 | N | 4.1 U | NA | 320 | 3700 | 110 |
| FLUORENE | 310000 | 230000 | N | 4.1 U | NA | 30 | 180 | 29 |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4.1 U | NA | 82 | **480** | 42 |
| NAPHTHALENE | 160000 | 3600 | C | 4.1 U | NA | 13 | 34 | 45 |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 4.1 U | NA | 250 | 2100 | 120 |
| PYRENE | 230000 | 170000 | N | 4.1 U | NA | 240 | 2900 | 87 |
| TOTAL PAHS | NC | NC | | 0 U | NA | 1859 | 16614 | 884 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | NA | NA | 0.45 U | 34 J | 0.47 U |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | 20 U | **240** | 21 U |
| BETA-BHC | 350 | 270 | C | NA | NA | 1.3 U | 26 U | 1.3 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | 0 U | **240** | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | 0.2 B | 0.2 B | 0.22 J |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | **4.5** | **4.9** | **6.3** |
| BARIUM | 1600 | 1500 | N | NA | NA | 33.8 | 31 | 27.8 |
| BERYLLIUM | 16 | 16 | N | NA | NA | 2.2 | 2 | 2.6 |
| CADMIUM | 3.9 | 7 | N | NA | NA | 0.12 | 0.4 | 0.12 L |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | 19.5 | 18.3 | 18.9 |
| COBALT | NC | 2.3 | N | NA | NA | **13.7** | **14.3** | **24.5** |
| COPPER | 310 | 310 | N | NA | NA | 23.2 | 22.3 | 23.4 |
| IRON | 5500 | 5500 | N | NA | NA | **21900** | **20200** | **22200** |
| LEAD | 400 | 400 | | NA | NA | 16.5 | 30.9 | 20.6 |
| MANGANESE | 160 | 180 | N | NA | NA | 84.9 | 112 | 78.4 |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | 0.36 | 0.21 | 0.63 |
| MOLYBDENUM | NC | 39 | N | NA | NA | 0.39 | 0.49 | 0.35 |
| NICKEL | 160 | 150 | N | NA | NA | 28.4 | 31 | 41.4 |
| SELENIUM | 39 | 39 | N | NA | NA | 2.3 | 2.4 | 3.5 |
| SILVER | 39 | 39 | N | NA | NA | 0.24 K | 0.25 K | 0.32 K |
| THALLIUM | 0.55 | NC | | NA | NA | 0.042 J | 0.053 J | 0.051 J |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | **29.6** | **27.5** | **28** |
| ZINC | 2300 | 2300 | N | NA | NA | 61.1 | 87.5 | 77.9 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | 12000 | 63000 | 230000 |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | 53 U | 55 U | 56 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | 0.31 U | **0.57 J** | 0.33 U |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-790<br>D-SB-790-09<br>20100908<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-791<br>D-SB-791-03<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-791<br>D-SB-791-05<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-791<br>D-SB-791-07<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-791<br>D-SB-791-09<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 0.46 U | 0.47 U | 0.56 U | 0.44 U | 0.52 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 0.15 U | 0.15 U | 0.18 U | 0.15 U | 0.17 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 0.58 U | 0.58 U | 0.7 U | 0.55 U | 0.65 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 1.3 U | 4.9 J | 14 | 3.1 J | 1.4 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | 0.19 U | 0.19 U | 0.23 U | 0.18 U | 0.21 U |
| ACETONE | 7000000 | 6100000 | N | 11 B | 49 B | 400 J | 220 B | 68 B |
| BENZENE | 12000 | 1100 | C | 0.21 U | 0.21 U | 0.25 U | 0.2 U | 0.23 U |
| BROMOMETHANE | 11000 | 730 | N | 0.48 U | 0.48 U | 0.58 U | 0.46 U | 0.54 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 0.39 U | 0.99 B | 1.6 B | 0.86 B | 0.94 B |
| ETHYLBENZENE | 780000 | 5400 | C | 0.23 U | 0.23 U | 0.28 U | 0.22 U | 0.26 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 0.14 U | 0.14 U | 0.17 U | 0.14 U | 0.16 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 1.1 U | 1.1 U | 1.3 U | 1 U | 1.2 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.6 U | 0.84 B | 1.1 B | 0.9 B | 0.98 B |
| NAPHTHALENE | 160000 | 3600 | C | 0.17 U | 1.6 B | 1.1 B | 0.75 B | 0.93 B |
| N-PROPYLBENZENE | NC | 340000 | N | 0.36 U | 0.36 U | 0.43 U | 0.34 U | 0.4 U |
| O-XYLENE | 1600000 [4] | 380000 | N | 0.31 U | 0.31 U | 0.38 U | 0.3 U | 0.35 U |
| TOLUENE | 630000 | 500000 | N | 0.24 U | 0.24 U | 0.29 U | 0.23 U | 0.27 U |
| TOTAL XYLENES | 1600000 | 63000 | N | 0.6 U | 0.6 U | 0.72 U | 0.57 U | 0.67 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 24 U | 23 U | 52 J | 23 U | 22 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 13 U | 12 U | 13 U | 12 U | 11 U |
| CARBAZOLE | 32000 | NC | | 34 U | 33 U | 34 U | 32 U | 31 U |
| DIBENZOFURAN | 7800 | 7800 | N | 4.2 U | 4 U | 4.2 U | 3.9 U | 3.8 U |
| DIMETHYL PHTHALATE | NC | NC | | 22 U | 21 U | 22 U | 20 U | 19 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 19 U | 18 U | 19 U | 18 U | 17 U |
| DI-N-OCTYL PHTHALATE | NC | NC | | 34 U | 33 U | 34 U | 32 U | 31 U |
| PHENOL | 2300000 | 1800000 | N | 34 U | 33 U | 34 U | 32 U | 31 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4.2 U | 8.6 | 4.2 U | 3.9 U | 3.8 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4.2 U | 17 | 4.2 U | 3.9 U | 3.8 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 4.2 U | 4 U | 4.2 U | 3.9 U | 3.8 U |
| ANTHRACENE | 2300000 | 1700000 | N | 4.2 U | 16 | 4.2 U | 3.9 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 4.2 U | **60.2** | 4.2 U | 3.9 U | 3.8 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 4.2 U | **58.2** | 4.2 U | 3.9 U | 3.8 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4.2 U | 46 | 4.2 U | 3.9 U | 3.8 U |
| BENZO(A)PYRENE | 22 | 15 | C | 4.2 U | **44** | 4.2 U | 3.9 U | 3.8 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4.2 U | 65 | 4.2 U | 3.9 U | 3.8 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4.2 U | 33 | 4.2 U | 3.9 U | 3.8 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4.2 U | 24 | 4.2 U | 3.9 U | 3.8 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-790 | SB-791 | SB-791 | SB-791 | SB-791 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-790-09 | D-SB-791-03 | D-SB-791-05 | D-SB-791-07 | D-SB-791-09 |
| SAMPLE DATE | | | | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 9 | 3 | 5 | 7 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.4 U | 51 | 1.4 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4.2 U | 4 U | 4.2 U | 3.9 U | 3.8 U |
| FLUORANTHENE | 310000 | 230000 | N | 4.2 U | 95 | 4.2 U | 3.9 U | 3.8 U |
| FLUORENE | 310000 | 230000 | N | 4.2 U | 15 | 4.2 U | 3.9 U | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4.2 U | 28 | 4.2 U | 3.9 U | 3.8 U |
| NAPHTHALENE | 160000 | 3600 | C | 4.2 U | 13 | 4.2 U | 3.9 U | 3.8 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 4.2 U | 76 | 4.2 U | 3.9 U | 3.8 U |
| PYRENE | 230000 | 170000 | N | 4.2 U | 75 | 4.2 U | 3.9 U | 3.8 U |
| TOTAL PAHS | NC | NC | | 0 U | 606.6 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | 0.5 U | 0.94 U | 0.5 U | 0.46 U | 0.45 U |
| AROCLOR-1260 | 320 | 220 | C | 22 U | 21 U | 22 U | 20 U | 19 U |
| BETA-BHC | 350 | 270 | C | 1.4 U | 2.7 U | 1.4 U | 1.3 U | 1.3 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.23 J | 0.26 B | 0.14 B | 0.3 B | 0.027 UL |
| ARSENIC | 0.43 | 0.39 | C | **4.1** | **5.4 L** | **3.7 L** | **7.9 L** | **5 L** |
| BARIUM | 1600 | 1500 | N | 19.8 | 20.6 | 14.9 | 12.6 | 7.4 |
| BERYLLIUM | 16 | 16 | N | 2.5 | 3.1 J | 1.6 J | 3.4 J | 0.82 J |
| CADMIUM | 3.9 | 7 | N | 0.044 J | 0.027 B | 0.022 B | 0.019 B | 0.017 B |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 23.7 | 23.8 | 16.9 | 31 | 2.2 |
| COBALT | NC | 2.3 | N | **4.6** | **10.9** | **4.3** | **10.3** | **3.4** |
| COPPER | 310 | 310 | N | 30.1 L | 15.1 | 22 | 24.7 | 4.7 |
| IRON | 5500 | 5500 | N | **33200** | **37400** | **22100** | **50200** | 1420 |
| LEAD | 400 | 400 | | 9.3 | 13.4 | 5.5 | 6.7 | 5.6 |
| MANGANESE | 160 | 180 | N | 62.4 | 90.1 J | 28.4 J | **161 J** | 7.2 J |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.019 U | 0.018 U | 0.019 U | 0.018 U | 0.017 U |
| MOLYBDENUM | NC | 39 | N | 0.46 | 0.52 | 0.63 | 0.8 | 0.072 U |
| NICKEL | 160 | 150 | N | 15.3 | 40.7 | 10.7 | 36.2 | 5.3 |
| SELENIUM | 39 | 39 | N | 1 J | 1.4 L | 0.98 L | 2.4 L | 7.2 L |
| SILVER | 39 | 39 | N | 0.024 B | 0.019 U | 0.024 B | 0.019 U | 0.018 U |
| THALLIUM | 0.55 | NC | | 0.12 B | 0.082 J | 0.11 J | 0.079 J | 0.064 J |
| VANADIUM | 7.8 | 39 | N[13] | **42** | **37.5** | **30.9** | **51.2** | 2.1 |
| ZINC | 2300 | 2300 | N | 39.2 J | 40.1 | 31.6 | 41.3 | 8.7 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 9800 J | 41000 | 22000 | 5400 J | 3200 U |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 59 U | 56 U | 59 U | 55 U | 53 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | **0.55 J** | 0.33 U | **0.9 J** | 0.32 U | **0.39 J** |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-792<br>D-SB-792-03<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-792<br>D-SB-792-05<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-792<br>D-SB-792-07<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-792<br>D-SB-792-09<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-793<br>D-SB-793-03<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 0.44 U | 0.46 U | 0.44 U | 0.44 U | 0.48 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 0.21 J | 0.15 U | 0.14 U | 0.14 U | 0.16 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 0.55 U | 0.58 U | 0.54 U | 0.55 U | 0.6 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 52 | 3.7 J | 1.6 J | 1.2 U | 22 |
| 4-ISOPROPYLTOLUENE | NC | NC | | 0.18 U | 0.19 U | 0.18 U | 0.18 U | 0.19 U |
| ACETONE | 7000000 | 6100000 | N | 240 J | 160 B | 18 B | 310 J | 100 B |
| BENZENE | 12000 | 1100 | C | 0.19 U | 0.21 U | 0.19 U | 0.19 U | 0.21 U |
| BROMOMETHANE | 11000 | 730 | N | 0.45 U | 0.48 U | 0.45 U | 0.46 U | 0.49 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 2 B | 0.87 B | 0.83 B | 0.37 U | 1.8 B |
| ETHYLBENZENE | 780000 | 5400 | C | 0.22 U | 0.23 U | 0.22 U | 0.22 U | 0.24 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 0.13 U | 0.14 U | 0.13 U | 0.13 U | 0.15 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 1 U | 1.1 U | 1 U | 1 U | 1.1 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.79 B | 0.78 B | 0.82 B | 1 B | 0.93 B |
| NAPHTHALENE | 160000 | 3600 | C | 2.1 B | 0.8 B | 0.75 B | 0.76 B | 1.1 B |
| N-PROPYLBENZENE | NC | 340000 | N | 0.34 U | 0.36 U | 0.34 U | 0.34 U | 0.37 U |
| O-XYLENE | 1600000 [4] | 380000 | N | 0.29 U | 0.31 U | 0.29 U | 0.3 U | 0.32 U |
| TOLUENE | 630000 | 500000 | N | 0.71 J | 0.24 U | 0.41 J | 0.23 U | 0.25 U |
| TOTAL XYLENES | 1600000 | 63000 | N | 0.56 U | 0.6 U | 0.56 U | 0.57 U | 0.61 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 22 U | 23 U | 23 U | 22 U | 30 J |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 12 U | 12 U | 12 U | 12 U | 12 U |
| CARBAZOLE | 32000 | NC | | 32 U | 33 U | 32 U | 32 U | 33 U |
| DIBENZOFURAN | 7800 | 7800 | N | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U |
| DIMETHYL PHTHALATE | NC | NC | | 20 U | 21 U | 20 U | 20 U | 21 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 18 U | 18 U | 18 U | 18 U | 18 U |
| DI-N-OCTYL PHTHALATE | NC | NC | | 32 U | 33 U | 32 U | 32 U | 33 U |
| PHENOL | 2300000 | 1800000 | N | 32 U | 33 U | 32 U | 32 U | 33 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U |
| ACENAPHTHENE | 470000 | 340000 | N | 8.2 | 4 U | 3.9 U | 3.9 U | 4 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U |
| ANTHRACENE | 2300000 | 1700000 | N | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 5.1 | 4 U | 3.9 U | 3.9 U | **22.6** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 0.80 | 4 U | 3.9 U | 3.9 U | **20.6** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.9 U | 4 U | 3.9 U | 3.9 U | 17 |
| BENZO(A)PYRENE | 22 | 15 | C | 3.9 U | 4 U | 3.9 U | 3.9 U | **16** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 7.9 | 4 U | 3.9 U | 3.9 U | 18 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 3.9 U | 4 U | 3.9 U | 3.9 U | 10 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.9 U | 4 U | 3.9 U | 3.9 U | 13 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-792 | SB-792 | SB-792 | SB-792 | SB-793 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-792-03 | D-SB-792-05 | D-SB-792-07 | D-SB-792-09 | D-SB-793-03 |
| SAMPLE DATE | | | | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 9 | 3 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 7.8 | 1.3 U | 1.3 U | 1.3 U | 19 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U |
| FLUORANTHENE | 310000 | 230000 | N | 11 | 4 U | 3.9 U | 3.9 U | 36 |
| FLUORENE | 310000 | 230000 | N | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.9 U | 4 U | 3.9 U | 3.9 U | 9.2 |
| NAPHTHALENE | 160000 | 3600 | C | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 3.9 U | 4 U | 3.9 U | 3.9 U | 22 |
| PYRENE | 230000 | 170000 | N | 8.1 | 4 U | 3.9 U | 3.9 U | 27 |
| TOTAL PAHS | NC | NC | | 43 | 0 U | 0 U | 0 U | 187.2 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | 0.46 U | 0.47 U | 0.47 U | 0.46 U | 0.48 U |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 21 U | 20 U | 20 U | 21 U |
| BETA-BHC | 350 | 270 | C | 1.3 J | 1.3 U | 1.3 U | 1.3 U | 1.3 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.28 UL | 0.23 B | 0.21 B | 0.22 B | 0.3 B |
| ARSENIC | 0.43 | 0.39 | C | **5.4 L** | **4.4 L** | **2.9 L** | **3.8 L** | **5.6 L** |
| BARIUM | 1600 | 1500 | N | 40.6 | 16.7 | 12.2 | 10.3 | 26.5 |
| BERYLLIUM | 16 | 16 | N | 1.5 J | 1.9 J | 1.7 J | 2.7 J | 2.2 J |
| CADMIUM | 3.9 | 7 | N | 0.24 B | 0.026 B | 0.0093 UL | 0.02 B | 0.3 B |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 19.6 | 22.3 | 17.9 | 24.8 | 20.1 |
| COBALT | NC | 2.3 | N | **33** | **7** | **7.1** | **12.1** | **15.7** |
| COPPER | 310 | 310 | N | 31.1 | 20.4 | 13 | 18.2 | 32.8 |
| IRON | 5500 | 5500 | N | **18800** | **35700** | **27100** | **42300** | **25900** |
| LEAD | 400 | 400 | | 54.1 | 5.2 | 3.3 | 2.9 | 26.4 |
| MANGANESE | 160 | 180 | N | 88.8 J | 53.1 J | 40.2 J | 30 J | 69.5 J |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 1.3 | 0.018 U | 0.018 U | 0.018 U | 0.47 |
| MOLYBDENUM | NC | 39 | N | 0.53 | 0.65 | 0.57 | 0.74 | 0.49 |
| NICKEL | 160 | 150 | N | 37 | 18.7 | 19 | 30.1 | 34.2 |
| SELENIUM | 39 | 39 | N | 2 L | 0.84 L | 0.99 L | 1.1 L | 3 L |
| SILVER | 39 | 39 | N | 1.9 | 0.019 U | 0.019 U | 0.019 U | 0.37 |
| THALLIUM | 0.55 | NC | | 0.15 U | 0.099 J | 0.064 J | 0.06 J | 0.069 J |
| VANADIUM | 7.8 | 39 | N[13] | **29** | **46** | **35.9** | **67.2** | **30.8** |
| ZINC | 2300 | 2300 | N | 111 | 33.6 | 19 | 31.2 | 68.6 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 83000 | 8000 J | 7800 J | 4100 J | 47000 |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 54 U | 56 U | 55 U | 54 U | 56 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | 0.32 U | **0.56 J** | 0.32 U | 0.32 U | **0.42 J** |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-793<br>D-SB-793-05<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-793<br>D-SB-793-07<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-793<br>D-SB-793-09<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-794<br>D-SB-794-03<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-794<br>D-SB-794-05<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 0.45 U | 0.5 U | 1.1 J | 0.4 U | 0.43 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 0.15 U | 0.16 U | 0.15 U | 0.13 U | 0.14 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 0.57 U | 0.62 U | 0.57 U | 0.51 U | 0.54 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 1.2 U | 5.1 J | 1.2 U | 3 J | 6.8 J |
| 4-ISOPROPYLTOLUENE | NC | NC | | 0.18 U | 0.2 U | 0.18 U | 0.16 U | 0.17 U |
| ACETONE | 7000000 | 6100000 | N | 29 B | 190 B | 5.5 U | 31 B | 62 B |
| BENZENE | 12000 | 1100 | C | 0.2 U | 0.22 U | 0.2 U | 0.18 U | 0.19 U |
| BROMOMETHANE | 11000 | 730 | N | 0.47 U | 0.51 U | 0.47 U | 0.42 U | 0.45 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 0.81 B | 1 B | 0.38 U | 0.99 B | 1 B |
| ETHYLBENZENE | 780000 | 5400 | C | 0.23 U | 0.25 U | 0.23 U | 0.2 U | 0.22 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 0.14 U | 0.15 U | 0.14 U | 0.12 U | 0.13 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 1 U | 1.1 U | 1 U | 0.93 U | 1 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.83 B | 1.2 B | 0.76 B | 0.52 U | 0.56 U |
| NAPHTHALENE | 160000 | 3600 | C | 0.75 B | 0.84 B | 0.76 B | 0.15 U | 0.16 U |
| N-PROPYLBENZENE | NC | 340000 | N | 0.35 U | 0.38 U | 0.35 U | 0.31 U | 0.33 U |
| O-XYLENE | 1600000 [4] | 380000 | N | 0.31 U | 0.33 U | 0.3 U | 0.27 U | 0.29 U |
| TOLUENE | 630000 | 500000 | N | 0.24 U | 0.26 U | 0.23 U | 0.21 U | 0.22 U |
| TOTAL XYLENES | 1600000 | 63000 | N | 0.59 U | 0.64 U | 0.58 U | 0.52 U | 0.56 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 23 U | 23 U | 32 J | 22 UJ | 24 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 12 U | 12 U | 12 U | 12 UJ | 12 U |
| CARBAZOLE | 32000 | NC | | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| DIBENZOFURAN | 7800 | 7800 | N | 4.1 U | 4 U | 3.9 U | 35 J | 4.1 U |
| DIMETHYL PHTHALATE | NC | NC | | 21 U | 21 U | 20 U | 20 UJ | 21 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 18 U | 18 U | 18 U | 18 UJ | 19 U |
| DI-N-OCTYL PHTHALATE | NC | NC | | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| PHENOL | 2300000 | 1800000 | N | 33 U | 33 U | 32 U | 32 UJ | 34 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4.1 U | 4 U | 3.9 U | 59 J | 4.1 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4.1 U | 4 U | 3.9 U | 39 J | 4.1 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 4.1 U | 4 U | 3.9 U | 3.9 UJ | 4.1 U |
| ANTHRACENE | 2300000 | 1700000 | N | 4.1 U | 4 U | 3.9 U | 48 J | 4.1 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 4.1 U | 4 U | 3.9 U | **137** | 4.1 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 4.1 U | 4 U | 3.9 U | **135** | 4.1 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4.1 U | 4 U | 3.9 U | 110 J | 4.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 4.1 U | 4 U | 3.9 U | **100 J** | 4.1 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4.1 U | 4 U | 3.9 U | **160 J** | 4.1 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4.1 U | 4 U | 3.9 U | 75 J | 4.1 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4.1 U | 4 U | 3.9 U | 63 J | 4.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-793 | SB-793 | SB-793 | SB-794 | SB-794 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-793-05 | D-SB-793-07 | D-SB-793-09 | D-SB-794-03 | D-SB-794-05 |
| SAMPLE DATE | | | | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | | | | 5 | 7 | 9 | 3 | 5 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.4 U | 1.3 U | 1.3 U | 130 J | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4.1 U | 4 U | 3.9 U | 3.9 UJ | 4.1 U |
| FLUORANTHENE | 310000 | 230000 | N | 4.1 U | 4 U | 3.9 U | 210 J | 4.1 U |
| FLUORENE | 310000 | 230000 | N | 4.1 U | 4 U | 3.9 U | 38 J | 4.1 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4.1 U | 4 U | 3.9 U | 77 J | 4.1 U |
| NAPHTHALENE | 160000 | 3600 | C | 4.1 U | 4 U | 3.9 U | 47 J | 4.1 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 4.1 U | 4 U | 3.9 U | 190 J | 4.1 U |
| PYRENE | 230000 | 170000 | N | 4.1 U | 4 U | 3.9 U | 170 J | 4.1 U |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 1516 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | 4.8 U | 0.48 U | 0.46 U | 2.3 U | 0.48 U |
| AROCLOR-1260 | 320 | 220 | C | 21 U | 21 U | 20 U | 20 U | 21 U |
| BETA-BHC | 350 | 270 | C | 14 U | 1.3 U | 1.3 U | 6.5 U | 1.4 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.12 B | 0.15 B | 0.3 B | 0.28 B | 0.18 B |
| ARSENIC | 0.43 | 0.39 | C | **3.6 L** | **4.1 L** | **3.6 J** | **5.5 J** | **7 J** |
| BARIUM | 1600 | 1500 | N | 15.6 | 10.7 | 15.7 | 40.2 | 11.3 |
| BERYLLIUM | 16 | 16 | N | 0.92 J | 1.4 J | 2.6 J | 2.3 J | 1 J |
| CADMIUM | 3.9 | 7 | N | 0.0096 UL | 0.0095 UL | 0.028 B | 0.2 B | 0.02 B |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 18.7 | 23.5 | 27.3 J | 19.4 J | 25.9 J |
| COBALT | NC | 2.3 | N | **5.3** | **4.7** | **18.2 J** | **30 J** | **4.4 J** |
| COPPER | 310 | 310 | N | 21.5 | 26.2 | 27.8 J | 27.7 J | 23.1 J |
| IRON | 5500 | 5500 | N | **27600** | **29300** | **35600 J** | **30900 J** | **36000 J** |
| LEAD | 400 | 400 | | 4.7 | 3.7 | 4 | 33.3 | 4.8 |
| MANGANESE | 160 | 180 | N | 15.2 J | 20.4 J | 69.4 J | **326 J** | 28.2 J |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.018 U | 0.018 U | 0.018 U | 0.7 | 0.019 U |
| MOLYBDENUM | NC | 39 | N | 0.55 | 0.4 | 0.59 | 0.63 | 0.53 |
| NICKEL | 160 | 150 | N | 10.2 | 10.9 | 39.4 J | 40.8 J | 14 J |
| SELENIUM | 39 | 39 | N | 0.73 L | 0.81 L | 1.3 L | 1.8 L | 0.49 J |
| SILVER | 39 | 39 | N | 0.02 U | 0.02 U | 0.019 U | 0.88 | 0.02 U |
| THALLIUM | 0.55 | NC | | 0.069 J | 0.044 J | 0.1 J | 0.077 U | 0.05 J |
| VANADIUM | 7.8 | 39 | N[13] | **41.9** | **39.1** | **46 J** | **29.9 J** | **48.7 J** |
| ZINC | 2300 | 2300 | N | 20.3 | 17.5 | 43.3 L | 94.1 L | 21.7 L |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 7900 J | 5300 J | 7700 J | 70000 | 8400 J |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 57 U | 56 U | 55 U | 54 U | 57 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | 0.33 U | **0.48 J** | 0.32 U | 0.32 U | 0.34 U |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-4**
**Detected Concentrations Table for Subsurface Soil, 2 -10 feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-794<br>D-SB-794-07<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-794<br>D-SB-794-09<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-795<br>D-SB-795-03<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-795<br>D-SB-795-05<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-795<br>D-SB-795-07<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 0.48 U | 0.44 U | 0.5 U | 0.61 U | 0.43 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 0.16 U | 0.15 U | 0.16 U | 0.2 U | 0.14 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 0.6 U | 0.55 U | 0.63 U | 0.76 U | 0.53 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 1.7 J | 1.2 U | 1.9 J | 15 | 2.2 J |
| 4-ISOPROPYLTOLUENE | NC | NC | | 0.19 U | 0.18 U | 0.2 U | 0.24 U | 0.17 U |
| ACETONE | 7000000 | 6100000 | N | 15 B | 5.4 U | 9.2 B | 70 B | 15 B |
| BENZENE | 12000 | 1100 | C | 0.21 U | 0.2 U | 0.22 U | 0.27 U | 0.19 U |
| BROMOMETHANE | 11000 | 730 | N | 0.5 U | 0.46 U | 0.52 U | 0.63 U | 0.44 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 0.87 B | 0.38 U | 0.99 B | 2 B | 0.89 B |
| ETHYLBENZENE | 780000 | 5400 | C | 0.24 U | 0.22 U | 0.25 U | 0.3 U | 0.21 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 0.15 U | 0.14 U | 0.15 U | 0.19 U | 0.13 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 1.1 U | 1 U | 1.2 U | 1.4 U | 0.99 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.62 U | 0.57 U | 2.7 B | 0.78 U | 0.55 U |
| NAPHTHALENE | 160000 | 3600 | C | 0.8 B | 0.72 B | 0.84 B | 1 B | 0.16 U |
| N-PROPYLBENZENE | NC | 340000 | N | 0.37 U | 0.34 U | 0.39 U | 0.47 U | 0.33 U |
| O-XYLENE | 1600000 [4] | 380000 | N | 0.32 U | 0.3 U | 0.34 U | 0.41 U | 0.29 U |
| TOLUENE | 630000 | 500000 | N | 0.25 U | 0.23 U | 0.26 U | 0.31 U | 0.22 U |
| TOTAL XYLENES | 1600000 | 63000 | N | 0.62 U | 0.57 U | 0.65 U | 0.78 U | 0.55 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 24 U | 23 J | 23 J | 28 U | 24 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 12 U | 12 U | 12 U | 15 U | 36 J |
| CARBAZOLE | 32000 | NC | | 34 U | 31 U | 33 U | 40 U | 34 U |
| DIBENZOFURAN | 7800 | 7800 | N | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U |
| DIMETHYL PHTHALATE | NC | NC | | 21 U | 20 U | 21 U | 25 U | 21 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 19 U | 17 U | 18 U | 22 U | 19 U |
| DI-N-OCTYL PHTHALATE | NC | NC | | 34 U | 31 U | 33 U | 40 U | 34 U |
| PHENOL | 2300000 | 1800000 | N | 34 U | 31 U | 33 U | 40 U | 34 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U |
| ANTHRACENE | 2300000 | 1700000 | N | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 4.1 U | 3.8 U | **19.6** | 7.3 | 4.1 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 4.1 U | 3.8 U | **17.0** | 1.9 | 4.1 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 4.1 U | 3.8 U | **17** | 4.9 U | 4.1 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4.1 U | 3.8 U | 4 U | 19 | 4.1 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-794<br>D-SB-794-07<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-794<br>D-SB-794-09<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-795<br>D-SB-795-03<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-795<br>D-SB-795-05<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-795<br>D-SB-795-07<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 |
|---|---|---|---|---|---|---|---|---|
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.4 U | 1.3 U | 1.3 U | 1.6 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U |
| FLUORANTHENE | 310000 | 230000 | N | 4.1 U | 3.8 U | 10 | 10 | 4.1 U |
| FLUORENE | 310000 | 230000 | N | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U |
| NAPHTHALENE | 160000 | 3600 | C | 4.1 U | 3.8 U | 11 | 4.9 U | 4.1 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 4.1 U | 3.8 U | 9 | 4.9 U | 4.1 U |
| PYRENE | 230000 | 170000 | N | 4.1 U | 3.8 U | 4 U | 4.9 U | 4.1 U |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 47 | 29 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | 0.48 U | 0.45 U | 0.47 UJ | 0.58 UJ | 0.49 UJ |
| AROCLOR-1260 | 320 | 220 | C | 21 U | 20 U | 21 U | 25 U | 21 U |
| BETA-BHC | 350 | 270 | C | 1.4 U | 1.3 U | 1.3 UJ | 1.6 UJ | 1.4 UJ |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.3 B | 0.075 B | 0.29 B | 0.087 B | 0.24 B |
| ARSENIC | 0.43 | 0.39 | C | **6.1 J** | **5.6 J** | **5.8 J** | **3.9 J** | **5.7 J** |
| BARIUM | 1600 | 1500 | N | 8.1 | 11.6 | 25.3 | 20.5 | 23.7 |
| BERYLLIUM | 16 | 16 | N | 1.1 J | 0.46 J | 6.6 J | 0.97 J | 4.2 J |
| CADMIUM | 3.9 | 7 | N | 0.0097 UL | 0.009 UL | 0.042 B | 0.015 B | 0.11 B |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 29.7 J | 8.1 J | 25.6 J | 16.7 J | 20.9 J |
| COBALT | NC | 2.3 | N | **6 J** | **3 J** | **27.3 J** | **6.7 J** | **20.7 J** |
| COPPER | 310 | 310 | N | 29.7 J | 6.6 J | 40.9 J | 18.1 J | 32.9 J |
| IRON | 5500 | 5500 | N | **46500 J** | 4650 J | **39700 J** | **20800 J** | **37200 J** |
| LEAD | 400 | 400 | | 4.6 | 4.1 | 12.4 | 8.2 | 10.5 |
| MANGANESE | 160 | 180 | N | 44.9 J | 5.9 J | 110 J | 28.1 J | 74.5 J |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.019 U | 0.017 U | 0.018 U | 0.022 U | 0.023 J |
| MOLYBDENUM | NC | 39 | N | 0.57 | 0.073 U | 0.45 | 0.86 | 0.39 |
| NICKEL | 160 | 150 | N | 16.7 J | 4.7 J | 53.2 J | 13.3 J | 42.5 J |
| SELENIUM | 39 | 39 | N | 0.63 L | 2.1 L | 4.1 L | 0.69 J | 4.1 L |
| SILVER | 39 | 39 | N | 0.02 U | 0.018 U | 0.028 B | 0.024 U | 0.034 B |
| THALLIUM | 0.55 | NC | | 0.036 J | 0.11 J | 0.079 J | 0.084 J | 0.09 J |
| VANADIUM | 7.8 | 39 | N[13] | **55 J** | **7.9 J** | **42.7 J** | **33.3 J** | **32.7 J** |
| ZINC | 2300 | 2300 | N | 19.2 L | 7 L | 123 L | 28.1 L | 108 L |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 5100 J | 3200 UJ | 11000 J | 33000 | 4200 J |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 57 U | 53 UJ | 56 UJ | 68 UJ | 57 UJ |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | **0.45 J** | **0.33 J** | **0.43 J** | **0.51 J** | 0.34 U |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-795<br>D-SB-795-09<br>20100909<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-796<br>D-SB-796-03<br>20100910<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-796<br>D-SB-796-05<br>20100910<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-796<br>D-SB-796-07<br>20100910<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-796<br>D-SB-796-09<br>20100910<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 |
|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 0.48 U | 0.4 U | 0.51 U | 0.49 U | 0.46 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 0.16 U | 0.13 U | 0.17 U | 0.16 U | 0.15 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 0.6 U | 0.5 U | 0.64 U | 0.61 U | 0.58 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 1.3 U | 2.7 J | 8.1 J | 1.3 U | 1.3 J |
| 4-ISOPROPYLTOLUENE | NC | NC | | 0.19 U | 0.16 U | 0.21 U | 0.2 U | 0.19 U |
| ACETONE | 7000000 | 6100000 | N | 5.8 U | 35 B | 88 B | 16 B | 6.2 B |
| BENZENE | 12000 | 1100 | C | 0.21 U | 0.18 U | 0.23 U | 0.22 U | 0.21 U |
| BROMOMETHANE | 11000 | 730 | N | 0.5 U | 0.41 U | 0.53 U | 0.51 U | 0.48 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 0.85 B | 0.78 B | 1.5 B | 0.88 B | 0.81 B |
| ETHYLBENZENE | 780000 | 5400 | C | 0.24 U | 0.2 U | 0.26 U | 0.25 U | 0.23 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 0.15 U | 0.12 U | 0.16 U | 0.15 U | 0.14 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 1.1 U | 0.92 U | 1.2 U | 1.1 U | 1.1 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.93 B | 0.75 B | 0.98 B | 1 B | 1 B |
| NAPHTHALENE | 160000 | 3600 | C | 0.8 B | 0.7 B | 0.83 B | 0.83 B | 0.77 B |
| N-PROPYLBENZENE | NC | 340000 | N | 0.37 U | 0.31 U | 0.39 U | 0.38 U | 0.36 U |
| O-XYLENE | 1600000 [4] | 380000 | N | 0.32 U | 0.27 U | 0.34 U | 0.33 U | 0.31 U |
| TOLUENE | 630000 | 500000 | N | 0.25 U | 0.21 U | 0.27 U | 0.26 U | 0.24 U |
| TOTAL XYLENES | 1600000 | 63000 | N | 0.62 U | 0.51 U | 0.66 U | 0.63 U | 0.6 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 22 U | 22 U | 27 J | 22 U | 22 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 12 U | 12 U | 14 U | 12 U | 12 U |
| CARBAZOLE | 32000 | NC | | 32 U | 31 U | 37 U | 32 U | 31 U |
| DIBENZOFURAN | 7800 | 7800 | N | 3.9 U | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| DIMETHYL PHTHALATE | NC | NC | | 20 U | 20 U | 23 U | 20 U | 20 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 18 U | 17 U | 21 U | 18 U | 17 U |
| DI-N-OCTYL PHTHALATE | NC | NC | | 32 U | 31 U | 37 U | 32 U | 31 U |
| PHENOL | 2300000 | 1800000 | N | 32 U | 31 U | 37 U | 32 U | 31 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.9 U | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| ACENAPHTHENE | 470000 | 340000 | N | 3.9 U | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 3.9 U | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| ANTHRACENE | 2300000 | 1700000 | N | 3.9 U | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | C | 3.9 U | **74.7** | 4.5 U | 3.9 U | 3.8 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3.9 U | **72.8** | 4.5 U | 3.9 U | 3.8 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.9 U | 36 | 4.5 U | 3.9 U | 3.8 U |
| BENZO(A)PYRENE | 22 | 15 | C | 3.9 U | **58** | 4.5 U | 3.9 U | 3.8 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3.9 U | 66 | 4.5 U | 3.9 U | 3.8 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 3.9 U | 33 | 4.5 U | 3.9 U | 3.8 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.9 U | 28 | 4.5 U | 3.9 U | 3.8 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-795 | SB-796 | SB-796 | SB-796 | SB-796 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-795-09 | D-SB-796-03 | D-SB-796-05 | D-SB-796-07 | D-SB-796-09 |
| SAMPLE DATE | | | | 20100909 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 9 | 3 | 5 | 7 | 9 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (CONTINUED) (UG/KG)** | | | | | | | | |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 41 | 1.5 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.9 U | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| FLUORANTHENE | 310000 | 230000 | N | 3.9 U | 42 | 4.5 U | 3.9 U | 3.8 U |
| FLUORENE | 310000 | 230000 | N | 3.9 U | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.9 U | 43 | 4.5 U | 3.9 U | 3.8 U |
| NAPHTHALENE | 160000 | 3600 | C | 3.9 U | 3.8 U | 4.5 U | 3.9 U | 3.8 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 3.9 U | 18 | 4.5 U | 3.9 U | 3.8 U |
| PYRENE | 230000 | 170000 | N | 3.9 U | 37 | 4.5 U | 3.9 U | 3.8 U |
| TOTAL PAHS | NC | NC | | 0 U | 402 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDE | 1900 | 1400 | C | 0.46 UJ | 0.91 U | 2.7 U | 0.46 U | 0.45 U |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 20 U | 23 U | 20 U | 20 U |
| BETA-BHC | 350 | 270 | C | 1.3 UJ | 2.6 U | 7.5 U | 1.3 U | 1.3 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.3 B | 0.19 J | 0.2 J | 0.21 J | 0.19 J |
| ARSENIC | 0.43 | 0.39 | C | **4.4 J** | **3.4** | **9.4** | **3.1** | **4.3** |
| BARIUM | 1600 | 1500 | N | 12.6 | 38.2 | 32.5 | 9.8 | 11.4 |
| BERYLLIUM | 16 | 16 | N | 1.3 J | 1.3 | 2.3 | 1.3 | 2.3 |
| CADMIUM | 3.9 | 7 | N | 0.012 B | 0.24 | 0.016 B | 0.016 B | 0.025 B |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 21.7 J | 15.3 | 32.2 | 15.8 | 22.7 |
| COBALT | NC | 2.3 | N | **7.7 J** | **9.3** | **6.7** | **3.5** | **8.9** |
| COPPER | 310 | 310 | N | 16.6 J | 16.7 | 51.9 | 17.4 | 30.3 |
| IRON | 5500 | 5500 | N | **27300 J** | **15400** | **50200** | **28100** | **36700** |
| LEAD | 400 | 400 | | 6.4 | 17.1 | 9.6 | 3.4 | 3.3 |
| MANGANESE | 160 | 180 | N | 74 J | 44.6 | 23.5 | 20 | 20.9 |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.018 U | 0.51 | 0.021 U | 0.018 U | 0.017 U |
| MOLYBDENUM | NC | 39 | N | 0.41 | 0.4 | 1.2 | 0.57 | 0.78 |
| NICKEL | 160 | 150 | N | 20.2 J | 17.3 | 12.1 | 10.1 | 28.3 |
| SELENIUM | 39 | 39 | N | 1.4 L | 1.3 | 1.6 | 1.3 | 1.4 |
| SILVER | 39 | 39 | N | 0.019 U | 0.31 | 0.038 J | 0.019 U | 0.019 U |
| THALLIUM | 0.55 | NC | | 0.08 J | 0.065 B | 0.13 B | 0.053 B | 0.057 B |
| VANADIUM | 7.8 | 39 | N[13] | **38.5 J** | **24.8** | **57.6** | **41.8** | **68.5** |
| ZINC | 2300 | 2300 | N | 24.6 L | 95.4 | 44.8 | 10.3 | 27 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 5300 J | 160000 | 57000 | 5600 J | 5600 J |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 54 UJ | 53 U | 63 U | 54 U | 53 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | 0.32 U | 0.31 U | 0.37 U | 0.32 U | **0.37 J** |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the ESV are shaded black with white font. Concentrations exceeding the adjusted RSL for residential soil are shaded blue with black font. Concentrations exceeding both the ESV and the RSL are shaded red with white font.
4 - The value is for xylenes.
5 - The value is for xylene, mixture.
6 - The value for acenaphthene is used as a surrogate for acenaphthylene.
7 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
8 - The value is for PCB (total).
9 - The value is for polychlorinated biphenyls (high risk).
10 - The value is for trivalent chromium.
11 - The value is for mercury (inorganic/mercuric dichloride).
12 - The value is for mercuric chloride.
13 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-11 | D-SB-60RE-12 | D-SB-60RE-13 | D-SB-60RE-14 | D-SB-60RE-15 | D-SB-61RE-11 | D-SB-61RE-12 | D-SB-61RE-13 | D-SB-61RE-14 | D-SB-61RE-15 | D-SB-61REA-11 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-11 | D-SB-60RE-12 | D-SB-60RE-13 | D-SB-60RE-14 | D-SB-60RE-15 | D-SB-61RE-11 | D-SB-61RE-12 | D-SB-61RE-13 | D-SB-61RE-14 | D-SB-61RE-15 | D-SB-61REA-11 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 26 | 1.5 U | 1.5 U | 21 | 1.5 U | 181 | 578 | 1.5 U | 168 |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 26 | 1.5 U | 1.5 U | 20 | 1.5 U | 181 | 577 | 1.5 U | 168 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 23 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.1 U | 86 |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 20 | 1.5 U | 1.5 U | 16 | 1.5 U | 150 | 490 | 1.5 U | 120 |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 23 | 1.4 U | 1.4 U | 16 | 1.4 U | 170 | 510 | 1.4 U | 130 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 10 | 2 U | 2 U | 2 U | 2 U | 57 | 180 | 2 U | 49 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1.1 U | 27 | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 110 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 1.5 U | 19 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-11 | D-SB-60RE-12 | D-SB-60RE-13 | D-SB-60RE-14 | D-SB-60RE-15 | D-SB-61RE-11 | D-SB-61RE-12 | D-SB-61RE-13 | D-SB-61RE-14 | D-SB-61RE-15 | D-SB-61REA-11 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.8 U | 8.7 | 1.7 U | 1.8 U | 22 | 1.8 U | 130 | 340 | 1.8 U | 64 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 111.7 | 0 U | 0 U | 54 | 0 U | 507 | 1520 | 0 U | 578 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-11 | D-SB-60RE-12 | D-SB-60RE-13 | D-SB-60RE-14 | D-SB-60RE-15 | D-SB-61RE-11 | D-SB-61RE-12 | D-SB-61RE-13 | D-SB-61RE-14 | D-SB-61RE-15 | D-SB-61REA-11 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-061A | SB-061A | SB-061B | SB-061B | SB-061B | SB-061C | SB-061C | SB-061C | SB-061D | SB-061D | SB-061D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-13 | D-SB-61REA-15 | D-SB-61REB-11 | D-SB-61REB-13 | D-SB-61REB-15 | D-SB-61REC-11 | D-SB-61REC-13 | D-SB-61REC-15 | D-SB-61RED-11 | D-SB-61RED-13 | D-SB-61RED-15 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-061A | SB-061A | SB-061B | SB-061B | SB-061B | SB-061C | SB-061C | SB-061C | SB-061D | SB-061D | SB-061D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-13 | D-SB-61REA-15 | D-SB-61REB-11 | D-SB-61REB-13 | D-SB-61REB-15 | D-SB-61REC-11 | D-SB-61REC-13 | D-SB-61REC-15 | D-SB-61RED-11 | D-SB-61RED-13 | D-SB-61RED-15 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 154 | 1078 | 16 | 1.5 U | 9.2 | 1.5 U | 1.5 U | 429 | 47 |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 154 | 1078 | 15 | 1.5 U | 8.2 | 1.5 U | 1.5 U | 429 | 46 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 44 | 290 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 250 | 33 |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 110 | 750 | 13 | 1.5 U | 8.2 | 1.5 U | 1.5 U | 300 | 36 |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 100 | 750 | 13 | 1.4 U | 1.3 U | 1.4 U | 1.4 U | 340 | 40 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 2 U | 65 | 410 | 2 U | 1.9 U | 1.9 U | 2 U | 2 U | 130 | 17 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1 U | 84 | 410 | 1 U | 1 U | 1 U | 1 U | 1 U | 290 | 40 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 21 | 170 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 50 | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-061A | SB-061A | SB-061B | SB-061B | SB-061B | SB-061C | SB-061C | SB-061C | SB-061D | SB-061D | SB-061D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-13 | D-SB-61REA-15 | D-SB-61REB-11 | D-SB-61REB-13 | D-SB-61REB-15 | D-SB-61REC-11 | D-SB-61REC-13 | D-SB-61REC-15 | D-SB-61RED-11 | D-SB-61RED-13 | D-SB-61RED-15 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.7 U | 75 | 490 | 7.7 | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 180 | 22 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 499 | 3270 | 33.7 | 0 U | 8.2 | 0 U | 0 U | 1540 | 188 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-061A | SB-061A | SB-061B | SB-061B | SB-061B | SB-061C | SB-061C | SB-061C | SB-061D | SB-061D | SB-061D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-13 | D-SB-61REA-15 | D-SB-61REB-11 | D-SB-61REB-13 | D-SB-61REB-15 | D-SB-61REC-11 | D-SB-61REC-13 | D-SB-61REC-15 | D-SB-61RED-11 | D-SB-61RED-13 | D-SB-61RED-15 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 | SB-062A | SB-062A | SB-062A | SB-062A | SB-062A | SB-062B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-11 | D-SB-62RE-12 | D-SB-62RE-13 | D-SB-62RE-14 | D-SB-62RE-15 | D-SB-62REA-11 | D-SB-62REA-11-AVG | D-SB-62REA-11-D | D-SB-62REA-13 | D-SB-62REA-15 | D-SB-62REB-11 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 11 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 11 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 | SB-062A | SB-062A | SB-062A | SB-062A | SB-062A | SB-062A | SB-062B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-11 | D-SB-62RE-12 | D-SB-62RE-13 | D-SB-62RE-14 | D-SB-62RE-15 | D-SB-62REA-11 | D-SB-62REA-11-AVG | D-SB-62REA-11-D | D-SB-62REA-13 | D-SB-62REA-15 | D-SB-62REB-11 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 11 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 11 | 11 | 13 | 15 | 11 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.7 U | 2213 | 74 | 480 | 147 | 123 | 100 | 90 | 11 | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.7 U | 2212 | 73 | 479 | 147 | 123 | 100 | 90 | 9.8 | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.2 U | 930 | 34 | 210 | 110 | 93.5 | 77 | 71 | 8.5 | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.7 U | 1800 | 59 | 390 | 100 | 84 | 68 | 69 | 8 | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.5 U | 1900 | 60 | 390 | 130 | 113.5 | 97 | 98 | 9.9 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2.2 U | 750 | 20 | 150 | 56 | 46 | 36 | 31 | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.2 U | 1200 | 42 | 260 | 95 | 80 | 65 | 65 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.7 U | 3.2 U | 1.7 U | 1.7 U | 17 | 14 | 11 | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 | SB-062A | SB-062A | SB-062A | SB-062A | SB-062A | SB-062B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-11 | D-SB-62RE-12 | D-SB-62RE-13 | D-SB-62RE-14 | D-SB-62RE-15 | D-SB-62REA-11 | D-SB-62REA-11-AVG | D-SB-62REA-11-D | D-SB-62REA-13 | D-SB-62REA-15 | D-SB-62REB-11 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 11 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 11 | 11 | 13 | 15 | 11 |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.9 U | 1200 | 41 | 270 | 50 | 42 | 34 | 34 | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 7780 | 256 | 1670 | 558 | 473 | 388 | 368 | 26.4 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 | SB-062A | SB-062A | SB-062A | SB-062A | SB-062A | SB-062B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-11 | D-SB-62RE-12 | D-SB-62RE-13 | D-SB-62RE-14 | D-SB-62RE-15 | D-SB-62REA-11 | D-SB-62REA-11-AVG | D-SB-62REA-11-D | D-SB-62REA-13 | D-SB-62REA-15 | D-SB-62REB-11 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 11 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 11 | 11 | 13 | 15 | 11 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-062B | SB-062B | SB-062C | SB-062C | SB-062C | SB-062D | SB-062D | SB-062D | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REB-13 | D-SB-62REB-15 | D-SB-62REC-11 | D-SB-62REC-13 | D-SB-62REC-15 | D-SB-62RED-11 | D-SB-62RED-13 | D-SB-62RED-15 | D-SB-63RE-11 | D-SB-63RE-12 | D-SB-63RE-13 |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091014 | 20091014 | 20091014 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 12 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 12 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-062B | SB-062B | SB-062C | SB-062C | SB-062C | SB-062D | SB-062D | SB-062D | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REB-13 | D-SB-62REB-15 | D-SB-62REC-11 | D-SB-62REC-13 | D-SB-62REC-15 | D-SB-62RED-11 | D-SB-62RED-13 | D-SB-62RED-15 | D-SB-63RE-11 | D-SB-63RE-12 | D-SB-63RE-13 |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091014 | 20091014 | 20091014 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 12 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 12 | 13 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 1.5 U | 101 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 124 |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 1.5 U | 100 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 124 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 63 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 54 |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.5 U | 80 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 90 |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.4 U | 88 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 94 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 2 U | 33 | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 40 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 58 | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 73 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 13 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-062B | SB-062B | SB-062C | SB-062C | SB-062C | SB-062D | SB-062D | SB-062D | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REB-13 | D-SB-62REB-15 | D-SB-62REC-11 | D-SB-62REC-13 | D-SB-62REC-15 | D-SB-62RED-11 | D-SB-62RED-13 | D-SB-62RED-15 | D-SB-63RE-11 | D-SB-63RE-12 | D-SB-63RE-13 |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091014 | 20091014 | 20091014 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 12 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 12 | 13 |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 1.8 U | 48 | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 56 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 370 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 420 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-062B | SB-062B | SB-062C | SB-062C | SB-062C | SB-062D | SB-062D | SB-062D | SB-063 | SB-063 | SB-063 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REB-13 | D-SB-62REB-15 | D-SB-62REC-11 | D-SB-62REC-13 | D-SB-62REC-15 | D-SB-62RED-11 | D-SB-62RED-13 | D-SB-62RED-15 | D-SB-63RE-11 | D-SB-63RE-12 | D-SB-63RE-13 |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091014 | 20091014 | 20091014 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 12 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 12 | 13 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-063 | SB-063 | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 | SB-066 | SB-066 | SB-066 | SB-239 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-14 | D-SB-63RE-15 | D-SB-65RE-11 | D-SB-65RE-12 | D-SB-65RE-13 | D-SB-65RE-14 | D-SB-65RE-15 | D-SB-66RE-11 | D-SB-66RE-12 | D-SB-66RE-15 | D-SB-239RE-11 |
| SAMPLE DATE | 20090915 | 20090915 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20090915 | 20090914 | 20090914 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 15 | 11 |
| BOTTOM DEPTH | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-063 | SB-063 | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 | SB-066 | SB-066 | SB-066 | SB-239 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-14 | D-SB-63RE-15 | D-SB-65RE-11 | D-SB-65RE-12 | D-SB-65RE-13 | D-SB-65RE-14 | D-SB-65RE-15 | D-SB-66RE-11 | D-SB-66RE-12 | D-SB-66RE-15 | D-SB-239RE-11 |
| SAMPLE DATE | 20090915 | 20090915 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20090915 | 20090914 | 20090914 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 15 | 11 |
| BOTTOM DEPTH | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 15 | 11 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 44 | 45 | 43 | 185 |
| BAP EQUIVALENT-POS | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 43 | 45 | 42 | 185 |
| BENZO(A)ANTHRACENE | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 45 | 43 | 47 | 110 |
| BENZO(A)PYRENE | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 33 | 34 | 32 | 110 |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 34 | 43 | 29 | 250 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 1.9 U | 2 U | 2 U | 2.1 U | 2 U | 2 U | 18 | 15 | 23 | 100 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 48 | 50 | 48 | 170 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 29 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-063 | SB-063 | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 | SB-066 | SB-066 | SB-066 | SB-239 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-14 | D-SB-63RE-15 | D-SB-65RE-11 | D-SB-65RE-12 | D-SB-65RE-13 | D-SB-65RE-14 | D-SB-65RE-15 | D-SB-66RE-11 | D-SB-66RE-12 | D-SB-66RE-15 | D-SB-239RE-11 |
| SAMPLE DATE | 20090915 | 20090915 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20090915 | 20090914 | 20090914 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 15 | 11 |
| BOTTOM DEPTH | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 15 | 11 |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.7 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 19 | 19 | 19 | 88 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 197 | 204 | 198 | 857 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-063 | SB-063 | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 | SB-066 | SB-066 | SB-066 | SB-239 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-14 | D-SB-63RE-15 | D-SB-65RE-11 | D-SB-65RE-12 | D-SB-65RE-13 | D-SB-65RE-14 | D-SB-65RE-15 | D-SB-66RE-11 | D-SB-66RE-12 | D-SB-66RE-15 | D-SB-239RE-11 |
| SAMPLE DATE | 20090915 | 20090915 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20090915 | 20090914 | 20090914 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 15 | 11 |
| BOTTOM DEPTH | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 15 | 11 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-239 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240A | SB-240A | SB-240A | SB-240B | SB-240B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-239RE-12 | D-SB-240RE-11 | D-SB-240RE-12 | D-SB-240RE-13 | D-SB-240RE-14 | D-SB-240RE-15 | D-SB-240REA-11 | D-SB-240REA-13 | D-SB-240REA-15 | D-SB-240REB-11 | D-SB-240REB-13 |
| SAMPLE DATE | 20091015 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20091014 | 20091014 | 20091014 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 12 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-239 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240A | SB-240A | SB-240A | SB-240B | SB-240B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-239RE-12 | D-SB-240RE-11 | D-SB-240RE-12 | D-SB-240RE-13 | D-SB-240RE-14 | D-SB-240RE-15 | D-SB-240REA-11 | D-SB-240REA-13 | D-SB-240REA-15 | D-SB-240REB-11 | D-SB-240REB-13 |
| SAMPLE DATE | 20091015 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20091014 | 20091014 | 20091014 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 12 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 121 | 198 | 42 | 337 | 25 | 22 | 1.5 U | 1.6 U | 21 | 1.7 U | 2 U |
| BAP EQUIVALENT-POS | 121 | 198 | 42 | 337 | 24 | 21 | 1.5 U | 1.6 U | 20 | 1.7 U | 2 U |
| BENZO(A)ANTHRACENE | 82 | 140 | 32 | 210 | 18 | 18 | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 1.4 U |
| BENZO(A)PYRENE | 85 | 130 | 32 | 230 | 19 | 16 | 1.5 U | 1.6 U | 19 | 1.7 U | 2 U |
| BENZO(B)FLUORANTHENE | 110 | 180 | 40 | 250 | 23 | 19 | 1.4 U | 1.5 U | 9.3 | 1.5 U | 1.8 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 36 | 61 | 16 | 110 | 8.8 | 2.2 U | 2 U | 2.1 U | 2.2 U | 2.2 U | 2.6 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 74 | 130 | 40 | 240 | 27 | 21 | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 12 | 27 | 1.5 U | 43 | 1.6 U | 1.7 U | 1.5 U | 1.6 U | 1.7 U | 1.7 U | 2 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-239 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240A | SB-240A | SB-240A | SB-240B | SB-240B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-239RE-12 | D-SB-240RE-11 | D-SB-240RE-12 | D-SB-240RE-13 | D-SB-240RE-14 | D-SB-240RE-15 | D-SB-240REA-11 | D-SB-240REA-13 | D-SB-240REA-15 | D-SB-240REB-11 | D-SB-240REB-13 |
| SAMPLE DATE | 20091015 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20091014 | 20091014 | 20091014 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 12 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 |
| INDENO(1,2,3-CD)PYRENE | 47 | 87 | 22 | 170 | 12 | 12 | 1.8 U | 1.8 U | 2 U | 1.9 U | 2.3 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 446 | 755 | 182 | 1253 | 107.8 | 86 | 0 U | 0 U | 28.3 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-239 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240A | SB-240A | SB-240A | SB-240B | SB-240B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-239RE-12 | D-SB-240RE-11 | D-SB-240RE-12 | D-SB-240RE-13 | D-SB-240RE-14 | D-SB-240RE-15 | D-SB-240REA-11 | D-SB-240REA-13 | D-SB-240REA-15 | D-SB-240REB-11 | D-SB-240REB-13 |
| SAMPLE DATE | 20091015 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20091014 | 20091014 | 20091014 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 12 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-240C | SB-240C | SB-240C | SB-240D | SB-240D | SB-240D | SB-240D | SB-240D | SB-243 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REC-11 | D-SB-240REC-13 | D-SB-240REC-15 | D-SB-240RED-11 | D-SB-240RED-11-AVG | D-SB-240RED-11-D | D-SB-240RED-13 | D-SB-240RED-15 | D-SB-243RE-11 | D-SB-243RE-12 | D-SB-243RE-13 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 12 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 12 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240C | SB-240C | SB-240C | SB-240D | SB-240D | SB-240D | SB-240D | SB-240D | SB-243 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REC-11 | D-SB-240REC-13 | D-SB-240REC-15 | D-SB-240RED-11 | D-SB-240RED-11-AVG | D-SB-240RED-11-D | D-SB-240RED-13 | D-SB-240RED-15 | D-SB-243RE-11 | D-SB-243RE-12 | D-SB-243RE-13 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 12 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 12 | 13 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 58 | 1.9 U | 288 | 161 | 34 | 622 | 1.6 U | 1.6 U | 1.6 U | 91 |
| BAP EQUIVALENT-POS | 1.6 U | 57 | 1.9 U | 284 | 159 | 33 | 622 | 1.6 U | 1.6 U | 1.6 U | 91 |
| BENZO(A)ANTHRACENE | 1.2 U | 30 | 1.4 U | 200 J | 113.5 | 27 J | 270 | 1.2 U | 1.2 U | 1.1 U | 43 |
| BENZO(A)PYRENE | 1.6 U | 46 | 1.9 U | 220 J | 122.5 | 25 J | 440 | 1.6 U | 1.6 U | 1.6 U | 64 |
| BENZO(B)FLUORANTHENE | 1.5 U | 48 | 1.7 U | 280 J | 157.5 | 35 J | 450 | 1.5 U | 1.5 U | 1.4 U | 70 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 27 | 2.5 U | 120 J | 65.5 | 11 J | 220 | 2.1 U | 2.1 U | 2 U | 25 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 35 | 1.3 U | 240 J | 134 | 28 J | 330 | 1.1 U | 1.1 U | 1.1 U | 59 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.9 U | 6.2 U | 3.85 U | 1.5 U | 81 | 1.6 U | 1.6 U | 1.6 U | 11 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-240C | SB-240C | SB-240C | SB-240D | SB-240D | SB-240D | SB-240D | SB-240D | SB-243 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REC-11 | D-SB-240REC-13 | D-SB-240REC-15 | D-SB-240RED-11 | D-SB-240RED-11-AVG | D-SB-240RED-11-D | D-SB-240RED-13 | D-SB-240RED-15 | D-SB-243RE-11 | D-SB-243RE-12 | D-SB-243RE-13 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 12 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 12 | 13 |
| INDENO(1,2,3-CD)PYRENE | 1.9 U | 30 | 2.2 U | 150 J | 83.5 | 17 J | 260 | 1.8 U | 1.9 U | 1.8 U | 43 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 216 | 0 U | 1210 | 676.5 | 143 | 2051 | 0 U | 0 U | 0 U | 315 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-240C | SB-240C | SB-240C | SB-240D | SB-240D | SB-240D | SB-240D | SB-240D | SB-243 | SB-243 | SB-243 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REC-11 | D-SB-240REC-13 | D-SB-240REC-15 | D-SB-240RED-11 | D-SB-240RED-11-AVG | D-SB-240RED-11-D | D-SB-240RED-13 | D-SB-240RED-15 | D-SB-243RE-11 | D-SB-243RE-12 | D-SB-243RE-13 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 12 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 12 | 13 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-766 | SB-766 | SB-766 | SB-767 | SB-767 | SB-767 | SB-768 | SB-768 | SB-768 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-14 | D-SB-243RE-15 | D-SB-766-11 | D-SB-766-13 | D-SB-766-15 | D-SB-767-11 | D-SB-767-13 | D-SB-767-15 | D-SB-768-11 | D-SB-768-13 | D-SB-768-15 |
| SAMPLE DATE | 20090915 | 20090915 | 20100827 | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-243 | SB-243 | SB-766 | SB-766 | SB-766 | SB-767 | SB-767 | SB-767 | SB-768 | SB-768 | SB-768 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-14 | D-SB-243RE-15 | D-SB-766-11 | D-SB-766-13 | D-SB-766-15 | D-SB-767-11 | D-SB-767-13 | D-SB-767-15 | D-SB-768-11 | D-SB-768-13 | D-SB-768-15 |
| SAMPLE DATE | 20090915 | 20090915 | 20100827 | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | 15 U | 160 | 4.4 U | 4.1 U | 4.2 U | 4 U | 3.9 U | 11 | 4 U |
| 2-METHYLNAPHTHALENE | NA | NA | 15 U | 260 | 4.4 U | 4.1 U | 4.2 U | 4 U | 3.9 U | 23 | 4 U |
| ACENAPHTHENE | NA | NA | 110 | 58 | 4.4 U | 4.1 U | 33 J | 4 U | 3.9 U | 38 J | 4 U |
| ACENAPHTHYLENE | NA | NA | 370 | 34 | 4.4 U | 4.1 U | 140 | 4 U | 3.9 U | 200 | 4 U |
| ANTHRACENE | NA | NA | 270 | 71 | 4.4 U | 4.1 U | 85 J | 4 U | 3.9 U | 120 J | 4 U |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.6 U | 717 | 123 | 4.4 U | 4.1 U | 253 | 4 U | 3.9 U | 362 | 4 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 U | 710 | 121 | 4.4 U | 4.1 U | 251 | 4 U | 3.9 U | 360 | 4 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.1 U | 470 J | 85 | 4.4 UJ | 4.1 U | 160 | 4 U | 3.9 U | 190 | 4 U |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 560 J | 99 | 4.4 UJ | 4.1 U | 200 J | 4 U | 3.9 U | 290 J | 4 U |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.4 U | 620 J | 130 | 4.4 UJ | 4.1 U | 230 J | 4 U | 3.9 U | 320 J | 4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | 440 J | 3.9 U | 4.4 UJ | 4.1 U | 140 J | 4 U | 3.9 U | 220 J | 4 U |
| BENZO(K)FLUORANTHENE | 2.1 U | 2 U | 340 J | 50 | 4.4 UJ | 4.1 U | 110 J | 4 U | 3.9 U | 140 J | 4 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 89 U | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 510 J | 100 | 1.5 UJ | 1.4 U | 170 | 1.3 U | 1.3 U | 230 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 15 UJ | 3.9 U | 4.4 UJ | 4.1 U | 4.2 U | 4 U | 3.9 U | 4.1 U | 4 U |
| FLUORANTHENE | NA | NA | 650 | 230 | 34 | 4.1 U | 180 J | 4 U | 3.9 U | 240 J | 4 U |
| FLUORENE | NA | NA | 15 U | 72 | 4.4 U | 4.1 U | 33 J | 4 U | 3.9 U | 4.1 U | 4 U |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-766 | SB-766 | SB-766 | SB-767 | SB-767 | SB-767 | SB-768 | SB-768 | SB-768 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-14 | D-SB-243RE-15 | D-SB-766-11 | D-SB-766-13 | D-SB-766-15 | D-SB-767-11 | D-SB-767-13 | D-SB-767-15 | D-SB-768-11 | D-SB-768-13 | D-SB-768-15 |
| SAMPLE DATE | 20090915 | 20090915 | 20100827 | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 370 J | 3.9 U | 4.4 UJ | 4.1 U | 110 J | 4 U | 3.9 U | 170 J | 4 U |
| NAPHTHALENE | NA | NA | 56 | 400 | 4.4 U | 4.1 U | 11 | 4 U | 3.9 U | 26 | 4 U |
| PHENANTHRENE | NA | NA | 370 | 210 | 4.4 U | 4.1 U | 53 J | 4 U | 3.9 U | 59 J | 4 U |
| PYRENE | NA | NA | 1200 J | 210 | 18 J | 4.1 U | 330 | 4 U | 3.9 U | 550 | 4 U |
| TOTAL PAHS | 0 U | 0 U | 6336 | 2009 | 52 | 0 U | 1985 | 0 U | 0 U | 2816 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-243 | SB-243 | SB-766 | SB-766 | SB-766 | SB-767 | SB-767 | SB-767 | SB-768 | SB-768 | SB-768 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-14 | D-SB-243RE-15 | D-SB-766-11 | D-SB-766-13 | D-SB-766-15 | D-SB-767-11 | D-SB-767-13 | D-SB-767-15 | D-SB-768-11 | D-SB-768-13 | D-SB-768-15 |
| SAMPLE DATE | 20090915 | 20090915 | 20100827 | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-769 | SB-769 | SB-769 | SB-770 | SB-770 | SB-771 | SB-771 | SB-771 | SB-772 | SB-772 | SB-772 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-769-11 | D-SB-769-13 | D-SB-769-15 | D-SB-770-13 | D-SB-770-15 | D-SB-771-11 | D-SB-771-13 | D-SB-771-15 | D-SB-772-11 | D-SB-772-13 | D-SB-772-15 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 | 20100910 | 20100910 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-769 | SB-769 | SB-769 | SB-770 | SB-770 | SB-771 | SB-771 | SB-771 | SB-772 | SB-772 | SB-772 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-769-11 | D-SB-769-13 | D-SB-769-15 | D-SB-770-13 | D-SB-770-15 | D-SB-771-11 | D-SB-771-13 | D-SB-771-15 | D-SB-772-11 | D-SB-772-13 | D-SB-772-15 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 | 20100910 | 20100910 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4 U | 4 U | 4 U | 56 | 11 | 4 U | 4.1 U | 4 U | 43 | 59 | 190 |
| 2-METHYLNAPHTHALENE | 4 U | 4 U | 4 U | 94 | 21 | 4 U | 4.1 U | 4 U | 63 | 61 | 390 |
| ACENAPHTHENE | 4 U | 4 U | 4 U | 65 | 3.8 U | 4 U | 4.1 U | 4 U | 84 | 28 | 900 |
| ACENAPHTHYLENE | 4 U | 27 | 4 U | 400 | 43 | 4 U | 4.1 U | 4 U | 4.2 U | 14 | 20 U |
| ANTHRACENE | 4 U | 10 | 4 U | 260 | 26 | 4 U | 4.1 U | 4 U | 24 | 52 | 1600 |
| BAP EQUIVALENT-HALFND | 4 U | 46 | 4 U | 1871 | 300 | 4 U | 4.1 U | 4 U | 30 | 80 | 1351 |
| BAP EQUIVALENT-POS | 4 U | 44 | 4 U | 1871 | 298 | 4 U | 4.1 U | 4 U | 28 | 78 | 1341 |
| BENZO(A)ANTHRACENE | 4 U | 4 U | 4 U | 940 | 230 | 4 U | 4.1 U | 4 U | 29 | 76 | 2400 |
| BENZO(A)PYRENE | 4 U | 37 | 4 U | 1300 | 220 | 4 U | 4.1 U | 4 U | 19 | 59 | 810 |
| BENZO(B)FLUORANTHENE | 4 U | 37 J | 4 U | 1400 J | 350 J | 4 U | 4.1 U | 4 U | 31 J | 68 J | 2200 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4 U | 30 | 4 U | 1200 | 320 | 4 U | 4.1 U | 4 U | 14 | 37 | 580 |
| BENZO(K)FLUORANTHENE | 4 U | 4 U | 4 U | 660 | 73 | 4 U | 4.1 U | 4 U | 15 | 24 | 860 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 370 J | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | 410 J | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 140 J | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 240 J | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 170 J | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 99 J | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 130 J | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 23 | 1.3 U | 1100 | 210 | 1.3 U | 1.4 U | 1.3 U | 29 | 84 | 2200 |
| DIBENZO(A,H)ANTHRACENE | 4 U | 4 U | 4 U | 250 J | 3.8 U | 4 U | 4.1 U | 4 U | 4.2 U | 4.3 U | 20 U |
| FLUORANTHENE | 4 U | 25 | 4 U | 1600 | 270 | 4 U | 4.1 U | 4 U | 65 | 170 | 7100 |
| FLUORENE | 4 U | 4 U | 4 U | 96 | 3.8 U | 4 U | 4.1 U | 4 U | 45 | 68 | 950 |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-769 | SB-769 | SB-769 | SB-770 | SB-770 | SB-771 | SB-771 | SB-771 | SB-772 | SB-772 | SB-772 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-769-11 | D-SB-769-13 | D-SB-769-15 | D-SB-770-13 | D-SB-770-15 | D-SB-771-11 | D-SB-771-13 | D-SB-771-15 | D-SB-772-11 | D-SB-772-13 | D-SB-772-15 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 | 20100910 | 20100910 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| INDENO(1,2,3-CD)PYRENE | 4 U | 34 J | 4 U | 790 J | 190 J | 4 U | 4.1 U | 4 U | 24 J | 40 J | 600 J |
| NAPHTHALENE | 4 U | 4 U | 4 U | 130 | 24 | 4 U | 4.1 U | 4 U | 95 | 28 | 990 |
| PHENANTHRENE | 4 U | 4 U | 4 U | 640 | 82 | 4 U | 4.1 U | 4 U | 110 | 310 | 5600 |
| PYRENE | 4 U | 54 | 4 U | 2300 | 480 | 4 U | 4.1 U | 4 U | 49 | 210 | 5200 |
| TOTAL PAHS | 0 U | 277 | 0 U | 13225 | 2539 | 0 U | 0 U | 0 U | 696 | 1329 | 32380 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-769 | SB-769 | SB-769 | SB-770 | SB-770 | SB-771 | SB-771 | SB-771 | SB-772 | SB-772 | SB-772 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-769-11 | D-SB-769-13 | D-SB-769-15 | D-SB-770-13 | D-SB-770-15 | D-SB-771-11 | D-SB-771-13 | D-SB-771-15 | D-SB-772-11 | D-SB-772-13 | D-SB-772-15 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 | 20100910 | 20100910 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-773 | SB-773 | SB-773 | SB-774 | SB-774 | SB-774 | SB-774 | SB-774 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-773-11 | D-SB-773-13 | D-SB-773-15 | D-SB-774-11 | D-SB-774-13 | D-SB-774-15 | D-SB-774-15-AVG | D-SB-774-15-D |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-773 | SB-773 | SB-773 | SB-774 | SB-774 | SB-774 | SB-774 | SB-774 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-773-11 | D-SB-773-13 | D-SB-773-15 | D-SB-774-11 | D-SB-774-13 | D-SB-774-15 | D-SB-774-15-AVG | D-SB-774-15-D |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4.1 U | 4.1 U | 11 | 4 U | 29 | 17 | 16 | 15 |
| 2-METHYLNAPHTHALENE | 9 | 4.1 U | 14 | 8.5 | 48 | 25 | 27.5 | 30 |
| ACENAPHTHENE | 4.1 U | 4.1 U | 4 U | 13 | 240 | 90 | 105 | 120 |
| ACENAPHTHYLENE | 4.1 U | 4.1 U | 8.2 | 4 U | 7.7 U | 3.8 U | 3.8 U | 3.8 U |
| ANTHRACENE | 4.1 U | 4.1 U | 17 | 20 | 440 | 200 | 165 | 130 |
| BAP EQUIVALENT-HALFND | 4.1 U | 4.1 U | 43 | 97 | 888 | 499 | 449 | 399 |
| BAP EQUIVALENT-POS | 4.1 U | 4.1 U | 41 | 97 | 888 | 499 | 449 | 399 |
| BENZO(A)ANTHRACENE | 4.1 U | 4.1 U | 24 | 65 | 730 | 480 | 395 | 310 |
| BENZO(A)PYRENE | 4.1 U | 4.1 U | 34 | 63 | 590 | 340 | 310 | 280 |
| BENZO(B)FLUORANTHENE | 4.1 U | 4.1 U | 22 | 95 | 800 | 460 | 405 | 350 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4.1 U | 4.1 U | 12 | 51 | 350 | 190 | 185 | 180 |
| BENZO(K)FLUORANTHENE | 4.1 U | 4.1 U | 4 U | 33 | 300 | 230 | 205 | 180 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 130 J | 250 | 370 J |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | 160 J | 385 | 610 J |
| C1-FLUORENES | NA | NA | NA | NA | NA | 78 U | 78 U | 78 U |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 78 UJ | 199.5 | 360 J |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 84 J | 117 | 150 J |
| C2-FLUORENES | NA | NA | NA | NA | NA | 78 U | 78 U | 78 U |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | 78 U | 78 U | 78 U |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 78 U | 99.5 | 160 J |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 78 U | 59.5 | 80 J |
| C3-FLUORENES | NA | NA | NA | NA | NA | 78 U | 78 U | 78 U |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | 78 U | 78 U | 78 U |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 78 U | 67.5 | 96 J |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 78 U | 78 U | 78 U |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | 78 U | 78 U | 78 U |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 78 U | 78 U | 78 U |
| CHRYSENE | 1.4 U | 1.4 U | 26 | 73 | 750 | 480 | 405 | 330 |
| DIBENZO(A,H)ANTHRACENE | 4.1 U | 4.1 U | 4 U | 13 | 110 | 44 | 40 | 36 |
| FLUORANTHENE | 9.9 | 4.1 U | 47 | 120 | 1800 | 1300 J | 1000 | 700 J |
| FLUORENE | 4.1 U | 4.1 U | 18 | 13 | 220 | 95 | 91 | 87 |

| LOCATION | SB-773 | SB-773 | SB-773 | SB-774 | SB-774 | SB-774 | SB-774 | SB-774 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-773-11 | D-SB-773-13 | D-SB-773-15 | D-SB-774-11 | D-SB-774-13 | D-SB-774-15 | D-SB-774-15-AVG | D-SB-774-15-D |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| INDENO(1,2,3-CD)PYRENE | 4.1 U | 4.1 U | 23 | 41 | 310 | 180 | 165 | 150 |
| NAPHTHALENE | 4.1 U | 4.1 U | 4 U | 12 | 76 | 47 | 55 | 63 |
| PHENANTHRENE | 19 | 4.1 U | 86 | 74 | 1500 | 870 J | 680 | 490 J |
| PYRENE | 12 | 4.1 U | 64 | 97 | 1300 | 920 J | 720 | 520 J |
| TOTAL PAHS | 49.9 | 0 U | 395.2 | 791.5 | 9564 | 5951 | 4953.5 | 3956 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-773 | SB-773 | SB-773 | SB-774 | SB-774 | SB-774 | SB-774 | SB-774 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-773-11 | D-SB-773-13 | D-SB-773-15 | D-SB-774-11 | D-SB-774-13 | D-SB-774-15 | D-SB-774-15-AVG | D-SB-774-15-D |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

| LOCATION | MRC-MW40A | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW40[1214] | F-SB-57RE-11 | F-SB-57RE-12 | F-SB-57RE-13 | F-SB-57RE-14 | F-SB-57RE-15 | SB-57-15 | F-SB-58RE-11 | F-SB-58RE-12 | F-SB-58RE-13 | F-SB-58RE-14 |
| SAMPLE DATE | 20050525 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 | 20090917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 11 | 12 | 13 | 14 | 15 | 15 | 11 | 12 | 13 | 14 |
| BOTTOM DEPTH | 14 | 11 | 12 | 13 | 14 | 15 | 15 | 11 | 12 | 13 | 14 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | 58 U | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | 58 U | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | 58 U | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | 58 U | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | 12 U | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | 7 B | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | 6 U | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | 970 U | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |

| LOCATION | MRC-MW40A | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW40[1214] | F-SB-57RE-11 | F-SB-57RE-12 | F-SB-57RE-13 | F-SB-57RE-14 | F-SB-57RE-15 | SB-57-15 | F-SB-58RE-11 | F-SB-58RE-12 | F-SB-58RE-13 | F-SB-58RE-14 |
| SAMPLE DATE | 20050525 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 | 20090917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 11 | 12 | 13 | 14 | 15 | 15 | 11 | 12 | 13 | 14 |
| BOTTOM DEPTH | 14 | 11 | 12 | 13 | 14 | 15 | 15 | 11 | 12 | 13 | 14 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | 970 U | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | 970 U | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | 970 U | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | 900 U | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | 970 U | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | 970 U | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | 970 U | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | 550 | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 390 U | 6.3 | 1433 | 38 | 1.6 U |
| BAP EQUIVALENT-POS | NA | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 390 U | 4.4 | 1433 | 37 | 1.6 U |
| BENZO(A)ANTHRACENE | NA | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 390 U | 12 | 1200 | 33 | 1.2 U |
| BENZO(A)PYRENE | NA | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 390 U | 1.9 U | 1000 | 27 | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 390 U | 14 | 1200 | 38 | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 390 U | 2.4 U | 530 | 2.5 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 390 U | 1.3 U | 1000 | 28 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | NA | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 390 U | 1.9 U | 140 | 1.9 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MRC-MW40A | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW40[1214] | F-SB-57RE-11 | F-SB-57RE-12 | F-SB-57RE-13 | F-SB-57RE-14 | F-SB-57RE-15 | SB-57-15 | F-SB-58RE-11 | F-SB-58RE-12 | F-SB-58RE-13 | F-SB-58RE-14 |
| SAMPLE DATE | 20050525 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 | 20090917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 11 | 12 | 13 | 14 | 15 | 15 | 11 | 12 | 13 | 14 |
| BOTTOM DEPTH | 14 | 11 | 12 | 13 | 14 | 15 | 15 | 11 | 12 | 13 | 14 |
| INDENO(1,2,3-CD)PYRENE | NA | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.8 U | 390 U | 18 | 470 | 29 | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| TOTAL PAHS | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 44 | 5540 | 155 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | 280 U | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | 280 U | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | 280 U | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | 280 U | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | 280 U | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | 280 U | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | 280 U | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | 0 U | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | 2.8 UR | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | 0.66 L | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | 2.8 U | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | 2.8 UL | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | 5.7 L | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | 2.8 U | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | 2.8 UJ | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | 0.11 UL | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | 2.8 U | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | 2.8 UL | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | 2.8 UR | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | 2.3 UL | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | 28 UL | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | 11000 U | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | 110 U | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | 319 J | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MRC-MW40A | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW40[1214] | F-SB-57RE-11 | F-SB-57RE-12 | F-SB-57RE-13 | F-SB-57RE-14 | F-SB-57RE-15 | SB-57-15 | F-SB-58RE-11 | F-SB-58RE-12 | F-SB-58RE-13 | F-SB-58RE-14 |
| SAMPLE DATE | 20050525 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 | 20090917 | 20090917 | 20090917 | 20090917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 11 | 12 | 13 | 14 | 15 | 15 | 11 | 12 | 13 | 14 |
| BOTTOM DEPTH | 14 | 11 | 12 | 13 | 14 | 15 | 15 | 11 | 12 | 13 | 14 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-058 | SB-058 | SB-058 | SB-058A | SB-058A | SB-058B | SB-058B | SB-058C | SB-058C | SB-058D | SB-058D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RE-15 | SB-58-15 | SB-58-20 | F-SB-58REA-12 | F-SB-58REA-14 | F-SB-58REB-12 | F-SB-58REB-14 | F-SB-58REC-12 | F-SB-58REC-14 | F-SB-58RED-12 | F-SB-58RED-14 |
| SAMPLE DATE | 20090917 | 20040913 | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 20 | 12 | 14 | 12 | 14 | 12 | 14 | 12 | 14 |
| BOTTOM DEPTH | 15 | 15 | 20 | 12 | 14 | 12 | 14 | 12 | 14 | 12 | 14 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | 63 U | 65 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | 63 U | 65 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | 63 U | 65 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | 63 U | 65 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | 13 U | 13 U | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | 1000 U | 1100 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-058 | SB-058 | SB-058 | SB-058A | SB-058A | SB-058B | SB-058B | SB-058C | SB-058C | SB-058D | SB-058D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RE-15 | SB-58-15 | SB-58-20 | F-SB-58REA-12 | F-SB-58REA-14 | F-SB-58REB-12 | F-SB-58REB-14 | F-SB-58REC-12 | F-SB-58REC-14 | F-SB-58RED-12 | F-SB-58RED-14 |
| SAMPLE DATE | 20090917 | 20040913 | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 20 | 12 | 14 | 12 | 14 | 12 | 14 | 12 | 14 |
| BOTTOM DEPTH | 15 | 20 | 20 | 12 | 14 | 12 | 14 | 12 | 14 | 12 | 14 |
| 2,4-DICHLOROPHENOL | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | 1000 U | 1100 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | 1000 U | 1100 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | 1000 U | 1100 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | 950 U | 1000 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | 1000 U | 1100 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | 1000 U | 1100 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | 1000 U | 1100 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | 410 U | 590 | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 410 U | 440 U | 52 | 1.5 U | 2.1 U | 498 | 44 | 263 | 50 | 50 |
| BAP EQUIVALENT-POS | 1.6 U | 410 U | 440 U | 51 | 1.5 U | 2.1 U | 498 | 43 | 263 | 49 | 49 |
| BENZO(A)ANTHRACENE | 1.2 U | 410 U | 440 U | 30 | 1.1 U | 1.6 U | 210 | 25 | 200 | 28 | 32 |
| BENZO(A)PYRENE | 1.6 U | 410 U | 440 U | 39 | 1.5 U | 2.1 U | 330 | 33 | 170 | 38 | 38 |
| BENZO(B)FLUORANTHENE | 1.5 U | 410 U | 440 U | 51 | 1.4 U | 2 U | 480 | 45 | 230 | 50 | 46 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 410 U | 440 U | 19 | 1.9 U | 2.8 U | 200 | 12 | 74 | 8.9 | 14 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 410 U | 440 U | 29 | 1 U | 1.5 U | 270 | 19 | 180 | 30 | 24 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 410 U | 440 U | 1.8 U | 1.5 U | 2.1 U | 74 | 1.9 U | 40 | 1.7 U | 1.8 U |
| FLUORANTHENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-058 | SB-058 | SB-058 | SB-058A | SB-058A | SB-058B | SB-058B | SB-058C | SB-058C | SB-058D | SB-058D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RE-15 | SB-58-15 | SB-58-20 | F-SB-58REA-12 | F-SB-58REA-14 | F-SB-58REB-12 | F-SB-58REB-14 | F-SB-58REC-12 | F-SB-58REC-14 | F-SB-58RED-12 | F-SB-58RED-14 |
| SAMPLE DATE | 20090917 | 20040913 | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 20 | 12 | 14 | 12 | 14 | 12 | 14 | 12 | 14 |
| BOTTOM DEPTH | 15 | 15 | 20 | 12 | 14 | 12 | 14 | 12 | 14 | 12 | 14 |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 410 U | 440 U | 38 | 1.7 U | 2.5 U | 230 | 32 | 88 | 30 | 34 |
| NAPHTHALENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | 410 U | 440 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 206 | 0 U | 0 U | 1794 | 166 | 982 | 184.9 | 188 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | 310 U | 330 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | 310 U | 330 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | 310 U | 330 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | 310 U | 330 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | 310 U | 330 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | 310 U | 330 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | 310 U | 330 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | 0 U | 0 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | 3.1 UR | 3 UR | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | 5.3 L | 2.5 L | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | 3.1 U | 3 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | 3.1 UL | 3 UL | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | 26 L | 3.8 L | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | 22 | 4.8 K | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | 20 J | 3 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | 0.12 UL | 0.12 UL | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | 18 | 23 | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | 3.1 UL | 3 UL | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | 3.1 UR | 3 UR | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | 2.4 UL | 2.4 UL | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | 49 J | 30 UL | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | 12000 U | 13000 U | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | 130 U | 130 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-058 | SB-058 | SB-058 | SB-058A | SB-058A | SB-058B | SB-058B | SB-058C | SB-058C | SB-058D | SB-058D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RE-15 | SB-58-15 | SB-58-20 | F-SB-58REA-12 | F-SB-58REA-14 | F-SB-58REB-12 | F-SB-58REB-14 | F-SB-58REC-12 | F-SB-58REC-14 | F-SB-58RED-12 | F-SB-58RED-14 |
| SAMPLE DATE | 20090917 | 20040913 | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 20 | 12 | 14 | 12 | 14 | 12 | 14 | 12 | 14 |
| BOTTOM DEPTH | 15 | 15 | 20 | 12 | 14 | 12 | 14 | 12 | 14 | 12 | 14 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-059 | SB-062 | SB-065 | SB-065 | SB-067 | SB-067 | SB-067 | SB-244 | SB-245 | SB-246 | SB-247 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-59-15 | SB-62-15 | SB-65-15 | SB-65-20 | SB-67-15 | SB-67-20 | SB-67-25 | SB-244-15 | SB-245-15 | SB-246-15 | SB-247-15 |
| SAMPLE DATE | 20040923 | 20040923 | 20040917 | 20040917 | 20040927 | 20040927 | 20040927 | 20050607 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 15 | 20 | 15 | 20 | 25 | 15 | 15 | 15 | 15 |
| BOTTOM DEPTH | 15 | 15 | 15 | 20 | 15 | 20 | 25 | 15 | 15 | 15 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 2-BUTANONE | 58 U | 61 U | 56 U | 57 U | 62 UL | 63 UL | 60 UL | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 2-HEXANONE | 58 U | 61 U | 56 U | 57 U | 62 UL | 63 UL | 60 UL | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 58 U | 61 U | 56 U | 57 U | 62 UL | 63 UL | 60 UL | NA | NA | NA | NA |
| ACETONE | 58 U | 61 U | 56 U | 57 U | 62 UL | 63 UL | 60 UL | NA | NA | NA | NA |
| BENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| BROMOBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| BROMOFORM | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| BROMOMETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| CARBON DISULFIDE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| CHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| CHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| CHLOROFORM | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| CHLOROMETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| DIBROMOMETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| M+P-XYLENES | 12 U | 12 U | 11 U | 11 U | 12 UL | 13 UL | 12 UL | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 9 J | 9 J | 8 J | 9 J | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| NAPHTHALENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| N-BUTYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| N-PROPYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| O-XYLENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| STYRENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| TOLUENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| TRICHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| VINYL ACETATE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| VINYL CHLORIDE | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 9800 U | 1000 U | 950 U | 970 U | 1000 U | 11000 U | 1000 U | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-059 | SB-062 | SB-065 | SB-065 | SB-067 | SB-067 | SB-067 | SB-244 | SB-245 | SB-246 | SB-247 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-59-15 | SB-62-15 | SB-65-15 | SB-65-20 | SB-67-15 | SB-67-20 | SB-67-25 | SB-244-15 | SB-245-15 | SB-246-15 | SB-247-15 |
| SAMPLE DATE | 20040923 | 20040923 | 20040917 | 20040917 | 20040927 | 20040927 | 20040927 | 20050607 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 15 | 20 | 15 | 20 | 25 | 15 | 15 | 15 | 15 |
| BOTTOM DEPTH | 15 | 15 | 20 | 20 | 15 | 20 | 25 | 15 | 15 | 15 | 15 |
| 2,4-DICHLOROPHENOL | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 9800 U | 1000 U | 950 U | 970 U | 1000 U | 11000 U | 1000 U | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 2-METHYLPHENOL | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 2-NITROANILINE | 9800 U | 1000 U | 950 U | 970 U | 1000 U | 11000 U | 1000 U | NA | NA | NA | NA |
| 2-NITROPHENOL | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 3-NITROANILINE | 9800 U | 1000 U | 950 U | 970 U | 1000 U | 11000 U | 1000 U | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 9000 U | 940 U | 880 U | 890 U | 950 U | 9700 U | 930 U | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 4-CHLOROANILINE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 9800 U | 1000 U | 950 U | 970 U | 1000 U | 11000 U | 1000 U | NA | NA | NA | NA |
| 4-NITROPHENOL | 9800 U | 1000 U | 950 U | 970 U | 1000 U | 11000 U | 1000 U | NA | NA | NA | NA |
| ACETOPHENONE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| CAPROLACTAM | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| CARBAZOLE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| DIBENZOFURAN | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| HEXACHLOROETHANE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| ISOPHORONE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| NITROBENZENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 9800 U | 1000 U | 950 U | 970 U | 1000 U | 11000 U | 1000 U | NA | NA | NA | NA |
| PHENOL | 3900 U | 520 | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| ACENAPHTHENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| ACENAPHTHYLENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| ANTHRACENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 3021 | 410 U | 380 U | 390 U | 410 U | 3182 | 410 U | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 876 | 410 U | 380 U | 390 U | 410 U | 431 | 410 U | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 520 J | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| BENZO(A)PYRENE | 770 J | 410 U | 380 U | 390 U | 410 U | 430 J | 410 U | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 460 J | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 690 J | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 770 J | 410 U | 380 U | 390 U | 410 U | 510 J | 410 U | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| FLUORANTHENE | 740 J | 410 U | 380 U | 390 U | 410 U | 510 J | 410 U | NA | NA | NA | NA |
| FLUORENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |

| LOCATION | SB-059 | SB-062 | SB-065 | SB-065 | SB-067 | SB-067 | SB-067 | SB-244 | SB-245 | SB-246 | SB-247 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-59-15 | SB-62-15 | SB-65-15 | SB-65-20 | SB-67-15 | SB-67-20 | SB-67-25 | SB-244-15 | SB-245-15 | SB-246-15 | SB-247-15 |
| SAMPLE DATE | 20040923 | 20040923 | 20040917 | 20040917 | 20040927 | 20040927 | 20040927 | 20050607 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 15 | 20 | 15 | 20 | 25 | 15 | 15 | 15 | 15 |
| BOTTOM DEPTH | 15 | 15 | 15 | 20 | 15 | 20 | 25 | 15 | 15 | 15 | 15 |
| INDENO(1,2,3-CD)PYRENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| NAPHTHALENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| PHENANTHRENE | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA | NA | NA | NA |
| PYRENE | 1800 J | 410 U | 380 U | 390 U | 410 U | 790 J | 410 U | NA | NA | NA | NA |
| TOTAL PAHS | 5750 | 0 U | 0 U | 0 U | 0 U | 2240 | 0 U | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 290 U | 300 U | 280 U | 290 U | 310 U | 310 U | 300 U | 38 U | 39 U | 40 U | 38 U |
| AROCLOR-1221 | 290 U | 300 U | 280 U | 290 U | 310 U | 310 U | 300 U | 38 U | 39 U | 40 U | 38 U |
| AROCLOR-1232 | 290 U | 300 U | 280 U | 290 U | 310 U | 310 U | 300 U | 38 U | 39 U | 40 U | 38 U |
| AROCLOR-1242 | 290 U | 300 U | 280 U | 290 U | 310 U | 310 U | 300 U | 38 U | 39 U | 40 U | 38 U |
| AROCLOR-1248 | 290 U | 300 U | 280 U | 290 U | 310 U | 310 U | 300 U | 38 U | 39 U | 40 U | 38 U |
| AROCLOR-1254 | 290 U | 300 U | 280 U | 290 U | 310 U | 310 U | 300 U | 38 U | 39 U | 40 U | 38 U |
| AROCLOR-1260 | 290 U | 300 U | 280 U | 290 U | 310 U | 310 U | 300 U | 38 U | 39 U | 40 U | 38 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 2.5 UL | 2.6 UL | 2.8 UR | 2.8 U | 2.9 UL | 2.7 UL | 2.6 UL | NA | NA | NA | NA |
| ARSENIC | 2.8 | 0.71 | 0.57 UL | 0.57 U | 2.5 | 1.2 K | 0.52 U | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 2.5 U | 2.6 U | 2.8 UL | 2.8 U | 2.9 U | 2.7 U | 2.6 U | NA | NA | NA | NA |
| CADMIUM | 2.5 U | 2.6 U | 2.8 UL | 2.8 U | 2.9 U | 2.7 U | 2.6 U | NA | NA | NA | NA |
| CHROMIUM | 27 J | 6.4 J | 2.8 U | 2.8 U | 14 J | 19 J | 16 J | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 15 | 3 | 5 L | 3.4 L | 11 J | 9.7 J | 4.9 J | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 11 | 2.6 U | 2.8 UL | 2.8 UJ | 6.5 K | 7.5 K | 2.6 U | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.1 U | 0.11 U | 0.11 U | 0.11 U | 0.12 U | 0.11 U | 0.1 U | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 15 | 2.6 U | 6.6 | 3.5 K | 10 K | 4.3 K | 7.6 K | NA | NA | NA | NA |
| SELENIUM | 2.5 U | 2.6 U | 2.8 UL | 2.8 U | 2.9 U | 2.7 U | 2.6 U | NA | NA | NA | NA |
| SILVER | 2.5 UR | 2.6 UR | 2.8 UR | 2.8 UL | 2.9 UR | 2.7 UR | 2.6 UR | NA | NA | NA | NA |
| THALLIUM | 2 U | 2.1 U | 2.3 UL | 2.3 UL | 2.3 U | 2.2 U | 2.1 U | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 50 J | 26 UL | 28 U | 28 UL | 29 UL | 27 UL | 26 UL | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 11000 U | 12000 U | 11000 U | 12000 U | 12000 U | 13000 U | 12000 U | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 120 U | 120 U | 110 U | 110 U | 120 U | 130 U | 120 U | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-059 | SB-062 | SB-065 | SB-065 | SB-067 | SB-067 | SB-067 | SB-244 | SB-245 | SB-246 | SB-247 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-59-15 | SB-62-15 | SB-65-15 | SB-65-20 | SB-67-15 | SB-67-20 | SB-67-25 | SB-244-15 | SB-245-15 | SB-246-15 | SB-247-15 |
| SAMPLE DATE | 20040923 | 20040923 | 20040917 | 20040917 | 20040927 | 20040927 | 20040927 | 20050607 | 20050607 | 20050607 | 20050607 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 15 | 20 | 15 | 20 | 25 | 15 | 15 | 15 | 15 |
| BOTTOM DEPTH | 15 | 15 | 15 | 20 | 15 | 20 | 25 | 15 | 15 | 15 | 15 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-248 | SB-249 | SB-775 | SB-775 | SB-775 | SB-776 | SB-776 | SB-776 | SB-777 | SB-777 | SB-777 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-248-15 | SB-249-15 | D-SB-775-11 | D-SB-775-13 | D-SB-775-15 | D-SB-776-11 | D-SB-776-13 | D-SB-776-15 | D-SB-777-11 | D-SB-777-13 | D-SB-777-15 |
| SAMPLE DATE | 20050607 | 20050607 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-248 | SB-249 | SB-775 | SB-775 | SB-775 | SB-776 | SB-776 | SB-776 | SB-777 | SB-777 | SB-777 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-248-15 | SB-249-15 | D-SB-775-11 | D-SB-775-13 | D-SB-775-15 | D-SB-776-11 | D-SB-776-13 | D-SB-776-15 | D-SB-777-11 | D-SB-777-13 | D-SB-777-15 |
| SAMPLE DATE | 20050607 | 20050607 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | 3.9 U | 3.9 U | 4.2 U | 4.1 U | 4.3 U | 3.9 U | 3.8 U | 13 | 3.9 U |
| 2-METHYLNAPHTHALENE | NA | NA | 3.9 U | 3.9 U | 4.2 U | 4.1 U | 4.3 U | 3.9 U | 3.8 U | 20 | 3.9 U |
| ACENAPHTHENE | NA | NA | 3.9 U | 3.9 U | 4.2 U | 4.1 U | 4.3 U | 3.9 U | 3.8 U | 87 | 3.9 U |
| ACENAPHTHYLENE | NA | NA | 15 | 49 | 4.2 U | 28 | 37 | 3.9 U | 3.8 U | 4 U | 3.9 U |
| ANTHRACENE | NA | NA | 3.9 U | 20 | 4.2 U | 10 | 15 | 3.9 U | 3.8 U | 89 | 3.9 U |
| BAP EQUIVALENT-HALFND | NA | NA | 113 | 175 | 4.2 U | 88 | 97 | 3.9 U | 22 | 269 | 3.9 U |
| BAP EQUIVALENT-POS | NA | NA | 113 | 173 | 4.2 U | 88 | 97 | 3.9 U | 20 | 269 | 3.9 U |
| BENZO(A)ANTHRACENE | NA | NA | 31 | 88 | 4.2 U | 37 | 33 | 3.9 U | 16 | 220 | 3.9 U |
| BENZO(A)PYRENE | NA | NA | 71 | 140 | 4.2 U | 51 | 59 | 3.9 U | 15 | 180 | 3.9 U |
| BENZO(B)FLUORANTHENE | NA | NA | 78 | 150 | 4.2 U | 52 | 56 | 3.9 U | 20 | 270 | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | 51 | 100 | 4.2 U | 41 | 48 | 3.9 U | 11 | 110 | 3.9 U |
| BENZO(K)FLUORANTHENE | NA | NA | 26 | 61 | 4.2 U | 18 | 24 | 3.9 U | 11 | 100 | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C1-FLUORENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C2-FLUORENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C2-NAPHTHALENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C3-FLUORENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C3-NAPHTHALENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C4-NAPHTHALENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 85 U | NA | NA | NA | NA | NA | 79 U |
| CHRYSENE | NA | NA | 50 | 130 | 1.4 U | 26 | 41 | 1.3 U | 18 | 250 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | NA | NA | 26 | 3.9 U | 4.2 U | 25 | 25 | 3.9 U | 3.8 U | 28 | 3.9 U |
| FLUORANTHENE | NA | NA | 43 | 120 | 4.2 U | 26 | 37 | 3.9 U | 36 | 580 | 3.9 U |
| FLUORENE | NA | NA | 3.9 U | 3.9 U | 4.2 U | 4.1 U | 4.3 U | 3.9 U | 3.8 U | 85 | 3.9 U |

| LOCATION | SB-248 | SB-249 | SB-775 | SB-775 | SB-775 | SB-776 | SB-776 | SB-776 | SB-777 | SB-777 | SB-777 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-248-15 | SB-249-15 | D-SB-775-11 | D-SB-775-13 | D-SB-775-15 | D-SB-776-11 | D-SB-776-13 | D-SB-776-15 | D-SB-777-11 | D-SB-777-13 | D-SB-777-15 |
| SAMPLE DATE | 20050607 | 20050607 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| INDENO(1,2,3-CD)PYRENE | NA | NA | 51 | 88 | 4.2 U | 30 | 36 | 3.9 U | 9.6 | 110 | 3.9 U |
| NAPHTHALENE | NA | NA | 3.9 U | 3.9 U | 4.2 U | 4.1 U | 4.3 U | 3.9 U | 3.8 U | 38 | 3.9 U |
| PHENANTHRENE | NA | NA | 3.9 U | 8.3 | 4.2 U | 4.1 U | 4.3 U | 3.9 U | 23 | 370 | 3.9 U |
| PYRENE | NA | NA | 110 | 300 | 4.2 U | 120 | 150 | 3.9 U | 29 | 440 | 3.9 U |
| TOTAL PAHS | NA | NA | 552 | 1254.3 | 0 U | 464 | 561 | 0 U | 188.6 | 2977 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 38 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 38 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 38 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 38 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 38 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 38 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 38 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 0.4 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 2 B | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 2.2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 0.09 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 28.2 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | 8.5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 36 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 3 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.002 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | 0.6 B | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 36 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 5 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 0.04 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.8 B | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 61.4 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 30 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 0.35 UL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-248 | SB-249 | SB-775 | SB-775 | SB-775 | SB-776 | SB-776 | SB-776 | SB-777 | SB-777 | SB-777 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-248-15 | SB-249-15 | D-SB-775-11 | D-SB-775-13 | D-SB-775-15 | D-SB-776-11 | D-SB-776-13 | D-SB-776-15 | D-SB-777-11 | D-SB-777-13 | D-SB-777-15 |
| SAMPLE DATE | 20050607 | 20050607 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-778 | SB-778 | SB-778 | SB-779 | SB-779 | SB-779 | SB-780 | SB-780 | SB-780 | SB-781 | SB-781 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-778-11 | D-SB-778-13 | D-SB-778-15 | D-SB-779-11 | D-SB-779-13 | D-SB-779-15 | D-SB-780-11 | D-SB-780-13 | D-SB-780-15 | D-SB-781-11 | D-SB-781-13 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-778 | SB-778 | SB-778 | SB-779 | SB-779 | SB-779 | SB-780 | SB-780 | SB-780 | SB-781 | SB-781 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-778-11 | D-SB-778-13 | D-SB-778-15 | D-SB-779-11 | D-SB-779-13 | D-SB-779-15 | D-SB-780-11 | D-SB-780-13 | D-SB-780-15 | D-SB-781-11 | D-SB-781-13 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4 U | 41 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 4.3 U | 3.9 U | 3.7 U | 4.1 U |
| 2-METHYLNAPHTHALENE | 4 U | 76 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 4.3 U | 3.9 U | 3.7 U | 4.1 U |
| ACENAPHTHENE | 4 U | 86 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 4.3 U | 3.9 U | 3.7 U | 4.1 U |
| ACENAPHTHYLENE | 4 U | 2700 | 8.9 | 4.2 U | 11 | 3.9 U | 3.8 U | 69 | 3.9 U | 3.7 U | 93 |
| ANTHRACENE | 4 U | 1200 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 37 | 3.9 U | 3.7 U | 36 |
| BAP EQUIVALENT-HALFND | 4 U | 6217 | 16 | 4.2 U | 43 | 3.9 U | 3.8 U | 198 | 26 | 3.7 U | 131 |
| BAP EQUIVALENT-POS | 4 U | 6217 | 13 | 4.2 U | 43 | 3.9 U | 3.8 U | 198 | 24 | 3.7 U | 129 |
| BENZO(A)ANTHRACENE | 4 U | 2500 | 4 U | 4.2 U | 16 | 3.9 U | 3.8 U | 97 | 18 | 3.7 U | 58 |
| BENZO(A)PYRENE | 4 U | 4400 | 12 | 4.2 U | 23 | 3.9 U | 3.8 U | 130 | 19 | 3.7 U | 99 |
| BENZO(B)FLUORANTHENE | 4 U | 4600 | 12 | 4.2 U | 23 J | 3.9 U | 3.8 U | 120 J | 20 J | 3.7 U | 140 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4 U | 3800 | 10 | 4.2 U | 16 | 3.9 U | 3.8 U | 100 | 16 | 3.7 U | 160 |
| BENZO(K)FLUORANTHENE | 4 U | 1400 | 4 U | 4.2 U | 11 | 3.9 U | 3.8 U | 55 | 11 | 3.7 U | 56 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 3000 | 1.3 U | 1.4 U | 18 | 1.3 U | 1.3 U | 120 | 22 | 1.2 U | 82 |
| DIBENZO(A,H)ANTHRACENE | 4 U | 820 | 4 U | 4.2 U | 15 J | 3.9 U | 3.8 U | 38 J | 3.9 U | 3.7 U | 4.1 U |
| FLUORANTHENE | 4 U | 1900 | 4 U | 4.2 U | 23 | 3.9 U | 3.8 U | 180 | 34 | 3.7 U | 72 |
| FLUORENE | 4 U | 190 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 14 | 3.9 U | 3.7 U | 4.1 U |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-778 | SB-778 | SB-778 | SB-779 | SB-779 | SB-779 | SB-780 | SB-780 | SB-780 | SB-781 | SB-781 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-778-11 | D-SB-778-13 | D-SB-778-15 | D-SB-779-11 | D-SB-779-13 | D-SB-779-15 | D-SB-780-11 | D-SB-780-13 | D-SB-780-15 | D-SB-781-11 | D-SB-781-13 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| INDENO(1,2,3-CD)PYRENE | 4 U | 2700 | 4 U | 4.2 U | 11 J | 3.9 U | 3.8 U | 75 J | 11 J | 3.7 U | 99 J |
| NAPHTHALENE | 4 U | 78 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 4.3 U | 3.9 U | 3.7 U | 4.1 U |
| PHENANTHRENE | 4 U | 280 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 41 | 3.9 U | 3.7 U | 14 |
| PYRENE | 4 U | 4500 | 12 | 4.2 U | 50 | 3.9 U | 3.8 U | 280 | 55 | 3.7 U | 180 |
| TOTAL PAHS | 0 U | 34230 | 54.9 | 0 U | 217 | 0 U | 0 U | 1356 | 206 | 0 U | 1089 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-778 | SB-778 | SB-778 | SB-779 | SB-779 | SB-779 | SB-780 | SB-780 | SB-780 | SB-781 | SB-781 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-778-11 | D-SB-778-13 | D-SB-778-15 | D-SB-779-11 | D-SB-779-13 | D-SB-779-15 | D-SB-780-11 | D-SB-780-13 | D-SB-780-15 | D-SB-781-11 | D-SB-781-13 |
| SAMPLE DATE | 20100831 | 20100831 | 20100831 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-781 | SB-782 | SB-782 | SB-782 | SB-783 | SB-783 | SB-783 | SB-784 | SB-784 | SB-784 | SB-784 | SB-785 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-781-15 | D-SB-782-11 | D-SB-782-13 | D-SB-782-15 | D-SB-783-11 | D-SB-783-13 | D-SB-783-15 | D-SB-784-11 | D-SB-784-13 | D-SB-784-15 | D-SB-785-11 |
| SAMPLE DATE | 20100901 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | 0.52 U | 0.59 U | 0.5 U | 0.52 U | 0.57 U | 0.71 U | 0.56 U | 0.53 U | 0.57 U | 0.56 U |
| 1,1,1-TRICHLOROETHANE | NA | 0.47 U | 0.53 U | 0.45 U | 0.47 U | 0.52 U | 0.64 U | 0.51 U | 0.48 U | 0.51 U | 0.5 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | 0.28 U | 0.32 U | 0.27 U | 0.29 U | 0.31 U | 0.39 U | 0.31 U | 0.29 U | 0.31 U | 0.31 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | 1.1 U | 1.2 U | 1 U | 1.1 U | 1.2 U | 1.5 U | 1.2 U | 1.1 U | 1.2 U | 1.2 U |
| 1,1-DICHLOROETHANE | NA | 0.3 U | 0.34 U | 0.29 U | 0.3 U | 0.33 U | 0.41 U | 0.33 U | 0.31 U | 0.33 U | 0.32 U |
| 1,1-DICHLOROETHENE | NA | 0.43 U | 0.49 U | 0.42 U | 0.44 U | 0.48 U | 0.59 U | 0.47 U | 0.44 U | 0.47 U | 0.47 U |
| 1,1-DICHLOROPROPENE | NA | 0.25 U | 0.28 U | 0.24 U | 0.25 U | 0.28 U | 0.34 U | 0.27 U | 0.26 U | 0.27 U | 0.27 U |
| 1,2,3-TRICHLOROBENZENE | NA | 0.32 U | 0.36 U | 0.31 U | 0.32 U | 0.35 U | 0.43 U | 0.35 U | 0.32 U | 0.35 U | 0.34 U |
| 1,2,3-TRICHLOROPROPANE | NA | 0.75 U | 0.85 U | 0.73 U | 0.76 U | 0.83 U | 1 U | 0.82 U | 0.77 U | 0.82 U | 0.81 U |
| 1,2,3-TRIMETHYLBENZENE | NA | 0.14 U | 0.16 U | 0.14 U | 0.14 U | 0.16 U | 0.19 U | 0.15 U | 0.14 U | 0.16 U | 0.15 U |
| 1,2,4-TRICHLOROBENZENE | NA | 0.23 U | 0.26 U | 0.22 U | 0.23 U | 0.25 U | 0.31 U | 0.25 U | 0.23 U | 0.25 U | 0.24 U |
| 1,2,4-TRIMETHYLBENZENE | NA | 0.54 U | 0.62 U | 0.52 U | 0.55 U | 0.6 U | 0.74 U | 0.59 U | 0.55 U | 0.59 U | 0.58 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | 1.1 U | 1.2 U | 1 U | 1.1 U | 1.2 U | 1.5 U | 1.2 U | 1.1 U | 1.2 U | 1.2 U |
| 1,2-DIBROMOETHANE | NA | 0.42 U | 0.47 U | 0.4 U | 0.42 U | 0.46 U | 0.57 U | 0.45 U | 0.43 U | 0.46 U | 0.45 U |
| 1,2-DICHLOROBENZENE | NA | 0.3 U | 0.34 U | 0.29 U | 0.3 U | 0.33 U | 0.41 U | 0.33 U | 0.31 U | 0.33 U | 0.32 U |
| 1,2-DICHLOROETHANE | NA | 0.28 U | 0.32 U | 0.27 U | 0.29 U | 0.31 U | 0.39 U | 0.31 U | 0.29 U | 0.31 U | 0.31 U |
| 1,2-DICHLOROPROPANE | NA | 0.58 U | 0.65 U | 0.56 U | 0.58 U | 0.64 U | 0.79 U | 0.63 U | 0.59 U | 0.63 U | 0.62 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | 0.29 U | 0.33 U | 0.28 U | 0.29 U | 0.32 U | 0.4 U | 0.32 U | 0.3 U | 0.32 U | 0.31 U |
| 1,3-DICHLOROPROPANE | NA | 0.28 U | 0.32 U | 0.27 U | 0.29 U | 0.31 U | 0.39 U | 0.31 U | 0.29 U | 0.31 U | 0.31 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | 0.55 U | 0.63 U | 0.53 U | 0.55 U | 0.61 U | 0.75 U | 0.6 U | 0.56 U | 0.6 U | 0.59 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | 0.78 U | 0.89 U | 0.76 U | 0.79 U | 0.87 U | 1.1 U | 0.85 U | 0.8 U | 0.86 U | 0.85 U |
| 2-BUTANONE | NA | 1.2 U | 1.3 U | 1.1 U | 1.2 U | 1.3 U | 1.6 U | 1.3 U | 1.2 U | 1.3 U | 1.6 J |
| 2-CHLOROETHYL VINYL ETHER | NA | 1.2 U | 1.3 U | 1.1 U | 1.2 U | 1.3 U | 1.6 U | 1.3 U | 1.2 U | 1.3 U | 1.3 U |
| 2-CHLOROTOLUENE | NA | 0.33 U | 0.38 U | 0.32 U | 0.34 U | 0.37 U | 0.46 U | 0.36 U | 0.34 U | 0.37 U | 0.36 U |
| 2-HEXANONE | NA | 0.53 U | 0.6 U | 0.51 U | 0.53 U | 0.58 U | 0.72 U | 0.57 U | 0.54 U | 0.57 U | 0.57 U |
| 4-CHLOROTOLUENE | NA | 0.34 U | 0.39 U | 0.33 U | 0.34 U | 0.38 U | 0.47 U | 0.37 U | 0.35 U | 0.37 U | 0.37 U |
| 4-ISOPROPYLTOLUENE | NA | 0.18 U | 0.2 U | 0.17 U | 0.18 U | 0.19 U | 0.24 U | 0.19 U | 0.18 U | 0.19 U | 0.19 U |
| 4-METHYL-2-PENTANONE | NA | 0.45 U | 0.51 U | 0.44 U | 0.45 U | 0.5 U | 0.62 U | 0.49 U | 0.46 U | 0.49 U | 0.49 U |
| ACETONE | NA | 5.3 U | 6 U | 5.1 U | 5.3 U | 5.8 B | 7.2 U | 5.7 U | 5.4 U | 5.7 U | 37 B |
| BENZENE | NA | 0.19 U | 0.22 U | 0.19 U | 0.19 U | 0.21 U | 0.26 U | 0.21 U | 0.2 U | 0.21 U | 0.21 U |
| BROMOBENZENE | NA | 0.28 U | 0.31 U | 0.27 U | 0.28 U | 0.3 U | 0.38 U | 0.3 U | 0.28 U | 0.3 U | 0.3 U |
| BROMOCHLOROMETHANE | NA | 0.59 U | 0.67 U | 0.57 U | 0.6 U | 0.66 U | 0.81 U | 0.64 U | 0.6 U | 0.65 U | 0.64 U |
| BROMODICHLOROMETHANE | NA | 0.23 U | 0.27 U | 0.23 U | 0.24 U | 0.26 U | 0.32 U | 0.25 U | 0.24 U | 0.26 U | 0.25 U |
| BROMOFORM | NA | 0.28 U | 0.31 U | 0.27 U | 0.28 U | 0.3 U | 0.38 U | 0.3 U | 0.28 U | 0.3 U | 0.3 U |
| BROMOMETHANE | NA | 0.45 U | 0.51 U | 0.44 U | 0.45 U | 0.5 U | 0.62 U | 0.49 U | 0.46 U | 0.49 U | 0.49 U |
| CARBON DISULFIDE | NA | 0.37 U | 0.42 U | 0.35 U | 0.37 U | 0.41 U | 0.5 U | 0.4 U | 0.37 U | 0.4 U | 0.81 B |
| CARBON TETRACHLORIDE | NA | 0.31 U | 0.35 U | 0.3 U | 0.31 U | 0.34 U | 0.42 U | 0.34 U | 0.31 U | 0.34 U | 0.33 U |
| CHLOROBENZENE | NA | 0.28 U | 0.31 U | 0.27 U | 0.28 U | 0.3 U | 0.38 U | 0.3 U | 0.28 U | 0.3 U | 0.3 U |
| CHLORODIBROMOMETHANE | NA | 0.46 U | 0.52 U | 0.44 U | 0.46 U | 0.51 U | 0.63 U | 0.5 U | 0.47 U | 0.5 U | 0.49 U |
| CHLOROETHANE | NA | 0.72 U | 0.81 U | 0.69 U | 0.72 U | 0.79 U | 0.98 U | 0.78 U | 0.73 U | 0.78 U | 0.77 U |
| CHLOROFORM | NA | 0.24 U | 0.27 U | 0.23 U | 0.24 U | 0.27 U | 0.33 U | 0.26 U | 0.25 U | 0.26 U | 0.26 U |
| CHLOROMETHANE | NA | 0.34 U | 0.39 U | 0.33 U | 0.34 U | 0.38 U | 0.47 U | 0.37 U | 0.35 U | 0.37 U | 0.37 U |
| CIS-1,2-DICHLOROETHENE | NA | 0.3 U | 0.34 U | 0.29 U | 0.3 U | 0.33 U | 0.41 U | 0.33 U | 0.31 U | 0.33 U | 0.32 U |
| CIS-1,3-DICHLOROPROPENE | NA | 0.28 U | 0.32 U | 0.27 U | 0.29 U | 0.31 U | 0.39 U | 0.31 U | 0.29 U | 0.31 U | 0.31 U |
| DIBROMOMETHANE | NA | 0.53 U | 0.6 U | 0.51 U | 0.53 U | 0.58 U | 0.72 U | 0.57 U | 0.54 U | 0.57 U | 0.57 U |
| DICHLORODIFLUOROMETHANE | NA | 0.42 U | 0.47 U | 0.4 U | 0.42 U | 0.46 U | 0.57 U | 0.45 U | 0.43 U | 0.46 U | 0.45 U |
| DIISOPROPYL ETHER | NA | 1.3 U | 1.4 U | 1.2 U | 1.3 U | 1.4 U | 1.7 U | 1.4 U | 1.3 U | 1.4 U | 1.3 U |
| ETHYL TERT-BUTYL ETHER | NA | 0.18 U | 0.21 U | 0.18 U | 0.18 U | 0.2 U | 0.25 U | 0.2 U | 0.19 U | 0.2 U | 0.2 U |
| ETHYLBENZENE | NA | 0.22 U | 0.25 U | 0.21 U | 0.22 U | 0.24 U | 0.3 U | 0.24 U | 0.22 U | 0.24 U | 0.23 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | 1 U | 1.1 U | 0.97 U | 1 U | 1.1 U | 1.4 U | 1.1 U | 1 U | 1.1 U | 1.1 U |
| ISOPROPYLBENZENE | NA | 0.13 U | 0.15 U | 0.13 U | 0.13 U | 0.15 U | 0.18 U | 0.15 U | 0.14 U | 0.15 U | 0.14 U |
| M+P-XYLENES | NA | 1 U | 1.1 U | 0.97 U | 1 U | 1.1 U | 1.4 U | 1.1 U | 1 U | 1.1 U | 1.1 U |
| METHYL TERT-BUTYL ETHER | NA | 0.36 U | 0.41 U | 0.35 U | 0.36 U | 0.4 U | 0.49 U | 0.39 U | 0.37 U | 0.39 U | 0.39 U |
| METHYLENE CHLORIDE | NA | 0.56 U | 0.63 U | 0.54 U | 0.56 U | 0.62 U | 0.77 U | 0.61 U | 0.57 U | 0.61 U | 0.6 U |
| NAPHTHALENE | NA | 0.16 U | 0.18 U | 0.15 U | 0.16 U | 0.18 U | 0.22 U | 0.17 U | 0.16 U | 0.17 U | 0.8 B |
| N-BUTYLBENZENE | NA | 0.19 U | 0.22 U | 0.19 U | 0.19 U | 0.21 U | 0.26 U | 0.21 U | 0.2 U | 0.21 U | 0.21 U |
| N-PROPYLBENZENE | NA | 0.33 U | 0.38 U | 0.32 U | 0.34 U | 0.37 U | 0.46 U | 0.36 U | 0.34 U | 0.37 U | 0.36 U |
| O-XYLENE | NA | 0.29 U | 0.33 U | 0.28 U | 0.29 U | 0.32 U | 0.4 U | 0.32 U | 0.3 U | 0.32 U | 0.31 U |
| SEC-BUTYLBENZENE | NA | 0.15 U | 0.17 U | 0.15 U | 0.15 U | 0.17 U | 0.21 U | 0.16 U | 0.15 U | 0.16 U | 0.16 U |
| STYRENE | NA | 0.13 U | 0.14 U | 0.12 U | 0.13 U | 0.14 U | 0.17 U | 0.14 U | 0.13 U | 0.14 U | 0.13 U |
| TERT-AMYL METHYL ETHER | NA | 0.31 U | 0.35 U | 0.3 U | 0.31 U | 0.34 U | 0.42 U | 0.34 U | 0.31 U | 0.34 U | 0.33 UJ |
| TERT-BUTYLBENZENE | NA | 0.24 U | 0.27 U | 0.23 U | 0.24 U | 0.27 U | 0.33 U | 0.26 U | 0.25 U | 0.26 U | 0.26 U |
| TERTIARY-BUTYL ALCOHOL | NA | 6.3 UR | 7.2 UR | 6.1 UR | 6.4 UR | 7 UR | 8.7 UR | 6.9 UR | 6.5 UR | 6.9 UR | 47 B |
| TETRACHLOROETHENE | NA | 0.43 U | 0.49 U | 0.42 U | 0.44 U | 0.48 U | 0.59 U | 0.47 U | 0.44 U | 0.47 U | 0.47 U |
| TOLUENE | NA | 0.23 U | 0.26 U | 0.22 U | 0.23 U | 0.25 U | 0.31 U | 0.25 U | 0.23 U | 0.25 U | 0.28 J |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | 0.56 U | 0.63 U | 0.54 U | 0.56 U | 0.62 U | 0.77 U | 0.61 U | 0.57 U | 0.61 U | 0.6 U |
| TRANS-1,2-DICHLOROETHENE | NA | 0.34 U | 0.39 U | 0.33 U | 0.34 U | 0.38 U | 0.47 U | 0.37 U | 0.35 U | 0.37 U | 0.37 U |
| TRANS-1,3-DICHLOROPROPENE | NA | 0.45 U | 0.51 U | 0.44 U | 0.45 U | 0.5 U | 0.62 U | 0.49 U | 0.46 U | 0.49 U | 0.49 U |
| TRICHLOROETHENE | NA | 0.35 U | 0.4 U | 0.34 U | 0.35 U | 0.39 U | 0.48 U | 0.38 U | 0.36 U | 0.38 U | 0.38 U |
| TRICHLOROFLUOROMETHANE | NA | 0.28 U | 0.32 U | 0.27 U | 0.29 U | 0.31 U | 0.39 U | 0.31 U | 0.29 U | 0.31 U | 0.31 U |
| VINYL ACETATE | NA | 0.21 U | 0.24 U | 0.2 U | 0.21 U | 0.23 U | 0.29 U | 0.23 U | 0.21 U | 0.23 U | 0.22 U |
| VINYL CHLORIDE | NA | 0.33 U | 0.37 U | 0.31 U | 0.33 U | 0.36 U | 0.45 U | 0.35 U | 0.33 U | 0.36 U | 0.35 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | 31 U | 34 U | 31 U | 32 U | 33 U | 33 U | 32 U | 31 U | 33 U | 32 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | 25 U | 27 U | 25 U | 26 U | 27 U | 27 U | 26 U | 26 U | 27 U | 26 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | 11 U | 12 U | 11 U | 11 U | 12 U | 12 U | 11 U | 11 U | 12 U | 11 U |
| 2,4,5-TRICHLOROPHENOL | NA | 29 U | 31 U | 29 U | 30 U | 30 U | 30 U | 29 U | 29 U | 31 U | 30 U |
| 2,4,6-TRICHLOROPHENOL | NA | 93 U | 100 U | 92 U | 95 U | 97 U | 97 U | 94 U | 93 U | 99 U | 95 U |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-781 | SB-782 | SB-782 | SB-782 | SB-783 | SB-783 | SB-783 | SB-784 | SB-784 | SB-784 | SB-785 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-781-15 | D-SB-782-11 | D-SB-782-13 | D-SB-782-15 | D-SB-783-11 | D-SB-783-13 | D-SB-783-15 | D-SB-784-11 | D-SB-784-13 | D-SB-784-15 | D-SB-785-11 |
| SAMPLE DATE | 20100901 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| 2,4-DICHLOROPHENOL | NA | 23 U | 25 U | 23 U | 24 U | 24 U | 24 U | 24 U | 23 U | 25 U | 24 U |
| 2,4-DIMETHYLPHENOL | NA | 23 U | 25 U | 23 U | 24 U | 24 U | 24 U | 24 U | 23 U | 25 U | 24 U |
| 2,4-DINITROPHENOL | NA | 93 U | 100 U | 92 U | 95 U | 97 U | 97 U | 94 U | 93 U | 99 U | 95 U |
| 2,4-DINITROTOLUENE | NA | 31 U | 34 U | 31 U | 32 U | 33 U | 33 U | 32 U | 31 U | 33 U | 32 U |
| 2,6-DINITROTOLUENE | NA | 24 U | 26 U | 24 U | 25 U | 26 U | 26 U | 25 U | 24 U | 26 U | 25 U |
| 2-CHLORONAPHTHALENE | NA | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| 2-CHLOROPHENOL | NA | 31 U | 34 U | 31 U | 32 U | 33 U | 33 U | 32 U | 31 U | 33 U | 32 U |
| 2-METHYLPHENOL | NA | 93 U | 100 U | 92 U | 95 U | 97 U | 97 U | 94 U | 93 U | 99 U | 95 U |
| 2-NITROANILINE | NA | 11 U | 11 U | 10 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U |
| 2-NITROPHENOL | NA | 31 U | 34 U | 31 U | 32 U | 33 U | 33 U | 32 U | 31 U | 33 U | 32 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | 21 U | 22 U | 21 U | 21 U | 22 U | 22 U | 21 U | 21 U | 22 U | 21 U |
| 3-NITROANILINE | NA | 19 U | 20 U | 18 U | 19 U | 19 U | 19 U | 19 U | 19 U | 20 U | 19 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | 93 U | 100 U | 92 U | 95 U | 97 U | 97 U | 94 U | 93 U | 99 U | 95 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | 15 U | 16 U | 15 U | 15 U | 16 U | 16 U | 15 U | 15 U | 16 U | 15 U |
| 4-CHLORO-3-METHYLPHENOL | NA | 24 U | 26 U | 24 U | 25 U | 26 U | 26 U | 25 U | 24 U | 26 U | 25 U |
| 4-CHLOROANILINE | NA | 20 U | 21 U | 20 U | 20 U | 21 U | 21 U | 20 U | 20 U | 21 U | 20 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | 15 U | 16 U | 15 U | 15 U | 16 U | 16 U | 15 U | 15 U | 16 U | 15 U |
| 4-METHYLPHENOL | NA | 93 U | 100 U | 92 U | 95 U | 97 U | 97 U | 94 U | 93 U | 99 U | 95 U |
| 4-NITROANILINE | NA | 30 U | 32 U | 30 U | 31 U | 32 U | 32 U | 31 U | 30 U | 32 U | 31 U |
| 4-NITROPHENOL | NA | 93 U | 100 U | 92 U | 95 U | 97 U | 97 U | 94 U | 93 U | 99 U | 95 U |
| ACETOPHENONE | NA | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | 11 U | 11 U | 10 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | 14 U | 15 U | 14 U | 14 U | 15 U | 15 U | 14 U | 14 U | 15 U | 14 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | 25 U | 27 U | 25 U | 26 U | 27 U | 27 U | 26 U | 26 U | 27 U | 26 U |
| BIS(2-CHLOROETHYL)ETHER | NA | 2.3 U | 2.5 U | 2.3 U | 2.4 U | 2.4 U | 2.4 U | 2.4 U | 2.3 U | 2.5 U | 2.4 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | 22 U | 24 U | 22 U | 22 U | 23 U | 23 U | 22 U | 78 | 23 U | 22 U |
| BUTYL BENZYL PHTHALATE | NA | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 22 J | 12 U |
| CAPROLACTAM | NA | 43 U | 46 U | 43 U | 44 U | 45 U | 45 U | 44 U | 43 U | 46 U | 44 U |
| CARBAZOLE | NA | 31 U | 34 U | 31 U | 32 U | 33 U | 33 U | 32 U | 31 U | 33 U | 32 U |
| DIBENZOFURAN | NA | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| DIETHYL PHTHALATE | NA | 19 U | 20 U | 18 U | 19 U | 19 U | 19 U | 19 U | 19 U | 20 U | 19 U |
| DIMETHYL PHTHALATE | NA | 20 U | 21 U | 20 U | 20 U | 21 U | 21 U | 20 U | 20 U | 21 U | 20 U |
| DI-N-BUTYL PHTHALATE | NA | 17 U | 19 U | 17 U | 18 U | 18 U | 18 U | 18 U | 17 U | 18 U | 18 U |
| DI-N-OCTYL PHTHALATE | NA | 31 U | 34 U | 31 U | 32 U | 33 U | 33 U | 32 U | 31 U | 33 U | 32 U |
| HEXACHLOROBENZENE | NA | 2.4 U | 2.6 U | 2.4 U | 2.5 U | 2.6 U | 2.6 U | 2.5 U | 2.4 U | 2.6 U | 2.5 U |
| HEXACHLOROBUTADIENE | NA | 31 U | 34 U | 31 U | 32 U | 33 U | 33 U | 32 U | 31 U | 33 U | 32 U |
| HEXACHLOROCYCLOPENTADIENE | NA | 31 U | 34 U | 31 U | 32 U | 33 U | 33 U | 32 U | 31 U | 33 U | 32 U |
| HEXACHLOROETHANE | NA | 10 U | 11 U | 10 U | 11 U | 11 U | 11 U | 11 U | 10 U | 11 U | 11 U |
| ISOPHORONE | NA | 15 U | 16 U | 15 U | 15 U | 16 U | 16 U | 15 U | 15 U | 16 U | 15 U |
| NITROBENZENE | NA | 2.5 U | 2.7 U | 2.5 U | 2.6 U | 2.7 U | 2.7 U | 2.6 U | 2.6 U | 2.7 U | 2.6 U |
| N-NITROSODIMETHYLAMINE | NA | 19 U | 20 U | 18 U | 19 U | 19 U | 19 U | 19 U | 19 U | 20 U | 19 U |
| N-NITROSO-DI-N-PROPYLAMINE | NA | 31 U | 34 U | 31 U | 32 U | 33 U | 33 U | 32 U | 31 U | 33 U | 32 U |
| N-NITROSODIPHENYLAMINE | NA | 24 U | 26 U | 24 U | 25 U | 26 U | 26 U | 25 U | 24 U | 26 U | 25 U |
| PENTACHLOROPHENOL | NA | 93 U | 100 U | 92 U | 95 U | 97 U | 97 U | 94 U | 93 U | 99 U | 95 U |
| PHENOL | NA | 31 U | 34 U | 31 U | 32 U | 33 U | 33 U | 32 U | 31 U | 33 U | 32 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 3.9 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| ACENAPHTHENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| ACENAPHTHYLENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| ANTHRACENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 3.9 U | 3.8 U | 5.8 | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| BAP EQUIVALENT-POS | 3.9 U | 3.8 U | 1.3 | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| BENZO(A)ANTHRACENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| BENZO(A)PYRENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| BENZO(B)FLUORANTHENE | 3.9 U | 3.8 U | 13 | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| BENZO(K)FLUORANTHENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 8.7 | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.4 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| FLUORANTHENE | 3.9 U | 3.8 U | 15 | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| FLUORENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-781 | SB-782 | SB-782 | SB-782 | SB-783 | SB-783 | SB-783 | SB-784 | SB-784 | SB-784 | SB-785 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-781-15 | D-SB-782-11 | D-SB-782-13 | D-SB-782-15 | D-SB-783-11 | D-SB-783-13 | D-SB-783-15 | D-SB-784-11 | D-SB-784-13 | D-SB-784-15 | D-SB-785-11 |
| SAMPLE DATE | 20100901 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| INDENO(1,2,3-CD)PYRENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| NAPHTHALENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| PHENANTHRENE | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| PYRENE | 3.9 U | 3.8 U | 15 | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U | 3.8 U | 4.1 U | 3.9 U |
| TOTAL PAHS | 0 U | 0 U | 51.7 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | 0.72 U | 0.77 U | 0.71 U | 0.73 UJ | 0.75 UJ | 0.75 UJ | 0.73 U | 0.72 U | 0.76 U | 0.73 UJ |
| 4,4'-DDE | NA | 0.45 U | 0.49 U | 0.45 U | 0.46 U | 0.47 U | 0.47 U | 0.46 U | 0.45 U | 0.48 U | 0.46 U |
| 4,4'-DDT | NA | 0.73 U | 0.79 U | 0.73 U | 0.75 U | 0.77 U | 0.77 U | 0.74 U | 0.73 U | 0.78 U | 0.75 UJ |
| ALDRIN | NA | 1.4 U | 1.5 U | 1.4 U | 1.4 UJ | 1.5 UJ | 1.5 UJ | 1.4 U | 1.4 U | 1.5 U | 1.4 U |
| ALPHA-BHC | NA | 0.85 U | 0.91 U | 0.84 U | 0.86 UJ | 0.89 UJ | 0.89 UJ | 0.86 U | 0.85 U | 0.9 U | 0.86 U |
| ALPHA-CHLORDANE | NA | 1.1 U | 1.2 U | 1.1 U | 1.1 UJ | 1.1 UJ | 1.1 UJ | 1.1 U | 1.1 U | 1.2 U | 1.1 U |
| AROCLOR-1016 | NA | 24 U | 26 U | 24 U | 25 U | 26 U | 26 U | 25 U | 24 U | 26 U | 25 U |
| AROCLOR-1221 | NA | 19 U | 20 U | 18 U | 19 U | 19 U | 19 U | 19 U | 19 U | 20 U | 19 U |
| AROCLOR-1232 | NA | 16 U | 17 U | 16 U | 17 U | 17 U | 17 U | 17 U | 16 U | 17 U | 17 U |
| AROCLOR-1242 | NA | 15 U | 16 U | 15 U | 15 U | 16 U | 16 U | 15 U | 15 U | 16 U | 15 U |
| AROCLOR-1248 | NA | 20 U | 21 U | 20 U | 20 U | 21 U | 21 U | 20 U | 20 U | 21 U | 20 U |
| AROCLOR-1254 | NA | 20 U | 21 U | 20 U | 20 U | 21 U | 21 U | 20 U | 20 U | 21 U | 20 U |
| AROCLOR-1260 | NA | 20 U | 21 U | 20 U | 20 U | 21 U | 21 U | 20 U | 20 U | 21 U | 20 U |
| BETA-BHC | NA | 1.3 U | 1.4 U | 1.3 U | 1.3 UJ | 1.3 UJ | 1.3 UJ | 1.3 U | 1.3 U | 1.4 U | 1.3 U |
| DELTA-BHC | NA | 1.4 U | 1.5 U | 1.4 U | 1.4 UJ | 1.5 UJ | 1.5 UJ | 1.4 U | 1.4 U | 1.5 U | 1.4 U |
| DIELDRIN | NA | 0.54 U | 0.59 U | 0.54 U | 0.56 UJ | 0.57 UJ | 0.57 UJ | 0.55 U | 0.55 U | 0.58 U | 0.56 U |
| ENDOSULFAN I | NA | 0.6 U | 0.65 U | 0.6 U | 0.62 UJ | 0.63 UJ | 0.63 UJ | 0.61 U | 0.61 U | 0.64 U | 0.62 U |
| ENDOSULFAN II | NA | 0.95 U | 1 U | 0.94 U | 0.97 UJ | 1 UJ | 1 UJ | 0.97 U | 0.96 U | 1 U | 0.97 U |
| ENDOSULFAN SULFATE | NA | 1 U | 1.1 U | 1 U | 1 UJ | 1.1 UJ | 1.1 UJ | 1 U | 1 U | 1.1 U | 1 U |
| ENDRIN | NA | 0.58 U | 0.62 U | 0.58 U | 0.59 UJ | 0.61 UJ | 0.61 UJ | 0.59 U | 0.58 U | 0.62 U | 0.59 U |
| ENDRIN ALDEHYDE | NA | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U |
| ENDRIN KETONE | NA | 0.73 U | 0.79 U | 0.73 U | 0.75 U | 0.77 U | 0.77 U | 0.74 U | 0.73 U | 0.78 U | 0.75 U |
| GAMMA-BHC (LINDANE) | NA | 0.86 U | 0.92 U | 0.85 U | 0.88 UJ | 0.9 UJ | 0.9 UJ | 0.87 U | 0.86 U | 0.91 U | 0.88 U |
| GAMMA-CHLORDANE | NA | 0.49 U | 0.52 U | 0.48 U | 0.5 UJ | 0.51 UJ | 0.51 UJ | 0.5 U | 0.49 U | 0.52 U | 0.5 U |
| HEPTACHLOR | NA | 1.3 U | 1.4 U | 1.3 U | 1.3 UJ | 1.3 UJ | 1.3 UJ | 1.3 U | 1.3 U | 1.4 U | 1.3 U |
| HEPTACHLOR EPOXIDE | NA | 0.93 U | 1 U | 0.92 U | 0.95 UJ | 0.97 UJ | 0.97 UJ | 0.94 U | 0.93 U | 0.99 U | 0.95 U |
| METHOXYCHLOR | NA | 1.7 U | 1.9 U | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| TOTAL AROCLOR | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | 22 U | 24 U | 22 U | 22 U | 23 U | 23 U | 22 U | 22 U | 23 U | 22 UJ |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | 0.22 B | 0.19 B | 0.072 B | 0.11 B | 0.084 B | 0.36 J | 0.12 B | 0.18 B | 0.39 J | 0.28 J |
| ARSENIC | NA | 3.9 J | 4.6 J | 2.6 J | 2.1 J | 2.4 J | 4.3 J | 1.3 J | 2.5 J | 7.2 J | 3.2 L |
| BARIUM | NA | 11.2 | 20.7 | 19.2 | 12.6 | 14.2 | 18 | 7 | 13.1 | 20.6 | 12.7 J |
| BERYLLIUM | NA | 3.4 | 2.8 | 2.7 | 1.1 | 1.1 | 3 | 1.8 | 2.7 | 5 | 6.4 J |
| CADMIUM | NA | 0.077 J | 0.054 J | 0.096 J | 0.011 B | 0.012 B | 0.019 B | 0.012 B | 0.014 B | 0.023 B | 0.0092 U |
| CHROMIUM | NA | 20 J | 17.8 J | 13.4 J | 10.1 J | 11.4 J | 21.6 J | 14.4 J | 25.7 J | 32.5 J | 28.8 J |
| COBALT | NA | 10.9 J | 5.9 J | 8.2 J | 4.3 J | 3 J | 8.1 J | 7.2 J | 9.2 J | 14.3 J | 8 |
| COPPER | NA | 17.9 J | 18.8 J | 6.4 J | 8.6 J | 23.1 J | 21.9 J | 39 J | 16.6 J | 37 J | 23.5 |
| IRON | NA | 31000 J | 19200 J | 5110 J | 8650 J | 6580 J | 32800 J | 23200 J | 31400 J | 60600 J | 38700 J |
| LEAD | NA | 4.9 | 10.4 | 5.6 | 4.8 | 6 | 6.7 | 4.4 | 4.4 | 6.3 | 6.7 |
| MANGANESE | NA | 33.6 | 31.6 | 9.7 | 30.9 | 14.9 | 64.2 | 52.5 | 55.4 | 142 | 66.4 |
| MERCURY | NA | 0.017 U | 0.019 U | 0.017 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U | 0.017 U | 0.018 U | 0.018 U |
| MOLYBDENUM | NA | 0.43 | 0.67 | 0.073 U | 0.12 J | 0.17 J | 0.51 | 0.15 J | 0.44 | 0.82 | 0.32 |
| NICKEL | NA | 31.6 J | 15.7 J | 17.6 J | 9.1 J | 6.3 J | 24.4 J | 18.1 J | 25.4 J | 37.6 J | 22.4 J |
| SELENIUM | NA | 2.3 | 2 | 4.5 | 1.3 | 1.5 | 1.8 | 1 | 0.89 | 1.4 | 1.1 J |
| SILVER | NA | 0.019 UL | 0.082 J | 0.018 UL | 0.019 UL | 0.019 UL | 0.019 UL | 0.019 UL | 0.019 UL | 0.026 J | 0.019 UJ |
| THALLIUM | NA | 0.11 B | 0.13 B | 0.14 B | 0.077 B | 0.1 B | 0.089 B | 0.07 B | 0.074 B | 0.11 B | 0.12 |
| VANADIUM | NA | 41 J | 29.7 J | 6.6 J | 13.8 J | 17.7 J | 36.3 J | 14.9 J | 42.2 J | 50.4 J | 30.7 |
| ZINC | NA | 47.9 J | 47 J | 46.5 J | 25 J | 21.9 J | 48.5 J | 83.2 J | 45.7 J | 81.3 J | 65.8 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | 3200 B | 6600 B | 6500 B | 4400 J | 3400 U | 3400 U | 3300 U | 3300 U | 3500 U | 3300 UJ |
| GASOLINE RANGE ORGANICS | NA | 53 U | 57 U | 53 U | 54 U | 56 U | 56 U | 54 U | 54 U | 57 U | 54 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | 0.83 J | 0.34 U | 0.34 J | 0.32 U | 0.33 U | 0.33 U | 0.35 J | 0.63 J | 0.33 U | 0.88 J |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-781 | SB-782 | SB-782 | SB-782 | SB-783 | SB-783 | SB-783 | SB-784 | SB-784 | SB-784 | SB-785 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-781-15 | D-SB-782-11 | D-SB-782-13 | D-SB-782-15 | D-SB-783-11 | D-SB-783-13 | D-SB-783-15 | D-SB-784-11 | D-SB-784-13 | D-SB-784-15 | D-SB-785-11 |
| SAMPLE DATE | 20100901 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-785 | SB-785 | SB-786 | SB-786 | SB-786 | SB-787 | SB-787 | SB-787 | SB-788 | SB-788 | SB-788 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-13 | D-SB-785-15 | D-SB-786-11 | D-SB-786-13 | D-SB-786-15 | D-SB-787-11 | D-SB-787-13 | D-SB-787-15 | D-SB-788-11 | D-SB-788-13 | D-SB-788-15 |
| SAMPLE DATE | 20100908 | 20100908 | 20100903 | 20100903 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.57 U | 0.55 U | 6.3 U | 8.1 U | 0.5 U | 0.5 U | 0.52 U | 0.52 U | 0.72 U | 0.61 U | 0.49 U |
| 1,1,1-TRICHLOROETHANE | 0.52 U | 0.5 U | 15 U | 19 U | 0.45 U | 0.45 U | 0.47 U | 0.47 U | 0.65 U | 0.55 U | 0.45 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.31 U | 0.3 U | 6.2 U | 8 U | 0.27 U | 0.28 U | 0.29 U | 0.29 U | 0.4 U | 0.33 U | 0.27 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U | 1.2 U | 27 U | 35 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.5 U | 1.3 U | 1 U |
| 1,1-DICHLOROETHANE | 0.33 U | 0.32 U | 12 U | 15 U | 0.29 U | 0.29 U | 0.3 U | 0.3 U | 0.42 U | 0.35 U | 0.29 U |
| 1,1-DICHLOROETHENE | 0.48 U | 0.46 U | 13 U | 16 U | 0.42 U | 0.42 U | 0.44 U | 0.44 U | 0.61 U | 0.51 U | 0.41 U |
| 1,1-DICHLOROPROPENE | 0.28 U | 0.27 U | 7 U | 8.9 U | 0.24 U | 0.24 U | 0.25 U | 0.25 U | 0.35 U | 0.29 U | 0.24 U |
| 1,2,3-TRICHLOROBENZENE | 0.35 U | 0.34 U | 7 U | 8.9 U | 0.3 U | 0.31 U | 0.32 U | 0.32 U | 0.44 U | 0.37 U | 0.3 U |
| 1,2,3-TRICHLOROPROPANE | 0.83 U | 0.8 U | 15 U | 19 U | 0.72 U | 0.73 U | 0.76 U | 0.76 U | 1.1 U | 0.88 U | 0.72 U |
| 1,2,3-TRIMETHYLBENZENE | 0.16 U | 0.15 U | 0.12 U | 3.2 J | 0.16 J | 0.14 U | 0.14 U | 0.14 U | 0.2 U | 0.17 U | 0.14 U |
| 1,2,4-TRICHLOROBENZENE | 0.25 U | 0.24 U | 5.1 U | 6.5 U | 0.22 U | 0.22 U | 0.23 U | 0.23 U | 0.32 U | 0.26 U | 0.22 U |
| 1,2,4-TRIMETHYLBENZENE | 0.6 U | 0.58 U | 3.5 U | 4.5 U | 0.52 U | 0.53 U | 0.55 U | 0.55 U | 0.76 U | 0.64 U | 0.52 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U | 1.2 U | 35 U | 45 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.5 U | 1.3 U | 1 U |
| 1,2-DIBROMOETHANE | 0.46 U | 0.44 U | 7 U | 8.9 U | 0.4 U | 0.41 U | 0.42 U | 0.42 U | 0.58 U | 0.49 U | 0.4 U |
| 1,2-DICHLOROBENZENE | 0.33 U | 0.32 U | 6 U | 7.7 U | 0.29 U | 0.29 U | 0.3 U | 0.3 U | 0.42 U | 0.35 U | 0.29 U |
| 1,2-DICHLOROETHANE | 0.31 U | 0.3 U | 7 U | 8.9 U | 0.27 U | 0.28 U | 0.29 U | 0.29 U | 0.4 U | 0.33 U | 0.27 U |
| 1,2-DICHLOROPROPANE | 0.64 U | 0.61 U | 5.7 U | 7.3 U | 0.55 U | 0.56 U | 0.58 U | 0.58 U | 0.81 U | 0.68 U | 0.55 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.32 U | 0.31 U | 3.3 U | 4.3 U | 0.28 U | 0.28 U | 0.29 U | 0.3 U | 0.41 U | 0.34 U | 0.28 U |
| 1,3-DICHLOROPROPANE | 0.31 U | 0.3 U | 15 U | 20 U | 0.27 U | 0.28 U | 0.29 U | 0.29 U | 0.4 U | 0.33 U | 0.27 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.61 U | 0.59 U | 5.6 U | 7.1 U | 0.53 U | 0.53 U | 0.55 U | 0.56 U | 0.77 U | 0.65 U | 0.53 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.87 U | 0.83 U | 16 U | 21 U | 0.75 U | 0.76 U | 0.79 U | 0.79 U | 1.1 U | 0.92 U | 0.75 U |
| 2-BUTANONE | 1.3 U | 3.3 J | 120 B | 38 U | 1.1 U | 1.1 U | 1.2 U | 1.7 J | 1.6 U | 1.9 J | 1.3 J |
| 2-CHLOROETHYL VINYL ETHER | 1.3 U | 1.2 U | 30 U | 38 U | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.6 U | 1.4 U | 1.1 U |
| 2-CHLOROTOLUENE | 0.37 U | 0.36 U | 6.3 U | 8 U | 0.32 U | 0.32 U | 0.34 U | 0.34 U | 0.47 U | 0.39 U | 0.32 U |
| 2-HEXANONE | 0.58 U | 0.56 U | 14 U | 18 U | 0.5 U | 0.51 U | 0.53 U | 0.53 U | 0.74 U | 0.62 U | 0.5 U |
| 4-CHLOROTOLUENE | 0.38 U | 0.36 U | 6.9 U | 8.8 U | 0.33 U | 0.33 U | 0.34 U | 0.35 U | 0.48 U | 0.4 U | 0.33 U |
| 4-ISOPROPYLTOLUENE | 0.19 U | 0.19 U | 3.3 U | 4.3 U | 0.17 U | 0.17 U | 0.18 U | 0.18 U | 0.25 U | 0.21 U | 0.17 U |
| 4-METHYL-2-PENTANONE | 0.5 U | 0.48 U | 33 U | 43 U | 0.43 U | 0.44 U | 0.45 U | 0.46 U | 0.63 U | 0.53 U | 0.43 U |
| ACETONE | 28 B | 200 B | 260 B | 350 B | 16 B | 29 B | 100 B | 200 B | 18 B | 22 B | 230 |
| BENZENE | 0.21 U | 0.2 U | 10 J | 20 J | 3.4 J | 0.19 U | 0.19 U | 0.19 U | 0.27 U | 0.23 U | 0.18 U |
| BROMOBENZENE | 0.3 U | 0.29 U | 9.1 U | 12 U | 0.26 U | 0.27 U | 0.28 U | 0.28 U | 0.39 U | 0.32 U | 0.26 U |
| BROMOCHLOROMETHANE | 0.66 U | 0.63 U | 9.1 U | 12 U | 0.57 U | 0.58 U | 0.6 U | 0.6 U | 0.83 U | 0.7 U | 0.57 U |
| BROMODICHLOROMETHANE | 0.26 U | 0.25 U | 6.9 U | 8.8 U | 0.22 U | 0.23 U | 0.24 U | 0.24 U | 0.33 U | 0.27 U | 0.22 U |
| BROMOFORM | 0.3 U | 0.29 U | 13 U | 17 U | 0.26 U | 0.27 U | 0.28 U | 0.28 U | 0.39 U | 0.32 U | 0.26 U |
| BROMOMETHANE | 0.5 U | 0.48 U | 20 U | 26 U | 0.43 U | 0.44 U | 0.45 U | 0.46 U | 0.63 U | 0.53 U | 0.43 U |
| CARBON DISULFIDE | 1.2 B | 0.39 U | 8.4 U | 11 U | 0.35 U | 0.73 B | 0.37 U | 0.78 B | 1.1 B | 1.1 B | 0.35 U |
| CARBON TETRACHLORIDE | 0.34 U | 0.33 U | 4.5 U | 5.7 U | 0.3 U | 0.3 U | 0.31 U | 0.31 U | 0.43 U | 0.36 U | 0.3 U |
| CHLOROBENZENE | 0.3 U | 0.29 U | 4.5 U | 5.7 U | 0.26 U | 0.27 U | 0.28 U | 0.28 U | 0.39 U | 0.32 U | 0.26 U |
| CHLORODIBROMOMETHANE | 0.51 U | 0.49 U | 8.4 U | 11 U | 0.44 U | 0.45 U | 0.46 U | 0.46 U | 0.64 U | 0.54 U | 0.44 U |
| CHLOROETHANE | 0.79 U | 0.76 U | 42 U | 54 U | 0.69 U | 0.7 U | 0.72 U | 0.73 U | 1 U | 0.84 U | 0.69 U |
| CHLOROFORM | 0.27 U | 0.26 U | 6.1 U | 7.9 U | 0.23 U | 0.23 U | 0.24 U | 0.24 U | 0.34 U | 0.28 U | 0.23 U |
| CHLOROMETHANE | 0.7 J | 0.36 U | 9.8 U | 13 U | 0.33 U | 0.33 U | 0.34 U | 0.35 U | 0.48 U | 0.4 U | 0.33 U |
| CIS-1,2-DICHLOROETHENE | 0.33 U | 0.32 U | 4.8 U | 6.2 U | 0.29 U | 0.29 U | 0.3 U | 0.3 U | 0.42 U | 0.35 U | 0.29 U |
| CIS-1,3-DICHLOROPROPENE | 0.31 U | 0.3 U | 5.5 U | 7.1 U | 0.27 U | 0.28 U | 0.29 U | 0.29 U | 0.4 U | 0.33 U | 0.27 U |
| DIBROMOMETHANE | 0.58 U | 0.56 U | 9.8 U | 13 U | 0.5 U | 0.51 U | 0.53 U | 0.53 U | 0.74 U | 0.62 U | 0.5 U |
| DICHLORODIFLUOROMETHANE | 0.46 U | 0.44 U | 11 U | 14 U | 0.4 U | 0.41 U | 0.42 U | 0.42 U | 0.58 U | 0.49 U | 0.4 U |
| DIISOPROPYL ETHER | 1.4 U | 1.3 U | 35 U | 45 U | 1.2 U | 1.2 U | 1.3 U | 1.3 U | 1.8 U | 1.5 U | 1.2 U |
| ETHYL TERT-BUTYL ETHER | 0.2 U | 0.2 U | 0.15 U | 0.2 U | 0.18 U | 0.18 U | 0.18 U | 0.19 U | 0.26 U | 0.22 U | 0.18 U |
| ETHYLBENZENE | 0.24 U | 0.23 U | 3.8 U | 9.2 J | 0.35 J | 0.21 U | 0.22 U | 0.22 U | 0.3 U | 0.25 U | 0.21 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 1.1 U | 1.1 U | 9.8 U | 13 U | 0.96 U | 0.97 U | 1 U | 1 U | 1.4 U | 1.2 U | 0.96 U |
| ISOPROPYLBENZENE | 0.15 U | 0.14 U | 4.5 U | 5.8 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.19 U | 0.16 U | 0.13 U |
| M+P-XYLENES | 1.1 U | 1.1 U | 12 J | 20 J | 0.96 U | 0.97 U | 1 U | 1 U | 1.4 U | 1.2 U | 0.96 U |
| METHYL TERT-BUTYL ETHER | 0.4 U | 0.38 UJ | 4.9 UJ | 6.3 UJ | 0.34 UJ | 0.35 UJ | 0.36 UJ | 0.36 UJ | 0.5 UJ | 0.42 UJ | 0.34 UJ |
| METHYLENE CHLORIDE | 0.62 U | 0.59 U | 74 J | 77 J | 0.54 U | 0.54 U | 0.56 U | 0.57 U | 0.78 U | 0.66 U | 0.53 U |
| NAPHTHALENE | 0.81 B | 0.81 B | 260 | 530 | 47 | 0.76 B | 0.77 B | 0.76 B | 1.1 B | 0.87 B | 0.73 B |
| N-BUTYLBENZENE | 0.21 U | 0.2 U | 5.6 U | 7.1 U | 0.18 U | 0.19 U | 0.19 U | 0.19 U | 0.27 U | 0.23 U | 0.18 U |
| N-PROPYLBENZENE | 0.37 U | 0.36 U | 9.8 U | 13 U | 0.32 U | 0.32 U | 0.34 U | 0.34 U | 0.47 U | 0.39 U | 0.32 U |
| O-XYLENE | 0.32 U | 0.31 U | 6.3 J | 12 J | 0.57 J | 0.28 U | 0.29 U | 0.3 U | 0.41 U | 0.34 U | 0.28 U |
| SEC-BUTYLBENZENE | 0.17 U | 0.16 U | 3.3 U | 4.2 U | 0.14 U | 0.15 U | 0.15 U | 0.15 U | 0.21 U | 0.18 U | 0.14 U |
| STYRENE | 0.14 U | 0.13 U | 3.9 U | 5 U | 0.12 U | 0.12 U | 0.13 U | 0.13 U | 0.18 U | 0.15 U | 0.12 U |
| TERT-AMYL METHYL ETHER | 0.34 UJ | 0.33 UJ | 0.26 UJ | 0.33 UJ | 0.3 UJ | 0.3 UJ | 0.31 UJ | 0.31 UJ | 0.43 UJ | 0.36 UJ | 0.3 UJ |
| TERT-BUTYLBENZENE | 0.27 U | 0.26 U | 4.5 U | 5.8 U | 0.23 U | 0.23 U | 0.24 U | 0.24 U | 0.34 U | 0.28 U | 0.23 U |
| TERTIARY-BUTYL ALCOHOL | 49 B | 6.7 UR | 2200 B | 2800 B | 43 B | 6.2 UR | 45 B | 45 B | 8.9 UR | 52 B | 6.1 UR |
| TETRACHLOROETHENE | 0.48 U | 0.46 U | 8.4 U | 11 U | 0.42 U | 0.42 U | 0.44 U | 0.44 U | 0.61 U | 0.51 U | 0.41 U |
| TOLUENE | 0.25 U | 0.24 U | 13 J | 31 J | 0.58 J | 0.22 U | 0.23 U | 0.23 U | 0.43 J | 0.4 J | 0.22 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.62 U | 0.59 U | 18 J | 32 J | 1 J | 0.54 U | 0.56 U | 0.57 U | 0.78 U | 0.66 U | 0.53 U |
| TRANS-1,2-DICHLOROETHENE | 0.38 U | 0.36 U | 6.4 U | 8.2 U | 0.33 U | 0.33 U | 0.34 U | 0.35 U | 0.48 U | 0.4 U | 0.33 U |
| TRANS-1,3-DICHLOROPROPENE | 0.5 U | 0.48 U | 14 U | 18 U | 0.43 U | 0.44 U | 0.45 U | 0.46 U | 0.63 U | 0.53 U | 0.43 U |
| TRICHLOROETHENE | 0.39 U | 0.37 U | 6.8 U | 8.7 U | 0.34 U | 0.34 U | 0.35 U | 0.35 U | 0.49 U | 0.41 U | 0.33 U |
| TRICHLOROFLUOROMETHANE | 0.31 U | 0.3 U | 11 U | 14 U | 0.27 U | 0.28 U | 0.29 U | 0.29 U | 0.4 U | 0.33 U | 0.27 U |
| VINYL ACETATE | 0.23 U | 0.22 U | 16 U | 21 U | 0.2 U | 0.2 U | 0.21 U | 0.21 U | 0.29 U | 0.24 U | 0.2 U |
| VINYL CHLORIDE | 0.36 U | 0.35 U | 13 U | 16 U | 0.31 U | 0.32 U | 0.33 U | 0.33 U | 0.46 U | 0.38 U | 0.31 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | 33 U | 32 U | 31 U | 33 U | 30 U | 31 U | 32 U | 30 U | 32 U | 33 U | 31 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 27 U | 26 U | 25 U | 27 U | 25 U | 25 U | 26 U | 25 U | 26 U | 27 U | 25 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 12 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 12 U | 11 U |
| 2,4,5-TRICHLOROPHENOL | 30 U | 29 U | 29 U | 30 U | 28 U | 29 U | 29 U | 28 U | 30 U | 31 U | 29 U |
| 2,4,6-TRICHLOROPHENOL | 97 U | 93 U | 91 U | 97 U | 90 U | 91 U | 93 U | 90 U | 96 U | 99 U | 92 U |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-785 | SB-785 | SB-786 | SB-786 | SB-786 | SB-787 | SB-787 | SB-787 | SB-788 | SB-788 | SB-788 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-13 | D-SB-785-15 | D-SB-786-11 | D-SB-786-13 | D-SB-786-15 | D-SB-787-11 | D-SB-787-13 | D-SB-787-15 | D-SB-788-11 | D-SB-788-13 | D-SB-788-15 |
| SAMPLE DATE | 20100908 | 20100908 | 20100903 | 20100903 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| 2,4-DICHLOROPHENOL | 24 U | 23 U | 23 U | 24 U | 22 U | 23 U | 23 U | 22 U | 24 U | 25 U | 23 U |
| 2,4-DIMETHYLPHENOL | 24 U | 23 U | 23 U | 24 U | 22 U | 23 U | 23 U | 22 U | 24 U | 25 U | 23 U |
| 2,4-DINITROPHENOL | 97 U | 93 U | 91 U | 97 U | 90 U | 91 U | 93 U | 90 U | 96 U | 99 U | 92 U |
| 2,4-DINITROTOLUENE | 33 U | 32 U | 31 U | 33 U | 30 U | 31 U | 32 U | 30 U | 32 U | 33 U | 31 U |
| 2,6-DINITROTOLUENE | 26 U | 25 U | 24 U | 25 U | 24 U | 24 U | 25 U | 24 U | 25 U | 26 U | 24 U |
| 2-CHLORONAPHTHALENE | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| 2-CHLOROPHENOL | 33 U | 32 U | 31 U | 33 U | 30 U | 31 U | 32 U | 30 U | 32 U | 33 U | 31 U |
| 2-METHYLPHENOL | 97 U | 93 U | 91 U | 97 U | 90 U | 91 U | 93 U | 90 U | 96 U | 99 U | 92 U |
| 2-NITROANILINE | 11 U | 11 U | 10 U | 11 U | 10 U | 10 U | 11 U | 10 U | 11 U | 11 U | 11 U |
| 2-NITROPHENOL | 33 U | 32 U | 31 U | 33 U | 30 U | 31 U | 32 U | 30 U | 32 U | 33 U | 31 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 22 U | 21 U | 21 U | 22 U | 20 U | 21 U | 21 U | 20 U | 22 U | 22 U | 21 U |
| 3-NITROANILINE | 19 U | 19 U | 18 U | 19 U | 18 U | 18 U | 19 U | 18 U | 19 U | 20 U | 18 U |
| 4,6-DINITRO-2-METHYLPHENOL | 97 U | 93 U | 91 U | 97 U | 90 U | 91 U | 93 U | 90 U | 96 U | 99 U | 92 U |
| 4-BROMOPHENYL PHENYL ETHER | 16 U | 15 U | 15 U | 16 U | 15 U | 15 U | 15 U | 15 U | 16 U | 16 U | 15 U |
| 4-CHLORO-3-METHYLPHENOL | 26 U | 25 U | 24 U | 25 U | 24 U | 24 U | 25 U | 24 U | 25 U | 26 U | 24 U |
| 4-CHLOROANILINE | 21 U | 20 U | 19 U | 21 U | 19 U | 19 U | 20 U | 19 U | 20 U | 21 U | 20 U |
| 4-CHLOROPHENYL PHENYL ETHER | 16 U | 15 U | 15 U | 16 U | 15 U | 15 U | 15 U | 15 U | 16 U | 16 U | 15 U |
| 4-METHYLPHENOL | 97 U | 93 U | 91 U | 97 U | 90 U | 91 U | 93 U | 90 U | 96 U | 99 U | 92 U |
| 4-NITROANILINE | 32 U | 30 U | 30 U | 31 U | 29 U | 30 U | 30 U | 29 U | 31 U | 32 U | 30 U |
| 4-NITROPHENOL | 97 U | 93 U | 91 U | 97 U | 90 U | 91 U | 93 U | 90 U | 96 U | 99 U | 92 U |
| ACETOPHENONE | 11 U | 11 U | 11 U | 11 U | 10 U | 10 U | 11 U | 10 U | 11 U | 11 U | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 11 U | 11 U | 10 U | 11 U | 10 U | 10 U | 11 U | 10 U | 11 U | 11 U | 11 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 15 U | 14 U | 14 U | 14 U | 13 U | 14 U | 14 U | 13 U | 14 U | 15 U | 14 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 27 U | 26 U | 25 U | 27 U | 25 U | 25 U | 26 U | 25 U | 26 U | 27 U | 25 U |
| BIS(2-CHLOROETHYL)ETHER | 2.4 U | 2.3 U | 2.3 U | 2.4 U | 2.2 U | 2.3 U | 2.3 U | 2.2 U | 2.4 U | 2.5 U | 2.3 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 23 U | 22 U | 22 U | 23 U | 21 U | 22 U | 22 U | 21 U | 23 U | 24 U | 22 U |
| BUTYL BENZYL PHTHALATE | 12 U | 12 U | 11 U | 12 U | 11 U | 11 U | 12 U | 11 U | 12 U | 12 U | 12 U |
| CAPROLACTAM | 45 U | 43 U | 42 U | 45 U | 42 U | 42 U | 43 U | 42 U | 45 U | 46 U | 43 U |
| CARBAZOLE | 33 U | 32 U | 31 U | 33 U | 30 U | 31 U | 32 U | 30 U | 32 U | 33 U | 31 U |
| DIBENZOFURAN | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| DIETHYL PHTHALATE | 19 U | 19 U | 18 U | 19 U | 18 U | 18 U | 19 U | 18 U | 19 U | 20 U | 18 U |
| DIMETHYL PHTHALATE | 21 U | 20 U | 19 U | 21 U | 19 U | 19 U | 20 U | 19 U | 20 U | 21 U | 20 U |
| DI-N-BUTYL PHTHALATE | 18 U | 18 U | 17 U | 18 U | 17 U | 17 U | 18 U | 17 U | 18 U | 19 U | 17 U |
| DI-N-OCTYL PHTHALATE | 33 U | 32 U | 31 U | 33 U | 30 U | 31 U | 32 U | 30 U | 32 U | 33 U | 31 U |
| HEXACHLOROBENZENE | 2.6 U | 2.5 U | 2.4 U | 2.5 U | 2.4 U | 2.4 U | 2.5 U | 2.4 U | 2.5 U | 2.6 U | 2.4 U |
| HEXACHLOROBUTADIENE | 33 U | 32 U | 31 U | 33 U | 30 U | 31 U | 32 U | 30 U | 32 U | 33 U | 31 U |
| HEXACHLOROCYCLOPENTADIENE | 33 U | 32 U | 31 U | 33 U | 30 U | 31 U | 32 U | 30 U | 32 U | 33 U | 31 U |
| HEXACHLOROETHANE | 11 U | 11 U | 10 U | 11 U | 10 U | 10 U | 11 U | 10 U | 11 U | 11 U | 10 U |
| ISOPHORONE | 16 U | 15 U | 15 U | 16 U | 15 U | 15 U | 15 U | 15 U | 16 U | 16 U | 15 U |
| NITROBENZENE | 2.7 U | 2.6 U | 2.5 U | 2.7 U | 2.5 U | 2.5 U | 2.6 U | 2.5 U | 2.6 U | 2.7 U | 2.5 U |
| N-NITROSODIMETHYLAMINE | 19 U | 19 U | 18 U | 19 U | 18 U | 18 U | 19 U | 18 U | 19 U | 20 U | 18 U |
| N-NITROSO-DI-N-PROPYLAMINE | 33 U | 32 U | 31 U | 33 U | 30 U | 31 U | 32 U | 30 U | 32 U | 33 U | 31 U |
| N-NITROSODIPHENYLAMINE | 26 U | 25 U | 24 U | 25 U | 24 U | 24 U | 25 U | 24 U | 25 U | 26 U | 24 U |
| PENTACHLOROPHENOL | 97 U | 93 U | 91 U | 97 U | 90 U | 91 U | 93 U | 90 U | 96 U | 99 U | 92 U |
| PHENOL | 33 U | 32 U | 31 U | 33 U | 30 U | 31 U | 32 U | 30 U | 32 U | 33 U | 31 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| ACENAPHTHENE | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| ACENAPHTHYLENE | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| ANTHRACENE | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 18 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| BAP EQUIVALENT-POS | 16 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| BENZO(A)ANTHRACENE | 12 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| BENZO(A)PYRENE | 12 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| BENZO(B)FLUORANTHENE | 17 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 12 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| BENZO(K)FLUORANTHENE | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 11 | 1.3 U | 1.3 U | 1.3 U | 1.2 U | 1.3 U | 1.3 U | 1.2 U | 1.3 U | 1.4 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| FLUORANTHENE | 14 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| FLUORENE | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |

| LOCATION | SB-785 | SB-785 | SB-786 | SB-786 | SB-786 | SB-787 | SB-787 | SB-787 | SB-788 | SB-788 | SB-788 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-13 | D-SB-785-15 | D-SB-786-11 | D-SB-786-13 | D-SB-786-15 | D-SB-787-11 | D-SB-787-13 | D-SB-787-15 | D-SB-788-11 | D-SB-788-13 | D-SB-788-15 |
| SAMPLE DATE | 20100908 | 20100908 | 20100903 | 20100903 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| INDENO(1,2,3-CD)PYRENE | 9.1 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| NAPHTHALENE | 4 U | 3.9 U | 3.8 U | 11 | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| PHENANTHRENE | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| PYRENE | 14 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U | 4 U | 4.1 U | 3.8 U |
| TOTAL PAHS | 101.1 | 0 U | 0 U | 11 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | 0.75 UJ | 0.72 UJ | 0.71 U | 0.75 U | 0.7 UJ | 0.71 UJ | 0.72 UJ | 0.7 UJ | 0.75 UJ | 0.77 UJ | 0.72 UJ |
| 4,4'-DDE | 0.47 U | 0.46 U | 0.45 U | 0.47 U | 0.44 U | 0.45 U | 0.46 U | 0.44 U | 0.47 U | 0.48 U | 0.45 U |
| 4,4'-DDT | 0.77 UJ | 0.74 UJ | 0.72 U | 0.76 U | 0.71 UJ | 0.72 UJ | 0.74 UJ | 0.71 UJ | 0.76 UJ | 0.78 UJ | 0.73 UJ |
| ALDRIN | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.3 U | 1.4 U | 1.4 U | 1.3 U | 1.4 U | 1.5 U | 1.4 U |
| ALPHA-BHC | 0.89 U | 0.85 U | 0.83 UJ | 0.88 UJ | 0.82 U | 0.83 U | 0.85 U | 0.82 U | 0.88 U | 0.9 U | 0.84 U |
| ALPHA-CHLORDANE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U |
| AROCLOR-1016 | 26 U | 25 U | 24 U | 25 U | 24 U | 24 U | 25 U | 24 U | 25 U | 26 U | 24 U |
| AROCLOR-1221 | 19 U | 19 U | 18 U | 19 U | 18 U | 18 U | 19 U | 18 U | 19 U | 20 U | 18 U |
| AROCLOR-1232 | 17 U | 16 U | 16 U | 17 U | 16 U | 16 U | 16 U | 16 U | 17 U | 17 U | 16 U |
| AROCLOR-1242 | 16 U | 15 U | 15 U | 16 U | 15 U | 15 U | 15 U | 15 U | 16 U | 16 U | 15 U |
| AROCLOR-1248 | 21 U | 20 U | 19 U | 21 U | 19 U | 19 U | 20 U | 19 U | 20 U | 21 U | 20 U |
| AROCLOR-1254 | 21 U | 20 U | 19 U | 21 U | 19 U | 19 U | 20 U | 19 U | 20 U | 21 U | 20 U |
| AROCLOR-1260 | 21 U | 20 U | 19 U | 21 U | 19 U | 19 U | 20 U | 19 U | 20 U | 21 U | 20 U |
| BETA-BHC | 1.3 U | 1.3 U | 1.3 UJ | 1.3 UJ | 1.2 U | 1.3 U | 1.3 U | 1.2 U | 1.3 U | 1.4 U | 1.3 U |
| DELTA-BHC | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.3 U | 1.4 U | 1.4 U | 1.3 U | 1.4 U | 1.5 U | 1.4 U |
| DIELDRIN | 0.57 U | 0.55 U | 0.54 U | 0.57 U | 0.53 U | 0.54 U | 0.55 U | 0.53 U | 0.57 U | 0.58 U | 0.54 U |
| ENDOSULFAN I | 0.63 U | 0.61 U | 0.59 U | 0.63 U | 0.58 U | 0.59 U | 0.61 U | 0.58 U | 0.63 U | 0.64 U | 0.6 U |
| ENDOSULFAN II | 1 U | 0.96 U | 0.94 U | 0.99 U | 0.92 U | 0.94 U | 0.96 U | 0.92 U | 0.99 U | 1 U | 0.95 U |
| ENDOSULFAN SULFATE | 1.1 U | 1 U | 0.99 U | 1.1 U | 0.98 U | 0.99 U | 1 U | 0.98 U | 1 U | 1.1 U | 1 U |
| ENDRIN | 0.61 U | 0.58 U | 0.57 U | 0.6 U | 0.56 U | 0.57 U | 0.58 U | 0.56 U | 0.6 UJ | 0.62 UJ | 0.58 UJ |
| ENDRIN ALDEHYDE | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U |
| ENDRIN KETONE | 0.77 U | 0.74 U | 0.72 U | 0.76 U | 0.71 U | 0.72 U | 0.74 U | 0.71 U | 0.76 U | 0.78 U | 0.73 U |
| GAMMA-BHC (LINDANE) | 0.9 U | 0.86 U | 0.85 UJ | 0.89 UJ | 0.83 U | 0.84 U | 0.86 U | 0.83 U | 0.89 U | 0.92 U | 0.86 U |
| GAMMA-CHLORDANE | 0.51 U | 0.49 U | 0.48 U | 0.51 U | 0.47 U | 0.48 U | 0.49 U | 0.47 U | 0.51 U | 0.52 U | 0.49 U |
| HEPTACHLOR | 1.3 U | 1.3 U | 1.3 UJ | 1.3 UJ | 1.2 U | 1.3 U | 1.3 U | 1.2 U | 1.3 UJ | 1.4 UJ | 1.3 UJ |
| HEPTACHLOR EPOXIDE | 0.97 U | 0.93 U | 0.91 UJ | 0.97 UJ | 0.9 U | 0.91 U | 0.93 U | 0.9 U | 0.96 U | 0.99 U | 0.92 U |
| METHOXYCHLOR | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.8 UJ | 1.9 UJ | 1.7 UJ |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 23 UJ | 22 UJ | 22 U | 23 U | 21 UJ | 22 UJ | 22 UJ | 21 UJ | 23 U | 24 U | 22 U |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 0.12 J | 0.28 J | 0.027 UL | 0.075 J | 0.064 J | 0.33 J | 0.22 J | 0.027 UL | 0.43 J | 0.31 J | 0.39 J |
| ARSENIC | 3.1 L | 3.8 L | 2.5 | 1.3 | 0.88 L | 5 L | 5.4 L | 1.7 L | 5.6 | 7.5 | 5.2 |
| BARIUM | 15.1 J | 10.9 J | 6.8 J | 14.4 J | 4.4 J | 10.8 J | 15.7 J | 10.7 J | 25.2 | 10.8 | 23 |
| BERYLLIUM | 4.6 J | 4.5 J | 0.31 | 0.98 | 0.3 J | 2.8 J | 3.7 J | 1.7 J | 0.057 U | 0.058 U | 5.5 |
| CADMIUM | 0.12 K | 0.013 B | 0.023 J | 0.041 J | 0.034 J | 0.078 J | 0.091 J | 0.077 J | 0.034 J | 0.021 B | 0.031 B |
| CHROMIUM | 23.2 J | 28.7 J | 3.8 | 18.9 | 2.1 J | 28.9 J | 27.8 J | 4.7 J | 34 | 30.2 | 30.9 |
| COBALT | 13.7 | 8.6 | 1.5 | 8.5 | 1.9 | 7.5 | 11.7 | 4.8 | 12.3 | 5.1 | 11.2 |
| COPPER | 56.2 | 14.6 | 3.1 J | 4.9 J | 5 | 10.5 | 15.4 | 5 | 22.5 L | 24 L | 20.5 L |
| IRON | 34200 J | 37900 J | 1830 J | 13500 J | 462 J | 33800 J | 21700 J | 1020 J | 49900 | 42200 | 43700 |
| LEAD | 14 | 4.8 | 2.8 J | 3.8 J | 1.3 | 12.3 | 8.2 | 3.5 | 9.8 | 6.4 | 8.6 |
| MANGANESE | 96 | 54.1 | 3.1 J | 5.6 J | 1.6 | 20.4 | 15.9 | 6.9 | 104 | 38.8 | 93.6 |
| MERCURY | 0.059 J | 0.018 U | 0.017 U | 0.018 U | 0.017 U | 0.017 U | 0.018 U | 0.017 U | 0.018 U | 0.019 U | 0.017 U |
| MOLYBDENUM | 0.6 | 0.55 | 0.072 U | 0.13 J | 0.095 J | 0.78 | 0.31 | 0.18 J | 0.77 | 0.77 | 0.7 |
| NICKEL | 32.8 J | 27.7 J | 2.5 J | 14 J | 3.2 J | 16.1 J | 25 J | 9.1 J | 37.6 | 16.9 | 34.8 |
| SELENIUM | 1.1 J | 1.5 L | 4.6 L | 2 L | 0.57 J | 1.5 L | 1.6 L | 1.8 L | 1.8 J | 0.6 J | 1.7 J |
| SILVER | 0.029 J | 0.019 UJ | 0.018 U | 0.019 U | 0.047 J | 0.018 UJ | 0.019 UJ | 0.026 J | 0.019 U | 0.02 U | 0.018 U |
| THALLIUM | 0.094 B | 0.084 B | 0.037 J | 0.12 L | 0.064 B | 0.056 B | 0.11 J | 0.07 B | 0.15 J | 0.052 J | 0.13 B |
| VANADIUM | 34.4 | 48.3 | 4.6 | 16.5 | 1.6 | 66.9 | 54.8 | 6 | 40 | 64.7 | 36.7 |
| ZINC | 114 | 42.5 | 3.4 J | 16.9 J | 4.7 | 27.2 | 45.3 | 23.5 | 70.5 J | 26.5 J | 64.2 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 17000 | 3300 U | 3200 U | 4300 J | 3800 J | 3200 UJ | 3300 UJ | 3100 UJ | 3400 U | 4600 J | 3200 U |
| GASOLINE RANGE ORGANICS | 56 U | 54 U | 53 U | 79 J | 52 U | 52 U | 54 U | 52 U | 55 U | 57 U | 53 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 0.33 U | 0.8 J | 0.31 U | 0.55 J | 0.3 U | 0.31 U | 0.32 U | 0.32 J | 0.32 U | 0.79 J | 0.31 U |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-785 | SB-785 | SB-786 | SB-786 | SB-786 | SB-787 | SB-787 | SB-787 | SB-788 | SB-788 | SB-788 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-13 | D-SB-785-15 | D-SB-786-11 | D-SB-786-13 | D-SB-786-15 | D-SB-787-11 | D-SB-787-13 | D-SB-787-15 | D-SB-788-11 | D-SB-788-13 | D-SB-788-15 |
| SAMPLE DATE | 20100908 | 20100908 | 20100903 | 20100903 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-789 | SB-789 | SB-789 | SB-790 | SB-790 | SB-790 | SB-791 | SB-791 | SB-791 | SB-792 | SB-792 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-789-11 | D-SB-789-13 | D-SB-789-15 | D-SB-790-11 | D-SB-790-13 | D-SB-790-15 | D-SB-791-11 | D-SB-791-13 | D-SB-791-15 | D-SB-792-11 | D-SB-792-13 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.51 U | 0.52 U | 0.55 U | 0.57 U | 0.55 U | 0.51 U | 0.53 U | 0.65 U | 0.57 U | 0.54 U | 0.57 U |
| 1,1,1-TRICHLOROETHANE | 0.46 U | 0.47 U | 0.5 U | 0.52 U | 0.5 U | 0.46 U | 0.48 U | 0.59 U | 0.51 U | 0.49 U | 0.51 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.28 U | 0.28 U | 0.3 U | 0.31 U | 0.3 U | 0.28 U | 0.29 U | 0.36 U | 0.31 U | 0.3 U | 0.31 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 1.4 U | 1.2 U | 1.1 U | 1.2 U |
| 1,1-DICHLOROETHANE | 0.3 U | 0.3 U | 0.32 U | 0.33 U | 0.32 U | 0.3 U | 0.31 U | 0.38 U | 0.33 U | 0.31 U | 0.33 U |
| 1,1-DICHLOROETHENE | 0.43 U | 0.43 U | 0.47 U | 0.48 U | 0.46 U | 0.43 U | 0.45 U | 0.54 U | 0.48 U | 0.45 U | 0.48 U |
| 1,1-DICHLOROPROPENE | 0.25 U | 0.25 U | 0.27 U | 0.28 U | 0.27 U | 0.25 U | 0.26 U | 0.31 U | 0.27 U | 0.26 U | 0.27 U |
| 1,2,3-TRICHLOROBENZENE | 0.31 U | 0.32 U | 0.34 U | 0.35 U | 0.34 U | 0.31 U | 0.33 U | 0.4 U | 0.35 U | 0.33 U | 0.35 U |
| 1,2,3-TRICHLOROPROPANE | 0.74 U | 0.75 U | 0.8 U | 0.83 U | 0.8 U | 0.75 U | 0.77 U | 0.94 U | 0.82 U | 0.78 U | 0.82 U |
| 1,2,3-TRIMETHYLBENZENE | 0.14 U | 0.14 U | 0.15 U | 0.16 U | 0.15 U | 0.14 U | 0.15 U | 0.18 U | 0.16 U | 0.15 U | 0.16 U |
| 1,2,4-TRICHLOROBENZENE | 0.22 U | 0.22 U | 0.24 U | 0.25 U | 0.24 U | 0.22 U | 0.23 U | 0.28 U | 0.25 U | 0.23 U | 0.25 U |
| 1,2,4-TRIMETHYLBENZENE | 0.53 U | 0.54 U | 0.58 U | 0.6 U | 0.58 U | 0.54 U | 0.56 U | 0.68 U | 0.59 U | 0.56 U | 0.59 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 1.4 U | 1.2 U | 1.1 U | 1.2 U |
| 1,2-DIBROMOETHANE | 0.41 U | 0.42 U | 0.45 U | 0.46 U | 0.44 U | 0.41 U | 0.43 U | 0.52 U | 0.46 U | 0.43 U | 0.46 U |
| 1,2-DICHLOROBENZENE | 0.3 U | 0.3 U | 0.32 U | 0.33 U | 0.32 U | 0.3 U | 0.31 U | 0.38 U | 0.33 U | 0.31 U | 0.33 U |
| 1,2-DICHLOROETHANE | 0.28 U | 0.28 U | 0.3 U | 0.31 U | 0.3 U | 0.28 U | 0.29 U | 0.36 U | 0.31 U | 0.3 U | 0.31 U |
| 1,2-DICHLOROPROPANE | 0.57 U | 0.57 U | 0.62 U | 0.64 U | 0.61 U | 0.57 U | 0.59 U | 0.72 U | 0.63 U | 0.6 U | 0.63 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.29 U | 0.29 U | 0.31 U | 0.32 U | 0.31 U | 0.29 U | 0.3 U | 0.37 U | 0.32 U | 0.3 U | 0.32 U |
| 1,3-DICHLOROPROPANE | 0.28 U | 0.28 U | 0.3 U | 0.31 U | 0.3 U | 0.28 U | 0.29 U | 0.36 U | 0.31 U | 0.3 U | 0.31 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.54 U | 0.55 U | 0.59 U | 0.61 U | 0.59 U | 0.55 U | 0.57 U | 0.69 U | 0.6 U | 0.57 U | 0.6 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.77 U | 0.78 U | 0.84 U | 0.87 U | 0.84 U | 0.78 U | 0.8 U | 0.98 U | 0.86 U | 0.82 U | 0.86 U |
| 2-BUTANONE | 1.1 U | 1.2 U | 1.7 J | 1.3 U | 1.2 U | 1.2 U | 1.2 U | 4 J | 1.3 U | 1.2 U | 1.3 U |
| 2-CHLOROETHYL VINYL ETHER | 1.1 U | 1.2 U | 1.3 U | 1.3 U | 1.2 U | 1.2 U | 1.2 U | 1.5 U | 1.3 U | 1.2 U | 1.3 U |
| 2-CHLOROTOLUENE | 0.33 U | 0.33 U | 0.36 U | 0.37 U | 0.36 U | 0.33 U | 0.34 U | 0.42 U | 0.37 U | 0.35 U | 0.37 U |
| 2-HEXANONE | 0.52 U | 0.52 U | 0.56 U | 0.58 U | 0.56 U | 0.52 U | 0.54 U | 0.66 U | 0.58 U | 0.55 U | 0.58 U |
| 4-CHLOROTOLUENE | 0.34 U | 0.34 U | 0.37 U | 0.38 U | 0.36 U | 0.34 U | 0.35 U | 0.43 U | 0.37 U | 0.36 U | 0.37 U |
| 4-ISOPROPYLTOLUENE | 0.17 U | 0.17 U | 0.19 U | 0.19 U | 0.19 U | 0.17 U | 0.18 U | 0.22 U | 0.19 U | 0.18 U | 0.19 U |
| 4-METHYL-2-PENTANONE | 0.44 U | 0.45 U | 0.48 U | 0.5 U | 0.48 U | 0.45 U | 0.46 U | 0.56 U | 0.49 U | 0.47 U | 0.49 U |
| ACETONE | 30 B | 5.2 U | 100 | 150 U | 110 | 19 B | 5.4 U | 60 B | 11 B | 130 B | 38 B |
| BENZENE | 0.19 U | 0.19 U | 0.21 U | 0.21 U | 0.2 U | 0.19 U | 0.2 U | 0.24 U | 0.21 U | 0.2 U | 0.21 U |
| BROMOBENZENE | 0.27 U | 0.27 U | 0.3 U | 0.3 U | 0.29 U | 0.27 U | 0.28 U | 0.35 U | 0.3 U | 0.29 U | 0.3 U |
| BROMOCHLOROMETHANE | 0.58 U | 0.59 U | 0.64 U | 0.66 U | 0.63 U | 0.59 U | 0.61 U | 0.74 U | 0.65 U | 0.62 U | 0.65 U |
| BROMODICHLOROMETHANE | 0.23 U | 0.23 U | 0.25 U | 0.26 U | 0.25 U | 0.23 U | 0.24 U | 0.29 U | 0.26 U | 0.24 U | 0.26 U |
| BROMOFORM | 0.27 U | 0.27 U | 0.3 U | 0.3 U | 0.29 U | 0.27 U | 0.28 U | 0.35 U | 0.3 U | 0.29 U | 0.3 U |
| BROMOMETHANE | 0.44 U | 0.45 U | 0.48 U | 0.5 U | 0.48 U | 0.45 U | 0.46 U | 0.56 U | 0.49 U | 0.47 U | 0.49 U |
| CARBON DISULFIDE | 0.36 U | 0.37 U | 0.39 U | 0.41 U | 0.39 U | 0.36 U | 0.38 U | 4.3 B | 0.4 U | 0.38 U | 0.4 U |
| CARBON TETRACHLORIDE | 0.3 U | 0.31 U | 0.33 U | 0.34 U | 0.33 U | 0.31 U | 0.32 U | 0.39 U | 0.34 U | 0.32 U | 0.34 U |
| CHLOROBENZENE | 0.27 U | 0.27 U | 0.3 U | 0.3 U | 0.29 U | 0.27 U | 0.28 U | 0.35 U | 0.3 U | 0.29 U | 0.3 U |
| CHLORODIBROMOMETHANE | 0.45 U | 0.46 U | 0.49 U | 0.51 U | 0.49 U | 0.46 U | 0.47 U | 0.58 U | 0.5 U | 0.48 U | 0.5 U |
| CHLOROETHANE | 0.71 U | 0.72 U | 0.77 U | 0.79 U | 0.76 U | 0.71 U | 0.74 U | 0.9 U | 0.79 U | 0.75 U | 0.79 U |
| CHLOROFORM | 0.24 U | 0.24 U | 0.26 U | 0.27 U | 0.26 U | 0.24 U | 0.25 U | 0.3 U | 0.27 U | 0.25 U | 0.27 U |
| CHLOROMETHANE | 0.34 U | 0.34 U | 0.37 U | 0.38 U | 0.36 U | 0.34 U | 0.35 U | 0.43 U | 0.37 U | 0.36 U | 0.37 U |
| CIS-1,2-DICHLOROETHENE | 0.3 U | 0.3 U | 0.32 U | 0.33 U | 0.32 U | 0.3 U | 0.31 U | 0.38 U | 0.33 U | 0.31 U | 0.33 U |
| CIS-1,3-DICHLOROPROPENE | 0.28 U | 0.28 U | 0.3 U | 0.31 U | 0.3 U | 0.28 U | 0.29 U | 0.36 U | 0.31 U | 0.3 U | 0.31 U |
| DIBROMOMETHANE | 0.52 U | 0.52 U | 0.56 U | 0.58 U | 0.56 U | 0.52 U | 0.54 U | 0.66 U | 0.58 U | 0.55 U | 0.58 U |
| DICHLORODIFLUOROMETHANE | 0.41 U | 0.42 U | 0.45 U | 0.46 U | 0.44 U | 0.41 U | 0.43 U | 0.52 U | 0.46 U | 0.43 U | 0.46 U |
| DIISOPROPYL ETHER | 1.2 U | 1.2 U | 1.3 U | 1.4 U | 1.3 U | 1.2 U | 1.3 U | 1.6 U | 1.4 U | 1.3 U | 1.4 U |
| ETHYL TERT-BUTYL ETHER | 0.18 U | 0.18 U | 0.2 U | 0.2 U | 0.2 U | 0.18 U | 0.19 U | 0.23 U | 0.2 U | 0.19 U | 0.2 U |
| ETHYLBENZENE | 0.21 U | 0.22 U | 0.23 U | 0.24 U | 0.23 U | 0.22 U | 0.22 U | 0.27 U | 0.24 U | 0.23 U | 0.24 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 0.98 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 0.99 U | 1 U | 1.3 U | 1.1 U | 1 U | 1.1 U |
| ISOPROPYLBENZENE | 0.13 U | 0.13 U | 0.14 U | 0.15 U | 0.14 U | 0.13 U | 0.14 U | 0.17 U | 0.15 U | 0.14 U | 0.15 U |
| M+P-XYLENES | 0.98 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 0.99 U | 1 U | 1.3 U | 1.1 U | 1 U | 1.1 U |
| METHYL TERT-BUTYL ETHER | 0.35 U | 0.36 U | 0.38 U | 0.4 U | 0.38 U | 0.36 U | 0.37 UJ | 0.45 UJ | 0.39 UJ | 0.37 UJ | 0.39 UJ |
| METHYLENE CHLORIDE | 0.55 U | 0.56 U | 0.6 U | 0.62 U | 0.6 U | 0.55 U | 0.81 B | 0.82 B | 0.9 B | 1.1 B | 0.77 B |
| NAPHTHALENE | 0.16 U | 0.16 U | 0.17 U | 0.18 U | 0.17 U | 0.16 U | 0.79 B | 1 B | 0.83 B | 0.8 B | 0.79 B |
| N-BUTYLBENZENE | 0.19 U | 0.19 U | 0.21 U | 0.21 U | 0.2 U | 0.19 U | 0.2 U | 0.24 U | 0.21 U | 0.2 U | 0.21 U |
| N-PROPYLBENZENE | 0.33 U | 0.33 U | 0.36 U | 0.37 U | 0.36 U | 0.33 U | 0.34 U | 0.42 U | 0.37 U | 0.35 U | 0.37 U |
| O-XYLENE | 0.29 U | 0.29 U | 0.31 U | 0.32 U | 0.31 U | 0.29 U | 0.3 U | 0.37 U | 0.32 U | 0.3 U | 0.32 U |
| SEC-BUTYLBENZENE | 0.15 U | 0.15 U | 0.16 U | 0.17 U | 0.16 U | 0.15 U | 0.15 U | 0.19 U | 0.16 U | 0.16 U | 0.16 U |
| STYRENE | 0.12 U | 0.12 U | 0.13 U | 0.14 U | 0.13 U | 0.12 U | 0.13 U | 0.16 J | 0.14 U | 0.13 U | 0.14 U |
| TERT-AMYL METHYL ETHER | 0.3 U | 0.31 U | 0.33 U | 0.34 U | 0.33 U | 0.31 U | 0.32 U | 0.39 U | 0.34 U | 0.32 U | 0.34 U |
| TERT-BUTYLBENZENE | 0.24 U | 0.24 U | 0.26 U | 0.27 U | 0.26 U | 0.24 U | 0.25 U | 0.3 U | 0.27 U | 0.25 U | 0.27 U |
| TERTIARY-BUTYL ALCOHOL | 6.2 UR | 6.3 UR | 6.8 UR | 7 UR | 6.8 UR | 6.3 UR | 45 B | 58 B | 48 B | 6.6 UR | 48 B |
| TETRACHLOROETHENE | 0.43 U | 0.43 U | 0.47 U | 0.48 U | 0.46 U | 0.43 U | 0.45 U | 0.54 U | 0.48 U | 0.45 U | 0.48 U |
| TOLUENE | 0.22 U | 0.22 U | 0.24 U | 0.25 U | 0.24 U | 0.22 U | 0.23 U | 0.28 U | 0.25 U | 0.23 U | 0.25 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.55 U | 0.56 U | 0.6 U | 0.62 U | 0.6 U | 0.55 U | 0.57 U | 0.7 U | 0.61 U | 0.58 U | 0.61 U |
| TRANS-1,2-DICHLOROETHENE | 0.34 U | 0.34 U | 0.37 U | 0.38 U | 0.36 U | 0.34 U | 0.35 U | 0.43 U | 0.37 U | 0.36 U | 0.37 U |
| TRANS-1,3-DICHLOROPROPENE | 0.44 U | 0.45 U | 0.48 U | 0.5 U | 0.48 U | 0.45 U | 0.46 U | 0.56 U | 0.49 U | 0.47 U | 0.49 U |
| TRICHLOROETHENE | 0.34 U | 0.35 U | 0.38 U | 0.39 U | 0.37 U | 0.35 U | 0.36 U | 0.44 U | 0.38 U | 0.36 U | 0.38 U |
| TRICHLOROFLUOROMETHANE | 0.28 U | 0.28 U | 0.3 U | 0.31 U | 0.3 U | 0.28 U | 0.29 U | 0.36 U | 0.31 U | 0.3 U | 0.31 U |
| VINYL ACETATE | 0.21 U | 0.21 U | 0.22 U | 0.23 U | 0.22 U | 0.21 U | 0.21 U | 0.26 U | 0.23 U | 0.22 U | 0.23 U |
| VINYL CHLORIDE | 0.32 U | 0.32 U | 0.35 U | 0.36 U | 0.35 U | 0.32 U | 0.33 U | 0.41 U | 0.36 U | 0.34 U | 0.36 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | 32 U | 33 U | 31 U | 33 U | 32 U | 31 U | 31 U | 32 U | 33 U | 31 U | 34 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 26 U | 27 U | 26 U | 27 U | 26 U | 26 U | 25 U | 26 U | 27 U | 25 U | 28 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 11 U | 11 U | 11 U | 12 U | 11 U | 11 U | 11 U | 11 U | 12 U | 11 U | 12 U |
| 2,4,5-TRICHLOROPHENOL | 29 U | 30 U | 29 U | 31 U | 30 U | 29 U | 29 U | 30 U | 31 U | 29 U | 31 U |
| 2,4,6-TRICHLOROPHENOL | 94 U | 96 U | 93 U | 98 U | 96 U | 93 U | 93 U | 95 U | 99 U | 93 U | 100 U |

| LOCATION | SB-789 | SB-789 | SB-789 | SB-790 | SB-790 | SB-790 | SB-791 | SB-791 | SB-791 | SB-792 | SB-792 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-789-11 | D-SB-789-13 | D-SB-789-15 | D-SB-790-11 | D-SB-790-13 | D-SB-790-15 | D-SB-791-11 | D-SB-791-13 | D-SB-791-15 | D-SB-792-11 | D-SB-792-13 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| 2,4-DICHLOROPHENOL | 23 U | 24 U | 23 U | 25 U | 24 U | 23 U | 23 U | 24 U | 25 U | 23 U | 25 U |
| 2,4-DIMETHYLPHENOL | 23 U | 24 U | 23 U | 25 U | 24 U | 23 U | 23 U | 24 U | 25 U | 23 U | 25 U |
| 2,4-DINITROPHENOL | 94 U | 96 U | 93 U | 98 U | 96 U | 93 U | 93 U | 95 U | 99 U | 93 U | 100 U |
| 2,4-DINITROTOLUENE | 32 U | 33 U | 31 U | 33 U | 32 U | 31 U | 31 U | 32 U | 33 U | 31 U | 34 U |
| 2,6-DINITROTOLUENE | 25 U | 25 U | 24 U | 26 U | 25 U | 24 U | 24 U | 25 U | 26 U | 24 U | 26 U |
| 2-CHLORONAPHTHALENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| 2-CHLOROPHENOL | 32 U | 33 U | 31 U | 33 U | 32 U | 31 U | 31 U | 32 U | 33 U | 31 U | 34 U |
| 2-METHYLPHENOL | 94 U | 96 U | 93 U | 98 U | 96 U | 93 U | 93 U | 95 U | 99 U | 93 U | 100 U |
| 2-NITROANILINE | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U |
| 2-NITROPHENOL | 32 U | 33 U | 31 U | 33 U | 32 U | 31 U | 31 U | 32 U | 33 U | 31 U | 34 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 21 U | 22 U | 21 U | 22 U | 22 U | 21 U | 21 U | 21 U | 22 U | 21 U | 23 U |
| 3-NITROANILINE | 19 U | 19 U | 19 U | 20 U | 19 U | 19 U | 19 U | 19 U | 20 U | 19 U | 20 U |
| 4,6-DINITRO-2-METHYLPHENOL | 94 U | 96 U | 93 U | 98 U | 96 U | 93 U | 93 U | 95 U | 99 U | 93 U | 100 U |
| 4-BROMOPHENYL PHENYL ETHER | 15 U | 16 U | 15 U | 16 U | 16 U | 15 U | 15 U | 15 U | 16 U | 15 U | 16 U |
| 4-CHLORO-3-METHYLPHENOL | 25 U | 25 U | 24 U | 26 U | 25 U | 24 U | 24 U | 25 U | 26 U | 24 U | 26 U |
| 4-CHLOROANILINE | 20 U | 20 U | 20 U | 21 U | 20 U | 20 U | 20 U | 20 U | 21 U | 20 U | 21 U |
| 4-CHLOROPHENYL PHENYL ETHER | 15 U | 16 U | 15 U | 16 U | 16 U | 15 U | 15 U | 15 U | 16 U | 15 U | 16 U |
| 4-METHYLPHENOL | 94 U | 96 U | 93 U | 98 U | 96 U | 93 U | 93 U | 95 U | 99 U | 93 U | 100 U |
| 4-NITROANILINE | 30 U | 31 U | 30 U | 32 U | 31 U | 30 U | 30 U | 31 U | 32 U | 30 U | 33 U |
| 4-NITROPHENOL | 94 U | 96 U | 93 U | 98 U | 96 U | 93 U | 93 U | 95 U | 99 U | 93 U | 100 U |
| ACETOPHENONE | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 12 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 14 U | 14 U | 14 U | 15 U | 14 U | 14 U | 14 U | 14 U | 15 U | 14 U | 15 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 26 U | 27 U | 26 U | 27 U | 26 U | 26 U | 25 U | 26 U | 27 U | 25 U | 28 U |
| BIS(2-CHLOROETHYL)ETHER | 2.3 U | 2.4 U | 2.3 U | 2.5 U | 2.4 U | 2.3 U | 2.3 U | 2.4 U | 2.5 U | 2.3 U | 2.5 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 22 U | 23 U | 22 U | 23 U | 140 | 22 U | 22 U | 23 J | 23 U | 22 U | 110 |
| BUTYL BENZYL PHTHALATE | 12 U | 29 J | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 13 U |
| CAPROLACTAM | 43 U | 45 U | 43 U | 46 U | 44 U | 43 U | 43 U | 44 U | 46 U | 43 U | 46 U |
| CARBAZOLE | 32 U | 33 U | 31 U | 33 U | 32 U | 31 U | 31 U | 32 U | 33 U | 31 U | 34 U |
| DIBENZOFURAN | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| DIETHYL PHTHALATE | 19 U | 19 U | 19 U | 20 U | 19 U | 19 U | 19 U | 19 U | 20 U | 19 U | 20 U |
| DIMETHYL PHTHALATE | 20 U | 20 U | 20 U | 21 U | 20 U | 20 U | 20 U | 20 U | 21 U | 20 U | 21 U |
| DI-N-BUTYL PHTHALATE | 18 U | 18 U | 17 U | 18 U | 18 U | 17 U | 17 U | 18 U | 19 U | 17 U | 19 U |
| DI-N-OCTYL PHTHALATE | 32 U | 33 U | 31 U | 33 U | 32 U | 31 U | 31 U | 32 U | 33 U | 31 U | 34 U |
| HEXACHLOROBENZENE | 2.5 U | 2.5 U | 2.4 U | 2.6 U | 2.5 U | 2.4 U | 2.4 U | 2.5 U | 2.6 U | 2.4 U | 2.6 U |
| HEXACHLOROBUTADIENE | 32 U | 33 U | 31 U | 33 U | 32 U | 31 U | 31 U | 32 U | 33 U | 31 U | 34 U |
| HEXACHLOROCYCLOPENTADIENE | 32 U | 33 U | 31 U | 33 U | 32 U | 31 U | 31 U | 32 U | 33 U | 31 U | 34 U |
| HEXACHLOROETHANE | 11 U | 11 U | 10 U | 11 U | 11 U | 10 U | 10 U | 11 U | 11 U | 10 U | 11 U |
| ISOPHORONE | 15 U | 16 U | 15 U | 16 U | 16 U | 15 U | 15 U | 15 U | 16 U | 15 U | 16 U |
| NITROBENZENE | 2.6 U | 2.7 U | 2.6 U | 2.7 U | 2.6 U | 2.6 U | 2.5 U | 2.6 U | 2.7 U | 2.5 U | 2.8 U |
| N-NITROSODIMETHYLAMINE | 19 U | 19 U | 19 U | 20 U | 19 U | 19 U | 19 U | 19 U | 20 U | 19 U | 20 U |
| N-NITROSO-DI-N-PROPYLAMINE | 32 U | 33 U | 31 U | 33 U | 32 U | 31 U | 31 U | 32 U | 33 U | 31 U | 34 U |
| N-NITROSODIPHENYLAMINE | 25 U | 25 U | 24 U | 26 U | 25 U | 24 U | 24 U | 25 U | 26 U | 24 U | 26 U |
| PENTACHLOROPHENOL | 94 U | 96 U | 93 U | 98 U | 96 U | 93 U | 93 U | 95 U | 99 U | 93 U | 100 U |
| PHENOL | 32 U | 33 U | 31 U | 33 U | 32 U | 31 U | 31 U | 32 U | 33 U | 31 U | 34 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| ACENAPHTHENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| ACENAPHTHYLENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| ANTHRACENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| BAP EQUIVALENT-HALFND | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| BAP EQUIVALENT-POS | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| BENZO(A)ANTHRACENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| BENZO(A)PYRENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| BENZO(B)FLUORANTHENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| BENZO(K)FLUORANTHENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 1.3 U | 1.4 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.4 U | 1.3 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| FLUORANTHENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| FLUORENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |

| LOCATION | SB-789 | SB-789 | SB-789 | SB-790 | SB-790 | SB-790 | SB-791 | SB-791 | SB-791 | SB-792 | SB-792 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-789-11 | D-SB-789-13 | D-SB-789-15 | D-SB-790-11 | D-SB-790-13 | D-SB-790-15 | D-SB-791-11 | D-SB-791-13 | D-SB-791-15 | D-SB-792-11 | D-SB-792-13 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| INDENO(1,2,3-CD)PYRENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| NAPHTHALENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| PHENANTHRENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| PYRENE | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U | 4.1 U | 3.8 U | 4.1 U |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | 0.73 UJ | 0.75 UJ | 0.72 UJ | 0.76 U | 0.74 U | 0.72 UJ | 0.72 U | 0.74 U | 0.77 U | 0.72 U | 0.78 U |
| 4,4'-DDE | 0.46 U | 0.47 U | 0.45 U | 0.48 U | 0.47 U | 0.45 U | 0.45 U | 0.46 U | 0.48 U | 0.45 U | 0.49 U |
| 4,4'-DDT | 0.74 U | 0.76 U | 0.73 UJ | 0.78 U | 0.76 U | 0.73 U | 0.73 U | 0.75 U | 0.78 U | 0.73 U | 0.79 U |
| ALDRIN | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.5 U |
| ALPHA-BHC | 0.86 U | 0.88 U | 0.85 U | 0.9 U | 0.88 U | 0.85 U | 0.84 U | 0.87 U | 0.9 U | 0.84 U | 0.91 U |
| ALPHA-CHLORDANE | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.2 U |
| AROCLOR-1016 | 25 U | 25 U | 24 U | 26 U | 25 U | 24 U | 24 U | 25 U | 26 U | 24 U | 26 U |
| AROCLOR-1221 | 19 U | 19 U | 19 U | 20 U | 19 U | 19 U | 19 U | 19 U | 20 U | 19 U | 20 U |
| AROCLOR-1232 | 16 U | 17 U | 16 U | 17 U | 17 U | 16 U | 16 U | 17 U | 17 U | 16 U | 18 U |
| AROCLOR-1242 | 15 U | 16 U | 15 U | 16 U | 16 U | 15 U | 15 U | 15 U | 16 U | 15 U | 16 U |
| AROCLOR-1248 | 20 U | 20 U | 20 U | 21 U | 20 U | 20 U | 20 U | 20 U | 21 U | 20 U | 21 U |
| AROCLOR-1254 | 20 U | 20 U | 20 U | 21 U | 20 U | 20 U | 20 U | 20 U | 21 U | 20 U | 21 U |
| AROCLOR-1260 | 20 U | 20 U | 20 U | 21 U | 20 U | 20 U | 20 U | 20 U | 21 U | 20 U | 21 U |
| BETA-BHC | 1.3 U | 1.3 U | 1.3 U | 1.4 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.4 U | 1.3 U | 1.4 U |
| DELTA-BHC | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.5 U |
| DIELDRIN | 0.55 U | 0.57 U | 0.55 U | 0.58 U | 0.56 U | 0.55 U | 0.54 U | 0.56 U | 0.58 U | 0.54 U | 0.59 U |
| ENDOSULFAN I | 0.61 U | 0.63 U | 0.6 U | 0.64 U | 0.62 U | 0.61 U | 0.6 U | 0.62 U | 0.64 U | 0.6 U | 0.65 U |
| ENDOSULFAN II | 0.96 U | 0.99 U | 0.95 U | 1 U | 0.98 U | 0.96 U | 0.95 U | 0.97 U | 1 U | 0.95 U | 1 U |
| ENDOSULFAN SULFATE | 1 U | 1 U | 1 U | 1.1 U | 1 U | 1 U | 1 U | 1 U | 1.1 U | 1 U | 1.1 U |
| ENDRIN | 0.59 UJ | 0.6 UJ | 0.58 UJ | 0.62 U | 0.6 U | 0.58 UJ | 0.58 U | 0.59 U | 0.62 U | 0.58 U | 0.63 U |
| ENDRIN ALDEHYDE | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.3 U |
| ENDRIN KETONE | 0.74 U | 0.76 U | 0.73 U | 0.78 U | 0.76 U | 0.73 U | 0.73 U | 0.75 U | 0.78 U | 0.73 U | 0.79 U |
| GAMMA-BHC (LINDANE) | 0.87 U | 0.89 U | 0.86 U | 0.91 UJ | 0.89 UJ | 0.86 U | 0.86 U | 0.88 U | 0.91 U | 0.86 U | 0.93 U |
| GAMMA-CHLORDANE | 0.49 U | 0.51 U | 0.49 U | 0.52 U | 0.5 U | 0.49 U | 0.49 U | 0.5 U | 0.52 U | 0.49 U | 0.53 U |
| HEPTACHLOR | 1.3 UJ | 1.3 UJ | 1.3 UJ | 1.4 U | 1.3 U | 1.3 UJ | 1.3 UJ | 1.3 UJ | 1.4 UJ | 1.3 UJ | 1.4 UJ |
| HEPTACHLOR EPOXIDE | 0.94 U | 0.96 U | 0.93 U | 0.98 U | 0.96 U | 0.93 U | 0.93 U | 0.95 U | 0.99 U | 0.93 U | 1 U |
| METHOXYCHLOR | 1.8 UJ | 1.8 UJ | 1.7 UJ | 1.8 U | 1.8 U | 1.7 UJ | 1.7 UJ | 1.8 UJ | 1.9 UJ | 1.7 UJ | 1.9 UJ |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 22 U | 23 U | 22 U | 23 U | 23 U | 22 U | 22 U | 23 U | 23 U | 22 U | 24 U |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 0.14 J | 0.47 J | 0.32 J | 0.051 J | 0.41 J | 0.22 J | 0.11 B | 0.18 B | 0.68 J | 0.14 B | 0.83 J |
| ARSENIC | 2.8 | 6.8 | 4.5 | 2.1 | 5 | 3.3 | 3.9 L | 2.8 L | 8.2 L | 3.3 L | 5 J |
| BARIUM | 11.3 | 23.6 | 16.7 | 16.1 | 14 | 20.9 | 7.3 | 7.2 | 14.3 | 11.5 | 10.3 |
| BERYLLIUM | 1.8 | 10.5 | 7.2 | 1.6 | 4.2 | 4.2 | 1 J | 1.3 J | 3.5 J | 2.1 J | 6.4 J |
| CADMIUM | 0.013 B | 0.041 J | 0.034 J | 0.0096 UL | 0.025 B | 0.027 B | 0.015 B | 0.017 B | 0.025 B | 0.019 B | 0.027 B |
| CHROMIUM | 13.7 | 33.3 | 27.8 | 9.4 | 22.1 | 22.7 | 15.9 | 20.6 | 56.1 | 26.3 | 54.8 |
| COBALT | 5.7 | 21.3 | 18.1 | 2.6 | 8.8 | 7.4 | 3.7 | 5.9 | 13.5 | 8.7 | 13.6 |
| COPPER | 14.5 L | 48.6 L | 23.5 L | 12.8 L | 20.1 L | 18.5 L | 6.1 | 12.5 | 30.2 | 17.8 | 47.9 |
| IRON | 18400 | 85000 | 43700 | 6230 | 36600 | 28600 | 17100 | 26600 | 87200 | 34100 | 134000 |
| LEAD | 4.5 | 10.3 | 5.9 | 3.6 | 7.4 | 4.2 | 5.6 | 4.9 | 18.4 | 6.7 | 15.9 |
| MANGANESE | 49 | 341 | 106 | 5.2 | 107 | 47.2 | 7.4 J | 11.7 J | 23.8 J | 20.8 J | 31.1 J |
| MERCURY | 0.018 U | 0.018 U | 0.017 U | 0.018 U | 0.018 U | 0.017 U | 0.017 U | 0.018 U | 0.019 U | 0.017 U | 0.019 U |
| MOLYBDENUM | 0.22 J | 1 | 0.67 | 0.11 J | 0.6 | 0.46 | 0.28 | 0.61 | 1.5 | 0.54 | 1.5 |
| NICKEL | 15.7 | 54.1 | 41.7 | 5.4 | 27.6 | 24.6 | 9.3 | 17.7 | 27.9 | 16.1 | 37.5 |
| SELENIUM | 1.8 J | 1.6 J | 1.5 J | 1.4 J | 3.3 J | 2.3 J | 4.9 L | 1.4 L | 1.3 L | 1 L | 0.97 L |
| SILVER | 0.019 U | 0.029 B | 0.024 B | 0.02 U | 0.019 U | 0.019 U | 0.019 U | 0.019 U | 0.02 U | 0.021 B | 0.02 B |
| THALLIUM | 0.057 B | 0.11 B | 0.086 B | 0.088 B | 0.094 B | 0.089 B | 0.06 J | 0.051 J | 0.1 J | 0.06 J | 0.068 J |
| VANADIUM | 24.8 | 66.2 | 56.5 | 17.1 | 35.1 | 38.5 | 23.5 | 44.3 | 102 | 55.7 | 111 |
| ZINC | 24.8 J | 96.2 J | 66.4 J | 8.9 J | 36.9 J | 34 J | 11.1 | 17.8 | 37.2 | 24.1 | 45.2 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 3700 J | 3400 U | 3300 U | 3400 J | 3400 U | 3300 U | 3200 U | 3300 U | 3500 U | 4500 J | 4800 J |
| GASOLINE RANGE ORGANICS | 54 U | 55 U | 53 U | 57 U | 55 U | 54 U | 53 U | 55 U | 57 U | 53 U | 58 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 0.32 U | 0.36 J | 0.31 U | 0.49 J | 0.32 U | 0.31 J | 0.32 J | 0.32 U | 0.33 U | 0.31 U | 0.34 U |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-789 | SB-789 | SB-789 | SB-790 | SB-790 | SB-790 | SB-791 | SB-791 | SB-791 | SB-792 | SB-792 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-789-11 | D-SB-789-13 | D-SB-789-15 | D-SB-790-11 | D-SB-790-13 | D-SB-790-15 | D-SB-791-11 | D-SB-791-13 | D-SB-791-15 | D-SB-792-11 | D-SB-792-13 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-792 | SB-793 | SB-793 | SB-793 | SB-794 | SB-794 | SB-794 | SB-795 | SB-795 | SB-795 | SB-795 | SB-796 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-792-15 | D-SB-793-11 | D-SB-793-13 | D-SB-793-15 | D-SB-794-11 | D-SB-794-13 | D-SB-794-15 | D-SB-795-11 | D-SB-795-13 | D-SB-795-15 | D-SB-795-15 | D-SB-796-11 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.58 U | 0.58 U | 0.56 U | 0.56 U | 0.54 U | 0.54 U | 0.55 U | 0.63 U | 0.62 U | 0.64 U | 0.5 U | |
| 1,1,1-TRICHLOROETHANE | 0.53 U | 0.52 U | 0.51 U | 0.5 U | 0.49 U | 0.49 U | 0.49 U | 0.57 U | 0.56 U | 0.58 U | 0.45 U | |
| 1,1,2,2-TETRACHLOROETHANE | 0.32 U | 0.32 U | 0.31 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.35 U | 0.34 U | 0.35 U | 0.27 U | |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.3 U | 1.3 U | 1.3 U | 1 U | |
| 1,1-DICHLOROETHANE | 0.34 U | 0.33 U | 0.33 U | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.37 U | 0.36 U | 0.37 U | 0.29 U | |
| 1,1-DICHLOROETHENE | 0.49 U | 0.48 U | 0.47 U | 0.47 U | 0.45 U | 0.45 U | 0.46 U | 0.53 U | 0.52 U | 0.54 U | 0.42 U | |
| 1,1-DICHLOROPROPENE | 0.28 U | 0.28 U | 0.27 U | 0.27 U | 0.26 U | 0.26 U | 0.26 U | 0.3 U | 0.3 U | 0.31 U | 0.24 U | |
| 1,2,3-TRICHLOROBENZENE | 0.36 U | 0.35 U | 0.34 U | 0.34 U | 0.33 U | 0.33 U | 0.33 U | 0.39 U | 0.38 U | 0.39 U | 0.31 U | |
| 1,2,3-TRICHLOROPROPANE | 0.84 U | 0.83 U | 0.81 U | 0.81 U | 0.78 U | 0.79 U | 0.79 U | 0.91 U | 0.9 U | 0.93 U | 0.73 U | |
| 1,2,3-TRIMETHYLBENZENE | 0.16 U | 0.16 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.17 U | 0.17 U | 0.18 U | 0.14 U | |
| 1,2,4-TRICHLOROBENZENE | 0.25 U | 0.25 U | 0.24 U | 0.24 U | 0.23 U | 0.24 U | 0.24 U | 0.27 U | 0.27 U | 0.28 U | 0.22 U | |
| 1,2,4-TRIMETHYLBENZENE | 0.61 U | 0.6 U | 0.59 U | 0.58 U | 0.57 U | 0.57 U | 0.57 U | 0.66 U | 0.65 U | 0.67 U | 0.52 U | |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.3 U | 1.3 U | 1.3 U | 1 U | |
| 1,2-DIBROMOETHANE | 0.47 U | 0.46 U | 0.45 U | 0.45 U | 0.43 U | 0.44 U | 0.44 U | 0.51 U | 0.5 U | 0.52 U | 0.4 U | |
| 1,2-DICHLOROBENZENE | 0.34 U | 0.33 U | 0.33 U | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.37 U | 0.36 U | 0.37 U | 0.29 U | |
| 1,2-DICHLOROETHANE | 0.32 U | 0.32 U | 0.31 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.35 U | 0.34 U | 0.35 U | 0.27 U | |
| 1,2-DICHLOROPROPANE | 0.65 U | 0.64 U | 0.62 U | 0.62 U | 0.6 U | 0.6 U | 0.61 U | 0.7 U | 0.69 U | 0.71 U | 0.56 U | |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,3-DICHLOROBENZENE | 0.33 U | 0.32 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U | 0.31 U | 0.36 U | 0.35 U | 0.36 U | 0.28 U | |
| 1,3-DICHLOROPROPANE | 0.32 U | 0.32 U | 0.31 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.35 U | 0.34 U | 0.35 U | 0.27 U | |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,4-DICHLOROBENZENE | 0.62 U | 0.61 U | 0.6 U | 0.59 U | 0.57 U | 0.58 U | 0.58 U | 0.67 U | 0.66 U | 0.68 U | 0.53 U | |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2,2-DICHLOROPROPANE | 0.88 U | 0.87 U | 0.85 U | 0.84 U | 0.82 U | 0.82 U | 0.83 U | 0.95 U | 0.94 U | 0.97 U | 0.76 U | |
| 2-BUTANONE | 2 J | 1.3 U | 1.3 U | 1.3 U | 1.2 U | 1.2 U | 1.2 U | 1.4 U | 1.4 U | 1.4 U | 1.1 U | |
| 2-CHLOROETHYL VINYL ETHER | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.2 U | 1.2 U | 1.2 U | 1.4 U | 1.4 U | 1.4 U | 1.1 U | |
| 2-CHLOROTOLUENE | 0.38 U | 0.37 U | 0.36 U | 0.36 U | 0.35 U | 0.35 U | 0.35 U | 0.41 U | 0.4 U | 0.41 U | 0.32 U | |
| 2-HEXANONE | 0.59 U | 0.58 U | 0.57 U | 0.56 U | 0.55 U | 0.55 U | 0.56 U | 0.64 U | 0.63 U | 0.65 U | 0.51 U | |
| 4-CHLOROTOLUENE | 0.38 U | 0.38 U | 0.37 U | 0.37 U | 0.36 U | 0.36 U | 0.36 U | 0.42 U | 0.41 U | 0.42 U | 0.33 U | |
| 4-ISOPROPYLTOLUENE | 0.2 U | 0.19 U | 0.19 U | 0.19 U | 0.18 U | 0.18 U | 0.19 U | 0.21 U | 0.21 U | 0.22 U | 0.17 U | |
| 4-METHYL-2-PENTANONE | 0.51 U | 0.5 U | 0.49 U | 0.48 U | 0.47 U | 0.47 U | 0.48 U | 0.55 U | 0.54 U | 0.56 U | 0.44 U | |
| ACETONE | 170 B | 5.8 U | 5.7 U | 5.6 U | 5.5 U | 5.5 U | 8.1 B | 16 B | 6.3 U | 6.5 U | 5.1 U | |
| BENZENE | 0.22 U | 0.21 U | 0.21 U | 0.21 U | 0.2 U | 0.2 U | 0.2 U | 0.23 U | 0.23 U | 0.24 U | 0.19 U | |
| BROMOBENZENE | 0.31 U | 0.31 U | 0.3 U | 0.3 U | 0.29 U | 0.29 U | 0.29 U | 0.34 U | 0.33 U | 0.34 U | 0.27 U | |
| BROMOCHLOROMETHANE | 0.67 U | 0.66 U | 0.64 U | 0.64 U | 0.62 U | 0.62 U | 0.63 U | 0.72 U | 0.71 U | 0.73 U | 0.57 U | |
| BROMODICHLOROMETHANE | 0.26 U | 0.26 U | 0.25 U | 0.25 U | 0.24 U | 0.24 U | 0.25 U | 0.28 U | 0.28 U | 0.29 U | 0.23 U | |
| BROMOFORM | 0.31 U | 0.31 U | 0.3 U | 0.3 U | 0.29 U | 0.29 U | 0.29 U | 0.34 U | 0.33 U | 0.34 U | 0.27 U | |
| BROMOMETHANE | 0.51 U | 0.5 U | 0.49 U | 0.48 U | 0.47 U | 0.47 U | 0.48 U | 0.55 U | 0.54 U | 0.56 U | 0.44 U | |
| CARBON DISULFIDE | 0.41 U | 0.41 U | 0.4 U | 0.39 U | 0.38 U | 0.38 U | 0.39 U | 0.45 U | 0.91 B | 1 B | 0.36 U | |
| CARBON TETRACHLORIDE | 0.35 U | 0.34 U | 0.33 U | 0.33 U | 0.32 U | 0.32 U | 0.33 U | 0.38 U | 0.37 U | 0.38 U | 0.3 U | |
| CHLOROBENZENE | 0.31 U | 0.31 U | 0.3 U | 0.3 U | 0.29 U | 0.29 U | 0.29 U | 0.34 U | 0.33 U | 0.34 U | 0.27 U | |
| CHLORODIBROMOMETHANE | 0.52 U | 0.51 U | 0.5 U | 0.49 U | 0.48 U | 0.48 U | 0.48 U | 0.56 U | 0.55 U | 0.57 U | 0.44 U | |
| CHLOROETHANE | 0.81 U | 0.8 U | 0.78 U | 0.77 U | 0.75 U | 0.75 U | 0.76 U | 0.87 U | 0.86 U | 0.89 U | 0.69 U | |
| CHLOROFORM | 0.27 U | 0.27 U | 0.26 U | 0.26 U | 0.25 U | 0.25 U | 0.26 U | 0.29 U | 0.29 U | 0.3 U | 0.23 U | |
| CHLOROMETHANE | 0.38 U | 0.38 U | 0.37 U | 0.37 U | 0.36 U | 0.36 U | 0.36 U | 0.42 U | 0.41 U | 0.42 U | 0.33 U | |
| CIS-1,2-DICHLOROETHENE | 0.34 U | 0.33 U | 0.33 U | 0.32 U | 0.31 U | 0.31 U | 0.32 U | 0.37 U | 0.36 U | 0.37 U | 0.29 U | |
| CIS-1,3-DICHLOROPROPENE | 0.32 U | 0.32 U | 0.31 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.35 U | 0.34 U | 0.35 U | 0.27 U | |
| DIBROMOMETHANE | 0.59 U | 0.58 U | 0.57 U | 0.56 U | 0.55 U | 0.55 U | 0.56 U | 0.64 U | 0.63 U | 0.65 U | 0.51 U | |
| DICHLORODIFLUOROMETHANE | 0.47 U | 0.46 U | 0.45 U | 0.45 U | 0.43 U | 0.44 U | 0.44 U | 0.51 U | 0.5 U | 0.52 U | 0.4 U | |
| DIISOPROPYL ETHER | 1.4 U | 1.4 U | 1.4 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.5 U | 1.5 U | 1.5 U | 1.2 U | |
| ETHYL TERT-BUTYL ETHER | 0.21 U | 0.2 U | 0.2 U | 0.2 U | 0.19 U | 0.19 U | 0.19 U | 0.22 U | 0.22 U | 0.23 U | 0.18 U | |
| ETHYLBENZENE | 0.24 U | 0.24 U | 0.24 U | 0.23 U | 0.23 U | 0.23 U | 0.23 U | 0.26 U | 0.26 U | 0.27 U | 0.21 U | |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| HEXACHLOROBUTADIENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 0.97 U | |
| ISOPROPYLBENZENE | 0.15 U | 0.15 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.16 U | 0.16 U | 0.16 U | 0.13 U | |
| M+P-XYLENES | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 0.97 U | |
| METHYL TERT-BUTYL ETHER | 0.4 UJ | 0.4 UJ | 0.39 UJ | 0.38 UJ | 0.37 U | 0.38 UJ | 0.38 UJ | 0.44 UJ | 0.43 UJ | 0.44 UJ | 0.35 UJ | |
| METHYLENE CHLORIDE | 1.9 B | 0.62 U | 0.61 U | 0.6 U | 0.58 U | 0.59 U | 0.59 U | 1.2 B | 1.1 B | 0.69 U | 0.78 B | |
| NAPHTHALENE | 0.87 B | 0.18 U | 0.17 U | 0.17 U | 0.17 U | 0.75 B | 0.77 B | 0.88 B | 0.86 B | 0.92 B | 0.69 B | |
| N-BUTYLBENZENE | 0.22 U | 0.21 U | 0.21 U | 0.21 U | 0.2 U | 0.2 U | 0.2 U | 0.23 U | 0.23 U | 0.24 U | 0.19 U | |
| N-PROPYLBENZENE | 0.38 U | 0.37 U | 0.36 U | 0.36 U | 0.35 U | 0.35 U | 0.35 U | 0.41 U | 0.4 U | 0.41 U | 0.32 U | |
| O-XYLENE | 0.33 U | 0.32 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U | 0.31 U | 0.36 U | 0.35 U | 0.36 U | 0.28 U | |
| SEC-BUTYLBENZENE | 0.17 U | 0.17 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.16 U | 0.18 U | 0.18 U | 0.19 U | 0.15 U | |
| STYRENE | 0.14 U | 0.14 U | 0.14 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.15 U | 0.15 U | 0.15 U | 0.12 U | |
| TERT-AMYL METHYL ETHER | 0.35 UJ | 0.34 UJ | 0.96 J | 0.33 UJ | 0.32 U | 0.32 UJ | 0.33 UJ | 0.38 U | 0.37 U | 0.38 UJ | 0.3 U | |
| TERT-BUTYLBENZENE | 0.27 U | 0.27 U | 0.26 U | 0.26 U | 0.25 U | 0.25 U | 0.26 U | 0.29 U | 0.29 U | 0.3 U | 0.23 U | |
| TERTIARY-BUTYL ALCOHOL | 49 B | 7 UR | 6.9 UR | 6.8 UR | 6.6 UR | 46 B | 6.7 UR | 54 B | 52 B | 54 B | 43 B | |
| TETRACHLOROETHENE | 0.49 U | 0.48 U | 0.47 U | 0.47 U | 0.45 U | 0.45 U | 0.46 U | 0.53 U | 0.52 U | 0.54 U | 0.42 U | |
| TOLUENE | 0.25 U | 0.25 U | 0.24 U | 0.24 U | 0.23 U | 0.24 U | 0.24 U | 0.27 U | 0.27 U | 0.28 U | 0.22 U | |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| TOTAL XYLENES | 0.63 U | 0.62 U | 0.61 U | 0.6 U | 0.58 U | 0.59 U | 0.59 U | 0.68 U | 0.67 U | 0.69 U | 0.54 U | |
| TRANS-1,2-DICHLOROETHENE | 0.38 U | 0.38 U | 0.37 U | 0.37 U | 0.36 U | 0.36 U | 0.36 U | 0.42 U | 0.41 U | 0.42 U | 0.33 U | |
| TRANS-1,3-DICHLOROPROPENE | 0.51 U | 0.5 U | 0.49 U | 0.48 U | 0.47 U | 0.47 U | 0.48 U | 0.55 U | 0.54 U | 0.56 U | 0.44 U | |
| TRICHLOROETHENE | 0.39 U | 0.39 U | 0.38 U | 0.38 U | 0.37 U | 0.37 U | 0.37 U | 0.43 U | 0.42 U | 0.43 U | 0.34 U | |
| TRICHLOROFLUOROMETHANE | 0.32 U | 0.35 J | 0.31 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.35 U | 0.34 U | 0.35 U | 0.27 U | |
| VINYL ACETATE | 0.23 U | 0.23 U | 0.23 U | 0.22 U | 0.22 U | 0.22 U | 0.22 U | 0.25 U | 0.25 U | 0.26 U | 0.2 U | |
| VINYL CHLORIDE | 0.37 U | 0.36 U | 0.35 U | 0.35 U | 0.34 U | 0.34 U | 0.34 U | 0.4 U | 0.39 U | 0.4 U | 0.31 U | |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-BIPHENYL | 31 U | 32 U | 32 U | 33 U | 32 U | 33 U | 32 U | 32 U | 33 U | 32 U | 31 U | |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,4-DIOXANE | 25 U | 26 U | 26 U | 27 U | 26 U | 27 U | 26 U | 26 U | 27 U | 26 U | 25 U | |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 11 U | 11 U | 11 U | 12 U | 11 U | 12 U | 11 U | 11 U | 12 U | 11 U | 11 U | |
| 2,4,5-TRICHLOROPHENOL | 29 U | 30 U | 29 U | 31 U | 29 U | 30 U | 29 U | 30 U | 30 U | 30 U | 29 U | |
| 2,4,6-TRICHLOROPHENOL | 93 U | 95 U | 94 U | 98 U | 94 U | 97 U | 94 U | 96 U | 98 U | 96 U | 92 U | |

| LOCATION | SB-792 | SB-793 | SB-793 | SB-793 | SB-794 | SB-794 | SB-794 | SB-795 | SB-795 | SB-795 | SB-796 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-792-15 | D-SB-793-11 | D-SB-793-13 | D-SB-793-15 | D-SB-794-11 | D-SB-794-13 | D-SB-794-15 | D-SB-795-11 | D-SB-795-13 | D-SB-795-15 | D-SB-796-11 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| 2,4-DICHLOROPHENOL | 23 U | 24 U | 24 U | 25 U | 24 U | 24 U | 23 U | 24 U | 24 U | 24 U | 23 U |
| 2,4-DIMETHYLPHENOL | 23 U | 24 U | 24 U | 25 U | 24 U | 24 U | 23 U | 24 U | 24 U | 24 U | 23 U |
| 2,4-DINITROPHENOL | 93 U | 95 U | 94 U | 98 U | 94 U | 97 U | 94 U | 96 U | 98 U | 96 U | 92 U |
| 2,4-DINITROTOLUENE | 31 U | 32 U | 32 U | 33 U | 32 U | 33 U | 32 U | 32 U | 33 U | 32 U | 31 U |
| 2,6-DINITROTOLUENE | 24 U | 25 U | 25 U | 26 U | 25 U | 25 U | 25 U | 25 U | 26 U | 25 U | 24 U |
| 2-CHLORONAPHTHALENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| 2-CHLOROPHENOL | 31 U | 32 U | 32 U | 33 U | 32 U | 33 U | 32 U | 32 U | 33 U | 32 U | 31 U |
| 2-METHYLPHENOL | 93 U | 95 U | 94 U | 98 U | 94 U | 97 U | 94 U | 96 U | 98 U | 96 U | 92 U |
| 2-NITROANILINE | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 10 U |
| 2-NITROPHENOL | 31 U | 32 U | 32 U | 33 U | 32 U | 33 U | 32 U | 32 U | 33 U | 32 U | 31 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 21 U | 21 U | 21 U | 22 U | 21 U | 22 U | 21 U | 22 U | 22 U | 22 U | 21 U |
| 3-NITROANILINE | 19 U | 19 U | 19 U | 20 U | 19 U | 19 U | 19 U | 19 U | 20 U | 19 U | 18 U |
| 4,6-DINITRO-2-METHYLPHENOL | 93 U | 95 U | 94 U | 98 U | 94 U | 97 U | 94 U | 96 U | 98 U | 96 U | 92 U |
| 4-BROMOPHENYL PHENYL ETHER | 15 U | 15 U | 15 U | 16 U | 15 U | 16 U | 15 U | 16 U | 16 U | 16 U | 15 U |
| 4-CHLORO-3-METHYLPHENOL | 24 U | 25 U | 25 U | 26 U | 25 U | 25 U | 25 U | 25 U | 26 U | 25 U | 24 U |
| 4-CHLOROANILINE | 20 U | 20 U | 20 U | 21 U | 20 U | 21 U | 20 U | 20 U | 21 U | 20 U | 20 U |
| 4-CHLOROPHENYL PHENYL ETHER | 15 U | 15 U | 15 U | 16 U | 15 U | 16 U | 15 U | 16 U | 16 U | 16 U | 15 U |
| 4-METHYLPHENOL | 93 U | 95 U | 94 U | 98 U | 94 U | 97 U | 94 U | 96 U | 98 U | 96 U | 92 U |
| 4-NITROANILINE | 30 U | 31 U | 31 U | 32 U | 31 U | 32 U | 31 U | 31 U | 32 U | 31 U | 30 U |
| 4-NITROPHENOL | 93 U | 95 U | 94 U | 98 U | 94 U | 97 UR | 94 U | 96 U | 98 U | 96 U | 92 U |
| ACETOPHENONE | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 10 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 14 U | 14 U | 14 U | 15 U | 14 U | 15 U | 14 U | 14 U | 15 U | 14 U | 14 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 25 U | 26 U | 26 U | 27 U | 26 U | 27 U | 26 U | 26 U | 27 U | 26 U | 25 U |
| BIS(2-CHLOROETHYL)ETHER | 2.3 U | 2.4 U | 2.4 U | 2.5 U | 2.4 U | 2.4 U | 2.3 U | 2.4 U | 2.4 U | 2.4 U | 2.3 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 22 U | 23 U | 22 U | 23 U | 22 U | 27 J | 22 U | 25 J | 23 U | 23 U | 22 U |
| BUTYL BENZYL PHTHALATE | 12 U | 12 U | 12 U | 28 J | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| CAPROLACTAM | 43 U | 44 U | 43 U | 45 U | 43 U | 45 U | 43 U | 44 U | 45 U | 44 U | 43 U |
| CARBAZOLE | 31 U | 32 U | 32 U | 33 U | 32 U | 33 U | 32 U | 32 U | 33 U | 32 U | 31 U |
| DIBENZOFURAN | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| DIETHYL PHTHALATE | 19 U | 19 U | 19 U | 20 U | 19 U | 19 U | 19 U | 19 U | 20 U | 19 U | 18 U |
| DIMETHYL PHTHALATE | 20 U | 20 U | 20 U | 21 U | 20 U | 21 U | 20 U | 20 U | 21 U | 20 U | 20 U |
| DI-N-BUTYL PHTHALATE | 17 U | 18 U | 18 U | 18 U | 18 U | 18 U | 18 U | 18 U | 18 U | 18 U | 17 U |
| DI-N-OCTYL PHTHALATE | 31 U | 32 U | 32 U | 33 U | 32 U | 33 U | 32 U | 32 U | 33 U | 32 U | 31 U |
| HEXACHLOROBENZENE | 2.4 U | 2.5 U | 2.5 U | 2.6 U | 2.5 U | 2.5 U | 2.5 U | 2.5 U | 2.6 U | 2.5 U | 2.4 U |
| HEXACHLOROBUTADIENE | 31 U | 32 U | 32 U | 33 U | 32 U | 33 U | 32 U | 32 U | 33 U | 32 U | 31 U |
| HEXACHLOROCYCLOPENTADIENE | 31 U | 32 U | 32 U | 33 U | 32 U | 33 U | 32 U | 32 U | 33 U | 32 U | 31 U |
| HEXACHLOROETHANE | 10 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 11 U | 10 U |
| ISOPHORONE | 15 U | 15 U | 15 U | 16 U | 15 U | 16 U | 15 U | 16 U | 16 U | 16 U | 15 U |
| NITROBENZENE | 2.5 U | 2.6 U | 2.6 U | 2.7 U | 2.6 U | 2.7 U | 2.6 U | 2.6 U | 2.7 U | 2.6 U | 2.5 U |
| N-NITROSODIMETHYLAMINE | 19 U | 19 U | 19 U | 20 U | 19 U | 19 U | 19 U | 19 U | 20 U | 19 U | 18 U |
| N-NITROSO-DI-N-PROPYLAMINE | 31 U | 32 U | 32 U | 33 U | 32 U | 33 U | 32 U | 32 U | 33 U | 32 U | 31 U |
| N-NITROSODIPHENYLAMINE | 24 U | 25 U | 25 U | 26 U | 25 U | 25 U | 25 U | 25 U | 26 U | 25 U | 24 U |
| PENTACHLOROPHENOL | 93 U | 95 U | 94 U | 98 U | 94 U | 97 U | 94 U | 96 U | 98 U | 96 U | 92 U |
| PHENOL | 31 U | 32 U | 32 U | 33 U | 32 U | 33 U | 32 U | 32 U | 33 U | 32 U | 31 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| ACENAPHTHENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| ACENAPHTHYLENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| ANTHRACENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| BAP EQUIVALENT-POS | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| BENZO(A)ANTHRACENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| BENZO(A)PYRENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| BENZO(B)FLUORANTHENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| BENZO(K)FLUORANTHENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| FLUORANTHENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| FLUORENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-792 | SB-793 | SB-793 | SB-793 | SB-794 | SB-794 | SB-794 | SB-795 | SB-795 | SB-795 | SB-796 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-792-15 | D-SB-793-11 | D-SB-793-13 | D-SB-793-15 | D-SB-794-11 | D-SB-794-13 | D-SB-794-15 | D-SB-795-11 | D-SB-795-13 | D-SB-795-15 | D-SB-796-11 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 13 | 15 | 15 | 13 | 13 | 15 | 11 | 13 | 15 | 11 |
| INDENO(1,2,3-CD)PYRENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| NAPHTHALENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| PHENANTHRENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| PYRENE | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U | 4 U | 4 U | 3.8 U |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | 0.72 U | 0.74 U | 0.73 U | 0.76 U | 0.73 U | 0.75 UJ | 0.73 UJ | 0.74 UJ | 0.76 UJ | 0.74 UJ | 0.72 U |
| 4,4'-DDE | 0.45 U | 0.46 U | 0.46 U | 0.48 U | 0.46 U | 0.47 UJ | 0.46 UJ | 0.47 UJ | 0.48 UJ | 0.47 UJ | 0.45 U |
| 4,4'-DDT | 0.73 U | 0.75 U | 0.74 U | 0.77 U | 0.74 U | 0.76 U | 0.74 U | 0.75 U | 0.77 U | 0.75 U | 0.73 U |
| ALDRIN | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.5 UJ | 1.4 UJ | 1.4 UJ | 1.5 UJ | 1.4 UJ | 1.4 U |
| ALPHA-BHC | 0.85 U | 0.87 UJ | 0.86 UJ | 0.9 UJ | 0.86 UJ | 0.89 UJ | 0.86 UJ | 0.87 UJ | 0.89 UJ | 0.87 UJ | 0.84 U |
| ALPHA-CHLORDANE | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.1 UJ | 1.1 UJ | 1.1 UJ | 1.1 UJ | 1.1 UJ | 1.1 U |
| AROCLOR-1016 | 24 U | 25 U | 25 U | 26 U | 25 U | 25 U | 25 U | 25 U | 26 U | 25 U | 24 U |
| AROCLOR-1221 | 19 U | 19 U | 19 U | 20 U | 19 U | 19 U | 19 U | 19 U | 20 U | 19 U | 18 U |
| AROCLOR-1232 | 16 U | 17 U | 16 U | 17 U | 16 U | 17 U | 16 U | 17 U | 17 U | 17 U | 16 U |
| AROCLOR-1242 | 15 U | 15 U | 15 U | 16 U | 15 U | 16 U | 15 U | 16 U | 16 U | 16 U | 15 U |
| AROCLOR-1248 | 20 U | 20 U | 20 U | 21 U | 20 U | 21 U | 20 U | 20 U | 21 U | 20 U | 20 U |
| AROCLOR-1254 | 20 U | 20 U | 20 U | 21 U | 20 U | 21 U | 20 U | 20 U | 21 U | 20 U | 20 U |
| AROCLOR-1260 | 20 U | 20 U | 20 U | 21 U | 20 U | 21 U | 20 U | 20 U | 21 U | 20 U | 20 U |
| BETA-BHC | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 UJ | 1.3 UJ | 1.3 UJ | 1.3 UJ | 1.3 UJ | 1.3 U |
| DELTA-BHC | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.5 UJ | 1.4 UJ | 1.4 UJ | 1.5 UJ | 1.4 UJ | 1.4 U |
| DIELDRIN | 0.54 U | 0.56 U | 0.55 U | 0.58 U | 0.55 U | 0.57 U | 0.55 U | 0.56 U | 0.57 U | 0.56 U | 0.54 U |
| ENDOSULFAN I | 0.6 U | 0.62 U | 0.61 U | 0.64 U | 0.61 U | 0.63 U | 0.61 U | 0.62 U | 0.63 U | 0.62 U | 0.6 U |
| ENDOSULFAN II | 0.95 U | 0.98 U | 0.96 U | 1 U | 0.96 U | 1 U | 0.96 U | 0.98 U | 1 U | 0.98 U | 0.95 U |
| ENDOSULFAN SULFATE | 1 U | 1 U | 1 U | 1.1 U | 1 U | 1.1 U | 1 U | 1 U | 1.1 U | 1 U | 1 U |
| ENDRIN | 0.58 U | 0.59 U | 0.59 U | 0.61 U | 0.59 U | 0.61 U | 0.59 U | 0.6 U | 0.61 U | 0.6 U | 0.58 U |
| ENDRIN ALDEHYDE | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U |
| ENDRIN KETONE | 0.73 U | 0.75 U | 0.74 U | 0.77 U | 0.74 U | 0.76 U | 0.74 U | 0.75 U | 0.77 U | 0.75 U | 0.73 U |
| GAMMA-BHC (LINDANE) | 0.86 U | 0.88 U | 0.87 U | 0.91 U | 0.87 U | 0.9 UJ | 0.87 UJ | 0.88 UJ | 0.9 UJ | 0.89 UJ | 0.85 U |
| GAMMA-CHLORDANE | 0.49 U | 0.5 U | 0.49 U | 0.52 U | 0.49 U | 0.51 UJ | 0.49 UJ | 0.5 UJ | 0.51 UJ | 0.5 UJ | 0.48 U |
| HEPTACHLOR | 1.3 UJ | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U |
| HEPTACHLOR EPOXIDE | 0.93 U | 0.95 U | 0.94 U | 0.98 U | 0.94 U | 0.97 UJ | 0.94 UJ | 0.96 UJ | 0.98 UJ | 0.96 UJ | 0.92 U |
| METHOXYCHLOR | 1.7 UJ | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 22 U | 23 U | 22 U | 23 U | 22 U | 23 U | 22 U | 23 U | 23 U | 23 U | 22 U |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 0.043 B | 0.28 B | 0.17 B | 0.12 B | 0.074 B | 0.36 J | 0.17 B | 0.085 B | 0.42 J | 0.24 B | 0.065 J |
| ARSENIC | 0.65 L | 4.6 J | 2.7 J | 2.1 J | 1.5 J | 7 J | 2.3 J | 2.3 J | 4.2 J | 3.2 J | 1.3 |
| BARIUM | 9 | 12.7 | 12.6 | 14.8 | 15.3 | 20.9 | 14.7 | 12.2 | 15 | 14 | 10.5 |
| BERYLLIUM | 0.99 J | 2.3 J | 1.5 J | 1.4 J | 0.78 J | 2.7 J | 1.4 J | 0.38 J | 2.4 J | 1.7 J | 0.91 |
| CADMIUM | 0.02 B | 0.022 B | 0.024 B | 0.017 B | 0.014 B | 0.033 B | 0.02 B | 0.0093 UL | 0.02 B | 0.015 B | 0.023 B |
| CHROMIUM | 12.1 | 26.5 J | 18 J | 17.8 J | 9.6 J | 26.4 J | 22.6 J | 12.4 J | 32.7 J | 25.5 J | 17.3 |
| COBALT | 5.4 | 15 J | 11 J | 11.9 J | 6 J | 14.6 J | 10.6 J | 1.7 J | 11.8 J | 10 J | 3.9 |
| COPPER | 6.3 | 27.5 J | 15.8 J | 21.3 J | 6.5 J | 20.6 J | 11 J | 10.9 J | 24.2 J | 17.7 J | 9.4 |
| IRON | 6810 | 33500 J | 22400 J | 15400 J | 9930 J | 41800 J | 23400 J | 9260 J | 39400 J | 28500 J | 11100 |
| LEAD | 2.4 | 6.8 | 6.5 | 4.9 | 4.1 | 8.1 | 3 | 4.9 | 7.5 | 4.4 | 2.8 |
| MANGANESE | 5.8 J | 20.5 J | 10.2 J | 7.1 J | 20 J | 50.8 J | 20.6 J | 11.4 J | 52.1 J | 41.9 J | 5 |
| MERCURY | 0.017 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U | 0.017 U |
| MOLYBDENUM | 0.11 B | 0.65 | 0.44 | 0.24 B | 0.09 B | 0.63 | 0.32 | 0.087 B | 0.58 | 0.42 | 0.16 J |
| NICKEL | 8.5 | 28.5 J | 18.7 J | 23.3 J | 12.1 J | 35.2 J | 23.5 J | 3.9 J | 30 J | 24.5 J | 8.5 |
| SELENIUM | 0.93 L | 1 L | 0.97 L | 1.3 L | 1.3 L | 4.5 L | 1.5 L | 1.4 L | 1.5 L | 2.2 L | 1 K |
| SILVER | 0.019 U | 0.024 B | 0.019 U | 0.02 U | 0.019 U | 0.026 B | 0.021 B | 0.019 U | 0.02 U | 0.019 U | 0.018 U |
| THALLIUM | 0.057 J | 0.093 J | 0.091 J | 0.14 | 0.094 J | 0.11 J | 0.096 J | 0.12 | 0.14 | 0.1 J | 0.052 B |
| VANADIUM | 14.9 | 54.7 J | 35.1 J | 28.1 J | 15.5 J | 45.7 J | 31.1 J | 14.6 J | 43.2 J | 36.4 J | 26.5 |
| ZINC | 12.8 | 35.6 L | 24 L | 29 L | 15.4 L | 45.2 L | 26.2 L | 5.6 L | 38 L | 30.6 L | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 8900 J | 4000 J | 3300 U | 3400 U | 3300 UJ | 3400 UJ | 3300 UJ | 4800 J | 8300 J | 3400 U | 5000 J |
| GASOLINE RANGE ORGANICS | 53 U | 55 U | 54 U | 56 U | 54 UJ | 56 UJ | 54 UJ | 55 UJ | 56 UJ | 55 UJ | 53 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 0.31 U | 0.32 U | 0.32 U | 0.33 U | 0.36 J | 0.44 J | 0.59 J | 0.67 J | 0.62 J | 0.32 U | 0.56 J |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-5**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-792 | SB-793 | SB-793 | SB-793 | SB-794 | SB-794 | SB-794 | SB-795 | SB-795 | SB-795 | SB-796 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-792-15 | D-SB-793-11 | D-SB-793-13 | D-SB-793-15 | D-SB-794-11 | D-SB-794-13 | D-SB-794-15 | D-SB-795-11 | D-SB-795-13 | D-SB-795-15 | D-SB-796-11 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-796 | SB-796 |
|---|---|---|
| SAMPLE ID | D-SB-796-13 | D-SB-796-15 |
| SAMPLE DATE | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL |
| MATRIX | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL |
| SUBMATRIX | SB | SB |
| TOP DEPTH | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 |
| **VOLATILES (UG/KG)** | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.54 U | 0.52 U |
| 1,1,1-TRICHLOROETHANE | 0.49 U | 0.47 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.3 U | 0.28 U |
| 1,1,2-TRICHLOROETHANE | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.1 U | 1.1 U |
| 1,1-DICHLOROETHANE | 0.32 U | 0.3 U |
| 1,1-DICHLOROETHENE | 0.46 U | 0.43 U |
| 1,1-DICHLOROPROPENE | 0.26 U | 0.25 U |
| 1,2,3-TRICHLOROBENZENE | 0.33 U | 0.32 U |
| 1,2,3-TRICHLOROPROPANE | 0.79 U | 0.75 U |
| 1,2,3-TRIMETHYLBENZENE | 0.15 U | 0.14 U |
| 1,2,4-TRICHLOROBENZENE | 0.24 U | 0.23 U |
| 1,2,4-TRIMETHYLBENZENE | 0.57 U | 0.54 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 U | 1.1 U |
| 1,2-DIBROMOETHANE | 0.44 U | 0.42 U |
| 1,2-DICHLOROBENZENE | 0.32 U | 0.3 U |
| 1,2-DICHLOROETHANE | 0.3 U | 0.28 U |
| 1,2-DICHLOROPROPANE | 0.61 U | 0.58 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA |
| 1,3-DICHLOROBENZENE | 0.31 U | 0.29 U |
| 1,3-DICHLOROPROPANE | 0.3 U | 0.28 U |
| 1,3-DICHLOROPROPENE | NA | NA |
| 1,4-DICHLOROBENZENE | 0.58 U | 0.55 U |
| 1,4-DIOXANE | NA | NA |
| 2,2-DICHLOROPROPANE | 0.83 U | 0.78 U |
| 2-BUTANONE | 1.2 U | 1.2 U |
| 2-CHLOROETHYL VINYL ETHER | 1.2 U | 1.2 U |
| 2-CHLOROTOLUENE | 0.35 U | 0.33 U |
| 2-HEXANONE | 0.55 U | 0.53 U |
| 4-CHLOROTOLUENE | 0.36 U | 0.34 U |
| 4-ISOPROPYLTOLUENE | 0.18 U | 0.18 U |
| 4-METHYL-2-PENTANONE | 0.47 U | 0.45 U |
| ACETONE | 5.5 U | 5.3 U |
| BENZENE | 0.2 U | 0.19 U |
| BROMOBENZENE | 0.29 U | 0.28 U |
| BROMOCHLOROMETHANE | 0.62 U | 0.59 U |
| BROMODICHLOROMETHANE | 0.25 U | 0.23 U |
| BROMOFORM | 0.29 U | 0.28 U |
| BROMOMETHANE | 0.47 U | 0.45 U |
| CARBON DISULFIDE | 0.79 B | 0.84 B |
| CARBON TETRACHLORIDE | 0.32 U | 0.31 U |
| CHLOROBENZENE | 0.29 U | 0.28 U |
| CHLORODIBROMOMETHANE | 0.48 U | 0.46 U |
| CHLOROETHANE | 0.76 U | 0.72 U |
| CHLOROFORM | 0.25 U | 0.24 U |
| CHLOROMETHANE | 0.36 U | 0.34 U |
| CIS-1,2-DICHLOROETHENE | 0.32 U | 0.3 U |
| CIS-1,3-DICHLOROPROPENE | 0.3 U | 0.28 U |
| DIBROMOMETHANE | 0.55 U | 0.53 U |
| DICHLORODIFLUOROMETHANE | 0.44 U | 0.42 U |
| DIISOPROPYL ETHER | 1.3 U | 1.3 U |
| ETHYL TERT-BUTYL ETHER | 0.19 U | 0.18 U |
| ETHYLBENZENE | 0.23 U | 0.22 U |
| FLUORODICHLOROMETHANE | NA | NA |
| HEXACHLOROBUTADIENE | 1.1 U | 1 U |
| ISOPROPYLBENZENE | 0.14 U | 0.13 U |
| M+P-XYLENES | 1.1 U | 1 U |
| METHYL TERT-BUTYL ETHER | 0.38 UJ | 0.36 UJ |
| METHYLENE CHLORIDE | 0.86 B | 0.96 B |
| NAPHTHALENE | 0.74 B | 0.7 B |
| N-BUTYLBENZENE | 0.2 U | 0.19 U |
| N-PROPYLBENZENE | 0.35 U | 0.33 U |
| O-XYLENE | 0.31 U | 0.29 U |
| SEC-BUTYLBENZENE | 0.16 U | 0.15 U |
| STYRENE | 0.13 U | 0.13 U |
| TERT-AMYL METHYL ETHER | 0.32 U | 0.31 U |
| TERT-BUTYLBENZENE | 0.25 U | 0.24 U |
| TERTIARY-BUTYL ALCOHOL | 6.7 UR | 6.3 UR |
| TETRACHLOROETHENE | 0.46 U | 0.43 U |
| TOLUENE | 0.24 U | 0.23 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA |
| TOTAL XYLENES | 0.59 U | 0.56 U |
| TRANS-1,2-DICHLOROETHENE | 0.36 U | 0.34 U |
| TRANS-1,3-DICHLOROPROPENE | 0.47 U | 0.45 U |
| TRICHLOROETHENE | 0.37 U | 0.35 U |
| TRICHLOROFLUOROMETHANE | 0.3 U | 0.28 U |
| VINYL ACETATE | 0.22 U | 0.21 U |
| VINYL CHLORIDE | 0.34 U | 0.33 U |
| **SEMIVOLATILES (UG/KG)** | | |
| 1,1-BIPHENYL | 33 U | 31 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA |
| 1,4-DIOXANE | 27 U | 25 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 12 U | 11 U |
| 2,4,5-TRICHLOROPHENOL | 30 U | 29 U |
| 2,4,6-TRICHLOROPHENOL | 98 U | 91 U |

| LOCATION | SB-796 | SB-796 |
|---|---|---|
| SAMPLE ID | D-SB-796-13 | D-SB-796-15 |
| SAMPLE DATE | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL |
| MATRIX | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL |
| SUBMATRIX | SB | SB |
| TOP DEPTH | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 |
| 2,4-DICHLOROPHENOL | 24 U | 23 U |
| 2,4-DIMETHYLPHENOL | 24 U | 23 U |
| 2,4-DINITROPHENOL | 98 U | 91 U |
| 2,4-DINITROTOLUENE | 33 U | 31 U |
| 2,6-DINITROTOLUENE | 26 U | 24 U |
| 2-CHLORONAPHTHALENE | 4 U | 3.8 U |
| 2-CHLOROPHENOL | 33 U | 31 U |
| 2-METHYLPHENOL | 98 U | 91 U |
| 2-NITROANILINE | 11 U | 10 U |
| 2-NITROPHENOL | 33 U | 31 U |
| 3&4-METHYLPHENOL | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 22 U | 21 U |
| 3-NITROANILINE | 20 U | 18 U |
| 4,6-DINITRO-2-METHYLPHENOL | 98 U | 91 U |
| 4-BROMOPHENYL PHENYL ETHER | 16 U | 15 U |
| 4-CHLORO-3-METHYLPHENOL | 26 U | 24 U |
| 4-CHLOROANILINE | 21 U | 19 U |
| 4-CHLOROPHENYL PHENYL ETHER | 16 U | 15 U |
| 4-METHYLPHENOL | 98 U | 91 U |
| 4-NITROANILINE | 32 U | 30 U |
| 4-NITROPHENOL | 98 U | 91 U |
| ACETOPHENONE | 11 U | 11 U |
| ANILINE | NA | NA |
| ATRAZINE | 11 U | 10 U |
| AZOBENZENE | NA | NA |
| BENZALDEHYDE | 15 U | 14 U |
| BENZIDINE | NA | NA |
| BENZOIC ACID | NA | NA |
| BENZYL ALCOHOL | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 27 U | 25 U |
| BIS(2-CHLOROETHYL)ETHER | 2.4 U | 2.3 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 23 U | 22 U |
| BUTYL BENZYL PHTHALATE | 12 U | 11 U |
| CAPROLACTAM | 45 U | 42 U |
| CARBAZOLE | 33 U | 31 U |
| DIBENZOFURAN | 4 U | 3.8 U |
| DIETHYL PHTHALATE | 20 U | 18 U |
| DIMETHYL PHTHALATE | 21 U | 19 U |
| DI-N-BUTYL PHTHALATE | 18 U | 17 U |
| DI-N-OCTYL PHTHALATE | 33 U | 31 U |
| HEXACHLOROBENZENE | 2.6 U | 2.4 U |
| HEXACHLOROBUTADIENE | 33 U | 31 U |
| HEXACHLOROCYCLOPENTADIENE | 33 U | 31 U |
| HEXACHLOROETHANE | 11 U | 10 U |
| ISOPHORONE | 16 U | 15 U |
| NITROBENZENE | 2.7 U | 2.5 U |
| N-NITROSODIMETHYLAMINE | 20 U | 18 U |
| N-NITROSO-DI-N-PROPYLAMINE | 33 U | 31 U |
| N-NITROSODIPHENYLAMINE | 26 U | 24 U |
| PENTACHLOROPHENOL | 98 U | 91 U |
| PHENOL | 33 U | 31 U |
| PYRIDINE | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | |
| 1-METHYLNAPHTHALENE | NA | NA |
| 2-METHYLNAPHTHALENE | 4 U | 3.8 U |
| ACENAPHTHENE | 4 U | 3.8 U |
| ACENAPHTHYLENE | 4 U | 3.8 U |
| ANTHRACENE | 4 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 4 U | 3.8 U |
| BAP EQUIVALENT-POS | 4 U | 3.8 U |
| BENZO(A)ANTHRACENE | 4 U | 3.8 U |
| BENZO(A)PYRENE | 4 U | 3.8 U |
| BENZO(B)FLUORANTHENE | 4 U | 3.8 U |
| BENZO(B+K)FLUORANTHENE | NA | NA |
| BENZO(G,H,I)PERYLENE | 4 U | 3.8 U |
| BENZO(K)FLUORANTHENE | 4 U | 3.8 U |
| C1-CHRYSENES | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA |
| C1-FLUORENES | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA |
| C2-CHRYSENES | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA |
| C2-FLUORENES | NA | NA |
| C2-NAPHTHALENES | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA |
| C3-CHRYSENES | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA |
| C3-FLUORENES | NA | NA |
| C3-NAPHTHALENES | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA |
| C4-CHRYSENES | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA |
| C4-NAPHTHALENES | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 4 U | 3.8 U |
| FLUORANTHENE | 4 U | 3.8 U |
| FLUORENE | 4 U | 3.8 U |

| LOCATION | SB-796 | SB-796 |
|---|---|---|
| SAMPLE ID | D-SB-796-13 | D-SB-796-15 |
| SAMPLE DATE | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL |
| MATRIX | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL |
| SUBMATRIX | SB | SB |
| TOP DEPTH | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 |
| INDENO(1,2,3-CD)PYRENE | 4 U | 3.8 U |
| NAPHTHALENE | 4 U | 3.8 U |
| PHENANTHRENE | 4 U | 3.8 U |
| PYRENE | 4 U | 3.8 U |
| TOTAL PAHS | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | |
| 4,4'-DDD | 0.76 U | 0.71 U |
| 4,4'-DDE | 0.48 U | 0.45 U |
| 4,4'-DDT | 0.77 U | 0.72 U |
| ALDRIN | 1.5 U | 1.4 U |
| ALPHA-BHC | 0.89 U | 0.83 U |
| ALPHA-CHLORDANE | 1.1 U | 1.1 U |
| AROCLOR-1016 | 26 U | 24 U |
| AROCLOR-1221 | 20 U | 18 U |
| AROCLOR-1232 | 17 U | 16 U |
| AROCLOR-1242 | 16 U | 15 U |
| AROCLOR-1248 | 21 U | 19 U |
| AROCLOR-1254 | 21 U | 19 U |
| AROCLOR-1260 | 21 U | 19 U |
| BETA-BHC | 1.3 U | 1.3 U |
| DELTA-BHC | 1.5 U | 1.4 U |
| DIELDRIN | 0.57 U | 0.54 U |
| ENDOSULFAN I | 0.63 U | 0.59 U |
| ENDOSULFAN II | 1 U | 0.94 U |
| ENDOSULFAN SULFATE | 1.1 U | 0.99 U |
| ENDRIN | 0.61 U | 0.57 U |
| ENDRIN ALDEHYDE | 1.2 U | 1.1 U |
| ENDRIN KETONE | 0.77 U | 0.72 U |
| GAMMA-BHC (LINDANE) | 0.9 U | 0.85 U |
| GAMMA-CHLORDANE | 0.51 U | 0.48 U |
| HEPTACHLOR | 1.3 U | 1.3 U |
| HEPTACHLOR EPOXIDE | 0.98 U | 0.91 U |
| METHOXYCHLOR | 1.8 U | 1.7 U |
| TOTAL AROCLOR | 0 U | 0 U |
| TOXAPHENE | 23 U | 22 U |
| **METALS (MG/KG)** | | |
| ANTIMONY | 0.029 U | 0.2 J |
| ARSENIC | 0.43 J | 7.3 |
| BARIUM | 6.7 | 9.7 |
| BERYLLIUM | 0.48 | 0.71 |
| CADMIUM | 0.025 B | 0.02 B |
| CHROMIUM | 3.7 | 3.5 |
| COBALT | 2.4 | 3.6 |
| COPPER | 6.2 | 23.2 |
| IRON | 1050 | 1610 |
| LEAD | 1.4 | 1.8 |
| MANGANESE | 2.9 | 3.6 |
| MERCURY | 0.018 U | 0.017 U |
| MOLYBDENUM | 0.077 U | 0.078 J |
| NICKEL | 4.1 | 5.7 |
| SELENIUM | 0.72 K | 0.94 K |
| SILVER | 0.02 U | 0.029 J |
| THALLIUM | 0.041 B | 0.08 B |
| VANADIUM | 4.2 | 2.6 |
| ZINC | 7.3 | 12.4 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | |
| DIESEL RANGE ORGANICS | 3400 J | 3200 U |
| GASOLINE RANGE ORGANICS | 56 U | 53 U |
| TPH (C09-C36) | NA | NA |
| TPH (C10-C32) | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | |
| PERCENT SOLIDS | NA | NA |
| TOTAL SOLIDS | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | |
| HEXAVALENT CHROMIUM | 0.33 U | 0.31 U |
| TOTAL ORGANIC CARBON | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | |
| PH | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | |
| MERCURY (METHYL) | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | |
| ACTINIUM-228 | NA | NA |
| ALUMINUM-26 | NA | NA |
| AMERICIUM-241 | NA | NA |
| ANTIMONY-124 | NA | NA |
| ANTIMONY-125 | NA | NA |
| BERYLLIUM-7 | NA | NA |
| BISMUTH-212 | NA | NA |
| BISMUTH-214 | NA | NA |
| CERIUM-139 | NA | NA |
| CERIUM-144 | NA | NA |
| CESIUM-134 | NA | NA |
| CESIUM-137 | NA | NA |
| CHROMIUM-51 | NA | NA |
| COBALT-56 | NA | NA |
| COBALT-57 | NA | NA |
| COBALT-58 | NA | NA |
| COBALT-60 | NA | NA |
| EUROPIUM-152 | NA | NA |

| LOCATION | **SB-796** | **SB-796** |
|---|---|---|
| SAMPLE ID | **D-SB-796-13** | **D-SB-796-15** |
| SAMPLE DATE | **20100910** | **20100910** |
| SAMPLE CODE | **NORMAL** | **NORMAL** |
| MATRIX | **SO** | **SO** |
| SAMPLE TYPE | **NORMAL** | **NORMAL** |
| SUBMATRIX | **SB** | **SB** |
| TOP DEPTH | **13** | **15** |
| BOTTOM DEPTH | **13** | **15** |
| EUROPIUM-154 | NA | NA |
| EUROPIUM-155 | NA | NA |
| IODINE-131 | NA | NA |
| IRON-59 | NA | NA |
| LEAD-212 | NA | NA |
| LEAD-214 | NA | NA |
| MANGANESE-54 | NA | NA |
| NIOBIUM-94 | NA | NA |
| NIOBIUM-95 | NA | NA |
| POTASSIUM-40 | NA | NA |
| PROTACTINIUM-234 | NA | NA |
| RADIUM-226 | NA | NA |
| RUTHENIUM-106 | NA | NA |
| SCANDIUM-46 | NA | NA |
| SILVER-110 | NA | NA |
| SODIUM-22 | NA | NA |
| THALLIUM-208 | NA | NA |
| THORIUM-227 | NA | NA |
| THORIUM-234 | NA | NA |
| URANIUM-235 | NA | NA |
| ZINC-65 | NA | NA |

**Table A-6**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 | SB-061 | SB-061 | SB-061 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-60RE-11 | D-SB-60RE-12 | D-SB-60RE-13 | D-SB-60RE-14 | D-SB-60RE-15 | D-SB-61RE-11 | D-SB-61RE-12 | D-SB-61RE-13 |
| SAMPLE DATE | | | | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 |
| BOTTOM DEPTH | | | | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 26 | 1.5 U | 1.5 U | 21 | 1.5 U | 181 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 26 | 1.5 U | 1.5 U | 20 | 1.5 U | 181 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 23 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 20 | 1.5 U | 1.5 U | 16 | 1.5 U | 150 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 23 | 1.4 U | 1.4 U | 16 | 1.4 U | 170 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 10 | 2 U | 2 U | 2 U | 2 U | 57 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1.1 U | 27 | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.7 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.8 U | 8.7 | 1.7 U | 1.8 U | 22 | 1.8 U | 130 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 111.7 | 0 U | 0 U | 54 | 0 U | 507 |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-6**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061 | SB-061 | SB-061A | SB-061A | SB-061A | SB-061B | SB-061B | SB-061B | SB-061C | SB-061C | SB-061C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-61RE-14 | D-SB-61RE-15 | D-SB-61REA-11 | D-SB-61REA-13 | D-SB-61REA-15 | D-SB-61REB-11 | D-SB-61REB-13 | D-SB-61REB-15 | D-SB-61REC-11 | D-SB-61REC-13 | D-SB-61REC-15 |
| SAMPLE DATE | | | | 20090916 | 20090916 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 578 | 1.5 U | 168 | 1.5 U | 1.5 U | 154 | 1078 | 16 | 1.5 U | 9.2 | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 577 | 1.5 U | 168 | 1.5 U | 1.5 U | 154 | 1078 | 15 | 1.5 U | 8.2 | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.1 U | 86 | 1.1 U | 1.1 U | 44 | 290 | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 490 | 1.5 U | 120 | 1.5 U | 1.5 U | 110 | 750 | 13 | 1.5 U | 8.2 | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 510 | 1.4 U | 130 | 1.4 U | 1.4 U | 100 | 750 | 13 | 1.4 U | 1.3 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 180 | 2 U | 49 | 1.9 U | 2 U | 65 | 410 | 2 U | 1.9 U | 1.9 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 110 | 1 U | 1 U | 84 | 410 | 1 U | 1 U | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 19 | 1.5 U | 1.5 U | 21 | 170 | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 340 | 1.8 U | 64 | 1.7 U | 1.7 U | 75 | 490 | 7.7 | 1.7 U | 1.7 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 1520 | 0 U | 578 | 0 U | 0 U | 499 | 3270 | 33.7 | 0 U | 8.2 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-6**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-061D | SB-061D | SB-061D | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 | SB-062A | SB-062A | SB-062A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-61RED-11 | D-SB-61RED-13 | D-SB-61RED-15 | D-SB-62RE-11 | D-SB-62RE-12 | D-SB-62RE-13 | D-SB-62RE-14 | D-SB-62RE-15 | D-SB-62REA-11 | D-SB-62REA-11-AVG | D-SB-62REA-11-D |
| SAMPLE DATE | | | | 20091012 | 20091012 | 20091012 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 11 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 429 | 47 | 1.5 U | 1.7 U | 2213 | 74 | 480 | 147 | 123 | 100 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 429 | 46 | 1.5 U | 1.7 U | 2212 | 73 | 479 | 147 | 123 | 100 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 250 | 33 | 1.1 U | 1.2 U | 930 | 34 | 210 | 110 | 93.5 | 77 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 300 | 36 | 1.5 U | 1.7 U | 1800 | 59 | 390 | 100 | 84 | 68 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 340 | 40 | 1.4 U | 1.5 U | 1900 | 60 | 390 | 130 | 113.5 | 97 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 130 | 17 | 2 U | 2.2 U | 750 | 20 | 150 | 56 | 46 | 36 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1 U | 290 | 40 | 1.1 U | 1.2 U | 1200 | 42 | 260 | 95 | 80 | 65 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 50 | 1.6 U | 1.5 U | 1.7 U | 3.2 U | 1.7 U | 1.7 U | 17 | 14 | 11 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 180 | 22 | 1.8 U | 1.9 U | 1200 | 41 | 270 | 50 | 42 | 34 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 1540 | 188 | 0 U | 0 U | 7780 | 256 | 1670 | 558 | 473 | 388 |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-6**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-062A | SB-062A | SB-062B | SB-062B | SB-062B | SB-062C | SB-062C | SB-062C | SB-062D | SB-062D | SB-062D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-62REA-13 | D-SB-62REA-15 | D-SB-62REB-11 | D-SB-62REB-13 | D-SB-62REB-15 | D-SB-62REC-11 | D-SB-62REC-13 | D-SB-62REC-15 | D-SB-62RED-11 | D-SB-62RED-13 | D-SB-62RED-15 |
| SAMPLE DATE | | | | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 90 | 11 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 101 | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 90 | 9.8 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 100 | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 71 | 8.5 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 63 | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 69 | 8 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 80 | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 98 | 9.9 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 88 | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 31 | 2 U | 2 U | 2 U | 2 U | 2 U | 33 | 2 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 65 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 58 | 1.1 U | 1.1 U | 1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 34 | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 48 | 1.8 U | 1.8 U | 1.7 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 368 | 26.4 | 0 U | 0 U | 0 U | 0 U | 370 | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-063 | SB-063 | SB-063 | SB-063 | SB-063 | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 | SB-066 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-63RE-11 | D-SB-63RE-12 | D-SB-63RE-13 | D-SB-63RE-14 | D-SB-63RE-15 | D-SB-65RE-11 | D-SB-65RE-12 | D-SB-65RE-13 | D-SB-65RE-14 | D-SB-65RE-15 | D-SB-66RE-11 |
| SAMPLE DATE | | | | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20090915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | | | | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.5 U | **124** | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | **44** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | **124** | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | **43** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 54 | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 45 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | **90** | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | **33** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 94 | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 34 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 40 | 2.1 U | 1.9 U | 2 U | 2 U | 2.1 U | 2 U | 2 U | 18 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 73 | 1.1 U | 1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 48 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 13 | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 56 | 1.8 U | 1.7 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 19 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 420 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 197 |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-6**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-066 | SB-066 | SB-239 | SB-239 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240A | SB-240A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-66RE-12 | D-SB-66RE-15 | D-SB-239RE-11 | D-SB-239RE-12 | D-SB-240RE-11 | D-SB-240RE-12 | D-SB-240RE-13 | D-SB-240RE-14 | D-SB-240RE-15 | D-SB-240REA-11 | D-SB-240REA-13 |
| SAMPLE DATE | | | | 20090914 | 20090914 | 20091015 | 20091015 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20091014 | 20091014 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 12 | 15 | 11 | 12 | 11 | 12 | 13 | 14 | 15 | 11 | 13 |
| BOTTOM DEPTH | | | | 12 | 15 | 11 | 12 | 11 | 12 | 13 | 14 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 45 | 43 | 185 | 121 | 198 | 42 | 337 | 25 | 22 | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 45 | 42 | 185 | 121 | 198 | 42 | 337 | 24 | 21 | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 43 | 47 | 110 | 82 | 140 | 32 | 210 | 18 | 18 | 1.1 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 34 | 32 | 110 | 85 | 130 | 32 | 230 | 19 | 16 | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 43 | 29 | 250 | 110 | 180 | 40 | 250 | 23 | 19 | 1.4 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 15 | 23 | 100 | 36 | 61 | 16 | 110 | 8.8 | 2.2 U | 2 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 50 | 48 | 170 | 74 | 130 | 40 | 240 | 27 | 21 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 29 | 12 | 27 | 1.5 U | 43 | 1.6 U | 1.7 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 19 | 19 | 88 | 47 | 87 | 22 | 170 | 12 | 12 | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 204 | 198 | 857 | 446 | 755 | 182 | 1253 | 107.8 | 86 | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-6**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-240A | SB-240B | SB-240B | SB-240C | SB-240C | SB-240C | SB-240D | SB-240D | SB-240D | SB-240D | SB-240D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-240REA-15 | D-SB-240REB-11 | D-SB-240REB-13 | D-SB-240REC-11 | D-SB-240REC-13 | D-SB-240REC-15 | D-SB-240RED-11 | D-SB-240RED-11-AVG | D-SB-240RED-11-D | D-SB-240RED-13 | D-SB-240RED-15 |
| SAMPLE DATE | | | | 20091014 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 15 | 11 | 13 | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 15 | 11 | 13 | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **21** | 1.7 U | 2 U | 1.6 U | **58** | 1.9 U | **288** | **161** | **34** | **622** | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **20** | 1.7 U | 2 U | 1.6 U | **57** | 1.9 U | **284** | **159** | **33** | **622** | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.2 U | 1.4 U | 1.2 U | 30 | 1.4 U | **200 J** | 113.5 | 27 J | **270** | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | **19** | 1.7 U | 2 U | 1.6 U | **46** | 1.9 U | **220 J** | **122.5** | **25 J** | **440** | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 9.3 | 1.5 U | 1.8 U | 1.5 U | 48 | 1.7 U | **280 J** | **157.5** | 35 J | **450** | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.2 U | 2.2 U | 2.6 U | 2.1 U | 27 | 2.5 U | 120 J | 65.5 | 11 J | 220 | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.2 U | 1.1 U | 1.4 U | 1.1 U | 35 | 1.3 U | 240 J | 134 | 28 J | 330 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.7 U | 1.7 U | 2 U | 1.6 U | 1.6 U | 1.9 U | 6.2 U | 3.85 U | 1.5 U | **81** | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 2 U | 1.9 U | 2.3 U | 1.9 U | 30 | 2.2 U | 150 J | 83.5 | 17 J | **260** | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 28.3 | 0 U | 0 U | 0 U | 216 | 0 U | 1210 | 676.5 | 143 | 2051 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-6**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 | SB-766 | SB-766 | SB-766 | SB-767 | SB-767 | SB-767 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-243RE-11 | D-SB-243RE-12 | D-SB-243RE-13 | D-SB-243RE-14 | D-SB-243RE-15 | D-SB-766-11 | D-SB-766-13 | D-SB-766-15 | D-SB-767-11 | D-SB-767-13 | D-SB-767-15 |
| SAMPLE DATE | | | | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20100827 | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | 15 U | **160** | 4.4 U | 4.1 U | 4.2 U | 4 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | 15 U | **260** | 4.4 U | 4.1 U | 4.2 U | 4 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | **110** | **58** | 4.4 U | 4.1 U | **33 J** | 4 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | **370** | **34** | 4.4 U | 4.1 U | **140** | 4 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | **270** | **71** | 4.4 U | 4.1 U | **85 J** | 4 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.6 U | **91** | 1.6 U | 1.6 U | **717** | **123** | 4.4 U | 4.1 U | **253** | 4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.6 U | **91** | 1.6 U | 1.6 U | **710** | **121** | 4.4 U | 4.1 U | **251** | 4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.1 U | 43 | 1.2 U | 1.1 U | **470 J** | 85 | 4.4 UJ | 4.1 U | **160** | 4 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | **64** | 1.6 U | 1.6 U | **560 J** | **99** | 4.4 UJ | 4.1 U | **200 J** | 4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.4 U | 70 | 1.5 U | 1.4 U | **620 J** | 130 | 4.4 UJ | 4.1 U | **230 J** | 4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | 440 J | 3.9 U | 4.4 UJ | 4.1 U | 140 J | 4 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2 U | 25 | 2.1 U | 2 U | 340 J | 50 | 4.4 UJ | 4.1 U | 110 J | 4 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 89 U | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 89 U | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 89 U | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 89 U | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 89 U | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 89 U | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 89 U | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 59 | 1.1 U | 1.1 U | 510 J | 100 | 1.5 UJ | 1.4 U | 170 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 11 | 1.6 U | 1.6 U | 15 UJ | 3.9 U | 4.4 UJ | 4.1 U | 4.2 U | 4 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | 650 | 230 | 34 | 4.1 U | 180 J | 4 U |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | 15 U | 72 | 4.4 U | 4.1 U | 33 J | 4 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 1.8 U | 43 | 1.8 U | 1.8 U | **370 J** | 3.9 U | 4.4 UJ | 4.1 U | 110 J | 4 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | 56 | 400 | 4.4 U | 4.1 U | 11 | 4 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | 370 | 210 | 4.4 U | 4.1 U | 53 J | 4 U |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | 1200 J | 210 | 18 J | 4.1 U | 330 | 4 U |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 315 | 0 U | 0 U | 6336 | 2009 | 52 | 0 U | 1985 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-6**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-768 | SB-768 | SB-768 | SB-769 | SB-769 | SB-769 | SB-770 | SB-770 | SB-771 | SB-771 | SB-771 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-768-11 | D-SB-768-13 | D-SB-768-15 | D-SB-769-11 | D-SB-769-13 | D-SB-769-15 | D-SB-770-13 | D-SB-770-15 | D-SB-771-11 | D-SB-771-13 | D-SB-771-15 |
| SAMPLE DATE | | | | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 3.9 U | **11** | 4 U | 4 U | 4 U | 4 U | **56** | **11** | 4 U | 4.1 U | 4 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.9 U | **23** | 4 U | 4 U | 4 U | 4 U | **94** | **21** | 4 U | 4.1 U | 4 U |
| ACENAPHTHENE | 470000 | 340000 | N | 3.9 U | **38 J** | 4 U | 4 U | 4 U | 4 U | **65** | 3.8 U | 4 U | 4.1 U | 4 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 3.9 U | **200** | 4 U | 4 U | **27** | 4 U | **400** | **43** | 4 U | 4.1 U | 4 U |
| ANTHRACENE | 2300000 | 1700000 | N | 3.9 U | **120 J** | 4 U | 4 U | **10** | 4 U | **260** | **26** | 4 U | 4.1 U | 4 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 3.9 U | **362** | 4 U | 4 U | **46** | 4 U | **1871** | **300** | 4 U | 4.1 U | 4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3.9 U | **360** | 4 U | 4 U | **44** | 4 U | **1871** | **298** | 4 U | 4.1 U | 4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.9 U | **190** | 4 U | 4 U | 4 U | 4 U | **940** | **230** | 4 U | 4.1 U | 4 U |
| BENZO(A)PYRENE | 22 | 15 | C | 3.9 U | **290 J** | 4 U | 4 U | **37** | 4 U | **1300** | **220** | 4 U | 4.1 U | 4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3.9 U | **320 J** | 4 U | 4 U | 37 J | 4 U | **1400 J** | **350 J** | 4 U | 4.1 U | 4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 3.9 U | 220 J | 4 U | 4 U | 30 | 4 U | 1200 | 320 | 4 U | 4.1 U | 4 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.9 U | 140 J | 4 U | 4 U | 4 U | 4 U | 660 | 73 | 4 U | 4.1 U | 4 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 370 J | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 410 J | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 140 J | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 240 J | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 170 J | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 99 J | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 130 J | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 230 | 1.3 U | 1.3 U | 23 | 1.3 U | 1100 | 210 | 1.3 U | 1.4 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.9 U | 4.1 U | 4 U | 4 U | 4 U | 4 U | **250 J** | 3.8 U | 4 U | 4.1 U | 4 U |
| FLUORANTHENE | 310000 | 230000 | N | 3.9 U | 240 J | 4 U | 4 U | 25 | 4 U | 1600 | 270 | 4 U | 4.1 U | 4 U |
| FLUORENE | 310000 | 230000 | N | 3.9 U | 4.1 U | 4 U | 4 U | 4 U | 4 U | 96 | 3.8 U | 4 U | 4.1 U | 4 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.9 U | **170 J** | 4 U | 4 U | 34 J | 4 U | **790 J** | **190 J** | 4 U | 4.1 U | 4 U |
| NAPHTHALENE | 160000 | 3600 | C | 3.9 U | 26 | 4 U | 4 U | 4 U | 4 U | 130 | 24 | 4 U | 4.1 U | 4 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 3.9 U | 59 J | 4 U | 4 U | 4 U | 4 U | 640 | 82 | 4 U | 4.1 U | 4 U |
| PYRENE | 230000 | 170000 | N | 3.9 U | 550 | 4 U | 4 U | 54 | 4 U | 2300 | 480 | 4 U | 4.1 U | 4 U |
| TOTAL PAHS | NC | NC | | 0 U | 2816 | 0 U | 0 U | 277 | 0 U | 13225 | 2539 | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-6**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block D**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-772 | SB-772 | SB-772 | SB-773 | SB-773 | SB-773 | SB-774 | SB-774 | SB-774 | SB-774 | SB-774 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-772-11 | D-SB-772-13 | D-SB-772-15 | D-SB-773-11 | D-SB-773-13 | D-SB-773-15 | D-SB-774-11 | D-SB-774-13 | D-SB-774-15 | D-SB-774-15-AVG | D-SB-774-15-D |
| SAMPLE DATE | | | | 20100830 | 20100830 | 20100830 | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 43 | 59 | 190 | 4.1 U | 4.1 U | 11 | 4 U | 29 | 17 | 16 | 15 |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 63 | 61 | 390 | 9 | 4.1 U | 14 | 8.5 | 48 | 25 | 27.5 | 30 |
| ACENAPHTHENE | 470000 | 340000 | N | 84 | 28 | 900 | 4.1 U | 4.1 U | 4 U | 13 | 240 | 90 | 105 | 120 |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 4.2 U | 14 | 20 U | 4.1 U | 4.1 U | 8.2 | 4 U | 7.7 U | 3.8 U | 3.8 U | 3.8 U |
| ANTHRACENE | 2300000 | 1700000 | N | 24 | 52 | 1600 | 4.1 U | 4.1 U | 17 | 20 | 440 | 200 | 165 | 130 |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 30 | 80 | 1351 | 4.1 U | 4.1 U | 43 | 97 | 888 | 499 | 449 | 399 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 28 | 78 | 1341 | 4.1 U | 4.1 U | 41 | 97 | 888 | 499 | 449 | 399 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 29 | 76 | 2400 | 4.1 U | 4.1 U | 24 | 65 | 730 | 480 | 395 | 310 |
| BENZO(A)PYRENE | 22 | 15 | C | 19 | 59 | 810 | 4.1 U | 4.1 U | 34 | 63 | 590 | 340 | 310 | 280 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 31 J | 68 J | 2200 J | 4.1 U | 4.1 U | 22 | 95 | 800 | 460 | 405 | 350 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 14 | 37 | 580 | 4.1 U | 4.1 U | 12 | 51 | 350 | 190 | 185 | 180 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 15 | 24 | 860 | 4.1 U | 4.1 U | 4 U | 33 | 300 | 230 | 205 | 180 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 130 J | 250 | 370 J |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 160 J | 385 | 610 J |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 78 UJ | 199.5 | 360 J |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 84 J | 117 | 150 J |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 78 U | 99.5 | 160 J |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 78 U | 59.5 | 80 J |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 78 U | 67.5 | 96 J |
| CHRYSENE | 22000 | 15000 | C | 29 | 84 | 2200 | 1.4 U | 1.4 U | 26 | 73 | 750 | 480 | 405 | 330 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4.2 U | 4.3 U | 20 U | 4.1 U | 4.1 U | 4 U | 13 | 110 | 44 | 40 | 36 |
| FLUORANTHENE | 310000 | 230000 | N | 65 | 170 | 7100 | 9.9 | 4.1 U | 47 | 120 | 1800 | 1300 J | 1000 | 700 J |
| FLUORENE | 310000 | 230000 | N | 45 | 68 | 950 | 4.1 U | 4.1 U | 18 | 13 | 220 | 95 | 91 | 87 |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 24 J | 40 J | 600 J | 4.1 U | 4.1 U | 23 | 41 | 310 | 180 | 165 | 150 |
| NAPHTHALENE | 160000 | 3600 | C | 95 | 28 | 990 | 4.1 U | 4.1 U | 4 U | 12 | 76 | 47 | 55 | 63 |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 110 | 310 | 5600 | 19 | 4.1 U | 86 | 74 | 1500 | 870 J | 680 | 490 J |
| PYRENE | 230000 | 170000 | N | 49 | 210 | 5200 | 12 | 4.1 U | 64 | 97 | 1300 | 920 J | 720 | 520 J |
| TOTAL PAHS | NC | NC | | 696 | 1329 | 32380 | 49.9 | 0 U | 395.2 | 791.5 | 9564 | 5951 | 4953.5 | 3956 |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | MRC-MW40A | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-058 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | MRC-MW40[1214] | F-SB-57RE-11 | F-SB-57RE-12 | F-SB-57RE-13 | F-SB-57RE-14 | F-SB-57RE-15 | SB-57-15 | F-SB-58RE-11 |
| SAMPLE DATE | | | | 20050525 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 | 20090917 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 12 | 11 | 12 | 13 | 14 | 15 | 15 | 11 |
| BOTTOM DEPTH | | | | 14 | 11 | 12 | 13 | 14 | 15 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | 58 U | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | 58 U | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | 6 U | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | 6 U | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | 6 U | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | 12 U | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | 7 B | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | 6 U | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | 6 U | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | NA | NA | NA | 6 U | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | 6 U | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | 6 U | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | 390 U | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | 390 U | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | 550 | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | 390 U | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | 390 U | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | 390 U | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | 390 U | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 390 U | 6.3 |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 390 U | 4.4 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 390 U | 12 |
| BENZO(A)PYRENE | 22 | 15 | C | NA | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 390 U | 1.9 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 390 U | 14 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | 390 U | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 390 U | 2.4 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 390 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 390 U | 1.9 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | 390 U | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | 390 U | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.8 U | 390 U | 18 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | 390 U | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | 390 U | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | 390 U | NA |
| TOTAL PAHS | NC | NC | | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 44 |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | 2.8 UR | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | 0.66 L | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | 2.8 U | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | 2.8 UL | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | 5.7 L | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | 2.8 U | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | 2.8 UJ | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | 0.11 UL | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | 2.8 U | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | 2.8 UL | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | 2.8 UR | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | 2.3 UL | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | 28 UL | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | 11000 U | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | 110 U | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | 319 J | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058A | SB-058A | SB-058B | SB-058B | SB-058C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | F-SB-58RE-12 | F-SB-58RE-13 | F-SB-58RE-14 | F-SB-58RE-15 | SB-58-15 | SB-58-20 | F-SB-58REA-12 | F-SB-58REA-14 | F-SB-58REB-12 | F-SB-58REB-14 | F-SB-58REC-12 |
| SAMPLE DATE | | | | | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | | 12 | 13 | 14 | 15 | 15 | 20 | 12 | 14 | 12 | 14 | 12 |
| BOTTOM DEPTH | | | | | 12 | 13 | 14 | 15 | 15 | 20 | 12 | 14 | 12 | 14 | 12 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | | 2800000 | N | NA | NA | NA | NA | 63 U | 65 U | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | | 6100000 | N | NA | NA | NA | NA | 63 U | 65 U | NA | NA | NA | NA | NA |
| BENZENE | 12000 | | 1100 | C | NA | NA | NA | NA | 6 U | 6 U | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | | 12000 | N | NA | NA | NA | NA | 6 U | 6 U | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | | 5400 | C | NA | NA | NA | NA | 6 U | 6 U | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 | [4] | 63000 | N[5] | NA | NA | NA | NA | 13 U | 13 U | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | NA | NA | NA | NA | 6 U | 6 U | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | 6 U | 6 U | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 | [4] | 380000 | N | NA | NA | NA | NA | 6 U | 6 U | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | | 630000 | N | NA | NA | NA | NA | 6 U | 6 U | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | | 500000 | N | NA | NA | NA | NA | 6 U | 6 U | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | | 79000 | N | NA | NA | NA | NA | 6 U | 6 U | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | | 35000 | C | NA | NA | NA | NA | 410 U | 440 U | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | | 260000 | C | NA | NA | NA | NA | 410 U | 440 U | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | | 1800000 | N | NA | NA | NA | NA | 410 U | 590 | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | NA | NA | NA | NA | 410 U | 440 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | | 340000 | N | NA | NA | NA | NA | 410 U | 440 U | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | NA | NA | NA | NA | 410 U | 440 U | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | | 1700000 | N | NA | NA | NA | NA | 410 U | 440 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | 1433 | 38 | 1.6 U | 1.6 U | 410 U | 440 U | 52 | 1.5 U | 2.1 U | 498 | 44 |
| BAP EQUIVALENT-POS | 22 | | 15 | C | 1433 | 37 | 1.6 U | 1.6 U | 410 U | 440 U | 51 | 1.5 U | 2.1 U | 498 | 43 |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | 1200 | 33 | 1.2 U | 1.2 U | 410 U | 440 U | 30 | 1.1 U | 1.6 U | 210 | 25 |
| BENZO(A)PYRENE | 22 | | 15 | C | 1000 | 27 | 1.6 U | 1.6 U | 410 U | 440 U | 39 | 1.5 U | 2.1 U | 330 | 33 |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | 1200 | 38 | 1.5 U | 1.5 U | 410 U | 440 U | 51 | 1.4 U | 2 U | 480 | 45 |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[7] | NA | NA | NA | NA | 410 U | 440 U | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | 530 | 2.5 U | 2.1 U | 2.1 U | 410 U | 440 U | 19 | 1.9 U | 2.8 U | 200 | 12 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | | 15000 | C | 1000 | 28 | 1.1 U | 1.1 U | 410 U | 440 U | 29 | 1 U | 1.5 U | 270 | 19 |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | 140 | 1.9 U | 1.6 U | 1.6 U | 410 U | 440 U | 1.8 U | 1.5 U | 2.1 U | 74 | 1.9 U |
| FLUORANTHENE | 310000 | | 230000 | N | NA | NA | NA | NA | 410 U | 440 U | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | | 230000 | N | NA | NA | NA | NA | 410 U | 440 U | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | 470 | 29 | 1.9 U | 1.8 U | 410 U | 440 U | 38 | 1.7 U | 2.5 U | 230 | 32 |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | 410 U | 440 U | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | | 170000 | N[7] | NA | NA | NA | NA | 410 U | 440 U | NA | NA | NA | NA | NA |
| PYRENE | 230000 | | 170000 | N | NA | NA | NA | NA | 410 U | 440 U | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | | NC | | 5540 | 155 | 0 U | 0 U | 0 U | 0 U | 206 | 0 U | 0 U | 1794 | 166 |
| **METALS (MG/KG)** | | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | NA | NA | NA | NA | 3.1 UR | 3 UR | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | | 0.39 | C | NA | NA | NA | NA | 5.3 L | 2.5 L | NA | NA | NA | NA | NA |
| BARIUM | 1600 | | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | | 16 | N | NA | NA | NA | NA | 3.1 U | 3 U | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | | 7 | N | NA | NA | NA | NA | 3.1 UL | 3 UL | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 | [8] | 12000 | N[8] | NA | NA | NA | NA | 26 L | 3.8 L | NA | NA | NA | NA | NA |
| COBALT | NC | | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | | 310 | N | NA | NA | NA | NA | 22 | 4.8 K | NA | NA | NA | NA | NA |
| IRON | 5500 | | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | | 400 | | NA | NA | NA | NA | 20 J | 3 UJ | NA | NA | NA | NA | NA |
| MANGANESE | 160 | | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 | [9] | 2.3 | N[10] | NA | NA | NA | NA | 0.12 UL | 0.12 UL | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | | 150 | N | NA | NA | NA | NA | 18 | 23 | NA | NA | NA | NA | NA |
| SELENIUM | 39 | | 39 | N | NA | NA | NA | NA | 3.1 UL | 3 UL | NA | NA | NA | NA | NA |
| SILVER | 39 | | 39 | N | NA | NA | NA | NA | 3.1 UR | 3 UR | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | | NC | | NA | NA | NA | NA | 2.4 UL | 2.4 UL | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | | 2300 | N | NA | NA | NA | NA | 49 J | 30 UL | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | 12000 U | 13000 U | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | 130 U | 130 U | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-058C | SB-058D | SB-058D | SB-059 | SB-062 | SB-065 | SB-065 | SB-067 | SB-067 | SB-067 | SB-244 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-58REC-14 | F-SB-58RED-12 | F-SB-58RED-14 | SB-59-15 | SB-62-15 | SB-65-15 | SB-65-20 | SB-67-15 | SB-67-20 | SB-67-25 | SB-244-15 |
| SAMPLE DATE | | | | 20091103 | 20091103 | 20091103 | 20040923 | 20040923 | 20040917 | 20040917 | 20040927 | 20040927 | 20040927 | 20050607 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 14 | 12 | 14 | 15 | 15 | 15 | 20 | 15 | 20 | 25 | 15 |
| BOTTOM DEPTH | | | | 14 | 12 | 14 | 15 | 15 | 15 | 20 | 15 | 20 | 25 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | 58 U | 61 U | 56 U | 57 U | 62 UL | 63 UL | 60 UL | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | 58 U | 61 U | 56 U | 57 U | 62 UL | 63 UL | 60 UL | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | 12 U | 12 U | 11 U | 11 U | 12 UL | 13 UL | 12 UL | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | 9 J | 9 J | 8 J | 9 J | 6 UL | 6 UL | 6 UL | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 UL | 6 UL | 6 UL | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | 3900 U | 520 | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 263 | 50 | 50 | 3021 | 410 U | 380 U | 390 U | 410 U | 3182 | 410 U | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | 263 | 49 | 49 | 876 | 410 U | 380 U | 390 U | 410 U | 431 | 410 U | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 200 | 28 | 32 | 520 J | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 170 | 38 | 38 | 770 J | 410 U | 380 U | 390 U | 410 U | 430 J | 410 U | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 230 | 50 | 46 | 460 J | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 74 | 8.9 | 14 | 690 J | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 180 | 30 | 24 | 770 J | 410 U | 380 U | 390 U | 410 U | 510 J | 410 U | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 40 | 1.7 U | 1.8 U | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | 740 J | 410 U | 380 U | 390 U | 410 U | 510 J | 410 U | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 88 | 30 | 34 | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | 3900 U | 410 U | 380 U | 390 U | 410 U | 4200 U | 410 U | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | 1800 J | 410 U | 380 U | 390 U | 410 U | 790 J | 410 U | NA |
| TOTAL PAHS | NC | NC | | 982 | 184.9 | 188 | 5750 | 0 U | 0 U | 0 U | 0 U | 2240 | 0 U | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | 2.5 UL | 2.6 UL | 2.8 UR | 2.8 U | 2.9 UL | 2.7 UL | 2.6 UL | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | 2.8 | 0.71 | 0.57 UL | 0.57 U | 2.5 | 1.2 K | 0.52 U | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | 2.5 U | 2.6 U | 2.8 UL | 2.8 U | 2.9 U | 2.7 U | 2.6 U | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | 2.5 U | 2.6 U | 2.8 UL | 2.8 U | 2.9 U | 2.7 U | 2.6 U | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | 27 J | 6.4 J | 2.8 U | 2.8 U | 14 J | 19 J | 16 J | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | 15 | 3 | 5 L | 3.4 L | 11 J | 9.7 J | 4.9 J | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | 11 | 2.6 U | 2.8 UL | 2.8 UJ | 6.5 K | 7.5 K | 2.6 U | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | 0.1 U | 0.11 U | 0.11 U | 0.11 U | 0.12 U | 0.11 U | 0.1 U | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | 15 | 2.6 U | 6.6 | 3.5 K | 10 K | 4.3 K | 7.6 K | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | 2.5 U | 2.6 U | 2.8 UL | 2.8 U | 2.9 U | 2.7 U | 2.6 U | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | 2.5 UR | 2.6 UR | 2.8 UR | 2.8 UL | 2.9 UR | 2.7 UR | 2.6 UR | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | 2 U | 2.1 U | 2.3 UL | 2.3 UL | 2.3 U | 2.2 U | 2.1 U | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | 50 J | 26 UL | 28 U | 28 UL | 29 UL | 27 UL | 26 UL | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | 11000 U | 12000 U | 11000 U | 12000 U | 12000 U | 13000 U | 12000 U | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | 120 U | 120 U | 110 U | 110 U | 120 U | 130 U | 120 U | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-245 | SB-246 | SB-247 | SB-248 | SB-249 | SB-775 | SB-775 | SB-775 | SB-776 | SB-776 | SB-776 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | SB-245-15 | SB-246-15 | SB-247-15 | SB-248-15 | SB-249-15 | D-SB-775-11 | D-SB-775-13 | D-SB-775-15 | D-SB-776-11 | D-SB-776-13 | D-SB-776-15 |
| SAMPLE DATE | | | | | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | | 15 | 15 | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | | 15 | 15 | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 | [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 | [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | | 630000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | 3.9 U | 3.9 U | 4.2 U | 4.1 U | 4.3 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.9 U | 4.2 U | 4.1 U | 4.3 U | 3.9 U |
| ACENAPHTHENE | 470000 | | 340000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.9 U | 4.2 U | 4.1 U | 4.3 U | 3.9 U |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | NA | NA | NA | NA | NA | 15 | 49 | 4.2 U | 28 | 37 | 3.9 U |
| ANTHRACENE | 2300000 | | 1700000 | N | NA | NA | NA | NA | NA | 3.9 U | 20 | 4.2 U | 10 | 15 | 3.9 U |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | NA | NA | NA | NA | NA | 113 | 175 | 4.2 U | 88 | 97 | 3.9 U |
| BAP EQUIVALENT-POS | 22 | | 15 | C | NA | NA | NA | NA | NA | 113 | 173 | 4.2 U | 88 | 97 | 3.9 U |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | NA | NA | NA | NA | NA | 31 | 88 | 4.2 U | 37 | 33 | 3.9 U |
| BENZO(A)PYRENE | 22 | | 15 | C | NA | NA | NA | NA | NA | 71 | 140 | 4.2 U | 51 | 59 | 3.9 U |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | NA | NA | NA | NA | NA | 78 | 150 | 4.2 U | 52 | 56 | 3.9 U |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[7] | NA | NA | NA | NA | NA | 51 | 100 | 4.2 U | 41 | 48 | 3.9 U |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | NA | NA | NA | NA | NA | 26 | 61 | 4.2 U | 18 | 24 | 3.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | 85 U | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | 85 U | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | 85 U | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | 85 U | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | 85 U | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | 85 U | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | 85 U | NA | NA | NA |
| CHRYSENE | 22000 | | 15000 | C | NA | NA | NA | NA | NA | 50 | 130 | 1.4 U | 26 | 41 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | NA | NA | NA | NA | NA | 26 | 3.9 U | 4.2 U | 25 | 25 | 3.9 U |
| FLUORANTHENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | 43 | 120 | 4.2 U | 26 | 37 | 3.9 U |
| FLUORENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.9 U | 4.2 U | 4.1 U | 4.3 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | NA | NA | NA | NA | NA | 51 | 88 | 4.2 U | 30 | 36 | 3.9 U |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | 3.9 U | 3.9 U | 4.2 U | 4.1 U | 4.3 U | 3.9 U |
| PHENANTHRENE | 2300000 | | 170000 | N[7] | NA | NA | NA | NA | NA | 3.9 U | 8.3 | 4.2 U | 4.1 U | 4.3 U | 3.9 U |
| PYRENE | 230000 | | 170000 | N | NA | NA | NA | NA | NA | 110 | 300 | 4.2 U | 120 | 150 | 3.9 U |
| TOTAL PAHS | NC | | NC | | NA | NA | NA | NA | NA | 552 | 1254.3 | 0 U | 464 | 561 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | NA | NA | NA | 0.4 | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | | 0.39 | C | NA | NA | NA | 2 B | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | | 1500 | N | NA | NA | NA | 5 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | | 16 | N | NA | NA | NA | 2.2 | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | | 7 | N | NA | NA | NA | 0.09 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 | [8] | 12000 | N[8] | NA | NA | NA | 28.2 | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | | 2.3 | N | NA | NA | NA | 8.5 | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | | 310 | N | NA | NA | NA | 36 | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | | 400 | | NA | NA | NA | 3 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 | [9] | 2.3 | N[10] | NA | NA | NA | 0.002 U | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | | 39 | N | NA | NA | NA | 0.6 B | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | | 150 | N | NA | NA | NA | 36 | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | | 39 | N | NA | NA | NA | 5 | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | | 39 | N | NA | NA | NA | 0.04 U | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | | NC | | NA | NA | NA | 0.8 B | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | | 39 | N[11] | NA | NA | NA | 61.4 | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | | 2300 | N | NA | NA | NA | 30 | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | | 0.29 | C | NA | NA | NA | 0.35 UL | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-777 | SB-777 | SB-777 | SB-778 | SB-778 | SB-778 | SB-779 | SB-779 | SB-779 | SB-780 | SB-780 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-777-11 | D-SB-777-13 | D-SB-777-15 | D-SB-778-11 | D-SB-778-13 | D-SB-778-15 | D-SB-779-11 | D-SB-779-13 | D-SB-779-15 | D-SB-780-11 | D-SB-780-13 |
| SAMPLE DATE | | | | 20100910 | 20100910 | 20100910 | 20100831 | 20100831 | 20100831 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 1600000 | 630000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 3.8 U | 13 | 3.9 U | 4 U | 41 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 4.3 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.8 U | 20 | 3.9 U | 4 U | 76 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 4.3 U |
| ACENAPHTHENE | 470000 | 340000 | N | 3.8 U | 87 | 3.9 U | 4 U | 86 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 4.3 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 3.8 U | 4 U | 3.9 U | 4 U | 2700 | 8.9 | 4.2 U | 11 | 3.9 U | 3.8 U | 69 |
| ANTHRACENE | 2300000 | 1700000 | N | 3.8 U | 89 | 3.9 U | 4 U | 1200 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 37 |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **22** | **269** | 3.9 U | 4 U | **6217** | **16** | 4.2 U | **43** | 3.9 U | 3.8 U | **198** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **20** | **269** | 3.9 U | 4 U | **6217** | 13 | 4.2 U | **43** | 3.9 U | 3.8 U | **198** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 16 | **220** | 3.9 U | 4 U | **2500** | 4 U | 4.2 U | 16 | 3.9 U | 3.8 U | 97 |
| BENZO(A)PYRENE | 22 | 15 | C | 15 | **180** | 3.9 U | 4 U | **4400** | 12 | 4.2 U | **23** | 3.9 U | 3.8 U | **130** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 20 | **270** | 3.9 U | 4 U | **4600** | 12 | 4.2 U | 23 J | 3.9 U | 3.8 U | 120 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 11 | 110 | 3.9 U | 4 U | 3800 | 10 | 4.2 U | 16 | 3.9 U | 3.8 U | 100 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 11 | 100 | 3.9 U | 4 U | 1400 | 4 U | 4.2 U | 11 | 3.9 U | 3.8 U | 55 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 79 U | NA | NA | NA | NA | NA | 80 U | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | 79 U | NA | NA | NA | NA | NA | 80 U | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 79 U | NA | NA | NA | NA | NA | 80 U | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 79 U | NA | NA | NA | NA | NA | 80 U | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 79 U | NA | NA | NA | NA | NA | 80 U | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 79 U | NA | NA | NA | NA | NA | 80 U | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 79 U | NA | NA | NA | NA | NA | 80 U | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 18 | 250 | 1.3 U | 1.3 U | 3000 | 1.3 U | 1.4 U | 18 | 1.3 U | 1.3 U | 120 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.8 U | **28** | 3.9 U | 4 U | **820** | 4 U | 4.2 U | 15 J | 3.9 U | 3.8 U | **38 J** |
| FLUORANTHENE | 310000 | 230000 | N | 36 | 580 | 3.9 U | 4 U | 1900 | 4 U | 4.2 U | 23 | 3.9 U | 3.8 U | 180 |
| FLUORENE | 310000 | 230000 | N | 3.8 U | 85 | 3.9 U | 4 U | 190 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 14 |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 9.6 | 110 | 3.9 U | 4 U | **2700** | 4 U | 4.2 U | 11 J | 3.9 U | 3.8 U | 75 J |
| NAPHTHALENE | 160000 | 3600 | C | 3.8 U | 38 | 3.9 U | 4 U | 78 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 4.3 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 23 | 370 | 3.9 U | 4 U | 280 | 4 U | 4.2 U | 3.9 U | 3.9 U | 3.8 U | 41 |
| PYRENE | 230000 | 170000 | N | 29 | 440 | 3.9 U | 4 U | 4500 | 12 | 4.2 U | 50 | 3.9 U | 3.8 U | 280 |
| TOTAL PAHS | NC | NC | | 188.6 | 2977 | 0 U | 0 U | 34230 | 54.9 | 0 U | 217 | 0 U | 0 U | 1356 |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-780 | SB-781 | SB-781 | SB-781 | SB-782 | SB-782 | SB-782 | SB-783 | SB-783 | SB-783 | SB-784 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | D-SB-780-15 | D-SB-781-11 | D-SB-781-13 | D-SB-781-15 | D-SB-782-11 | D-SB-782-13 | D-SB-782-15 | D-SB-783-11 | D-SB-783-13 | D-SB-783-15 | D-SB-784-11 |
| SAMPLE DATE | | | 20100901 | 20100901 | 20100901 | 20100901 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | | | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | 0.14 U | 0.16 U | 0.14 U | 0.14 U | 0.16 U | 0.19 U | 0.15 U |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | 1.2 U | 1.3 U | 1.1 U | 1.2 U | 1.3 U | 1.6 U | 1.3 U |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | 5.3 U | 6 U | 5.1 U | 5.3 U | 5.8 B | 7.2 U | 5.7 U |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | 0.19 U | 0.22 U | 0.19 U | 0.19 U | 0.21 U | 0.26 U | 0.21 U |
| CHLOROMETHANE | NC | 12000 N | NA | NA | NA | NA | 0.34 U | 0.39 U | 0.33 U | 0.34 U | 0.38 U | 0.47 U | 0.37 U |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | 0.22 U | 0.25 U | 0.21 U | 0.22 U | 0.24 U | 0.3 U | 0.24 U |
| M+P-XYLENES | 1600000 [4] | 63000 N[5] | NA | NA | NA | NA | 1 U | 1.1 U | 0.97 U | 1 U | 1.1 U | 1.4 U | 1.1 U |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | 0.56 U | 0.63 U | 0.54 U | 0.56 U | 0.62 U | 0.77 U | 0.61 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | 0.16 U | 0.18 U | 0.15 U | 0.16 U | 0.18 U | 0.22 U | 0.17 U |
| O-XYLENE | 1600000 [4] | 380000 N | NA | NA | NA | NA | 0.29 U | 0.33 U | 0.28 U | 0.29 U | 0.32 U | 0.4 U | 0.32 U |
| STYRENE | 1600000 | 630000 N | NA | NA | NA | NA | 0.13 U | 0.14 U | 0.12 U | 0.13 U | 0.14 U | 0.17 U | 0.14 U |
| TERT-AMYL METHYL ETHER | NC | NC | NA | NA | NA | NA | 0.31 U | 0.35 U | 0.3 U | 0.31 U | 0.34 U | 0.42 U | 0.34 U |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | 0.23 U | 0.26 U | 0.22 U | 0.23 U | 0.25 U | 0.31 U | 0.25 U |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | 0.56 U | 0.63 U | 0.54 U | 0.56 U | 0.62 U | 0.77 U | 0.61 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | 0.28 U | 0.32 U | 0.27 U | 0.29 U | 0.31 U | 0.39 U | 0.31 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | 22 U | 24 U | 22 U | 22 U | 23 U | 23 U | 22 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 C | NA | NA | NA | NA | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | 31 U | 34 U | 31 U | 32 U | 33 U | 33 U | 32 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | 3.9 U | 3.7 U | 4.1 U | 3.9 U | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | 3.9 U | 3.7 U | 4.1 U | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| ACENAPHTHENE | 470000 | 340000 N | 3.9 U | 3.7 U | 4.1 U | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | 3.9 U | 3.7 U | 93 | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| ANTHRACENE | 2300000 | 1700000 N | 3.9 U | 3.7 U | 36 | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | 26 | 3.7 U | 131 | 3.9 U | 3.8 U | 5.8 | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 24 | 3.7 U | 129 | 3.9 U | 3.8 U | 1.3 | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 18 | 3.7 U | 58 | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| BENZO(A)PYRENE | 22 | 15 C | 19 | 3.7 U | 99 | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 20 J | 3.7 U | 140 J | 3.9 U | 3.8 U | 13 | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[7] | 16 | 3.7 U | 160 | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 11 | 3.7 U | 56 | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 22 | 1.2 U | 82 | 1.3 U | 1.3 U | 8.7 | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 3.9 U | 3.7 U | 4.1 U | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| FLUORANTHENE | 310000 | 230000 N | 34 | 3.7 U | 72 | 3.9 U | 3.8 U | 15 | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| FLUORENE | 310000 | 230000 N | 3.9 U | 3.7 U | 4.1 U | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 11 J | 3.7 U | 99 J | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| NAPHTHALENE | 160000 | 3600 C | 3.9 U | 3.7 U | 4.1 U | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| PHENANTHRENE | 2300000 | 170000 N[7] | 3.9 U | 3.7 U | 14 | 3.9 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| PYRENE | 230000 | 170000 N | 55 | 3.7 U | 180 | 3.9 U | 3.8 U | 15 | 3.8 U | 3.9 U | 4 U | 4 U | 3.9 U |
| TOTAL PAHS | NC | NC | 206 | 0 U | 1089 | 0 U | 0 U | 51.7 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | 0.22 B | 0.19 B | 0.072 B | 0.11 B | 0.084 B | 0.36 J | 0.12 B |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | 3.9 J | 4.6 J | 2.6 J | 2.1 J | 2.4 J | 4.3 J | 1.3 J |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | 11.2 | 20.7 | 19.2 | 12.6 | 14.2 | 18 | 7 |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | 3.4 | 2.8 | 2.7 | 1.1 | 1.1 | 3 | 1.8 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | 0.077 J | 0.054 J | 0.096 J | 0.011 B | 0.012 B | 0.019 B | 0.012 B |
| CHROMIUM | 12000 [8] | 12000 N[8] | NA | NA | NA | NA | 20 J | 17.8 J | 13.4 J | 10.1 J | 11.4 J | 21.6 J | 14.4 J |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | 10.9 J | 5.9 J | 8.2 J | 4.3 J | 3 J | 8.1 J | 7.2 J |
| COPPER | 310 | 310 N | NA | NA | NA | NA | 17.9 J | 18.8 J | 6.4 J | 8.6 J | 23.1 J | 21.9 J | 39 J |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | 31000 J | 19200 J | 5110 J | 8650 J | 6580 J | 32800 J | 23200 J |
| LEAD | 400 | 400 | NA | NA | NA | NA | 4.9 | 10.4 | 5.6 | 4.8 | 6 | 6.7 | 4.4 |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | 33.6 | 31.6 | 9.7 | 30.9 | 14.9 | 64.2 | 52.5 |
| MERCURY | 2.3 [9] | 2.3 N[10] | NA | NA | NA | NA | 0.017 U | 0.019 U | 0.017 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | 0.43 | 0.67 | 0.073 U | 0.12 J | 0.17 J | 0.51 | 0.15 J |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | 31.6 J | 15.7 J | 17.6 J | 9.1 J | 6.3 J | 24.4 J | 18.1 J |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | 2.3 | 2 | 4.5 | 1.3 | 1.5 | 1.8 | 1 |
| SILVER | 39 | 39 N | NA | NA | NA | NA | 0.019 UL | 0.082 J | 0.018 UL | 0.019 UL | 0.019 UL | 0.019 UL | 0.019 UL |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | 0.11 B | 0.13 B | 0.14 B | 0.077 B | 0.1 B | 0.089 B | 0.07 B |
| VANADIUM | 7.8 | 39 N[11] | NA | NA | NA | NA | 41 J | 29.7 J | 6.6 J | 13.8 J | 17.7 J | 36.3 J | 14.9 J |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | 47.9 J | 47 J | 46.5 J | 25 J | 21.9 J | 48.5 J | 83.2 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | 3200 B | 6600 B | 6500 B | 4400 J | 3400 U | 3400 U | 3300 U |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | 53 U | 57 U | 53 U | 54 U | 56 U | 56 U | 54 U |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 C | NA | NA | NA | NA | 0.83 J | 0.34 U | 0.34 J | 0.32 U | 0.33 U | 0.33 U | 0.35 J |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-784 | SB-784 | SB-785 | SB-785 | SB-785 | SB-786 | SB-786 | SB-786 | SB-787 | SB-787 | SB-787 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | D-SB-784-13 | D-SB-784-15 | D-SB-785-11 | D-SB-785-13 | D-SB-785-15 | D-SB-786-11 | D-SB-786-13 | D-SB-786-15 | D-SB-787-11 | D-SB-787-13 | D-SB-787-15 |
| SAMPLE DATE | | | | | 20100902 | 20100902 | 20100908 | 20100908 | 20100908 | 20100903 | 20100903 | 20100908 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | | NC | | 0.14 U | 0.16 U | 0.15 U | 0.16 U | 0.15 U | 0.12 U | 3.2 J | 0.16 J | 0.14 U | 0.14 U | 0.14 U |
| 2-BUTANONE | 4700000 | | 2800000 | N | 1.2 U | 1.3 U | 1.6 J | 1.3 U | 3.3 J | 120 B | 38 U | 1.1 U | 1.1 U | 1.2 U | 1.7 J |
| ACETONE | 7000000 | | 6100000 | N | 5.4 U | 5.7 U | 37 B | 28 B | 200 B | 260 B | 350 B | 16 B | 29 B | 100 B | 200 B |
| BENZENE | 12000 | | 1100 | C | 0.2 U | 0.21 U | 0.21 U | 0.21 U | 0.2 U | 10 J | 20 J | 3.4 J | 0.19 U | 0.19 U | 0.19 U |
| CHLOROMETHANE | NC | | 12000 | N | 0.35 U | 0.37 U | 0.37 U | 0.7 J | 0.36 U | 9.8 U | 13 U | 0.33 U | 0.33 U | 0.34 U | 0.35 U |
| ETHYLBENZENE | 780000 | | 5400 | C | 0.22 U | 0.24 U | 0.23 U | 0.24 U | 0.23 U | 3.8 U | 9.2 J | 0.35 J | 0.21 U | 0.22 U | 0.22 U |
| M+P-XYLENES | 1600000 | [4] | 63000 | N[5] | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 12 J | 20 J | 0.96 U | 0.97 U | 1 U | 1 U |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | 0.57 U | 0.61 U | 0.6 U | 0.62 U | 0.59 U | 74 J | 77 J | 0.54 U | 0.54 U | 0.56 U | 0.57 U |
| NAPHTHALENE | 160000 | | 3600 | C | 0.16 U | 0.17 U | 0.8 B | 0.81 B | 0.81 B | 260 | 530 | 47 | 0.76 B | 0.77 B | 0.76 B |
| O-XYLENE | 1600000 | [4] | 380000 | N | 0.3 U | 0.32 U | 0.31 U | 0.32 U | 0.31 U | 6.3 J | 12 J | 0.57 J | 0.28 U | 0.29 U | 0.3 U |
| STYRENE | 1600000 | | 630000 | N | 0.13 U | 0.14 U | 0.13 U | 0.14 U | 0.13 U | 3.9 U | 5 U | 0.12 U | 0.12 U | 0.13 U | 0.13 U |
| TERT-AMYL METHYL ETHER | NC | | NC | | 0.31 U | 0.34 U | 0.33 UJ | 0.34 UJ | 0.33 UJ | 0.26 UJ | 0.33 UJ | 0.3 UJ | 0.3 UJ | 0.31 UJ | 0.31 UJ |
| TOLUENE | 630000 | | 500000 | N | 0.23 U | 0.25 U | 0.28 J | 0.25 U | 0.24 U | 13 J | 31 J | 0.58 J | 0.22 U | 0.23 U | 0.23 U |
| TOTAL XYLENES | 1600000 | [4] | 63000 | N | 0.57 U | 0.61 U | 0.6 U | 0.62 U | 0.59 U | 18 J | 32 J | 1 J | 0.54 U | 0.56 U | 0.57 U |
| TRICHLOROFLUOROMETHANE | NC | | 79000 | N | 0.29 U | 0.31 U | 0.31 U | 0.31 U | 0.3 U | 11 U | 14 U | 0.27 U | 0.28 U | 0.29 U | 0.29 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | | 35000 | C | 78 | 23 U | 22 U | 23 U | 22 U | 22 U | 23 U | 21 U | 22 U | 22 U | 21 U |
| BUTYL BENZYL PHTHALATE | NC | | 260000 | C | 12 U | 22 J | 12 U | 12 U | 12 U | 11 U | 12 U | 11 U | 11 U | 12 U | 11 U |
| PHENOL | 2300000 | | 1800000 | N | 31 U | 33 U | 32 U | 33 U | 32 U | 31 U | 33 U | 30 U | 31 U | 32 U | 30 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | 3.8 U | 4.1 U | 3.9 U | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| ACENAPHTHENE | 470000 | | 340000 | N | 3.8 U | 4.1 U | 3.9 U | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | 3.8 U | 4.1 U | 3.9 U | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| ANTHRACENE | 2300000 | | 1700000 | N | 3.8 U | 4.1 U | 3.9 U | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | 3.8 U | 4.1 U | 3.9 U | 18 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| BAP EQUIVALENT-POS | 22 | | 15 | C | 3.8 U | 4.1 U | 3.9 U | 16 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | 3.8 U | 4.1 U | 3.9 U | 12 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| BENZO(A)PYRENE | 22 | | 15 | C | 3.8 U | 4.1 U | 3.9 U | 12 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | 3.8 U | 4.1 U | 3.9 U | 17 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[7] | 3.8 U | 4.1 U | 3.9 U | 12 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | 3.8 U | 4.1 U | 3.9 U | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | | 15000 | C | 1.3 U | 1.4 U | 1.3 U | 11 | 1.3 U | 1.3 U | 1.3 U | 1.2 U | 1.3 U | 1.3 U | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | 3.8 U | 4.1 U | 3.9 U | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| FLUORANTHENE | 310000 | | 230000 | N | 3.8 U | 4.1 U | 3.9 U | 14 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| FLUORENE | 310000 | | 230000 | N | 3.8 U | 4.1 U | 3.9 U | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | 3.8 U | 4.1 U | 3.9 U | 9.1 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| NAPHTHALENE | 160000 | | 3600 | C | 3.8 U | 4.1 U | 3.9 U | 4 U | 3.9 U | 3.8 U | 11 | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| PHENANTHRENE | 2300000 | | 170000 | N[7] | 3.8 U | 4.1 U | 3.9 U | 4 U | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| PYRENE | 230000 | | 170000 | N | 3.8 U | 4.1 U | 3.9 U | 14 | 3.9 U | 3.8 U | 4 U | 3.7 U | 3.8 U | 3.9 U | 3.7 U |
| TOTAL PAHS | NC | | NC | | 0 U | 0 U | 0 U | 101.1 | 0 U | 0 U | 11 | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | 0.18 B | 0.39 J | 0.28 J | 0.12 J | 0.28 J | 0.027 UL | 0.075 J | 0.064 J | 0.33 J | 0.22 J | 0.027 UL |
| ARSENIC | 0.43 | | 0.39 | C | 2.5 J | 7.2 J | 3.2 L | 3.1 L | 3.8 L | 2.5 | 1.3 | 0.88 L | 5 L | 5.4 L | 1.7 L |
| BARIUM | 1600 | | 1500 | N | 13.1 | 20.6 | 12.7 J | 15.1 J | 10.9 J | 6.8 J | 14.4 J | 4.4 J | 10.8 J | 15.7 J | 10.7 J |
| BERYLLIUM | 16 | | 16 | N | 2.7 | 5 | 6.4 J | 4.6 J | 4.5 J | 0.31 | 0.98 | 0.3 J | 2.8 J | 3.7 J | 1.7 J |
| CADMIUM | 3.9 | | 7 | N | 0.014 B | 0.023 B | 0.0092 U | 0.12 K | 0.013 B | 0.023 J | 0.041 J | 0.034 J | 0.078 J | 0.091 J | 0.077 J |
| CHROMIUM | 12000 | [8] | 12000 | N[8] | 25.7 J | 32.5 J | 28.8 J | 23.2 J | 28.7 J | 3.8 | 18.9 | 2.1 J | 28.9 J | 27.8 J | 4.7 J |
| COBALT | NC | | 2.3 | N | 9.2 J | 14.3 J | 8 | 13.7 | 8.6 | 1.5 | 8.5 | 1.9 | 7.5 | 11.7 | 4.8 |
| COPPER | 310 | | 310 | N | 16.6 J | 37 J | 23.5 | 56.2 | 14.6 | 3.1 J | 4.9 J | 5 | 10.5 | 15.4 | 5 |
| IRON | 5500 | | 5500 | N | 31400 J | 60600 J | 38700 J | 34200 J | 37900 J | 1830 J | 13500 J | 462 J | 33800 J | 21700 J | 1020 J |
| LEAD | 400 | | 400 | | 4.4 | 6.3 | 6.7 | 14 | 4.8 | 2.8 J | 3.8 J | 1.3 | 12.3 | 8.2 | 3.5 |
| MANGANESE | 160 | | 180 | N | 55.4 | 142 | 66.4 | 96 | 54.1 | 3.1 J | 5.6 J | 1.6 | 20.4 | 15.9 | 6.9 |
| MERCURY | 2.3 | [9] | 2.3 | N[10] | 0.017 U | 0.018 U | 0.018 U | 0.059 J | 0.018 U | 0.017 U | 0.018 U | 0.017 U | 0.017 U | 0.018 U | 0.017 U |
| MOLYBDENUM | NC | | 39 | N | 0.44 | 0.82 | 0.32 | 0.6 | 0.55 | 0.072 U | 0.13 J | 0.095 J | 0.78 | 0.31 | 0.18 J |
| NICKEL | 160 | | 150 | N | 25.4 J | 37.6 J | 22.4 J | 32.8 J | 27.7 J | 2.5 J | 14 J | 3.2 J | 16.1 J | 25 J | 9.1 J |
| SELENIUM | 39 | | 39 | N | 0.89 | 1.4 | 1.1 J | 1.1 J | 1.5 L | 4.6 L | 2 L | 0.57 J | 1.5 L | 1.6 L | 1.8 L |
| SILVER | 39 | | 39 | N | 0.019 UL | 0.026 J | 0.019 UJ | 0.029 J | 0.019 UJ | 0.018 U | 0.019 U | 0.047 J | 0.018 UJ | 0.019 UJ | 0.026 J |
| THALLIUM | 0.55 | | NC | | 0.074 B | 0.11 B | 0.12 | 0.094 B | 0.084 B | 0.037 J | 0.12 L | 0.064 B | 0.056 B | 0.11 J | 0.07 B |
| VANADIUM | 7.8 | | 39 | N[11] | 42.2 J | 50.4 J | 30.7 | 34.4 | 48.3 | 4.6 | 16.5 | 1.6 | 66.9 | 54.8 | 6 |
| ZINC | 2300 | | 2300 | N | 45.7 J | 81.3 J | 65.8 | 114 | 42.5 | 3.4 J | 16.9 J | 4.7 | 27.2 | 45.3 | 23.5 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | 3300 U | 3500 U | 3300 UJ | 17000 | 3300 U | 3200 U | 4300 J | 3800 J | 3200 UJ | 3300 UJ | 3100 UJ |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | 54 U | 57 U | 54 U | 56 U | 54 U | 53 U | 79 J | 52 U | 52 U | 54 U | 52 U |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | | 0.29 | C | 0.63 J | 0.33 U | 0.88 J | 0.33 U | 0.8 J | 0.31 U | 0.55 J | 0.3 U | 0.31 U | 0.32 U | 0.32 J |
| TOTAL ORGANIC CARBON | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-788 | SB-788 | SB-788 | SB-789 | SB-789 | SB-789 | SB-790 | SB-790 | SB-790 | SB-791 | SB-791 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | D-SB-788-11 | D-SB-788-13 | D-SB-788-15 | D-SB-789-11 | D-SB-789-13 | D-SB-789-15 | D-SB-790-11 | D-SB-790-13 | D-SB-790-15 | D-SB-791-11 | D-SB-791-13 |
| SAMPLE DATE | | | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | 0.2 U | 0.17 U | 0.14 U | 0.14 U | 0.14 U | 0.15 U | 0.16 U | 0.15 U | 0.14 U | 0.15 U | 0.18 U |
| 2-BUTANONE | 4700000 | 2800000 N | 1.6 U | 1.9 J | 1.3 J | 1.1 U | 1.2 U | 1.7 J | 1.3 U | 1.2 U | 1.2 U | 1.2 U | 4 J |
| ACETONE | 7000000 | 6100000 N | 18 B | 22 B | 230 | 30 B | 5.2 U | 100 | 150 U | 110 | 19 B | 5.4 U | 60 B |
| BENZENE | 12000 | 1100 C | 0.27 U | 0.23 U | 0.18 U | 0.19 U | 0.19 U | 0.21 U | 0.21 U | 0.2 U | 0.19 U | 0.2 U | 0.24 U |
| CHLOROMETHANE | NC | 12000 N | 0.48 U | 0.4 U | 0.33 U | 0.34 U | 0.34 U | 0.37 U | 0.38 U | 0.36 U | 0.34 U | 0.35 U | 0.43 U |
| ETHYLBENZENE | 780000 | 5400 C | 0.3 U | 0.25 U | 0.21 U | 0.21 U | 0.22 U | 0.23 U | 0.24 U | 0.23 U | 0.22 U | 0.22 U | 0.27 U |
| M+P-XYLENES | 1600000 [4] | 63000 N[5] | 1.4 U | 1.2 U | 0.96 U | 0.98 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 0.99 U | 1 U | 1.3 U |
| METHYLENE CHLORIDE | 85000 | 11000 C | 0.78 U | 0.66 U | 0.53 U | 0.55 U | 0.56 U | 0.6 U | 0.62 U | 0.6 U | 0.55 U | 0.81 B | 0.82 B |
| NAPHTHALENE | 160000 | 3600 C | 1.1 B | 0.87 B | 0.73 B | 0.16 U | 0.16 U | 0.17 U | 0.18 U | 0.17 U | 0.16 U | 0.79 B | 1 B |
| O-XYLENE | 1600000 [4] | 380000 N | 0.41 U | 0.34 U | 0.28 U | 0.29 U | 0.29 U | 0.31 U | 0.32 U | 0.31 U | 0.29 U | 0.3 U | 0.37 U |
| STYRENE | 1600000 | 630000 N | 0.18 U | 0.15 U | 0.12 U | 0.12 U | 0.12 U | 0.13 U | 0.14 U | 0.13 U | 0.12 U | 0.13 U | 0.16 J |
| TERT-AMYL METHYL ETHER | NC | NC | 0.43 UJ | 0.36 UJ | 0.3 UJ | 0.3 U | 0.31 U | 0.33 U | 0.34 U | 0.33 U | 0.31 U | 0.32 U | 0.39 U |
| TOLUENE | 630000 | 500000 N | 0.43 J | 0.4 J | 0.22 U | 0.22 U | 0.22 U | 0.24 U | 0.25 U | 0.24 U | 0.22 U | 0.23 U | 0.28 U |
| TOTAL XYLENES | 1600000 [4] | 63000 N | 0.78 U | 0.66 U | 0.53 U | 0.55 U | 0.56 U | 0.6 U | 0.62 U | 0.6 U | 0.55 U | 0.57 U | 0.7 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | 0.4 U | 0.33 U | 0.27 U | 0.28 U | 0.28 U | 0.3 U | 0.31 U | 0.3 U | 0.28 U | 0.29 U | 0.36 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | 23 U | 24 U | 22 U | 22 U | 23 U | 22 U | 23 U | 140 | 22 U | 22 U | 23 J |
| BUTYL BENZYL PHTHALATE | NC | 260000 C | 12 U | 12 U | 12 U | 12 U | 29 J | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| PHENOL | 2300000 | 1800000 N | 32 U | 33 U | 31 U | 32 U | 33 U | 31 U | 33 U | 32 U | 31 U | 31 U | 32 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| ACENAPHTHENE | 470000 | 340000 N | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| ANTHRACENE | 2300000 | 1700000 N | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| BENZO(A)PYRENE | 22 | 15 C | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[7] | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.3 U | 1.4 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.4 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| FLUORANTHENE | 310000 | 230000 N | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| FLUORENE | 310000 | 230000 N | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| NAPHTHALENE | 160000 | 3600 C | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| PHENANTHRENE | 2300000 | 170000 N[7] | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| PYRENE | 230000 | 170000 N | 4 U | 4.1 U | 3.8 U | 3.9 U | 4 U | 3.8 U | 4.1 U | 4 U | 3.8 U | 3.8 U | 3.9 U |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | 0.43 J | 0.31 J | 0.39 J | 0.14 J | 0.47 J | 0.32 J | 0.051 J | 0.41 J | 0.22 J | 0.11 B | 0.18 B |
| ARSENIC | 0.43 | 0.39 C | **5.6** | **7.5** | **5.2** | **2.8** | **6.8** | **4.5** | **2.1** | **5** | **3.3** | **3.9 L** | **2.8 L** |
| BARIUM | 1600 | 1500 N | 25.2 | 10.8 | 23 | 11.3 | 23.6 | 16.7 | 16.1 | 14 | 20.9 | 7.3 | 7.2 |
| BERYLLIUM | 16 | 16 N | 0.057 U | 0.058 U | 5.5 | 1.8 | 10.5 | 7.2 | 1.6 | 4.2 | 4.2 | 1 J | 1.3 J |
| CADMIUM | 3.9 | 7 N | 0.034 J | 0.021 B | 0.031 B | 0.013 B | 0.041 J | 0.034 J | 0.0096 UL | 0.025 B | 0.027 B | 0.015 B | 0.017 B |
| CHROMIUM | 12000 [8] | 12000 N[8] | 34 | 30.2 | 30.9 | 13.7 | 33.3 | 27.8 | 9.4 | 22.1 | 22.7 | 15.9 | 20.6 |
| COBALT | NC | 2.3 N | **12.3** | **5.1** | **11.2** | **5.7** | **21.3** | **18.1** | **2.6** | **8.8** | **7.4** | **3.7** | **5.9** |
| COPPER | 310 | 310 N | 22.5 L | 24 L | 20.5 L | 14.5 L | 48.6 L | 23.5 L | 12.8 L | 20.1 L | 18.5 L | 6.1 | 12.5 |
| IRON | 5500 | 5500 N | **49900** | **42200** | **43700** | **18400** | **85000** | **43700** | **6230** | **36600** | **28600** | **17100** | **26600** |
| LEAD | 400 | 400 | 9.8 | 6.4 | 8.6 | 4.5 | 10.3 | 5.9 | 3.6 | 7.4 | 4.2 | 5.6 | 4.9 |
| MANGANESE | 160 | 180 N | 104 | 38.8 | 93.6 | 49 | **341** | 106 | 5.2 | 107 | 47.2 | 7.4 J | 11.7 J |
| MERCURY | 2.3 [9] | 2.3 N[10] | 0.018 U | 0.019 U | 0.017 U | 0.018 U | 0.018 U | 0.017 U | 0.018 U | 0.018 U | 0.017 U | 0.017 U | 0.018 U |
| MOLYBDENUM | NC | 39 N | 0.77 | 0.77 | 0.7 | 0.22 J | 1 | 0.67 | 0.11 J | 0.6 | 0.46 | 0.28 | 0.61 |
| NICKEL | 160 | 150 N | 37.6 | 16.9 | 34.8 | 15.7 | 54.1 | 41.7 | 5.4 | 27.6 | 24.6 | 9.3 | 17.7 |
| SELENIUM | 39 | 39 N | 1.8 J | 0.6 J | 1.7 J | 1.8 J | 1.6 J | 1.5 J | 1.4 J | 3.3 J | 2.3 J | 4.9 L | 1.4 L |
| SILVER | 39 | 39 N | 0.019 U | 0.02 U | 0.018 U | 0.019 U | 0.029 B | 0.024 B | 0.02 U | 0.019 U | 0.019 U | 0.019 U | 0.019 U |
| THALLIUM | 0.55 | NC | 0.15 J | 0.052 J | 0.13 B | 0.057 B | 0.11 B | 0.086 B | 0.088 B | 0.094 B | 0.089 B | 0.06 J | 0.051 J |
| VANADIUM | 7.8 | 39 N[11] | **40** | **64.7** | **36.7** | **24.8** | **66.2** | **56.5** | **17.1** | **35.1** | **38.5** | **23.5** | **44.3** |
| ZINC | 2300 | 2300 N | 70.5 J | 26.5 J | 64.2 J | 24.8 J | 96.2 J | 66.4 J | 8.9 J | 36.9 J | 34 J | 11.1 | 17.8 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | 3400 U | 4600 J | 3200 U | 3700 J | 3400 U | 3300 U | 3400 J | 3400 U | 3300 U | 3200 U | 3300 U |
| GASOLINE RANGE ORGANICS | 230000 | NC | 55 U | 57 U | 53 U | 54 U | 55 U | 53 U | 57 U | 55 U | 54 U | 53 U | 55 U |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 C | 0.32 U | **0.79 J** | 0.31 U | 0.32 U | **0.36 J** | 0.31 U | **0.49 J** | 0.32 U | **0.31 J** | **0.32 J** | 0.32 U |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-791 | SB-792 | SB-792 | SB-792 | SB-793 | SB-793 | SB-793 | SB-794 | SB-794 | SB-794 | SB-795 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | D-SB-791-15 | D-SB-792-11 | D-SB-792-13 | D-SB-792-15 | D-SB-793-11 | D-SB-793-13 | D-SB-793-15 | D-SB-794-11 | D-SB-794-13 | D-SB-794-15 | D-SB-795-11 |
| SAMPLE DATE | | | | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | | | | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 0.16 U | 0.15 U | 0.16 U | 0.16 U | 0.16 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.15 U | 0.17 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 1.3 U | 1.2 U | 1.3 U | 2 J | 1.3 U | 1.3 U | 1.3 U | 1.2 U | 1.2 U | 1.2 U | 1.4 U |
| ACETONE | 7000000 | 6100000 | N | 11 B | 130 B | 38 B | 170 B | 5.8 U | 5.7 U | 5.6 U | 5.5 U | 5.5 U | 8.1 B | 16 B |
| BENZENE | 12000 | 1100 | C | 0.21 U | 0.2 U | 0.21 U | 0.22 U | 0.21 U | 0.21 U | 0.21 U | 0.2 U | 0.2 U | 0.2 U | 0.23 U |
| CHLOROMETHANE | NC | 12000 | N | 0.37 U | 0.36 U | 0.37 U | 0.38 U | 0.38 U | 0.37 U | 0.37 U | 0.36 U | 0.36 U | 0.36 U | 0.42 U |
| ETHYLBENZENE | 780000 | 5400 | C | 0.24 U | 0.23 U | 0.24 U | 0.24 U | 0.24 U | 0.24 U | 0.23 U | 0.23 U | 0.23 U | 0.23 U | 0.26 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1 U | 1.1 U | 1.2 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.9 B | 1.1 B | 0.77 B | 1.9 B | 0.62 U | 0.61 U | 0.6 U | 0.58 U | 0.59 U | 0.59 U | 1.2 B |
| NAPHTHALENE | 160000 | 3600 | C | 0.83 B | 0.8 B | 0.79 B | 0.87 B | 0.18 U | 0.17 U | 0.17 U | 0.17 U | 0.75 B | 0.77 B | 0.88 B |
| O-XYLENE | 1600000 [4] | 380000 | N | 0.32 U | 0.3 U | 0.32 U | 0.33 U | 0.32 U | 0.32 U | 0.31 U | 0.3 U | 0.31 U | 0.31 U | 0.36 U |
| STYRENE | 1600000 | 630000 | N | 0.14 U | 0.13 U | 0.14 U | 0.14 U | 0.14 U | 0.14 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.15 U |
| TERT-AMYL METHYL ETHER | NC | NC | | 0.34 U | 0.32 U | 0.34 U | 0.35 UJ | 0.34 UJ | 0.96 J | 0.33 UJ | 0.32 U | 0.32 UJ | 0.33 UJ | 0.38 U |
| TOLUENE | 630000 | 500000 | N | 0.25 U | 0.23 U | 0.25 U | 0.25 U | 0.25 U | 0.24 U | 0.24 U | 0.23 U | 0.24 U | 0.24 U | 0.27 U |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | 0.61 U | 0.58 U | 0.61 U | 0.63 U | 0.62 U | 0.61 U | 0.6 U | 0.58 U | 0.59 U | 0.59 U | 0.68 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 0.31 U | 0.3 U | 0.31 U | 0.32 U | 0.35 J | 0.31 U | 0.3 U | 0.3 U | 0.3 U | 0.3 U | 0.35 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 23 U | 22 U | 110 | 22 U | 23 U | 22 U | 23 U | 22 U | 27 J | 22 U | 25 J |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 12 U | 12 U | 13 U | 12 U | 12 U | 12 U | 28 J | 12 U | 12 U | 12 U | 12 U |
| PHENOL | 2300000 | 1800000 | N | 33 U | 31 U | 34 U | 31 U | 32 U | 32 U | 33 U | 32 U | 33 U | 32 U | 32 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| ANTHRACENE | 2300000 | 1700000 | N | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| BENZO(A)PYRENE | 22 | 15 | C | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.4 U | 1.3 U | 1.4 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| FLUORANTHENE | 310000 | 230000 | N | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| FLUORENE | 310000 | 230000 | N | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| NAPHTHALENE | 160000 | 3600 | C | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| PYRENE | 230000 | 170000 | N | 4.1 U | 3.8 U | 4.1 U | 3.8 U | 3.9 U | 3.9 U | 4 U | 3.9 U | 4 U | 3.9 U | 3.9 U |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.68 J | 0.14 B | 0.83 J | 0.043 B | 0.28 B | 0.17 B | 0.12 B | 0.074 B | 0.36 J | 0.17 B | 0.085 B |
| ARSENIC | 0.43 | 0.39 | C | 8.2 L | 3.3 L | 5 J | 0.65 L | 4.6 J | 2.7 J | 2.1 J | 1.5 J | 7 J | 2.3 J | 2.3 J |
| BARIUM | 1600 | 1500 | N | 14.3 | 11.5 | 10.3 | 9 | 12.7 | 12.6 | 14.8 | 15.3 | 20.9 | 14.7 | 12.2 |
| BERYLLIUM | 16 | 16 | N | 3.5 J | 2.1 J | 6.4 J | 0.99 J | 2.3 J | 1.5 J | 1.4 J | 0.78 J | 2.7 J | 1.4 J | 0.38 J |
| CADMIUM | 3.9 | 7 | N | 0.025 B | 0.019 B | 0.027 B | 0.02 B | 0.022 B | 0.024 B | 0.017 B | 0.014 B | 0.033 B | 0.02 B | 0.0093 UL |
| CHROMIUM | 12000 [8] | 12000 | N[8] | 56.1 | 26.3 | 54.8 | 12.1 | 26.5 J | 18 J | 17.8 J | 9.6 J | 26.4 J | 22.6 J | 12.4 J |
| COBALT | NC | 2.3 | N | 13.5 | 8.7 | 13.6 | 5.4 | 15 J | 11 J | 11.9 J | 6 J | 14.6 J | 10.6 J | 1.7 J |
| COPPER | 310 | 310 | N | 30.2 | 17.8 | 47.9 | 6.3 | 27.5 J | 15.8 J | 21.3 J | 6.5 J | 20.6 J | 11 J | 10.9 J |
| IRON | 5500 | 5500 | N | 87200 | 34100 | 134000 | 6810 | 33500 J | 22400 J | 15400 J | 9930 J | 41800 J | 23400 J | 9260 J |
| LEAD | 400 | 400 | | 18.4 | 6.7 | 15.9 | 2.4 | 6.8 | 6.5 | 4.9 | 4.1 | 8.1 | 3 | 4.9 |
| MANGANESE | 160 | 180 | N | 23.8 J | 20.8 J | 31.1 J | 5.8 J | 20.5 J | 10.2 J | 7.1 J | 20 J | 50.8 J | 20.6 J | 11.4 J |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.019 U | 0.017 U | 0.019 U | 0.017 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U | 0.018 U |
| MOLYBDENUM | NC | 39 | N | 1.5 | 0.54 | 1.5 | 0.11 B | 0.65 | 0.44 | 0.24 B | 0.09 B | 0.63 | 0.32 | 0.087 B |
| NICKEL | 160 | 150 | N | 27.9 | 16.1 | 37.5 | 8.5 | 28.5 J | 18.7 J | 23.3 J | 12.1 J | 35.2 J | 23.5 J | 3.9 J |
| SELENIUM | 39 | 39 | N | 1.3 L | 1 L | 0.97 L | 0.93 L | 1 L | 0.97 L | 1.3 L | 1.3 L | 4.5 L | 1.5 L | 1.4 L |
| SILVER | 39 | 39 | N | 0.02 U | 0.021 B | 0.02 B | 0.019 U | 0.024 B | 0.019 U | 0.02 U | 0.019 U | 0.026 B | 0.021 B | 0.019 U |
| THALLIUM | 0.55 | NC | | 0.1 J | 0.06 J | 0.068 J | 0.057 J | 0.093 J | 0.091 J | 0.14 | 0.094 J | 0.11 J | 0.096 J | 0.12 |
| VANADIUM | 7.8 | 39 | N[11] | 102 | 55.7 | 111 | 14.9 | 54.7 J | 35.1 J | 28.1 J | 15.5 J | 45.7 J | 31.1 J | 14.6 J |
| ZINC | 2300 | 2300 | N | 37.2 | 24.1 | 45.2 | 12.8 | 35.6 L | 24 L | 29 L | 15.4 L | 45.2 L | 26.2 L | 5.6 L |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 3500 U | 4500 J | 4800 J | 8900 J | 4000 J | 3300 U | 3400 U | 3300 UJ | 3400 UJ | 3300 UJ | 4800 J |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 57 U | 53 U | 58 U | 53 U | 55 U | 54 U | 56 U | 54 UJ | 56 UJ | 54 UJ | 55 UJ |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | 0.33 U | 0.31 U | 0.34 U | 0.31 U | 0.32 U | 0.32 U | 0.33 U | 0.36 J | 0.44 J | 0.59 J | 0.67 J |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-795 | SB-795 | SB-796 | SB-796 | SB-796 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | D-SB-795-13 | D-SB-795-15 | D-SB-796-11 | D-SB-796-13 | D-SB-796-15 |
| SAMPLE DATE | | | | | 20100909 | 20100909 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | | NC | | 0.17 U | 0.18 U | 0.14 U | 0.15 U | 0.14 U |
| 2-BUTANONE | 4700000 | | 2800000 | N | 1.4 U | 1.4 U | 1.1 U | 1.2 U | 1.2 U |
| ACETONE | 7000000 | | 6100000 | N | 6.3 U | 6.5 U | 5.1 U | 5.5 U | 5.3 U |
| BENZENE | 12000 | | 1100 | C | 0.23 U | 0.24 U | 0.19 U | 0.2 U | 0.19 U |
| CHLOROMETHANE | NC | | 12000 | N | 0.41 U | 0.42 U | 0.33 U | 0.36 U | 0.34 U |
| ETHYLBENZENE | 780000 | | 5400 | C | 0.26 U | 0.27 U | 0.21 U | 0.23 U | 0.22 U |
| M+P-XYLENES | 1600000 | [4] | 63000 | N[5] | 1.2 U | 1.2 U | 0.97 U | 1.1 U | 1 U |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | 1.1 B | 0.69 U | 0.78 B | 0.86 B | 0.96 B |
| NAPHTHALENE | 160000 | | 3600 | C | 0.86 B | 0.92 B | 0.69 B | 0.74 B | 0.7 B |
| O-XYLENE | 1600000 | [4] | 380000 | N | 0.35 U | 0.36 U | 0.28 U | 0.31 U | 0.29 U |
| STYRENE | 1600000 | | 630000 | N | 0.15 U | 0.15 U | 0.12 U | 0.13 U | 0.13 U |
| TERT-AMYL METHYL ETHER | NC | | NC | | 0.37 U | 0.38 UJ | 0.3 U | 0.32 U | 0.31 U |
| TOLUENE | 630000 | | 500000 | N | 0.27 U | 0.28 U | 0.22 U | 0.24 U | 0.23 U |
| TOTAL XYLENES | 1600000 | [4] | 63000 | N | 0.67 U | 0.69 U | 0.54 U | 0.59 U | 0.56 U |
| TRICHLOROFLUOROMETHANE | NC | | 79000 | N | 0.34 U | 0.35 U | 0.27 U | 0.3 U | 0.28 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | | 35000 | C | 23 U | 23 U | 22 U | 23 U | 22 U |
| BUTYL BENZYL PHTHALATE | NC | | 260000 | C | 12 U | 12 U | 12 U | 12 U | 11 U |
| PHENOL | 2300000 | | 1800000 | N | 33 U | 32 U | 31 U | 33 U | 31 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| ACENAPHTHENE | 470000 | | 340000 | N | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| ANTHRACENE | 2300000 | | 1700000 | N | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| BAP EQUIVALENT-POS | 22 | | 15 | C | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| BENZO(A)PYRENE | 22 | | 15 | C | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[7] | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | | NC | | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | | 15000 | C | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| FLUORANTHENE | 310000 | | 230000 | N | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| FLUORENE | 310000 | | 230000 | N | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| NAPHTHALENE | 160000 | | 3600 | C | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| PHENANTHRENE | 2300000 | | 170000 | N[7] | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| PYRENE | 230000 | | 170000 | N | 4 U | 4 U | 3.8 U | 4 U | 3.8 U |
| TOTAL PAHS | NC | | NC | | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | 0.42 J | 0.24 B | 0.065 J | 0.029 U | 0.2 J |
| ARSENIC | 0.43 | | 0.39 | C | **4.2 J** | **3.2 J** | **1.3** | **0.43 J** | **7.3** |
| BARIUM | 1600 | | 1500 | N | 15 | 14 | 10.5 | 6.7 | 9.7 |
| BERYLLIUM | 16 | | 16 | N | 2.4 J | 1.7 J | 0.91 | 0.48 | 0.71 |
| CADMIUM | 3.9 | | 7 | N | 0.02 B | 0.015 B | 0.023 B | 0.025 B | 0.02 B |
| CHROMIUM | 12000 | [8] | 12000 | N[8] | 32.7 J | 25.5 J | 17.3 | 3.7 | 3.5 |
| COBALT | NC | | 2.3 | N | **11.8 J** | **10 J** | **3.9** | **2.4** | **3.6** |
| COPPER | 310 | | 310 | N | 24.2 J | 17.7 J | 9.4 | 6.2 | 23.2 |
| IRON | 5500 | | 5500 | N | **39400 J** | **28500 J** | **11100** | 1050 | 1610 |
| LEAD | 400 | | 400 | | 7.5 | 4.4 | 2.8 | 1.4 | 1.8 |
| MANGANESE | 160 | | 180 | N | 52.1 J | 41.9 J | 5 | 2.9 | 3.6 |
| MERCURY | 2.3 | [9] | 2.3 | N[10] | 0.018 U | 0.018 U | 0.017 U | 0.018 U | 0.017 U |
| MOLYBDENUM | NC | | 39 | N | 0.58 | 0.42 | 0.16 J | 0.077 U | 0.078 J |
| NICKEL | 160 | | 150 | N | 30 J | 24.5 J | 8.5 | 4.1 | 5.7 |
| SELENIUM | 39 | | 39 | N | 1.5 L | 2.2 L | 1 K | 0.72 K | 0.94 K |
| SILVER | 39 | | 39 | N | 0.02 U | 0.019 U | 0.018 U | 0.02 U | 0.029 J |
| THALLIUM | 0.55 | | NC | | 0.14 | 0.1 J | 0.052 B | 0.041 B | 0.08 B |
| VANADIUM | 7.8 | | 39 | N[11] | **43.2 J** | **36.4 J** | **26.5** | 4.2 | 2.6 |
| ZINC | 2300 | | 2300 | N | 38 L | 30.6 L | 11 | 7.3 | 12.4 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | 8300 J | 3400 U | 5000 J | 3400 J | 3200 U |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | 56 UJ | 55 UJ | 53 U | 56 U | 53 U |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | | 0.29 | C | **0.62 J** | 0.32 U | **0.56 J** | 0.33 U | 0.31 U |
| TOTAL ORGANIC CARBON | NC | | NC | | NA | NA | NA | NA | NA |

**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - The value is for xylenes.
5 - The value is for xylene, mixture.
6 - The value for acenaphthene is used as a surrogate for acenaphthylene.
7 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
8 - The value is for trivalent chromium.
9 - The value is for mercury (inorganic/mercuric dichloride).
10 - The value is for mercuric chloride.
11 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-001 | SB-002 | SB-003 | SB-004 | SB-004 | SB-035 | SB-036 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-1A-SS | SB-2A-01 | SB-3A-SS | SB-04B-01 | SB-4A-SS | SB-35-SS | SB-36-SS |
| SAMPLE DATE | 20040921 | 20040920 | 20040920 | 20050512 | 20040921 | 20040917 | 20040917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SS | SS |
| TOP DEPTH | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| BOTTOM DEPTH | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,1,1-TRICHLOROETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,1,2-TRICHLOROETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,1-DICHLOROETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,1-DICHLOROETHENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,1-DICHLOROPROPENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,2,3-TRICHLOROBENZENE | 6 U | 6 U | 5 U | NA | 45 | 6 U | 6 U |
| 1,2,3-TRICHLOROPROPANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 U | 6 U | 5 U | NA | 140 | 6 U | 6 U |
| 1,2,4-TRIMETHYLBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,2-DIBROMOETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,2-DICHLOROBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,2-DICHLOROETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,2-DICHLOROPROPANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,3,5-TRIMETHYLBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,3-DICHLOROBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,3-DICHLOROPROPANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 2-BUTANONE | 56 U | 59 U | 53 U | NA | 60 U | 56 U | 58 U |
| 2-CHLOROETHYL VINYL ETHER | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 2-CHLOROTOLUENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 2-HEXANONE | 56 U | 59 U | 53 U | NA | 60 U | 56 U | 58 U |
| 4-CHLOROTOLUENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 4-ISOPROPYLTOLUENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| 4-METHYL-2-PENTANONE | 56 U | 59 U | 53 U | NA | 60 U | 56 U | 58 U |
| ACETONE | 56 U | 59 U | 53 U | NA | 60 U | 56 U | 58 U |
| BENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| BROMOBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| BROMOCHLOROMETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| BROMODICHLOROMETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| BROMOFORM | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| BROMOMETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| CARBON DISULFIDE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| CARBON TETRACHLORIDE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| CHLOROBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| CHLORODIBROMOMETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| CHLOROETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| CHLOROFORM | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| CHLOROMETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| CIS-1,2-DICHLOROETHENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| CIS-1,3-DICHLOROPROPENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| DIBROMOMETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| DICHLORODIFLUOROMETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| M+P-XYLENES | 11 U | 12 U | 11 U | NA | 12 U | 11 U | 12 U |
| METHYL TERT-BUTYL ETHER | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| METHYLENE CHLORIDE | 6 U | 9 J | 8 J | NA | 8 J | 8 J | 8 J |
| NAPHTHALENE | 6 U | 6 U | 5 U | NA | 58 | 6 U | 6 U |
| N-BUTYLBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| N-PROPYLBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| O-XYLENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| SEC-BUTYLBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| STYRENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| TOLUENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| TRANS-1,3-DICHLOROPROPENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| TRICHLOROETHENE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| TRICHLOROFLUOROMETHANE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| VINYL ACETATE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-001 | SB-002 | SB-003 | SB-004 | SB-004 | SB-035 | SB-036 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-1A-SS | SB-2A-01 | SB-3A-SS | SB-04B-01 | SB-4A-SS | SB-35-SS | SB-36-SS |
| SAMPLE DATE | 20040921 | 20040920 | 20040920 | 20050512 | 20040921 | 20040917 | 20040917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SS | SS |
| TOP DEPTH | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| BOTTOM DEPTH | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| VINYL CHLORIDE | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 2,4,5-TRICHLOROPHENOL | 940 U | 980 U | 9100 U | NA | 990 U | 950 U | 990 U |
| 2,4,6-TRICHLOROPHENOL | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 2,4-DICHLOROPHENOL | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 2,4-DIMETHYLPHENOL | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 2,4-DINITROPHENOL | 940 U | 980 U | 9100 U | NA | 990 U | 950 U | 990 U |
| 2,4-DINITROTOLUENE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 2,6-DINITROTOLUENE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 2-CHLORONAPHTHALENE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 2-CHLOROPHENOL | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 2-METHYLPHENOL | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 2-NITROANILINE | 940 U | 980 U | 9100 U | NA | 990 U | 950 U | 990 U |
| 2-NITROPHENOL | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 3&4-METHYLPHENOL | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 3,3'-DICHLOROBENZIDINE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 3-NITROANILINE | 940 U | 980 U | 9100 U | NA | 990 U | 950 U | 990 U |
| 4,6-DINITRO-2-METHYLPHENOL | 870 U | 900 U | 8300 U | NA | 910 U | 870 U | 910 U |
| 4-BROMOPHENYL PHENYL ETHER | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 4-CHLORO-3-METHYLPHENOL | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 4-CHLOROANILINE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 4-CHLOROPHENYL PHENYL ETHER | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 940 U | 980 U | 9100 U | NA | 990 U | 950 U | 990 U |
| 4-NITROPHENOL | 940 U | 980 U | 9100 U | NA | 990 U | 950 U | 990 U |
| ACETOPHENONE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| BIS(2-CHLOROETHYL)ETHER | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| BUTYL BENZYL PHTHALATE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| CAPROLACTAM | 140 J | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| CARBAZOLE | 380 U | 390 U | 3600 U | NA | 89 J | 380 U | 390 U |
| DIBENZOFURAN | 380 U | 390 U | 3600 U | NA | 250 J | 380 U | 390 U |
| DIETHYL PHTHALATE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| DIMETHYL PHTHALATE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| DI-N-BUTYL PHTHALATE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| DI-N-OCTYL PHTHALATE | 380 U | 390 U | 3600 UJ | NA | 390 U | 380 U | 390 U |
| HEXACHLOROBENZENE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| HEXACHLOROBUTADIENE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| HEXACHLOROCYCLOPENTADIENE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| HEXACHLOROETHANE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| ISOPHORONE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| NITROBENZENE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| N-NITROSODIPHENYLAMINE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| PENTACHLOROPHENOL | 940 U | 980 U | 9100 U | NA | 990 U | 950 U | 990 U |
| PHENOL | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 380 U | 390 U | 3600 U | NA | 41 J | 380 U | 390 U |
| ACENAPHTHENE | 380 U | 390 U | 3600 U | NA | 180 J | 380 U | 390 U |
| ACENAPHTHYLENE | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U |
| ANTHRACENE | 380 U | 390 U | 3600 U | NA | 220 J | 380 U | 390 U |
| BAP EQUIVALENT-HALFND | 380 U | 390 U | 3600 U | NA | 365 | 380 U | 390 U |
| BAP EQUIVALENT-POS | 380 U | 390 U | 3600 U | NA | 170 | 380 U | 390 U |
| BENZO(A)ANTHRACENE | 380 U | 390 U | 3600 U | NA | 240 J | 380 U | 390 U |
| BENZO(A)PYRENE | 380 U | 390 U | 3600 UJ | NA | 110 J | 380 U | 390 U |
| BENZO(B)FLUORANTHENE | 380 U | 390 U | 3600 UJ | NA | 220 J | 380 U | 390 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 380 U | 390 U | 3600 UJ | NA | 170 J | 380 U | 390 U |
| BENZO(K)FLUORANTHENE | 380 U | 390 U | 3600 UJ | NA | 200 J | 380 U | 390 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-001 | SB-002 | SB-003 | SB-004 | SB-004 | SB-035 | SB-036 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-1A-SS | SB-2A-01 | SB-3A-SS | SB-04B-01 | SB-4A-SS | SB-35-SS | SB-36-SS |
| SAMPLE DATE | 20040921 | 20040920 | 20040920 | 20050512 | 20040921 | 20040917 | 20040917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SS | SS |
| TOP DEPTH | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| BOTTOM DEPTH | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-001 | SB-002 | SB-003 | SB-004 | SB-004 | SB-035 | SB-036 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-1A-SS | SB-2A-01 | SB-3A-SS | SB-04B-01 | SB-4A-SS | SB-35-SS | SB-36-SS |
| SAMPLE DATE | 20040921 | 20040920 | 20040920 | 20050512 | 20040921 | 20040917 | 20040917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SS | SS |
| TOP DEPTH | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| BOTTOM DEPTH | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 380 U | 390 U | 3600 U | NA | 370 J | 380 U | 390 U |
| DIBENZO(A,H)ANTHRACENE | 380 U | 390 U | 3600 UJ | NA | 390 U | 380 U | 390 U |
| FLUORANTHENE | 380 U | 390 U | 440 J | NA | 1200 | 380 U | 390 U |
| FLUORENE | 380 U | 390 U | 3600 U | NA | 150 J | 380 U | 390 U |
| INDENO(1,2,3-CD)PYRENE | 380 U | 390 U | 3600 UJ | NA | 120 J | 380 U | 390 U |
| NAPHTHALENE | 380 U | 390 U | 3600 U | NA | 50 J | 380 U | 390 U |
| PHENANTHRENE | 380 U | 390 U | 3600 U | NA | 2200 | 380 U | 390 U |
| PYRENE | 380 U | 390 U | 440 J | NA | 1000 | 380 U | 390 U |
| TOTAL PAHS | 0 U | 0 U | 880 | NA | 6471 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 280 U | 290 U | 270 U | 38 U | 58000 U | 280 U | 290 U |
| AROCLOR-1221 | 280 U | 290 U | 270 U | 38 U | 58000 U | 280 U | 290 U |
| AROCLOR-1232 | 280 U | 290 U | 270 U | 38 U | 58000 U | 280 U | 290 U |
| AROCLOR-1242 | 280 U | 290 U | 270 U | 38 U | 58000 U | 280 U | 290 U |
| AROCLOR-1248 | 280 U | 290 U | 270 U | 38 U | 58000 U | 280 U | 290 U |
| AROCLOR-1254 | 280 U | 290 U | 270 U | 38 U | 58000 U | 280 U | 290 U |
| AROCLOR-1260 | 280 U | 290 U | 350 | 38 U | 180000 | 280 U | 290 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 350 | 0 U | 180000 | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 2.8 UL | 2.9 U | 2.4 U | NA | 2.7 UL | 2.5 U | 2.9 U |
| ARSENIC | 1.1 | 0.98 | 1.5 | NA | 1.5 | 0.92 | 1.2 |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 2.8 U | 2.9 U | 2.4 U | NA | 2.7 U | 2.5 U | 2.9 U |
| CADMIUM | 2.8 U | 2.9 U | 2.4 U | NA | 2.7 U | 2.5 U | 2.9 U |
| CHROMIUM | 19 J | 10 K | 15 | NA | 18 J | 6.6 K | 15 |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 8.2 | 15 | 13 | NA | 11 | 4.4 L | 14 |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 3 | 2.9 UJ | 82 J | NA | 8.9 | 3.9 J | 4.7 J |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.11 U | 0.11 U | 0.098 U | NA | 0.12 | 0.1 U | 0.12 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 6.5 | 7.5 | 20 | NA | 14 | 4.3 K | 10 |
| SELENIUM | 2.8 U | 2.9 U | 2.4 U | NA | 2.7 U | 2.5 U | 2.9 U |
| SILVER | 2.8 UR | 2.9 UL | 2.4 UL | NA | 2.7 UR | 2.5 UL | 2.9 UL |
| THALLIUM | 2.2 U | 2.3 UL | 2 UL | NA | 2.2 U | 2 UL | 2.3 UL |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 28 UL | 29 UL | 110 L | NA | 27 UL | 25 UL | 29 UL |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | 11000 U | 12000 U | 11000 U | NA | 330000 | 11000 U | 13000 |
| GASOLINE RANGE ORGANICS | 110 U | 120 U | 110 U | NA | 830 | 120 U | 120 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-001 | SB-002 | SB-003 | SB-004 | SB-004 | SB-035 | SB-036 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-1A-SS | SB-2A-01 | SB-3A-SS | SB-04B-01 | SB-4A-SS | SB-35-SS | SB-36-SS |
| SAMPLE DATE | 20040921 | 20040920 | 20040920 | 20050512 | 20040921 | 20040917 | 20040917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SS | SS |
| TOP DEPTH | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| BOTTOM DEPTH | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-041 | SB-042 | SB-169 | SB-232 | SB-232 | SB-233 | SB-233 | SB-234 | SB-234 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-41S-SS | SB-42S-SS | SB-169-SS | SB-232-01 | SB-232-SS | SB-233-01 | SB-233-SS | SB-234-01 | SB-234-SS |
| SAMPLE DATE | 20041105 | 20041105 | 20041105 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-041 | SB-042 | SB-169 | SB-232 | SB-232 | SB-233 | SB-233 | SB-234 | SB-234 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-41S-SS | SB-42S-SS | SB-169-SS | SB-232-01 | SB-232-SS | SB-233-01 | SB-233-SS | SB-234-01 | SB-234-SS |
| SAMPLE DATE | 20041105 | 20041105 | 20041105 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-041 | SB-042 | SB-169 | SB-232 | SB-232 | SB-233 | SB-233 | SB-234 | SB-234 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-41S-SS | SB-42S-SS | SB-169-SS | SB-232-01 | SB-232-SS | SB-233-01 | SB-233-SS | SB-234-01 | SB-234-SS |
| SAMPLE DATE | 20041105 | 20041105 | 20041105 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-041 | SB-042 | SB-169 | SB-232 | SB-232 | SB-233 | SB-233 | SB-234 | SB-234 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-41S-SS | SB-42S-SS | SB-169-SS | SB-232-01 | SB-232-SS | SB-233-01 | SB-233-SS | SB-234-01 | SB-234-SS |
| SAMPLE DATE | 20041105 | 20041105 | 20041105 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | 39 U | 37 U | 39 U | 37 U | 39 U | 37 U |
| AROCLOR-1221 | NA | NA | NA | 39 U | 37 U | 39 U | 37 U | 39 U | 37 U |
| AROCLOR-1232 | NA | NA | NA | 39 U | 37 U | 39 U | 37 U | 39 U | 37 U |
| AROCLOR-1242 | NA | NA | NA | 39 U | 37 U | 39 U | 32 J | 39 U | 37 U |
| AROCLOR-1248 | NA | NA | NA | 39 U | 37 U | 39 U | 37 U | 39 U | 37 U |
| AROCLOR-1254 | NA | NA | NA | 39 U | 37 U | 39 U | 37 U | 39 U | 37 U |
| AROCLOR-1260 | NA | NA | NA | 94 | 140 | 39 U | 80 | 8.5 J | 1070 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | 94 | 140 | 0 U | 112 | 8.5 | 1070 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-041 | SB-042 | SB-169 | SB-232 | SB-232 | SB-233 | SB-233 | SB-234 | SB-234 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-41S-SS | SB-42S-SS | SB-169-SS | SB-232-01 | SB-232-SS | SB-233-01 | SB-233-SS | SB-234-01 | SB-234-SS |
| SAMPLE DATE | 20041105 | 20041105 | 20041105 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | 0.03 U | 1.02 | 0.15 U | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | -0.1 U | 0.043 U | -0.05 U | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | -0.41 U | 0 U | -0.11 U | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | 0.01 U | 0.12 U | -0.13 U | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | -0.01 U | 0.07 U | 0.13 U | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | 0.39 U | 0.17 U | -0.9 U | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | 0.1 U | 2.3 | 0.1 U | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | 0.1 UJ | 0.67 J | 0.38 UJ | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | 0.026 U | -0.014 U | 0.05 U | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | -0.22 U | -0.55 U | 0.07 U | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | 0.01 U | -0.28 U | 0.01 U | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | 0.145 | -0.048 U | 0.08 U | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | -0.5 U | 0.1 U | 0.1 U | NA | NA | NA | NA | NA | NA |
| COBALT-56 | 0.08 U | 0.19 U | 0.05 U | NA | NA | NA | NA | NA | NA |
| COBALT-57 | 0.008 U | -0.055 U | 0 U | NA | NA | NA | NA | NA | NA |
| COBALT-58 | -0.14 U | 0.03 U | 0.22 UJ | NA | NA | NA | NA | NA | NA |
| COBALT-60 | 0.065 U | 0.018 U | 0 U | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | -0.02 U | 0.01 U | -0.56 U | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | -0.13 U | 0.08 U | 0.38 U | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | 0.24 U | 0 U | 0.1 U | NA | NA | NA | NA | NA | NA |
| IODINE-131 | 0.4 U | -0.23 U | 0.1 U | NA | NA | NA | NA | NA | NA |
| IRON-59 | -0.16 U | -0.16 U | 0.47 UJ | NA | NA | NA | NA | NA | NA |
| LEAD-212 | 0.3 | 1.2 | 0.3 UJ | NA | NA | NA | NA | NA | NA |
| LEAD-214 | 0.25 UJ | 1.09 J | 0.42 J | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | -0.022 U | 0.037 U | 0.07 U | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | -0.027 U | 0.07 U | -0.14 U | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | 0.01 U | -0.03 U | -0.07 U | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | 4.4 | 9.2 | 3.4 | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | -2 U | -7 U | 9 U | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | 0.32 UJ | 1.22 J | 0.51 UJ | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | 0.38 U | -0.46 U | 0.5 U | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | -0.006 U | -0.07 U | 0.14 U | NA | NA | NA | NA | NA | NA |
| SILVER-110 | -0.101 U | 0.005 U | -0.01 U | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | -0.038 U | 0.018 U | 0 U | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | 0.075 U | 0.39 | 0.1 U | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | -0.44 U | -0.59 U | 0.22 U | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | -0.1 U | 0.7 U | -0.6 U | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | -0.3 U | -0.45 U | -0.22 U | NA | NA | NA | NA | NA | NA |
| ZINC-65 | -0.16 U | 0.4 UJ | 0.06 U | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-235 | SB-235 | SB-345 | SB-346 | SB-347 | SB-348 | SB-349 | SB-350 | SB-351 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-235-01 | SB-235-SS | SB-345-0001 | SB-346-0001 | SB-347-0001 | SB-348-0001 | SB-349-0001 | SB-350-0001 | SB-351-0001 |
| SAMPLE DATE | 20050512 | 20050512 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-235 | SB-235 | SB-345 | SB-346 | SB-347 | SB-348 | SB-349 | SB-350 | SB-351 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-235-01 | SB-235-SS | SB-345-0001 | SB-346-0001 | SB-347-0001 | SB-348-0001 | SB-349-0001 | SB-350-0001 | SB-351-0001 |
| SAMPLE DATE | 20050512 | 20050512 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-235 | SB-235 | SB-345 | SB-346 | SB-347 | SB-348 | SB-349 | SB-350 | SB-351 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-235-01 | SB-235-SS | SB-345-0001 | SB-346-0001 | SB-347-0001 | SB-348-0001 | SB-349-0001 | SB-350-0001 | SB-351-0001 |
| SAMPLE DATE | 20050512 | 20050512 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-235 | SB-235 | SB-345 | SB-346 | SB-347 | SB-348 | SB-349 | SB-350 | SB-351 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-235-01 | SB-235-SS | SB-345-0001 | SB-346-0001 | SB-347-0001 | SB-348-0001 | SB-349-0001 | SB-350-0001 | SB-351-0001 |
| SAMPLE DATE | 20050512 | 20050512 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 37 U | 37 U | 35 U | 390 U | 2100 U | 4200 U | 4400 U | 8200 U | 4100 U |
| AROCLOR-1221 | 37 U | 37 U | 35 U | 390 U | 2100 U | 4200 U | 4400 U | 8200 U | 4100 U |
| AROCLOR-1232 | 37 U | 37 U | 35 U | 390 U | 2100 U | 4200 U | 4400 U | 8200 U | 4100 U |
| AROCLOR-1242 | 37 U | 58 | 35 U | 390 U | 2100 U | 4200 U | 4400 U | 8200 U | 4100 U |
| AROCLOR-1248 | 37 U | 37 U | 35 U | 390 U | 2100 U | 4200 U | 4400 U | 8200 U | 4100 U |
| AROCLOR-1254 | 37 U | 37 U | 35 U | 390 U | 2100 U | 4200 U | 4400 U | 8200 U | 4100 U |
| AROCLOR-1260 | 37 U | 108 | 260 | 1700 | 7100 | 34000 | 24000 | 55000 | 21000 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 166 | 260 | 1700 | 7100 | 34000 | 24000 | 55000 | 21000 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | 94.6 | 85.3 | 79.1 | 78.1 | 75.6 | 80.1 | 81.2 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-235 | SB-235 | SB-345 | SB-346 | SB-347 | SB-348 | SB-349 | SB-350 | SB-351 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-235-01 | SB-235-SS | SB-345-0001 | SB-346-0001 | SB-347-0001 | SB-348-0001 | SB-349-0001 | SB-350-0001 | SB-351-0001 |
| SAMPLE DATE | 20050512 | 20050512 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-352 | SB-353 | SB-354 | SB-355 | SB-356 | SB-357 | SB-358 | SB-359 | SB-360 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-352-0001 | SB-353-0001 | SB-354-0001 | SB-355-0001 | SB-356-0001 | SB-357-0001 | SB-358-0001 | SB-359-0001 | SB-360-0001 |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-352 | SB-353 | SB-354 | SB-355 | SB-356 | SB-357 | SB-358 | SB-359 | SB-360 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-352-0001 | SB-353-0001 | SB-354-0001 | SB-355-0001 | SB-356-0001 | SB-357-0001 | SB-358-0001 | SB-359-0001 | SB-360-0001 |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-352 | SB-353 | SB-354 | SB-355 | SB-356 | SB-357 | SB-358 | SB-359 | SB-360 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-352-0001 | SB-353-0001 | SB-354-0001 | SB-355-0001 | SB-356-0001 | SB-357-0001 | SB-358-0001 | SB-359-0001 | SB-360-0001 |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-352 | SB-353 | SB-354 | SB-355 | SB-356 | SB-357 | SB-358 | SB-359 | SB-360 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-352-0001 | SB-353-0001 | SB-354-0001 | SB-355-0001 | SB-356-0001 | SB-357-0001 | SB-358-0001 | SB-359-0001 | SB-360-0001 |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 2800 U | 740000 U | 83000 U | 21000 U | 4500 U | 2100 U | 3900 U | 750 U | 3900 U |
| AROCLOR-1221 | 2800 U | 740000 U | 83000 U | 21000 U | 4500 U | 2100 U | 3900 U | 750 U | 3900 U |
| AROCLOR-1232 | 2800 U | 740000 U | 83000 U | 21000 U | 4500 U | 2100 U | 3900 U | 750 U | 3900 U |
| AROCLOR-1242 | 2800 U | 740000 U | 83000 U | 21000 U | 4500 U | 2100 U | 3900 U | 750 U | 3900 U |
| AROCLOR-1248 | 2800 U | 740000 U | 83000 U | 21000 U | 4500 U | 2100 U | 3900 U | 750 U | 3900 U |
| AROCLOR-1254 | 2800 U | 740000 U | 83000 U | 21000 U | 4500 U | 2100 U | 3900 U | 750 U | 3900 U |
| AROCLOR-1260 | 19000 | 1800000 | 400000 | 96000 | 25000 | 12000 | 27000 | 3700 | 27000 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 19000 | 1800000 | 400000 | 96000 | 25000 | 12000 | 27000 | 3700 | 27000 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 58.9 | 89.2 | 79.1 | 80.3 | 73.6 | 77.5 | 84.2 | 88.5 | 84.4 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-352 | SB-353 | SB-354 | SB-355 | SB-356 | SB-357 | SB-358 | SB-359 | SB-360 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-352-0001 | SB-353-0001 | SB-354-0001 | SB-355-0001 | SB-356-0001 | SB-357-0001 | SB-358-0001 | SB-359-0001 | SB-360-0001 |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-361 | SB-362 | SB-363 | SB-364 | SB-500 | SB-501 | SB-502 | SB-503 | SB-503 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-361-0001 | SB-362-0001 | SB-363-0001 | SB-364-0001 | SB-500-0001 | SB-501-0001 | SB-502-0001 | SB-503-0001 | SB-503-0001-AVG |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 0.65 B | 5.8 UJ | 6.15 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 0.2 J | 0.35 J | 0.35 J |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | 0.76 B | 5.8 U | 3.1 B | 1 B | 3.75 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | 0.89 B | 0.94 B | 1 B | 1.9 B | 4.2 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | 11 U | 12 U | 12 U | 12 UJ | 12.5 U |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| 2-BUTANONE | NA | NA | NA | NA | 11 U | 12 U | 12 U | 12 U | 12.5 U |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | 11 U | 12 U | 12 U | 12 U | 12.5 U |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| 2-HEXANONE | NA | NA | NA | NA | 11 U | 12 U | 12 U | 12 U | 12.5 U |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | 11 U | 12 U | 12 U | 12 U | 12.5 U |
| ACETONE | NA | NA | NA | NA | 11 U | 12 U | 12 U | 12 U | 12.5 U |
| BENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| BROMOBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| BROMOFORM | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| BROMOMETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| CARBON DISULFIDE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| CHLOROBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| CHLOROETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| CHLOROFORM | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| CHLOROMETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| DIBROMOMETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | 11 U | 12 U | 12 U | 12 U | 12.5 U |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| ETHYLBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| ISOPROPYLBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| M+P-XYLENES | NA | NA | NA | NA | 11 U | 12 U | 12 U | 12 U | 12.5 U |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | 11 U | 12 U | 12 U | 12 U | 12.5 U |
| METHYLENE CHLORIDE | NA | NA | NA | NA | 2.5 B | 2.8 B | 2.4 B | 3.6 B | 3.4 U |
| NAPHTHALENE | NA | NA | NA | NA | 3.2 B | 5.8 U | 0.87 B | 11 B | 8.75 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| N-PROPYLBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| O-XYLENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 0.43 J | 0.43 J |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| STYRENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 UJ | 6.15 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | 110 UR | 120 UR | 120 UR | 120 UR | 125 R |
| TETRACHLOROETHENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| TOLUENE | NA | NA | NA | NA | 5.7 U | 0.37 J | 5.9 U | 0.46 J | 0.46 J |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | 1.2 J | 12 U | 12 U | 1.1 J | 1.1 J |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| TRICHLOROETHENE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| VINYL ACETATE | NA | NA | NA | NA | 11 U | 12 U | 12 U | 12 U | 12.5 U |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-361 | SB-362 | SB-363 | SB-364 | SB-500 | SB-501 | SB-502 | SB-503 | SB-503 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-361-0001 | SB-362-0001 | SB-363-0001 | SB-364-0001 | SB-500-0001 | SB-501-0001 | SB-502-0001 | SB-503-0001 | SB-503-0001-AVG |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | 5.7 U | 5.8 U | 5.9 U | 5.8 U | 6.15 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | 1100 U | 15000 U | 3900 U | 12000 U | 6425 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 2-NITROANILINE | NA | NA | NA | NA | 1100 U | 15000 U | 3900 U | 12000 U | 6425 U |
| 2-NITROPHENOL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 3-NITROANILINE | NA | NA | NA | NA | 1100 U | 15000 U | 3900 U | 12000 U | 6425 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 4-NITROANILINE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| 4-NITROPHENOL | NA | NA | NA | NA | 1100 U | 15000 U | 3900 U | 12000 U | 6425 U |
| ACETOPHENONE | NA | NA | NA | NA | 110 U | 1500 U | 390 U | 1200 U | 643 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 37 J |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| CAPROLACTAM | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| CARBAZOLE | NA | NA | NA | NA | 27 J | 7600 U | 2000 U | 430 J | 256 |
| DIBENZOFURAN | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 34 J |
| DIETHYL PHTHALATE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| HEXACHLOROBENZENE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| ISOPHORONE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| NITROBENZENE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| PHENOL | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 5800 U | 3115 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 190 J | 105 |
| ACENAPHTHENE | NA | NA | NA | NA | 25 J | 7600 U | 2000 U | 470 J | 277 |
| ACENAPHTHYLENE | NA | NA | NA | NA | 13 J | 7600 U | 84 J | 330 J | 183 |
| ANTHRACENE | NA | NA | NA | NA | 78 J | 7600 U | 360 J | 1500 J | 835 |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | 542 | 4477 | 5574 | 10999 | 5944 |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | 542 | 259 | 5574 | 10999 | 5944 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | 280 J | 240 J | 4000 | 7300 | 3955 |
| BENZO(A)PYRENE | NA | NA | NA | NA | 340 J | 190 J | 3900 | 7600 | 4100 |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | 520 J | 450 J | 4500 | 8100 | 4450 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | 360 J | 7600 U | 2100 | 5000 J | 2685 |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | 210 J | 7600 U | 2100 | 3100 J | 1705 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-361 | SB-362 | SB-363 | SB-364 | SB-500 | SB-501 | SB-502 | SB-503 | SB-503 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-361-0001 | SB-362-0001 | SB-363-0001 | SB-364-0001 | SB-500-0001 | SB-501-0001 | SB-502-0001 | SB-503-0001 | SB-503-0001-AVG |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-361 | SB-362 | SB-363 | SB-364 | SB-500 | SB-501 | SB-502 | SB-503 | SB-503 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-361-0001 | SB-362-0001 | SB-363-0001 | SB-364-0001 | SB-500-0001 | SB-501-0001 | SB-502-0001 | SB-503-0001 | SB-503-0001-AVG |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | 300 J | 220 J | 3400 | 7700 | 4160 |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | 90 J | 7600 U | 590 J | 1400 J | 755 |
| FLUORANTHENE | NA | NA | NA | NA | 570 | 450 J | 6100 | 14000 | 7650 |
| FLUORENE | NA | NA | NA | NA | 19 J | 7600 U | 2000 U | 580 J | 327.5 |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | 300 J | 7600 U | 2100 | 4200 J | 2275 |
| NAPHTHALENE | NA | NA | NA | NA | 560 U | 7600 U | 2000 U | 180 J | 102 |
| PHENANTHRENE | NA | NA | NA | NA | 220 J | 200 J | 650 J | 5600 J | 3135 |
| PYRENE | NA | NA | NA | NA | 460 J | 370 J | 5400 | 16000 | 8500 |
| TOTAL PAHS | NA | NA | NA | NA | 3785 | 2120 | 35284 | 83250 | 45199.5 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 38000 U | 800 U | 4400 U | 2100 U | 37 U | 7600 U | 390 U | 390 U | 216.5 U |
| AROCLOR-1221 | 38000 U | 800 U | 4400 U | 2100 U | 37 U | 7600 U | 390 U | 390 U | 216.5 U |
| AROCLOR-1232 | 38000 U | 800 U | 4400 U | 2100 U | 37 U | 7600 U | 390 U | 390 U | 216.5 U |
| AROCLOR-1242 | 38000 U | 800 U | 4400 U | 2100 U | 37 U | 7600 U | 390 U | 390 U | 216.5 U |
| AROCLOR-1248 | 38000 U | 800 U | 4400 U | 2100 U | 37 U | 7600 U | 390 U | 390 U | 216.5 U |
| AROCLOR-1254 | 38000 U | 800 U | 4400 U | 2100 U | 37 U | 7600 U | 390 U | 390 U | 216.5 U |
| AROCLOR-1260 | 140000 | 5000 | 24000 | 12000 | 47 | 58000 | 1200 | 1700 | 910 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 140000 | 5000 | 24000 | 12000 | 47 | 58000 | 1200 | 1700 | 910 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | 0.16 B | 0.55 J | 0.12 B | 2.2 J | 1.345 |
| ARSENIC | NA | NA | NA | NA | 1.3 L | 3.4 L | 1.8 L | 2.6 L | 2.45 |
| BARIUM | NA | NA | NA | NA | 25.7 | 34.5 | 34 | 121 J | 82.1 |
| BERYLLIUM | NA | NA | NA | NA | 0.36 | 0.76 | 0.29 | 0.88 J | 0.6 |
| CADMIUM | NA | NA | NA | NA | 0.2 | 0.2 | 0.19 | 1.5 J | 1.16 |
| CHROMIUM | NA | NA | NA | NA | 9.9 K | 13.8 K | 8.4 K | 33.4 J | 25.7 |
| COBALT | NA | NA | NA | NA | 2.7 J | 4.8 J | 2.2 J | 5 J | 4.05 |
| COPPER | NA | NA | NA | NA | 7 J | 7.9 J | 5.6 J | 12.7 J | 12.1 |
| IRON | NA | NA | NA | NA | 13200 | 13800 | 5610 | 13300 | 10655 |
| LEAD | NA | NA | NA | NA | 15.9 J | 12.3 J | 20.4 J | 68.2 J | 53.1 |
| MANGANESE | NA | NA | NA | NA | 48.8 L | 53.2 L | 81.6 L | 1370 J | 787.5 |
| MERCURY | NA | NA | NA | NA | 0.019 U | 0.061 | 0.02 U | 0.019 U | 0.12975 |
| MOLYBDENUM | NA | NA | NA | NA | 0.34 B | 0.42 B | 0.22 B | 0.59 J | 0.3775 |
| NICKEL | NA | NA | NA | NA | 4.8 | 6.7 | 5.8 | 11 | 8.8 |
| SELENIUM | NA | NA | NA | NA | 0.29 L | 0.26 L | 0.19 UL | 0.25 L | 0.245 |
| SILVER | NA | NA | NA | NA | 0.04 | 0.081 | 0.056 | 0.23 | 0.235 |
| THALLIUM | NA | NA | NA | NA | 0.063 B | 0.1 | 0.032 B | 0.069 B | 0.05875 |
| VANADIUM | NA | NA | NA | NA | 13.2 | 20.9 | 12.4 | 53.4 | 42.65 |
| ZINC | NA | NA | NA | NA | 42.7 J | 36.1 J | 39.7 J | 175 J | 127.8 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | 18000 B | 61000 J | 130000 | 650000 | 347500 |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 87.3 | 82.4 | 74.3 | 78.6 | 88.1 | 86.7 | 84.4 | 85.6 | 81.4 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-361 | SB-362 | SB-363 | SB-364 | SB-500 | SB-501 | SB-502 | SB-503 | SB-503 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-361-0001 | SB-362-0001 | SB-363-0001 | SB-364-0001 | SB-500-0001 | SB-501-0001 | SB-502-0001 | SB-503-0001 | SB-503-0001-AVG |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-503 | SB-504 | SB-505 | SB-506 | SB-506 | SB-506 | SB-507 | SB-508 | SB-509 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-503-0001-D | SB-504-0001 | SB-505-0001 | SB-506-0001 | SB-506-0001-AVG | SB-506-0001-D | SB-507-0001 | SB-508-0001 | SB-509-0001 |
| SAMPLE DATE | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,1,1-TRICHLOROETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,1,2,2-TETRACHLOROETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,1-DICHLOROETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,1-DICHLOROETHENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,1-DICHLOROPROPENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,2,3-TRICHLOROBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,2,3-TRICHLOROPROPANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,2,3-TRIMETHYLBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,2,4-TRICHLOROBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,2,4-TRIMETHYLBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 3.31 U | 0.92 B | 5.8 U | 5.8 U | 5.8 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 13 U | 11 U | 12 U | 11 U | 11.5 U | 12 U | 12 U | 12 U | 12 U |
| 1,2-DIBROMOETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,2-DICHLOROBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,2-DICHLOROETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,2-DICHLOROPROPANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,3-DICHLOROPROPANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 2-BUTANONE | 13 U | 11 U | 12 U | 11 U | 11.5 U | 12 U | 12 U | 12 U | 12 U |
| 2-CHLOROETHYL VINYL ETHER | 13 U | 11 U | 12 U | 11 U | 11.5 U | 12 U | 12 U | 12 U | 12 U |
| 2-CHLOROTOLUENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 2-HEXANONE | 13 U | 11 U | 12 U | 11 U | 11.5 U | 12 U | 12 U | 12 U | 12 U |
| 4-CHLOROTOLUENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 4-ISOPROPYLTOLUENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| 4-METHYL-2-PENTANONE | 13 U | 11 U | 12 U | 11 U | 11.5 U | 12 U | 12 U | 12 U | 12 U |
| ACETONE | 13 U | 7.3 J | 12 U | 11 U | 11.5 U | 12 U | 13 J | 21 J | 12 U |
| BENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| BROMOBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| BROMOCHLOROMETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| BROMODICHLOROMETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| BROMOFORM | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| BROMOMETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| CARBON DISULFIDE | 6.5 U | 0.82 J | 6 U | 0.95 J | 0.95 J | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| CARBON TETRACHLORIDE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| CHLOROBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| CHLORODIBROMOMETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| CHLOROETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| CHLOROFORM | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| CHLOROMETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| CIS-1,2-DICHLOROETHENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| CIS-1,3-DICHLOROPROPENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| DIBROMOMETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| DICHLORODIFLUOROMETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| DIISOPROPYL ETHER | 13 U | 11 U | 12 U | 11 U | 11.5 U | 12 U | 12 U | 12 U | 12 U |
| ETHYL TERT-BUTYL ETHER | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| ETHYLBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| ISOPROPYLBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| M+P-XYLENES | 13 U | 11 U | 12 U | 11 U | 11.5 U | 12 U | 12 U | 12 U | 12 U |
| METHYL TERT-BUTYL ETHER | 13 U | 11 U | 12 U | 11 U | 11.5 U | 12 U | 12 U | 12 U | 12 U |
| METHYLENE CHLORIDE | 3.2 B | 1.6 B | 1.7 B | 2 B | 2.05 U | 2.1 B | 5.1 B | 7.1 B | 5 B |
| NAPHTHALENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| N-BUTYLBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| N-PROPYLBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| O-XYLENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| SEC-BUTYLBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| STYRENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| TERT-AMYL METHYL ETHER | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| TERT-BUTYLBENZENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| TERTIARY-BUTYL ALCOHOL | 130 UR | 110 UR | 120 UR | 110 UR | 115 R | 120 UR | 120 UR | 120 UR | 120 UR |
| TETRACHLOROETHENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| TOLUENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 13 U | 11 U | 12 U | 11 U | 11.5 U | 12 U | 12 U | 12 U | 12 U |
| TRANS-1,2-DICHLOROETHENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| TRANS-1,3-DICHLOROPROPENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| TRICHLOROETHENE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| TRICHLOROFLUOROMETHANE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| VINYL ACETATE | 13 U | 11 U | 12 U | 11 U | 11.5 U | 12 U | 12 U | 12 U | 12 UJ |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-503 | SB-504 | SB-505 | SB-506 | SB-506 | SB-506 | SB-507 | SB-508 | SB-509 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-503-0001-D | SB-504-0001 | SB-505-0001 | SB-506-0001 | SB-506-0001-AVG | SB-506-0001-D | SB-507-0001 | SB-508-0001 | SB-509-0001 |
| SAMPLE DATE | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 2,4,5-TRICHLOROPHENOL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 2,4,6-TRICHLOROPHENOL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 2,4-DICHLOROPHENOL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 2,4-DIMETHYLPHENOL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 2,4-DINITROPHENOL | 850 U | 720 U | 800 U | 750 U | 755 U | 760 U | 770 U | 770 U | 760 U |
| 2,4-DINITROTOLUENE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 2,6-DINITROTOLUENE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 2-CHLORONAPHTHALENE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 2-CHLOROPHENOL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 2-METHYLPHENOL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 2-NITROANILINE | 850 U | 720 U | 800 U | 750 U | 755 U | 760 U | 770 U | 770 U | 760 U |
| 2-NITROPHENOL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 3-NITROANILINE | 850 U | 720 U | 800 U | 750 U | 755 U | 760 U | 770 U | 770 U | 760 U |
| 4,6-DINITRO-2-METHYLPHENOL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 4-BROMOPHENYL PHENYL ETHER | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 4-CHLORO-3-METHYLPHENOL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 4-CHLOROANILINE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 4-CHLOROPHENYL PHENYL ETHER | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 4-METHYLPHENOL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 4-NITROANILINE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| 4-NITROPHENOL | 850 U | 720 U | 800 U | 750 U | 755 U | 760 U | 770 U | 770 U | 760 U |
| ACETOPHENONE | 86 U | 73 U | 80 U | 76 U | 76.5 U | 77 U | 78 U | 78 U | 77 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| BIS(2-CHLOROETHYL)ETHER | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 37 J | 360 U | 93 J | 380 U | 24 J | 24 J | 37 J | 58 J | 380 U |
| BUTYL BENZYL PHTHALATE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 120 J | 380 U | 380 U |
| CAPROLACTAM | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| CARBAZOLE | 82 J | 360 U | 73 J | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| DIBENZOFURAN | 34 J | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| DIETHYL PHTHALATE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| DIMETHYL PHTHALATE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| DI-N-BUTYL PHTHALATE | 430 U | 360 U | 28 J | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| DI-N-OCTYL PHTHALATE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| HEXACHLOROBENZENE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| HEXACHLOROBUTADIENE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| HEXACHLOROCYCLOPENTADIENE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| HEXACHLOROETHANE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| ISOPHORONE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| NITROBENZENE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| N-NITROSODIMETHYLAMINE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| N-NITROSO-DI-N-PROPYLAMINE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| N-NITROSODIPHENYLAMINE | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| PENTACHLOROPHENOL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| PHENOL | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 20 J | 360 U | 9.8 J | 380 U | 380 U | 380 U | 380 U | 26 J | 380 U |
| ACENAPHTHENE | 84 J | 7.5 J | 45 J | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| ACENAPHTHYLENE | 36 J | 360 U | 13 J | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| ANTHRACENE | 170 J | 16 J | 95 J | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| BAP EQUIVALENT-HALFND | 890 | 306 | 827 | 380 U | 380 U | 380 U | 229 | 380 U | 380 U |
| BAP EQUIVALENT-POS | 890 | 126 | 827 | 380 U | 380 U | 380 U | 18 | 380 U | 380 U |
| BENZO(A)ANTHRACENE | 610 | 93 J | 530 | 380 U | 380 U | 380 U | 12 J | 380 U | 380 U |
| BENZO(A)PYRENE | 600 | 95 J | 560 | 380 U | 380 U | 380 U | 14 J | 380 U | 380 U |
| BENZO(B)FLUORANTHENE | 800 | 150 J | 770 | 380 U | 380 U | 380 U | 25 J | 380 U | 380 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 370 J | 67 J | 360 J | 380 U | 380 U | 380 U | 8 J | 380 U | 380 U |
| BENZO(K)FLUORANTHENE | 310 J | 71 J | 330 J | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-503 | SB-504 | SB-505 | SB-506 | SB-506 | SB-506 | SB-507 | SB-508 | SB-509 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-503-0001-D | SB-504-0001 | SB-505-0001 | SB-506-0001 | SB-506-0001-AVG | SB-506-0001-D | SB-507-0001 | SB-508-0001 | SB-509-0001 |
| SAMPLE DATE | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-503 | SB-504 | SB-505 | SB-506 | SB-506 | SB-506 | SB-507 | SB-508 | SB-509 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-503-0001-D | SB-504-0001 | SB-505-0001 | SB-506-0001 | SB-506-0001-AVG | SB-506-0001-D | SB-507-0001 | SB-508-0001 | SB-509-0001 |
| SAMPLE DATE | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 620 | 100 J | 480 | 380 U | 380 U | 380 U | 14 J | 380 U | 380 U |
| DIBENZO(A,H)ANTHRACENE | 110 J | 360 U | 100 J | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| FLUORANTHENE | 1300 | 220 J | 1100 | 380 U | 380 U | 380 U | 19 J | 380 U | 380 U |
| FLUORENE | 75 J | 360 U | 35 J | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| INDENO(1,2,3-CD)PYRENE | 350 J | 59 J | 330 J | 380 U | 380 U | 380 U | 380 U | 380 U | 380 U |
| NAPHTHALENE | 24 J | 360 U | 13 J | 380 U | 380 U | 380 U | 380 U | 10 J | 380 U |
| PHENANTHRENE | 670 | 74 J | 570 | 380 U | 380 U | 380 U | 9.4 J | 17 J | 380 U |
| PYRENE | 1000 | 170 J | 810 | 380 U | 380 U | 380 U | 16 J | 380 U | 380 U |
| TOTAL PAHS | 7149 | 1122.5 | 6150.8 | 0 U | 0 U | 0 U | 117.4 | 53 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 43 U | 180 U | 20000 U | 38 U | 38 U | 38 U | 38 U | 38 U | 38 U |
| AROCLOR-1221 | 43 U | 180 U | 20000 U | 38 U | 38 U | 38 U | 38 U | 38 U | 38 U |
| AROCLOR-1232 | 43 U | 180 U | 20000 U | 38 U | 38 U | 38 U | 38 U | 38 U | 38 U |
| AROCLOR-1242 | 43 U | 180 U | 20000 U | 38 U | 38 U | 38 U | 38 U | 38 U | 38 U |
| AROCLOR-1248 | 43 U | 180 U | 20000 U | 38 U | 38 U | 38 U | 38 U | 38 U | 38 U |
| AROCLOR-1254 | 43 U | 180 U | 20000 U | 38 U | 38 U | 38 U | 38 U | 38 U | 38 U |
| AROCLOR-1260 | 120 | 1200 | 99000 | 12 J | 11.5 | 11 J | 38 U | 15 J | 38 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 120 | 1200 | 99000 | 12 | 11.5 | 11 | 0 U | 15 | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.49 J | 0.089 B | 0.89 | 0.073 B | 0.066 U | 0.059 B | 0.13 B | 0.14 B | 0.031 L |
| ARSENIC | 2.3 | 0.53 L | 3.5 | 1.8 | 1.75 | 1.7 | 2.1 | 2.5 | 1.5 J |
| BARIUM | 43.2 J | 153 | 90 | 19.2 | 17.1 | 15 | 20.7 | 19.3 | 12.5 K |
| BERYLLIUM | 0.32 J | 0.12 | 0.54 | 0.22 | 0.23 | 0.24 | 2 | 0.59 | 0.3 |
| CADMIUM | 0.82 J | 0.41 K | 6.4 | 0.014 B | 0.0125 | 0.018 | 0.11 K | 0.044 K | 0.012 B |
| CHROMIUM | 18 J | 12.7 J | 83.7 J | 7.1 J | 8.65 | 10.2 J | 11.2 J | 11.1 J | 6.3 J |
| COBALT | 3.1 | 4.6 | 4 | 2.1 | 2.25 | 2.4 | 10.8 | 27.2 | 3.9 |
| COPPER | 11.5 J | 13.8 J | 26.8 J | 3.8 J | 4.75 | 5.7 J | 12.7 J | 10.8 J | 4.9 J |
| IRON | 8010 | 20800 | 9150 | 13700 | 11780 | 9860 | 20400 | 13800 | 10400 |
| LEAD | 38 J | 8.6 J | 278 J | 4 J | 4.1 | 4.2 J | 10.9 J | 3.8 J | 3 J |
| MANGANESE | 205 J | 231 | 11.2 | 172 J | 109.25 | 46.5 J | 135 | 42.1 | 27.4 L |
| MERCURY | 0.25 | 0.41 | 0.13 | 0.019 U | 0.019 U | 0.019 U | 0.29 | 0.019 U | 0.019 UL |
| MOLYBDENUM | 0.33 B | 0.78 B | 1.2 L | 0.3 B | 0.245 U | 0.19 B | 0.15 B | 0.58 B | 0.16 B |
| NICKEL | 6.6 | 6.9 | 18.5 | 4.1 | 4.75 | 5.4 | 15.6 | 9.1 | 3.2 J |
| SELENIUM | 0.24 | 0.18 U | 0.42 | 0.18 U | 0.18 U | 0.18 U | 0.32 | 0.19 U | 0.18 UL |
| SILVER | 0.24 | 0.092 | 0.38 | 0.049 | 0.03325 | 0.035 B | 0.2 | 0.14 | 0.031 |
| THALLIUM | 0.083 K | 0.38 | 0.098 K | 0.054 K | 0.0585 | 0.063 K | 0.07 K | 0.038 B | 0.055 B |
| VANADIUM | 31.9 J | 22.8 J | 60.7 J | 13 J | 13.95 | 14.9 J | 17.1 J | 15.9 J | 11.4 J |
| ZINC | 80.6 J | 63.8 | 302 | 12.2 | 14.4 | 16.6 | 78.2 | 16.2 | 11.1 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | 45000 | 52000 | 170000 | 14000 B | 4800 J | 4800 J | 13000 | 5900 J | 10000 B |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 77.2 | 91.2 | 82.8 | 87.5 | 87.1 | 86.7 | 85.8 | 85.9 | 86.7 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-503 | SB-504 | SB-505 | SB-506 | SB-506 | SB-506 | SB-507 | SB-508 | SB-509 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-503-0001-D | SB-504-0001 | SB-505-0001 | SB-506-0001 | SB-506-0001-AVG | SB-506-0001-D | SB-507-0001 | SB-508-0001 | SB-509-0001 |
| SAMPLE DATE | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-510 | SB-511 | SB-512 | SB-513 | SB-514 | SB-515 | SB-516 | SB-517 | SB-518 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-510-0001 | SB-511-0001 | SB-512-0001 | SB-513-0001 | SB-514-0001 | SB-515-0001 | SB-516-0001 | SB-517-0001 | SB-518-0001 |
| SAMPLE DATE | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 | 20071130 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,1,1-TRICHLOROETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,1,2,2-TETRACHLOROETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,1-DICHLOROETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,1-DICHLOROETHENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,1-DICHLOROPROPENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,2,3-TRICHLOROBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,2,3-TRICHLOROPROPANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,2,3-TRIMETHYLBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,2,4-TRICHLOROBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,2,4-TRIMETHYLBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 11 U | 11 U | 11 U | 12 U | 12 U | 12 U | 12 U | 11 U | 12 U |
| 1,2-DIBROMOETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,2-DICHLOROBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,2-DICHLOROETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,2-DICHLOROPROPANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,3-DICHLOROPROPANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 2-BUTANONE | 11 U | 11 U | 11 U | 12 U | 2.7 J | 12 U | 5.3 J | 11 U | 4.1 J |
| 2-CHLOROETHYL VINYL ETHER | 11 U | 11 U | 11 U | 12 U | 12 U | 12 U | 12 U | 11 U | 12 U |
| 2-CHLOROTOLUENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 2-HEXANONE | 11 U | 11 U | 11 U | 12 U | 12 U | 12 U | 12 U | 11 U | 12 U |
| 4-CHLOROTOLUENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 4-ISOPROPYLTOLUENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| 4-METHYL-2-PENTANONE | 11 U | 11 U | 11 U | 12 U | 12 U | 12 U | 12 U | 11 U | 12 U |
| ACETONE | 11 U | 11 U | 8.2 J | 12 U | 51 J | 11 J | 18 J | 11 U | 74 J |
| BENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| BROMOBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| BROMOCHLOROMETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| BROMODICHLOROMETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| BROMOFORM | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| BROMOMETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| CARBON DISULFIDE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 0.66 J | 5.9 U | 6 U | 5.7 U | 6 U |
| CARBON TETRACHLORIDE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| CHLOROBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| CHLORODIBROMOMETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| CHLOROETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| CHLOROFORM | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| CHLOROMETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| CIS-1,2-DICHLOROETHENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| CIS-1,3-DICHLOROPROPENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| DIBROMOMETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| DICHLORODIFLUOROMETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| DIISOPROPYL ETHER | 11 U | 11 U | 11 U | 12 U | 12 U | 12 U | 12 U | 11 U | 12 U |
| ETHYL TERT-BUTYL ETHER | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| ETHYLBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| ISOPROPYLBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| M+P-XYLENES | 11 U | 11 U | 11 U | 12 U | 12 U | 12 U | 12 U | 11 U | 12 U |
| METHYL TERT-BUTYL ETHER | 11 U | 11 U | 11 U | 12 U | 12 U | 12 U | 12 U | 11 U | 12 U |
| METHYLENE CHLORIDE | 6.4 B | 5.4 B | 5.6 B | 3.6 B | 5.6 B | 5.9 B | 5.8 B | 3.1 B | 4.8 B |
| NAPHTHALENE | 0.55 B | 5.7 U | 1.8 B | 0.67 B | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| N-BUTYLBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| N-PROPYLBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| O-XYLENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| SEC-BUTYLBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| STYRENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| TERT-AMYL METHYL ETHER | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| TERT-BUTYLBENZENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| TERTIARY-BUTYL ALCOHOL | 110 UR | 110 UR | 110 UR | 120 UR | 120 UR | 120 UR | 120 UR | 110 UR | 120 UR |
| TETRACHLOROETHENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| TOLUENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 11 U | 11 U | 11 U | 12 U | 12 U | 12 U | 12 U | 11 U | 12 U |
| TRANS-1,2-DICHLOROETHENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| TRANS-1,3-DICHLOROPROPENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| TRICHLOROETHENE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| TRICHLOROFLUOROMETHANE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| VINYL ACETATE | 11 U | 11 U | 11 U | 12 UJ | 12 UJ | 12 UJ | 12 U | 11 U | 12 U |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-510 | SB-511 | SB-512 | SB-513 | SB-514 | SB-515 | SB-516 | SB-517 | SB-518 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-510-0001 | SB-511-0001 | SB-512-0001 | SB-513-0001 | SB-514-0001 | SB-515-0001 | SB-516-0001 | SB-517-0001 | SB-518-0001 |
| SAMPLE DATE | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 | 20071130 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U | 6 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 2,4,5-TRICHLOROPHENOL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 2,4,6-TRICHLOROPHENOL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 2,4-DICHLOROPHENOL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 2,4-DIMETHYLPHENOL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 2,4-DINITROPHENOL | 740 U | 760 U | 750 U | 770 U | 760 U | 780 U | 790 U | 750 U | 800 U |
| 2,4-DINITROTOLUENE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 2,6-DINITROTOLUENE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 2-CHLORONAPHTHALENE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 2-CHLOROPHENOL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 2-METHYLPHENOL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 2-NITROANILINE | 740 U | 760 U | 750 U | 770 U | 760 U | 780 U | 790 U | 750 U | 800 U |
| 2-NITROPHENOL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 3-NITROANILINE | 740 U | 760 U | 750 U | 770 U | 760 U | 780 U | 790 U | 750 U | 800 U |
| 4,6-DINITRO-2-METHYLPHENOL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 4-BROMOPHENYL PHENYL ETHER | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 4-CHLORO-3-METHYLPHENOL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 4-CHLOROANILINE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 4-CHLOROPHENYL PHENYL ETHER | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 4-METHYLPHENOL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 4-NITROANILINE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| 4-NITROPHENOL | 740 U | 760 U | 750 U | 770 U | 760 U | 780 U | 790 U | 750 U | 800 U |
| ACETOPHENONE | 75 U | 76 U | 75 U | 78 U | 77 U | 79 U | 79 U | 75 U | 80 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| BIS(2-CHLOROETHYL)ETHER | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 370 U | 380 U | 370 U | 390 U | 380 U | 43 J | 390 U | 370 U | 400 U |
| BUTYL BENZYL PHTHALATE | 370 U | 380 U | 370 U | 390 U | 380 U | 78 J | 390 U | 370 U | 400 U |
| CAPROLACTAM | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| CARBAZOLE | 370 U | 380 U | 370 U | 390 U | 380 U | 41 J | 390 U | 370 U | 400 U |
| DIBENZOFURAN | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| DIETHYL PHTHALATE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| DIMETHYL PHTHALATE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| DI-N-BUTYL PHTHALATE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| DI-N-OCTYL PHTHALATE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| HEXACHLOROBENZENE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| HEXACHLOROBUTADIENE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| HEXACHLOROCYCLOPENTADIENE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| HEXACHLOROETHANE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| ISOPHORONE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| NITROBENZENE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| N-NITROSODIMETHYLAMINE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| N-NITROSO-DI-N-PROPYLAMINE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| N-NITROSODIPHENYLAMINE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| PENTACHLOROPHENOL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| PHENOL | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| ACENAPHTHENE | 370 U | 380 U | 370 U | 390 U | 380 U | 32 J | 390 U | 370 U | 400 U |
| ACENAPHTHYLENE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| ANTHRACENE | 370 U | 380 U | 370 U | 390 U | 380 U | 71 J | 34 J | 370 U | 400 U |
| BAP EQUIVALENT-HALFND | 216 | 97 | 211 | 433 | 380 U | 948 | 392 | 205 | 400 U |
| BAP EQUIVALENT-POS | 31 | 97 | 24 | 1.5 | 380 U | 948 | 197 | 20 | 400 U |
| BENZO(A)ANTHRACENE | 29 J | 59 J | 22 J | 390 U | 380 U | 550 | 170 J | 13 J | 400 U |
| BENZO(A)PYRENE | 23 J | 62 J | 17 J | 390 U | 380 U | 630 | 150 J | 15 J | 400 U |
| BENZO(B)FLUORANTHENE | 41 J | 100 J | 37 J | 15 J | 380 U | 860 | 210 J | 31 J | 400 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 16 J | 55 J | 16 J | 390 U | 380 U | 490 | 96 J | 11 J | 400 U |
| BENZO(K)FLUORANTHENE | 15 J | 55 J | 370 U | 390 U | 380 U | 390 | 97 J | 8.7 J | 400 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-510 | SB-511 | SB-512 | SB-513 | SB-514 | SB-515 | SB-516 | SB-517 | SB-518 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-510-0001 | SB-511-0001 | SB-512-0001 | SB-513-0001 | SB-514-0001 | SB-515-0001 | SB-516-0001 | SB-517-0001 | SB-518-0001 |
| SAMPLE DATE | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 | 20071130 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-510 | SB-511 | SB-512 | SB-513 | SB-514 | SB-515 | SB-516 | SB-517 | SB-518 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-510-0001 | SB-511-0001 | SB-512-0001 | SB-513-0001 | SB-514-0001 | SB-515-0001 | SB-516-0001 | SB-517-0001 | SB-518-0001 |
| SAMPLE DATE | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 | 20071130 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 34 J | 75 J | 24 J | 390 U | 380 U | 680 | 170 J | 13 J | 400 U |
| DIBENZO(A,H)ANTHRACENE | 370 U | 14 J | 370 U | 390 U | 380 U | 130 J | 390 U | 370 U | 400 U |
| FLUORANTHENE | 57 J | 120 J | 61 J | 9.5 J | 380 U | 1200 | 320 J | 15 J | 400 U |
| FLUORENE | 370 U | 380 U | 370 U | 390 U | 380 U | 26 J | 390 U | 370 U | 400 U |
| INDENO(1,2,3-CD)PYRENE | 13 J | 47 J | 14 J | 390 U | 380 U | 420 | 83 J | 9.2 J | 400 U |
| NAPHTHALENE | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U | 400 U |
| PHENANTHRENE | 25 J | 29 J | 59 J | 390 U | 380 U | 430 | 120 J | 370 U | 400 U |
| PYRENE | 44 J | 83 J | 47 J | 390 U | 380 U | 830 | 250 J | 13 J | 400 U |
| TOTAL PAHS | 297 | 699 | 297 | 24.5 | 0 U | 6739 | 1700 | 128.9 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 37 U | 38 U | 37 U | 39 U | 38 U | 39 U | 39 U | 37 U | 40 U |
| AROCLOR-1221 | 37 U | 38 U | 37 U | 39 U | 38 U | 39 U | 39 U | 37 U | 40 U |
| AROCLOR-1232 | 37 U | 38 U | 37 U | 39 U | 38 U | 39 U | 39 U | 37 U | 40 U |
| AROCLOR-1242 | 37 U | 38 U | 37 U | 39 U | 38 U | 39 U | 39 U | 37 U | 40 U |
| AROCLOR-1248 | 37 U | 38 U | 37 U | 39 U | 38 U | 39 U | 39 U | 37 U | 40 U |
| AROCLOR-1254 | 37 U | 38 U | 37 U | 39 U | 38 U | 39 U | 39 U | 37 U | 40 U |
| AROCLOR-1260 | 31 J | 49 | 30 J | 84 | 38 U | 290 | 39 U | 37 U | 40 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 31 | 49 | 30 | 84 | 0 U | 290 | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.29 L | 0.23 L | 0.083 L | 0.18 L | 0.098 L | 0.29 L | 0.23 L | 0.18 L | 0.18 J |
| ARSENIC | 9.6 J | 0.52 J | 1.5 J | 1.7 J | 1.5 J | 0.99 J | 0.94 L | 1.1 L | 2.2 L |
| BARIUM | 12.2 K | 15.1 K | 15.8 K | 26.4 K | 20.4 K | 24.1 K | 13.7 | 15.1 | 20.1 |
| BERYLLIUM | 0.21 | 1.8 | 0.55 | 0.35 | 1 | 0.84 | 1.1 | 1.6 | 1.2 |
| CADMIUM | 0.036 K | 0.029 K | 0.093 K | 0.11 K | 0.78 | 0.45 | 0.16 K | 0.07 K | 0.022 K |
| CHROMIUM | 10.1 J | 15.5 J | 11.4 J | 12.7 J | 15.8 J | 11.3 J | 11.8 J | 9.3 J | 11.5 J |
| COBALT | 3.9 | 4.2 | 3.7 | 3.9 | 17.5 | 4.1 | 2.8 J | 5.7 J | 3.9 J |
| COPPER | 27.9 J | 16.9 J | 11.4 J | 7.1 J | 22.8 J | 12.5 J | 10.3 L | 16.5 L | 14.5 L |
| IRON | 13400 | 24400 | 13200 | 13800 | 16100 | 11900 | 16600 | 17600 | 29900 |
| LEAD | 2 J | 6.8 J | 4.5 J | 9.3 J | 11.4 J | 36.7 J | 5.7 L | 11.4 L | 4.7 L |
| MANGANESE | 83.4 L | 53.7 L | 66.5 L | 122 L | 133 L | 152 L | 69.5 L | 65.4 L | 85 L |
| MERCURY | 0.019 UL | 0.019 UL | 0.019 UL | 0.019 UL | 0.019 UL | 0.072 L | 0.19 L | 0.019 UL | 0.02 UL |
| MOLYBDENUM | 3.2 J | 0.091 B | 0.31 B | 0.077 UL | 0.081 B | 0.094 B | 0.23 B | 0.12 B | 0.18 B |
| NICKEL | 11.1 J | 16.3 J | 8.7 J | 6.5 J | 15.4 J | 11.8 J | 10.9 L | 13.1 J | 7.4 L |
| SELENIUM | 0.18 UL | 1.1 L | 0.18 UL | 0.19 UL | 0.27 L | 0.19 UL | 0.34 L | 0.69 L | 0.35 L |
| SILVER | 0.058 | 0.099 K | 0.06 | 0.06 | 0.079 | 0.12 | 0.12 | 0.086 | 0.097 |
| THALLIUM | 0.02 B | 0.064 B | 0.023 B | 0.031 B | 0.055 B | 0.041 B | 0.041 K | 0.034 K | 0.061 K |
| VANADIUM | 8.5 J | 20.6 J | 14.3 J | 10.6 J | 18.8 J | 15 J | 20.3 J | 15.8 J | 17.6 J |
| ZINC | 12.6 | 20.5 | 16.7 | 23.2 | 47.3 | 57 | 25.9 | 46.7 | 23.6 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | 22000 B | 9000 B | 33000 | 2200 J | 1800 B | 2200 J | 23000 | 4000 J | 610 B |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 89.4 | 87.3 | 88.6 | 85.5 | 86.3 | 84.8 | 83.9 | 88.4 | 82.9 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-510 | SB-511 | SB-512 | SB-513 | SB-514 | SB-515 | SB-516 | SB-517 | SB-518 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-510-0001 | SB-511-0001 | SB-512-0001 | SB-513-0001 | SB-514-0001 | SB-515-0001 | SB-516-0001 | SB-517-0001 | SB-518-0001 |
| SAMPLE DATE | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 | 20071130 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-519 | SB-520 | SB-521 | SB-522 | SB-523 | SB-524 | SB-525 | SB-526 | SB-527 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-519-0001 | SB-520-0001 | SB-521-0001 | SB-522-0001 | SB-523-0001 | SB-524-0001 | SB-525-0001 | SB-526-0001 | SB-527-0001 |
| SAMPLE DATE | 20071130 | 20071130 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7.5 J | 12 U | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 3.6 B | 4.6 B | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | 120 UR | 120 UR | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-519 | SB-520 | SB-521 | SB-522 | SB-523 | SB-524 | SB-525 | SB-526 | SB-527 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-519-0001 | SB-520-0001 | SB-521-0001 | SB-522-0001 | SB-523-0001 | SB-524-0001 | SB-525-0001 | SB-526-0001 | SB-527-0001 |
| SAMPLE DATE | 20071130 | 20071130 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 780 U | 810 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 780 U | 810 U | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 780 U | 810 U | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | 780 U | 810 U | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | 78 U | 82 U | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 31 J | 410 U | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 432 | 249 | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 1.2 | 42 | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 390 U | 33 J | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 390 U | 32 J | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 12 J | 46 J | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 390 U | 22 J | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-519 | SB-520 | SB-521 | SB-522 | SB-523 | SB-524 | SB-525 | SB-526 | SB-527 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-519-0001 | SB-520-0001 | SB-521-0001 | SB-522-0001 | SB-523-0001 | SB-524-0001 | SB-525-0001 | SB-526-0001 | SB-527-0001 |
| SAMPLE DATE | 20071130 | 20071130 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-519 | SB-520 | SB-521 | SB-522 | SB-523 | SB-524 | SB-525 | SB-526 | SB-527 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-519-0001 | SB-520-0001 | SB-521-0001 | SB-522-0001 | SB-523-0001 | SB-524-0001 | SB-525-0001 | SB-526-0001 | SB-527-0001 |
| SAMPLE DATE | 20071130 | 20071130 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 390 U | 39 J | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 390 U | 69 J | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 390 U | 19 J | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 390 U | 40 J | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 390 U | 57 J | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 12 | 357 | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 39 U | 41 U | 420 U | 410 U | 380 U | 7900 U | 8600 U | 22000 U | 7200 U |
| AROCLOR-1221 | 39 U | 41 U | 420 U | 410 U | 380 U | 7900 U | 8600 U | 22000 U | 7200 U |
| AROCLOR-1232 | 39 U | 41 U | 420 U | 410 U | 380 U | 7900 U | 8600 U | 22000 U | 7200 U |
| AROCLOR-1242 | 39 U | 41 U | 420 U | 410 U | 380 U | 7900 U | 8600 U | 22000 U | 7200 U |
| AROCLOR-1248 | 39 U | 41 U | 420 U | 410 U | 380 U | 7900 U | 8600 U | 22000 U | 7200 U |
| AROCLOR-1254 | 39 U | 41 U | 420 U | 410 U | 380 U | 7900 U | 8600 U | 22000 U | 7200 U |
| AROCLOR-1260 | 39 U | 41 U | 3100 | 3400 | 2100 | 52000 | 54000 | 82000 | 62000 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 3100 | 3400 | 2100 | 52000 | 54000 | 82000 | 62000 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.12 J | 0.22 L | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 1.6 L | 0.82 L | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 16 | 9 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 0.95 | 1.4 | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 0.019 K | 0.029 K | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 10.5 J | 7.5 J | NA | NA | NA | NA | NA | NA | NA |
| COBALT | 3.8 J | 4.6 J | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 11.2 L | 10.8 L | NA | NA | NA | NA | NA | NA | NA |
| IRON | 14600 | 17800 | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 3.9 L | 5.3 L | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 74.9 L | 41.7 L | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.02 UL | 0.021 UL | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | 0.16 B | 0.64 J | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 8.1 L | 10.2 L | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 0.62 L | 0.44 L | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 0.086 | 0.065 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.045 K | 0.026 K | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 20.2 J | 12 J | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 17.3 | 23.2 | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | 2800 B | 5200 B | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 85 | 81 | 79 | 80 | 86.9 | 83.3 | 77.1 | 76 | 46.1 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-519 | SB-520 | SB-521 | SB-522 | SB-523 | SB-524 | SB-525 | SB-526 | SB-527 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-519-0001 | SB-520-0001 | SB-521-0001 | SB-522-0001 | SB-523-0001 | SB-524-0001 | SB-525-0001 | SB-526-0001 | SB-527-0001 |
| SAMPLE DATE | 20071130 | 20071130 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-528 | SB-529 | SB-530 | SB-531 | SB-532 | SB-533 | SB-534 | SB-535 | SB-536 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-528-0001 | SB-529-0001 | SB-530-0001 | SB-531-0001 | SB-532-0001 | SB-533-0001 | SB-534-0001 | SB-535-0001 | SB-536-0001 |
| SAMPLE DATE | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-528 | SB-529 | SB-530 | SB-531 | SB-532 | SB-533 | SB-534 | SB-535 | SB-536 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-528-0001 | SB-529-0001 | SB-530-0001 | SB-531-0001 | SB-532-0001 | SB-533-0001 | SB-534-0001 | SB-535-0001 | SB-536-0001 |
| SAMPLE DATE | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-528 | SB-529 | SB-530 | SB-531 | SB-532 | SB-533 | SB-534 | SB-535 | SB-536 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-528-0001 | SB-529-0001 | SB-530-0001 | SB-531-0001 | SB-532-0001 | SB-533-0001 | SB-534-0001 | SB-535-0001 | SB-536-0001 |
| SAMPLE DATE | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-528 | SB-529 | SB-530 | SB-531 | SB-532 | SB-533 | SB-534 | SB-535 | SB-536 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-528-0001 | SB-529-0001 | SB-530-0001 | SB-531-0001 | SB-532-0001 | SB-533-0001 | SB-534-0001 | SB-535-0001 | SB-536-0001 |
| SAMPLE DATE | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 4300 U | 200000 U | 89000 U | 38000 U | 430 U | 8800 U | 9700 U | 1900 U | 26000 U |
| AROCLOR-1221 | 4300 U | 200000 U | 89000 U | 38000 U | 430 U | 8800 U | 9700 U | 1900 U | 26000 U |
| AROCLOR-1232 | 4300 U | 200000 U | 89000 U | 38000 U | 430 U | 8800 U | 9700 U | 1900 U | 26000 U |
| AROCLOR-1242 | 4300 U | 200000 U | 89000 U | 38000 U | 430 U | 8800 U | 9700 U | 1900 U | 26000 U |
| AROCLOR-1248 | 4300 U | 200000 U | 89000 U | 38000 U | 430 U | 8800 U | 9700 U | 1900 U | 26000 U |
| AROCLOR-1254 | 4300 U | 200000 U | 89000 U | 38000 U | 430 U | 8800 U | 9700 U | 1900 U | 26000 U |
| AROCLOR-1260 | 34000 | 1500000 | 690000 | 190000 | 2100 | 53000 | 49000 | 6000 | 77000 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 34000 | 1500000 | 690000 | 190000 | 2100 | 53000 | 49000 | 6000 | 77000 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 77.5 | 83.9 | 74.5 | 86.5 | 76 | 74.7 | 68.3 | 86.6 | 63.3 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-528 | SB-529 | SB-530 | SB-531 | SB-532 | SB-533 | SB-534 | SB-535 | SB-536 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-528-0001 | SB-529-0001 | SB-530-0001 | SB-531-0001 | SB-532-0001 | SB-533-0001 | SB-534-0001 | SB-535-0001 | SB-536-0001 |
| SAMPLE DATE | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-537 | SB-538 | SB-539 | SB-818 | SB-819 | SB-820 | SB-821 | SB-822 | SB-823 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-537-0001 | SB-538-0001 | SB-539-0001 | E-SB-818-SS | E-SB-819-SS | E-SB-820-SS | E-SB-821-SS | E-SB-822-SS | E-SB-823-SS |
| SAMPLE DATE | 20071204 | 20071204 | 20071204 | 20100915 | 20100915 | 20100915 | 20100916 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-537 | SB-538 | SB-539 | SB-818 | SB-819 | SB-820 | SB-821 | SB-822 | SB-823 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-537-0001 | SB-538-0001 | SB-539-0001 | E-SB-818-SS | E-SB-819-SS | E-SB-820-SS | E-SB-821-SS | E-SB-822-SS | E-SB-823-SS |
| SAMPLE DATE | 20071204 | 20071204 | 20071204 | 20100915 | 20100915 | 20100915 | 20100916 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-537 | SB-538 | SB-539 | SB-818 | SB-819 | SB-820 | SB-821 | SB-822 | SB-823 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-537-0001 | SB-538-0001 | SB-539-0001 | E-SB-818-SS | E-SB-819-SS | E-SB-820-SS | E-SB-821-SS | E-SB-822-SS | E-SB-823-SS |
| SAMPLE DATE | 20071204 | 20071204 | 20071204 | 20100915 | 20100915 | 20100915 | 20100916 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-537 | SB-538 | SB-539 | SB-818 | SB-819 | SB-820 | SB-821 | SB-822 | SB-823 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-537-0001 | SB-538-0001 | SB-539-0001 | E-SB-818-SS | E-SB-819-SS | E-SB-820-SS | E-SB-821-SS | E-SB-822-SS | E-SB-823-SS |
| SAMPLE DATE | 20071204 | 20071204 | 20071204 | 20100915 | 20100915 | 20100915 | 20100916 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 2500 U | 880 U | 4300 U | 23 U | 22 U | 23 U | 24 U | 25 U | 26 U |
| AROCLOR-1221 | 2500 U | 880 U | 4300 U | 18 U | 17 U | 17 U | 19 U | 19 U | 20 U |
| AROCLOR-1232 | 2500 U | 880 U | 4300 U | 16 U | 15 U | 15 U | 16 U | 16 U | 17 U |
| AROCLOR-1242 | 2500 U | 880 U | 4300 U | 14 U | 14 U | 14 U | 15 U | 15 U | 16 U |
| AROCLOR-1248 | 2500 U | 880 U | 4300 U | 19 U | 18 U | 19 U | 20 U | 20 U | 21 U |
| AROCLOR-1254 | 2500 U | 880 U | 4300 U | 19 U | 18 U | 19 U | 20 U | 20 U | 21 U |
| AROCLOR-1260 | 10000 | 4500 | 18000 | 19 U | 18 U | 19 U | 21 J | 20 U | 38 J |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 10000 | 4500 | 18000 | 0 U | 0 U | 0 U | 21 | 0 U | 38 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 65.2 | 75.1 | 75.9 | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-537 | SB-538 | SB-539 | SB-818 | SB-819 | SB-820 | SB-821 | SB-822 | SB-823 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-537-0001 | SB-538-0001 | SB-539-0001 | E-SB-818-SS | E-SB-819-SS | E-SB-820-SS | E-SB-821-SS | E-SB-822-SS | E-SB-823-SS |
| SAMPLE DATE | 20071204 | 20071204 | 20071204 | 20100915 | 20100915 | 20100915 | 20100916 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-824 | SB-825 | SB-827 | SB-828 | SB-829 | SB-830 | SB-831 | SB-832 | SB-833 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-824-SS | E-SB-825-SS | E-SB-827-SS | E-SB-828-SS | E-SB-829-SS | E-SB-830-SS | E-SB-831-SS | E-SB-832-SS | E-SB-833-SS |
| SAMPLE DATE | 20100915 | 20100913 | 20100916 | 20100916 | 20100917 | 20100914 | 20100913 | 20100917 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-824 | SB-825 | SB-827 | SB-828 | SB-829 | SB-830 | SB-831 | SB-832 | SB-833 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-824-SS | E-SB-825-SS | E-SB-827-SS | E-SB-828-SS | E-SB-829-SS | E-SB-830-SS | E-SB-831-SS | E-SB-832-SS | E-SB-833-SS |
| SAMPLE DATE | 20100915 | 20100913 | 20100916 | 20100916 | 20100917 | 20100914 | 20100913 | 20100917 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-824 | SB-825 | SB-827 | SB-828 | SB-829 | SB-830 | SB-831 | SB-832 | SB-833 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-824-SS | E-SB-825-SS | E-SB-827-SS | E-SB-828-SS | E-SB-829-SS | E-SB-830-SS | E-SB-831-SS | E-SB-832-SS | E-SB-833-SS |
| SAMPLE DATE | 20100915 | 20100913 | 20100916 | 20100916 | 20100917 | 20100914 | 20100913 | 20100917 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 80 U | 170 J | 77 U | NA | NA | NA | 85 U |
| C1-FLUORANTHENES/PYRENES | NA | NA | 80 U | 85 J | 77 U | NA | NA | NA | 85 U |
| C1-FLUORENES | NA | NA | 80 U | 77 U | 77 U | NA | NA | NA | 85 U |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | 80 U | 77 U | 77 U | NA | NA | NA | 85 U |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 80 U | 260 J | 77 U | NA | NA | NA | 85 U |
| C2-FLUORENES | NA | NA | 80 U | 77 U | 77 U | NA | NA | NA | 85 U |
| C2-NAPHTHALENES | NA | NA | 80 U | 77 U | 77 U | NA | NA | NA | 85 U |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | 80 U | 86 J | 77 U | NA | NA | NA | 96 J |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-824 | SB-825 | SB-827 | SB-828 | SB-829 | SB-830 | SB-831 | SB-832 | SB-833 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-824-SS | E-SB-825-SS | E-SB-827-SS | E-SB-828-SS | E-SB-829-SS | E-SB-830-SS | E-SB-831-SS | E-SB-832-SS | E-SB-833-SS |
| SAMPLE DATE | 20100915 | 20100913 | 20100916 | 20100916 | 20100917 | 20100914 | 20100913 | 20100917 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 80 U | 200 J | 77 U | NA | NA | NA | 85 U |
| C3-FLUORENES | NA | NA | 80 U | 77 U | 77 U | NA | NA | NA | 85 U |
| C3-NAPHTHALENES | NA | NA | 80 U | 77 U | 77 U | NA | NA | NA | 85 U |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | 80 U | 160 J | 77 U | NA | NA | NA | 85 U |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 80 U | 170 J | 77 U | NA | NA | NA | 85 U |
| C4-NAPHTHALENES | NA | NA | 80 U | 77 U | 77 U | NA | NA | NA | 85 U |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | 80 U | 110 J | 77 U | NA | NA | NA | 85 U |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | 24 U | 25 U | 24 U | 24 U | 23 U | 24 U | 110 U | 27 U |
| AROCLOR-1221 | 18 U | 19 U | 19 U | 18 U | 18 U | 18 U | 18 U | 85 U | 20 U |
| AROCLOR-1232 | 16 U | 16 U | 17 U | 16 U | 16 U | 16 U | 16 U | 75 U | 18 U |
| AROCLOR-1242 | 15 U | 15 U | 16 U | 15 U | 15 U | 14 U | 15 U | 69 U | 16 U |
| AROCLOR-1248 | 19 U | 20 U | 20 U | 20 U | 20 U | 19 U | 19 U | 91 U | 22 U |
| AROCLOR-1254 | 19 U | 20 U | 20 U | 20 U | 20 U | 19 U | 19 U | 91 U | 22 U |
| AROCLOR-1260 | 19 U | 20 U | 34 J | 35 J | 20 UJ | 19 U | 19 U | 690 | 22 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 34 | 35 | 0 U | 0 U | 0 U | 690 | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-824 | SB-825 | SB-827 | SB-828 | SB-829 | SB-830 | SB-831 | SB-832 | SB-833 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-824-SS | E-SB-825-SS | E-SB-827-SS | E-SB-828-SS | E-SB-829-SS | E-SB-830-SS | E-SB-831-SS | E-SB-832-SS | E-SB-833-SS |
| SAMPLE DATE | 20100915 | 20100913 | 20100916 | 20100916 | 20100917 | 20100914 | 20100913 | 20100917 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833A | SB-833B | SB-833C | SB-833D | SB-833E | SB-833F | SB-833G | SB-833H | SB-833J |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833A-02 | E-SB-833B-02 | E-SB-833C-02 | E-SB-833D-02 | E-SB-833E-02 | E-SB-833F-02 | E-SB-833G-02 | E-SB-833H-02 | E-SB-833J-02 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.65 U | 0.53 U | 0.47 U | 0.5 U | 370 U | 8 U | 0.5 U | 0.54 U | 6.9 U |
| 1,1,1-TRICHLOROETHANE | 0.58 U | 0.48 U | 0.43 U | 0.45 U | 840 U | 18 U | 0.46 U | 0.49 U | 16 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.35 U | 0.29 U | 0.26 U | 0.27 U | 360 U | 7.8 U | 0.28 U | 0.3 U | 6.7 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.4 U | 1.1 U | 0.99 U | 1 U | 1600 U | 34 U | 1.1 U | 1.1 U | 30 U |
| 1,1-DICHLOROETHANE | 0.37 U | 0.31 U | 0.27 U | 0.29 U | 680 U | 15 U | 0.29 U | 0.31 U | 13 U |
| 1,1-DICHLOROETHENE | 0.54 U | 0.44 U | 0.4 U | 0.42 U | 720 U | 16 U | 0.42 U | 0.45 U | 14 U |
| 1,1-DICHLOROPROPENE | 0.31 U | 0.26 U | 0.23 U | 0.24 U | 400 U | 8.7 U | 0.24 U | 0.26 U | 7.6 U |
| 1,2,3-TRICHLOROBENZENE | 0.4 U | 140 | 0.29 U | 0.31 U | 39000 | 280 J | 0.31 U | 0.33 U | 47 J |
| 1,2,3-TRICHLOROPROPANE | 0.94 U | 0.77 U | 0.68 U | 0.72 U | 840 U | 18 U | 0.73 U | 0.78 U | 16 U |
| 1,2,3-TRIMETHYLBENZENE | 0.18 U | 0.68 B | 0.6 B | 0.14 U | 6.8 U | 0.15 U | 0.14 U | 0.15 U | 0.13 U |
| 1,2,4-TRICHLOROBENZENE | 0.36 B | 140 J | 1.1 B | 0.52 B | 180000 | 1200 | 0.68 B | 1.1 B | 260 |
| 1,2,4-TRIMETHYLBENZENE | 0.68 U | 0.55 U | 0.49 U | 0.52 U | 200 U | 4.4 U | 0.53 U | 0.57 U | 3.8 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.4 U | 1.1 U | 0.99 U | 1 U | 2000 U | 44 U | 1.1 U | 1.1 U | 38 U |
| 1,2-DIBROMOETHANE | 0.52 U | 0.43 U | 0.38 U | 0.4 U | 400 U | 8.7 U | 0.41 U | 0.44 U | 7.6 U |
| 1,2-DICHLOROBENZENE | 0.37 U | 3.4 J | 0.27 U | 0.29 U | 970 J | 26 J | 0.29 U | 0.31 U | 6.5 U |
| 1,2-DICHLOROETHANE | 0.35 U | 0.29 U | 0.26 U | 0.27 U | 400 U | 8.7 U | 0.28 U | 0.3 U | 7.6 U |
| 1,2-DICHLOROPROPANE | 0.72 U | 0.59 U | 0.52 U | 0.55 U | 330 U | 7.2 U | 0.56 U | 0.6 U | 6.2 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.36 U | 21 | 0.27 U | 0.28 U | 190 U | 4.2 U | 0.33 J | 0.31 U | 11 J |
| 1,3-DICHLOROPROPANE | 0.35 U | 0.29 U | 0.26 U | 0.27 U | 880 U | 19 U | 0.28 U | 0.3 U | 17 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.69 U | 12 | 0.5 U | 0.53 U | 1500 J | 42 J | 1.3 J | 0.58 U | 12 J |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.98 U | 0.8 U | 0.71 U | 0.75 U | 930 U | 20 U | 0.77 U | 0.82 U | 17 U |
| 2-BUTANONE | 1.5 U | 1.2 U | 1.1 U | 3.2 B | 1700 U | 38 U | 1.1 U | 1.2 U | 88 J |
| 2-CHLOROETHYL VINYL ETHER | 1.5 U | 1.2 U | 1.1 U | 1.1 U | 1700 UR | 38 U | 1.1 U | 1.2 U | 33 U |
| 2-CHLOROTOLUENE | 0.42 U | 0.34 U | 0.3 U | 0.32 U | 360 U | 7.9 U | 0.33 U | 0.35 U | 6.8 U |
| 2-HEXANONE | 0.66 U | 0.54 U | 0.48 U | 0.51 U | 800 U | 17 U | 0.51 U | 0.55 U | 15 U |
| 4-CHLOROTOLUENE | 0.43 U | 0.35 U | 0.31 U | 0.33 U | 400 U | 8.7 U | 0.33 U | 0.36 U | 7.5 U |
| 4-ISOPROPYLTOLUENE | 0.22 U | 0.18 U | 0.16 U | 0.17 U | 190 U | 4.2 U | 0.17 U | 0.18 U | 3.6 U |
| 4-METHYL-2-PENTANONE | 0.56 U | 0.46 U | 0.41 U | 0.43 U | 1900 U | 42 U | 0.44 U | 0.47 U | 36 U |
| ACETONE | 6.8 B | 7.7 B | 4.8 U | 25 B | 6800 U | 230 J | 5.1 U | 8.4 B | 220 B |
| BENZENE | 0.24 U | 0.2 U | 0.17 U | 0.18 U | 480 U | 10 U | 0.19 U | 0.2 U | 9.1 U |
| BROMOBENZENE | 0.34 U | 0.28 U | 0.25 U | 0.26 U | 520 U | 11 U | 0.27 U | 0.29 U | 9.8 U |
| BROMOCHLOROMETHANE | 0.74 U | 0.6 U | 0.54 U | 0.57 U | 520 U | 11 U | 0.58 U | 0.62 U | 9.8 U |
| BROMODICHLOROMETHANE | 0.29 U | 0.24 U | 0.21 U | 0.22 U | 400 U | 8.7 U | 0.23 U | 0.24 U | 7.5 U |
| BROMOFORM | 0.34 U | 0.28 U | 0.25 U | 0.26 U | 760 U | 17 U | 0.27 U | 0.29 U | 14 U |
| BROMOMETHANE | 0.56 U | 0.46 U | 0.41 U | 0.43 U | 1200 U | 25 U | 0.44 U | 0.47 U | 22 U |
| CARBON DISULFIDE | 0.46 U | 0.37 U | 0.33 U | 0.35 U | 480 U | 10 U | 0.36 U | 0.38 U | 9.1 U |
| CARBON TETRACHLORIDE | 0.39 U | 0.32 U | 0.28 U | 0.3 U | 260 U | 5.6 U | 0.3 U | 0.32 U | 4.8 U |
| CHLOROBENZENE | 0.34 U | 0.28 U | 0.25 U | 0.26 U | 260 U | 5.6 U | 12 | 0.29 U | 4.8 U |
| CHLORODIBROMOMETHANE | 0.57 U | 0.47 U | 0.42 U | 0.44 U | 480 U | 10 U | 0.45 U | 0.48 U | 9.1 U |
| CHLOROETHANE | 0.9 U | 0.73 U | 0.65 U | 0.69 U | 2500 U | 53 U | 0.7 U | 0.75 U | 46 U |
| CHLOROFORM | 0.3 U | 0.25 U | 0.22 U | 0.23 U | 350 U | 7.7 U | 0.24 U | 0.25 U | 6.7 U |
| CHLOROMETHANE | 0.43 U | 0.35 U | 0.31 U | 0.33 U | 560 U | 12 U | 0.33 U | 0.36 U | 11 U |
| CIS-1,2-DICHLOROETHENE | 0.37 U | 0.31 U | 0.27 U | 0.29 U | 280 U | 6 U | 0.29 U | 0.31 U | 5.2 U |
| CIS-1,3-DICHLOROPROPENE | 0.35 U | 0.29 U | 0.26 U | 0.27 U | 320 U | 6.9 U | 0.28 U | 0.3 U | 6 U |
| DIBROMOMETHANE | 0.66 U | 0.54 U | 0.48 U | 0.51 U | 560 U | 12 U | 0.51 U | 0.55 U | 11 U |
| DICHLORODIFLUOROMETHANE | 0.52 U | 0.43 U | 0.38 U | 0.4 U | 640 U | 14 U | 0.41 U | 0.44 U | 12 U |
| DIISOPROPYL ETHER | 1.6 U | 1.3 U | 1.1 U | 1.2 U | 2000 U | 44 U | 1.2 U | 1.3 U | 38 U |
| ETHYL TERT-BUTYL ETHER | 0.23 U | 0.19 U | 0.17 U | 0.18 U | 8.8 U | 0.19 U | 0.18 U | 0.19 U | 0.17 U |
| ETHYLBENZENE | 0.27 U | 0.22 U | 0.2 U | 0.21 U | 220 U | 4.7 U | 0.21 U | 0.23 U | 4.1 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 1.2 U | 1 U | 0.91 U | 0.96 U | 560 U | 12 U | 0.98 U | 1 U | 11 U |
| ISOPROPYLBENZENE | 0.17 U | 0.14 U | 0.12 U | 0.13 U | 260 U | 5.7 U | 0.13 U | 0.14 U | 4.9 U |
| M+P-XYLENES | 1.2 U | 1 U | 0.91 U | 0.96 U | 250 U | 5.4 U | 0.98 U | 1 U | 4.7 U |
| METHYL TERT-BUTYL ETHER | 0.45 U | 0.37 U | 0.33 U | 0.35 U | 290 U | 6.2 U | 0.35 U | 0.37 U | 5.4 U |
| METHYLENE CHLORIDE | 0.7 U | 0.57 U | 0.51 U | 0.54 U | 3100 U | 88 J | 0.55 U | 0.58 U | 58 U |
| NAPHTHALENE | 0.2 U | 0.16 U | 0.14 U | 0.15 U | 270 U | 5.9 U | 0.15 U | 0.17 U | 5.1 U |
| N-BUTYLBENZENE | 0.24 U | 0.2 U | 0.17 U | 0.18 U | 320 U | 7 U | 0.19 U | 0.2 U | 6.1 U |
| N-PROPYLBENZENE | 0.42 U | 0.34 U | 0.3 U | 0.32 U | 560 U | 12 U | 0.33 U | 0.35 U | 11 U |
| O-XYLENE | 0.36 U | 0.3 U | 0.27 U | 0.28 U | 340 U | 7.4 U | 0.28 U | 0.31 U | 6.4 U |
| SEC-BUTYLBENZENE | 0.19 U | 0.15 U | 0.14 U | 0.14 U | 190 U | 4.1 U | 0.15 U | 0.16 U | 3.6 U |
| STYRENE | 0.16 U | 0.13 U | 0.11 U | 0.12 U | 230 U | 4.9 U | 0.12 U | 0.13 U | 4.2 U |
| TERT-AMYL METHYL ETHER | 0.39 U | 0.32 U | 0.28 U | 0.3 U | 15 U | 0.32 U | 0.3 U | 0.32 U | 0.28 U |
| TERT-BUTYLBENZENE | 0.3 U | 0.25 U | 0.22 U | 0.23 U | 260 U | 5.7 U | 0.24 U | 0.25 U | 4.9 U |
| TERTIARY-BUTYL ALCOHOL | 7.9 UR | 6.5 UR | 5.8 UR | 6.1 UR | 9700 UR | 210 UR | 6.2 UR | 6.6 UR | 390 J |
| TETRACHLOROETHENE | 0.54 U | 0.44 U | 0.4 U | 0.42 U | 480 U | 10 U | 0.42 U | 0.45 U | 9.1 U |
| TOLUENE | 0.28 U | 0.23 U | 0.21 U | 0.22 U | 680 U | 15 U | 0.22 U | 0.24 U | 13 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.7 U | 0.57 U | 0.51 U | 0.54 U | 330 U | 7.1 U | 0.55 U | 0.58 U | 6.1 U |
| TRANS-1,2-DICHLOROETHENE | 0.43 U | 0.35 U | 0.31 U | 0.33 U | 370 U | 8 U | 0.33 U | 0.36 U | 7 U |
| TRANS-1,3-DICHLOROPROPENE | 0.56 U | 0.46 U | 0.41 U | 0.43 U | 800 U | 17 U | 0.44 U | 0.47 U | 15 U |
| TRICHLOROETHENE | 0.44 U | 0.36 U | 0.32 U | 0.34 U | 390 U | 8.5 U | 0.34 U | 0.37 U | 7.3 U |
| TRICHLOROFLUOROMETHANE | 0.35 U | 0.29 U | 0.26 U | 0.27 U | 640 U | 14 U | 0.28 U | 0.3 U | 12 U |
| VINYL ACETATE | 0.26 U | 0.21 U | 0.19 U | 0.2 U | 930 U | 20 U | 0.2 U | 0.22 U | 17 U |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833A | SB-833B | SB-833C | SB-833D | SB-833E | SB-833F | SB-833G | SB-833H | SB-833J |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833A-02 | E-SB-833B-02 | E-SB-833C-02 | E-SB-833D-02 | E-SB-833E-02 | E-SB-833F-02 | E-SB-833G-02 | E-SB-833H-02 | E-SB-833J-02 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| VINYL CHLORIDE | 0.41 U | 0.33 U | 0.3 U | 0.31 U | 720 U | 16 U | 0.32 U | 0.34 U | 14 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 140 U | 4 U | 3.9 U | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 140 U | 4 U | 3.9 U | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| ACENAPHTHENE | 140 U | 4 U | 3.9 U | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| ACENAPHTHYLENE | 140 U | 4 U | 3.9 U | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| ANTHRACENE | 140 U | 4 U | 3.9 U | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 140 U | 4 U | 3.9 U | 7.0 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| BAP EQUIVALENT-POS | 140 U | 4 U | 3.9 U | 2.8 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| BENZO(A)ANTHRACENE | 140 U | 4 U | 3.9 U | 15 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| BENZO(A)PYRENE | 140 U | 4 U | 3.9 U | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| BENZO(B)FLUORANTHENE | 140 U | 4 U | 3.9 U | 13 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 140 U | 4 U | 3.9 U | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| BENZO(K)FLUORANTHENE | 140 U | 4 U | 3.9 U | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833A | SB-833B | SB-833C | SB-833D | SB-833E | SB-833F | SB-833G | SB-833H | SB-833J |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833A-02 | E-SB-833B-02 | E-SB-833C-02 | E-SB-833D-02 | E-SB-833E-02 | E-SB-833F-02 | E-SB-833G-02 | E-SB-833H-02 | E-SB-833J-02 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833A | SB-833B | SB-833C | SB-833D | SB-833E | SB-833F | SB-833G | SB-833H | SB-833J |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833A-02 | E-SB-833B-02 | E-SB-833C-02 | E-SB-833D-02 | E-SB-833E-02 | E-SB-833F-02 | E-SB-833G-02 | E-SB-833H-02 | E-SB-833J-02 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 48 U | 1.3 U | 1.3 U | 25 | 1.3 U | 1.3 U | 1.3 U | 1.2 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 140 U | 4 U | 3.9 U | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| FLUORANTHENE | 660 | 4 U | 3.9 U | 42 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| FLUORENE | 140 U | 4 U | 3.9 U | 8.8 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 140 U | 4 U | 3.9 U | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| NAPHTHALENE | 410 | 93 | 3.9 U | 33 | 31 | 4 U | 3.9 U | 3.7 U | 3.9 U |
| PHENANTHRENE | 140 U | 4 U | 3.9 U | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| PYRENE | 950 | 4 U | 3.9 U | 30 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U |
| TOTAL PAHS | 2020 | 93 | 0 U | 166.8 | 31 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 23 U | 500 U | 25 U | 26 U | 25000 U | 2500 U | 25 U | 24 U | 250 U |
| AROCLOR-1221 | 17 U | 380 U | 19 U | 19 U | 19000 U | 1900 U | 19 U | 18 U | 190 U |
| AROCLOR-1232 | 15 U | 340 U | 16 U | 17 U | 17000 U | 1700 U | 17 U | 16 U | 170 U |
| AROCLOR-1242 | 14 U | 310 U | 15 U | 16 U | 16000 U | 1600 U | 15 U | 15 U | 150 U |
| AROCLOR-1248 | 18 U | 410 U | 20 U | 21 U | 20000 U | 2100 U | 20 U | 19 U | 200 U |
| AROCLOR-1254 | 18 U | 410 U | 20 U | 21 U | 20000 U | 2100 U | 20 U | 19 U | 200 U |
| AROCLOR-1260 | 220 | 1700 | 82 | 21 U | 360000 | 25000 | 57 | 23 J | 3000 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 220 | 1700 | 82 | 0 U | 360000 | 25000 | 57 | 23 | 3000 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 8900000 J | NA | NA | NA | 640000 J | 150000 J | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 440 | 55 U | NA | NA | 64 J | 56 U | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833A | SB-833B | SB-833C | SB-833D | SB-833E | SB-833F | SB-833G | SB-833H | SB-833J |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833A-02 | E-SB-833B-02 | E-SB-833C-02 | E-SB-833D-02 | E-SB-833E-02 | E-SB-833F-02 | E-SB-833G-02 | E-SB-833H-02 | E-SB-833J-02 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833K | SB-833L | SB-833M | SB-833N | SB-834 | SB-835 | SB-836 | SB-837 | SB-838 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833K-02 | E-SB-833L-02 | E-SB-833M-02 | E-SB-833N-02 | E-SB-834-SS | E-SB-835-SS | E-SB-836-SS | E-SB-837-SS | E-SB-838-SS |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101014 | 20100916 | 20100917 | 20100917 | 20100917 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 380 U | 7.4 U | 0.54 U | 0.5 U | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 880 U | 17 U | 0.49 U | 0.45 U | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 370 U | 7.3 U | 0.3 U | 0.28 U | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1600 U | 32 U | 1.1 U | 1.1 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 710 U | 14 U | 0.32 U | 0.29 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 750 U | 15 U | 0.46 U | 0.42 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 420 U | 8.2 U | 0.26 U | 0.24 U | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 43000 J | 300 J | 11 J | 0.31 U | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 880 U | 17 U | 0.79 U | 0.73 U | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | 7.1 U | 0.14 U | 0.15 U | 0.14 U | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 210000 | 1600 | 47 J | 0.22 U | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 210 U | 4.1 U | 0.57 U | 0.53 U | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 2100 U | 41 U | 1.1 U | 1.1 U | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 420 U | 8.2 U | 0.44 U | 0.41 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 360 U | 22 J | 0.32 U | 0.29 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 420 U | 8.2 U | 0.3 U | 0.28 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 340 U | 6.7 U | 0.6 U | 0.56 U | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 1100 J | 3.9 U | 0.31 U | 0.28 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 920 U | 18 U | 0.3 U | 0.28 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 2700 J | 38 J | 0.58 U | 0.53 U | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 960 U | 19 U | 0.82 U | 0.76 U | NA | NA | NA | NA | NA |
| 2-BUTANONE | 1800 U | 35 U | 1.2 U | 1.1 U | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 1800 U | 35 U | 1.2 UJ | 1.1 UR | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 380 U | 7.4 U | 0.35 U | 0.32 U | NA | NA | NA | NA | NA |
| 2-HEXANONE | 840 U | 16 U | 0.55 U | 0.51 U | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 410 U | 8.1 U | 0.36 U | 0.33 U | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 200 U | 3.9 U | 0.18 U | 0.17 U | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 2000 U | 39 U | 0.47 U | 0.44 U | NA | NA | NA | NA | NA |
| ACETONE | 9800 B | 160 B | 5.5 U | 13 J | NA | NA | NA | NA | NA |
| BENZENE | 500 U | 9.8 U | 0.2 U | 0.19 U | NA | NA | NA | NA | NA |
| BROMOBENZENE | 540 U | 11 U | 0.29 U | 0.27 U | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 540 U | 11 U | 0.62 U | 0.58 U | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 410 U | 8.1 U | 0.25 U | 0.23 U | NA | NA | NA | NA | NA |
| BROMOFORM | 790 U | 16 U | 0.29 U | 0.27 U | NA | NA | NA | NA | NA |
| BROMOMETHANE | 1200 U | 24 U | 0.47 U | 0.44 U | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 500 U | 9.8 U | 0.39 U | 0.36 U | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 270 U | 5.2 U | 0.32 U | 0.3 U | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 270 U | 5.2 U | 0.29 U | 0.27 U | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 500 U | 9.8 U | 0.48 U | 0.45 U | NA | NA | NA | NA | NA |
| CHLOROETHANE | 2500 U | 50 U | 0.75 U | 0.7 U | NA | NA | NA | NA | NA |
| CHLOROFORM | 370 U | 7.2 U | 0.25 U | 0.24 U | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 580 U | 11 U | 0.36 U | 0.33 U | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 290 U | 5.6 U | 0.32 U | 0.29 U | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 330 U | 6.5 U | 0.3 U | 0.28 U | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 580 U | 11 U | 0.55 U | 0.51 U | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 670 U | 13 U | 0.44 U | 0.41 U | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | 2100 U | 41 U | 1.3 U | 1.2 U | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | 9.2 U | 0.18 U | 0.19 U | 0.18 U | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 230 U | 4.4 U | 0.23 U | 0.21 U | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 580 U | 11 U | 1.1 U | 0.97 U | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 270 U | 5.3 U | 0.14 U | 0.13 U | NA | NA | NA | NA | NA |
| M+P-XYLENES | 260 U | 5.1 U | 1.1 U | 0.97 U | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 300 U | 5.8 U | 0.38 U | 0.35 U | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 3200 U | 63 U | 0.59 U | 0.54 U | NA | NA | NA | NA | NA |
| NAPHTHALENE | 280 U | 5.5 U | 0.17 U | 2.1 B | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 330 U | 6.5 U | 0.2 U | 0.19 U | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 580 U | 11 U | 0.35 U | 0.32 U | NA | NA | NA | NA | NA |
| O-XYLENE | 360 U | 6.9 U | 0.31 U | 0.28 U | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 200 U | 3.8 U | 0.16 U | 0.15 U | NA | NA | NA | NA | NA |
| STYRENE | 230 U | 4.6 U | 0.13 U | 0.12 U | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | 15 U | 0.3 U | 0.32 U | 0.3 U | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 270 U | 5.3 U | 0.25 U | 0.24 U | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | 10000 UR | 620 J | 6.7 UR | 6.2 UR | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 500 U | 9.8 U | 0.46 U | 1.8 J | NA | NA | NA | NA | NA |
| TOLUENE | 710 U | 14 U | 0.31 J | 0.22 U | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 340 U | 6.6 U | 0.59 U | 0.54 U | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 380 U | 7.5 U | 0.36 U | 0.33 U | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 840 U | 16 U | 0.47 U | 0.44 U | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 410 U | 7.9 U | 0.37 U | 0.34 U | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 670 U | 13 U | 0.3 U | 0.28 U | NA | NA | NA | NA | NA |
| VINYL ACETATE | 960 U | 19 U | 0.22 U | 0.2 UR | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833K | SB-833L | SB-833M | SB-833N | SB-834 | SB-835 | SB-836 | SB-837 | SB-838 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833K-02 | E-SB-833L-02 | E-SB-833M-02 | E-SB-833N-02 | E-SB-834-SS | E-SB-835-SS | E-SB-836-SS | E-SB-837-SS | E-SB-838-SS |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101014 | 20100916 | 20100917 | 20100917 | 20100917 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | 750 U | 15 U | 0.34 U | 0.32 U | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 38 U | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 38 U | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 98 | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 38 U | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| ANTHRACENE | 240 | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1788 | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 1788 | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 1300 | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1200 | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 1700 | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 850 | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 630 | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833K | SB-833L | SB-833M | SB-833N | SB-834 | SB-835 | SB-836 | SB-837 | SB-838 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833K-02 | E-SB-833L-02 | E-SB-833M-02 | E-SB-833N-02 | E-SB-834-SS | E-SB-835-SS | E-SB-836-SS | E-SB-837-SS | E-SB-838-SS |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101014 | 20100916 | 20100917 | 20100917 | 20100917 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 75 U | 120 J | 81 U | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | 75 U | 150 J | 81 U | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | 75 U | 80 U | 81 U | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 75 U | 88 J | 81 U | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 75 U | 80 U | 81 U | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | 75 U | 80 U | 81 U | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | 75 U | 80 U | 81 U | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 75 U | 80 U | 81 U | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833K | SB-833L | SB-833M | SB-833N | SB-834 | SB-835 | SB-836 | SB-837 | SB-838 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833K-02 | E-SB-833L-02 | E-SB-833M-02 | E-SB-833N-02 | E-SB-834-SS | E-SB-835-SS | E-SB-836-SS | E-SB-837-SS | E-SB-838-SS |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101014 | 20100916 | 20100917 | 20100917 | 20100917 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 75 U | 80 U | 81 U | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | 75 U | 80 U | 81 U | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | 75 U | 80 U | 81 U | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 75 U | 80 U | 81 U | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 75 U | 80 U | 81 U | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | 75 U | 80 U | 81 U | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 75 U | 80 U | 81 U | NA | NA |
| CHRYSENE | 1200 | 1.3 U | 1.3 U | 13 U | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 210 | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| FLUORANTHENE | 2000 | 3.9 U | 3.9 U | 520 | NA | NA | NA | NA | NA |
| FLUORENE | 38 U | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 700 | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| NAPHTHALENE | 38 U | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| PHENANTHRENE | 800 | 3.9 U | 3.9 U | 39 U | NA | NA | NA | NA | NA |
| PYRENE | 1600 | 3.9 U | 3.9 U | 290 | NA | NA | NA | NA | NA |
| TOTAL PAHS | 12528 | 0 U | 0 U | 810 | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 49000 U | 25 U | 250 U | 25 U | 24 U | 250 U | 25 U | 23 U | 23 U |
| AROCLOR-1221 | 37000 U | 19 U | 190 U | 19 U | 18 U | 190 U | 19 U | 18 U | 18 U |
| AROCLOR-1232 | 32000 U | 17 U | 160 U | 17 U | 16 U | 170 U | 17 U | 16 U | 16 U |
| AROCLOR-1242 | 30000 U | 15 U | 150 U | 15 U | 15 U | 160 U | 16 U | 14 U | 14 U |
| AROCLOR-1248 | 39000 U | 20 U | 200 U | 20 U | 19 U | 200 U | 20 U | 19 U | 19 U |
| AROCLOR-1254 | 39000 U | 20 U | 200 U | 20 U | 19 U | 200 U | 20 U | 19 U | 19 U |
| AROCLOR-1260 | 680000 | 26 J | 1300 | 31 J | 19 U | 910 | 130 | 26 J | 19 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 680000 | 26 | 1300 | 31 | 0 U | 910 | 130 | 26 | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 1400000 K | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 1400 | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833K | SB-833L | SB-833M | SB-833N | SB-834 | SB-835 | SB-836 | SB-837 | SB-838 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833K-02 | E-SB-833L-02 | E-SB-833M-02 | E-SB-833N-02 | E-SB-834-SS | E-SB-835-SS | E-SB-836-SS | E-SB-837-SS | E-SB-838-SS |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101014 | 20100916 | 20100917 | 20100917 | 20100917 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-839 | SB-840 | SB-841 | SB-842 | SB-843 | SB-844 | SB-845 | SB-846 | SB-847 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-839-SS | E-SB-840-SS | E-SB-841-SS | E-SB-842-SS | E-SB-843-SS | E-SB-844-SS | E-SB-845-SS | E-SB-846-SS | E-SB-847-SS |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100913 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-839 | SB-840 | SB-841 | SB-842 | SB-843 | SB-844 | SB-845 | SB-846 | SB-847 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-839-SS | E-SB-840-SS | E-SB-841-SS | E-SB-842-SS | E-SB-843-SS | E-SB-844-SS | E-SB-845-SS | E-SB-846-SS | E-SB-847-SS |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100913 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-839 | SB-840 | SB-841 | SB-842 | SB-843 | SB-844 | SB-845 | SB-846 | SB-847 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-839-SS | E-SB-840-SS | E-SB-841-SS | E-SB-842-SS | E-SB-843-SS | E-SB-844-SS | E-SB-845-SS | E-SB-846-SS | E-SB-847-SS |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100913 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-839 | SB-840 | SB-841 | SB-842 | SB-843 | SB-844 | SB-845 | SB-846 | SB-847 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-839-SS | E-SB-840-SS | E-SB-841-SS | E-SB-842-SS | E-SB-843-SS | E-SB-844-SS | E-SB-845-SS | E-SB-846-SS | E-SB-847-SS |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100913 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 6600 U | 23 U | 2200 U | 23 U | 24 U | 240 U | 11000 U | 24 U | 22 U |
| AROCLOR-1221 | 5000 U | 17 U | 1700 U | 18 U | 18 U | 180 U | 8500 U | 18 U | 17 U |
| AROCLOR-1232 | 4400 U | 15 U | 1500 U | 15 U | 16 U | 160 U | 7500 U | 16 U | 15 U |
| AROCLOR-1242 | 4100 U | 14 U | 1400 U | 14 U | 15 U | 150 U | 6900 U | 15 U | 14 U |
| AROCLOR-1248 | 5300 U | 18 U | 1800 U | 19 U | 19 U | 190 U | 9100 U | 19 U | 18 U |
| AROCLOR-1254 | 5300 U | 18 U | 1800 U | 19 U | 19 U | 190 U | 9100 U | 19 U | 18 U |
| AROCLOR-1260 | 41000 | 120 | 25000 | 19 U | 19 U | 2300 | 37000 | 53 | 64 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 41000 | 120 | 25000 | 0 U | 0 U | 2300 | 37000 | 53 | 64 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-839 | SB-840 | SB-841 | SB-842 | SB-843 | SB-844 | SB-845 | SB-846 | SB-847 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-839-SS | E-SB-840-SS | E-SB-841-SS | E-SB-842-SS | E-SB-843-SS | E-SB-844-SS | E-SB-845-SS | E-SB-846-SS | E-SB-847-SS |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100913 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-005 | SB-006 | SB-540 | SB-541 | SB-541 | SB-541 | SB-541A |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5A-SS | SB-6A-SS | SB-540-0001 | SB-541-2 | SB-541-SS0.5-1 | SB-541-SS0-0.5 | SB-541A-SS[SJ] |
| SAMPLE DATE | 20040917 | 20040917 | 20071204 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 2 | 0.5 | 0 | 0 |
| BOTTOM DEPTH | 0 | 0 | 1 | 2 | 1 | 0.5 | 0 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 2-BUTANONE | 55 U | 58 UJ | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 2-HEXANONE | 55 U | 58 UJ | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 55 U | 58 UJ | NA | NA | NA | NA | NA |
| ACETONE | 55 U | 58 UJ | NA | NA | NA | NA | NA |
| BENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| BROMOBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| BROMOFORM | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| BROMOMETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| CHLOROETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| CHLOROFORM | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| M+P-XYLENES | 11 U | 12 UJ | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 8 J | 9 J | NA | NA | NA | NA | NA |
| NAPHTHALENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| O-XYLENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| STYRENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| TOLUENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 6 U | 6 UJ | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-005 | SB-006 | SB-540 | SB-541 | SB-541 | SB-541 | SB-541A |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5A-SS | SB-6A-SS | SB-540-0001 | SB-541-2 | SB-541-SS0.5-1 | SB-541-SS0-0.5 | SB-541A-SS[SJ] |
| SAMPLE DATE | 20040917 | 20040917 | 20071204 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 2 | 0.5 | 0 | 0 |
| BOTTOM DEPTH | 0 | 0 | 1 | 2 | 1 | 0.5 | 0 |
| TRICHLOROFLUOROMETHANE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| VINYL ACETATE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 6 U | 6 UJ | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | 380 U | 390 U | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 380 U | 390 U | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 950 U | 970 U | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 380 U | 390 U | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 380 U | 390 U | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 380 U | 390 U | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 950 U | 970 U | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 380 U | 390 U | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 380 U | 390 U | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 950 U | 44 J | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 380 U | 390 U | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 380 U | 390 U | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 380 U | 390 U | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 950 U | 970 U | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 870 U | 890 U | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 380 U | 390 U | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 380 U | 390 U | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 380 U | 390 U | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 380 U | 390 U | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 950 U | 970 U | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | 950 U | 970 U | NA | NA | NA | NA | NA |
| ACETOPHENONE | 380 U | 390 U | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 380 U | 390 U | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 380 U | 390 U | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 380 U | 390 U | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 380 U | 390 U | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 380 U | 390 U | NA | NA | NA | NA | NA |
| CAPROLACTAM | 380 U | 390 U | NA | NA | NA | NA | NA |
| CARBAZOLE | 380 U | 390 U | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 380 U | 390 U | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 380 U | 390 U | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 380 U | 390 U | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 380 U | 390 U | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 380 U | 390 UJ | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 380 U | 390 U | NA | NA | NA | NA | NA |
| ISOPHORONE | 380 U | 390 U | NA | NA | NA | NA | NA |
| NITROBENZENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 380 U | 390 U | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 380 U | 390 U | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 950 U | 970 U | NA | NA | NA | NA | NA |
| PHENOL | 380 U | 390 U | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| ANTHRACENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 380 U | 390 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 380 U | 390 U | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 380 U | 390 UJ | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 380 U | 390 UJ | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-005 | SB-006 | SB-540 | SB-541 | SB-541 | SB-541 | SB-541A |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5A-SS | SB-6A-SS | SB-540-0001 | SB-541-2 | SB-541-SS0.5-1 | SB-541-SS0-0.5 | SB-541A-SS[SJ] |
| SAMPLE DATE | 20040917 | 20040917 | 20071204 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 2 | 0.5 | 0 | 0 |
| BOTTOM DEPTH | 0 | 0 | 1 | 2 | 1 | 0.5 | 0 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 380 U | 390 UJ | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 380 U | 390 UJ | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-005 | SB-006 | SB-540 | SB-541 | SB-541 | SB-541 | SB-541A |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5A-SS | SB-6A-SS | SB-540-0001 | SB-541-2 | SB-541-SS0.5-1 | SB-541-SS0-0.5 | SB-541A-SS[SJ] |
| SAMPLE DATE | 20040917 | 20040917 | 20071204 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 2 | 0.5 | 0 | 0 |
| BOTTOM DEPTH | 0 | 0 | 1 | 2 | 1 | 0.5 | 0 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 380 U | 390 UJ | NA | NA | NA | NA | NA |
| FLUORANTHENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| FLUORENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 380 U | 390 UJ | NA | NA | NA | NA | NA |
| NAPHTHALENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| PHENANTHRENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| PYRENE | 380 U | 390 U | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 280 U | 290 U | 400 U | 20 U | 20 U | 20 U | 89 U |
| AROCLOR-1221 | 280 U | 290 U | 400 U | 20 U | 20 U | 20 U | 89 U |
| AROCLOR-1232 | 280 U | 290 U | 400 U | 20 U | 20 U | 20 U | 89 U |
| AROCLOR-1242 | 280 U | 290 U | 400 U | 20 U | 20 U | 20 U | 89 U |
| AROCLOR-1248 | 280 U | 290 U | 400 U | 20 U | 20 U | 20 U | 89 U |
| AROCLOR-1254 | 280 U | 290 U | 400 U | 20 U | 20 U | 20 U | 89 U |
| AROCLOR-1260 | 280 U | 290 U | 1800 | 20 U | 20 U | 20 U | 490 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 1800 | 0 U | 0 U | 0 U | 490 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 2.8 U | 2.8 U | NA | NA | NA | NA | NA |
| ARSENIC | 1.1 | 1.7 | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 2.8 U | 2.8 U | NA | NA | NA | NA | NA |
| CADMIUM | 2.8 U | 2.8 U | NA | NA | NA | NA | NA |
| CHROMIUM | 29 | 10 K | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 5.8 L | 5.1 L | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 8 J | 2.8 UJ | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.11 U | 0.11 U | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 3.6 K | 5.6 K | NA | NA | NA | NA | NA |
| SELENIUM | 2.8 U | 2.8 U | NA | NA | NA | NA | NA |
| SILVER | 2.8 UL | 2.8 UL | NA | NA | NA | NA | NA |
| THALLIUM | 2.2 UL | 2.3 UL | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 28 UL | 28 UL | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | 11000 U | 11000 U | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 110 U | 170 | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | NA | 81.9 | 82 | 82 | 81 | 94 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-005 | SB-006 | SB-540 | SB-541 | SB-541 | SB-541 | SB-541A |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5A-SS | SB-6A-SS | SB-540-0001 | SB-541-2 | SB-541-SS0.5-1 | SB-541-SS0-0.5 | SB-541A-SS[SJ] |
| SAMPLE DATE | 20040917 | 20040917 | 20071204 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 2 | 0.5 | 0 | 0 |
| BOTTOM DEPTH | 0 | 0 | 1 | 2 | 1 | 0.5 | 0 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-541A | SB-541A | SB-542 | SB-542 | SB-542 | SB-543 | SB-543 | SB-543 | SB-543A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-541A-SS0.5-1 | SB-541A-SS0-0.5 | SB-542-2 | SB-542-SS0.5-1 | SB-542-SS0-0.5 | SB-543-2 | SB-543-SS0.5-1 | SB-543-SS0-0.5 | SB-543A-2 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-541A | SB-541A | SB-542 | SB-542 | SB-542 | SB-543 | SB-543 | SB-543 | SB-543A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-541A-SS0.5-1 | SB-541A-SS0-0.5 | SB-542-2 | SB-542-SS0.5-1 | SB-542-SS0-0.5 | SB-543-2 | SB-543-SS0.5-1 | SB-543-SS0-0.5 | SB-543A-2 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-541A | SB-541A | SB-542 | SB-542 | SB-542 | SB-543 | SB-543 | SB-543 | SB-543A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-541A-SS0.5-1 | SB-541A-SS0-0.5 | SB-542-2 | SB-542-SS0.5-1 | SB-542-SS0-0.5 | SB-543-2 | SB-543-SS0.5-1 | SB-543-SS0-0.5 | SB-543A-2 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-541A | SB-541A | SB-542 | SB-542 | SB-542 | SB-543 | SB-543 | SB-543 | SB-543A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-541A-SS0.5-1 | SB-541A-SS0-0.5 | SB-542-2 | SB-542-SS0.5-1 | SB-542-SS0-0.5 | SB-543-2 | SB-543-SS0.5-1 | SB-543-SS0-0.5 | SB-543A-2 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 21 U | 21 U | 19 U | 19 U | 20 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1221 | 21 U | 21 U | 19 U | 19 U | 20 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1232 | 21 U | 21 U | 19 U | 19 U | 20 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1242 | 21 U | 21 U | 19 U | 19 U | 20 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1248 | 21 U | 21 U | 19 U | 19 U | 20 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1254 | 21 U | 21 U | 19 U | 19 U | 20 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1260 | 19 J | 21 J | 19 U | 19 U | 20 U | 20 U | 19 U | 5.4 J | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 19 | 21 | 0 U | 0 U | 0 U | 0 U | 0 U | 5.4 | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 79 | 79 | 88 | 86 | 85 | 85 | 88 | 87 | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-541A | SB-541A | SB-542 | SB-542 | SB-542 | SB-543 | SB-543 | SB-543 | SB-543A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-541A-SS0.5-1 | SB-541A-SS0-0.5 | SB-542-2 | SB-542-SS0.5-1 | SB-542-SS0-0.5 | SB-543-2 | SB-543-SS0.5-1 | SB-543-SS0-0.5 | SB-543A-2 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-543A | SB-543A | SB-543A | SB-544 | SB-544 | SB-544 | SB-544A | SB-544A | SB-544A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-543A-SS[SJ] | SB-543A-SS0.5-1 | SB-543A-SS0-0.5 | SB-544-2 | SB-544-SS0.5-1 | SB-544-SS0-0.5 | SB-544A-SS[SJ] | SB-544A-SS0.5-1 | SB-544A-SS0-0.5 |
| SAMPLE DATE | 20081111 | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0.5 | 0 | 2 | 0.5 | 0 | 0 | 0.5 | 0 |
| BOTTOM DEPTH | 0 | 1 | 0.5 | 2 | 1 | 0.5 | 0 | 1 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-543A | SB-543A | SB-543A | SB-544 | SB-544 | SB-544 | SB-544A | SB-544A | SB-544A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-543A-SS[SJ] | SB-543A-SS0.5-1 | SB-543A-SS0-0.5 | SB-544-2 | SB-544-SS0.5-1 | SB-544-SS0-0.5 | SB-544A-SS[SJ] | SB-544A-SS0.5-1 | SB-544A-SS0-0.5 |
| SAMPLE DATE | 20081111 | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0.5 | 0 | 2 | 0.5 | 0 | 0 | 0.5 | 0 |
| BOTTOM DEPTH | 0 | 1 | 0.5 | 2 | 1 | 0.5 | 0 | 1 | 0.5 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-543A | SB-543A | SB-543A | SB-544 | SB-544 | SB-544 | SB-544A | SB-544A | SB-544A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-543A-SS[SJ] | SB-543A-SS0.5-1 | SB-543A-SS0-0.5 | SB-544-2 | SB-544-SS0.5-1 | SB-544-SS0-0.5 | SB-544A-SS[SJ] | SB-544A-SS0.5-1 | SB-544A-SS0-0.5 |
| SAMPLE DATE | 20081111 | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0.5 | 0 | 2 | 0.5 | 0 | 0 | 0.5 | 0 |
| BOTTOM DEPTH | 0 | 1 | 0.5 | 2 | 1 | 0.5 | 0 | 1 | 0.5 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-543A | SB-543A | SB-543A | SB-544 | SB-544 | SB-544 | SB-544A | SB-544A | SB-544A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-543A-SS[SJ] | SB-543A-SS0.5-1 | SB-543A-SS0-0.5 | SB-544-2 | SB-544-SS0.5-1 | SB-544-SS0-0.5 | SB-544A-SS[SJ] | SB-544A-SS0.5-1 | SB-544A-SS0-0.5 |
| SAMPLE DATE | 20081111 | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0.5 | 0 | 2 | 0.5 | 0 | 0 | 0.5 | 0 |
| BOTTOM DEPTH | 0 | 1 | 0.5 | 2 | 1 | 0.5 | 0 | 1 | 0.5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 180 U | 19 U | 20 U | 20 U | 20 U | 19 U | 17 U | 20 U | 19 U |
| AROCLOR-1221 | 180 U | 19 U | 20 U | 20 U | 20 U | 19 U | 17 U | 20 U | 19 U |
| AROCLOR-1232 | 180 U | 19 U | 20 U | 20 U | 20 U | 19 U | 17 U | 20 U | 19 U |
| AROCLOR-1242 | 180 U | 19 U | 20 U | 20 U | 20 U | 19 U | 17 U | 20 U | 19 U |
| AROCLOR-1248 | 180 U | 19 U | 20 U | 20 U | 20 U | 19 U | 17 U | 20 U | 19 U |
| AROCLOR-1254 | 180 U | 19 U | 20 U | 20 U | 20 U | 19 U | 17 U | 20 U | 19 U |
| AROCLOR-1260 | 940 | 77 | 91 | 20 U | 20 U | 19 U | 41 | 23 | 190 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 940 | 77 | 91 | 0 U | 0 U | 0 U | 41 | 23 | 190 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 94 | NA | 82 | 82 | 84 | 87 | 95 | 84 | 88 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-543A | SB-543A | SB-543A | SB-544 | SB-544 | SB-544 | SB-544A | SB-544A | SB-544A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-543A-SS[SJ] | SB-543A-SS0.5-1 | SB-543A-SS0-0.5 | SB-544-2 | SB-544-SS0.5-1 | SB-544-SS0-0.5 | SB-544A-SS[SJ] | SB-544A-SS0.5-1 | SB-544A-SS0-0.5 |
| SAMPLE DATE | 20081111 | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0.5 | 0 | 2 | 0.5 | 0 | 0 | 0.5 | 0 |
| BOTTOM DEPTH | 0 | 1 | 0.5 | 2 | 1 | 0.5 | 0 | 1 | 0.5 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-545 | SB-545 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-545-SS0.5-1 | SB-545-SS0-0.5 | SB-546-2 | SB-546-2-AVG | SB-546-2-D | SB-546-SS0.5-1 | SB-546-SS0.5-1-AVG | SB-546-SS0.5-1-D | SB-546-SS0-0.5 |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SB | SB | SS | SS | SS | SS |
| TOP DEPTH | 0.5 | 0 | 2 | 2 | 2 | 0.5 | 0.5 | 0.5 | 0 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 2 | 2 | 1 | 1 | 1 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-545 | SB-545 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-545-SS0.5-1 | SB-545-SS0-0.5 | SB-546-2 | SB-546-2-AVG | SB-546-2-D | SB-546-SS0.5-1 | SB-546-SS0.5-1-AVG | SB-546-SS0.5-1-D | SB-546-SS0-0.5 |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SB | SB | SS | SS | SS | SS |
| TOP DEPTH | 0.5 | 0 | 2 | 2 | 2 | 0.5 | 0.5 | 0.5 | 0 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 2 | 2 | 1 | 1 | 1 | 0.5 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-545 | SB-545 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-545-SS0.5-1 | SB-545-SS0-0.5 | SB-546-2 | SB-546-2-AVG | SB-546-2-D | SB-546-SS0.5-1 | SB-546-SS0.5-1-AVG | SB-546-SS0.5-1-D | SB-546-SS0-0.5 |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SB | SB | SS | SS | SS | SS |
| TOP DEPTH | 0.5 | 0 | 2 | 2 | 2 | 0.5 | 0.5 | 0.5 | 0 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 2 | 2 | 1 | 1 | 1 | 0.5 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-545 | SB-545 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-545-SS0.5-1 | SB-545-SS0-0.5 | SB-546-2 | SB-546-2-AVG | SB-546-2-D | SB-546-SS0.5-1 | SB-546-SS0.5-1-AVG | SB-546-SS0.5-1-D | SB-546-SS0-0.5 |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SB | SB | SS | SS | SS | SS |
| TOP DEPTH | 0.5 | 0 | 2 | 2 | 2 | 0.5 | 0.5 | 0.5 | 0 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 2 | 2 | 1 | 1 | 1 | 0.5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 21 U | 20 U | 20 U | 19.5 U | 19 U | 18 U | 18.5 U | 19 U | 19 U |
| AROCLOR-1221 | 21 U | 20 U | 20 U | 19.5 U | 19 U | 18 U | 18.5 U | 19 U | 19 U |
| AROCLOR-1232 | 21 U | 20 U | 20 U | 19.5 U | 19 U | 18 U | 18.5 U | 19 U | 19 U |
| AROCLOR-1242 | 21 U | 20 U | 20 U | 19.5 U | 19 U | 18 U | 18.5 U | 19 U | 19 U |
| AROCLOR-1248 | 21 U | 20 U | 20 U | 19.5 U | 19 U | 18 U | 18.5 U | 19 U | 19 U |
| AROCLOR-1254 | 21 U | 20 U | 20 U | 19.5 U | 19 U | 18 U | 18.5 U | 19 U | 19 U |
| AROCLOR-1260 | 21 U | 20 U | 20 U | 19.5 U | 19 U | 18 U | 18.5 U | 19 UJ | 19 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 81 | 84 | 85 | 85.5 | 86 | 90 | 88 | 86 | 90 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-545 | SB-545 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-545-SS0.5-1 | SB-545-SS0-0.5 | SB-546-2 | SB-546-2-AVG | SB-546-2-D | SB-546-SS0.5-1 | SB-546-SS0.5-1-AVG | SB-546-SS0.5-1-D | SB-546-SS0-0.5 |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SB | SB | SS | SS | SS | SS |
| TOP DEPTH | 0.5 | 0 | 2 | 2 | 2 | 0.5 | 0.5 | 0.5 | 0 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 2 | 2 | 1 | 1 | 1 | 0.5 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-546 | SB-546 | SB-546A | SB-546A | SB-546A | SB-547 | SB-547 | SB-547 | SB-548 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-546-SS0-0.5-AVG | SB-546-SS0-0.5-D | SB-546A-SS[SJ] | SB-546A-SS0.5-1 | SB-546A-SS0-0.5 | SB-547-2 | SB-547-SS0.5-1 | SB-547-SS0-0.5 | SB-548-2 |
| SAMPLE DATE | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 | 20081023 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0 | 0 | 0 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 0.5 | 0.5 | 0 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-546 | SB-546 | SB-546A | SB-546A | SB-546A | SB-547 | SB-547 | SB-547 | SB-548 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-546-SS0-0.5-AVG | SB-546-SS0-0.5-D | SB-546A-SS[SJ] | SB-546A-SS0.5-1 | SB-546A-SS0-0.5 | SB-547-2 | SB-547-SS0.5-1 | SB-547-SS0-0.5 | SB-548-2 |
| SAMPLE DATE | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 | 20081023 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0 | 0 | 0 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 0.5 | 0.5 | 0 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-546 | SB-546 | SB-546A | SB-546A | SB-546A | SB-547 | SB-547 | SB-547 | SB-548 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-546-SS0-0.5-AVG | SB-546-SS0-0.5-D | SB-546A-SS[SJ] | SB-546A-SS0.5-1 | SB-546A-SS0-0.5 | SB-547-2 | SB-547-SS0.5-1 | SB-547-SS0-0.5 | SB-548-2 |
| SAMPLE DATE | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 | 20081023 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0 | 0 | 0 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 0.5 | 0.5 | 0 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-546 | SB-546 | SB-546A | SB-546A | SB-546A | SB-547 | SB-547 | SB-547 | SB-548 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-546-SS0-0.5-AVG | SB-546-SS0-0.5-D | SB-546A-SS[SJ] | SB-546A-SS0.5-1 | SB-546A-SS0-0.5 | SB-547-2 | SB-547-SS0.5-1 | SB-547-SS0-0.5 | SB-548-2 |
| SAMPLE DATE | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 | 20081023 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0 | 0 | 0 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 0.5 | 0.5 | 0 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 19 U | 19 U | 18 U | 20 U | 920 U | 19 U | 18 U | 19 U | 19 U |
| AROCLOR-1221 | 19 U | 19 U | 18 U | 20 U | 920 U | 19 U | 18 U | 19 U | 19 U |
| AROCLOR-1232 | 19 U | 19 U | 18 U | 20 U | 920 U | 19 U | 18 U | 19 U | 19 U |
| AROCLOR-1242 | 19 U | 19 U | 18 U | 20 U | 920 U | 19 U | 18 U | 19 U | 19 U |
| AROCLOR-1248 | 19 U | 19 U | 18 U | 20 U | 920 U | 19 U | 18 U | 19 U | 19 U |
| AROCLOR-1254 | 19 U | 19 U | 18 U | 20 U | 920 U | 19 U | 18 U | 19 U | 19 U |
| AROCLOR-1260 | 19 U | 19 U | 66 | 140 | 9600 | 19 U | 18 U | 19 U | 19 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 66 | 140 | 9600 | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 89.5 | 89 | 94 | 85 | 91 | 88 | 91 | 89 | 86 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-546 | SB-546 | SB-546A | SB-546A | SB-546A | SB-547 | SB-547 | SB-547 | SB-548 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-546-SS0-0.5-AVG | SB-546-SS0-0.5-D | SB-546A-SS[SJ] | SB-546A-SS0.5-1 | SB-546A-SS0-0.5 | SB-547-2 | SB-547-SS0.5-1 | SB-547-SS0-0.5 | SB-548-2 |
| SAMPLE DATE | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 | 20081023 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0 | 0 | 0 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 0.5 | 0.5 | 0 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-549 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-548-2-AVG | SB-548-2-D | SB-548-SS0.5-1 | SB-548-SS0.5-1-AVG | SB-548-SS0.5-1-D | SB-548-SS0-0.5 | SB-548-SS0-0.5-AVG | SB-548-SS0-0.5-D | SB-549-2 |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | AVG | DUP | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SS | SS | SS | SS | SB |
| TOP DEPTH | 2 | 2 | 0.5 | 0.5 | 0.5 | 0 | 0 | 0 | 2 |
| BOTTOM DEPTH | 2 | 2 | 1 | 1 | 1 | 0.5 | 0.5 | 0.5 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-549 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-548-2-AVG | SB-548-2-D | SB-548-SS0.5-1 | SB-548-SS0.5-1-AVG | SB-548-SS0.5-1-D | SB-548-SS0-0.5 | SB-548-SS0-0.5-AVG | SB-548-SS0-0.5-D | SB-549-2 |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | AVG | DUP | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SS | SS | SS | SS | SB |
| TOP DEPTH | 2 | 2 | 0.5 | 0.5 | 0.5 | 0 | 0 | 0 | 2 |
| BOTTOM DEPTH | 2 | 2 | 1 | 1 | 1 | 0.5 | 0.5 | 0.5 | 2 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-549 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-548-2-AVG | SB-548-2-D | SB-548-SS0.5-1 | SB-548-SS0.5-1-AVG | SB-548-SS0.5-1-D | SB-548-SS0-0.5 | SB-548-SS0-0.5-AVG | SB-548-SS0-0.5-D | SB-549-2 |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | AVG | DUP | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SS | SS | SS | SS | SB |
| TOP DEPTH | 2 | 2 | 0.5 | 0.5 | 0.5 | 0 | 0 | 0 | 2 |
| BOTTOM DEPTH | 2 | 2 | 1 | 1 | 1 | 0.5 | 0.5 | 0.5 | 2 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-549 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-548-2-AVG | SB-548-2-D | SB-548-SS0.5-1 | SB-548-SS0.5-1-AVG | SB-548-SS0.5-1-D | SB-548-SS0-0.5 | SB-548-SS0-0.5-AVG | SB-548-SS0-0.5-D | SB-549-2 |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | AVG | DUP | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SS | SS | SS | SS | SB |
| TOP DEPTH | 2 | 2 | 0.5 | 0.5 | 0.5 | 0 | 0 | 0 | 2 |
| BOTTOM DEPTH | 2 | 2 | 1 | 1 | 1 | 0.5 | 0.5 | 0.5 | 2 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 20 U |
| AROCLOR-1221 | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 20 U |
| AROCLOR-1232 | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 20 U |
| AROCLOR-1242 | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 20 U |
| AROCLOR-1248 | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 20 U |
| AROCLOR-1254 | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 20 U |
| AROCLOR-1260 | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 87 | 88 | 87 | 88 | 89 | 88 | 87 | 86 | 85 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-549 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-548-2-AVG | SB-548-2-D | SB-548-SS0.5-1 | SB-548-SS0.5-1-AVG | SB-548-SS0.5-1-D | SB-548-SS0-0.5 | SB-548-SS0-0.5-AVG | SB-548-SS0-0.5-D | SB-549-2 |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | AVG | DUP | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SS | SS | SS | SS | SB |
| TOP DEPTH | 2 | 2 | 0.5 | 0.5 | 0.5 | 0 | 0 | 0 | 2 |
| BOTTOM DEPTH | 2 | 2 | 1 | 1 | 1 | 0.5 | 0.5 | 0.5 | 2 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-549 | SB-549 | SB-549 | SB-549 | SB-550 | SB-550 | SB-550 | SB-550A | SB-550A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-549-2-AVG | SB-549-2-D | SB-549-SS0.5-1 | SB-549-SS0-0.5 | SB-550-2 | SB-550-SS0.5-1 | SB-550-SS0-0.5 | SB-550A-2 | SB-550A-SS[SJ] |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SB | SS | SS | SB | SS |
| TOP DEPTH | 2 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 0 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-549 | SB-549 | SB-549 | SB-549 | SB-550 | SB-550 | SB-550 | SB-550A | SB-550A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-549-2-AVG | SB-549-2-D | SB-549-SS0.5-1 | SB-549-SS0-0.5 | SB-550-2 | SB-550-SS0.5-1 | SB-550-SS0-0.5 | SB-550A-2 | SB-550A-SS[SJ] |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SB | SS | SS | SB | SS |
| TOP DEPTH | 2 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 0 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-549 | SB-549 | SB-549 | SB-549 | SB-550 | SB-550 | SB-550 | SB-550A | SB-550A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-549-2-AVG | SB-549-2-D | SB-549-SS0.5-1 | SB-549-SS0-0.5 | SB-550-2 | SB-550-SS0.5-1 | SB-550-SS0-0.5 | SB-550A-2 | SB-550A-SS[SJ] |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SB | SS | SS | SB | SS |
| TOP DEPTH | 2 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 0 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-549 | SB-549 | SB-549 | SB-549 | SB-550 | SB-550 | SB-550 | SB-550A | SB-550A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-549-2-AVG | SB-549-2-D | SB-549-SS0.5-1 | SB-549-SS0-0.5 | SB-550-2 | SB-550-SS0.5-1 | SB-550-SS0-0.5 | SB-550A-2 | SB-550A-SS[SJ] |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SB | SS | SS | SB | SS |
| TOP DEPTH | 2 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 0 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 19.5 U | 19 U | 20 U | 19 U | 20 U | 20 U | 19 U | 20 U | 17 U |
| AROCLOR-1221 | 19.5 U | 19 U | 20 U | 19 U | 20 U | 20 U | 19 U | 20 U | 17 U |
| AROCLOR-1232 | 19.5 U | 19 U | 20 U | 19 U | 20 U | 20 U | 19 U | 20 U | 17 U |
| AROCLOR-1242 | 19.5 U | 19 U | 20 U | 19 U | 20 U | 20 U | 19 U | 20 U | 17 U |
| AROCLOR-1248 | 19.5 U | 19 U | 20 U | 19 U | 20 U | 20 U | 19 U | 20 U | 17 U |
| AROCLOR-1254 | 19.5 U | 19 U | 20 U | 19 U | 20 U | 20 U | 19 U | 20 U | 17 U |
| AROCLOR-1260 | 19.5 U | 19 U | 20 U | 19 U | 20 U | 20 U | 19 U | 20 U | 61 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 61 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 85.5 | 86 | 85 | 87 | 85 | 84 | 86 | 84 | 95 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-549 | SB-549 | SB-549 | SB-549 | SB-550 | SB-550 | SB-550 | SB-550A | SB-550A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-549-2-AVG | SB-549-2-D | SB-549-SS0.5-1 | SB-549-SS0-0.5 | SB-550-2 | SB-550-SS0.5-1 | SB-550-SS0-0.5 | SB-550A-2 | SB-550A-SS[SJ] |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SB | SS | SS | SB | SS |
| TOP DEPTH | 2 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0 |
| BOTTOM DEPTH | 2 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 0 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-550A | SB-550A | SB-551 | SB-551 | SB-551 | SB-552 | SB-552 | SB-552 | SB-553 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-550A-SS0.5-1 | SB-550A-SS0-0.5 | SB-551-2 | SB-551-SS0.5-1 | SB-551-SS0-0.5 | SB-552-2 | SB-552-SS0.5-1 | SB-552-SS0-0.5 | SB-553-2 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-550A | SB-550A | SB-551 | SB-551 | SB-551 | SB-552 | SB-552 | SB-552 | SB-553 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-550A-SS0.5-1 | SB-550A-SS0-0.5 | SB-551-2 | SB-551-SS0.5-1 | SB-551-SS0-0.5 | SB-552-2 | SB-552-SS0.5-1 | SB-552-SS0-0.5 | SB-553-2 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-550A | SB-550A | SB-551 | SB-551 | SB-551 | SB-552 | SB-552 | SB-552 | SB-553 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-550A-SS0.5-1 | SB-550A-SS0-0.5 | SB-551-2 | SB-551-SS0.5-1 | SB-551-SS0-0.5 | SB-552-2 | SB-552-SS0.5-1 | SB-552-SS0-0.5 | SB-553-2 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-550A | SB-550A | SB-551 | SB-551 | SB-551 | SB-552 | SB-552 | SB-552 | SB-553 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-550A-SS0.5-1 | SB-550A-SS0-0.5 | SB-551-2 | SB-551-SS0.5-1 | SB-551-SS0-0.5 | SB-552-2 | SB-552-SS0.5-1 | SB-552-SS0-0.5 | SB-553-2 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1221 | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1232 | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1242 | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1248 | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1254 | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1260 | 20 U | 12 J | 21 U | 20 U | 5.6 J | 20 U | 27 | 19 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 12 | 0 U | 0 U | 5.6 | 0 U | 27 | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 81 | 82 | 80 | 83 | 91 | 85 | 87 | 86 | 82 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-550A | SB-550A | SB-551 | SB-551 | SB-551 | SB-552 | SB-552 | SB-552 | SB-553 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-550A-SS0.5-1 | SB-550A-SS0-0.5 | SB-551-2 | SB-551-SS0.5-1 | SB-551-SS0-0.5 | SB-552-2 | SB-552-SS0.5-1 | SB-552-SS0-0.5 | SB-553-2 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-553 | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-556 | SB-556 | SB-556 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-553-SS0.5-1 | SB-554-2 | SB-554-SS0.5-1 | SB-555-2 | SB-555-SS0.5-1 | SB-555-SS0-0.5 | SB-556-2 | SB-556-SS0.5-1 | SB-556-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 0.5 | 2 | 0.5 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-553 | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-556 | SB-556 | SB-556 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-553-SS0.5-1 | SB-554-2 | SB-554-SS0.5-1 | SB-555-2 | SB-555-SS0.5-1 | SB-555-SS0-0.5 | SB-556-2 | SB-556-SS0.5-1 | SB-556-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 0.5 | 2 | 0.5 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-553 | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-556 | SB-556 | SB-556 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-553-SS0.5-1 | SB-554-2 | SB-554-SS0.5-1 | SB-555-2 | SB-555-SS0.5-1 | SB-555-SS0-0.5 | SB-556-2 | SB-556-SS0.5-1 | SB-556-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 0.5 | 2 | 0.5 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-553 | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-556 | SB-556 | SB-556 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-553-SS0.5-1 | SB-554-2 | SB-554-SS0.5-1 | SB-555-2 | SB-555-SS0.5-1 | SB-555-SS0-0.5 | SB-556-2 | SB-556-SS0.5-1 | SB-556-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 0.5 | 2 | 0.5 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 19 U | 19 U | 19 U | 950 U | 910 U | 1800 U | NA | 20 U | 18 U |
| AROCLOR-1221 | 19 U | 19 U | 19 U | 950 U | 910 U | 1800 U | NA | 20 U | 18 U |
| AROCLOR-1232 | 19 U | 19 U | 19 U | 950 U | 910 U | 1800 U | NA | 20 U | 18 U |
| AROCLOR-1242 | 19 U | 19 U | 19 U | 950 U | 910 U | 1800 U | NA | 20 U | 18 U |
| AROCLOR-1248 | 19 U | 19 U | 19 U | 950 U | 910 U | 1800 U | NA | 20 U | 18 U |
| AROCLOR-1254 | 19 U | 19 U | 19 U | 950 U | 4800 | 36000 | NA | 20 U | 18 U |
| AROCLOR-1260 | 19 U | 19 U | 19 U | 3800 | 3800 J | 17000 J | NA | 20 U | 180 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 3800 | 8600 | 53000 | NA | 0 U | 180 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 86 | 88 | 90 | 88 | 91 | 93 | 83 | 82 | 91 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-553 | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-556 | SB-556 | SB-556 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-553-SS0.5-1 | SB-554-2 | SB-554-SS0.5-1 | SB-555-2 | SB-555-SS0.5-1 | SB-555-SS0-0.5 | SB-556-2 | SB-556-SS0.5-1 | SB-556-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 0.5 | 2 | 0.5 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 | SB-559 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-557-2 | SB-557-SS0.5-1 | SB-557-SS0-0.5 | SB-558-2 | SB-558-SS0.5-1 | SB-558-SS0-0.5 | SB-559-2 | SB-559-SS0.5-1 | SB-559-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 | SB-559 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-557-2 | SB-557-SS0.5-1 | SB-557-SS0-0.5 | SB-558-2 | SB-558-SS0.5-1 | SB-558-SS0-0.5 | SB-559-2 | SB-559-SS0.5-1 | SB-559-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 | SB-559 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-557-2 | SB-557-SS0.5-1 | SB-557-SS0-0.5 | SB-558-2 | SB-558-SS0.5-1 | SB-558-SS0-0.5 | SB-559-2 | SB-559-SS0.5-1 | SB-559-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 | SB-559 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-557-2 | SB-557-SS0.5-1 | SB-557-SS0-0.5 | SB-558-2 | SB-558-SS0.5-1 | SB-558-SS0-0.5 | SB-559-2 | SB-559-SS0.5-1 | SB-559-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 18 U | 18 U | 19 U | 19 U | 19 U | 196 U | 18 U | 18 U | 18 U |
| AROCLOR-1221 | 18 U | 18 U | 19 U | 19 U | 19 U | 196 U | 18 U | 18 U | 18 U |
| AROCLOR-1232 | 18 U | 18 U | 19 U | 19 U | 19 U | 196 U | 18 U | 18 U | 18 U |
| AROCLOR-1242 | 18 U | 18 U | 19 U | 19 U | 19 U | 196 U | 18 U | 18 U | 18 U |
| AROCLOR-1248 | 18 U | 18 U | 19 U | 19 U | 19 U | 196 U | 18 U | 18 U | 18 U |
| AROCLOR-1254 | 18 U | 18 U | 19 U | 51 | 19 U | 196 U | 18 U | 18 U | 18 U |
| AROCLOR-1260 | 18 U | 18 U | 11 J | 19 U | 19 U | 1600 | 18 U | 18 U | 5.2 J |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 11 | 51 | 0 U | 1600 | 0 U | 0 U | 5.2 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 95 | 90 | 89 | 89 | 87 | 86 | 93 | 93 | 93 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 | SB-559 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-557-2 | SB-557-SS0.5-1 | SB-557-SS0-0.5 | SB-558-2 | SB-558-SS0.5-1 | SB-558-SS0-0.5 | SB-559-2 | SB-559-SS0.5-1 | SB-559-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-560 | SB-560 | SB-560 | SB-561 | SB-561 | SB-561 | SB-562 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-560-2 | SB-560-SS0.5-1 | SB-560-SS0-0.5 | SB-561-2 | SB-561-SS0.5-1 | SB-561-SS0-0.5 | SB-562-2 | SB-562-SS0.5-1 | SB-562-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-560 | SB-560 | SB-560 | SB-561 | SB-561 | SB-561 | SB-562 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-560-2 | SB-560-SS0.5-1 | SB-560-SS0-0.5 | SB-561-2 | SB-561-SS0.5-1 | SB-561-SS0-0.5 | SB-562-2 | SB-562-SS0.5-1 | SB-562-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-560 | SB-560 | SB-560 | SB-561 | SB-561 | SB-561 | SB-562 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-560-2 | SB-560-SS0.5-1 | SB-560-SS0-0.5 | SB-561-2 | SB-561-SS0.5-1 | SB-561-SS0-0.5 | SB-562-2 | SB-562-SS0.5-1 | SB-562-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-560 | SB-560 | SB-560 | SB-561 | SB-561 | SB-561 | SB-562 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-560-2 | SB-560-SS0.5-1 | SB-560-SS0-0.5 | SB-561-2 | SB-561-SS0.5-1 | SB-561-SS0-0.5 | SB-562-2 | SB-562-SS0.5-1 | SB-562-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 18 U | 18 U | 18 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 18 U | 18 U | 18 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 18 U | 18 U | 18 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 18 U | 18 U | 18 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 18 U | 18 U | 18 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 18 U | 18 U | 18 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 18 U | 18 U | 13 J | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 13 | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 93 | 91 | 92 | 90 | 92 | 92 | 85 | 90 | 87 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-560 | SB-560 | SB-560 | SB-561 | SB-561 | SB-561 | SB-562 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-560-2 | SB-560-SS0.5-1 | SB-560-SS0-0.5 | SB-561-2 | SB-561-SS0.5-1 | SB-561-SS0-0.5 | SB-562-2 | SB-562-SS0.5-1 | SB-562-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-563 | SB-563 | SB-563 | SB-564 | SB-564 | SB-564 | SB-565 | SB-565 | SB-565 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-563-2 | SB-563-SS0.5-1 | SB-563-SS0-0.5 | SB-564-2 | SB-564-SS0.5-1 | SB-564-SS0-0.5 | SB-565-2 | SB-565-SS0.5-1 | SB-565-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-563 | SB-563 | SB-563 | SB-564 | SB-564 | SB-564 | SB-565 | SB-565 | SB-565 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-563-2 | SB-563-SS0.5-1 | SB-563-SS0-0.5 | SB-564-2 | SB-564-SS0.5-1 | SB-564-SS0-0.5 | SB-565-2 | SB-565-SS0.5-1 | SB-565-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-563 | SB-563 | SB-563 | SB-564 | SB-564 | SB-564 | SB-565 | SB-565 | SB-565 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-563-2 | SB-563-SS0.5-1 | SB-563-SS0-0.5 | SB-564-2 | SB-564-SS0.5-1 | SB-564-SS0-0.5 | SB-565-2 | SB-565-SS0.5-1 | SB-565-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-563 | SB-563 | SB-563 | SB-564 | SB-564 | SB-564 | SB-565 | SB-565 | SB-565 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-563-2 | SB-563-SS0.5-1 | SB-563-SS0-0.5 | SB-564-2 | SB-564-SS0.5-1 | SB-564-SS0-0.5 | SB-565-2 | SB-565-SS0.5-1 | SB-565-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 19 U | 18 U | 19 U | 17 U | 18 U | 18 U | 97 U | 20 U | 19 U |
| AROCLOR-1221 | 19 U | 18 U | 19 U | 17 U | 18 U | 18 U | 97 U | 20 U | 19 U |
| AROCLOR-1232 | 19 U | 18 U | 19 U | 17 U | 18 U | 18 U | 97 U | 20 U | 19 U |
| AROCLOR-1242 | 19 U | 18 U | 19 U | 17 U | 18 U | 18 U | 97 U | 20 U | 19 U |
| AROCLOR-1248 | 19 U | 18 U | 19 U | 17 U | 18 U | 18 U | 97 U | 20 U | 19 U |
| AROCLOR-1254 | 19 U | 18 U | 19 U | 17 U | 18 U | 18 U | 97 U | 20 U | 19 U |
| AROCLOR-1260 | 19 U | 18 U | 40 | 17 U | 18 U | 11 J | 1000 | 340 | 210 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 40 | 0 U | 0 U | 11 | 1000 | 340 | 210 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 86 | 91 | 88 | 96 | 95 | 92 | 86 | 85 | 86 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-563 | SB-563 | SB-563 | SB-564 | SB-564 | SB-564 | SB-565 | SB-565 | SB-565 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-563-2 | SB-563-SS0.5-1 | SB-563-SS0-0.5 | SB-564-2 | SB-564-SS0.5-1 | SB-564-SS0-0.5 | SB-565-2 | SB-565-SS0.5-1 | SB-565-SS0-0.5 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-566 | SB-566 | SB-566 | SB-567 | SB-567 | SB-567 | SB-568 | SB-568 | SB-568 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-566-2 | SB-566-SS0.5-1 | SB-566-SS0-0.5 | SB-567-2 | SB-567-SS0.5-1 | SB-567-SS0-0.5 | SB-568-2 | SB-568-SS0.5-1 | SB-568-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081023 | 20081023 | 20081023 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-566 | SB-566 | SB-566 | SB-567 | SB-567 | SB-567 | SB-568 | SB-568 | SB-568 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-566-2 | SB-566-SS0.5-1 | SB-566-SS0-0.5 | SB-567-2 | SB-567-SS0.5-1 | SB-567-SS0-0.5 | SB-568-2 | SB-568-SS0.5-1 | SB-568-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081023 | 20081023 | 20081023 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-566 | SB-566 | SB-566 | SB-567 | SB-567 | SB-567 | SB-568 | SB-568 | SB-568 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-566-2 | SB-566-SS0.5-1 | SB-566-SS0-0.5 | SB-567-2 | SB-567-SS0.5-1 | SB-567-SS0-0.5 | SB-568-2 | SB-568-SS0.5-1 | SB-568-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081023 | 20081023 | 20081023 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-566 | SB-566 | SB-566 | SB-567 | SB-567 | SB-567 | SB-568 | SB-568 | SB-568 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-566-2 | SB-566-SS0.5-1 | SB-566-SS0-0.5 | SB-567-2 | SB-567-SS0.5-1 | SB-567-SS0-0.5 | SB-568-2 | SB-568-SS0.5-1 | SB-568-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081023 | 20081023 | 20081023 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 19 U | 18 U | 92 U | 19 U | 19 U | 18 U | 18 U | 910 U | 9000 U |
| AROCLOR-1221 | 19 U | 18 U | 92 U | 19 U | 19 U | 18 U | 18 U | 910 U | 9000 U |
| AROCLOR-1232 | 19 U | 18 U | 92 U | 19 U | 19 U | 18 U | 18 U | 910 U | 9000 U |
| AROCLOR-1242 | 19 U | 18 U | 92 U | 19 U | 19 U | 18 U | 18 U | 910 U | 9000 U |
| AROCLOR-1248 | 19 U | 18 U | 92 U | 19 U | 19 U | 18 U | 18 U | 910 U | 9000 U |
| AROCLOR-1254 | 19 U | 18 U | 92 U | 19 U | 19 U | 18 U | 18 U | 910 U | 9000 U |
| AROCLOR-1260 | 19 U | 11 J | 1200 | 4.3 J | 5.4 J | 25 | 18 U | 11000 | 81000 J |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 11 | 1200 | 4.3 | 5.4 | 25 | 0 U | 11000 | 81000 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 90 | 91 | 91 | 90 | 87 | 91 | 91 | 92 | 93 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-566 | SB-566 | SB-566 | SB-567 | SB-567 | SB-567 | SB-568 | SB-568 | SB-568 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-566-2 | SB-566-SS0.5-1 | SB-566-SS0-0.5 | SB-567-2 | SB-567-SS0.5-1 | SB-567-SS0-0.5 | SB-568-2 | SB-568-SS0.5-1 | SB-568-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081023 | 20081023 | 20081023 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-569 | SB-569 | SB-569 | SB-570 | SB-570 | SB-570 | SB-571 | SB-571 | SB-571 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-569-2 | SB-569-SS0.5-1 | SB-569-SS0-0.5 | SB-570-2 | SB-570-SS0.5-1 | SB-570-SS0-0.5 | SB-571-2 | SB-571-SS0.5-1 | SB-571-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-569 | SB-569 | SB-569 | SB-570 | SB-570 | SB-570 | SB-571 | SB-571 | SB-571 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-569-2 | SB-569-SS0.5-1 | SB-569-SS0-0.5 | SB-570-2 | SB-570-SS0.5-1 | SB-570-SS0-0.5 | SB-571-2 | SB-571-SS0.5-1 | SB-571-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-569 | SB-569 | SB-569 | SB-570 | SB-570 | SB-570 | SB-571 | SB-571 | SB-571 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-569-2 | SB-569-SS0.5-1 | SB-569-SS0-0.5 | SB-570-2 | SB-570-SS0.5-1 | SB-570-SS0-0.5 | SB-571-2 | SB-571-SS0.5-1 | SB-571-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-569 | SB-569 | SB-569 | SB-570 | SB-570 | SB-570 | SB-571 | SB-571 | SB-571 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-569-2 | SB-569-SS0.5-1 | SB-569-SS0-0.5 | SB-570-2 | SB-570-SS0.5-1 | SB-570-SS0-0.5 | SB-571-2 | SB-571-SS0.5-1 | SB-571-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 20 U | 690 U | 19000 U | 18 U | 180 U | 370 U | 19 U | 18 U | 18 U |
| AROCLOR-1221 | 20 U | 690 U | 19000 U | 18 U | 180 U | 370 U | 19 U | 18 U | 18 U |
| AROCLOR-1232 | 20 U | 690 U | 19000 U | 18 U | 180 U | 370 U | 19 U | 18 U | 18 U |
| AROCLOR-1242 | 20 U | 690 U | 19000 U | 18 U | 180 U | 370 U | 19 U | 18 U | 18 U |
| AROCLOR-1248 | 20 U | 690 U | 19000 U | 18 U | 180 U | 370 U | 19 U | 18 U | 18 U |
| AROCLOR-1254 | 20 U | 690 U | 19000 U | 18 U | 180 U | 370 U | 19 U | 18 U | 18 U |
| AROCLOR-1260 | 20 U | 7900 | 300000 | 18 U | 3200 | 6800 | 19 U | 18 U | 18 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 7900 | 300000 | 0 U | 3200 | 6800 | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 85 | 97 | 88 | 92 | 91 | 90 | 90 | 91 | 94 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table a-7**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-569 | SB-569 | SB-569 | SB-570 | SB-570 | SB-570 | SB-571 | SB-571 | SB-571 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-569-2 | SB-569-SS0.5-1 | SB-569-SS0-0.5 | SB-570-2 | SB-570-SS0.5-1 | SB-570-SS0-0.5 | SB-571-2 | SB-571-SS0.5-1 | SB-571-SS0-0.5 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-001<br>SB-1A-SS<br>20040921<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-002<br>SB-2A-01<br>20040920<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-003<br>SB-3A-SS<br>20040920<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-004<br>SB-04B-01<br>20050512<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-004<br>SB-4A-SS<br>20040921<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-035<br>SB-35-SS<br>20040917<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-036<br>SB-36-SS<br>20040917<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-041<br>SB-41S-SS<br>20041105<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-042<br>SB-42S-SS<br>20041105<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-169<br>SB-169-SS<br>20041105<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 6 U | 6 U | 5 U | NA | 45 | 6 U | 6 U | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | 6 U | 6 U | 5 U | NA | 140 | 6 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 56 U | 59 U | 53 U | NA | 60 U | 56 U | 58 U | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 56 U | 59 U | 53 U | NA | 60 U | 56 U | 58 U | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 6 U | 9 J | 8 J | NA | 8 J | 8 J | 8 J | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | 6 U | 5 U | NA | 58 | 6 U | 6 U | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 | N | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 U | 6 U | 5 U | NA | 6 U | 6 U | 6 U | NA | NA | NA |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | 940 U | 980 U | 9100 U | NA | 990 U | 950 U | 990 U | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | 140 J | 390 U | 3600 U | NA | 390 U | 380 U | 390 U | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 380 U | 390 U | 3600 U | NA | 89 J | 380 U | 390 U | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 380 U | 390 U | 3600 U | NA | 250 J | 380 U | 390 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 380 U | 390 U | 3600 U | NA | 41 J | 380 U | 390 U | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 380 U | 390 U | 3600 U | NA | 180 J | 380 U | 390 U | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | 380 U | 390 U | 3600 U | NA | 390 U | 380 U | 390 U | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 380 U | 390 U | 3600 U | NA | 220 J | 380 U | 390 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 380 U | 390 U | 3600 U | NA | 365 | 380 U | 390 U | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | 380 U | 390 U | 3600 U | NA | 170 | 380 U | 390 U | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 380 U | 390 U | 3600 U | NA | 240 J | 380 U | 390 U | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 380 U | 390 U | 3600 UJ | NA | 110 J | 380 U | 390 U | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 380 U | 390 U | 3600 UJ | NA | 220 J | 380 U | 390 U | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | 380 U | 390 U | 3600 UJ | NA | 170 J | 380 U | 390 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 380 U | 390 U | 3600 UJ | NA | 200 J | 380 U | 390 U | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 380 U | 390 U | 3600 U | NA | 370 J | 380 U | 390 U | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 380 U | 390 U | 3600 UJ | NA | 390 U | 380 U | 390 U | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | 380 U | 390 U | 440 J | NA | 1200 | 380 U | 390 U | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 380 U | 390 U | 3600 U | NA | 150 J | 380 U | 390 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 380 U | 390 U | 3600 UJ | NA | 120 J | 380 U | 390 U | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 380 U | 390 U | 3600 U | NA | 50 J | 380 U | 390 U | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N(7) | 380 U | 390 U | 3600 U | NA | 2200 | 380 U | 390 U | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 380 U | 390 U | 440 J | NA | 1000 | 380 U | 390 U | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 880 | NA | 6471 | 0 U | 0 U | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 280 U | 290 U | 270 U | 38 U | 58000 U | 280 U | 290 U | NA | NA | NA |
| AROCLOR-1254 | 320 | 110 | N(4) | 280 U | 290 U | 270 U | 38 U | 58000 U | 280 U | 290 U | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 280 U | 290 U | 350 | 38 U | 180000 | 280 U | 290 U | NA | NA | NA |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | 0 U | 0 U | 350 | 0 U | 180000 | 0 U | 0 U | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 2.8 UL | 2.9 U | 2.4 U | NA | 2.7 UL | 2.5 U | 2.9 U | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 1.1 | 0.98 | 1.5 | NA | 1.5 | 0.92 | 1.2 | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 2.8 U | 2.9 U | 2.4 U | NA | 2.7 U | 2.5 U | 2.9 U | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 2.8 U | 2.9 U | 2.4 U | NA | 2.7 U | 2.5 U | 2.9 U | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 | N(10) | 19 J | 10 K | 15 | NA | 18 J | 6.6 K | 15 | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 8.2 | 15 | 13 | NA | 11 | 4.4 L | 14 | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 3 | 2.9 UJ | 82 J | NA | 8.9 | 3.9 J | 4.7 J | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 | N(12) | 0.11 U | 0.11 U | 0.098 U | NA | 0.12 | 0.1 U | 0.12 U | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 6.5 | 7.5 | 20 | NA | 14 | 4.3 K | 10 | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 2.8 U | 2.9 U | 2.4 U | NA | 2.7 U | 2.5 U | 2.9 U | NA | NA | NA |
| SILVER | 39 | 39 | N | 2.8 UR | 2.9 UL | 2.4 UL | NA | 2.7 UR | 2.5 UL | 2.9 UL | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 2.2 U | 2.3 UL | 2 UL | NA | 2.2 U | 2 UL | 2.3 UL | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-001**<br>**SB-1A-SS**<br>**20040921**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0** | **SB-002**<br>**SB-2A-01**<br>**20040920**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**1**<br>**1** | **SB-003**<br>**SB-3A-SS**<br>**20040920**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0** | **SB-004**<br>**SB-04B-01**<br>**20050512**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**1**<br>**1** | **SB-004**<br>**SB-4A-SS**<br>**20040921**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0** | **SB-035**<br>**SB-35-SS**<br>**20040917**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0** | **SB-036**<br>**SB-36-SS**<br>**20040917**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0** | **SB-041**<br>**SB-41S-SS**<br>**20041105**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0** | **SB-042**<br>**SB-42S-SS**<br>**20041105**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0** | **SB-169**<br>**SB-169-SS**<br>**20041105**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | 28 UL | 29 UL | 110 L | NA | 27 UL | 25 UL | 29 UL | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | 11000 U | 12000 U | 11000 U | NA | **330000** | 11000 U | 13000 | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | 110 U | 120 U | 110 U | NA | 830 | 120 U | 120 U | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | 0.03 U | 1.02 | 0.15 U |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | 0.1 U | 2.3 | 0.1 U |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | 0.1 UJ | 0.67 J | 0.38 UJ |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | 0.145 | -0.048 U | 0.08 U |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | 0.3 | 1.2 | 0.3 UJ |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | 0.25 UJ | 1.09 J | 0.42 J |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | 4.4 | 9.2 | 3.4 |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | 0.32 UJ | 1.22 J | 0.51 UJ |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | 0.075 U | 0.39 | 0.1 U |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-232<br>SB-232-01<br>20050512<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-232<br>SB-232-SS<br>20050512<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-233<br>SB-233-01<br>20050512<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-233<br>SB-233-SS<br>20050512<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-234<br>SB-234-01<br>20050512<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-234<br>SB-234-SS<br>20050512<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-235<br>SB-235-01<br>20050512<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-235<br>SB-235-SS<br>20050512<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-345<br>SB-345-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-346<br>SB-346-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 39 U | 37 U | 39 U | 32 J | 39 U | 37 U | 37 U | 58 | 35 U | 390 U |
| AROCLOR-1254 | 320 | 110 | N(4) | 39 U | 37 U | 39 U | 37 U | 39 U | 37 U | 37 U | 37 U | 35 U | 390 U |
| AROCLOR-1260 | 320 | 220 | C | 94 | 140 | 39 U | 80 | 8.5 J | **1070** | 37 U | 108 | **260** | **1700** |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | 94 | 140 | 0 U | 112 | 8.5 | **1070** | 0 U | 166 | **260** | **1700** |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 | N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 | N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-232 | SB-232 | SB-233 | SB-233 | SB-234 | SB-234 | SB-235 | SB-235 | SB-345 | SB-346 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-232-01 | SB-232-SS | SB-233-01 | SB-233-SS | SB-234-01 | SB-234-SS | SB-235-01 | SB-235-SS | SB-345-0001 | SB-346-0001 |
| SAMPLE DATE | | | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20071102 | 20071102 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SS | SB | SS | SB | SS | SB | SS | SS | SS |
| TOP DEPTH | | | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 |
| BOTTOM DEPTH | | | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | 94.6 | 85.3 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-347<br>SB-347-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-348<br>SB-348-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-349<br>SB-349-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-350<br>SB-350-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-351<br>SB-351-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-352<br>SB-352-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-353<br>SB-353-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-354<br>SB-354-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-355<br>SB-355-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-356<br>SB-356-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 2100 U | 4200 U | 4400 U | 8200 U | 4100 U | 2800 U | 740000 U | 83000 U | 21000 U | 4500 U |
| AROCLOR-1254 | 320 | 110 | N(4) | 2100 U | 4200 U | 4400 U | 8200 U | 4100 U | 2800 U | 740000 U | 83000 U | 21000 U | 4500 U |
| AROCLOR-1260 | 320 | 220 | C | **7100** | **34000** | **24000** | **55000** | **21000** | **19000** | **1800000** | **400000** | **96000** | **25000** |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | **7100** | **34000** | **24000** | **55000** | **21000** | **19000** | **1800000** | **400000** | **96000** | **25000** |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 | N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 | N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-347**<br>**SB-347-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-348**<br>**SB-348-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-349**<br>**SB-349-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-350**<br>**SB-350-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-351**<br>**SB-351-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-352**<br>**SB-352-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-353**<br>**SB-353-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-354**<br>**SB-354-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-355**<br>**SB-355-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-356**<br>**SB-356-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 79.1 | 78.1 | 75.6 | 80.1 | 81.2 | 58.9 | 89.2 | 79.1 | 80.3 | 73.6 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-357<br>SB-357-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-358<br>SB-358-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-359<br>SB-359-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-360<br>SB-360-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-361<br>SB-361-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-362<br>SB-362-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-363<br>SB-363-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-364<br>SB-364-0001<br>20071102<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-500<br>SB-500-0001<br>20071127<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-501<br>SB-501-0001<br>20071127<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | 5.7 U | 5.8 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 5.7 U | 5.8 U |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | NA | NA | NA | NA | NA | NA | NA | NA | 0.76 B | 5.8 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 5.7 U | 5.8 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 5.7 U | 5.8 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | 5.7 U | 5.8 U |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 11 U | 12 U |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 11 U | 12 U |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 5.7 U | 5.8 U |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 5.7 U | 5.8 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | 2.5 B | 2.8 B |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | 3.2 B | 5.8 U |
| O-XYLENE | 1600000 (5) | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 5.7 U | 5.8 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 110 UR | 120 UR |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | 5.7 U | 5.8 U |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 5.7 U | 0.37 J |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 1.2 J | 12 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 1100 U | 15000 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | 560 U | 7600 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | 560 U | 7600 U |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 560 U | 7600 U |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 27 J | 7600 U |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | 560 U | 7600 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 560 U | 7600 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 560 U | 7600 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 25 J | 7600 U |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | NA | NA | NA | NA | NA | NA | NA | NA | 13 J | 7600 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 78 J | 7600 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | **542** | **4477** |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | **542** | **259** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | **280 J** | **240 J** |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | **340 J** | **190 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | **520 J** | **450 J** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | 360 J | 7600 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | 210 J | 7600 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | 300 J | 220 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | **90 J** | 7600 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 570 | 450 J |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 19 J | 7600 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | **300 J** | 7600 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | 560 U | 7600 U |
| PHENANTHRENE | 2300000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | 220 J | 200 J |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 460 J | 370 J |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 3785 | 2120 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 2100 U | 3900 U | 750 U | 3900 U | 38000 U | 800 U | 4400 U | 2100 U | 37 U | 7600 U |
| AROCLOR-1254 | 320 | 110 | N(4) | 2100 U | 3900 U | 750 U | 3900 U | 38000 U | 800 U | 4400 U | 2100 U | 37 U | 7600 U |
| AROCLOR-1260 | 320 | 220 | C | **12000** | **27000** | **3700** | **27000** | **140000** | **5000** | **24000** | **12000** | 47 | **58000** |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | **12000** | **27000** | **3700** | **27000** | **140000** | **5000** | **24000** | **12000** | 47 | **58000** |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | 0.16 B | 0.55 J |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | **1.3 L** | **3.4 L** |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | 25.7 | 34.5 |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | 0.36 | 0.76 |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | 0.2 | 0.2 |
| CHROMIUM | 12000 (10) | 12000 | N(10) | NA | NA | NA | NA | NA | NA | NA | NA | 9.9 K | 13.8 K |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | **2.7 J** | **4.8 J** |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | 7 J | 7.9 J |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | **13200** | **13800** |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | 15.9 J | 12.3 J |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | 48.8 L | 53.2 L |
| MERCURY | 2.3 (11) | 2.3 | N(12) | NA | NA | NA | NA | NA | NA | NA | NA | 0.019 U | 0.061 |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | 0.34 B | 0.42 B |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | 4.8 | 6.7 |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | 0.29 L | 0.26 L |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | 0.04 | 0.081 |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 0.063 B | 0.1 |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-357**<br>**SB-357-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-358**<br>**SB-358-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-359**<br>**SB-359-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-360**<br>**SB-360-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-361**<br>**SB-361-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-362**<br>**SB-362-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-363**<br>**SB-363-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-364**<br>**SB-364-0001**<br>**20071102**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-500**<br>**SB-500-0001**<br>**20071127**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-501**<br>**SB-501-0001**<br>**20071127**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | **13.2** | **20.9** |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | 42.7 J | 36.1 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | 18000 B | 61000 J |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 77.5 | 84.2 | 88.5 | 84.4 | 87.3 | 82.4 | 74.3 | 78.6 | 88.1 | 86.7 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-502<br>SB-502-0001<br>20071127<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-503<br>SB-503-0001<br>20071127<br>ORIG<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-503<br>SB-503-0001-AVG<br>20071127<br>AVG<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-503<br>SB-503-0001-D<br>20071127<br>DUP<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-504<br>SB-504-0001<br>20071127<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-505<br>SB-505-0001<br>20071127<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-506<br>SB-506-0001<br>20071128<br>ORIG<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-506<br>SB-506-0001-AVG<br>20071128<br>AVG<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-506<br>SB-506-0001-D<br>20071128<br>DUP<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-507<br>SB-507-0001<br>20071128<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 0.65 B | 5.8 UJ | 6.15 U | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 0.2 J | 0.35 J | 0.35 J | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | 3.1 B | 1 B | 3.75 U | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 5.9 U | 5.8 UJ | 6.15 U | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 5.9 U | 5.8 UJ | 6.15 U | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 5.9 U | 5.8 U | 6.15 U | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 12 U | 12 U | 12.5 U | 13 U | 11 U | 12 U | 11 U | 11.5 U | 12 U | 12 U |
| ACETONE | 7000000 | 6100000 | N | 12 U | 12 U | 12.5 U | 13 U | 7.3 J | 12 U | 11 U | 11.5 U | 12 U | 13 J |
| CARBON DISULFIDE | 780000 | 82000 | N | 5.9 U | 5.8 U | 6.15 U | 6.5 U | 0.82 J | 6 U | 0.95 J | 0.95 J | 5.8 U | 5.8 U |
| CHLOROBENZENE | 160000 | 29000 | N | 5.9 U | 5.8 U | 6.15 U | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 2.4 B | 3.6 B | 3.4 U | 3.2 B | 1.6 B | 1.7 B | 2 B | 2.05 U | 2.1 B | 5.1 B |
| NAPHTHALENE | 160000 | 3600 | C | 0.87 B | 11 B | 8.75 U | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U |
| O-XYLENE | 1600000 (5) | 380000 | N | 5.9 U | 0.43 J | 0.43 J | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 120 UR | 120 UR | 125 R | 130 UR | 110 UR | 120 UR | 110 UR | 115 R | 120 UR | 120 UR |
| TETRACHLOROETHENE | 1200 | 550 | C | 5.9 U | 5.8 U | 6.15 U | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U |
| TOLUENE | 630000 | 500000 | N | 5.9 U | 0.46 J | 0.46 J | 6.5 U | 5.5 U | 6 U | 5.7 U | 5.75 U | 5.8 U | 5.8 U |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | 12 U | 1.1 J | 1.1 J | 13 U | 11 U | 12 U | 11 U | 11.5 U | 12 U | 12 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | 3900 U | 12000 U | 6425 U | 850 U | 720 U | 800 U | 750 U | 755 U | 760 U | 770 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 2000 U | 5800 U | 37 J | 37 J | 360 U | 93 J | 380 U | 24 J | 24 J | 37 J |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 2000 U | 5800 U | 3115 U | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 120 J |
| CAPROLACTAM | NC | 3100000 | N | 2000 U | 5800 U | 3115 U | 430 U | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U |
| CARBAZOLE | 32000 | NC | | 2000 U | 430 J | 256 | 82 J | 360 U | 73 J | 380 U | 380 U | 380 U | 380 U |
| DIBENZOFURAN | 7800 | 7800 | N | 2000 U | 5800 U | 34 J | 34 J | 360 U | 400 U | 380 U | 380 U | 380 U | 380 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 2000 U | 5800 U | 3115 U | 430 U | 360 U | 28 J | 380 U | 380 U | 380 U | 380 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 2000 U | 190 J | 105 | 20 J | 360 U | 9.8 J | 380 U | 380 U | 380 U | 380 U |
| ACENAPHTHENE | 470000 | 340000 | N | 2000 U | 470 J | 277 | 84 J | 7.5 J | 45 J | 380 U | 380 U | 380 U | 380 U |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | 84 J | 330 J | 183 | 36 J | 360 U | 13 J | 380 U | 380 U | 380 U | 380 U |
| ANTHRACENE | 2300000 | 1700000 | N | 360 J | 1500 J | 835 | 170 J | 16 J | 95 J | 380 U | 380 U | 380 U | 380 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 5574 | 10999 | 5944 | 890 | 306 | 827 | 380 U | 380 U | 380 U | 229 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 5574 | 10999 | 5944 | 890 | 126 | 827 | 380 U | 380 U | 380 U | 18 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4000 | 7300 | 3955 | 610 | 93 J | 530 | 380 U | 380 U | 380 U | 12 J |
| BENZO(A)PYRENE | 22 | 15 | C | 3900 | 7600 | 4100 | 600 | 95 J | 560 | 380 U | 380 U | 380 U | 14 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4500 | 8100 | 4450 | 800 | 150 J | 770 | 380 U | 380 U | 380 U | 25 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | 2100 | 5000 J | 2685 | 370 J | 67 J | 360 J | 380 U | 380 U | 380 U | 8 J |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2100 | 3100 J | 1705 | 310 J | 71 J | 330 J | 380 U | 380 U | 380 U | 380 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 3400 | 7700 | 4160 | 620 | 100 J | 480 | 380 U | 380 U | 380 U | 14 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 590 J | 1400 J | 755 | 110 J | 360 U | 100 J | 380 U | 380 U | 380 U | 380 U |
| FLUORANTHENE | 310000 | 230000 | N | 6100 | 14000 | 7650 | 1300 | 220 J | 1100 | 380 U | 380 U | 380 U | 19 J |
| FLUORENE | 310000 | 230000 | N | 2000 U | 580 J | 327.5 | 75 J | 360 U | 35 J | 380 U | 380 U | 380 U | 380 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 2100 | 4200 J | 2275 | 350 J | 59 J | 330 J | 380 U | 380 U | 380 U | 380 U |
| NAPHTHALENE | 160000 | 3600 | C | 2000 U | 180 J | 102 | 24 J | 360 U | 13 J | 380 U | 380 U | 380 U | 380 U |
| PHENANTHRENE | 2300000 | 170000 | N(7) | 650 J | 5600 J | 3135 | 670 | 74 J | 570 | 380 U | 380 U | 380 U | 9.4 J |
| PYRENE | 230000 | 170000 | N | 5400 | 16000 | 8500 | 1000 | 170 J | 810 | 380 U | 380 U | 380 U | 16 J |
| TOTAL PAHS | NC | NC | | 35284 | 83250 | 45199.5 | 7149 | 1122.5 | 6150.8 | 0 U | 0 U | 0 U | 117.4 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 390 U | 390 U | 216.5 U | 43 U | 180 U | 20000 U | 38 U | 38 U | 38 U | 38 U |
| AROCLOR-1254 | 320 | 110 | N(4) | 390 U | 390 U | 216.5 U | 43 U | 180 U | 20000 U | 38 U | 38 U | 38 U | 38 U |
| AROCLOR-1260 | 320 | 220 | C | 1200 | 1700 | 910 | 120 | 1200 | 99000 | 12 J | 11.5 | 11 J | 38 U |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | 1200 | 1700 | 910 | 120 | 1200 | 99000 | 12 | 11.5 | 11 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.12 B | 2.2 J | 1.345 | 0.49 J | 0.089 B | 0.89 | 0.073 B | 0.066 U | 0.059 B | 0.13 B |
| ARSENIC | 0.43 | 0.39 | C | 1.8 L | 2.6 L | 2.45 | 2.3 | 0.53 L | 3.5 | 1.8 | 1.75 | 1.7 | 2.1 |
| BARIUM | 1600 | 1500 | N | 34 | 121 J | 82.1 | 43.2 J | 153 | 90 | 19.2 | 17.1 | 15 | 20.7 |
| BERYLLIUM | 16 | 16 | N | 0.29 | 0.88 J | 0.6 | 0.32 J | 0.12 | 0.54 | 0.22 | 0.23 | 0.24 | 2 |
| CADMIUM | 3.9 | 7 | N | 0.19 | 1.5 J | 1.16 | 0.82 J | 0.41 K | 6.4 | 0.014 B | 0.0125 | 0.018 | 0.11 K |
| CHROMIUM | 12000 (10) | 12000 | N(10) | 8.4 K | 33.4 J | 25.7 | 18 J | 12.7 J | 83.7 J | 7.1 J | 8.65 | 10.2 J | 11.2 J |
| COBALT | NC | 2.3 | N | 2.2 J | 5 J | 4.05 | 3.1 | 4.6 | 4 | 2.1 | 2.25 | 2.4 | 10.8 |
| COPPER | 310 | 310 | N | 5.6 J | 12.7 J | 12.1 | 11.5 J | 13.8 J | 26.8 J | 3.8 J | 4.75 | 5.7 J | 12.7 J |
| IRON | 5500 | 5500 | N | 5610 | 13300 | 10655 | 8010 | 20800 | 9150 | 13700 | 11780 | 9860 | 20400 |
| LEAD | 400 | 400 | | 20.4 J | 68.2 J | 53.1 | 38 J | 8.6 J | 278 J | 4 J | 4.1 | 4.2 J | 10.9 J |
| MANGANESE | 160 | 180 | N | 81.6 L | 1370 J | 787.5 | 205 J | 231 | 11.2 | 172 J | 109.25 | 46.5 J | 135 |
| MERCURY | 2.3 (11) | 2.3 | N(12) | 0.02 U | 0.019 U | 0.12975 | 0.25 | 0.41 | 0.13 | 0.019 U | 0.019 U | 0.019 U | 0.29 |
| MOLYBDENUM | NC | 39 | N | 0.22 B | 0.59 J | 0.3775 | 0.33 B | 0.78 B | 1.2 L | 0.3 B | 0.245 U | 0.19 B | 0.15 B |
| NICKEL | 160 | 150 | N | 5.8 | 11 | 8.8 | 6.6 | 6.9 | 18.5 | 4.1 | 4.75 | 5.4 | 15.6 |
| SELENIUM | 39 | 39 | N | 0.19 UL | 0.25 L | 0.245 | 0.24 | 0.18 U | 0.42 | 0.18 U | 0.18 U | 0.18 U | 0.32 |
| SILVER | 39 | 39 | N | 0.056 | 0.23 | 0.235 | 0.24 | 0.092 | 0.38 | 0.049 | 0.03325 | 0.035 B | 0.2 |
| THALLIUM | 0.55 | NC | | 0.032 B | 0.069 B | 0.05875 | 0.083 K | 0.38 | 0.098 K | 0.054 K | 0.0585 | 0.063 K | 0.07 K |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | SB-502<br>SB-502-0001<br>20071127<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-503<br>SB-503-0001<br>20071127<br>ORIG<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-503<br>SB-503-0001-AVG<br>20071127<br>AVG<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-503<br>SB-503-0001-D<br>20071127<br>DUP<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-504<br>SB-504-0001<br>20071127<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-505<br>SB-505-0001<br>20071127<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-506<br>SB-506-0001<br>20071128<br>ORIG<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-506<br>SB-506-0001-AVG<br>20071128<br>AVG<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-506<br>SB-506-0001-D<br>20071128<br>DUP<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-507<br>SB-507-0001<br>20071128<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | **12.4** | **53.4** | **42.65** | **31.9 J** | **22.8 J** | **60.7 J** | **13 J** | **13.95** | **14.9 J** | **17.1 J** |
| ZINC | 2300 | 2300 N | 39.7 J | 175 J | 127.8 | 80.6 J | 63.8 | 302 | 12.2 | 14.4 | 16.6 | 78.2 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | 130000 | 650000 | 347500 | 45000 | 52000 | 170000 | 14000 B | 4800 J | 4800 J | 13000 |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 84.4 | 85.6 | 81.4 | 77.2 | 91.2 | 82.8 | 87.5 | 87.1 | 86.7 | 85.8 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-508<br>SB-508-0001<br>20071128<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-509<br>SB-509-0001<br>20071129<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-510<br>SB-510-0001<br>20071128<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-511<br>SB-511-0001<br>20071129<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-512<br>SB-512-0001<br>20071129<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-513<br>SB-513-0001<br>20071129<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-514<br>SB-514-0001<br>20071129<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-515<br>SB-515-0001<br>20071129<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-516<br>SB-516-0001<br>20071130<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-517<br>SB-517-0001<br>20071130<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 5.8 U | 5.8 U | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 5.8 U | 5.8 U | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | 5.8 U | 5.8 U | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 5.8 U | 5.8 U | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 5.8 U | 5.8 U | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 5.8 U | 5.8 U | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 12 U | 12 U | 11 U | 11 U | 11 U | 12 U | 2.7 J | 12 U | 5.3 J | 11 U |
| ACETONE | 7000000 | 6100000 | N | 21 J | 12 U | 11 U | 11 U | 8.2 J | 12 U | 51 J | 11 J | 18 J | 11 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 5.8 U | 5.8 U | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 0.66 J | 5.9 U | 6 U | 5.7 U |
| CHLOROBENZENE | 160000 | 29000 | N | 5.8 U | 5.8 U | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 7.1 B | 5 B | 6.4 B | 5.4 B | 5.6 B | 3.6 B | 5.6 B | 5.9 B | 5.8 B | 3.1 B |
| NAPHTHALENE | 160000 | 3600 | C | 5.8 U | 5.8 U | 0.55 B | 5.7 U | 1.8 B | 0.67 B | 5.8 U | 5.9 U | 6 U | 5.7 U |
| O-XYLENE | 1600000 (5) | 380000 | N | 5.8 U | 5.8 U | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 120 UR | 120 UR | 110 UR | 110 UR | 110 UR | 120 UR | 120 UR | 120 UR | 120 UR | 110 UR |
| TETRACHLOROETHENE | 1200 | 550 | C | 5.8 U | 5.8 U | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U |
| TOLUENE | 630000 | 500000 | N | 5.8 U | 5.8 U | 5.6 U | 5.7 U | 5.6 U | 5.8 U | 5.8 U | 5.9 U | 6 U | 5.7 U |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | 12 U | 12 U | 11 U | 11 U | 11 U | 12 U | 12 U | 12 U | 12 U | 11 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | 770 U | 760 U | 740 U | 760 U | 750 U | 770 U | 760 U | 780 U | 790 U | 750 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 58 J | 380 U | 370 U | 380 U | 370 U | 390 U | 380 U | 43 J | 390 U | 370 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 380 U | 380 U | 370 U | 380 U | 370 U | 390 U | 380 U | 78 J | 390 U | 370 U |
| CAPROLACTAM | NC | 3100000 | N | 380 U | 380 U | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U |
| CARBAZOLE | 32000 | NC | | 380 U | 380 U | 370 U | 380 U | 370 U | 390 U | 380 U | 41 J | 390 U | 370 U |
| DIBENZOFURAN | 7800 | 7800 | N | 380 U | 380 U | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 380 U | 380 U | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 26 J | 380 U | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U |
| ACENAPHTHENE | 470000 | 340000 | N | 380 U | 380 U | 370 U | 380 U | 370 U | 390 U | 380 U | 32 J | 390 U | 370 U |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | 380 U | 380 U | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U |
| ANTHRACENE | 2300000 | 1700000 | N | 380 U | 380 U | 370 U | 380 U | 370 U | 390 U | 380 U | 71 J | 34 J | 370 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 380 U | 380 U | **216** | **97** | **211** | **433** | 380 U | **948** | **392** | **205** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 380 U | 380 U | **31** | **97** | **24** | 1.5 | 380 U | **948** | **197** | **20** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 380 U | 380 U | 29 J | 59 J | 22 J | 390 U | 380 U | **550** | **170 J** | 13 J |
| BENZO(A)PYRENE | 22 | 15 | C | 380 U | 380 U | **23 J** | **62 J** | **17 J** | 390 U | 380 U | **630** | **150 J** | 15 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 380 U | 380 U | 41 J | 100 J | 37 J | 15 J | 380 U | **860** | **210 J** | 31 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | 380 U | 380 U | 16 J | 55 J | 16 J | 390 U | 380 U | 490 | 96 J | 11 J |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 380 U | 380 U | 15 J | 55 J | 370 U | 390 U | 380 U | 390 | 97 J | 8.7 J |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 380 U | 380 U | 34 J | 75 J | 24 J | 390 U | 380 U | 680 | 170 J | 13 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 380 U | 380 U | 370 U | 14 J | 370 U | 390 U | 380 U | **130 J** | 390 U | 370 U |
| FLUORANTHENE | 310000 | 230000 | N | 380 U | 380 U | 57 J | 120 J | 61 J | 9.5 J | 380 U | 1200 | 320 J | 15 J |
| FLUORENE | 310000 | 230000 | N | 380 U | 380 U | 370 U | 380 U | 370 U | 390 U | 380 U | 26 J | 390 U | 370 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 380 U | 380 U | 13 J | 47 J | 14 J | 390 U | 380 U | **420** | 83 J | 9.2 J |
| NAPHTHALENE | 160000 | 3600 | C | 10 J | 380 U | 370 U | 380 U | 370 U | 390 U | 380 U | 390 U | 390 U | 370 U |
| PHENANTHRENE | 2300000 | 170000 | N(7) | 17 J | 380 U | 25 J | 29 J | 59 J | 390 U | 380 U | 430 | 120 J | 370 U |
| PYRENE | 230000 | 170000 | N | 380 U | 380 U | 44 J | 83 J | 47 J | 390 U | 380 U | 830 | 250 J | 13 J |
| TOTAL PAHS | NC | NC | | 53 | 0 U | 297 | 699 | 297 | 24.5 | 0 U | 6739 | 1700 | 128.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 38 U | 38 U | 37 U | 38 U | 37 U | 39 U | 38 U | 39 U | 39 U | 37 U |
| AROCLOR-1254 | 320 | 110 | N(4) | 38 U | 38 U | 37 U | 38 U | 37 U | 39 U | 38 U | 39 U | 39 U | 37 U |
| AROCLOR-1260 | 320 | 220 | C | 15 J | 38 U | 31 J | 49 | 30 J | 84 | 38 U | **290** | 39 U | 37 U |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | 15 | 0 U | 31 | 49 | 30 | 84 | 0 U | **290** | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.14 B | 0.031 L | 0.29 L | 0.23 L | 0.083 L | 0.18 L | 0.098 L | 0.29 L | 0.23 L | 0.18 L |
| ARSENIC | 0.43 | 0.39 | C | **2.5** | **1.5 J** | **9.6 J** | **0.52 J** | **1.5 J** | **1.7 J** | **1.5 J** | **0.99 J** | **0.94 L** | **1.1 L** |
| BARIUM | 1600 | 1500 | N | 19.3 | 12.5 K | 12.2 K | 15.1 K | 15.8 K | 26.4 K | 20.4 K | 24.1 K | 13.7 | 15.1 |
| BERYLLIUM | 16 | 16 | N | 0.59 | 0.3 | 0.21 | 1.8 | 0.55 | 0.35 | 1 | 0.84 | 1.1 | 1.6 |
| CADMIUM | 3.9 | 7 | N | 0.044 K | 0.012 B | 0.036 K | 0.029 K | 0.093 K | 0.11 K | 0.78 | 0.45 | 0.16 K | 0.07 K |
| CHROMIUM | 12000 (10) | 12000 | N(10) | 11.1 J | 6.3 J | 10.1 J | 15.5 J | 11.4 J | 12.7 J | 15.8 J | 11.3 J | 11.8 J | 9.3 J |
| COBALT | NC | 2.3 | N | **27.2** | **3.9** | **3.9** | **4.2** | **3.7** | **3.9** | **17.5** | **4.1** | **2.8 J** | **5.7 J** |
| COPPER | 310 | 310 | N | 10.8 J | 4.9 J | 27.9 J | 16.9 J | 11.4 J | 7.1 J | 22.8 J | 12.5 J | 10.3 L | 16.5 L |
| IRON | 5500 | 5500 | N | **13800** | **10400** | **13400** | **24400** | **13200** | **13800** | **16100** | **11900** | **16600** | **17600** |
| LEAD | 400 | 400 | | 3.8 J | 3 J | 2 J | 6.8 J | 4.5 J | 9.3 J | 11.4 J | 36.7 J | 5.7 L | 11.4 L |
| MANGANESE | 160 | 180 | N | 42.1 | 27.4 L | 83.4 L | 53.7 L | 66.5 L | 122 L | 133 L | 152 L | 69.5 L | 65.4 L |
| MERCURY | 2.3 (11) | 2.3 | N(12) | 0.019 U | 0.019 UL | 0.019 UL | 0.019 UL | 0.019 UL | 0.019 UL | 0.019 UL | 0.072 L | 0.19 L | 0.019 UL |
| MOLYBDENUM | NC | 39 | N | 0.58 B | 0.16 B | 3.2 J | 0.091 B | 0.31 B | 0.077 UL | 0.081 B | 0.094 B | 0.23 B | 0.12 B |
| NICKEL | 160 | 150 | N | 9.1 | 3.2 J | 11.1 J | 16.3 J | 8.7 J | 6.5 J | 15.4 J | 11.8 J | 10.9 L | 13.1 J |
| SELENIUM | 39 | 39 | N | 0.19 U | 0.18 UL | 0.18 UL | 1.1 L | 0.18 UL | 0.19 UL | 0.27 L | 0.19 UL | 0.34 L | 0.69 L |
| SILVER | 39 | 39 | N | 0.14 | 0.031 | 0.058 | 0.099 K | 0.06 | 0.06 | 0.079 | 0.12 | 0.12 | 0.086 |
| THALLIUM | 0.55 | NC | | 0.038 B | 0.055 B | 0.02 B | 0.064 B | 0.023 B | 0.031 B | 0.055 B | 0.041 B | 0.041 K | 0.034 K |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-508**<br>**SB-508-0001**<br>**20071128**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-509**<br>**SB-509-0001**<br>**20071129**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-510**<br>**SB-510-0001**<br>**20071128**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-511**<br>**SB-511-0001**<br>**20071129**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-512**<br>**SB-512-0001**<br>**20071129**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-513**<br>**SB-513-0001**<br>**20071129**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-514**<br>**SB-514-0001**<br>**20071129**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-515**<br>**SB-515-0001**<br>**20071129**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-516**<br>**SB-516-0001**<br>**20071130**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-517**<br>**SB-517-0001**<br>**20071130**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | **15.9 J** | **11.4 J** | **8.5 J** | **20.6 J** | **14.3 J** | **10.6 J** | **18.8 J** | **15 J** | **20.3 J** | **15.8 J** |
| ZINC | 2300 | 2300 N | 16.2 | 11.1 | 12.6 | 20.5 | 16.7 | 23.2 | 47.3 | 57 | 25.9 | 46.7 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | 5900 J | 10000 B | 22000 B | 9000 B | 33000 | 2200 J | 1800 B | 2200 J | 23000 | 4000 J |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 85.9 | 86.7 | 89.4 | 87.3 | 88.6 | 85.5 | 86.3 | 84.8 | 83.9 | 88.4 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-518<br>SB-518-0001<br>20071130<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-519<br>SB-519-0001<br>20071130<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-520<br>SB-520-0001<br>20071130<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-521<br>SB-521-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-522<br>SB-522-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-523<br>SB-523-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-524<br>SB-524-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-525<br>SB-525-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-526<br>SB-526-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-527<br>SB-527-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 6 U | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 6 U | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | 6 U | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 6 U | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 6 U | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 6 U | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 4.1 J | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 74 J | 7.5 J | 12 U | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 U | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | 6 U | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 4.8 B | 3.6 B | 4.6 B | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 | N | 6 U | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 120 UR | 120 UR | 120 UR | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | 6 U | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 U | 5.9 U | 6.2 U | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | 12 U | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | 800 U | 780 U | 810 U | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 400 U | 31 J | 410 U | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 400 U | 432 | 249 | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | 400 U | 1.2 | 42 | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 400 U | 390 U | 33 J | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 400 U | 390 U | 32 J | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 400 U | 12 J | 46 J | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | 400 U | 390 U | 22 J | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 400 U | 390 U | 39 J | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | 400 U | 390 U | 69 J | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 400 U | 390 U | 19 J | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 400 U | 390 U | 410 U | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N(7) | 400 U | 390 U | 40 J | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 400 U | 390 U | 57 J | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 12 | 357 | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 40 U | 39 U | 41 U | 420 U | 410 U | 380 U | 7900 U | 8600 U | 22000 U | 7200 U |
| AROCLOR-1254 | 320 | 110 | N(4) | 40 U | 39 U | 41 U | 420 U | 410 U | 380 U | 7900 U | 8600 U | 22000 U | 7200 U |
| AROCLOR-1260 | 320 | 220 | C | 40 U | 39 U | 41 U | 3100 | 3400 | 2100 | 52000 | 54000 | 82000 | 62000 |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | 0 U | 0 U | 0 U | 3100 | 3400 | 2100 | 52000 | 54000 | 82000 | 62000 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.18 J | 0.12 J | 0.22 L | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 2.2 L | 1.6 L | 0.82 L | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | 20.1 | 16 | 9 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 1.2 | 0.95 | 1.4 | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 0.022 K | 0.019 K | 0.029 K | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 | N(10) | 11.5 J | 10.5 J | 7.5 J | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | 3.9 J | 3.8 J | 4.6 J | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 14.5 L | 11.2 L | 10.8 L | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | 29900 | 14600 | 17800 | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 4.7 L | 3.9 L | 5.3 L | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | 85 L | 74.9 L | 41.7 L | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 | N(12) | 0.02 UL | 0.02 UL | 0.021 UL | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | 0.18 B | 0.16 B | 0.64 J | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 7.4 L | 8.1 L | 10.2 L | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 0.35 L | 0.62 L | 0.44 L | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | 0.097 | 0.086 | 0.065 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 0.061 K | 0.045 K | 0.026 K | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-518**<br>**SB-518-0001**<br>**20071130**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-519**<br>**SB-519-0001**<br>**20071130**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-520**<br>**SB-520-0001**<br>**20071130**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-521**<br>**SB-521-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-522**<br>**SB-522-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-523**<br>**SB-523-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-524**<br>**SB-524-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-525**<br>**SB-525-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-526**<br>**SB-526-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-527**<br>**SB-527-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | **17.6 J** | **20.2 J** | **12 J** | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | 23.6 | 17.3 | 23.2 | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | 610 B | 2800 B | 5200 B | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 82.9 | 85 | 81 | 79 | 80 | 86.9 | 83.3 | 77.1 | 76 | 46.1 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-528<br>SB-528-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-529<br>SB-529-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-530<br>SB-530-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-531<br>SB-531-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-532<br>SB-532-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-533<br>SB-533-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-534<br>SB-534-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-535<br>SB-535-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-536<br>SB-536-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-537<br>SB-537-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 4300 U | 200000 U | 89000 U | 38000 U | 430 U | 8800 U | 9700 U | 1900 U | 26000 U | 2500 U |
| AROCLOR-1254 | 320 | 110 | N(4) | 4300 U | 200000 U | 89000 U | 38000 U | 430 U | 8800 U | 9700 U | 1900 U | 26000 U | 2500 U |
| AROCLOR-1260 | 320 | 220 | C | **34000** | **1500000** | **690000** | **190000** | **2100** | **53000** | **49000** | **6000** | **77000** | **10000** |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | **34000** | **1500000** | **690000** | **190000** | **2100** | **53000** | **49000** | **6000** | **77000** | **10000** |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 | N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 | N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-528**<br>**SB-528-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-529**<br>**SB-529-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-530**<br>**SB-530-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-531**<br>**SB-531-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-532**<br>**SB-532-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-533**<br>**SB-533-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-534**<br>**SB-534-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-535**<br>**SB-535-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-536**<br>**SB-536-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-537**<br>**SB-537-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 77.5 | 83.9 | 74.5 | 86.5 | 76 | 74.7 | 68.3 | 86.6 | 63.3 | 65.2 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-538<br>SB-538-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-539<br>SB-539-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-818<br>E-SB-818-SS<br>20100915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-819<br>E-SB-819-SS<br>20100915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-820<br>E-SB-820-SS<br>20100915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-821<br>E-SB-821-SS<br>20100916<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-822<br>E-SB-822-SS<br>20100915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-823<br>E-SB-823-SS<br>20100915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-824<br>E-SB-824-SS<br>20100915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-825<br>E-SB-825-SS<br>20100913<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 880 U | 4300 U | 14 U | 14 U | 14 U | 15 U | 15 U | 16 U | 15 U | 15 U |
| AROCLOR-1254 | 320 | 110 | N(4) | 880 U | 4300 U | 19 U | 18 U | 19 U | 20 U | 20 U | 21 U | 19 U | 20 U |
| AROCLOR-1260 | 320 | 220 | C | **4500** | **18000** | 19 U | 18 U | 19 U | 21 J | 20 U | 38 J | 19 U | 20 U |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | **4500** | **18000** | 0 U | 0 U | 0 U | 21 | 0 U | 38 | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 | N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 | N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-538**<br>**SB-538-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-539**<br>**SB-539-0001**<br>**20071204**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-818**<br>**E-SB-818-SS**<br>**20100915**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-819**<br>**E-SB-819-SS**<br>**20100915**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-820**<br>**E-SB-820-SS**<br>**20100915**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-821**<br>**E-SB-821-SS**<br>**20100916**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-822**<br>**E-SB-822-SS**<br>**20100915**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-823**<br>**E-SB-823-SS**<br>**20100915**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-824**<br>**E-SB-824-SS**<br>**20100915**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-825**<br>**E-SB-825-SS**<br>**20100913**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 75.1 | 75.9 | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-827<br>E-SB-827-SS<br>20100916<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-828<br>E-SB-828-SS<br>20100916<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-829<br>E-SB-829-SS<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-830<br>E-SB-830-SS<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-831<br>E-SB-831-SS<br>20100913<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-832<br>E-SB-832-SS<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-833<br>E-SB-833-SS<br>20100916<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-833A<br>E-SB-833A-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-833B<br>E-SB-833B-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-833C<br>E-SB-833C-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | 0.4 U | 140 | 0.29 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 0.18 U | 0.68 B | 0.6 B |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | NA | NA | NA | NA | NA | NA | NA | 0.36 B | 140 J | 1.1 B |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | 0.37 U | 3.4 J | 0.27 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | 0.36 U | 21 | 0.27 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | 0.69 U | 12 | 0.5 U |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | 1.5 U | 1.2 U | 1.1 U |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | 6.8 B | 7.7 B | 4.8 U |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | 0.46 U | 0.37 U | 0.33 U |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | 0.34 U | 0.28 U | 0.25 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | 0.7 U | 0.57 U | 0.51 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | 0.2 U | 0.16 U | 0.14 U |
| O-XYLENE | 1600000 (5) | 380000 | N | NA | NA | NA | NA | NA | NA | NA | 0.36 U | 0.3 U | 0.27 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 7.9 UR | 6.5 UR | 5.8 UR |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | 0.54 U | 0.44 U | 0.4 U |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | 0.28 U | 0.23 U | 0.21 U |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | NA | NA | NA | NA | NA | NA | NA | 0.7 U | 0.57 U | 0.51 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 80 U | 170 J | 77 U | NA | NA | NA | 85 U | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | 80 U | 85 J | 77 U | NA | NA | NA | 85 U | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | 80 U | 77 U | 77 U | NA | NA | NA | 85 U | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 80 U | 260 J | 77 U | NA | NA | NA | 85 U | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | 80 U | 86 J | 77 U | NA | NA | NA | 96 J | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 80 U | 200 J | 77 U | NA | NA | NA | 85 U | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | 80 U | 160 J | 77 U | NA | NA | NA | 85 U | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 80 U | 170 J | 77 U | NA | NA | NA | 85 U | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | 80 U | 110 J | 77 U | NA | NA | NA | 85 U | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | 48 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | 660 | 4 U | 3.9 U |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | 410 | 93 | 3.9 U |
| PHENANTHRENE | 2300000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | 140 U | 4 U | 3.9 U |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | 950 | 4 U | 3.9 U |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 2020 | 93 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 16 U | 15 U | 15 U | 14 U | 15 U | 69 U | 16 U | 14 U | 310 U | 15 U |
| AROCLOR-1254 | 320 | 110 | N(4) | 20 U | 20 U | 20 U | 19 U | 19 U | 91 U | 22 U | 18 U | 410 U | 20 U |
| AROCLOR-1260 | 320 | 220 | C | 34 J | 35 J | 20 UJ | 19 U | 19 U | **690** | 22 U | 220 | **1700** | 82 |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | 34 | 35 | 0 U | 0 U | 0 U | **690** | 0 U | 220 | **1700** | 82 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 | N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 | N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-827**<br>**E-SB-827-SS**<br>**20100916**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-828**<br>**E-SB-828-SS**<br>**20100916**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-829**<br>**E-SB-829-SS**<br>**20100917**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-830**<br>**E-SB-830-SS**<br>**20100914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-831**<br>**E-SB-831-SS**<br>**20100913**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-832**<br>**E-SB-832-SS**<br>**20100917**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-833**<br>**E-SB-833-SS**<br>**20100916**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-833A**<br>**E-SB-833A-02**<br>**20101012**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-833B**<br>**E-SB-833B-02**<br>**20101012**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-833C**<br>**E-SB-833C-02**<br>**20101012**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | **8900000 J** | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | 440 | 55 U | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-833D<br>E-SB-833D-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-833E<br>E-SB-833E-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-833F<br>E-SB-833F-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-833G<br>E-SB-833G-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-833H<br>E-SB-833H-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-833J<br>E-SB-833J-02<br>20101013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-833K<br>E-SB-833K-02<br>20101013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-833L<br>E-SB-833L-02<br>20101013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-833M<br>E-SB-833M-02<br>20101013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-833N<br>E-SB-833N-02<br>20101014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 0.31 U | 39000 | 280 J | 0.31 U | 0.33 U | 47 J | 43000 J | 300 J | 11 J | 0.31 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 0.14 U | 6.8 U | 0.15 U | 0.14 U | 0.15 U | 0.13 U | 7.1 U | 0.14 U | 0.15 U | 0.14 U |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | 0.52 B | 180000 | 1200 | 0.68 B | 1.1 B | 260 | 210000 | 1600 | 47 J | 0.22 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 0.29 U | 970 J | 26 J | 0.29 U | 0.31 U | 6.5 U | 360 U | 22 J | 0.32 U | 0.29 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 0.28 U | 190 U | 4.2 U | 0.33 J | 0.31 U | 11 J | 1100 J | 3.9 U | 0.31 U | 0.28 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 0.53 U | 1500 J | 42 J | 1.3 J | 0.58 U | 12 J | 2700 J | 38 J | 0.58 U | 0.53 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 3.2 B | 1700 U | 38 U | 1.1 U | 1.2 U | 88 J | 1800 U | 35 U | 1.2 U | 1.1 U |
| ACETONE | 7000000 | 6100000 | N | 25 B | 6800 U | 230 J | 5.1 U | 8.4 B | 220 B | 9800 B | 160 B | 5.5 U | 13 J |
| CARBON DISULFIDE | 780000 | 82000 | N | 0.35 U | 480 U | 10 U | 0.36 U | 0.38 U | 9.1 U | 500 U | 9.8 U | 0.39 U | 0.36 U |
| CHLOROBENZENE | 160000 | 29000 | N | 0.26 U | 260 U | 5.6 U | 12 | 0.29 U | 4.8 U | 270 U | 5.2 U | 0.29 U | 0.27 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.54 U | 3100 U | 88 J | 0.55 U | 0.58 U | 58 U | 3200 U | 63 U | 0.59 U | 0.54 U |
| NAPHTHALENE | 160000 | 3600 | C | 0.15 U | 270 U | 5.9 U | 0.15 U | 0.17 U | 5.1 U | 280 U | 5.5 U | 0.17 U | 2.1 B |
| O-XYLENE | 1600000 (5) | 380000 | N | 0.28 U | 340 U | 7.4 U | 0.28 U | 0.31 U | 6.4 U | 360 U | 6.9 U | 0.31 U | 0.28 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 6.1 UR | 9700 UR | 210 UR | 6.2 UR | 6.6 UR | 390 J | 10000 UR | 620 J | 6.7 UR | 6.2 UR |
| TETRACHLOROETHENE | 1200 | 550 | C | 0.42 U | 480 U | 10 U | 0.42 U | 0.45 U | 9.1 U | 500 U | 9.8 U | 0.46 U | 1.8 J |
| TOLUENE | 630000 | 500000 | N | 0.22 U | 680 U | 15 U | 0.22 U | 0.24 U | 13 U | 710 U | 14 U | 0.31 J | 0.22 U |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | 0.54 U | 330 U | 7.1 U | 0.55 U | 0.58 U | 6.1 U | 340 U | 6.6 U | 0.59 U | 0.54 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 38 U | 3.9 U | 3.9 U | 39 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 98 | 3.9 U | 3.9 U | 39 U |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 38 U | 3.9 U | 3.9 U | 39 U |
| ANTHRACENE | 2300000 | 1700000 | N | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 240 | 3.9 U | 3.9 U | 39 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 7.0 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 1788 | 3.9 U | 3.9 U | 39 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 2.8 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 1788 | 3.9 U | 3.9 U | 39 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 15 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 1300 | 3.9 U | 3.9 U | 39 U |
| BENZO(A)PYRENE | 22 | 15 | C | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 1200 | 3.9 U | 3.9 U | 39 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 13 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 1700 | 3.9 U | 3.9 U | 39 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 850 | 3.9 U | 3.9 U | 39 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 630 | 3.9 U | 3.9 U | 39 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 25 | 1.3 U | 1.3 U | 1.3 U | 1.2 U | 1.3 U | 1200 | 1.3 U | 1.3 U | 13 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 210 | 3.9 U | 3.9 U | 39 U |
| FLUORANTHENE | 310000 | 230000 | N | 42 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 2000 | 3.9 U | 3.9 U | 520 |
| FLUORENE | 310000 | 230000 | N | 8.8 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 38 U | 3.9 U | 3.9 U | 39 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 700 | 3.9 U | 3.9 U | 39 U |
| NAPHTHALENE | 160000 | 3600 | C | 33 | 31 | 4 U | 3.9 U | 3.7 U | 3.9 U | 38 U | 3.9 U | 3.9 U | 39 U |
| PHENANTHRENE | 2300000 | 170000 | N(7) | 4 U | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 800 | 3.9 U | 3.9 U | 39 U |
| PYRENE | 230000 | 170000 | N | 30 | 4 U | 4 U | 3.9 U | 3.7 U | 3.9 U | 1600 | 3.9 U | 3.9 U | 290 |
| TOTAL PAHS | NC | NC | | 166.8 | 31 | 0 U | 0 U | 0 U | 0 U | 12528 | 0 U | 0 U | 810 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 16 U | 16000 U | 1600 U | 15 U | 15 U | 150 U | 30000 U | 15 U | 150 U | 15 U |
| AROCLOR-1254 | 320 | 110 | N(4) | 21 U | 20000 U | 2100 U | 20 U | 19 U | 200 U | 39000 U | 20 U | 200 U | 20 U |
| AROCLOR-1260 | 320 | 220 | C | 21 U | 360000 | 25000 | 57 | 23 J | 3000 | 680000 | 26 J | 1300 | 31 J |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | 0 U | 360000 | 25000 | 57 | 23 | 3000 | 680000 | 26 | 1300 | 31 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 | N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 | N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-833D<br>E-SB-833D-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-833E<br>E-SB-833E-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-833F<br>E-SB-833F-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-833G<br>E-SB-833G-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-833H<br>E-SB-833H-02<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-833J<br>E-SB-833J-02<br>20101013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-833K<br>E-SB-833K-02<br>20101013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-833L<br>E-SB-833L-02<br>20101013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-833M<br>E-SB-833M-02<br>20101013<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2** | **SB-833N<br>E-SB-833N-02<br>20101014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | **640000 J** | 150000 J | NA | NA | NA | **1400000 K** | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | 64 J | 56 U | NA | NA | NA | 1400 | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-834<br>E-SB-834-SS<br>20100916<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-835<br>E-SB-835-SS<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-836<br>E-SB-836-SS<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-837<br>E-SB-837-SS<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-838<br>E-SB-838-SS<br>20100913<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-839<br>E-SB-839-SS<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-840<br>E-SB-840-SS<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-841<br>E-SB-841-SS<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-842<br>E-SB-842-SS<br>20100913<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-843<br>E-SB-843-SS<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 75 U | 120 J | 81 U | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | 75 U | 150 J | 81 U | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | 75 U | 88 J | 81 U | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 75 U | 80 U | 81 U | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | 75 U | 80 U | 81 U | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 75 U | 80 U | 81 U | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | 75 U | 80 U | 81 U | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 75 U | 80 U | 81 U | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | 75 U | 80 U | 81 U | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 15 U | 160 U | 16 U | 14 U | 14 U | 4100 U | 14 U | 1400 U | 14 U | 15 U |
| AROCLOR-1254 | 320 | 110 | N(4) | 19 U | 200 U | 20 U | 19 U | 19 U | 5300 U | 18 U | 1800 U | 19 U | 19 U |
| AROCLOR-1260 | 320 | 220 | C | 19 U | **910** | 130 | 26 J | 19 U | **41000** | 120 | **25000** | 19 U | 19 U |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | 0 U | **910** | 130 | 26 | 0 U | **41000** | 120 | **25000** | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 | N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 | N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-834**<br>**E-SB-834-SS**<br>**20100916**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-835**<br>**E-SB-835-SS**<br>**20100917**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-836**<br>**E-SB-836-SS**<br>**20100917**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-837**<br>**E-SB-837-SS**<br>**20100917**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-838**<br>**E-SB-838-SS**<br>**20100913**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-839**<br>**E-SB-839-SS**<br>**20100914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-840**<br>**E-SB-840-SS**<br>**20100914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-841**<br>**E-SB-841-SS**<br>**20100914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-842**<br>**E-SB-842-SS**<br>**20100913**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-843**<br>**E-SB-843-SS**<br>**20100914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | | SB-844<br>E-SB-844-SS<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-845<br>E-SB-845-SS<br>20100913<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-846<br>E-SB-846-SS<br>20100913<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-847<br>E-SB-847-SS<br>20100913<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 | N | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N(6) | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N(7) | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 150 U | 6900 U | 15 U | 14 U |
| AROCLOR-1254 | 320 | 110 | N(4) | 190 U | 9100 U | 19 U | 18 U |
| AROCLOR-1260 | 320 | 220 | C | **2300** | **37000** | 53 | 64 |
| TOTAL AROCLOR | 320 (8) | 220 | C(9) | **2300** | **37000** | 53 | 64 |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 | N(10) | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 | N(12) | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-844**<br>**E-SB-844-SS**<br>**20100914**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-845**<br>**E-SB-845-SS**<br>**20100913**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-846**<br>**E-SB-846-SS**<br>**20100913**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** | **SB-847**<br>**E-SB-847-SS**<br>**20100913**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**1** |
|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1)3)] | USEPA Regional Screening Levels (RSLs) [2)3)] | SB-005<br>SB-5A-SS<br>20040917<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-006<br>SB-6A-SS<br>20040917<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-540<br>SB-540-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-541<br>SB-541-2<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-541<br>SB-541-SS0.5-1<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-541<br>SB-541-SS0-0.5<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-541A<br>SB-541A-SS[SJ]<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-541A<br>SB-541A-SS0.5-1<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-541A<br>SB-541A-SS0-0.5<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-542<br>SB-542-2<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 N | 6 U | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 N[4] | 6 U | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 N | 6 U | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | 6 U | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 C | 6 U | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | 55 U | 58 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | 55 U | 58 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | 6 U | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 N | 6 U | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | 8 J | 9 J | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | 6 U | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 N | 6 U | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 C | 6 U | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | 6 U | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 N | 950 U | 44 J | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 C | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 N | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 C | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 C | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 380 U | 390 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 380 U | 390 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[7] | 380 U | 390 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 380 U | 390 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 380 U | 390 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 380 U | 390 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[7] | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | 380 U | 390 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 C | 280 U | 290 U | 400 U | 20 U | 20 U | 20 U | 89 U | 21 U | 21 U | 19 U |
| AROCLOR-1254 | 320 | 110 N[4] | 280 U | 290 U | 400 U | 20 U | 20 U | 20 U | 89 U | 21 U | 21 U | 19 U |
| AROCLOR-1260 | 320 | 220 C | 280 U | 290 U | **1800** | 20 U | 20 U | 20 U | **490** | 19 J | 21 J | 19 U |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | 0 U | 0 U | **1800** | 0 U | 0 U | 0 U | **490** | 19 | 21 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | 2.8 U | 2.8 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | **1.1** | **1.7** | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | 2.8 U | 2.8 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | 2.8 U | 2.8 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | 29 | 10 K | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | 5.8 L | 5.1 L | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | 8 J | 2.8 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | 0.11 U | 0.11 U | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | 3.6 K | 5.6 K | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | 2.8 U | 2.8 U | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | 2.8 UL | 2.8 UL | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | 2.2 UL | 2.3 UL | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | SB-005<br>SB-5A-SS<br>20040917<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-006<br>SB-6A-SS<br>20040917<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-540<br>SB-540-0001<br>20071204<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-541<br>SB-541-2<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-541<br>SB-541-SS0.5-1<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-541<br>SB-541-SS0-0.5<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-541A<br>SB-541A-SS[SJ]<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-541A<br>SB-541A-SS0.5-1<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-541A<br>SB-541A-SS0-0.5<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-542<br>SB-542-2<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | 28 UL | 28 UL | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | 11000 U | 11000 U | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | 110 U | 170 | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | 81.9 | 82 | 82 | 81 | 94 | 79 | 79 | 88 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-542<br>SB-542-SS0.5-1<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-542<br>SB-542-SS0-0.5<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-543<br>SB-543-2<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-543<br>SB-543-SS0.5-1<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-543<br>SB-543-SS0-0.5<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-543A<br>SB-543A-2<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-543A<br>SB-543A-SS[SJ]<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-543A<br>SB-543A-SS0.5-1<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-543A<br>SB-543A-SS0-0.5<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-544<br>SB-544-2<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 C | 19 U | 20 U | 20 U | 19 U | 19 U | 20 U | 180 U | 19 U | 20 U | 20 U |
| AROCLOR-1254 | 320 | 110 N[4] | 19 U | 20 U | 20 U | 19 U | 19 U | 20 U | 180 U | 19 U | 20 U | 20 U |
| AROCLOR-1260 | 320 | 220 C | 19 U | 20 U | 20 U | 19 U | 5.4 J | 20 U | **940** | 77 | 91 | 20 U |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | 0 U | 0 U | 0 U | 0 U | 5.4 | 0 U | **940** | 77 | 91 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | SB-542 | SB-542 | SB-543 | SB-543 | SB-543 | SB-543A | SB-543A | SB-543A | SB-543A | SB-544 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-542-SS0.5-1 | SB-542-SS0-0.5 | SB-543-2 | SB-543-SS0.5-1 | SB-543-SS0-0.5 | SB-543A-2 | SB-543A-SS[SJ] | SB-543A-SS0.5-1 | SB-543A-SS0-0.5 | SB-544-2 |
| SAMPLE DATE | | | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 | 20081111 | 20081023 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SS | SS | SB | SS | SS | SB | SS | SS | SS | SB |
| TOP DEPTH | | | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | | | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 0 | 1 | 0.5 | 2 |
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 86 | 85 | 85 | 88 | 87 | NA | 94 | NA | 82 | 82 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-544<br>SB-544-SS0.5-1<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-544<br>SB-544-SS0-0.5<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-544A<br>SB-544A-SS[SJ]<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-544A<br>SB-544A-SS0.5-1<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-544A<br>SB-544A-SS0-0.5<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-545<br>SB-545-SS0.5-1<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-545<br>SB-545-SS0-0.5<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-546<br>SB-546-2<br>20081023<br>ORIG<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-546<br>SB-546-2-AVG<br>20081023<br>AVG<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-546<br>SB-546-2-D<br>20081023<br>DUP<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 C | 20 U | 19 U | 17 U | 20 U | 19 U | 21 U | 20 U | 20 U | 19.5 U | 19 U |
| AROCLOR-1254 | 320 | 110 N[4] | 20 U | 19 U | 17 U | 20 U | 19 U | 21 U | 20 U | 20 U | 19.5 U | 19 U |
| AROCLOR-1260 | 320 | 220 C | 20 U | 19 U | 41 | 23 | 190 | 21 U | 20 U | 20 U | 19.5 U | 19 U |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | 0 U | 0 U | 41 | 23 | 190 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | SB-544<br>SB-544-SS0.5-1<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-544<br>SB-544-SS0-0.5<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-544A<br>SB-544A-SS[SJ]<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-544A<br>SB-544A-SS0.5-1<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-544A<br>SB-544A-SS0-0.5<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-545<br>SB-545-SS0.5-1<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-545<br>SB-545-SS0-0.5<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-546<br>SB-546-2<br>20081023<br>ORIG<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-546<br>SB-546-2-AVG<br>20081023<br>AVG<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-546<br>SB-546-2-D<br>20081023<br>DUP<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 84 | 87 | 95 | 84 | 88 | 81 | 84 | 85 | 85.5 | 86 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1)(3)] | USEPA Regional Screening Levels (RSLs) [2)(3)] | SB-546<br>SB-546-SS0.5-1<br>20081023<br>ORIG<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-546<br>SB-546-SS0.5-1-AVG<br>20081023<br>AVG<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-546<br>SB-546-SS0.5-1-D<br>20081023<br>DUP<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-546<br>SB-546-SS0-0.5<br>20081023<br>ORIG<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-546<br>SB-546-SS0-0.5-AVG<br>20081023<br>AVG<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-546<br>SB-546-SS0-0.5-D<br>20081023<br>DUP<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-546A<br>SB-546A-SS[SJ]<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-546A<br>SB-546A-SS0.5-1<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-546A<br>SB-546A-SS0-0.5<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-547<br>SB-547-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 C | 18 U | 18.5 U | 19 U | 19 U | 19 U | 19 U | 18 U | 20 U | 920 U | 19 U |
| AROCLOR-1254 | 320 | 110 N[4] | 18 U | 18.5 U | 19 U | 19 U | 19 U | 19 U | 18 U | 20 U | 920 U | 19 U |
| AROCLOR-1260 | 320 | 220 C | 18 U | 18.5 U | 19 UJ | 19 U | 19 U | 19 U | 66 | 140 | 9600 | 19 U |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 66 | 140 | 9600 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-546<br>SB-546-SS0.5-1<br>20081023<br>ORIG<br>SO<br>NORMAL<br>SS<br>0.5<br>1** | **SB-546<br>SB-546-SS0.5-1-AVG<br>20081023<br>AVG<br>SO<br>NORMAL<br>SS<br>0.5<br>1** | **SB-546<br>SB-546-SS0.5-1-D<br>20081023<br>DUP<br>SO<br>NORMAL<br>SS<br>0.5<br>1** | **SB-546<br>SB-546-SS0-0.5<br>20081023<br>ORIG<br>SO<br>NORMAL<br>SS<br>0<br>0.5** | **SB-546<br>SB-546-SS0-0.5-AVG<br>20081023<br>AVG<br>SO<br>NORMAL<br>SS<br>0<br>0.5** | **SB-546<br>SB-546-SS0-0.5-D<br>20081023<br>DUP<br>SO<br>NORMAL<br>SS<br>0<br>0.5** | **SB-546A<br>SB-546A-SS[SJ]<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0** | **SB-546A<br>SB-546A-SS0.5-1<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1** | **SB-546A<br>SB-546A-SS0-0.5<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5** | **SB-547<br>SB-547-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 90 | 88 | 86 | 90 | 89.5 | 89 | 94 | 85 | 91 | 88 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-547 | SB-547 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-547-SS0.5-1 | SB-547-SS0-0.5 | SB-548-2 | SB-548-2-AVG | SB-548-2-D | SB-548-SS0.5-1 | SB-548-SS0.5-1-AVG | SB-548-SS0.5-1-D | SB-548-SS0-0.5 | SB-548-SS0-0.5-AVG |
| SAMPLE DATE | | | | 20081021 | 20081021 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG | AVG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SS | SB | SB | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | | | | 0.5 | 0 | 2 | 2 | 2 | 0.5 | 0.5 | 0.5 | 0 | 0 |
| BOTTOM DEPTH | | | | 1 | 0.5 | 2 | 2 | 2 | 1 | 1 | 1 | 0.5 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 18 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| AROCLOR-1254 | 320 | 110 | N[4] | 18 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| AROCLOR-1260 | 320 | 220 | C | 18 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1)3)] | USEPA Regional Screening Levels (RSLs) [2)3)] | SB-547<br>SB-547-SS0.5-1<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-547<br>SB-547-SS0-0.5<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-548<br>SB-548-2<br>20081023<br>ORIG<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-548<br>SB-548-2-AVG<br>20081023<br>AVG<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-548<br>SB-548-2-D<br>20081023<br>DUP<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-548<br>SB-548-SS0.5-1<br>20081023<br>ORIG<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-548<br>SB-548-SS0.5-1-AVG<br>20081023<br>AVG<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-548<br>SB-548-SS0.5-1-D<br>20081023<br>DUP<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-548<br>SB-548-SS0-0.5<br>20081023<br>ORIG<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-548<br>SB-548-SS0-0.5-AVG<br>20081023<br>AVG<br>SO<br>NORMAL<br>SS<br>0<br>0.5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 91 | 89 | 86 | 87 | 88 | 87 | 88 | 89 | 88 | 87 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-548 | SB-549 | SB-549 | SB-549 | SB-549 | SB-549 | SB-550 | SB-550 | SB-550 | SB-550A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-548-SS0-0.5-D | SB-549-2 | SB-549-2-AVG | SB-549-2-D | SB-549-SS0.5-1 | SB-549-SS0-0.5 | SB-550-2 | SB-550-SS0.5-1 | SB-550-SS0-0.5 | SB-550A-2 |
| SAMPLE DATE | | | | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | | | | DUP | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SB | SB | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | | | | 0 | 2 | 2 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | | | | 0.5 | 2 | 2 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 19 U | 20 U | 19.5 U | 19 U | 20 U | 19 U | 20 U | 20 U | 19 U | 20 U |
| AROCLOR-1254 | 320 | 110 | N[4] | 19 U | 20 U | 19.5 U | 19 U | 20 U | 19 U | 20 U | 20 U | 19 U | 20 U |
| AROCLOR-1260 | 320 | 220 | C | 19 U | 20 U | 19.5 U | 19 U | 20 U | 19 U | 20 U | 20 U | 19 U | 20 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | SB-548 | SB-549 | SB-549 | SB-549 | SB-549 | SB-549 | SB-550 | SB-550 | SB-550 | SB-550A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-548-SS0-0.5-D | SB-549-2 | SB-549-2-AVG | SB-549-2-D | SB-549-SS0.5-1 | SB-549-SS0-0.5 | SB-550-2 | SB-550-SS0.5-1 | SB-550-SS0-0.5 | SB-550A-2 |
| SAMPLE DATE | | | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | | | DUP | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SS | SB | SB | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | | | 0 | 2 | 2 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | | | 0.5 | 2 | 2 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 86 | 85 | 85.5 | 86 | 85 | 87 | 85 | 84 | 86 | 84 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-550A<br>SB-550A-SS[SJ]<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-550A<br>SB-550A-SS0.5-1<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-550A<br>SB-550A-SS0-0.5<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-551<br>SB-551-2<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-551<br>SB-551-SS0.5-1<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-551<br>SB-551-SS0-0.5<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-552<br>SB-552-2<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-552<br>SB-552-SS0.5-1<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-552<br>SB-552-SS0-0.5<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-553<br>SB-553-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 C | 17 U | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1254 | 320 | 110 N[4] | 17 U | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U | 19 U | 19 U | 20 U |
| AROCLOR-1260 | 320 | 220 C | 61 | 20 U | 12 J | 21 U | 20 U | 5.6 J | 20 U | 27 | 19 U | 20 U |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | 61 | 0 U | 12 | 0 U | 0 U | 5.6 | 0 U | 27 | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | SB-550A<br>SB-550A-SS[SJ]<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0 | SB-550A<br>SB-550A-SS0.5-1<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-550A<br>SB-550A-SS0-0.5<br>20081111<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-551<br>SB-551-2<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-551<br>SB-551-SS0.5-1<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-551<br>SB-551-SS0-0.5<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-552<br>SB-552-2<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-552<br>SB-552-SS0.5-1<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-552<br>SB-552-SS0-0.5<br>20081023<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-553<br>SB-553-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 95 | 81 | 82 | 80 | 83 | 91 | 85 | 87 | 86 | 82 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-553<br>SB-553-SS0.5-1<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-554<br>SB-554-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-554<br>SB-554-SS0.5-1<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-555<br>SB-555-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-555<br>SB-555-SS0.5-1<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-555<br>SB-555-SS0-0.5<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-556<br>SB-556-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-556<br>SB-556-SS0.5-1<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-556<br>SB-556-SS0-0.5<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-557<br>SB-557-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 C | 19 U | 19 U | 19 U | 950 U | 910 U | 1800 U | NA | 20 U | 18 U | 18 U |
| AROCLOR-1254 | 320 | 110 N[4] | 19 U | 19 U | 19 U | 950 U | 4800 | 36000 | NA | 20 U | 18 U | 18 U |
| AROCLOR-1260 | 320 | 220 C | 19 U | 19 U | 19 U | 3800 | 3800 J | 17000 J | NA | 20 U | 180 | 18 U |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | 0 U | 0 U | 0 U | 3800 | 8600 | 53000 | NA | 0 U | 180 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | SB-553<br>SB-553-SS0.5-1<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-554<br>SB-554-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-554<br>SB-554-SS0.5-1<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-555<br>SB-555-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-555<br>SB-555-SS0.5-1<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-555<br>SB-555-SS0-0.5<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-556<br>SB-556-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-556<br>SB-556-SS0.5-1<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-556<br>SB-556-SS0-0.5<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-557<br>SB-557-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 86 | 88 | 90 | 88 | 91 | 93 | 83 | 82 | 91 | 95 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1)(3)] | USEPA Regional Screening Levels (RSLs) [2)(3)] | | SB-557<br>SB-557-SS0.5-1<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-557<br>SB-557-SS0-0.5<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-558<br>SB-558-2<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-558<br>SB-558-SS0.5-1<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-558<br>SB-558-SS0-0.5<br>20081021<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-559<br>SB-559-2<br>20081022<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-559<br>SB-559-SS0.5-1<br>20081022<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 | SB-559<br>SB-559-SS0-0.5<br>20081022<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>0.5 | SB-560<br>SB-560-2<br>20081022<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-560<br>SB-560-SS0.5-1<br>20081022<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0.5<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 18 U | 19 U | 19 U | 19 U | 196 U | 18 U | 18 U | 18 U | 18 U | 18 U |
| AROCLOR-1254 | 320 | 110 | N[4] | 18 U | 19 U | 51 | 19 U | 196 U | 18 U | 18 U | 18 U | 18 U | 18 U |
| AROCLOR-1260 | 320 | 220 | C | 18 U | 11 J | 19 U | 19 U | **1600** | 18 U | 18 U | 5.2 J | 18 U | 18 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 11 | 51 | 0 U | **1600** | 0 U | 0 U | 5.2 | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 | SB-559 | SB-560 | SB-560 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-557-SS0.5-1 | SB-557-SS0-0.5 | SB-558-2 | SB-558-SS0.5-1 | SB-558-SS0-0.5 | SB-559-2 | SB-559-SS0.5-1 | SB-559-SS0-0.5 | SB-560-2 | SB-560-SS0.5-1 |
| SAMPLE DATE | | | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SS | SS | SB | SS | SS | SB | SS | SS | SB | SS |
| TOP DEPTH | | | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 |
| BOTTOM DEPTH | | | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 |
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 90 | 89 | 89 | 87 | 86 | 93 | 93 | 93 | 93 | 91 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-560 | SB-561 | SB-561 | SB-561 | SB-562 | SB-562 | SB-562 | SB-563 | SB-563 | SB-563 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-560-SS0-0.5 | SB-561-2 | SB-561-SS0.5-1 | SB-561-SS0-0.5 | SB-562-2 | SB-562-SS0.5-1 | SB-562-SS0-0.5 | SB-563-2 | SB-563-SS0.5-1 | SB-563-SS0-0.5 |
| SAMPLE DATE | | | | 20081022 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SB | SS | SS | SB | SS | SS | SB | SS | SS |
| TOP DEPTH | | | | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | | | | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 18 U | NA | NA | NA | NA | NA | NA | 19 U | 18 U | 19 U |
| AROCLOR-1254 | 320 | 110 | N[4] | 18 U | NA | NA | NA | NA | NA | NA | 19 U | 18 U | 19 U |
| AROCLOR-1260 | 320 | 220 | C | 13 J | NA | NA | NA | NA | NA | NA | 19 U | 18 U | 40 |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 13 | NA | NA | NA | NA | NA | NA | 0 U | 0 U | 40 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-560**<br>**SB-560-SS0-0.5**<br>**20081022**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0.5** | **SB-561**<br>**SB-561-2**<br>**20081021**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-561**<br>**SB-561-SS0.5-1**<br>**20081021**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0.5**<br>**1** | **SB-561**<br>**SB-561-SS0-0.5**<br>**20081021**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0.5** | **SB-562**<br>**SB-562-2**<br>**20081021**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-562**<br>**SB-562-SS0.5-1**<br>**20081021**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0.5**<br>**1** | **SB-562**<br>**SB-562-SS0-0.5**<br>**20081021**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0.5** | **SB-563**<br>**SB-563-2**<br>**20081021**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-563**<br>**SB-563-SS0.5-1**<br>**20081021**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0.5**<br>**1** | **SB-563**<br>**SB-563-SS0-0.5**<br>**20081021**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0.5** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 92 | 90 | 92 | 92 | 85 | 90 | 87 | 86 | 91 | 88 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-564 | SB-564 | SB-564 | SB-565 | SB-565 | SB-565 | SB-566 | SB-566 | SB-566 | SB-567 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-564-2 | SB-564-SS0.5-1 | SB-564-SS0-0.5 | SB-565-2 | SB-565-SS0.5-1 | SB-565-SS0-0.5 | SB-566-2 | SB-566-SS0.5-1 | SB-566-SS0-0.5 | SB-567-2 |
| SAMPLE DATE | | | | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SS | SS | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | | | | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | | | | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 17 U | 18 U | 18 U | 97 U | 20 U | 19 U | 19 U | 18 U | 92 U | 19 U |
| AROCLOR-1254 | 320 | 110 | N[4] | 17 U | 18 U | 18 U | 97 U | 20 U | 19 U | 19 U | 18 U | 92 U | 19 U |
| AROCLOR-1260 | 320 | 220 | C | 17 U | 18 U | 11 J | **1000** | **340** | 210 | 19 U | 11 J | **1200** | 4.3 J |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 11 | **1000** | **340** | 210 | 0 U | 11 | **1200** | 4.3 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-564 | SB-564 | SB-564 | SB-565 | SB-565 | SB-565 | SB-566 | SB-566 | SB-566 | SB-567 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-564-2 | SB-564-SS0.5-1 | SB-564-SS0-0.5 | SB-565-2 | SB-565-SS0.5-1 | SB-565-SS0-0.5 | SB-566-2 | SB-566-SS0.5-1 | SB-566-SS0-0.5 | SB-567-2 |
| SAMPLE DATE | | | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SS | SS | SB | SS | SS | SB | SS | SS | SB |
| TOP DEPTH | | | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 |
| BOTTOM DEPTH | | | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 96 | 95 | 92 | 86 | 85 | 86 | 90 | 91 | 91 | 90 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-567 | SB-567 | SB-568 | SB-568 | SB-568 | SB-569 | SB-569 | SB-569 | SB-570 | SB-570 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-567-SS0.5-1 | SB-567-SS0-0.5 | SB-568-2 | SB-568-SS0.5-1 | SB-568-SS0-0.5 | SB-569-2 | SB-569-SS0.5-1 | SB-569-SS0-0.5 | SB-570-2 | SB-570-SS0.5-1 |
| SAMPLE DATE | | | | 20081023 | 20081023 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SS | SB | SS | SS | SB | SS | SS | SB | SS |
| TOP DEPTH | | | | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 |
| BOTTOM DEPTH | | | | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-NITROANILINE | NC | 61000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1242 | 320 | 220 | C | 19 U | 18 U | 18 U | 910 U | 9000 U | 20 U | 690 U | 19000 U | 18 U | 180 U |
| AROCLOR-1254 | 320 | 110 | N[4] | 19 U | 18 U | 18 U | 910 U | 9000 U | 20 U | 690 U | 19000 U | 18 U | 180 U |
| AROCLOR-1260 | 320 | 220 | C | 5.4 J | 25 | 18 U | **11000** | **81000 J** | 20 U | **7900** | **300000** | 18 U | **3200** |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 5.4 | 25 | 0 U | **11000** | **81000** | 0 U | **7900** | **300000** | 0 U | **3200** |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-567 | SB-567 | SB-568 | SB-568 | SB-568 | SB-569 | SB-569 | SB-569 | SB-570 | SB-570 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-567-SS0.5-1 | SB-567-SS0-0.5 | SB-568-2 | SB-568-SS0.5-1 | SB-568-SS0-0.5 | SB-569-2 | SB-569-SS0.5-1 | SB-569-SS0-0.5 | SB-570-2 | SB-570-SS0.5-1 |
| SAMPLE DATE | | | 20081023 | 20081023 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SS | SS | SB | SS | SS | SB | SS | SS | SB | SS |
| TOP DEPTH | | | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 | 0 | 2 | 0.5 |
| BOTTOM DEPTH | | | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 |
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 87 | 91 | 91 | 92 | 93 | 85 | 97 | 88 | 92 | 91 |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | SB-570 | SB-571 | SB-571 | SB-571 |
|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-570-SS0-0.5 | SB-571-2 | SB-571-SS0.5-1 | SB-571-SS0-0.5 |
| SAMPLE DATE | | | 20081022 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SS | SB | SS | SS |
| TOP DEPTH | | | 0 | 2 | 0.5 | 0 |
| BOTTOM DEPTH | | | 0.5 | 2 | 1 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 N | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 N(4) | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 N | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 C | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 N | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 N | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 C | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (5) | 63000 N | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 2-NITROANILINE | NC | 61000 N | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 C | NA | NA | NA | NA |
| CAPROLACTAM | NC | 3100000 N | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(6) | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 C | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(7) | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(7) | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| AROCLOR-1242 | 320 | 220 C | 370 U | 19 U | 18 U | 18 U |
| AROCLOR-1254 | 320 | 110 N(4) | 370 U | 19 U | 18 U | 18 U |
| AROCLOR-1260 | 320 | 220 C | **6800** | 19 U | 18 U | 18 U |
| TOTAL AROCLOR | 320 (8) | 220 C(9) | **6800** | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 N(10) | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 N(12) | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA |

**Table A-8**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** (1)(3) | **USEPA Regional Screening Levels (RSLs)** (2)(3) | **SB-570**<br>**SB-570-SS0-0.5**<br>**20081022**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0.5** | **SB-571**<br>**SB-571-2**<br>**20081023**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SB**<br>**2**<br>**2** | **SB-571**<br>**SB-571-SS0.5-1**<br>**20081023**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0.5**<br>**1** | **SB-571**<br>**SB-571-SS0-0.5**<br>**20081023**<br>**NORMAL**<br>**SO**<br>**NORMAL**<br>**SS**<br>**0**<br>**0.5** |
|---|---|---|---|---|---|---|
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NC | NC | 90 | 90 | 91 | 94 |
| **RADIONUCLIDES (PCI/G)** | | | | | | |
| ACTINIUM-228 | NC | NC | NA | NA | NA | NA |
| BISMUTH-212 | NC | NC | NA | NA | NA | NA |
| BISMUTH-214 | NC | NC | NA | NA | NA | NA |
| CESIUM-137 | NC | NC | NA | NA | NA | NA |
| LEAD-212 | NC | NC | NA | NA | NA | NA |
| LEAD-214 | NC | NC | NA | NA | NA | NA |
| POTASSIUM-40 | NC | NC | NA | NA | NA | NA |
| RADIUM-226 | NC | NC | NA | NA | NA | NA |
| THALLIUM-208 | NC | NC | NA | NA | NA | NA |

**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
5 - The value is for xylenes.
6 - The value for acenaphthene is used as a surrogate for acenaphthylene.
7 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
8 - The value is for PCB (total).
9 - The value is for polychlorinated biphenyls (high risk).
10 - The value is for trivalent chromium.
11 - The value is for mercury (inorganic/mercuric dichloride).
12 - The value is for mercuric chloride.
13 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-818 | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-818-03 | E-SB-818-05 | E-SB-818-07 | E-SB-818-09 | E-SB-819-03 | E-SB-819-05 | E-SB-819-07 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-818 | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-818-03 | E-SB-818-05 | E-SB-818-07 | E-SB-818-09 | E-SB-819-03 | E-SB-819-05 | E-SB-819-07 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-818 | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-818-03 | E-SB-818-05 | E-SB-818-07 | E-SB-818-09 | E-SB-819-03 | E-SB-819-05 | E-SB-819-07 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-818 | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-818-03 | E-SB-818-05 | E-SB-818-07 | E-SB-818-09 | E-SB-819-03 | E-SB-819-05 | E-SB-819-07 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 22 U | 27 U | 25 U | 27 U | 23 U | 25 U | 22 U |
| AROCLOR-1221 | 17 U | 20 U | 19 U | 20 U | 17 U | 19 U | 17 U |
| AROCLOR-1232 | 15 U | 18 U | 17 U | 18 U | 15 U | 16 U | 15 U |
| AROCLOR-1242 | 14 U | 17 U | 16 U | 17 U | 14 U | 15 U | 14 U |
| AROCLOR-1248 | 18 U | 22 U | 20 U | 22 U | 18 U | 20 U | 18 U |
| AROCLOR-1254 | 18 U | 22 U | 20 U | 22 U | 18 U | 20 U | 18 U |
| AROCLOR-1260 | 18 U | 22 U | 20 U | 22 U | 96 | 20 U | 18 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 96 | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-818 | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-818-03 | E-SB-818-05 | E-SB-818-07 | E-SB-818-09 | E-SB-819-03 | E-SB-819-05 | E-SB-819-07 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 | SB-820 | SB-820 | SB-821 | SB-821 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-819-07-AVG | E-SB-819-07-D | E-SB-819-09 | E-SB-820-03 | E-SB-820-05 | E-SB-820-07 | E-SB-820-09 | E-SB-821-03 | E-SB-821-05 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100916 | 20100916 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 | SB-820 | SB-820 | SB-821 | SB-821 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-819-07-AVG | E-SB-819-07-D | E-SB-819-09 | E-SB-820-03 | E-SB-820-05 | E-SB-820-07 | E-SB-820-09 | E-SB-821-03 | E-SB-821-05 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100916 | 20100916 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 | SB-820 | SB-820 | SB-821 | SB-821 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-819-07-AVG | E-SB-819-07-D | E-SB-819-09 | E-SB-820-03 | E-SB-820-05 | E-SB-820-07 | E-SB-820-09 | E-SB-821-03 | E-SB-821-05 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100916 | 20100916 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 | SB-820 | SB-820 | SB-821 | SB-821 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-819-07-AVG | E-SB-819-07-D | E-SB-819-09 | E-SB-820-03 | E-SB-820-05 | E-SB-820-07 | E-SB-820-09 | E-SB-821-03 | E-SB-821-05 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100916 | 20100916 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 21.5 U | 21 U | 24 U | 24 U | 24 U | 24 U | 25 U | 26 U | 24 U |
| AROCLOR-1221 | 16.5 U | 16 U | 19 U | 18 U | 18 U | 18 U | 19 U | 19 U | 18 U |
| AROCLOR-1232 | 14.5 U | 14 U | 16 U | 16 U | 16 U | 16 U | 17 U | 17 U | 16 U |
| AROCLOR-1242 | 13.5 U | 13 U | 15 U | 15 U | 15 U | 15 U | 15 U | 16 U | 15 U |
| AROCLOR-1248 | 17.5 U | 17 U | 20 U | 19 U | 20 U | 19 U | 20 U | 21 U | 19 U |
| AROCLOR-1254 | 17.5 U | 17 U | 20 U | 19 U | 20 U | 19 U | 20 U | 21 U | 19 U |
| AROCLOR-1260 | 17.5 U | 17 U | 54 | 19 U | 20 U | 19 U | 20 U | 21 U | 37 J |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 54 | 0 U | 0 U | 0 U | 0 U | 0 U | 37 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 | SB-820 | SB-820 | SB-821 | SB-821 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-819-07-AVG | E-SB-819-07-D | E-SB-819-09 | E-SB-820-03 | E-SB-820-05 | E-SB-820-07 | E-SB-820-09 | E-SB-821-03 | E-SB-821-05 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100916 | 20100916 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-821 | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-822 | SB-822 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-821-07 | E-SB-821-09 | E-SB-821-09-AVG | E-SB-821-09-D | E-SB-822-03 | E-SB-822-05 | E-SB-822-05-AVG | E-SB-822-05-D | E-SB-822-07 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-821 | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-822 | SB-822 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-821-07 | E-SB-821-09 | E-SB-821-09-AVG | E-SB-821-09-D | E-SB-822-03 | E-SB-822-05 | E-SB-822-05-AVG | E-SB-822-05-D | E-SB-822-07 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-821 | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-822 | SB-822 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-821-07 | E-SB-821-09 | E-SB-821-09-AVG | E-SB-821-09-D | E-SB-822-03 | E-SB-822-05 | E-SB-822-05-AVG | E-SB-822-05-D | E-SB-822-07 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-821 | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-822 | SB-822 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-821-07 | E-SB-821-09 | E-SB-821-09-AVG | E-SB-821-09-D | E-SB-822-03 | E-SB-822-05 | E-SB-822-05-AVG | E-SB-822-05-D | E-SB-822-07 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 | 7 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 25 U | 27 U | 26.5 U | 26 U | 25 U | 26 U | 26 U | 26 U | 25 U |
| AROCLOR-1221 | 19 U | 20 U | 20 U | 20 U | 19 U | 20 U | 19.5 U | 19 U | 19 U |
| AROCLOR-1232 | 17 U | 18 U | 17.5 U | 17 U | 17 U | 17 U | 17 U | 17 U | 17 U |
| AROCLOR-1242 | 16 U | 16 U | 16 U | 16 U | 15 U | 16 U | 16 U | 16 U | 15 U |
| AROCLOR-1248 | 20 U | 22 U | 21.5 U | 21 U | 20 U | 21 U | 21 U | 21 U | 20 U |
| AROCLOR-1254 | 20 U | 22 U | 21.5 U | 21 U | 20 U | 21 U | 21 U | 21 U | 20 U |
| AROCLOR-1260 | 20 U | 60 J | 41.5 | 23 J | 20 U | 21 U | 21 U | 21 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 60 | 41.5 | 23 | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-821 | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-822 | SB-822 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-821-07 | E-SB-821-09 | E-SB-821-09-AVG | E-SB-821-09-D | E-SB-822-03 | E-SB-822-05 | E-SB-822-05-AVG | E-SB-822-05-D | E-SB-822-07 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 | 7 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-822 | SB-823 | SB-823 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-822-09 | E-SB-823-05 | E-SB-823-07 | E-SB-824-03 | E-SB-824-05 | E-SB-824-07 | E-SB-824-07-AVG | E-SB-824-07-D | E-SB-824-09 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-822 | SB-823 | SB-823 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-822-09 | E-SB-823-05 | E-SB-823-07 | E-SB-824-03 | E-SB-824-05 | E-SB-824-07 | E-SB-824-07-AVG | E-SB-824-07-D | E-SB-824-09 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-822 | SB-823 | SB-823 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-822-09 | E-SB-823-05 | E-SB-823-07 | E-SB-824-03 | E-SB-824-05 | E-SB-824-07 | E-SB-824-07-AVG | E-SB-824-07-D | E-SB-824-09 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-822 | SB-823 | SB-823 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-822-09 | E-SB-823-05 | E-SB-823-07 | E-SB-824-03 | E-SB-824-05 | E-SB-824-07 | E-SB-824-07-AVG | E-SB-824-07-D | E-SB-824-09 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | 26 U | 26 U | 24 U | 24 U | 24 U | 24 U | 24 U | 26 U |
| AROCLOR-1221 | 18 U | 20 U | 20 U | 18 U | 18 U | 19 U | 19 U | 19 U | 20 U |
| AROCLOR-1232 | 16 U | 18 U | 17 U | 16 U | 16 U | 16 U | 16 U | 16 U | 18 U |
| AROCLOR-1242 | 15 U | 16 U | 16 U | 15 U | 15 U | 15 U | 15 U | 15 U | 16 U |
| AROCLOR-1248 | 20 U | 21 U | 21 U | 19 U | 19 U | 20 U | 20 U | 20 U | 21 U |
| AROCLOR-1254 | 20 U | 21 U | 21 U | 19 U | 19 U | 20 U | 20 U | 20 U | 21 U |
| AROCLOR-1260 | 20 U | 21 U | 21 U | 19 U | 37 | 20 U | 20 U | 20 U | 21 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 37 | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-822 | SB-823 | SB-823 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-822-09 | E-SB-823-05 | E-SB-823-07 | E-SB-824-03 | E-SB-824-05 | E-SB-824-07 | E-SB-824-07-AVG | E-SB-824-07-D | E-SB-824-09 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-825 | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-826 | SB-826 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-03 | E-SB-825-05 | E-SB-825-07 | E-SB-825-09 | E-SB-826-05 | E-SB-826-07 | E-SB-826-09 | E-SB-826-09-AVG | E-SB-826-09-D |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 5 | 7 | 9 | 9 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 5 | 7 | 9 | 9 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-825 | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-826 | SB-826 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-03 | E-SB-825-05 | E-SB-825-07 | E-SB-825-09 | E-SB-826-05 | E-SB-826-07 | E-SB-826-09 | E-SB-826-09-AVG | E-SB-826-09-D |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 5 | 7 | 9 | 9 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 5 | 7 | 9 | 9 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-825 | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-826 | SB-826 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-03 | E-SB-825-05 | E-SB-825-07 | E-SB-825-09 | E-SB-826-05 | E-SB-826-07 | E-SB-826-09 | E-SB-826-09-AVG | E-SB-826-09-D |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 5 | 7 | 9 | 9 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 5 | 7 | 9 | 9 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-825 | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-826 | SB-826 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-03 | E-SB-825-05 | E-SB-825-07 | E-SB-825-09 | E-SB-826-05 | E-SB-826-07 | E-SB-826-09 | E-SB-826-09-AVG | E-SB-826-09-D |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 5 | 7 | 9 | 9 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 5 | 7 | 9 | 9 | 9 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U |
| AROCLOR-1221 | 18 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| AROCLOR-1232 | 16 U | 17 U | 17 U | 17 U | 17 U | 17 U | 17 U | 17 U | 17 U |
| AROCLOR-1242 | 15 U | 16 U | 15 U | 15 U | 15 U | 15 U | 16 U | 16 U | 16 U |
| AROCLOR-1248 | 19 U | 21 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1254 | 19 U | 21 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1260 | 19 U | 21 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 UJ |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-825 | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-826 | SB-826 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-03 | E-SB-825-05 | E-SB-825-07 | E-SB-825-09 | E-SB-826-05 | E-SB-826-07 | E-SB-826-09 | E-SB-826-09-AVG | E-SB-826-09-D |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 5 | 7 | 9 | 9 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 5 | 7 | 9 | 9 | 9 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-827 | SB-827 | SB-827 | SB-827 | SB-828 | SB-828 | SB-829 | SB-829 | SB-829 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-827-03 | E-SB-827-05 | E-SB-827-07 | E-SB-827-09 | E-SB-828-03 | E-SB-828-09 | E-SB-829-03 | E-SB-829-05 | E-SB-829-07 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-827 | SB-827 | SB-827 | SB-827 | SB-828 | SB-828 | SB-829 | SB-829 | SB-829 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-827-03 | E-SB-827-05 | E-SB-827-07 | E-SB-827-09 | E-SB-828-03 | E-SB-828-09 | E-SB-829-03 | E-SB-829-05 | E-SB-829-07 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 9 | 3 | 5 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-827 | SB-827 | SB-827 | SB-827 | SB-828 | SB-828 | SB-829 | SB-829 | SB-829 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-827-03 | E-SB-827-05 | E-SB-827-07 | E-SB-827-09 | E-SB-828-03 | E-SB-828-09 | E-SB-829-03 | E-SB-829-05 | E-SB-829-07 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 9 | 3 | 5 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 77 U | NA | NA | 490 J | NA | NA | 90 U |
| C1-FLUORANTHENES/PYRENES | NA | NA | 77 U | NA | NA | 370 J | NA | NA | 90 U |
| C1-FLUORENES | NA | NA | 77 U | NA | NA | 170 J | NA | NA | 90 U |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | 77 U | NA | NA | 81 U | NA | NA | 90 U |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 77 U | NA | NA | 580 J | NA | NA | 90 U |
| C2-FLUORENES | NA | NA | 77 U | NA | NA | 330 J | NA | NA | 90 U |
| C2-NAPHTHALENES | NA | NA | 77 U | NA | NA | 81 U | NA | NA | 90 U |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | 77 U | NA | NA | 460 J | NA | NA | 90 U |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-827 | SB-827 | SB-827 | SB-827 | SB-828 | SB-828 | SB-829 | SB-829 | SB-829 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-827-03 | E-SB-827-05 | E-SB-827-07 | E-SB-827-09 | E-SB-828-03 | E-SB-828-09 | E-SB-829-03 | E-SB-829-05 | E-SB-829-07 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 9 | 3 | 5 | 7 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 77 U | NA | NA | 430 J | NA | NA | 90 U |
| C3-FLUORENES | NA | NA | 77 U | NA | NA | 320 J | NA | NA | 90 U |
| C3-NAPHTHALENES | NA | NA | 77 U | NA | NA | 500 J | NA | NA | 90 U |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | 77 U | NA | NA | 620 J | NA | NA | 90 U |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 77 U | NA | NA | 350 J | NA | NA | 90 U |
| C4-NAPHTHALENES | NA | NA | 77 U | NA | NA | 2300 J | NA | NA | 90 U |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | 77 U | NA | NA | 660 J | NA | NA | 90 U |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | 25 U | 480 U | 25000 U | 24 U | 26 U | 25 U | 25 U | 28 U |
| AROCLOR-1221 | 19 U | 19 U | 370 U | 19000 U | 19 U | 19 U | 19 U | 19 U | 21 U |
| AROCLOR-1232 | 16 U | 17 U | 320 U | 16000 U | 16 U | 17 U | 16 U | 17 U | 19 U |
| AROCLOR-1242 | 15 U | 15 U | 300 U | 15000 U | 15 U | 16 U | 15 U | 16 U | 17 U |
| AROCLOR-1248 | 20 U | 20 U | 390 U | 20000 U | 20 U | 21 U | 20 U | 20 U | 23 U |
| AROCLOR-1254 | 20 U | 20 U | 390 U | 20000 U | 20 U | 21 U | 20 U | 20 U | 23 U |
| AROCLOR-1260 | 20 U | 20 U | 2500 J | 260000 J | 300 | 130 | 20 UJ | 20 UJ | 23 UJ |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 2500 | 260000 | 300 | 130 | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | 1500000 | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | 280 U | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-827 | SB-827 | SB-827 | SB-827 | SB-828 | SB-828 | SB-829 | SB-829 | SB-829 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-827-03 | E-SB-827-05 | E-SB-827-07 | E-SB-827-09 | E-SB-828-03 | E-SB-828-09 | E-SB-829-03 | E-SB-829-05 | E-SB-829-07 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 9 | 3 | 5 | 7 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-829 | SB-830 | SB-830 | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-829-09 | E-SB-830-03 | E-SB-830-05 | E-SB-830-07 | E-SB-830-09 | E-SB-831-03 | E-SB-831-05 | E-SB-831-07 | E-SB-831-09 |
| SAMPLE DATE | 20100917 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-829 | SB-830 | SB-830 | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-829-09 | E-SB-830-03 | E-SB-830-05 | E-SB-830-07 | E-SB-830-09 | E-SB-831-03 | E-SB-831-05 | E-SB-831-07 | E-SB-831-09 |
| SAMPLE DATE | 20100917 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-829 | SB-830 | SB-830 | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-829-09 | E-SB-830-03 | E-SB-830-05 | E-SB-830-07 | E-SB-830-09 | E-SB-831-03 | E-SB-831-05 | E-SB-831-07 | E-SB-831-09 |
| SAMPLE DATE | 20100917 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-829 | SB-830 | SB-830 | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-829-09 | E-SB-830-03 | E-SB-830-05 | E-SB-830-07 | E-SB-830-09 | E-SB-831-03 | E-SB-831-05 | E-SB-831-07 | E-SB-831-09 |
| SAMPLE DATE | 20100917 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | 25 U | 24 U | 25 U | 26 U | 24 U | 23 U | 24 U | 25 U |
| AROCLOR-1221 | 19 U | 19 U | 18 U | 19 U | 20 U | 18 U | 17 U | 19 U | 19 U |
| AROCLOR-1232 | 16 U | 16 U | 16 U | 16 U | 17 U | 16 U | 15 U | 16 U | 17 U |
| AROCLOR-1242 | 15 U | 15 U | 15 U | 15 U | 16 U | 15 U | 14 U | 15 U | 15 U |
| AROCLOR-1248 | 20 U | 20 U | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U | 20 U |
| AROCLOR-1254 | 20 U | 20 U | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U | 20 U |
| AROCLOR-1260 | 20 UJ | 20 U | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-829 | SB-830 | SB-830 | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-829-09 | E-SB-830-03 | E-SB-830-05 | E-SB-830-07 | E-SB-830-09 | E-SB-831-03 | E-SB-831-05 | E-SB-831-07 | E-SB-831-09 |
| SAMPLE DATE | 20100917 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-832 | SB-832 | SB-832 | SB-833 | SB-833 | SB-833 | SB-833 | SB-833A | SB-833A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-832-05 | E-SB-832-07 | E-SB-832-09 | E-SB-833-03 | E-SB-833-05 | E-SB-833-07 | E-SB-833-09 | E-SB-833A-06 | E-SB-833A-10 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | 23000 U | 220 U | 1600 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | 54000 U | 510 U | 3700 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | 23000 U | 220 U | 1600 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | 100000 U | 940 U | 6800 U |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | 44000 U | 410 U | 3000 U |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | 46000 U | 440 U | 3100 U |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | 26000 U | 240 U | 1700 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | 2200000 | 18000 | 140000 |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | 54000 U | 510 U | 3700 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | 440 U | 4.1 U | 30 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | 9600000 | 140000 | 830000 |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | 13000 U | 120 U | 870 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | 130000 U | 1200 U | 8700 U |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | 26000 U | 240 U | 1700 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | 120000 J | 1600 J | 6200 J |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | 26000 U | 240 U | 1700 U |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | 21000 U | 200 U | 1400 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | 12000 U | 37000 | 38000 J |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | 57000 U | 530 U | 3800 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | 130000 J | 17000 | 28000 J |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | 59000 U | 560 U | 4000 U |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | 110000 U | 1000 U | 7500 U |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | 110000 U | 1000 UR | 7500 UR |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | 23000 U | 220 U | 1600 U |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | 51000 U | 480 U | 3500 U |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | 25000 U | 240 U | 1700 U |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | 12000 U | 120 U | 840 U |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | 120000 U | 1200 U | 8400 U |
| ACETONE | NA | NA | NA | NA | NA | NA | 800000 B | 4100 U | 30000 U |
| BENZENE | NA | NA | NA | NA | NA | NA | 31000 U | 290 U | 2100 U |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | 33000 U | 310 U | 2300 U |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | 33000 U | 310 U | 2300 U |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | 25000 U | 240 U | 1700 U |
| BROMOFORM | NA | NA | NA | NA | NA | NA | 49000 U | 460 U | 3300 U |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | 75000 U | 700 U | 5100 U |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | 31000 U | 290 U | 2100 U |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | 16000 U | 150 U | 1100 U |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | 16000 U | 1500 J | 1100 U |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | 31000 U | 290 U | 2100 U |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | 160000 U | 1500 U | 11000 U |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | 23000 U | 210 U | 1500 U |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | 36000 U | 340 U | 2400 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | 18000 U | 170 U | 1200 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | 20000 U | 190 U | 1400 U |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | 36000 U | 340 U | 2400 U |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | 41000 U | 390 U | 2800 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | 130000 U | 1200 U | 8700 U |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | 570 U | 5.3 U | 38 U |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | 14000 U | 130 U | 940 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | 36000 U | 340 U | 2400 U |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | 17000 U | 160 U | 1100 U |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | 16000 U | 150 U | 1100 U |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | 18000 UJ | 170 U | 1200 U |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | 360000 B | 1900 U | 13000 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | 140000 B | 160 U | 1200 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | 21000 U | 2900 J | 1400 U |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | 36000 U | 340 U | 2400 U |
| O-XYLENE | NA | NA | NA | NA | NA | NA | 22000 U | 210 U | 1500 U |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | 12000 U | 380 J | 820 U |
| STYRENE | NA | NA | NA | NA | NA | NA | 14000 U | 140 U | 980 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | 950 UJ | 8.9 U | 64 U |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | 17000 U | 160 U | 1100 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | 7200000 B | 5800 UR | 42000 UR |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | 31000 U | 290 U | 2100 U |
| TOLUENE | NA | NA | NA | NA | NA | NA | 44000 U | 410 U | 3000 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | 21000 U | 200 U | 1400 U |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | 24000 U | 220 U | 1600 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | 51000 U | 480 U | 3500 U |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | 25000 U | 230 U | 1700 U |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | 41000 U | 390 U | 2800 U |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | 59000 U | 560 U | 4000 U |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-832 | SB-832 | SB-832 | SB-833 | SB-833 | SB-833 | SB-833 | SB-833A | SB-833A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-832-05 | E-SB-832-07 | E-SB-832-09 | E-SB-833-03 | E-SB-833-05 | E-SB-833-07 | E-SB-833-09 | E-SB-833A-06 | E-SB-833A-10 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | 46000 U | 440 U | 3100 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | 88000 U | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | 72000 U | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | 31000 U | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | 82000 U | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | 260000 U | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | 65000 U | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | 65000 U | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | 260000 U | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | 88000 U | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | 69000 U | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | 11000 U | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | 88000 U | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | 260000 U | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | 30000 U | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | 88000 U | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | 59000 U | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | 52000 U | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | 260000 U | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | 42000 U | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | 69000 U | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | 55000 U | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | 42000 U | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | 260000 U | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | 85000 U | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | 260000 U | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | 30000 U | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | 30000 U | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | 39000 U | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | 72000 U | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | 6500 U | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | 62000 U | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | 33000 U | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | 120000 U | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | 88000 U | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | 11000 U | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | 52000 U | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | 55000 U | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | 49000 U | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | 88000 U | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | 6900 U | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | 88000 U | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | 88000 U | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | 29000 U | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | 42000 U | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | 7200 U | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | 52000 U | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | 88000 U | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | 69000 U | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | 260000 U | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | 88000 U | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | 100 U | 200 U |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | 27000 | 100 U | 200 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | 28000 | 100 U | 200 U |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | 39347 | 401 | 200 U |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | 33242 | 340 | 200 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | 35000 | 100 U | 200 U |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | 27000 | 290 | 200 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | 27000 | 500 | 200 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-832 | SB-832 | SB-832 | SB-833 | SB-833 | SB-833 | SB-833 | SB-833A | SB-833A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-832-05 | E-SB-832-07 | E-SB-832-09 | E-SB-833-03 | E-SB-833-05 | E-SB-833-07 | E-SB-833-09 | E-SB-833A-06 | E-SB-833A-10 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-832 | SB-832 | SB-832 | SB-833 | SB-833 | SB-833 | SB-833 | SB-833A | SB-833A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-832-05 | E-SB-832-07 | E-SB-832-09 | E-SB-833-03 | E-SB-833-05 | E-SB-833-07 | E-SB-833-09 | E-SB-833A-06 | E-SB-833A-10 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | 42000 | 470 | 68 U |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | 81000 | 660 | 200 U |
| FLUORENE | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | 11000 U | 310 | 460 |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | 88000 | 360 | 200 U |
| PYRENE | NA | NA | NA | NA | NA | NA | 60000 | 520 | 200 U |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | 415000 | 3110 | 460 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | 29 U | 28 U | 25 U | 25 U | 24 U | 1400000 U | 260000 U | 260000 U |
| AROCLOR-1221 | 18 U | 22 U | 21 U | 19 U | 19 U | 18 U | 1000000 U | 200000 U | 200000 U |
| AROCLOR-1232 | 16 U | 20 U | 18 U | 16 U | 17 U | 16 U | 910000 U | 170000 U | 170000 U |
| AROCLOR-1242 | 15 U | 18 U | 17 U | 15 U | 15 U | 15 U | 850000 U | 160000 U | 160000 U |
| AROCLOR-1248 | 20 U | 24 U | 22 U | 20 U | 20 U | 20 U | 1100000 U | 210000 U | 210000 U |
| AROCLOR-1254 | 20 U | 24 U | 22 U | 20 U | 20 U | 20 U | 1100000 U | 210000 U | 210000 U |
| AROCLOR-1260 | 63 | 24 U | 22 U | 330 | 140 | 20 U | 24000000 | 510000 | 2000000 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 63 | 0 U | 0 U | 330 | 140 | 0 U | 24000000 | 510000 | 2000000 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | 0.031 U | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | 0.61 J | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | 6.2 | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | 1.3 | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | 0.011 B | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | 3.2 | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | 5.3 | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | 4.3 | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | 10900 | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | 1.7 | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | 13.6 | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | 0.02 U | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | 0.082 U | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | 8.6 | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | 0.59 J | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | 0.021 U | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | 0.017 U | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | 3 | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | 43.7 | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | 28000000 | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | 630 J | 140000 J | 170000 J |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-832 | SB-832 | SB-832 | SB-833 | SB-833 | SB-833 | SB-833 | SB-833A | SB-833A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-832-05 | E-SB-832-07 | E-SB-832-09 | E-SB-833-03 | E-SB-833-05 | E-SB-833-07 | E-SB-833-09 | E-SB-833A-06 | E-SB-833A-10 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833B | SB-833B | SB-833B | SB-833B | SB-833C | SB-833C | SB-833C | SB-833C | SB-833D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833B-04 | E-SB-833B-06 | E-SB-833B-08 | E-SB-833B-10 | E-SB-833C-04 | E-SB-833C-06 | E-SB-833C-08 | E-SB-833C-10 | E-SB-833D-04 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.45 U | 0.53 U | 0.49 U | 0.56 U | 0.53 U | 0.54 U | 0.58 U | 0.48 U | 0.51 U |
| 1,1,1-TRICHLOROETHANE | 0.41 U | 0.48 U | 0.44 U | 0.51 U | 0.48 U | 0.49 U | 0.53 U | 0.43 U | 0.46 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.25 U | 0.29 U | 0.27 U | 0.31 U | 0.29 U | 0.3 U | 0.32 U | 0.26 U | 0.28 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.94 U | 1.1 U | 1 U | 1.2 U | 1.1 U | 1.1 U | 1.2 U | 1 U | 1.1 U |
| 1,1-DICHLOROETHANE | 0.26 U | 0.31 U | 0.28 U | 0.33 U | 0.31 U | 0.31 U | 0.34 U | 0.28 U | 0.3 U |
| 1,1-DICHLOROETHENE | 0.38 U | 0.45 U | 0.41 U | 0.47 U | 0.45 U | 0.45 U | 0.49 U | 0.4 U | 0.43 U |
| 1,1-DICHLOROPROPENE | 0.22 U | 0.26 U | 0.24 U | 0.27 U | 0.26 U | 0.26 U | 0.28 U | 0.23 U | 0.25 U |
| 1,2,3-TRICHLOROBENZENE | 0.28 U | 2.2 J | 2.1 J | 0.34 U | 0.33 U | 0.33 U | 0.36 U | 0.29 U | 0.31 U |
| 1,2,3-TRICHLOROPROPANE | 0.65 U | 0.78 U | 0.71 U | 0.81 U | 0.78 U | 0.78 U | 0.84 U | 0.69 U | 0.74 U |
| 1,2,3-TRIMETHYLBENZENE | 0.12 U | 0.69 B | 0.13 U | 0.71 B | 0.15 U | 0.15 U | 0.16 U | 0.61 B | 0.14 U |
| 1,2,4-TRICHLOROBENZENE | 0.69 B | 12 | 11 | 1.4 B | 0.66 B | 0.94 B | 0.79 B | 0.49 B | 0.57 B |
| 1,2,4-TRIMETHYLBENZENE | 0.47 U | 0.56 U | 0.51 U | 0.59 U | 0.56 U | 0.56 U | 0.61 U | 0.5 U | 0.54 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.94 U | 1.1 U | 1 U | 1.2 U | 1.1 U | 1.1 U | 1.2 U | 1 U | 1.1 U |
| 1,2-DIBROMOETHANE | 0.36 U | 0.43 U | 0.39 U | 0.45 U | 0.43 U | 0.43 U | 0.47 U | 0.38 U | 0.41 U |
| 1,2-DICHLOROBENZENE | 0.26 U | 0.31 U | 0.28 U | 0.33 U | 0.31 U | 0.31 U | 0.34 U | 0.28 U | 0.3 U |
| 1,2-DICHLOROETHANE | 0.25 U | 0.29 U | 0.27 U | 0.31 U | 0.29 U | 0.3 U | 0.32 U | 0.26 U | 0.28 U |
| 1,2-DICHLOROPROPANE | 0.5 U | 0.59 U | 0.54 U | 0.62 U | 0.59 U | 0.6 U | 0.65 U | 0.53 U | 0.57 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.25 U | 0.39 J | 0.5 J | 0.32 U | 0.3 U | 0.3 U | 0.33 U | 0.27 U | 0.29 U |
| 1,3-DICHLOROPROPANE | 0.25 U | 0.29 U | 0.27 U | 0.31 U | 0.29 U | 0.3 U | 0.32 U | 0.26 U | 0.28 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.48 U | 0.57 U | 0.52 U | 0.6 U | 0.57 U | 0.57 U | 0.62 U | 0.51 U | 0.55 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.68 U | 0.81 U | 0.74 U | 0.85 U | 0.81 U | 0.82 U | 0.88 U | 0.72 U | 0.78 U |
| 2-BUTANONE | 1 U | 1.2 U | 1.1 U | 1.3 U | 1.2 U | 1.2 U | 1.3 U | 1.1 U | 1.2 U |
| 2-CHLOROETHYL VINYL ETHER | 1 U | 1.2 U | 1.1 U | 1.3 U | 1.2 U | 1.2 U | 1.3 U | 1.1 U | 1.2 U |
| 2-CHLOROTOLUENE | 0.29 U | 0.34 U | 0.31 U | 0.36 U | 0.34 U | 0.35 U | 0.38 U | 0.31 U | 0.33 U |
| 2-HEXANONE | 0.46 U | 0.54 U | 0.49 U | 0.57 U | 0.54 U | 0.55 U | 0.59 U | 0.48 U | 0.52 U |
| 4-CHLOROTOLUENE | 0.3 U | 0.35 U | 0.32 U | 0.37 U | 0.35 U | 0.36 U | 0.38 U | 0.31 U | 0.34 U |
| 4-ISOPROPYLTOLUENE | 0.15 U | 0.18 U | 0.16 U | 0.19 U | 0.18 U | 0.18 U | 0.2 U | 0.16 U | 0.17 U |
| 4-METHYL-2-PENTANONE | 0.39 U | 0.47 U | 0.42 U | 0.49 U | 0.47 U | 0.47 U | 0.51 U | 0.41 U | 0.45 U |
| ACETONE | 4.8 B | 5.4 U | 5.4 B | 7.3 B | 5.4 U | 8 B | 5.9 U | 4.8 U | 5.9 B |
| BENZENE | 0.17 U | 0.2 U | 0.18 U | 0.21 U | 0.2 U | 0.2 U | 0.22 U | 0.18 U | 0.19 U |
| BROMOBENZENE | 0.24 U | 0.28 U | 0.26 U | 0.3 U | 0.28 U | 0.29 U | 0.31 U | 0.25 U | 0.27 U |
| BROMOCHLOROMETHANE | 0.51 U | 0.61 U | 0.56 U | 0.64 U | 0.61 U | 0.62 U | 0.67 U | 0.54 U | 0.59 U |
| BROMODICHLOROMETHANE | 0.2 U | 0.24 U | 0.22 U | 0.25 U | 0.24 U | 0.24 U | 0.26 U | 0.21 U | 0.23 U |
| BROMOFORM | 0.24 U | 0.28 U | 0.26 U | 0.3 U | 0.28 U | 0.29 U | 0.31 U | 0.25 U | 0.27 U |
| BROMOMETHANE | 0.39 U | 0.47 U | 0.42 U | 0.49 U | 0.47 U | 0.47 U | 0.51 U | 0.41 U | 0.45 U |
| CARBON DISULFIDE | 0.32 U | 0.38 U | 0.35 U | 0.4 U | 0.38 U | 0.38 U | 0.41 U | 0.34 U | 0.36 U |
| CARBON TETRACHLORIDE | 0.27 U | 0.32 U | 0.29 U | 0.33 U | 0.32 U | 0.32 U | 0.35 U | 0.28 U | 0.31 U |
| CHLOROBENZENE | 0.24 U | 0.28 U | 0.26 U | 0.3 U | 0.28 U | 0.29 U | 0.31 U | 0.25 U | 0.27 U |
| CHLORODIBROMOMETHANE | 0.4 U | 0.47 U | 0.43 U | 0.5 U | 0.47 U | 0.48 U | 0.52 U | 0.42 U | 0.45 U |
| CHLOROETHANE | 0.62 U | 0.74 U | 0.67 U | 0.78 U | 0.74 U | 0.75 U | 0.81 U | 0.66 U | 0.71 U |
| CHLOROFORM | 0.21 U | 0.25 U | 0.23 U | 0.26 U | 0.25 U | 0.25 U | 0.27 U | 0.22 U | 0.24 U |
| CHLOROMETHANE | 0.3 U | 0.35 U | 0.32 U | 0.37 U | 0.35 U | 0.36 U | 0.38 U | 0.31 U | 0.34 U |
| CIS-1,2-DICHLOROETHENE | 0.26 U | 0.31 U | 0.28 U | 0.33 U | 0.31 U | 0.31 U | 0.34 U | 0.28 U | 0.3 U |
| CIS-1,3-DICHLOROPROPENE | 0.25 U | 0.29 U | 0.27 U | 0.31 U | 0.29 U | 0.3 U | 0.32 U | 0.26 U | 0.28 U |
| DIBROMOMETHANE | 0.46 U | 0.54 U | 0.49 U | 0.57 U | 0.54 U | 0.55 U | 0.59 U | 0.48 U | 0.52 U |
| DICHLORODIFLUOROMETHANE | 0.36 U | 0.43 U | 0.39 U | 0.45 U | 0.43 U | 0.43 U | 0.47 U | 0.38 U | 0.41 U |
| DIISOPROPYL ETHER | 1.1 U | 1.3 U | 1.2 U | 1.4 U | 1.3 U | 1.3 U | 1.4 U | 1.1 U | 1.2 U |
| ETHYL TERT-BUTYL ETHER | 0.16 U | 0.19 U | 0.17 U | 0.2 U | 0.19 U | 0.19 U | 0.21 U | 0.17 U | 0.18 U |
| ETHYLBENZENE | 0.19 U | 0.22 U | 0.2 U | 0.24 U | 0.22 U | 0.23 U | 0.24 U | 0.2 U | 0.22 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 0.87 U | 1 U | 0.94 U | 1.1 U | 1 U | 1 U | 1.1 U | 0.92 U | 0.99 U |
| ISOPROPYLBENZENE | 0.12 U | 0.14 U | 0.13 U | 0.14 U | 0.14 U | 0.14 U | 0.15 U | 0.12 U | 0.13 U |
| M+P-XYLENES | 0.87 U | 1 U | 0.94 U | 1.1 U | 1 U | 1 U | 1.1 U | 0.92 U | 0.99 U |
| METHYL TERT-BUTYL ETHER | 0.31 U | 0.37 U | 0.34 U | 0.39 U | 0.37 U | 0.37 U | 0.4 U | 0.33 U | 0.36 U |
| METHYLENE CHLORIDE | 0.49 U | 0.58 U | 0.53 U | 0.61 U | 0.58 U | 0.58 U | 0.63 U | 0.51 U | 0.55 U |
| NAPHTHALENE | 0.14 U | 0.16 U | 0.15 U | 0.17 U | 0.16 U | 0.17 U | 0.18 U | 0.15 U | 0.16 U |
| N-BUTYLBENZENE | 0.17 U | 0.2 U | 0.18 U | 0.21 U | 0.2 U | 0.2 U | 0.22 U | 0.18 U | 0.19 U |
| N-PROPYLBENZENE | 0.29 U | 0.34 U | 0.31 U | 0.36 U | 0.34 U | 0.35 U | 0.38 U | 0.31 U | 0.33 U |
| O-XYLENE | 0.25 U | 0.3 U | 0.27 U | 0.32 U | 0.3 U | 0.3 U | 0.33 U | 0.27 U | 0.29 U |
| SEC-BUTYLBENZENE | 0.13 U | 0.16 U | 0.14 U | 0.16 U | 0.16 U | 0.16 U | 0.17 U | 0.14 U | 0.15 U |
| STYRENE | 0.11 U | 0.13 U | 0.12 U | 0.14 U | 0.13 U | 0.13 U | 0.14 U | 0.11 U | 0.12 U |
| TERT-AMYL METHYL ETHER | 0.27 U | 0.32 U | 0.29 U | 0.33 U | 0.32 U | 0.32 U | 0.35 U | 0.28 U | 0.31 U |
| TERT-BUTYLBENZENE | 0.21 U | 0.25 U | 0.23 U | 0.26 U | 0.25 U | 0.25 U | 0.27 U | 0.22 U | 0.24 U |
| TERTIARY-BUTYL ALCOHOL | 5.5 UR | 6.6 UR | 6 UR | 6.9 UR | 6.5 UR | 6.6 UR | 7.1 UR | 5.8 UR | 6.3 UR |
| TETRACHLOROETHENE | 0.38 U | 0.45 U | 0.41 U | 0.49 J | 0.45 U | 0.45 U | 0.49 U | 0.4 U | 0.43 U |
| TOLUENE | 0.2 U | 0.23 U | 0.21 U | 0.24 U | 0.23 U | 0.23 U | 0.25 U | 0.21 U | 0.22 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.49 U | 0.58 U | 0.53 U | 0.61 U | 0.58 U | 0.58 U | 0.63 U | 0.51 U | 0.55 U |
| TRANS-1,2-DICHLOROETHENE | 0.3 U | 0.35 U | 0.32 U | 0.37 U | 0.35 U | 0.36 U | 0.38 U | 0.31 U | 0.34 U |
| TRANS-1,3-DICHLOROPROPENE | 0.39 U | 0.47 U | 0.42 U | 0.49 U | 0.47 U | 0.47 U | 0.51 U | 0.41 U | 0.45 U |
| TRICHLOROETHENE | 0.3 U | 0.36 U | 0.33 U | 0.38 U | 0.36 U | 0.36 U | 0.39 U | 0.32 U | 0.35 U |
| TRICHLOROFLUOROMETHANE | 0.25 U | 0.29 U | 0.27 U | 0.31 U | 0.29 U | 0.3 U | 0.32 U | 0.26 U | 0.28 U |
| VINYL ACETATE | 0.18 U | 0.22 U | 0.2 U | 0.23 U | 0.22 U | 0.22 U | 0.23 U | 0.19 U | 0.21 U |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833B | SB-833B | SB-833B | SB-833B | SB-833C | SB-833C | SB-833C | SB-833C | SB-833D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833B-04 | E-SB-833B-06 | E-SB-833B-08 | E-SB-833B-10 | E-SB-833C-04 | E-SB-833C-06 | E-SB-833C-08 | E-SB-833C-10 | E-SB-833D-04 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 |
| VINYL CHLORIDE | 0.28 U | 0.34 U | 0.31 U | 0.35 U | 0.34 U | 0.34 U | 0.37 U | 0.3 U | 0.32 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| 2-METHYLNAPHTHALENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| ACENAPHTHENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| ACENAPHTHYLENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| ANTHRACENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| BAP EQUIVALENT-HALFND | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| BAP EQUIVALENT-POS | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| BENZO(A)ANTHRACENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| BENZO(A)PYRENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| BENZO(B)FLUORANTHENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| BENZO(K)FLUORANTHENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833B | SB-833B | SB-833B | SB-833B | SB-833C | SB-833C | SB-833C | SB-833C | SB-833D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833B-04 | E-SB-833B-06 | E-SB-833B-08 | E-SB-833B-10 | E-SB-833C-04 | E-SB-833C-06 | E-SB-833C-08 | E-SB-833C-10 | E-SB-833D-04 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833B | SB-833B | SB-833B | SB-833B | SB-833C | SB-833C | SB-833C | SB-833C | SB-833D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833B-04 | E-SB-833B-06 | E-SB-833B-08 | E-SB-833B-10 | E-SB-833C-04 | E-SB-833C-06 | E-SB-833C-08 | E-SB-833C-10 | E-SB-833D-04 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 1.4 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.4 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| FLUORANTHENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| FLUORENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| INDENO(1,2,3-CD)PYRENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| NAPHTHALENE | 31 | 43 | 200 | 65 | 230 | 3.9 U | 4 U | 4.1 U | 4 U |
| PHENANTHRENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| PYRENE | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U |
| TOTAL PAHS | 31 | 43 | 200 | 65 | 230 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 25 U | 26 U | 24 U | 130 U | 24 U | 25 U | 25 U | 26 U | 26 U |
| AROCLOR-1221 | 19 U | 20 U | 18 U | 95 U | 19 U | 19 U | 19 U | 20 U | 19 U |
| AROCLOR-1232 | 16 U | 17 U | 16 U | 83 U | 16 U | 16 U | 17 U | 17 U | 17 U |
| AROCLOR-1242 | 15 U | 16 U | 15 U | 77 U | 15 U | 15 U | 16 U | 16 U | 16 U |
| AROCLOR-1248 | 20 U | 21 U | 20 U | 100 U | 20 U | 20 U | 20 U | 21 U | 21 U |
| AROCLOR-1254 | 20 U | 21 U | 20 U | 100 U | 20 U | 20 U | 20 U | 21 U | 21 U |
| AROCLOR-1260 | 110 | 520 | 150 | 750 | 50 | 24 J | 20 U | 27 J | 21 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 110 | 520 | 150 | 750 | 50 | 24 | 0 U | 27 | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 110 J | 86 J | 64 J | 61 J | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833B | SB-833B | SB-833B | SB-833B | SB-833C | SB-833C | SB-833C | SB-833C | SB-833D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833B-04 | E-SB-833B-06 | E-SB-833B-08 | E-SB-833B-10 | E-SB-833C-04 | E-SB-833C-06 | E-SB-833C-08 | E-SB-833C-10 | E-SB-833D-04 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833D | SB-833D | SB-833D | SB-833E | SB-833E | SB-833F | SB-833F | SB-833F | SB-833F |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833D-06 | E-SB-833D-08 | E-SB-833D-10 | E-SB-833E-06 | E-SB-833E-10 | E-SB-833F-04 | E-SB-833F-06 | E-SB-833F-08 | E-SB-833F-10 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 10 | 4 | 6 | 8 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.59 U | 0.56 U | 6.9 U | 410 U | 7.8 U | 8 U | 8.2 U | 7.7 U | 8.2 U |
| 1,1,1-TRICHLOROETHANE | 0.53 U | 0.5 U | 16 U | 950 U | 18 U | 19 U | 19 U | 18 U | 19 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.32 U | 0.31 U | 6.8 U | 400 U | 7.6 U | 7.9 U | 8.1 U | 7.5 U | 8 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U | 1.2 U | 30 U | 1800 U | 34 U | 34 U | 35 U | 33 U | 35 U |
| 1,1-DICHLOROETHANE | 0.34 U | 0.32 U | 13 U | 770 U | 15 U | 15 U | 15 U | 14 U | 15 U |
| 1,1-DICHLOROETHENE | 0.49 U | 0.47 U | 14 U | 820 U | 15 U | 16 U | 16 U | 15 U | 16 U |
| 1,1-DICHLOROPROPENE | 0.29 U | 0.27 U | 7.6 U | 450 U | 8.6 U | 8.8 U | 9.1 U | 8.5 U | 9 U |
| 1,2,3-TRICHLOROBENZENE | 0.6 J | 65 | 11 B | 52000 J | 910 J | 340 J | 380 J | 320 J | 150 J |
| 1,2,3-TRICHLOROPROPANE | 0.86 U | 0.81 U | 16 U | 950 U | 18 U | 19 U | 19 U | 18 U | 19 U |
| 1,2,3-TRIMETHYLBENZENE | 0.16 U | 0.72 B | 30 J | 7.7 U | 34 J | 0.15 U | 36 J | 0.14 U | 0.15 U |
| 1,2,4-TRICHLOROBENZENE | 2.7 B | 110 J | 52 B | 260000 | 4700 | 1500 | 1800 | 1500 | 720 |
| 1,2,4-TRIMETHYLBENZENE | 0.62 U | 0.59 U | 3.8 U | 230 U | 4.3 U | 4.4 U | 4.5 U | 4.2 U | 4.5 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U | 1.2 U | 38 U | 2300 U | 43 U | 44 U | 45 U | 42 U | 45 U |
| 1,2-DIBROMOETHANE | 0.48 U | 0.45 U | 7.6 U | 450 U | 8.6 U | 8.8 U | 9.1 U | 8.5 U | 9 U |
| 1,2-DICHLOROBENZENE | 0.39 J | 12 | 6.6 U | 1900 J | 110 J | 57 J | 81 J | 71 J | 42 J |
| 1,2-DICHLOROETHANE | 0.32 U | 0.31 U | 7.6 U | 450 U | 8.6 U | 8.8 U | 9.1 U | 8.5 U | 9 U |
| 1,2-DICHLOROPROPANE | 0.66 U | 0.62 U | 6.2 U | 370 U | 7 U | 7.2 U | 7.4 U | 6.9 U | 7.4 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.33 U | 0.32 U | 3.7 U | 220 U | 4.1 U | 4.2 U | 4.4 U | 4.1 U | 4.3 U |
| 1,3-DICHLOROPROPANE | 0.32 U | 0.31 U | 17 U | 1000 U | 19 U | 19 U | 20 U | 19 U | 20 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.63 U | 14 | 8.2 J | 2700 J | 140 J | 89 J | 110 J | 93 J | 58 J |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.89 U | 0.85 U | 18 U | 1000 U | 20 U | 20 U | 21 U | 19 U | 21 U |
| 2-BUTANONE | 1.3 U | 1.3 U | 33 U | 2000 U | 37 U | 38 U | 39 U | 36 U | 39 U |
| 2-CHLOROETHYL VINYL ETHER | 1.3 U | 1.3 U | 33 U | 2000 U | 37 U | 38 U | 39 U | 36 U | 39 U |
| 2-CHLOROTOLUENE | 0.38 U | 0.36 U | 6.9 U | 410 U | 7.7 U | 7.9 U | 8.2 U | 7.6 U | 8.1 U |
| 2-HEXANONE | 0.6 U | 0.57 U | 15 U | 910 U | 17 U | 18 U | 18 U | 17 U | 18 U |
| 4-CHLOROTOLUENE | 0.39 U | 0.37 U | 7.5 U | 450 U | 8.5 U | 8.7 U | 9 U | 8.4 U | 8.9 U |
| 4-ISOPROPYLTOLUENE | 0.2 U | 0.19 U | 3.7 U | 220 U | 4.1 U | 4.2 U | 4.4 U | 4.1 U | 4.3 U |
| 4-METHYL-2-PENTANONE | 0.51 U | 0.49 U | 37 U | 2200 U | 41 U | 42 U | 44 U | 41 U | 43 U |
| ACETONE | 6.2 B | 7.1 B | 240 B | 16000 J | 260 J | 220 J | 260 J | 240 J | 260 J |
| BENZENE | 0.22 U | 0.21 U | 9.1 U | 550 U | 10 U | 11 U | 11 U | 10 U | 11 U |
| BROMOBENZENE | 0.31 U | 0.3 U | 9.9 U | 590 U | 11 U | 11 U | 12 U | 11 U | 12 U |
| BROMOCHLOROMETHANE | 0.67 U | 0.64 U | 9.9 U | 590 U | 11 U | 11 U | 12 U | 11 U | 12 U |
| BROMODICHLOROMETHANE | 0.27 U | 0.25 U | 7.5 U | 450 U | 8.5 U | 8.7 U | 9 U | 8.4 U | 8.9 U |
| BROMOFORM | 0.31 U | 0.3 U | 14 U | 860 U | 16 U | 17 U | 17 U | 16 U | 17 U |
| BROMOMETHANE | 0.51 U | 0.49 U | 22 U | 1300 U | 25 U | 26 U | 26 U | 25 U | 26 U |
| CARBON DISULFIDE | 0.42 U | 0.4 U | 9.1 U | 550 U | 10 U | 11 U | 11 U | 10 U | 11 U |
| CARBON TETRACHLORIDE | 0.35 U | 0.33 U | 4.9 U | 290 U | 5.5 U | 5.6 U | 5.8 U | 5.4 U | 5.8 U |
| CHLOROBENZENE | 0.31 U | 0.3 U | 4.9 U | 290 U | 5.5 U | 5.6 U | 5.8 U | 5.4 U | 5.8 U |
| CHLORODIBROMOMETHANE | 0.52 U | 0.5 U | 9.1 U | 550 U | 10 U | 11 U | 11 U | 10 U | 11 U |
| CHLOROETHANE | 0.82 U | 0.77 U | 46 U | 2800 U | 52 U | 54 U | 55 U | 52 U | 55 U |
| CHLOROFORM | 0.28 U | 0.26 U | 6.7 U | 400 U | 7.6 U | 7.8 U | 8 U | 7.5 U | 7.9 U |
| CHLOROMETHANE | 0.39 U | 0.37 U | 11 U | 640 U | 12 U | 12 U | 13 U | 12 U | 13 U |
| CIS-1,2-DICHLOROETHENE | 0.34 U | 0.32 U | 5.3 U | 310 U | 5.9 U | 6.1 U | 6.3 U | 5.8 U | 6.2 U |
| CIS-1,3-DICHLOROPROPENE | 0.32 U | 0.31 U | 6 U | 360 U | 6.8 U | 7 U | 7.2 U | 6.7 U | 7.1 U |
| DIBROMOMETHANE | 0.6 U | 0.57 U | 11 U | 640 U | 12 U | 12 U | 13 U | 12 U | 13 U |
| DICHLORODIFLUOROMETHANE | 0.48 U | 0.45 U | 12 U | 730 U | 14 U | 14 U | 15 U | 14 U | 14 U |
| DIISOPROPYL ETHER | 1.4 U | 1.4 U | 38 U | 2300 U | 43 U | 44 U | 45 U | 42 U | 45 U |
| ETHYL TERT-BUTYL ETHER | 0.21 U | 0.2 U | 0.17 U | 10 U | 0.19 U | 0.19 U | 0.2 U | 0.19 U | 0.2 U |
| ETHYLBENZENE | 0.25 U | 0.23 U | 4.1 U | 250 U | 4.6 U | 4.8 U | 4.9 U | 4.6 U | 4.9 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 1.1 U | 1.1 U | 11 U | 640 U | 12 U | 12 U | 13 U | 12 U | 13 U |
| ISOPROPYLBENZENE | 0.15 U | 0.14 U | 5 U | 300 U | 5.6 U | 5.7 U | 5.9 U | 5.5 U | 5.9 U |
| M+P-XYLENES | 1.1 U | 1.1 U | 4.7 U | 280 U | 5.3 U | 5.5 U | 5.6 U | 5.3 U | 5.6 U |
| METHYL TERT-BUTYL ETHER | 0.41 U | 0.39 U | 5.4 U | 320 U | 6.1 U | 6.3 U | 6.4 U | 6 U | 6.4 U |
| METHYLENE CHLORIDE | 0.64 U | 0.6 U | 59 U | 4800 J | 66 U | 68 U | 70 U | 110 J | 69 U |
| NAPHTHALENE | 0.18 U | 0.17 U | 5.1 U | 300 U | 5.8 U | 5.9 U | 6.1 U | 5.7 U | 6 U |
| N-BUTYLBENZENE | 0.22 U | 0.21 U | 6.1 U | 360 U | 6.9 U | 7.1 U | 7.3 U | 6.8 U | 7.2 U |
| N-PROPYLBENZENE | 0.38 U | 0.36 U | 11 U | 640 U | 12 U | 12 U | 13 U | 12 U | 13 U |
| O-XYLENE | 0.33 U | 0.32 U | 6.5 U | 390 U | 7.3 U | 7.5 U | 7.7 U | 7.2 U | 7.7 U |
| SEC-BUTYLBENZENE | 0.17 U | 0.16 U | 3.6 U | 210 U | 4 U | 4.1 U | 4.3 U | 4 U | 4.2 U |
| STYRENE | 0.14 U | 0.14 U | 4.3 U | 250 U | 4.8 U | 4.9 U | 5.1 U | 4.7 U | 5 U |
| TERT-AMYL METHYL ETHER | 0.35 U | 0.33 U | 0.28 U | 17 U | 0.32 U | 0.33 U | 0.34 U | 0.31 U | 0.33 U |
| TERT-BUTYLBENZENE | 0.28 U | 0.26 U | 5 U | 300 U | 5.6 U | 5.7 U | 5.9 U | 5.5 U | 5.9 U |
| TERTIARY-BUTYL ALCOHOL | 7.2 UR | 6.8 UR | 310 J | 11000 UR | 210 UR | 210 UR | 220 UR | 200 UR | 220 UR |
| TETRACHLOROETHENE | 0.49 U | 0.47 U | 9.1 U | 550 U | 10 U | 11 U | 11 U | 10 U | 11 U |
| TOLUENE | 0.26 U | 0.24 U | 13 U | 770 U | 15 U | 15 U | 15 U | 14 U | 15 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.64 U | 0.6 U | 6.2 U | 370 U | 7 U | 7.1 U | 7.3 U | 6.9 U | 7.3 U |
| TRANS-1,2-DICHLOROETHENE | 0.39 U | 0.37 U | 7 U | 420 U | 7.9 U | 8.1 U | 8.3 U | 7.8 U | 8.3 U |
| TRANS-1,3-DICHLOROPROPENE | 0.51 U | 0.49 U | 15 U | 910 U | 17 U | 18 U | 18 U | 17 U | 18 U |
| TRICHLOROETHENE | 0.4 U | 0.38 U | 7.4 U | 440 U | 8.3 U | 8.6 U | 8.8 U | 8.2 U | 8.7 U |
| TRICHLOROFLUOROMETHANE | 0.32 U | 0.31 U | 12 U | 730 U | 14 U | 14 U | 15 U | 14 U | 14 U |
| VINYL ACETATE | 0.24 U | 0.23 U | 18 U | 1000 U | 20 U | 20 U | 21 U | 19 U | 21 U |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833D | SB-833D | SB-833D | SB-833E | SB-833E | SB-833F | SB-833F | SB-833F | SB-833F |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833D-06 | E-SB-833D-08 | E-SB-833D-10 | E-SB-833E-06 | E-SB-833E-10 | E-SB-833F-04 | E-SB-833F-06 | E-SB-833F-08 | E-SB-833F-10 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 10 | 4 | 6 | 8 | 10 |
| VINYL CHLORIDE | 0.37 U | 0.35 U | 14 U | 820 U | 15 U | 16 U | 16 U | 15 U | 16 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| 2-METHYLNAPHTHALENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| ACENAPHTHENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| ACENAPHTHYLENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| ANTHRACENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| BAP EQUIVALENT-HALFND | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| BAP EQUIVALENT-POS | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| BENZO(A)ANTHRACENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| BENZO(A)PYRENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| BENZO(B)FLUORANTHENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| BENZO(K)FLUORANTHENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833D | SB-833D | SB-833D | SB-833E | SB-833E | SB-833F | SB-833F | SB-833F | SB-833F |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833D-06 | E-SB-833D-08 | E-SB-833D-10 | E-SB-833E-06 | E-SB-833E-10 | E-SB-833F-04 | E-SB-833F-06 | E-SB-833F-08 | E-SB-833F-10 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 10 | 4 | 6 | 8 | 10 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833D | SB-833D | SB-833D | SB-833E | SB-833E | SB-833F | SB-833F | SB-833F | SB-833F |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833D-06 | E-SB-833D-08 | E-SB-833D-10 | E-SB-833E-06 | E-SB-833E-10 | E-SB-833F-04 | E-SB-833F-06 | E-SB-833F-08 | E-SB-833F-10 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 10 | 4 | 6 | 8 | 10 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.4 U | 1.3 U | 1.4 U | 26 U | 1.3 U | 1.3 U | 1.3 U | 1.4 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| FLUORANTHENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| FLUORENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| INDENO(1,2,3-CD)PYRENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| NAPHTHALENE | 4.2 U | 62 | 19 | 77 U | 3.9 U | 3.9 U | 17 | 4.1 U | 4.1 U |
| PHENANTHRENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| PYRENE | 4.2 U | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U |
| TOTAL PAHS | 0 U | 62 | 19 | 0 U | 0 U | 0 U | 17 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 27 U | 25 U | 27 U | 12000 U | 2500 U | 25 U | 260 U | 26 U | 260 U |
| AROCLOR-1221 | 20 U | 19 U | 21 U | 9300 U | 1900 U | 19 U | 200 U | 20 U | 200 U |
| AROCLOR-1232 | 18 U | 17 U | 18 U | 8100 U | 1700 U | 17 U | 170 U | 17 U | 180 U |
| AROCLOR-1242 | 16 U | 15 U | 17 U | 7600 U | 1600 U | 15 U | 160 U | 16 U | 160 U |
| AROCLOR-1248 | 22 U | 20 U | 22 U | 9900 U | 2000 U | 20 U | 210 U | 21 U | 210 U |
| AROCLOR-1254 | 22 U | 20 U | 22 U | 9900 U | 2000 U | 20 U | 210 U | 21 U | 210 U |
| AROCLOR-1260 | 22 U | 48 | 22 U | 180000 | 27000 | 250 | 2300 | 100 | 1000 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 48 | 0 U | 180000 | 27000 | 250 | 2300 | 100 | 1000 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | 1900000 J | 7600 J | 3300 U | 3400 U | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | 56 J | 55 U | 55 U | 56 U | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833D | SB-833D | SB-833D | SB-833E | SB-833E | SB-833F | SB-833F | SB-833F | SB-833F |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833D-06 | E-SB-833D-08 | E-SB-833D-10 | E-SB-833E-06 | E-SB-833E-10 | E-SB-833F-04 | E-SB-833F-06 | E-SB-833F-08 | E-SB-833F-10 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 10 | 4 | 6 | 8 | 10 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833G | SB-833G | SB-833G | SB-833H | SB-833H | SB-833H | SB-833I | SB-833I | SB-833J |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833G-06 | E-SB-833G-08 | E-SB-833G-10 | E-SB-833H-06 | E-SB-833H-08 | E-SB-833H-10 | E-SB-833I-08 | E-SB-833I-10 | E-SB-833J-04 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 | 4 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.45 U | 0.54 U | 0.52 U | 0.47 U | 10 U | 0.55 U | 170 U | 130 U | 0.57 U |
| 1,1,1-TRICHLOROETHANE | 0.41 U | 0.49 U | 0.47 U | 0.42 U | 24 U | 0.5 U | 400 U | 310 U | 0.52 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.25 U | 0.3 U | 0.29 U | 0.26 U | 10 U | 0.3 U | 170 U | 130 U | 0.31 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 0.95 U | 1.1 U | 1.1 U | 0.98 U | 44 U | 1.2 U | 740 U | 580 U | 1.2 U |
| 1,1-DICHLOROETHANE | 0.26 U | 0.31 U | 0.3 U | 0.27 U | 19 U | 0.32 U | 320 U | 250 U | 0.33 U |
| 1,1-DICHLOROETHENE | 0.38 U | 0.45 U | 0.44 U | 0.39 U | 20 U | 0.46 U | 340 U | 270 U | 0.48 U |
| 1,1-DICHLOROPROPENE | 0.22 U | 0.26 U | 0.25 U | 0.23 U | 11 U | 0.27 U | 190 U | 150 U | 0.28 U |
| 1,2,3-TRICHLOROBENZENE | 2 J | 4.1 J | 0.32 U | 5.9 | 180 J | 19 J | 21000 J | 11000 J | 0.35 U |
| 1,2,3-TRICHLOROPROPANE | 0.66 U | 0.78 U | 0.76 U | 0.68 U | 24 U | 0.8 U | 400 U | 310 U | 0.83 U |
| 1,2,3-TRIMETHYLBENZENE | 0.12 U | 0.68 B | 0.14 U | 0.6 B | 0.19 U | 0.15 U | 3.2 U | 2.5 U | 0.16 U |
| 1,2,4-TRICHLOROBENZENE | 7.5 | 21 | 0.67 B | 38 | 970 | 96 | 110000 | 66000 | 1.1 B |
| 1,2,4-TRIMETHYLBENZENE | 0.47 U | 0.57 U | 0.55 U | 0.49 U | 5.7 U | 0.58 U | 94 U | 74 U | 0.6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 0.95 U | 1.1 U | 1.1 U | 0.98 U | 57 U | 1.2 U | 940 U | 740 U | 1.2 U |
| 1,2-DIBROMOETHANE | 0.36 U | 0.43 U | 0.42 U | 0.38 U | 11 U | 0.45 U | 190 U | 150 U | 0.46 U |
| 1,2-DICHLOROBENZENE | 0.26 U | 2.1 J | 0.6 J | 3.2 J | 44 J | 5.3 | 910 J | 430 J | 0.33 U |
| 1,2-DICHLOROETHANE | 0.25 U | 0.3 U | 0.29 U | 0.26 U | 11 U | 0.3 U | 190 U | 150 U | 0.31 U |
| 1,2-DICHLOROPROPANE | 0.5 U | 0.6 U | 0.58 U | 0.52 U | 9.3 U | 0.62 U | 150 U | 120 U | 0.63 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.51 J | 13 | 4.3 | 31 | 160 J | 5.9 | 2600 J | 3300 J | 0.32 U |
| 1,3-DICHLOROPROPANE | 0.25 U | 0.3 U | 0.29 U | 0.26 U | 25 U | 0.3 U | 410 U | 330 U | 0.31 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 1.6 J | 38 | 18 | 30 | 140 J | 9.9 | 2900 J | 2300 J | 0.61 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.68 U | 0.82 U | 0.79 U | 0.71 U | 26 U | 0.84 U | 430 U | 340 U | 0.86 U |
| 2-BUTANONE | 1 U | 1.2 U | 1.2 U | 1.1 U | 49 U | 1.3 U | 810 U | 640 U | 1.3 U |
| 2-CHLOROETHYL VINYL ETHER | 1 U | 1.2 U | 1.2 U | 1.1 U | 49 UR | 1.3 U | 810 U | 640 U | 1.3 U |
| 2-CHLOROTOLUENE | 0.29 U | 0.35 U | 0.34 U | 0.3 U | 10 U | 0.36 U | 170 U | 130 U | 0.37 U |
| 2-HEXANONE | 0.46 U | 0.55 U | 0.53 U | 0.47 U | 23 U | 0.56 U | 380 U | 300 U | 0.58 U |
| 4-CHLOROTOLUENE | 0.3 U | 0.36 U | 0.34 U | 0.31 U | 11 U | 0.37 U | 190 U | 150 U | 0.38 U |
| 4-ISOPROPYLTOLUENE | 0.15 U | 0.18 U | 0.18 U | 0.16 U | 5.4 U | 0.19 U | 91 U | 71 U | 0.19 U |
| 4-METHYL-2-PENTANONE | 0.39 U | 0.47 U | 0.45 U | 0.41 U | 54 U | 0.48 U | 910 U | 710 U | 0.5 U |
| ACETONE | 11 B | 7.2 B | 15 B | 5 B | 190 U | 6.6 B | 4500 B | 3600 B | 24 B |
| BENZENE | 0.17 U | 0.4 J | 0.34 J | 0.33 J | 14 U | 0.21 U | 230 U | 180 U | 0.21 U |
| BROMOBENZENE | 0.24 U | 0.29 U | 0.28 U | 0.25 U | 15 U | 0.29 U | 250 U | 190 U | 0.3 U |
| BROMOCHLOROMETHANE | 0.52 U | 0.62 U | 0.6 U | 0.54 U | 15 U | 0.63 U | 250 U | 190 U | 0.65 U |
| BROMODICHLOROMETHANE | 0.2 U | 0.24 U | 0.24 U | 0.21 U | 11 U | 0.25 U | 190 U | 150 U | 0.26 U |
| BROMOFORM | 0.24 U | 0.29 U | 0.28 U | 0.25 U | 22 U | 0.29 U | 360 U | 280 U | 0.3 U |
| BROMOMETHANE | 0.39 U | 0.47 U | 0.45 U | 0.41 U | 33 U | 0.48 U | 550 U | 430 U | 0.5 U |
| CARBON DISULFIDE | 0.32 U | 0.38 U | 0.37 U | 0.33 U | 14 U | 0.39 U | 230 U | 180 U | 0.4 U |
| CARBON TETRACHLORIDE | 0.27 U | 0.88 J | 0.31 U | 0.28 U | 7.3 U | 0.33 U | 120 U | 95 U | 0.34 U |
| CHLOROBENZENE | 39 | 120 | 170 | 51 | 52 J | 2 J | 210 J | 120 J | 0.3 U |
| CHLORODIBROMOMETHANE | 0.4 U | 0.48 U | 0.46 U | 0.41 U | 14 U | 0.49 U | 230 U | 180 U | 0.51 U |
| CHLOROETHANE | 0.63 U | 0.75 U | 0.72 U | 0.65 U | 69 U | 0.77 U | 1200 U | 900 U | 0.79 U |
| CHLOROFORM | 0.21 U | 0.25 U | 0.24 U | 0.22 U | 10 U | 0.26 U | 170 U | 130 U | 0.27 U |
| CHLOROMETHANE | 0.3 U | 0.36 U | 0.34 U | 0.31 U | 16 U | 0.37 U | 260 U | 210 U | 0.38 U |
| CIS-1,2-DICHLOROETHENE | 0.26 U | 0.31 U | 0.3 U | 0.27 U | 7.8 U | 0.57 J | 130 U | 100 U | 0.33 U |
| CIS-1,3-DICHLOROPROPENE | 0.25 U | 0.3 U | 0.29 U | 0.26 U | 9 U | 0.3 U | 150 U | 120 U | 0.31 U |
| DIBROMOMETHANE | 0.46 U | 0.55 U | 0.53 U | 0.47 U | 16 U | 0.56 U | 260 U | 210 U | 0.58 U |
| DICHLORODIFLUOROMETHANE | 0.36 U | 0.43 U | 0.42 U | 0.38 U | 18 U | 0.45 U | 300 U | 240 U | 0.46 U |
| DIISOPROPYL ETHER | 1.1 U | 1.3 U | 1.3 U | 1.1 U | 57 U | 1.3 U | 940 U | 740 U | 1.4 U |
| ETHYL TERT-BUTYL ETHER | 0.16 U | 0.19 U | 0.19 U | 0.17 U | 0.25 U | 0.2 U | 4.1 U | 3.3 U | 0.2 U |
| ETHYLBENZENE | 0.19 U | 0.23 U | 0.22 U | 0.2 U | 6.1 U | 0.23 U | 100 U | 80 U | 0.24 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 0.87 U | 1 U | 1 U | 0.9 U | 16 U | 1.1 U | 260 U | 210 U | 1.1 U |
| ISOPROPYLBENZENE | 0.12 U | 0.14 U | 0.13 U | 0.12 U | 7.4 U | 0.14 U | 120 U | 96 U | 0.15 U |
| M+P-XYLENES | 0.87 U | 1 U | 1 U | 0.9 U | 7 U | 1.1 U | 120 U | 92 U | 1.1 U |
| METHYL TERT-BUTYL ETHER | 0.31 U | 0.37 U | 0.36 U | 0.32 U | 8.1 U | 0.38 U | 130 U | 110 U | 0.4 U |
| METHYLENE CHLORIDE | 0.49 U | 0.58 U | 0.56 U | 0.5 U | 87 U | 0.6 U | 1500 U | 1100 U | 0.62 U |
| NAPHTHALENE | 0.14 U | 0.17 U | 0.16 U | 0.14 U | 7.6 U | 0.17 U | 130 U | 99 U | 0.17 U |
| N-BUTYLBENZENE | 0.17 U | 0.2 U | 0.19 U | 0.17 U | 9.1 U | 0.21 U | 150 U | 120 U | 0.21 U |
| N-PROPYLBENZENE | 0.29 U | 0.35 U | 0.34 U | 0.3 U | 16 U | 0.36 U | 260 U | 210 U | 0.37 U |
| O-XYLENE | 0.25 U | 0.3 U | 0.29 U | 0.26 U | 9.6 U | 0.31 U | 160 U | 130 U | 0.32 U |
| SEC-BUTYLBENZENE | 0.13 U | 0.16 U | 0.15 U | 0.14 U | 5.3 U | 0.16 U | 89 U | 70 U | 0.17 U |
| STYRENE | 0.11 U | 0.13 U | 0.13 U | 0.11 U | 6.4 U | 0.13 U | 110 U | 83 U | 0.14 U |
| TERT-AMYL METHYL ETHER | 0.27 U | 0.32 U | 0.31 U | 0.28 U | 0.42 U | 0.33 U | 7 U | 5.5 U | 0.34 U |
| TERT-BUTYLBENZENE | 0.21 U | 0.25 U | 0.24 U | 0.22 U | 7.4 U | 0.26 U | 120 U | 96 U | 0.27 U |
| TERTIARY-BUTYL ALCOHOL | 5.5 UR | 6.6 UR | 6.4 UR | 5.7 UR | 270 UR | 6.8 UR | 4500 UR | 3600 UR | 7 UR |
| TETRACHLOROETHENE | 0.38 U | 2.6 J | 0.44 U | 0.69 J | 14 U | 2.2 J | 230 U | 180 U | 0.48 U |
| TOLUENE | 0.2 U | 0.23 U | 0.23 U | 0.2 U | 19 U | 0.24 U | 320 U | 270 J | 0.38 J |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.49 U | 0.58 U | 0.56 U | 0.5 U | 9.2 U | 0.6 U | 150 U | 120 U | 0.62 U |
| TRANS-1,2-DICHLOROETHENE | 0.3 U | 0.36 U | 0.34 U | 0.31 U | 10 U | 0.37 U | 170 U | 140 U | 0.38 U |
| TRANS-1,3-DICHLOROPROPENE | 0.39 U | 0.47 U | 0.45 U | 0.41 U | 23 U | 0.48 U | 380 U | 300 U | 0.5 U |
| TRICHLOROETHENE | 0.31 U | 2.2 J | 0.35 U | 0.32 J | 11 U | 0.59 J | 180 U | 140 U | 0.39 U |
| TRICHLOROFLUOROMETHANE | 0.25 U | 0.3 U | 0.29 U | 0.26 U | 18 U | 0.3 U | 300 U | 240 U | 0.31 U |
| VINYL ACETATE | 0.18 U | 0.22 U | 0.21 U | 0.19 U | 26 U | 0.22 U | 430 U | 340 U | 0.23 U |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833G | SB-833G | SB-833G | SB-833H | SB-833H | SB-833H | SB-833I | SB-833I | SB-833J |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833G-06 | E-SB-833G-08 | E-SB-833G-10 | E-SB-833H-06 | E-SB-833H-08 | E-SB-833H-10 | E-SB-833I-08 | E-SB-833I-10 | E-SB-833J-04 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 | 4 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 | 4 |
| VINYL CHLORIDE | 0.28 U | 0.34 U | 0.33 U | 0.29 U | 20 U | 0.35 U | 340 U | 270 U | 0.36 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U |
| 2-METHYLNAPHTHALENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U |
| ACENAPHTHENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U |
| ACENAPHTHYLENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U |
| ANTHRACENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 177 | 3.8 U |
| BAP EQUIVALENT-POS | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 155 | 3.8 U |
| BENZO(A)ANTHRACENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 190 | 3.8 U |
| BENZO(A)PYRENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 120 | 3.8 U |
| BENZO(B)FLUORANTHENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 160 | 3.8 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 84 | 3.8 U |
| BENZO(K)FLUORANTHENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833G | SB-833G | SB-833G | SB-833H | SB-833H | SB-833H | SB-833I | SB-833I | SB-833J |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833G-06 | E-SB-833G-08 | E-SB-833G-10 | E-SB-833H-06 | E-SB-833H-08 | E-SB-833H-10 | E-SB-833I-08 | E-SB-833I-10 | E-SB-833J-04 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 | 4 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833G | SB-833G | SB-833G | SB-833H | SB-833H | SB-833H | SB-833I | SB-833I | SB-833J |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833G-06 | E-SB-833G-08 | E-SB-833G-10 | E-SB-833H-06 | E-SB-833H-08 | E-SB-833H-10 | E-SB-833I-08 | E-SB-833I-10 | E-SB-833J-04 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 | 4 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 | 4 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.4 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 13 U | 120 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U |
| FLUORANTHENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 91 | 240 | 3.8 U |
| FLUORENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U |
| NAPHTHALENE | 4.2 U | 4 U | 3.9 U | 23 | 3.8 U | 4 U | 40 U | 39 U | 3.8 U |
| PHENANTHRENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U |
| PYRENE | 4.2 U | 4 U | 3.9 U | 3.9 U | 3.8 U | 4 U | 110 | 220 | 3.8 U |
| TOTAL PAHS | 0 U | 0 U | 0 U | 23 | 0 U | 0 U | 201 | 1134 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 27 U | 26 U | 25 U | 25 U | 24 U | 26 U | 25000 U | 25000 U | 24 U |
| AROCLOR-1221 | 20 U | 20 U | 19 U | 19 U | 19 U | 20 U | 19000 U | 19000 U | 19 U |
| AROCLOR-1232 | 18 U | 17 U | 17 U | 16 U | 16 U | 17 U | 17000 U | 17000 U | 16 U |
| AROCLOR-1242 | 17 U | 16 U | 15 U | 15 U | 15 U | 16 U | 16000 U | 15000 U | 15 U |
| AROCLOR-1248 | 22 U | 21 U | 20 U | 20 U | 20 U | 21 U | 21000 U | 20000 U | 20 U |
| AROCLOR-1254 | 22 U | 21 U | 20 U | 20 U | 20 U | 21 U | 21000 U | 20000 U | 20 U |
| AROCLOR-1260 | 83 | 77 | 20 U | 20 U | 20 U | 21 U | 220000 | 350000 | 160 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 83 | 77 | 0 U | 0 U | 0 U | 0 U | 220000 | 350000 | 160 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | 460000 K | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | 1600 J | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833G | SB-833G | SB-833G | SB-833H | SB-833H | SB-833H | SB-833I | SB-833I | SB-833J |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833G-06 | E-SB-833G-08 | E-SB-833G-10 | E-SB-833H-06 | E-SB-833H-08 | E-SB-833H-10 | E-SB-833I-08 | E-SB-833I-10 | E-SB-833J-04 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 | 4 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 | 4 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833J | SB-833J | SB-833J | SB-833K | SB-833K | SB-833K | SB-833L | SB-833L | SB-833L |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833J-06 | E-SB-833J-08 | E-SB-833J-10 | E-SB-833K-06 | E-SB-833K-08 | E-SB-833K-10 | E-SB-833L-04 | E-SB-833L-06 | E-SB-833L-08 |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.51 U | 0.51 U | 7.4 U | 160 U | 8.9 U | 44 U | 11 U | 8.2 U | 830 U |
| 1,1,1-TRICHLOROETHANE | 0.46 U | 0.46 U | 17 U | 370 U | 21 U | 100 U | 25 U | 19 U | 1900 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.28 U | 0.28 U | 7.2 U | 160 U | 8.7 U | 43 U | 11 U | 8 U | 810 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.1 U | 1.1 U | 32 U | 700 U | 38 U | 190 U | 47 U | 35 U | 3600 U |
| 1,1-DICHLOROETHANE | 0.29 U | 0.3 U | 14 U | 300 U | 17 U | 82 U | 20 U | 15 U | 1600 U |
| 1,1-DICHLOROETHENE | 0.43 U | 0.43 U | 15 U | 320 U | 18 U | 87 U | 22 U | 16 U | 1600 U |
| 1,1-DICHLOROPROPENE | 0.25 U | 0.25 U | 8.1 U | 180 U | 9.8 U | 48 U | 12 U | 9 U | 920 U |
| 1,2,3-TRICHLOROBENZENE | 0.31 U | 0.31 U | 89 J | 22000 J | 370 J | 5800 | 420 J | 230 J | 77000 J |
| 1,2,3-TRICHLOROPROPANE | 0.74 U | 0.75 U | 17 U | 370 U | 21 U | 100 U | 25 U | 19 U | 1900 U |
| 1,2,3-TRIMETHYLBENZENE | 0.14 U | 0.14 U | 33 J | 3 U | 0.17 U | 0.82 U | 49 J | 0.15 U | 16 U |
| 1,2,4-TRICHLOROBENZENE | 1.1 B | 0.46 B | 520 | 120000 J | 1700 J | 28000 | 1900 | 1000 | 410000 J |
| 1,2,4-TRIMETHYLBENZENE | 0.53 U | 0.54 U | 4.1 U | 89 U | 4.9 U | 24 U | 6 U | 4.5 U | 460 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.1 U | 1.1 U | 41 U | 890 U | 49 U | 240 U | 60 U | 45 U | 4600 U |
| 1,2-DIBROMOETHANE | 0.41 U | 0.41 U | 8.1 U | 180 U | 9.8 U | 48 U | 12 U | 9 U | 920 U |
| 1,2-DICHLOROBENZENE | 0.29 U | 0.3 U | 7 U | 1100 J | 68 J | 180 J | 42 J | 22 J | 3000 J |
| 1,2-DICHLOROETHANE | 0.28 U | 0.28 U | 8.1 U | 180 U | 9.8 U | 51 J | 12 U | 9 U | 920 U |
| 1,2-DICHLOROPROPANE | 0.56 U | 0.57 U | 6.7 U | 150 U | 8.1 U | 39 U | 9.9 U | 7.4 U | 750 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.29 U | 0.29 U | 18 J | 86 U | 4.7 U | 23 U | 5.8 U | 4.3 U | 440 U |
| 1,3-DICHLOROPROPANE | 0.28 U | 0.28 U | 18 U | 390 U | 22 U | 110 U | 27 U | 20 U | 2000 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.54 U | 0.55 U | 20 J | 1500 J | 98 J | 250 J | 67 J | 27 J | 4300 J |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.77 U | 0.78 U | 19 U | 410 U | 23 U | 110 U | 28 U | 21 U | 2100 U |
| 2-BUTANONE | 1.1 U | 1.2 U | 35 U | 770 U | 71 J | 210 U | 52 U | 110 J | 3900 U |
| 2-CHLOROETHYL VINYL ETHER | 1.1 U | 1.2 U | 35 U | 770 UJ | 42 UJ | 210 U | 52 U | 39 U | 3900 UJ |
| 2-CHLOROTOLUENE | 0.33 U | 0.33 U | 7.3 U | 160 U | 8.8 U | 43 U | 11 U | 8.1 U | 820 U |
| 2-HEXANONE | 0.52 U | 0.52 U | 16 U | 360 U | 20 U | 96 U | 24 U | 18 U | 1800 U |
| 4-CHLOROTOLUENE | 0.34 U | 0.34 U | 8 U | 180 U | 9.7 U | 48 U | 12 U | 8.9 U | 910 U |
| 4-ISOPROPYLTOLUENE | 0.17 U | 0.17 U | 3.9 U | 86 U | 4.7 U | 23 U | 5.8 U | 4.3 U | 440 U |
| 4-METHYL-2-PENTANONE | 0.44 U | 0.45 U | 39 U | 860 U | 47 U | 230 U | 58 U | 43 U | 4400 U |
| ACETONE | 17 B | 5.2 U | 200 B | 3000 UJ | 170 UJ | 1100 B | 280 B | 190 B | 16000 UJ |
| BENZENE | 0.19 U | 0.19 U | 9.7 U | 210 U | 12 U | 58 U | 14 U | 11 U | 1100 U |
| BROMOBENZENE | 0.27 U | 0.27 U | 11 U | 230 U | 13 U | 63 U | 16 U | 12 U | 1200 U |
| BROMOCHLOROMETHANE | 0.58 U | 0.59 U | 11 U | 230 U | 13 U | 63 U | 16 U | 12 U | 1200 U |
| BROMODICHLOROMETHANE | 0.23 U | 0.23 U | 8 U | 180 U | 9.7 U | 48 U | 12 U | 8.9 U | 910 U |
| BROMOFORM | 0.27 U | 0.27 U | 15 U | 340 U | 19 U | 91 U | 23 U | 17 U | 1700 U |
| BROMOMETHANE | 0.44 U | 0.45 U | 24 U | 520 U | 28 U | 140 U | 35 U | 26 U | 2700 U |
| CARBON DISULFIDE | 0.36 U | 0.36 U | 9.7 U | 210 U | 12 U | 58 U | 14 U | 11 U | 1100 U |
| CARBON TETRACHLORIDE | 0.3 U | 0.31 U | 5.2 U | 110 U | 6.3 U | 31 U | 7.7 U | 5.8 U | 590 U |
| CHLOROBENZENE | 0.27 U | 0.27 U | 5.2 U | 110 U | 6.3 U | 31 U | 7.7 U | 12 J | 4000 J |
| CHLORODIBROMOMETHANE | 0.45 U | 0.46 U | 9.7 U | 210 U | 12 U | 58 U | 14 U | 11 U | 1100 U |
| CHLOROETHANE | 0.7 U | 0.71 U | 50 U | 1100 U | 60 U | 290 U | 74 U | 55 U | 5600 U |
| CHLOROFORM | 0.24 U | 0.24 U | 7.1 U | 160 U | 8.6 U | 42 U | 11 U | 7.9 U | 810 U |
| CHLOROMETHANE | 0.34 U | 0.34 U | 11 U | 250 U | 14 U | 67 U | 17 U | 13 U | 1300 U |
| CIS-1,2-DICHLOROETHENE | 0.29 U | 0.3 U | 5.6 U | 120 U | 6.8 U | 33 U | 8.3 U | 6.2 U | 630 U |
| CIS-1,3-DICHLOROPROPENE | 0.28 U | 0.28 U | 6.4 U | 140 U | 7.8 U | 38 U | 9.5 U | 7.1 U | 720 U |
| DIBROMOMETHANE | 0.52 U | 0.52 U | 11 U | 250 U | 14 U | 67 U | 17 U | 13 U | 1300 U |
| DICHLORODIFLUOROMETHANE | 0.41 U | 0.41 U | 13 U | 290 U | 16 U | 77 U | 19 U | 14 U | 1500 U |
| DIISOPROPYL ETHER | 1.2 U | 1.2 U | 41 U | 890 U | 49 U | 240 U | 60 U | 45 U | 4600 U |
| ETHYL TERT-BUTYL ETHER | 0.18 U | 0.18 U | 0.18 U | 3.9 U | 0.22 U | 1.1 U | 0.27 U | 0.2 U | 20 U |
| ETHYLBENZENE | 0.21 U | 0.22 U | 4.4 U | 96 U | 5.3 U | 26 U | 6.5 U | 4.9 U | 490 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 0.98 U | 0.99 U | 11 U | 250 U | 14 U | 67 U | 17 U | 13 U | 1300 U |
| ISOPROPYLBENZENE | 0.13 U | 0.13 U | 5.3 U | 120 U | 6.4 U | 31 U | 7.8 U | 5.9 U | 590 U |
| M+P-XYLENES | 0.98 U | 0.99 U | 5 U | 110 U | 6.1 U | 30 U | 14 J | 5.6 U | 570 U |
| METHYL TERT-BUTYL ETHER | 0.35 U | 0.36 U | 5.8 U | 130 U | 7 U | 34 U | 8.6 U | 6.4 U | 650 U |
| METHYLENE CHLORIDE | 0.55 U | 0.56 U | 62 U | 1400 U | 76 U | 370 U | 93 U | 69 U | 9000 B |
| NAPHTHALENE | 0.16 U | 0.16 U | 5.4 U | 120 U | 6.6 U | 32 U | 8.1 U | 6 U | 610 U |
| N-BUTYLBENZENE | 0.19 U | 0.19 U | 6.5 U | 140 U | 7.9 U | 38 U | 9.6 U | 7.2 U | 730 U |
| N-PROPYLBENZENE | 0.33 U | 0.33 U | 11 U | 250 U | 14 U | 67 U | 17 U | 13 U | 1300 U |
| O-XYLENE | 0.29 U | 0.29 U | 6.9 U | 150 U | 8.3 U | 41 U | 10 U | 7.7 U | 780 U |
| SEC-BUTYLBENZENE | 0.15 U | 0.15 U | 3.8 U | 84 U | 4.6 U | 23 U | 5.7 U | 4.2 U | 430 U |
| STYRENE | 0.12 U | 0.12 U | 4.5 U | 100 U | 5.5 U | 27 U | 6.7 U | 5.1 U | 510 U |
| TERT-AMYL METHYL ETHER | 0.3 U | 0.31 U | 0.3 U | 6.6 U | 0.36 U | 1.8 U | 0.45 U | 0.33 U | 34 U |
| TERT-BUTYLBENZENE | 0.24 U | 0.24 U | 5.3 U | 120 U | 6.4 U | 31 U | 7.8 U | 5.9 U | 590 U |
| TERTIARY-BUTYL ALCOHOL | 6.2 UR | 6.3 UR | 620 J | 4300 UR | 240 UR | 1200 UR | 1200 J | 720 J | 22000 UR |
| TETRACHLOROETHENE | 0.43 U | 0.43 U | 9.7 U | 210 U | 12 U | 58 U | 14 U | 11 U | 1100 U |
| TOLUENE | 0.27 J | 0.33 J | 16 J | 300 U | 17 U | 82 U | 48 J | 16 J | 1600 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.55 U | 0.56 U | 6.6 U | 140 U | 8 U | 39 U | 14 J | 7.3 U | 740 U |
| TRANS-1,2-DICHLOROETHENE | 0.34 U | 0.34 U | 7.5 U | 160 U | 9 U | 44 U | 11 U | 8.3 U | 840 U |
| TRANS-1,3-DICHLOROPROPENE | 0.44 U | 0.45 U | 16 U | 360 U | 20 U | 96 U | 24 U | 18 U | 1800 U |
| TRICHLOROETHENE | 0.34 U | 0.35 U | 7.9 U | 170 U | 9.5 U | 47 U | 12 U | 8.8 U | 890 U |
| TRICHLOROFLUOROMETHANE | 0.28 U | 0.28 U | 13 U | 290 U | 16 U | 77 U | 19 U | 14 U | 1500 U |
| VINYL ACETATE | 0.2 U | 0.21 U | 19 U | 410 U | 23 U | 110 U | 28 U | 21 U | 2100 U |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833J | SB-833J | SB-833J | SB-833K | SB-833K | SB-833K | SB-833L | SB-833L | SB-833L |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833J-06 | E-SB-833J-08 | E-SB-833J-10 | E-SB-833K-06 | E-SB-833K-08 | E-SB-833K-10 | E-SB-833L-04 | E-SB-833L-06 | E-SB-833L-08 |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 |
| VINYL CHLORIDE | 0.32 U | 0.32 U | 15 U | 320 U | 18 U | 87 U | 22 U | 16 U | 1600 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U |
| 2-METHYLNAPHTHALENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U |
| ACENAPHTHENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U |
| ACENAPHTHYLENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U |
| ANTHRACENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U |
| BAP EQUIVALENT-HALFND | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 142 | 3.9 U | 4 U | 38 U |
| BAP EQUIVALENT-POS | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 120 | 3.9 U | 4 U | 38 U |
| BENZO(A)ANTHRACENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 220 | 3.9 U | 4 U | 38 U |
| BENZO(A)PYRENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 85 | 3.9 U | 4 U | 38 U |
| BENZO(B)FLUORANTHENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 130 | 3.9 U | 4 U | 38 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U |
| BENZO(K)FLUORANTHENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833J | SB-833J | SB-833J | SB-833K | SB-833K | SB-833K | SB-833L | SB-833L | SB-833L |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833J-06 | E-SB-833J-08 | E-SB-833J-10 | E-SB-833K-06 | E-SB-833K-08 | E-SB-833K-10 | E-SB-833L-04 | E-SB-833L-06 | E-SB-833L-08 |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833J | SB-833J | SB-833J | SB-833K | SB-833K | SB-833K | SB-833L | SB-833L | SB-833L |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833J-06 | E-SB-833J-08 | E-SB-833J-10 | E-SB-833K-06 | E-SB-833K-08 | E-SB-833K-10 | E-SB-833L-04 | E-SB-833L-06 | E-SB-833L-08 |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 1.4 U | 13 U | 1.3 U | 130 | 1.3 U | 1.3 U | 13 U |
| DIBENZO(A,H)ANTHRACENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U |
| FLUORANTHENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 370 | 3.9 U | 4 U | 38 U |
| FLUORENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U |
| INDENO(1,2,3-CD)PYRENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U |
| NAPHTHALENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U |
| PHENANTHRENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 190 | 3.9 U | 4 U | 38 U |
| PYRENE | 4 U | 3.9 U | 4.1 U | 39 U | 3.9 U | 270 | 3.9 U | 4 U | 38 U |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 1395 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 25 U | 25 U | 26 U | 120000 U | 5000 U | 25000 U | 25 U | 510 U | 120000 U |
| AROCLOR-1221 | 19 U | 19 U | 20 U | 94000 U | 3800 U | 19000 U | 19 U | 390 U | 93000 U |
| AROCLOR-1232 | 17 U | 16 U | 17 U | 82000 U | 3300 U | 16000 U | 17 U | 340 U | 81000 U |
| AROCLOR-1242 | 16 U | 15 U | 16 U | 76000 U | 3100 U | 15000 U | 16 U | 320 U | 75000 U |
| AROCLOR-1248 | 20 U | 20 U | 21 U | 100000 U | 4000 U | 20000 U | 20 U | 410 U | 99000 U |
| AROCLOR-1254 | 20 U | 20 U | 21 U | 100000 U | 4000 U | 20000 U | 20 U | 410 U | 99000 U |
| AROCLOR-1260 | 39 J | 70 | 180 J | 970000 | 35000 | 270000 | 73 | 4500 | 700000 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 39 | 70 | 180 | 970000 | 35000 | 270000 | 73 | 4500 | 700000 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | 310000 J | NA | 590000 K | NA | 7300 J | 450000 J |
| GASOLINE RANGE ORGANICS | NA | NA | NA | 110 J | NA | 76 J | NA | 56 UJ | 5000 |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833J | SB-833J | SB-833J | SB-833K | SB-833K | SB-833K | SB-833L | SB-833L | SB-833L |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833J-06 | E-SB-833J-08 | E-SB-833J-10 | E-SB-833K-06 | E-SB-833K-08 | E-SB-833K-10 | E-SB-833L-04 | E-SB-833L-06 | E-SB-833L-08 |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 |
| BOTTOM DEPTH | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833M | SB-833M | SB-833M | SB-833M | SB-833N | SB-833N | SB-833N | SB-833N |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833M-04 | E-SB-833M-06 | E-SB-833M-08 | E-SB-833M-10 | E-SB-833N-04 | E-SB-833N-06 | E-SB-833N-08 | E-SB-833N-10 |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101013 | 20101014 | 20101014 | 20101014 | 20101014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 0.59 U | 0.48 U | 0.58 U | 0.54 U | 0.53 U | 0.58 U | 0.59 U | 0.57 U |
| 1,1,1-TRICHLOROETHANE | 0.53 U | 0.44 U | 0.52 U | 0.48 U | 0.48 U | 0.52 U | 0.54 U | 0.52 U |
| 1,1,2,2-TETRACHLOROETHANE | 0.32 U | 0.26 U | 0.32 U | 0.29 U | 0.29 U | 0.32 U | 0.33 U | 0.32 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.2 U | 1 U | 1.2 U | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U |
| 1,1-DICHLOROETHANE | 0.34 U | 0.28 U | 0.34 U | 0.31 U | 0.31 U | 0.34 U | 0.35 U | 0.33 U |
| 1,1-DICHLOROETHENE | 0.49 U | 0.4 U | 0.49 U | 0.45 U | 0.44 U | 0.49 U | 0.5 U | 0.48 U |
| 1,1-DICHLOROPROPENE | 0.28 U | 0.23 U | 0.28 U | 0.26 U | 0.26 U | 0.28 U | 0.29 U | 0.28 U |
| 1,2,3-TRICHLOROBENZENE | 0.36 U | 5.4 | 0.36 U | 0.33 U | 0.32 U | 0.35 U | 0.36 U | 1.4 B |
| 1,2,3-TRICHLOROPROPANE | 0.85 U | 0.7 U | 0.84 U | 0.78 U | 0.77 U | 0.84 U | 0.86 U | 0.83 U |
| 1,2,3-TRIMETHYLBENZENE | 0.16 U | 0.61 B | 0.16 U | 0.68 B | 0.14 U | 0.16 U | 0.16 U | 0.16 U |
| 1,2,4-TRICHLOROBENZENE | 0.98 B | 25 | 0.68 B | 0.68 B | 0.23 U | 0.25 U | 0.51 B | 5.9 J |
| 1,2,4-TRIMETHYLBENZENE | 0.62 U | 0.51 U | 0.61 U | 0.56 U | 0.55 U | 0.61 U | 0.62 U | 0.6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 1.2 U | 1 U | 1.2 U | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U |
| 1,2-DIBROMOETHANE | 0.47 U | 0.39 U | 0.47 U | 0.43 U | 0.43 U | 0.47 U | 0.48 U | 0.46 U |
| 1,2-DICHLOROBENZENE | 0.34 U | 0.28 U | 0.34 U | 0.31 U | 0.31 U | 0.34 U | 0.35 U | 0.33 U |
| 1,2-DICHLOROETHANE | 0.32 U | 0.26 U | 0.32 U | 0.29 U | 0.29 U | 0.32 U | 0.33 U | 0.32 U |
| 1,2-DICHLOROPROPANE | 0.65 U | 0.54 U | 0.65 U | 0.6 U | 0.59 U | 0.64 U | 0.66 U | 0.64 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 0.33 U | 0.27 U | 0.33 U | 0.3 U | 0.3 U | 0.33 U | 0.34 U | 0.32 U |
| 1,3-DICHLOROPROPANE | 0.32 U | 0.26 U | 0.32 U | 0.29 U | 0.29 U | 0.32 U | 0.33 U | 0.32 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 0.62 U | 0.51 U | 0.62 U | 0.57 U | 0.56 U | 0.62 U | 0.63 U | 0.61 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 0.89 U | 0.73 U | 0.88 U | 0.81 U | 0.8 U | 0.88 U | 0.9 U | 0.87 U |
| 2-BUTANONE | 1.3 U | 1.1 U | 1.3 U | 1.2 U | 1.5 J | 1.3 U | 1.3 U | 1.3 U |
| 2-CHLOROETHYL VINYL ETHER | 1.3 UJ | 1.1 U | 1.3 U | 1.2 U | 1.2 UR | 1.3 UR | 1.3 UR | 1.3 UR |
| 2-CHLOROTOLUENE | 0.38 U | 0.31 U | 0.37 U | 0.35 U | 0.34 U | 0.37 U | 0.38 U | 0.37 U |
| 2-HEXANONE | 0.6 U | 0.49 U | 0.59 U | 0.54 U | 0.54 U | 0.59 U | 0.6 U | 0.58 U |
| 4-CHLOROTOLUENE | 0.39 U | 0.32 U | 0.38 U | 0.35 U | 0.35 U | 0.38 U | 0.39 U | 0.38 U |
| 4-ISOPROPYLTOLUENE | 0.2 U | 0.16 U | 0.2 U | 0.18 U | 0.18 U | 0.2 U | 0.2 U | 0.19 U |
| 4-METHYL-2-PENTANONE | 0.51 U | 0.42 U | 0.51 U | 0.47 U | 0.46 U | 0.5 U | 0.52 U | 0.5 U |
| ACETONE | 19 J | 7.7 B | 13 B | 16 B | 18 J | 5.9 U | 12 J | 13 J |
| BENZENE | 0.22 U | 0.18 U | 0.22 U | 0.2 U | 0.2 U | 0.21 U | 0.22 U | 0.21 U |
| BROMOBENZENE | 0.31 U | 0.26 U | 0.31 U | 0.29 U | 0.28 U | 0.31 U | 0.32 U | 0.31 U |
| BROMOCHLOROMETHANE | 0.67 U | 0.55 U | 0.67 U | 0.61 U | 0.61 U | 0.66 U | 0.68 U | 0.66 U |
| BROMODICHLOROMETHANE | 0.27 U | 0.22 U | 0.26 U | 0.24 U | 0.24 U | 0.26 U | 0.27 U | 0.26 U |
| BROMOFORM | 0.31 U | 0.26 U | 0.31 U | 0.29 U | 0.28 U | 0.31 U | 0.32 U | 0.31 U |
| BROMOMETHANE | 0.51 U | 0.42 U | 0.51 U | 0.47 U | 0.46 U | 0.5 U | 0.52 U | 0.5 U |
| CARBON DISULFIDE | 0.42 U | 0.34 U | 0.41 U | 0.38 U | 0.38 U | 0.41 U | 0.42 U | 0.41 U |
| CARBON TETRACHLORIDE | 0.35 U | 0.29 U | 0.35 U | 0.32 U | 0.32 U | 0.35 U | 0.35 U | 0.34 U |
| CHLOROBENZENE | 0.31 U | 0.26 U | 0.31 U | 0.29 U | 0.28 U | 0.31 U | 0.32 U | 0.31 U |
| CHLORODIBROMOMETHANE | 0.52 U | 0.43 U | 0.52 U | 0.48 U | 0.47 U | 0.51 U | 0.53 U | 0.51 U |
| CHLOROETHANE | 0.81 U | 0.67 U | 0.81 U | 0.74 U | 0.73 U | 0.8 U | 0.82 U | 0.8 U |
| CHLOROFORM | 0.27 U | 0.23 U | 0.27 U | 0.25 U | 0.25 U | 0.27 U | 0.28 U | 0.27 U |
| CHLOROMETHANE | 0.39 U | 0.32 U | 0.38 U | 0.35 U | 0.35 U | 0.38 U | 0.39 U | 0.38 U |
| CIS-1,2-DICHLOROETHENE | 0.34 U | 0.28 U | 0.34 U | 0.31 U | 0.31 U | 0.37 J | 0.35 U | 0.33 U |
| CIS-1,3-DICHLOROPROPENE | 0.32 U | 0.26 U | 0.32 U | 0.29 U | 0.29 U | 0.32 U | 0.33 U | 0.32 U |
| DIBROMOMETHANE | 0.6 U | 0.49 U | 0.59 U | 0.54 U | 0.54 U | 0.59 U | 0.6 U | 0.58 U |
| DICHLORODIFLUOROMETHANE | 0.47 U | 0.39 U | 0.47 U | 0.43 U | 0.43 U | 0.47 U | 0.48 U | 0.46 U |
| DIISOPROPYL ETHER | 1.4 U | 1.2 U | 1.4 U | 1.3 U | 1.3 U | 1.4 U | 1.4 U | 1.4 U |
| ETHYL TERT-BUTYL ETHER | 0.21 U | 0.17 U | 0.21 U | 0.19 U | 0.19 U | 0.21 U | 0.21 U | 0.2 U |
| ETHYLBENZENE | 0.25 U | 0.2 U | 0.24 U | 0.22 U | 0.22 U | 0.24 U | 0.25 U | 0.24 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 1.1 U | 0.93 U | 1.1 U | 1 U | 1 U | 1.1 U | 1.2 U | 1.1 U |
| ISOPROPYLBENZENE | 0.15 U | 0.12 U | 0.15 U | 0.14 U | 0.14 U | 0.15 U | 0.15 U | 0.15 U |
| M+P-XYLENES | 1.1 U | 0.93 U | 1.1 U | 1 U | 1 U | 1.1 U | 1.2 U | 1.1 U |
| METHYL TERT-BUTYL ETHER | 0.41 U | 0.33 U | 0.4 U | 0.37 U | 0.37 U | 0.4 U | 0.41 U | 0.4 U |
| METHYLENE CHLORIDE | 0.63 U | 0.52 U | 0.63 U | 0.58 U | 0.57 U | 0.63 U | 0.64 U | 0.62 U |
| NAPHTHALENE | 0.18 U | 0.15 U | 0.18 U | 0.16 U | 0.16 U | 2.3 B | 0.18 U | 0.18 U |
| N-BUTYLBENZENE | 0.22 U | 0.18 U | 0.22 U | 0.2 U | 0.2 U | 0.21 U | 0.22 U | 0.21 U |
| N-PROPYLBENZENE | 0.38 U | 0.31 U | 0.37 U | 0.35 U | 0.34 U | 0.37 U | 0.38 U | 0.37 U |
| O-XYLENE | 0.33 U | 0.27 U | 0.33 U | 0.3 U | 0.3 U | 0.33 U | 0.34 U | 0.32 U |
| SEC-BUTYLBENZENE | 0.17 U | 0.14 U | 0.17 U | 0.16 U | 0.15 U | 0.17 U | 0.17 U | 0.17 U |
| STYRENE | 0.14 U | 0.12 U | 0.14 U | 0.13 U | 0.13 U | 0.14 U | 0.14 U | 0.14 U |
| TERT-AMYL METHYL ETHER | 0.35 U | 0.29 U | 0.35 U | 0.32 U | 0.32 U | 0.35 U | 0.35 U | 0.34 U |
| TERT-BUTYLBENZENE | 0.27 U | 0.23 U | 0.27 U | 0.25 U | 0.25 U | 0.27 U | 0.28 U | 0.27 U |
| TERTIARY-BUTYL ALCOHOL | 7.2 UR | 5.9 UR | 7.1 UR | 6.6 UR | 6.5 UR | 11 J | 10 J | 7 J |
| TETRACHLOROETHENE | 0.49 U | 0.4 U | 0.49 U | 0.45 U | 0.44 U | 0.49 U | 0.5 U | 0.48 U |
| TOLUENE | 0.29 J | 0.21 J | 0.39 J | 0.25 J | 0.32 J | 0.25 U | 0.41 J | 0.36 J |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 0.63 U | 0.52 U | 0.63 U | 0.58 U | 0.57 U | 0.63 U | 0.64 U | 0.62 U |
| TRANS-1,2-DICHLOROETHENE | 0.39 U | 0.32 U | 0.38 U | 0.35 U | 0.35 U | 0.38 U | 0.39 U | 0.38 U |
| TRANS-1,3-DICHLOROPROPENE | 0.51 U | 0.42 U | 0.51 U | 0.47 U | 0.46 U | 0.5 U | 0.52 U | 0.5 U |
| TRICHLOROETHENE | 0.4 U | 0.33 U | 0.39 U | 0.36 U | 0.36 U | 0.39 U | 0.4 U | 0.39 U |
| TRICHLOROFLUOROMETHANE | 0.32 U | 0.26 U | 0.32 U | 0.29 U | 0.29 U | 0.32 U | 0.33 U | 0.32 U |
| VINYL ACETATE | 0.24 U | 0.19 U | 0.23 U | 0.22 U | 0.21 UR | 0.23 UR | 0.24 UR | 0.23 UR |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833M | SB-833M | SB-833M | SB-833M | SB-833N | SB-833N | SB-833N | SB-833N |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833M-04 | E-SB-833M-06 | E-SB-833M-08 | E-SB-833M-10 | E-SB-833N-04 | E-SB-833N-06 | E-SB-833N-08 | E-SB-833N-10 |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101013 | 20101014 | 20101014 | 20101014 | 20101014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 |
| VINYL CHLORIDE | 0.37 U | 0.3 U | 0.37 U | 0.34 U | 0.33 U | 0.36 U | 0.37 U | 0.36 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| 2-METHYLNAPHTHALENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| ACENAPHTHENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| ACENAPHTHYLENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| ANTHRACENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| BAP EQUIVALENT-HALFND | 4 U | 3.8 U | 4 U | 4 U | 40 U | 267 | 60 | 16 U |
| BAP EQUIVALENT-POS | 4 U | 3.8 U | 4 U | 4 U | 40 U | 240 | 16 | 16 U |
| BENZO(A)ANTHRACENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| BENZO(A)PYRENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 240 | 40 U | 16 U |
| BENZO(B)FLUORANTHENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 160 | 16 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| BENZO(K)FLUORANTHENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833M | SB-833M | SB-833M | SB-833M | SB-833N | SB-833N | SB-833N | SB-833N |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833M-04 | E-SB-833M-06 | E-SB-833M-08 | E-SB-833M-10 | E-SB-833N-04 | E-SB-833N-06 | E-SB-833N-08 | E-SB-833N-10 |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101013 | 20101014 | 20101014 | 20101014 | 20101014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833M | SB-833M | SB-833M | SB-833M | SB-833N | SB-833N | SB-833N | SB-833N |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833M-04 | E-SB-833M-06 | E-SB-833M-08 | E-SB-833M-10 | E-SB-833N-04 | E-SB-833N-06 | E-SB-833N-08 | E-SB-833N-10 |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101013 | 20101014 | 20101014 | 20101014 | 20101014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 13 U | 14 U | 13 U | 5.4 U |
| DIBENZO(A,H)ANTHRACENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| FLUORANTHENE | 4 U | 3.8 U | 4 U | 4 U | 320 | 390 | 340 | 140 |
| FLUORENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| INDENO(1,2,3-CD)PYRENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| NAPHTHALENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| PHENANTHRENE | 4 U | 3.8 U | 4 U | 4 U | 40 U | 41 U | 40 U | 16 U |
| PYRENE | 4 U | 3.8 U | 4 U | 4 U | 110 | 210 | 160 | 70 |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 430 | 840 | 660 | 210 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 51 U | 120 U | 51 U | 25 U | 26 U | 26 U | 130 U | 130 U |
| AROCLOR-1221 | 39 U | 93 U | 39 U | 19 U | 19 U | 20 U | 97 U | 98 U |
| AROCLOR-1232 | 34 U | 81 U | 34 U | 17 U | 17 U | 17 U | 85 U | 85 U |
| AROCLOR-1242 | 32 U | 75 U | 32 U | 16 U | 16 U | 16 U | 79 U | 79 U |
| AROCLOR-1248 | 41 U | 99 U | 41 U | 20 U | 21 U | 21 U | 100 U | 100 U |
| AROCLOR-1254 | 41 U | 99 U | 41 U | 20 U | 21 U | 21 U | 100 U | 100 U |
| AROCLOR-1260 | 240 | 860 | 590 | 73 | 210 | 80 | 370 | 430 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 240 | 860 | 590 | 73 | 210 | 80 | 370 | 430 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-833M | SB-833M | SB-833M | SB-833M | SB-833N | SB-833N | SB-833N | SB-833N |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833M-04 | E-SB-833M-06 | E-SB-833M-08 | E-SB-833M-10 | E-SB-833N-04 | E-SB-833N-06 | E-SB-833N-08 | E-SB-833N-10 |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101013 | 20101014 | 20101014 | 20101014 | 20101014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MRC-MW43A | SB-001 | SB-001 | SB-002 | SB-002 | SB-003 | SB-003 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW43[0910] | SB-1-05 | SB-1-10 | SB-2-05 | SB-2-10 | SB-3-05 | SB-3-10 |
| SAMPLE DATE | 20050517 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,1,1-TRICHLOROETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,1,2-TRICHLOROETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,1-DICHLOROETHENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,1-DICHLOROPROPENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,2,3-TRICHLOROBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,2,3-TRICHLOROPROPANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,2,4-TRIMETHYLBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,2-DIBROMOETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,2-DICHLOROBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,2-DICHLOROETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,2-DICHLOROPROPANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,3,5-TRIMETHYLBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,3-DICHLOROBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,3-DICHLOROPROPANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 2-BUTANONE | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U |
| 2-CHLOROETHYL VINYL ETHER | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 2-CHLOROTOLUENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 2-HEXANONE | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U |
| 4-CHLOROTOLUENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 4-ISOPROPYLTOLUENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| 4-METHYL-2-PENTANONE | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U |
| ACETONE | NA | 30 J | 67 UJ | 17 J | 11 J | 12 J | 66 UJ |
| BENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| BROMOBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| BROMOCHLOROMETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| BROMODICHLOROMETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| BROMOFORM | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| BROMOMETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| CARBON DISULFIDE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| CARBON TETRACHLORIDE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| CHLOROBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| CHLORODIBROMOMETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| CHLOROETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| CHLOROFORM | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| CHLOROMETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| CIS-1,2-DICHLOROETHENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| CIS-1,3-DICHLOROPROPENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| DIBROMOMETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| DICHLORODIFLUOROMETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| ISOPROPYLBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| M+P-XYLENES | NA | 22 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| METHYL TERT-BUTYL ETHER | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| METHYLENE CHLORIDE | NA | 12 J | 9 J | 7 U | 7 U | 9 J | 11 J |
| NAPHTHALENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| N-BUTYLBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| N-PROPYLBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| O-XYLENE | NA | 22 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| SEC-BUTYLBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| STYRENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| TOLUENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| TRANS-1,3-DICHLOROPROPENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| TRICHLOROETHENE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| TRICHLOROFLUOROMETHANE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| VINYL ACETATE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |

| LOCATION | MRC-MW43A | SB-001 | SB-001 | SB-002 | SB-002 | SB-003 | SB-003 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW43[0910] | SB-1-05 | SB-1-10 | SB-2-05 | SB-2-10 | SB-3-05 | SB-3-10 |
| SAMPLE DATE | 20050517 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| VINYL CHLORIDE | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 2,4,5-TRICHLOROPHENOL | NA | 1200 U | 1100 U | 1100 U | 1100 U | 1100 U | 1100 U |
| 2,4,6-TRICHLOROPHENOL | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 2,4-DICHLOROPHENOL | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 2,4-DIMETHYLPHENOL | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 2,4-DINITROPHENOL | NA | 1200 U | 1100 U | 1100 U | 1100 U | 1100 U | 1100 U |
| 2,4-DINITROTOLUENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 2,6-DINITROTOLUENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 2-CHLORONAPHTHALENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 2-CHLOROPHENOL | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 2-METHYLPHENOL | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 2-NITROANILINE | NA | 1200 U | 1100 U | 1100 U | 1100 U | 1100 U | 1100 U |
| 2-NITROPHENOL | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 3&4-METHYLPHENOL | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 3,3'-DICHLOROBENZIDINE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 3-NITROANILINE | NA | 1200 U | 1100 U | 1100 U | 1100 U | 1100 U | 1100 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | 1100 U | 1000 U | 1000 U | 1000 U | 1000 U | 1000 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 4-CHLORO-3-METHYLPHENOL | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 4-CHLOROANILINE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | 1200 U | 1100 U | 1100 U | 1100 U | 1100 U | 1100 U |
| 4-NITROPHENOL | NA | 1200 U | 1100 U | 1100 U | 1100 U | 1100 U | 1100 U |
| ACETOPHENONE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| BIS(2-CHLOROETHYL)ETHER | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| BUTYL BENZYL PHTHALATE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| CAPROLACTAM | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| CARBAZOLE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| DIBENZOFURAN | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| DIETHYL PHTHALATE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| DIMETHYL PHTHALATE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| DI-N-BUTYL PHTHALATE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| DI-N-OCTYL PHTHALATE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| HEXACHLOROBENZENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| HEXACHLOROBUTADIENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| HEXACHLOROCYCLOPENTADIENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| HEXACHLOROETHANE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| ISOPHORONE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| NITROBENZENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| N-NITROSODIPHENYLAMINE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| PENTACHLOROPHENOL | NA | 1200 U | 1100 U | 1100 U | 1100 U | 1100 U | 1100 U |
| PHENOL | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| ACENAPHTHENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| ACENAPHTHYLENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| ANTHRACENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| BAP EQUIVALENT-HALFND | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| BAP EQUIVALENT-POS | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| BENZO(A)ANTHRACENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| BENZO(A)PYRENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| BENZO(B)FLUORANTHENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| BENZO(K)FLUORANTHENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MRC-MW43A | SB-001 | SB-001 | SB-002 | SB-002 | SB-003 | SB-003 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW43[0910] | SB-1-05 | SB-1-10 | SB-2-05 | SB-2-10 | SB-3-05 | SB-3-10 |
| SAMPLE DATE | 20050517 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MRC-MW43A | SB-001 | SB-001 | SB-002 | SB-002 | SB-003 | SB-003 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW43[0910] | SB-1-05 | SB-1-10 | SB-2-05 | SB-2-10 | SB-3-05 | SB-3-10 |
| SAMPLE DATE | 20050517 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| DIBENZO(A,H)ANTHRACENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| FLUORANTHENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| FLUORENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| INDENO(1,2,3-CD)PYRENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| NAPHTHALENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| PHENANTHRENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| PYRENE | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U |
| TOTAL PAHS | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U |
| AROCLOR-1221 | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U |
| AROCLOR-1232 | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U |
| AROCLOR-1242 | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U |
| AROCLOR-1248 | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U |
| AROCLOR-1254 | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U |
| AROCLOR-1260 | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | NA | 3.6 UL | 3.4 UL | 3.3 UL | 3.3 UL | 3.3 UL | 3.3 UL |
| ARSENIC | NA | 5.5 L | 1.8 L | 2.1 L | 0.87 L | 1.5 L | 1.6 L |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | 3.6 | 3.4 U | 3.3 U | 3.3 U | 3.3 U | 3.3 U |
| CADMIUM | NA | 3.6 U | 3.4 U | 3.3 U | 3.3 U | 3.3 U | 3.3 U |
| CHROMIUM | NA | 26 J | 13 B | 3.4 B | 3.3 UJ | 6.6 B | 5.2 B |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | 45 | 17 | 3.3 U | 3.3 U | 3.3 U | 3.3 U |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | 7.7 | 5 | 3.3 U | 3.3 U | 3.3 U | 3.3 U |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | 0.14 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | 14 | 30 | 3.3 U | 3.3 U | 3.3 U | 3.3 U |
| SELENIUM | NA | 3.6 U | 3.4 U | 3.3 U | 3.3 U | 3.3 U | 3.3 U |
| SILVER | NA | 3.6 UR | 3.4 UR | 3.3 UR | 3.3 UR | 3.3 UR | 3.3 UR |
| THALLIUM | NA | 2.9 U | 2.7 U | 2.7 U | 2.6 U | 2.6 U | 2.6 U |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | 79 | 76 | 33 U | 33 U | 33 U | 33 U |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | NA | 29000 U | 27000 U | 27000 U | 26000 U | 26000 U | 26000 U |
| GASOLINE RANGE ORGANICS | NA | 140 U | 130 U | 130 U | 130 U | 490 | 4400 |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | 70 | 74 | 75 | 76 | 77 | 76 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MRC-MW43A | SB-001 | SB-001 | SB-002 | SB-002 | SB-003 | SB-003 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW43[0910] | SB-1-05 | SB-1-10 | SB-2-05 | SB-2-10 | SB-3-05 | SB-3-10 |
| SAMPLE DATE | 20050517 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| TOTAL ORGANIC CARBON | 690 J | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-004 | SB-004 | SB-010 | SB-011 | SB-012 | SB-013 | SB-014 | SB-015 | SB-016 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-4-05 | SB-4-10 | SB-10-05 | SB-11-05 | SB-12-05 | SB-13-05 | SB-14-05 | SB-15-05 | SB-16-05 |
| SAMPLE DATE | 20031120 | 20031120 | 20031118 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 69 U | 68 U | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | 69 U | 68 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 69 U | 68 U | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 35 J | 15 J | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 7 U | 7 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| BROMOBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 7 U | 7 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 21 U | 20 U | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 11 J | 11 J | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 7 U | 7 U | 1 U | 1 U | 1 U | 1 U | 1 U | 2 | 1 U |
| N-BUTYLBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 21 U | 20 U | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 7 U | 7 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | 1 U | 1 U | 1 U | 1 U | 1 U | 3 | 1 U |
| TRANS-1,2-DICHLOROETHENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-004 | SB-004 | SB-010 | SB-011 | SB-012 | SB-013 | SB-014 | SB-015 | SB-016 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-4-05 | SB-4-10 | SB-10-05 | SB-11-05 | SB-12-05 | SB-13-05 | SB-14-05 | SB-15-05 | SB-16-05 |
| SAMPLE DATE | 20031120 | 20031120 | 20031118 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| VINYL CHLORIDE | 7 U | 7 U | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 1200 U | 1100 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 1200 U | 1100 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 1200 U | 1100 U | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 1200 U | 1100 U | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 1100 U | 1000 U | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 1200 U | 1100 U | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | 1200 U | 1100 U | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 1200 U | 1100 U | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 531 | 450 U | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 0.052 | 450 U | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 50 J | 450 U | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-004 | SB-004 | SB-010 | SB-011 | SB-012 | SB-013 | SB-014 | SB-015 | SB-016 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-4-05 | SB-4-10 | SB-10-05 | SB-11-05 | SB-12-05 | SB-13-05 | SB-14-05 | SB-15-05 | SB-16-05 |
| SAMPLE DATE | 20031120 | 20031120 | 20031118 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-004 | SB-004 | SB-010 | SB-011 | SB-012 | SB-013 | SB-014 | SB-015 | SB-016 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-4-05 | SB-4-10 | SB-10-05 | SB-11-05 | SB-12-05 | SB-13-05 | SB-14-05 | SB-15-05 | SB-16-05 |
| SAMPLE DATE | 20031120 | 20031120 | 20031118 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 52 J | 450 U | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 460 U | 450 U | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 57 J | 450 U | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 159 | 0 U | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 69 U | 68 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 69 U | 68 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 69 U | 68 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 69 U | 68 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 69 U | 68 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 69 U | 68 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 69 U | 68 U | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 3.5 UL | 3.4 UL | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 4.9 L | 2.4 L | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 3.5 U | 3.4 U | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.5 U | 3.4 U | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 27 J | 14 B | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 17 | 15 | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 4.5 | 4.4 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.14 U | 0.14 U | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 9 | 8 | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 3.5 U | 3.4 U | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 3.5 UR | 3.4 UR | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 2.8 U | 2.7 U | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 35 U | 34 U | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | 27000 U | 20000 U | 27000 U | 27000 U | 25000 U | 25000 U | 27000 U | 25000 U |
| GASOLINE RANGE ORGANICS | 190 | 140 U | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 72 | 73 | 75 | 75 | 75 | 81 | 80 | 75 | 79 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-004 | SB-004 | SB-010 | SB-011 | SB-012 | SB-013 | SB-014 | SB-015 | SB-016 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-4-05 | SB-4-10 | SB-10-05 | SB-11-05 | SB-12-05 | SB-13-05 | SB-14-05 | SB-15-05 | SB-16-05 |
| SAMPLE DATE | 20031120 | 20031120 | 20031118 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-017 | SB-018 | SB-019 | SB-019 | SB-020 | SB-020 | SB-021 | SB-021 | SB-035 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-17-05 | SB-18-05 | SB-19-05 | SB-19-10 | SB-20-05 | SB-20-10 | SB-21-05 | SB-21-10 | SB-35-04 |
| SAMPLE DATE | 20031119 | 20031119 | 20031121 | 20031121 | 20031120 | 20031120 | 20031120 | 20031120 | 20040922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 4 |
| BOTTOM DEPTH | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | 57 U |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | 57 U |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | 57 U |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | 57 U |
| BENZENE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 6 | 6 U |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 6 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | 11 U |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | 7 J |
| NAPHTHALENE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 6 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| TOLUENE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 6 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |

| LOCATION | SB-017 | SB-018 | SB-019 | SB-019 | SB-020 | SB-020 | SB-021 | SB-021 | SB-035 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-17-05 | SB-18-05 | SB-19-05 | SB-19-10 | SB-20-05 | SB-20-10 | SB-21-05 | SB-21-10 | SB-35-04 |
| SAMPLE DATE | 20031119 | 20031119 | 20031121 | 20031121 | 20031120 | 20031120 | 20031120 | 20031120 | 20040922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 4 |
| BOTTOM DEPTH | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 970 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 970 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 970 U |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 970 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 890 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 970 U |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 970 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 970 U |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-017 | SB-018 | SB-019 | SB-019 | SB-020 | SB-020 | SB-021 | SB-021 | SB-035 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-17-05 | SB-18-05 | SB-19-05 | SB-19-10 | SB-20-05 | SB-20-10 | SB-21-05 | SB-21-10 | SB-35-04 |
| SAMPLE DATE | 20031119 | 20031119 | 20031121 | 20031121 | 20031120 | 20031120 | 20031120 | 20031120 | 20040922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 4 |
| BOTTOM DEPTH | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-017 | SB-018 | SB-019 | SB-019 | SB-020 | SB-020 | SB-021 | SB-021 | SB-035 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-17-05 | SB-18-05 | SB-19-05 | SB-19-10 | SB-20-05 | SB-20-10 | SB-21-05 | SB-21-10 | SB-35-04 |
| SAMPLE DATE | 20031119 | 20031119 | 20031121 | 20031121 | 20031120 | 20031120 | 20031120 | 20031120 | 20040922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 4 |
| BOTTOM DEPTH | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 4 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | 390 U |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | 280 U |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | 280 U |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | 280 U |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | 280 U |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | 280 U |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | 280 U |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | 280 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | 2.5 UL |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | 1.6 |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | 2.5 U |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | 2.5 U |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | 10 J |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | 6.1 |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | 4.6 |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | 0.1 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | 5.7 |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | 2.5 U |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | 2.5 UR |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | 2 U |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | 25 UL |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 28000 UJ | 29000 U | 56000 | 27000 U | 26000 U | 26000 U | 28000 U | 27000 U | 12000 U |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | 110 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 70 | 70 | 80 | 74 | 77 | 77 | 73 | 73 | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-017 | SB-018 | SB-019 | SB-019 | SB-020 | SB-020 | SB-021 | SB-021 | SB-035 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-17-05 | SB-18-05 | SB-19-05 | SB-19-10 | SB-20-05 | SB-20-10 | SB-21-05 | SB-21-10 | SB-35-04 |
| SAMPLE DATE | 20031119 | 20031119 | 20031121 | 20031121 | 20031120 | 20031120 | 20031120 | 20031120 | 20040922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 4 |
| BOTTOM DEPTH | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 4 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-036 | SB-500 | SB-500 | SB-501 | SB-501 | SB-502 | SB-502 | SB-503 | SB-504 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-36-05 | SB-500-0406 | SB-500-0810 | SB-501-0406 | SB-501-0810 | SB-502-0406 | SB-502-0810 | SB-503-0406 | SB-504-0406 |
| SAMPLE DATE | 20040917 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 |
| BOTTOM DEPTH | 5 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,1,1-TRICHLOROETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,1,2-TRICHLOROETHANE | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,1-DICHLOROETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,1-DICHLOROETHENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,1-DICHLOROPROPENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,2,3-TRICHLOROBENZENE | 6 U | 5.6 U | 6 U | 2100 | 14000 | 21 | 710 | 6.1 U | 5.7 U |
| 1,2,3-TRICHLOROPROPANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,2,3-TRIMETHYLBENZENE | NA | 1.7 J | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 0.35 J |
| 1,2,4-TRICHLOROBENZENE | 6 U | 5.6 U | 6 U | 4800 | 69000 | 71 | 3700 | 6.1 U | 0.95 B |
| 1,2,4-TRIMETHYLBENZENE | 6 U | 4.4 J | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 0.92 B | 0.95 B |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | 11 U | 12 U | 550 U | 5800 U | 12 U | 580 U | 12 U | 11 U |
| 1,2-DIBROMOETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,2-DICHLOROBENZENE | 6 U | 5.6 U | 6 U | 280 U | 610 J | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,2-DICHLOROETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 1.5 J |
| 1,2-DICHLOROPROPANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,3,5-TRIMETHYLBENZENE | 6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 0.46 J | 290 U | 6.1 U | 5.7 U |
| 1,3-DICHLOROPROPANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | 5.6 U | 6 U | 17 J | 640 J | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 2-BUTANONE | 59 U | 11 U | 12 U | 550 U | 5800 U | 12 U | 580 U | 12 U | 11 U |
| 2-CHLOROETHYL VINYL ETHER | 6 U | 11 U | 12 U | 550 U | 5800 U | 12 U | 580 U | 12 U | 11 U |
| 2-CHLOROTOLUENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 2-HEXANONE | 59 U | 11 U | 12 U | 550 U | 5800 U | 12 U | 580 U | 12 U | 11 U |
| 4-CHLOROTOLUENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| 4-ISOPROPYLTOLUENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 9 |
| 4-METHYL-2-PENTANONE | 59 U | 11 U | 12 U | 550 U | 5800 U | 12 U | 580 U | 12 U | 11 U |
| ACETONE | 59 U | 11 U | 12 U | 550 U | 5800 U | 12 J | 580 U | 12 U | 21 J |
| BENZENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 0.81 J |
| BROMOBENZENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| BROMOCHLOROMETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| BROMODICHLOROMETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| BROMOFORM | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| BROMOMETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| CARBON DISULFIDE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 1.2 J |
| CARBON TETRACHLORIDE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| CHLOROBENZENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 1.8 J |
| CHLORODIBROMOMETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| CHLOROETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| CHLOROFORM | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| CHLOROMETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| CIS-1,2-DICHLOROETHENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| CIS-1,3-DICHLOROPROPENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| DIBROMOMETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| DICHLORODIFLUOROMETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| DIISOPROPYL ETHER | NA | 11 U | 12 U | 550 U | 5800 U | 12 U | 580 U | 12 U | 11 U |
| ETHYL TERT-BUTYL ETHER | NA | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| ETHYLBENZENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| ISOPROPYLBENZENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 0.82 J |
| M+P-XYLENES | 12 U | 2.1 J | 12 U | 550 U | 5800 U | 12 U | 580 U | 12 U | 11 U |
| METHYL TERT-BUTYL ETHER | 6 U | 11 U | 12 U | 550 U | 5800 U | 12 U | 580 U | 12 U | 11 U |
| METHYLENE CHLORIDE | 8 J | 1.4 B | 3 B | 280 U | 2900 U | 2.7 B | 290 U | 3.3 B | 3.4 B |
| NAPHTHALENE | 6 U | 2.6 B | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 1.3 B |
| N-BUTYLBENZENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| N-PROPYLBENZENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| O-XYLENE | 6 U | 1.3 J | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 1.4 J |
| SEC-BUTYLBENZENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| STYRENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| TERT-AMYL METHYL ETHER | NA | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| TERT-BUTYLBENZENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| TERTIARY-BUTYL ALCOHOL | NA | 110 UR | 120 UR | 5500 UR | 58000 UR | 120 UR | 5800 UR | 120 UR | 110 UR |
| TETRACHLOROETHENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| TOLUENE | 6 U | 0.49 J | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 0.59 J |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | 3.4 J | 12 U | 550 U | 5800 U | 12 U | 580 U | 12 U | 2.2 J |
| TRANS-1,2-DICHLOROETHENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| TRANS-1,3-DICHLOROPROPENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| TRICHLOROETHENE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| TRICHLOROFLUOROMETHANE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 5.7 U |
| VINYL ACETATE | 6 U | 11 U | 12 U | 550 U | 5800 U | 12 U | 580 U | 12 U | 11 U |

| LOCATION | SB-036 | SB-500 | SB-500 | SB-501 | SB-501 | SB-502 | SB-502 | SB-503 | SB-504 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-36-05 | SB-500-0406 | SB-500-0810 | SB-501-0406 | SB-501-0810 | SB-502-0406 | SB-502-0810 | SB-503-0406 | SB-504-0406 |
| SAMPLE DATE | 20040917 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 |
| BOTTOM DEPTH | 5 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 |
| VINYL CHLORIDE | 6 U | 5.6 U | 6 U | 280 U | 2900 U | 5.8 U | 290 U | 6.1 U | 0.64 J |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 2,4,5-TRICHLOROPHENOL | 1000 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 2,4,6-TRICHLOROPHENOL | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 2,4-DICHLOROPHENOL | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 2,4-DIMETHYLPHENOL | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 2,4-DINITROPHENOL | 1000 U | 740 U | 790 U | 740 U | 780 U | 770 U | 7700 U | 800 U | 3000 U |
| 2,4-DINITROTOLUENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 2,6-DINITROTOLUENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 2-CHLORONAPHTHALENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 2-CHLOROPHENOL | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 2-METHYLPHENOL | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 2-NITROANILINE | 1000 U | 740 U | 790 U | 740 U | 780 U | 770 U | 7700 U | 800 U | 3000 U |
| 2-NITROPHENOL | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 3&4-METHYLPHENOL | 400 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 3-NITROANILINE | 1000 U | 740 U | 790 U | 740 U | 780 U | 770 U | 7700 U | 800 U | 3000 U |
| 4,6-DINITRO-2-METHYLPHENOL | 930 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 4-BROMOPHENYL PHENYL ETHER | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 4-CHLORO-3-METHYLPHENOL | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 4-CHLOROANILINE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 4-CHLOROPHENYL PHENYL ETHER | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 4-METHYLPHENOL | NA | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 4-NITROANILINE | 1000 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| 4-NITROPHENOL | 1000 U | 740 U | 790 U | 740 U | 780 U | 770 U | 7700 U | 800 U | 3000 U |
| ACETOPHENONE | 400 U | 75 U | 80 U | 74 U | 79 U | 78 U | 780 U | 81 U | 310 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| BIS(2-CHLOROETHYL)ETHER | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| BUTYL BENZYL PHTHALATE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| CAPROLACTAM | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| CARBAZOLE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 370 J |
| DIBENZOFURAN | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 260 J |
| DIETHYL PHTHALATE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| DIMETHYL PHTHALATE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| DI-N-BUTYL PHTHALATE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| DI-N-OCTYL PHTHALATE | 400 UJ | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| HEXACHLOROBENZENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| HEXACHLOROBUTADIENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| HEXACHLOROCYCLOPENTADIENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| HEXACHLOROETHANE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| ISOPHORONE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| NITROBENZENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| N-NITROSODIMETHYLAMINE | NA | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| N-NITROSO-DI-N-PROPYLAMINE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| N-NITROSODIPHENYLAMINE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| PENTACHLOROPHENOL | 1000 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| PHENOL | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 140 J |
| ACENAPHTHENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 500 J |
| ACENAPHTHYLENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1500 U |
| ANTHRACENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 1100 J |
| BAP EQUIVALENT-HALFND | 400 U | 370 U | 400 U | 370 U | 390 U | 217 | 3800 U | 234 | 2167 |
| BAP EQUIVALENT-POS | 400 U | 370 U | 400 U | 370 U | 390 U | 22 | 3800 U | 34 | 2167 |
| BENZO(A)ANTHRACENE | 400 U | 370 U | 400 U | 370 U | 390 U | 21 J | 3800 U | 28 J | 2000 |
| BENZO(A)PYRENE | 400 UJ | 370 U | 400 U | 370 U | 390 U | 16 J | 3800 U | 26 J | 1500 |
| BENZO(B)FLUORANTHENE | 400 UJ | 370 U | 400 U | 370 U | 390 U | 31 J | 3800 U | 40 J | 1900 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 400 UJ | 370 U | 400 U | 370 U | 390 U | 11 J | 3800 U | 19 J | 710 J |
| BENZO(K)FLUORANTHENE | 400 UJ | 370 U | 400 U | 370 U | 390 U | 9.3 J | 3800 U | 17 J | 770 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-036 | SB-500 | SB-500 | SB-501 | SB-501 | SB-502 | SB-502 | SB-503 | SB-504 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-36-05 | SB-500-0406 | SB-500-0810 | SB-501-0406 | SB-501-0810 | SB-502-0406 | SB-502-0810 | SB-503-0406 | SB-504-0406 |
| SAMPLE DATE | 20040917 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 |
| BOTTOM DEPTH | 5 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-036 | SB-500 | SB-500 | SB-501 | SB-501 | SB-502 | SB-502 | SB-503 | SB-504 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-36-05 | SB-500-0406 | SB-500-0810 | SB-501-0406 | SB-501-0810 | SB-502-0406 | SB-502-0810 | SB-503-0406 | SB-504-0406 |
| SAMPLE DATE | 20040917 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 |
| BOTTOM DEPTH | 5 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 400 U | 370 U | 400 U | 370 U | 390 U | 13 J | 3800 U | 29 J | 1700 |
| DIBENZO(A,H)ANTHRACENE | 400 UJ | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 200 J |
| FLUORANTHENE | 400 U | 370 U | 400 U | 370 U | 390 U | 32 J | 3800 U | 54 J | 4900 |
| FLUORENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 510 J |
| INDENO(1,2,3-CD)PYRENE | 400 UJ | 370 U | 400 U | 370 U | 390 U | 10 J | 3800 U | 15 J | 680 J |
| NAPHTHALENE | 400 U | 370 U | 400 U | 370 U | 390 U | 390 U | 3800 U | 400 U | 330 J |
| PHENANTHRENE | 400 U | 370 U | 400 U | 370 U | 390 U | 10 J | 3800 U | 25 J | 3900 |
| PYRENE | 400 U | 370 U | 400 U | 370 U | 390 U | 20 J | 3800 U | 51 J | 3400 |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 173.3 | 0 U | 304 | 24240 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 300 U | 37 U | 40 U | 740 U | 3900 U | 7700 U | 19000 U | 200 U | 1900 U |
| AROCLOR-1221 | 300 U | 37 U | 40 U | 740 U | 3900 U | 7700 U | 19000 U | 200 U | 1900 U |
| AROCLOR-1232 | 300 U | 37 U | 40 U | 740 U | 3900 U | 7700 U | 19000 U | 200 U | 1900 U |
| AROCLOR-1242 | 300 U | 37 U | 40 U | 740 U | 3900 U | 7700 U | 19000 U | 200 U | 1900 U |
| AROCLOR-1248 | 300 U | 37 U | 40 U | 740 U | 3900 U | 7700 U | 19000 U | 200 U | 1900 U |
| AROCLOR-1254 | 300 U | 37 U | 40 U | 740 U | 3900 U | 7700 U | 19000 U | 200 U | 1900 U |
| AROCLOR-1260 | 300 U | 37 U | 40 U | 5800 | 24000 | 49000 | 65000 | 380 | 11000 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 5800 | 24000 | 49000 | 65000 | 380 | 11000 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 2.8 U | 0.091 B | 0.098 B | 0.068 B | 0.18 J | 0.17 L | 0.14 B | 0.1 B | 0.14 B |
| ARSENIC | 1.3 | 0.31 L | 0.73 L | 1.1 L | 0.94 L | 1.3 L | 0.55 L | 0.42 L | 2 |
| BARIUM | NA | 6.2 | 8.5 | 6.5 | 13.8 | 6.5 | 3.6 | 2.1 | 50.7 |
| BERYLLIUM | 2.8 U | 0.33 | 0.57 | 0.44 | 3.1 | 0.15 | 0.11 | 0.015 B | 0.75 |
| CADMIUM | 2.8 U | 0.0084 B | 0.016 | 0.0056 B | 0.018 K | 0.056 | 0.035 | 0.018 | 0.67 |
| CHROMIUM | 5.6 K | 7.4 K | 10.8 K | 6 K | 15.7 K | 5.9 K | 3.3 K | 3.2 J | 12.9 J |
| COBALT | NA | 1.2 J | 1.7 J | 1.7 J | 4.1 J | 1.1 J | 0.67 J | 0.18 | 8.6 |
| COPPER | 4.7 L | 3.6 J | 4.5 J | 4.9 J | 12.4 J | 2.3 J | 1.6 J | 1.9 J | 12.9 J |
| IRON | NA | 9880 | 10900 | 7710 | 25800 | 5570 | 4060 | 1980 | 15400 |
| LEAD | 2.8 UJ | 1.6 J | 1.3 J | 1.8 J | 5.1 J | 3.6 J | 2.4 J | 2.4 J | 14.4 J |
| MANGANESE | NA | 19.6 L | 18.6 L | 29 L | 70.4 L | 44 L | 39.7 L | 3.5 | 88.8 |
| MERCURY | 0.11 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U | 0.079 |
| MOLYBDENUM | NA | 0.13 B | 0.13 B | 0.17 B | 0.078 UL | 0.14 B | 0.18 B | 0.35 B | 0.38 B |
| NICKEL | 2.8 U | 4 | 6.4 | 2.1 | 14.7 | 1.6 | 1.4 | 0.39 B | 10.9 |
| SELENIUM | 2.8 U | 0.56 L | 0.24 L | 0.18 UL | 0.46 L | 0.19 UL | 0.19 UL | 0.19 U | 0.21 |
| SILVER | 2.8 UL | 0.036 | 0.04 | 0.026 B | 0.078 | 0.031 B | 0.018 B | 0.016 B | 0.16 |
| THALLIUM | 2.3 UL | 0.024 B | 0.033 B | 0.031 B | 0.052 B | 0.015 B | 0.0085 B | 0.011 B | 0.099 K |
| VANADIUM | NA | 10.8 | 17.3 | 7.1 | 20.7 | 7.2 | 4 | 5.3 J | 18.3 J |
| ZINC | 28 UL | 5.7 J | 8.4 J | 7.4 J | 24.8 J | 13.9 J | 14.9 J | 2.8 | 41.1 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 12000 U | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 120 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | 15000 B | 640 J | 25000 B | 34000 B | 48000 | 37000 | 9900 J | 130000 B |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | 89.3 | 83.3 | 89.5 | 84.7 | 85.7 | 85.8 | 82.1 | 87.2 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-036 | SB-500 | SB-500 | SB-501 | SB-501 | SB-502 | SB-502 | SB-503 | SB-504 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-36-05 | SB-500-0406 | SB-500-0810 | SB-501-0406 | SB-501-0810 | SB-502-0406 | SB-502-0810 | SB-503-0406 | SB-504-0406 |
| SAMPLE DATE | 20040917 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 |
| BOTTOM DEPTH | 5 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-504 | SB-505 | SB-505 | SB-506 | SB-506 | SB-507 | SB-507 | SB-508 | SB-508 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-504-0810 | SB-505-0406 | SB-505-0810 | SB-506-0406 | SB-506-0810 | SB-507-0406 | SB-507-0810 | SB-508-0406 | SB-508-0406-AVG |
| SAMPLE DATE | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 |
| BOTTOM DEPTH | 10 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,1,1-TRICHLOROETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,1,2,2-TETRACHLOROETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,1-DICHLOROETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,1-DICHLOROETHENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,1-DICHLOROPROPENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,2,3-TRICHLOROBENZENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,2,3-TRICHLOROPROPANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,2,3-TRIMETHYLBENZENE | 0.35 J | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,2,4-TRICHLOROBENZENE | 0.63 B | 5.8 U | 0.45 B | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,2,4-TRIMETHYLBENZENE | 1.2 B | 5.8 U | 6.3 U | 5.8 U | 1 B | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 12 U | 12 U | 13 U | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U |
| 1,2-DIBROMOETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,2-DICHLOROBENZENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,2-DICHLOROETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,2-DICHLOROPROPANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,3-DICHLOROPROPANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 2-BUTANONE | 4.3 J | 12 U | 13 U | 12 U | 13 U | 2.6 J | 12 U | 12 U | 12 U |
| 2-CHLOROETHYL VINYL ETHER | 12 U | 12 U | 13 U | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U |
| 2-CHLOROTOLUENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 2-HEXANONE | 12 U | 12 U | 13 U | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U |
| 4-CHLOROTOLUENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 4-ISOPROPYLTOLUENE | 1.6 J | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| 4-METHYL-2-PENTANONE | 12 U | 12 U | 13 U | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U |
| ACETONE | 74 J | 12 U | 13 U | 12 U | 14 J | 56 J | 8 J | 12 U | 12 U |
| BENZENE | 0.78 J | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| BROMOBENZENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| BROMOCHLOROMETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| BROMODICHLOROMETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| BROMOFORM | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| BROMOMETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| CARBON DISULFIDE | 2.4 J | 5.8 U | 6.3 U | 5.8 U | 4.2 J | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| CARBON TETRACHLORIDE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| CHLOROBENZENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| CHLORODIBROMOMETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| CHLOROETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| CHLOROFORM | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| CHLOROMETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| CIS-1,2-DICHLOROETHENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| CIS-1,3-DICHLOROPROPENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| DIBROMOMETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| DICHLORODIFLUOROMETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| DIISOPROPYL ETHER | 12 U | 12 U | 13 U | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U |
| ETHYL TERT-BUTYL ETHER | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| ETHYLBENZENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| ISOPROPYLBENZENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| M+P-XYLENES | 12 U | 12 U | 13 U | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U |
| METHYL TERT-BUTYL ETHER | 12 U | 12 U | 13 U | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U |
| METHYLENE CHLORIDE | 3.7 B | 3.1 B | 2.5 B | 2.3 B | 1.8 B | 6.5 B | 5.3 B | 7.1 B | 6.25 U |
| NAPHTHALENE | 2.4 B | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| N-BUTYLBENZENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| N-PROPYLBENZENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| O-XYLENE | 0.8 J | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| SEC-BUTYLBENZENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| STYRENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| TERT-AMYL METHYL ETHER | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| TERT-BUTYLBENZENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| TERTIARY-BUTYL ALCOHOL | 120 UR | 120 UR | 130 UR | 120 UR | 130 UR | 120 UR | 120 UR | 120 UR | 120 R |
| TETRACHLOROETHENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| TOLUENE | 0.47 J | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1.5 J | 12 U | 13 U | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U |
| TRANS-1,2-DICHLOROETHENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| TRANS-1,3-DICHLOROPROPENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| TRICHLOROETHENE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| TRICHLOROFLUOROMETHANE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| VINYL ACETATE | 12 U | 12 U | 13 U | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U |

| LOCATION | SB-504 | SB-505 | SB-505 | SB-506 | SB-506 | SB-507 | SB-507 | SB-508 | SB-508 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-504-0810 | SB-505-0406 | SB-505-0810 | SB-506-0406 | SB-506-0810 | SB-507-0406 | SB-507-0810 | SB-508-0406 | SB-508-0406-AVG |
| SAMPLE DATE | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 |
| BOTTOM DEPTH | 10 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 |
| VINYL CHLORIDE | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U | 5.8 U | 5.8 U | 5.85 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 2,4,5-TRICHLOROPHENOL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 2,4,6-TRICHLOROPHENOL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 2,4-DICHLOROPHENOL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 2,4-DIMETHYLPHENOL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 2,4-DINITROPHENOL | 770 U | 770 U | 830 U | 760 U | 840 U | 810 U | 760 U | 770 U | 775 U |
| 2,4-DINITROTOLUENE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 2,6-DINITROTOLUENE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 2-CHLORONAPHTHALENE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 2-CHLOROPHENOL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 2-METHYLPHENOL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 2-NITROANILINE | 770 U | 770 U | 830 U | 760 U | 840 U | 810 U | 760 U | 770 U | 775 U |
| 2-NITROPHENOL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 3-NITROANILINE | 770 U | 770 U | 830 U | 760 U | 840 U | 810 U | 760 U | 770 U | 775 U |
| 4,6-DINITRO-2-METHYLPHENOL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 4-BROMOPHENYL PHENYL ETHER | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 4-CHLORO-3-METHYLPHENOL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 4-CHLOROANILINE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 4-CHLOROPHENYL PHENYL ETHER | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 4-METHYLPHENOL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 4-NITROANILINE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| 4-NITROPHENOL | 770 U | 770 U | 830 U | 760 U | 840 U | 810 U | 760 U | 770 U | 775 U |
| ACETOPHENONE | 77 U | 78 U | 84 U | 77 U | 85 U | 82 U | 77 U | 78 U | 78 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| BIS(2-CHLOROETHYL)ETHER | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 38 J | 380 U | 25 J | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| BUTYL BENZYL PHTHALATE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| CAPROLACTAM | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| CARBAZOLE | 22 J | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| DIBENZOFURAN | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| DIETHYL PHTHALATE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| DIMETHYL PHTHALATE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| DI-N-BUTYL PHTHALATE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| DI-N-OCTYL PHTHALATE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| HEXACHLOROBENZENE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| HEXACHLOROBUTADIENE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| HEXACHLOROCYCLOPENTADIENE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| HEXACHLOROETHANE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| ISOPHORONE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| NITROBENZENE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| N-NITROSODIMETHYLAMINE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| N-NITROSO-DI-N-PROPYLAMINE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| N-NITROSODIPHENYLAMINE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| PENTACHLOROPHENOL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| PHENOL | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 12 J | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| ACENAPHTHENE | 21 J | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| ACENAPHTHYLENE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| ANTHRACENE | 26 J | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| BAP EQUIVALENT-HALFND | 287 | 380 U | 239 | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| BAP EQUIVALENT-POS | 97 | 380 U | 13 | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| BENZO(A)ANTHRACENE | 83 J | 380 U | 9.7 J | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| BENZO(A)PYRENE | 73 J | 380 U | 10 J | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| BENZO(B)FLUORANTHENE | 110 J | 380 U | 21 J | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 47 J | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| BENZO(K)FLUORANTHENE | 38 J | 380 U | 9.2 J | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-504 | SB-505 | SB-505 | SB-506 | SB-506 | SB-507 | SB-507 | SB-508 | SB-508 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-504-0810 | SB-505-0406 | SB-505-0810 | SB-506-0406 | SB-506-0810 | SB-507-0406 | SB-507-0810 | SB-508-0406 | SB-508-0406-AVG |
| SAMPLE DATE | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 |
| BOTTOM DEPTH | 10 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-504 | SB-505 | SB-505 | SB-506 | SB-506 | SB-507 | SB-507 | SB-508 | SB-508 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-504-0810 | SB-505-0406 | SB-505-0810 | SB-506-0406 | SB-506-0810 | SB-507-0406 | SB-507-0810 | SB-508-0406 | SB-508-0406-AVG |
| SAMPLE DATE | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 |
| BOTTOM DEPTH | 10 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 71 J | 380 U | 12 J | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| DIBENZO(A,H)ANTHRACENE | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| FLUORANTHENE | 190 J | 380 U | 21 J | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| FLUORENE | 19 J | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| INDENO(1,2,3-CD)PYRENE | 43 J | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| NAPHTHALENE | 22 J | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| PHENANTHRENE | 100 J | 380 U | 410 U | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| PYRENE | 120 J | 380 U | 17 J | 380 U | 420 U | 410 U | 380 U | 390 U | 390 U |
| TOTAL PAHS | 975 | 0 U | 99.9 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 380 U | 38 U | 210 U | 38 U | 42 U | 41 U | 38 U | 39 U | 39 U |
| AROCLOR-1221 | 380 U | 38 U | 210 U | 38 U | 42 U | 41 U | 38 U | 39 U | 39 U |
| AROCLOR-1232 | 380 U | 38 U | 210 U | 38 U | 42 U | 41 U | 38 U | 39 U | 39 U |
| AROCLOR-1242 | 380 U | 38 U | 210 U | 38 U | 42 U | 41 U | 38 U | 39 U | 39 U |
| AROCLOR-1248 | 380 U | 38 U | 210 U | 38 U | 42 U | 41 U | 38 U | 39 U | 39 U |
| AROCLOR-1254 | 380 U | 38 U | 210 U | 38 U | 42 U | 41 U | 38 U | 39 U | 39 U |
| AROCLOR-1260 | 2300 | 15 J | 650 | 38 U | 20 J | 41 U | 38 U | 39 U | 39 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 2300 | 15 | 650 | 0 U | 20 | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.13 B | 0.17 B | 0.12 B | 0.045 B | 0.033 B | 0.067 B | 0.036 B | 0.11 B | 0.0945 U |
| ARSENIC | 1.2 L | 1.2 L | 1.7 | 1.6 | 1 L | 2.3 | 1.1 L | 1.4 | 1.2 |
| BARIUM | 89.2 | 21.1 | 16.6 | 17.9 | 9.5 | 20.6 | 9.8 | 11.4 | 9.75 |
| BERYLLIUM | 0.38 | 0.95 | 0.72 | 0.61 | 0.48 | 1.1 | 1.6 | 0.85 | 0.79 |
| CADMIUM | 0.38 K | 0.018 K | 0.069 K | 0.022 | 0.0077 B | 0.038 K | 0.028 | 0.014 B | 0.014 U |
| CHROMIUM | 13.3 J | 10.2 J | 12.8 J | 8.7 J | 4.4 J | 11.1 J | 7.5 J | 9.1 J | 7.9 |
| COBALT | 4.5 | 6.3 | 4.6 | 3.3 | 2.4 | 3.3 | 1.2 | 2.3 | 2 |
| COPPER | 16.6 J | 14.6 J | 11.7 J | 7 J | 4.6 J | 6.8 J | 6.3 J | 10.6 J | 9.4 |
| IRON | 18900 | 17700 | 17000 | 8880 | 6210 | 13600 | 3760 | 17700 | 14550 |
| LEAD | 10.4 J | 3.7 J | 4 J | 4.4 J | 2.4 J | 6.8 J | 3.3 J | 3.4 J | 3.1 |
| MANGANESE | 168 | 34.5 | 31.3 | 41.5 | 29.3 | 44.7 | 8.1 | 14.3 J | 73.15 |
| MERCURY | 0.29 | 0.019 U | 0.021 U | 0.019 U | 0.021 U | 0.021 U | 0.019 U | 0.019 U | 0.0195 U |
| MOLYBDENUM | 1.3 J | 0.15 B | 0.42 B | 0.12 B | 0.16 B | 0.33 B | 0.11 B | 0.13 B | 0.111 U |
| NICKEL | 11.1 | 10.3 | 6.5 | 8.2 | 2.8 | 7.1 | 4.2 | 6.6 | 6.1 |
| SELENIUM | 0.31 | 0.31 | 0.2 | 0.19 U | 0.2 U | 0.21 | 0.56 | 0.32 | 0.35 |
| SILVER | 0.094 | 0.073 | 0.07 | 0.051 | 0.034 B | 0.077 | 0.036 B | 0.078 | 0.0785 |
| THALLIUM | 0.21 K | 0.051 B | 0.04 B | 0.047 B | 0.027 B | 0.13 K | 0.041 B | 0.046 B | 0.041 U |
| VANADIUM | 20.2 J | 18.8 J | 15.9 J | 16 J | 7.6 J | 17.5 J | 14.4 J | 19.8 J | 16.55 |
| ZINC | 45.7 | 19.5 | 18.1 | 26.3 | 9.8 | 25.4 | 8.5 | 16.8 J | 13.1 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | 43000 | 2700 B | 7000 J | 17000 J | 3600 J | 4300 J | 2700 B | 1900 B | 1800 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 86 | 85.9 | 79.7 | 86.4 | 78.5 | 81.1 | 86.3 | 85.6 | 85.35 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-504 | SB-505 | SB-505 | SB-506 | SB-506 | SB-507 | SB-507 | SB-508 | SB-508 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-504-0810 | SB-505-0406 | SB-505-0810 | SB-506-0406 | SB-506-0810 | SB-507-0406 | SB-507-0810 | SB-508-0406 | SB-508-0406-AVG |
| SAMPLE DATE | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 |
| BOTTOM DEPTH | 10 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-508 | SB-508 | SB-509 | SB-509 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-508-0406-D | SB-508-0810 | SB-509-0406 | SB-509-0810 | E-SB-834-05 | E-SB-834-07 | E-SB-834-09 | E-SB-835-03 | E-SB-835-05 |
| SAMPLE DATE | 20071128 | 20071128 | 20071129 | 20071129 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 4 | 8 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 6 | 10 | 6 | 10 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 12 U | 12 U | 12 U | 11 U | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 2-BUTANONE | 12 U | 4.6 J | 12 U | 11 U | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 12 U | 12 U | 12 U | 11 U | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 2-HEXANONE | 12 U | 12 U | 12 U | 11 U | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 12 U | 12 U | 12 U | 11 U | NA | NA | NA | NA | NA |
| ACETONE | 12 U | 13 J | 10 J | 15 J | NA | NA | NA | NA | NA |
| BENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| BROMOBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| BROMOFORM | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| BROMOMETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| CHLOROETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| CHLOROFORM | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | 12 U | 12 U | 12 U | 11 U | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| M+P-XYLENES | 12 U | 12 U | 12 U | 11 U | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 12 U | 12 U | 12 U | 11 U | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 5.4 B | 7.2 B | 4.8 B | 4.3 B | NA | NA | NA | NA | NA |
| NAPHTHALENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| O-XYLENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| STYRENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | 120 UR | 120 UR | 120 UR | 110 UR | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| TOLUENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 12 U | 12 U | 12 U | 11 U | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| VINYL ACETATE | 12 U | 12 U | 12 UJ | 11 UJ | NA | NA | NA | NA | NA |

| LOCATION | SB-508 | SB-508 | SB-509 | SB-509 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-508-0406-D | SB-508-0810 | SB-509-0406 | SB-509-0810 | E-SB-834-05 | E-SB-834-07 | E-SB-834-09 | E-SB-835-03 | E-SB-835-05 |
| SAMPLE DATE | 20071128 | 20071128 | 20071129 | 20071129 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 4 | 8 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 6 | 10 | 6 | 10 | 5 | 7 | 9 | 3 | 5 |
| VINYL CHLORIDE | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 780 U | 790 U | 760 U | 760 U | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 780 U | 790 U | 760 U | 760 U | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 780 U | 790 U | 760 U | 760 U | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | 780 U | 790 U | 760 U | 760 U | NA | NA | NA | NA | NA |
| ACETOPHENONE | 78 U | 80 U | 77 U | 76 U | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| CAPROLACTAM | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| CARBAZOLE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| ISOPHORONE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| NITROBENZENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| PHENOL | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| ANTHRACENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-508 | SB-508 | SB-509 | SB-509 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-508-0406-D | SB-508-0810 | SB-509-0406 | SB-509-0810 | E-SB-834-05 | E-SB-834-07 | E-SB-834-09 | E-SB-835-03 | E-SB-835-05 |
| SAMPLE DATE | 20071128 | 20071128 | 20071129 | 20071129 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 4 | 8 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 6 | 10 | 6 | 10 | 5 | 7 | 9 | 3 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |

| LOCATION | SB-508 | SB-508 | SB-509 | SB-509 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-508-0406-D | SB-508-0810 | SB-509-0406 | SB-509-0810 | E-SB-834-05 | E-SB-834-07 | E-SB-834-09 | E-SB-835-03 | E-SB-835-05 |
| SAMPLE DATE | 20071128 | 20071128 | 20071129 | 20071129 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 4 | 8 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 6 | 10 | 6 | 10 | 5 | 7 | 9 | 3 | 5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 81 U | NA | NA | NA |
| CHRYSENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| FLUORANTHENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| FLUORENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| NAPHTHALENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| PHENANTHRENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| PYRENE | 390 U | 400 U | 380 U | 380 U | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 39 U | 40 U | 38 U | 38 U | 28 U | 25 U | 27 U | 23 U | 25 U |
| AROCLOR-1221 | 39 U | 40 U | 38 U | 38 U | 22 U | 19 U | 21 U | 18 U | 19 U |
| AROCLOR-1232 | 39 U | 40 U | 38 U | 38 U | 19 U | 17 U | 18 U | 16 U | 17 U |
| AROCLOR-1242 | 39 U | 40 U | 38 U | 38 U | 17 U | 16 U | 17 U | 15 U | 16 U |
| AROCLOR-1248 | 39 U | 40 U | 38 U | 38 U | 23 U | 20 U | 22 U | 19 U | 21 U |
| AROCLOR-1254 | 39 U | 40 U | 38 U | 38 U | 23 U | 20 U | 22 U | 19 U | 21 U |
| AROCLOR-1260 | 39 U | 40 U | 38 U | 38 U | 280 | 23 J | 24 J | 19 U | 310 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 280 | 23 | 24 | 0 U | 310 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.079 B | 0.084 B | 0.059 L | 0.12 L | NA | NA | NA | NA | NA |
| ARSENIC | 1 L | 0.42 L | 1.7 J | 2.5 J | NA | NA | NA | NA | NA |
| BARIUM | 8.1 | 8.5 | 8.9 K | 5.7 K | NA | NA | NA | NA | NA |
| BERYLLIUM | 0.73 | 1.5 | 0.62 | 0.33 | NA | NA | NA | NA | NA |
| CADMIUM | 0.014 B | 0.016 K | 0.016 B | 0.0087 B | NA | NA | NA | NA | NA |
| CHROMIUM | 6.7 J | 13.2 J | 10 J | 8.3 J | NA | NA | NA | NA | NA |
| COBALT | 1.7 | 3.5 | 2.3 | 2.3 | NA | NA | NA | NA | NA |
| COPPER | 8.2 J | 11.4 J | 11.3 J | 6.7 J | NA | NA | NA | NA | NA |
| IRON | 11400 | 8540 | 10300 | 10200 | NA | NA | NA | NA | NA |
| LEAD | 2.8 J | 3.3 J | 2.5 J | 1.4 J | NA | NA | NA | NA | NA |
| MANGANESE | 132 J | 18.8 | 27.1 L | 25.9 L | NA | NA | NA | NA | NA |
| MERCURY | 0.02 U | 0.02 U | 0.019 UL | 0.019 UL | NA | NA | NA | NA | NA |
| MOLYBDENUM | 0.092 B | 0.079 UL | 0.1 B | 0.27 B | NA | NA | NA | NA | NA |
| NICKEL | 5.6 | 10.3 | 5.4 J | 3.9 J | NA | NA | NA | NA | NA |
| SELENIUM | 0.38 | 0.21 | 0.3 L | 0.18 UL | NA | NA | NA | NA | NA |
| SILVER | 0.079 | 0.05 | 0.042 | 0.032 | NA | NA | NA | NA | NA |
| THALLIUM | 0.036 B | 0.035 B | 0.028 B | 0.02 B | NA | NA | NA | NA | NA |
| VANADIUM | 13.3 J | 13.4 J | 14.5 J | 10.6 J | NA | NA | NA | NA | NA |
| ZINC | 9.4 J | 14.8 | 10.7 B | 6 B | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | 1700 B | 2700 B | 13000 B | 5600 B | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 85.1 | 83.1 | 86.3 | 87.4 | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-508 | SB-508 | SB-509 | SB-509 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-508-0406-D | SB-508-0810 | SB-509-0406 | SB-509-0810 | E-SB-834-05 | E-SB-834-07 | E-SB-834-09 | E-SB-835-03 | E-SB-835-05 |
| SAMPLE DATE | 20071128 | 20071128 | 20071129 | 20071129 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 4 | 8 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 6 | 10 | 6 | 10 | 5 | 7 | 9 | 3 | 5 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-835 | SB-835 | SB-836 | SB-836 | SB-836 | SB-836 | SB-837 | SB-837 | SB-837 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-835-07 | E-SB-835-09 | E-SB-836-03 | E-SB-836-05 | E-SB-836-07 | E-SB-836-09 | E-SB-837-03 | E-SB-837-05 | E-SB-837-07 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-835 | SB-835 | SB-836 | SB-836 | SB-836 | SB-836 | SB-837 | SB-837 | SB-837 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-835-07 | E-SB-835-09 | E-SB-836-03 | E-SB-836-05 | E-SB-836-07 | E-SB-836-09 | E-SB-837-03 | E-SB-837-05 | E-SB-837-07 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-835 | SB-835 | SB-836 | SB-836 | SB-836 | SB-836 | SB-837 | SB-837 | SB-837 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-835-07 | E-SB-835-09 | E-SB-836-03 | E-SB-836-05 | E-SB-836-07 | E-SB-836-09 | E-SB-837-03 | E-SB-837-05 | E-SB-837-07 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C1-FLUORENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C2-FLUORENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C2-NAPHTHALENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |

| LOCATION | SB-835 | SB-835 | SB-836 | SB-836 | SB-836 | SB-836 | SB-837 | SB-837 | SB-837 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-835-07 | E-SB-835-09 | E-SB-836-03 | E-SB-836-05 | E-SB-836-07 | E-SB-836-09 | E-SB-837-03 | E-SB-837-05 | E-SB-837-07 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C3-FLUORENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C3-NAPHTHALENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C4-NAPHTHALENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | 81 U | NA | NA | NA | 78 U | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 26 U | 240 U | 28 U | 25 U | 25 U | 27 U | 23 U | 23 U | 25 U |
| AROCLOR-1221 | 19 U | 190 U | 22 U | 19 U | 19 U | 20 U | 17 U | 18 U | 19 U |
| AROCLOR-1232 | 17 U | 160 U | 19 U | 17 U | 16 U | 18 U | 15 U | 16 U | 17 U |
| AROCLOR-1242 | 16 U | 150 U | 18 U | 15 U | 15 U | 16 U | 14 U | 15 U | 16 U |
| AROCLOR-1248 | 21 U | 200 U | 23 U | 20 U | 20 U | 22 U | 18 U | 19 U | 21 U |
| AROCLOR-1254 | 21 U | 200 U | 23 U | 20 U | 20 U | 22 U | 18 U | 19 U | 21 U |
| AROCLOR-1260 | 94 | 3500 | 23 U | 22 J | 20 U | 22 U | 18 U | 19 U | 21 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 94 | 3500 | 0 U | 22 | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-835 | SB-835 | SB-836 | SB-836 | SB-836 | SB-836 | SB-837 | SB-837 | SB-837 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-835-07 | E-SB-835-09 | E-SB-836-03 | E-SB-836-05 | E-SB-836-07 | E-SB-836-09 | E-SB-837-03 | E-SB-837-05 | E-SB-837-07 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-837 | SB-838 | SB-838 | SB-838 | SB-838 | SB-839 | SB-839 | SB-839 | SB-839 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-837-09 | E-SB-838-3 | E-SB-838-5 | E-SB-838-7 | E-SB-838-9 | E-SB-839-03 | E-SB-839-05 | E-SB-839-07 | E-SB-839-09 |
| SAMPLE DATE | 20100917 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-837 | SB-838 | SB-838 | SB-838 | SB-838 | SB-839 | SB-839 | SB-839 | SB-839 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-837-09 | E-SB-838-3 | E-SB-838-5 | E-SB-838-7 | E-SB-838-9 | E-SB-839-03 | E-SB-839-05 | E-SB-839-07 | E-SB-839-09 |
| SAMPLE DATE | 20100917 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-837 | SB-838 | SB-838 | SB-838 | SB-838 | SB-839 | SB-839 | SB-839 | SB-839 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-837-09 | E-SB-838-3 | E-SB-838-5 | E-SB-838-7 | E-SB-838-9 | E-SB-839-03 | E-SB-839-05 | E-SB-839-07 | E-SB-839-09 |
| SAMPLE DATE | 20100917 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-837 | SB-838 | SB-838 | SB-838 | SB-838 | SB-839 | SB-839 | SB-839 | SB-839 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-837-09 | E-SB-838-3 | E-SB-838-5 | E-SB-838-7 | E-SB-838-9 | E-SB-839-03 | E-SB-839-05 | E-SB-839-07 | E-SB-839-09 |
| SAMPLE DATE | 20100917 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | 24 U | 24 U | 25 U | 25 U | 25 U | 25 U | 25 U | 25 U |
| AROCLOR-1221 | 18 U | 18 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| AROCLOR-1232 | 16 U | 16 U | 16 U | 17 U | 17 U | 17 U | 16 U | 17 U | 17 U |
| AROCLOR-1242 | 15 U | 15 U | 15 U | 16 U | 15 U | 15 U | 15 U | 16 U | 15 U |
| AROCLOR-1248 | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1254 | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1260 | 59 | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 27 J |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 59 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 27 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-837 | SB-838 | SB-838 | SB-838 | SB-838 | SB-839 | SB-839 | SB-839 | SB-839 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-837-09 | E-SB-838-3 | E-SB-838-5 | E-SB-838-7 | E-SB-838-9 | E-SB-839-03 | E-SB-839-05 | E-SB-839-07 | E-SB-839-09 |
| SAMPLE DATE | 20100917 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 | SB-841 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-840-03 | E-SB-840-05 | E-SB-840-05-AVG | E-SB-840-05-D | E-SB-840-07 | E-SB-840-09 | E-SB-841-03 | E-SB-841-05 | E-SB-841-07 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 | SB-841 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-840-03 | E-SB-840-05 | E-SB-840-05-AVG | E-SB-840-05-D | E-SB-840-07 | E-SB-840-09 | E-SB-841-03 | E-SB-841-05 | E-SB-841-07 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 | SB-841 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-840-03 | E-SB-840-05 | E-SB-840-05-AVG | E-SB-840-05-D | E-SB-840-07 | E-SB-840-09 | E-SB-841-03 | E-SB-841-05 | E-SB-841-07 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 | SB-841 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-840-03 | E-SB-840-05 | E-SB-840-05-AVG | E-SB-840-05-D | E-SB-840-07 | E-SB-840-09 | E-SB-841-03 | E-SB-841-05 | E-SB-841-07 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 23 U | 25 U | 25 U | 25 U | 25 U | 24 U | 24 U | 24 U | 25 U |
| AROCLOR-1221 | 17 U | 19 U | 19 U | 19 U | 19 U | 18 U | 18 U | 18 U | 19 U |
| AROCLOR-1232 | 15 U | 17 U | 17 U | 17 U | 17 U | 16 U | 16 U | 16 U | 16 U |
| AROCLOR-1242 | 14 U | 16 U | 16 U | 16 U | 15 U | 15 U | 15 U | 15 U | 15 U |
| AROCLOR-1248 | 18 U | 20 U | 20 U | 20 U | 20 U | 19 U | 19 U | 19 U | 20 U |
| AROCLOR-1254 | 18 U | 20 U | 20 U | 20 U | 20 U | 19 U | 19 U | 19 U | 20 U |
| AROCLOR-1260 | 18 U | 20 U | 20 U | 20 U | 20 U | 19 U | 19 U | 35 J | 68 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 35 | 68 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 | SB-841 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-840-03 | E-SB-840-05 | E-SB-840-05-AVG | E-SB-840-05-D | E-SB-840-07 | E-SB-840-09 | E-SB-841-03 | E-SB-841-05 | E-SB-841-07 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-841 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-841-09 | E-SB-842-3 | E-SB-842-5 | E-SB-842-7 | E-SB-842-9 | E-SB-843-03 | E-SB-843-05 | E-SB-843-07 | E-SB-843-09 |
| SAMPLE DATE | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-841 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-841-09 | E-SB-842-3 | E-SB-842-5 | E-SB-842-7 | E-SB-842-9 | E-SB-843-03 | E-SB-843-05 | E-SB-843-07 | E-SB-843-09 |
| SAMPLE DATE | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-841 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-841-09 | E-SB-842-3 | E-SB-842-5 | E-SB-842-7 | E-SB-842-9 | E-SB-843-03 | E-SB-843-05 | E-SB-843-07 | E-SB-843-09 |
| SAMPLE DATE | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-841 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-841-09 | E-SB-842-3 | E-SB-842-5 | E-SB-842-7 | E-SB-842-9 | E-SB-843-03 | E-SB-843-05 | E-SB-843-07 | E-SB-843-09 |
| SAMPLE DATE | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | 24 U | 25 U | 25 U | 25 U | 24 U | 25 U | 24 U | 24 U |
| AROCLOR-1221 | 19 U | 18 U | 19 U | 19 U | 19 U | 18 U | 19 U | 19 U | 18 U |
| AROCLOR-1232 | 16 U | 16 U | 16 U | 16 U | 16 U | 16 U | 17 U | 16 U | 16 U |
| AROCLOR-1242 | 15 U | 15 U | 15 U | 15 U | 15 U | 15 U | 16 U | 15 U | 15 U |
| AROCLOR-1248 | 20 U | 19 U | 20 U | 20 U | 20 U | 19 U | 20 U | 20 U | 19 U |
| AROCLOR-1254 | 20 U | 19 U | 20 U | 20 U | 20 U | 19 U | 20 U | 20 U | 19 U |
| AROCLOR-1260 | 140 | 19 U | 20 U | 20 U | 20 U | 19 U | 20 U | 20 U | 19 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 140 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-841 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-841-09 | E-SB-842-3 | E-SB-842-5 | E-SB-842-7 | E-SB-842-9 | E-SB-843-03 | E-SB-843-05 | E-SB-843-07 | E-SB-843-09 |
| SAMPLE DATE | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-844 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-845 | SB-846 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-844-03 | E-SB-844-05 | E-SB-844-07 | E-SB-844-09 | E-SB-845-03 | E-SB-845-05 | E-SB-845-07 | E-SB-845-09 | E-SB-846-03 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-844 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-845 | SB-846 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-844-03 | E-SB-844-05 | E-SB-844-07 | E-SB-844-09 | E-SB-845-03 | E-SB-845-05 | E-SB-845-07 | E-SB-845-09 | E-SB-846-03 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-844 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-845 | SB-846 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-844-03 | E-SB-844-05 | E-SB-844-07 | E-SB-844-09 | E-SB-845-03 | E-SB-845-05 | E-SB-845-07 | E-SB-845-09 | E-SB-846-03 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-844 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-845 | SB-846 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-844-03 | E-SB-844-05 | E-SB-844-07 | E-SB-844-09 | E-SB-845-03 | E-SB-845-05 | E-SB-845-07 | E-SB-845-09 | E-SB-846-03 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 28 U | 27 U | 26 U | 130 U | 24 U | 23 U | 25 U | 120 U | 25 U |
| AROCLOR-1221 | 21 U | 20 U | 20 U | 100 U | 18 U | 17 U | 19 U | 88 U | 19 U |
| AROCLOR-1232 | 19 U | 18 U | 17 U | 87 U | 16 U | 15 U | 17 U | 77 U | 16 U |
| AROCLOR-1242 | 17 U | 17 U | 16 U | 81 U | 15 U | 14 U | 15 U | 72 U | 15 U |
| AROCLOR-1248 | 23 U | 22 U | 21 U | 110 U | 19 U | 18 U | 20 U | 94 U | 20 U |
| AROCLOR-1254 | 23 U | 22 U | 21 U | 110 U | 44 | 18 U | 20 U | 94 U | 20 U |
| AROCLOR-1260 | 23 U | 120 | 21 U | 400 | 19 U | 18 U | 20 U | 350 | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 120 | 0 U | 400 | 44 | 0 U | 0 U | 350 | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-844 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-845 | SB-846 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-844-03 | E-SB-844-05 | E-SB-844-07 | E-SB-844-09 | E-SB-845-03 | E-SB-845-05 | E-SB-845-07 | E-SB-845-09 | E-SB-846-03 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-846 | SB-846 | SB-846 | SB-847 | SB-847 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-846-05 | E-SB-846-07 | E-SB-846-09 | E-SB-847-03 | E-SB-847-05 | E-SB-847-07 | E-SB-847-09 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-846 | SB-846 | SB-846 | SB-847 | SB-847 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-846-05 | E-SB-846-07 | E-SB-846-09 | E-SB-847-03 | E-SB-847-05 | E-SB-847-07 | E-SB-847-09 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-846 | SB-846 | SB-846 | SB-847 | SB-847 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-846-05 | E-SB-846-07 | E-SB-846-09 | E-SB-847-03 | E-SB-847-05 | E-SB-847-07 | E-SB-847-09 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-846 | SB-846 | SB-846 | SB-847 | SB-847 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-846-05 | E-SB-846-07 | E-SB-846-09 | E-SB-847-03 | E-SB-847-05 | E-SB-847-07 | E-SB-847-09 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 22 U | 24 U | 26 U | 25 U | 25 U | 25 U | 25 U |
| AROCLOR-1221 | 17 U | 18 U | 20 U | 19 U | 19 U | 19 U | 19 U |
| AROCLOR-1232 | 15 U | 16 U | 17 U | 17 U | 17 U | 17 U | 17 U |
| AROCLOR-1242 | 14 U | 15 U | 16 U | 15 U | 16 U | 16 U | 16 U |
| AROCLOR-1248 | 18 U | 20 U | 21 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1254 | 18 U | 20 U | 21 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1260 | 18 U | 20 U | 21 U | 60 | 20 U | 20 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 60 | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-846 | SB-846 | SB-846 | SB-847 | SB-847 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-846-05 | E-SB-846-07 | E-SB-846-09 | E-SB-847-03 | E-SB-847-05 | E-SB-847-07 | E-SB-847-09 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-005 | SB-005 | SB-006 | SB-006 | SB-009 | SB-510 | SB-510 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5-05 | SB-5-10 | SB-6-05 | SB-6-10 | SB-9-05 | SB-510-0406 | SB-510-0810 |
| SAMPLE DATE | 20031120 | 20031120 | 20031120 | 20031120 | 20031118 | 20071128 | 20071128 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 4 | 8 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 6 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,1,1-TRICHLOROETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,1,2-TRICHLOROETHANE | 6 U | 7 U | 7 U | 7 U | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | 5.8 U | 5.8 U |
| 1,1-DICHLOROETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,1-DICHLOROETHENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,1-DICHLOROPROPENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,2,3-TRICHLOROBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,2,3-TRICHLOROPROPANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | 5.8 U | 5.8 U |
| 1,2,4-TRICHLOROBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,2,4-TRIMETHYLBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | 7 U | 7 U | 7 U | NA | 12 U | 12 U |
| 1,2-DIBROMOETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,2-DICHLOROBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,2-DICHLOROETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,2-DICHLOROPROPANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,3,5-TRIMETHYLBENZENE | 6 U | 7 U | 7 U | 7 U | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,3-DICHLOROPROPANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 2-BUTANONE | 64 U | 68 U | 65 U | 66 U | NA | 12 U | 12 U |
| 2-CHLOROETHYL VINYL ETHER | 6 U | 7 U | 7 U | 7 U | NA | 12 U | 12 U |
| 2-CHLOROTOLUENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 2-HEXANONE | 64 U | 68 U | 65 U | 66 U | NA | 12 U | 12 U |
| 4-CHLOROTOLUENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 4-ISOPROPYLTOLUENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| 4-METHYL-2-PENTANONE | 64 U | 68 U | 65 U | 66 U | NA | 12 U | 12 U |
| ACETONE | 64 UJ | 7 J | 7 J | 66 UJ | NA | 12 U | 8.9 J |
| BENZENE | 6 U | 7 U | 7 U | 7 U | 1 U | 5.8 U | 5.8 U |
| BROMOBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| BROMOCHLOROMETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| BROMODICHLOROMETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| BROMOFORM | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| BROMOMETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| CARBON DISULFIDE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| CARBON TETRACHLORIDE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| CHLOROBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| CHLORODIBROMOMETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| CHLOROETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| CHLOROFORM | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| CHLOROMETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| CIS-1,2-DICHLOROETHENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| CIS-1,3-DICHLOROPROPENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| DIBROMOMETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| DICHLORODIFLUOROMETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | 12 U | 12 U |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | 5.8 U | 5.8 U |
| ETHYLBENZENE | 6 U | 7 U | 7 U | 7 U | 1 U | 5.8 U | 5.8 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| ISOPROPYLBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| M+P-XYLENES | 19 U | 20 U | 19 U | 20 U | NA | 12 U | 12 U |
| METHYL TERT-BUTYL ETHER | 6 U | 7 U | 7 U | 7 U | NA | 12 U | 12 U |
| METHYLENE CHLORIDE | 10 J | 10 J | 9 J | 10 J | NA | 5.2 B | 4.5 B |
| NAPHTHALENE | 6 U | 7 U | 7 U | 7 U | 1 U | 5.8 U | 5.8 U |
| N-BUTYLBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| N-PROPYLBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| O-XYLENE | 19 U | 20 U | 19 U | 20 U | NA | 5.8 U | 5.8 U |
| SEC-BUTYLBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| STYRENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | 5.8 U | 5.8 U |
| TERT-BUTYLBENZENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | 120 UR | 120 UR |
| TETRACHLOROETHENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| TOLUENE | 6 U | 7 U | 7 U | 7 U | 2 | 5.8 U | 5.8 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | 10 | 12 U | 12 U |
| TRANS-1,2-DICHLOROETHENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| TRANS-1,3-DICHLOROPROPENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| TRICHLOROETHENE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| TRICHLOROFLUOROMETHANE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| VINYL ACETATE | 6 U | 7 U | 7 U | 7 U | NA | 12 U | 12 U |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-005 | SB-005 | SB-006 | SB-006 | SB-009 | SB-510 | SB-510 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5-05 | SB-5-10 | SB-6-05 | SB-6-10 | SB-9-05 | SB-510-0406 | SB-510-0810 |
| SAMPLE DATE | 20031120 | 20031120 | 20031120 | 20031120 | 20031118 | 20071128 | 20071128 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 4 | 8 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 6 | 10 |
| VINYL CHLORIDE | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 2,4,5-TRICHLOROPHENOL | 1100 U | 1100 U | 1100 U | 1100 U | NA | 380 UL | 380 U |
| 2,4,6-TRICHLOROPHENOL | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 2,4-DICHLOROPHENOL | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 2,4-DIMETHYLPHENOL | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 2,4-DINITROPHENOL | 1100 U | 1100 U | 1100 U | 1100 U | NA | 760 UL | 760 U |
| 2,4-DINITROTOLUENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 2,6-DINITROTOLUENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 2-CHLORONAPHTHALENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 2-CHLOROPHENOL | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 2-METHYLPHENOL | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 2-NITROANILINE | 1100 U | 1100 U | 1100 U | 1100 U | NA | 760 UL | 760 U |
| 2-NITROPHENOL | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 3&4-METHYLPHENOL | 420 U | 450 U | 430 U | 440 U | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 3-NITROANILINE | 1100 U | 1100 U | 1100 U | 1100 U | NA | 760 UL | 760 U |
| 4,6-DINITRO-2-METHYLPHENOL | 980 U | 1000 U | 1000 U | 1000 U | NA | 380 UL | 380 U |
| 4-BROMOPHENYL PHENYL ETHER | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 4-CHLORO-3-METHYLPHENOL | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 4-CHLOROANILINE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 4-CHLOROPHENYL PHENYL ETHER | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | 380 UL | 380 U |
| 4-NITROANILINE | 1100 U | 1100 U | 1100 U | 1100 U | NA | 380 UL | 380 U |
| 4-NITROPHENOL | 1100 U | 1100 U | 1100 U | 1100 U | NA | 760 UL | 760 U |
| ACETOPHENONE | 420 U | 450 U | 430 U | 440 U | NA | 77 UL | 77 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | 380 UL | 380 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| BIS(2-CHLOROETHYL)ETHER | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| BUTYL BENZYL PHTHALATE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| CAPROLACTAM | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| CARBAZOLE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| DIBENZOFURAN | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| DIETHYL PHTHALATE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| DIMETHYL PHTHALATE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| DI-N-BUTYL PHTHALATE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| DI-N-OCTYL PHTHALATE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| HEXACHLOROBENZENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| HEXACHLOROBUTADIENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| HEXACHLOROCYCLOPENTADIENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| HEXACHLOROETHANE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| ISOPHORONE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| NITROBENZENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | 380 UL | 380 U |
| N-NITROSO-DI-N-PROPYLAMINE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| N-NITROSODIPHENYLAMINE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| PENTACHLOROPHENOL | 1100 U | 1100 U | 1100 U | 1100 U | NA | 380 UL | 380 U |
| PHENOL | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| ACENAPHTHENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| ACENAPHTHYLENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| ANTHRACENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| BAP EQUIVALENT-HALFND | 420 U | 450 U | 430 U | 440 U | NA | 380 U | 236 |
| BAP EQUIVALENT-POS | 420 U | 450 U | 430 U | 440 U | NA | 380 U | 46 |
| BENZO(A)ANTHRACENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 34 J |
| BENZO(A)PYRENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 34 J |
| BENZO(B)FLUORANTHENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 64 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 27 J |
| BENZO(K)FLUORANTHENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 18 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-005 | SB-005 | SB-006 | SB-006 | SB-009 | SB-510 | SB-510 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5-05 | SB-5-10 | SB-6-05 | SB-6-10 | SB-9-05 | SB-510-0406 | SB-510-0810 |
| SAMPLE DATE | 20031120 | 20031120 | 20031120 | 20031120 | 20031118 | 20071128 | 20071128 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 4 | 8 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 6 | 10 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-005 | SB-005 | SB-006 | SB-006 | SB-009 | SB-510 | SB-510 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5-05 | SB-5-10 | SB-6-05 | SB-6-10 | SB-9-05 | SB-510-0406 | SB-510-0810 |
| SAMPLE DATE | 20031120 | 20031120 | 20031120 | 20031120 | 20031118 | 20071128 | 20071128 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 4 | 8 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 6 | 10 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 42 J |
| DIBENZO(A,H)ANTHRACENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| FLUORANTHENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 78 J |
| FLUORENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| INDENO(1,2,3-CD)PYRENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 24 J |
| NAPHTHALENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U |
| PHENANTHRENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 25 J |
| PYRENE | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 59 J |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | NA | 0 U | 405 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 64 U | 68 U | 65 U | 66 U | NA | 38 U | 38 U |
| AROCLOR-1221 | 64 U | 68 U | 65 U | 66 U | NA | 38 U | 38 U |
| AROCLOR-1232 | 64 U | 68 U | 65 U | 66 U | NA | 38 U | 38 U |
| AROCLOR-1242 | 64 U | 68 U | 65 U | 66 U | NA | 38 U | 38 U |
| AROCLOR-1248 | 64 U | 68 U | 65 U | 66 U | NA | 38 U | 38 U |
| AROCLOR-1254 | 64 U | 68 U | 65 U | 66 U | NA | 38 U | 38 U |
| AROCLOR-1260 | 64 U | 68 U | 65 U | 66 U | NA | 38 U | 16 J |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | NA | 0 U | 16 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 3.2 UL | 3.4 UL | 3.2 UL | 3.3 UL | NA | 0.13 L | 0.17 L |
| ARSENIC | 1.4 L | 1.1 L | 0.77 L | 2 L | NA | 0.26 J | 0.36 J |
| BARIUM | NA | NA | NA | NA | NA | 7.1 K | 7.8 K |
| BERYLLIUM | 3.2 U | 3.4 U | 3.2 U | 3.3 U | NA | 0.42 | 0.66 |
| CADMIUM | 3.2 U | 3.4 U | 3.2 U | 3.3 U | NA | 0.018 B | 0.03 K |
| CHROMIUM | 4.8 B | 3.8 B | 9.5 B | 22 J | NA | 8.5 J | 11.7 J |
| COBALT | NA | NA | NA | NA | NA | 1.2 | 1.9 |
| COPPER | 3.6 | 3.4 U | 5.4 | 14 | NA | 5.5 J | 6.7 J |
| IRON | NA | NA | NA | NA | NA | 15200 | 20900 |
| LEAD | 3.2 U | 3.4 U | 4.8 | 7.1 | NA | 1.9 J | 1.7 J |
| MANGANESE | NA | NA | NA | NA | NA | 27.1 L | 73.6 J |
| MERCURY | 0.13 U | 0.14 U | 0.12 U | 0.13 U | NA | 0.019 UL | 0.019 UL |
| MOLYBDENUM | NA | NA | NA | NA | NA | 0.076 UL | 0.16 B |
| NICKEL | 4.5 | 4.6 | 4.8 | 21 | NA | 4 J | 6.5 J |
| SELENIUM | 3.2 U | 3.4 U | 3.6 | 3.3 U | NA | 0.75 L | 0.18 UL |
| SILVER | 3.2 UR | 3.4 UR | 3.2 UR | 3.3 UR | NA | 0.061 K | 0.069 K |
| THALLIUM | 2.5 U | 2.7 U | 2.6 U | 2.7 U | NA | 0.024 B | 0.025 B |
| VANADIUM | NA | NA | NA | NA | NA | 13 J | 15.8 J |
| ZINC | 32 U | 34 U | 32 U | 33 U | NA | 5.9 B | 9.8 B |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | 25000 U | 27000 U | 26000 U | 27000 U | 26000 U | NA | NA |
| GASOLINE RANGE ORGANICS | 130 U | 140 U | 130 U | 130 U | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | 4700 B | 10000 B |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | 78 | 74 | 77 | 75 | 77 | 86.9 | 86.6 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-005 | SB-005 | SB-006 | SB-006 | SB-009 | SB-510 | SB-510 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5-05 | SB-5-10 | SB-6-05 | SB-6-10 | SB-9-05 | SB-510-0406 | SB-510-0810 |
| SAMPLE DATE | 20031120 | 20031120 | 20031120 | 20031120 | 20031118 | 20071128 | 20071128 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 4 | 8 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 6 | 10 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-510 | SB-510 | SB-511 | SB-511 | SB-512 | SB-512 | SB-512 | SB-512 | SB-513 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-510-0810-AVG | SB-510-0810-D | SB-511-0406 | SB-511-0810 | SB-512-0406 | SB-512-0810 | SB-512-0810-AVG | SB-512-0810-D | SB-513-0406 |
| SAMPLE DATE | 20071128 | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 4 | 8 | 4 | 8 | 8 | 8 | 4 |
| BOTTOM DEPTH | 10 | 10 | 6 | 10 | 6 | 10 | 10 | 10 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,1,1-TRICHLOROETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,1,2,2-TETRACHLOROETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,1-DICHLOROETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,1-DICHLOROETHENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,1-DICHLOROPROPENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,2,3-TRICHLOROBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,2,3-TRICHLOROPROPANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,2,3-TRIMETHYLBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,2,4-TRICHLOROBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,2,4-TRIMETHYLBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 12 U | 12 U | 12 U | 13 U | 11 U | 13 U | 13 U | 13 U | 12 U |
| 1,2-DIBROMOETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,2-DICHLOROBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,2-DICHLOROETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,2-DICHLOROPROPANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,3-DICHLOROPROPANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 2-BUTANONE | 12 U | 12 U | 12 U | 13 U | 11 U | 13 U | 13 U | 13 U | 2.7 J |
| 2-CHLOROETHYL VINYL ETHER | 12 U | 12 U | 12 U | 13 U | 11 U | 13 U | 13 U | 13 U | 12 U |
| 2-CHLOROTOLUENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 2-HEXANONE | 12 U | 12 U | 12 U | 13 U | 11 U | 13 U | 13 U | 13 U | 12 U |
| 4-CHLOROTOLUENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 4-ISOPROPYLTOLUENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| 4-METHYL-2-PENTANONE | 12 U | 12 U | 12 U | 13 U | 11 U | 13 U | 13 U | 13 U | 12 U |
| ACETONE | 8.9 J | 12 U | 12 J | 19 J | 11 U | 20 J | 16 | 12 J | 69 J |
| BENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| BROMOBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| BROMOCHLOROMETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| BROMODICHLOROMETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| BROMOFORM | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| BROMOMETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| CARBON DISULFIDE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| CARBON TETRACHLORIDE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| CHLOROBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| CHLORODIBROMOMETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| CHLOROETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| CHLOROFORM | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| CHLOROMETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| CIS-1,2-DICHLOROETHENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| CIS-1,3-DICHLOROPROPENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| DIBROMOMETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| DICHLORODIFLUOROMETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| DIISOPROPYL ETHER | 12 U | 12 U | 12 U | 13 U | 11 U | 13 U | 13 U | 13 U | 12 U |
| ETHYL TERT-BUTYL ETHER | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| ETHYLBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| ISOPROPYLBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| M+P-XYLENES | 12 U | 12 U | 12 U | 13 U | 11 U | 13 U | 13 U | 13 U | 12 U |
| METHYL TERT-BUTYL ETHER | 12 U | 12 U | 12 U | 13 U | 11 U | 13 U | 13 U | 13 U | 12 U |
| METHYLENE CHLORIDE | 4.5 U | 4.5 B | 5.6 B | 5.7 B | 6.2 B | 4.8 B | 4.75 U | 4.7 B | 4.4 B |
| NAPHTHALENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 110 J | 80.5 | 51 J | 5.9 U |
| N-BUTYLBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| N-PROPYLBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| O-XYLENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| SEC-BUTYLBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| STYRENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| TERT-AMYL METHYL ETHER | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| TERT-BUTYLBENZENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| TERTIARY-BUTYL ALCOHOL | 120 R | 120 UR | 120 UR | 130 UR | 110 UR | 130 UR | 130 R | 130 UR | 120 UR |
| TETRACHLOROETHENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| TOLUENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 12 U | 12 U | 12 U | 13 U | 11 U | 13 U | 13 U | 13 U | 12 U |
| TRANS-1,2-DICHLOROETHENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| TRANS-1,3-DICHLOROPROPENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| TRICHLOROETHENE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| TRICHLOROFLUOROMETHANE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| VINYL ACETATE | 12 U | 12 U | 12 U | 13 U | 11 U | 13 UJ | 13 U | 13 U | 12 UJ |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-510 | SB-510 | SB-511 | SB-511 | SB-512 | SB-512 | SB-512 | SB-512 | SB-513 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-510-0810-AVG | SB-510-0810-D | SB-511-0406 | SB-511-0810 | SB-512-0406 | SB-512-0810 | SB-512-0810-AVG | SB-512-0810-D | SB-513-0406 |
| SAMPLE DATE | 20071128 | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 4 | 8 | 4 | 8 | 8 | 8 | 4 |
| BOTTOM DEPTH | 10 | 10 | 6 | 10 | 6 | 10 | 10 | 10 | 6 |
| VINYL CHLORIDE | 5.8 U | 5.8 U | 5.9 U | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 2,4,5-TRICHLOROPHENOL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 2,4,6-TRICHLOROPHENOL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 2,4-DICHLOROPHENOL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 2,4-DIMETHYLPHENOL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 2,4-DINITROPHENOL | 765 U | 770 U | 770 U | 830 U | 750 U | 830 U | 830 U | 830 U | 770 U |
| 2,4-DINITROTOLUENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 2,6-DINITROTOLUENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 2-CHLORONAPHTHALENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 2-CHLOROPHENOL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 2-METHYLPHENOL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 2-NITROANILINE | 765 U | 770 U | 770 U | 830 U | 750 U | 830 U | 830 U | 830 U | 770 U |
| 2-NITROPHENOL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 3-NITROANILINE | 765 U | 770 U | 770 U | 830 U | 750 U | 830 U | 830 U | 830 U | 770 U |
| 4,6-DINITRO-2-METHYLPHENOL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 4-BROMOPHENYL PHENYL ETHER | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 4-CHLORO-3-METHYLPHENOL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 4-CHLOROANILINE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 4-CHLOROPHENYL PHENYL ETHER | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 4-METHYLPHENOL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 4-NITROANILINE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| 4-NITROPHENOL | 765 U | 770 U | 770 U | 830 U | 750 U | 830 U | 830 U | 830 U | 770 U |
| ACETOPHENONE | 77.5 U | 78 U | 78 U | 83 U | 76 U | 84 U | 84 U | 84 U | 78 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| BIS(2-CHLOROETHYL)ETHER | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| BUTYL BENZYL PHTHALATE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| CAPROLACTAM | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| CARBAZOLE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| DIBENZOFURAN | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 91 J | 91 J | 390 U |
| DIETHYL PHTHALATE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| DIMETHYL PHTHALATE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| DI-N-BUTYL PHTHALATE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| DI-N-OCTYL PHTHALATE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| HEXACHLOROBENZENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| HEXACHLOROBUTADIENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| HEXACHLOROCYCLOPENTADIENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| HEXACHLOROETHANE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| ISOPHORONE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| NITROBENZENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| N-NITROSODIMETHYLAMINE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| N-NITROSO-DI-N-PROPYLAMINE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| N-NITROSODIPHENYLAMINE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| PENTACHLOROPHENOL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| PHENOL | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 63 J | 63 J | 390 U |
| ACENAPHTHENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 35 J | 35 J | 390 U |
| ACENAPHTHYLENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 18 J | 18 J | 390 U |
| ANTHRACENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 58 J | 58 J | 390 U |
| BAP EQUIVALENT-HALFND | 230 | 224 | 413 | 410 U | 380 U | 303 | 379 | 456 | 432 |
| BAP EQUIVALENT-POS | 38 | 29 | 1.9 | 410 U | 380 U | 96 | 276 | 456 | 1 |
| BENZO(A)ANTHRACENE | 28.5 | 23 J | 8.8 J | 410 U | 380 U | 63 J | 171.5 | 280 J | 390 U |
| BENZO(A)PYRENE | 27.5 | 21 J | 390 U | 410 U | 380 U | 75 J | 192.5 | 310 J | 390 U |
| BENZO(B)FLUORANTHENE | 50.5 | 37 J | 9.8 J | 410 U | 380 U | 98 J | 234 | 370 J | 10 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 22 | 17 J | 390 U | 410 U | 380 U | 68 J | 159 | 250 J | 390 U |
| BENZO(K)FLUORANTHENE | 16 | 14 J | 390 U | 410 U | 380 U | 410 U | 150 J | 150 J | 390 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-510 | SB-510 | SB-511 | SB-511 | SB-512 | SB-512 | SB-512 | SB-512 | SB-513 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-510-0810-AVG | SB-510-0810-D | SB-511-0406 | SB-511-0810 | SB-512-0406 | SB-512-0810 | SB-512-0810-AVG | SB-512-0810-D | SB-513-0406 |
| SAMPLE DATE | 20071128 | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 4 | 8 | 4 | 8 | 8 | 8 | 4 |
| BOTTOM DEPTH | 10 | 10 | 6 | 10 | 6 | 10 | 10 | 10 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-510 | SB-510 | SB-511 | SB-511 | SB-512 | SB-512 | SB-512 | SB-512 | SB-513 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-510-0810-AVG | SB-510-0810-D | SB-511-0406 | SB-511-0810 | SB-512-0406 | SB-512-0810 | SB-512-0810-AVG | SB-512-0810-D | SB-513-0406 |
| SAMPLE DATE | 20071128 | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 4 | 8 | 4 | 8 | 8 | 8 | 4 |
| BOTTOM DEPTH | 10 | 10 | 6 | 10 | 6 | 10 | 10 | 10 | 6 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 32.5 | 23 J | 8.7 J | 410 U | 380 U | 79 J | 219.5 | 360 J | 390 U |
| DIBENZO(A,H)ANTHRACENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 61 J | 61 J | 390 U |
| FLUORANTHENE | 62 | 46 J | 12 J | 9.2 J | 380 U | 120 J | 360 | 600 J | 390 U |
| FLUORENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 17 J | 17 J | 390 U |
| INDENO(1,2,3-CD)PYRENE | 20 | 16 J | 390 U | 410 U | 380 U | 48 J | 114 | 180 J | 390 U |
| NAPHTHALENE | 385 U | 390 U | 390 U | 410 U | 380 U | 410 U | 65 J | 65 J | 390 U |
| PHENANTHRENE | 20 | 15 J | 390 U | 410 U | 380 U | 90 J | 320 | 550 J | 390 U |
| PYRENE | 46.5 | 34 J | 9.2 J | 410 U | 380 U | 140 J | 425 | 710 J | 390 U |
| TOTAL PAHS | 325.5 | 246 | 48.5 | 9.2 | 0 U | 781 | 2429 | 4077 | 10 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 38.5 U | 39 U | 39 U | 41 U | 38 U | 41 U | 41.5 U | 42 U | 39 U |
| AROCLOR-1221 | 38.5 U | 39 U | 39 U | 41 U | 38 U | 41 U | 41.5 U | 42 U | 39 U |
| AROCLOR-1232 | 38.5 U | 39 U | 39 U | 41 U | 38 U | 41 U | 41.5 U | 42 U | 39 U |
| AROCLOR-1242 | 38.5 U | 39 U | 39 U | 41 U | 38 U | 41 U | 41.5 U | 42 U | 39 U |
| AROCLOR-1248 | 38.5 U | 39 U | 39 U | 41 U | 38 U | 41 U | 41.5 U | 42 U | 39 U |
| AROCLOR-1254 | 38.5 U | 39 U | 39 U | 41 U | 38 U | 41 U | 41.5 U | 42 U | 39 U |
| AROCLOR-1260 | 16 J | 39 U | 16 J | 41 U | 38 U | 18 J | 35.5 | 53 J | 39 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 8 | 0 U | 16 | 0 U | 0 U | 18 | 35.5 | 53 | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.155 | 0.14 L | 0.0056 UL | 0.006 UL | 0.15 L | 0.083 L | 0.1115 | 0.14 L | 0.056 L |
| ARSENIC | 0.31 | 0.26 J | 0.58 J | 0.35 J | 0.59 J | 0.76 J | 1.08 | 1.4 L | 2.3 J |
| BARIUM | 6.9 | 6 K | 7.7 K | 6.4 K | 12.5 K | 17.9 J | 25.2 | 32.5 J | 8.9 K |
| BERYLLIUM | 0.62 | 0.58 | 0.31 | 0.42 | 0.96 | 0.77 | 0.735 | 0.7 | 0.3 |
| CADMIUM | 0.01925 | 0.017 B | 0.0075 B | 0.011 B | 0.019 K | 0.55 | 0.3085 | 0.067 K | 0.009 B |
| CHROMIUM | 10.9 | 10.1 J | 1.5 J | 4 J | 8.5 J | 8.9 J | 9 | 9.1 J | 7.8 J |
| COBALT | 1.95 | 2 | 0.82 | 1 | 3 | 2.2 | 2.15 | 2.1 J | 4 |
| COPPER | 6.75 | 6.8 J | 4.1 J | 4.7 J | 10.3 J | 11.3 J | 10.25 | 9.2 L | 3.5 J |
| IRON | 19350 | 17800 | 1290 | 3240 | 15200 | 9820 | 9510 | 9200 | 8600 |
| LEAD | 1.5 | 1.3 J | 3.2 J | 2.2 J | 3.6 J | 8.6 J | 8.15 | 7.7 L | 3.2 J |
| MANGANESE | 48.3 | 23 J | 2.2 L | 4.8 L | 33.5 L | 68.2 L | 107.1 | 146 J | 47 L |
| MERCURY | 0.019 U | 0.019 UL | 0.02 UL | 0.021 UL | 0.019 UL | 0.021 UL | 0.021 U | 0.021 UL | 0.02 UL |
| MOLYBDENUM | 0.135 U | 0.11 B | 0.077 UL | 0.083 UL | 0.08 B | 0.28 B | 0.295 U | 0.31 B | 0.094 B |
| NICKEL | 7.2 | 7.9 J | 1.8 J | 2.6 J | 11.5 J | 8 J | 7.4 | 6.8 L | 2.8 J |
| SELENIUM | 0.185 U | 0.19 UL | 0.2 L | 0.2 UL | 0.53 L | 0.54 L | 0.435 | 0.33 L | 0.19 UL |
| SILVER | 0.067 | 0.065 | 0.035 | 0.03 | 0.066 | 0.057 | 0.0635 | 0.07 | 0.03 |
| THALLIUM | 0.023 U | 0.021 B | 0.045 B | 0.028 B | 0.053 B | 0.033 B | 0.028 K | 0.028 K | 0.035 B |
| VANADIUM | 16.35 | 16.9 J | 2.2 J | 7.5 J | 12.6 J | 12.4 J | 13.6 | 14.8 J | 12.3 J |
| ZINC | 8.05 | 11.2 | 5.2 B | 7 B | 12 | 13.5 | 14.6 | 15.7 | 9.3 B |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | 8200 U | 6400 B | 1600 B | 7200 B | 6100 B | 21000 B | 16750 | 23000 | 8400 B |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 86.15 | 85.7 | 85.3 | 79.9 | 87.7 | 79.7 | 79.55 | 79.4 | 85.2 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-510 | SB-510 | SB-511 | SB-511 | SB-512 | SB-512 | SB-512 | SB-512 | SB-513 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-510-0810-AVG | SB-510-0810-D | SB-511-0406 | SB-511-0810 | SB-512-0406 | SB-512-0810 | SB-512-0810-AVG | SB-512-0810-D | SB-513-0406 |
| SAMPLE DATE | 20071128 | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 4 | 8 | 4 | 8 | 8 | 8 | 4 |
| BOTTOM DEPTH | 10 | 10 | 6 | 10 | 6 | 10 | 10 | 10 | 6 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-513 | SB-514 | SB-514 | SB-514 | SB-514 | SB-515 | SB-515 | SB-517 | SB-517 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-513-0810 | SB-514-0406 | SB-514-0810 | SB-514-0810-AVG | SB-514-0810-D | SB-515-0406 | SB-515-0810 | SB-517-0406 | SB-517-0810 |
| SAMPLE DATE | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 8 | 8 | 4 | 8 | 4 | 8 |
| BOTTOM DEPTH | 10 | 6 | 10 | 10 | 10 | 6 | 10 | 6 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,1,1-TRICHLOROETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,1,2,2-TETRACHLOROETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,1-DICHLOROETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 0.69 J | 0.69 J | 6.1 U | 6.1 U |
| 1,1-DICHLOROETHENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,1-DICHLOROPROPENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,2,3-TRICHLOROBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,2,3-TRICHLOROPROPANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,2,3-TRIMETHYLBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,2,4-TRICHLOROBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,2,4-TRIMETHYLBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| 1,2-DIBROMOETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,2-DICHLOROBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,2-DICHLOROETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,2-DICHLOROPROPANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,3-DICHLOROPROPANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 2-BUTANONE | 12 U | 9.3 J | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| 2-CHLOROETHYL VINYL ETHER | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| 2-CHLOROTOLUENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 2-HEXANONE | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| 4-CHLOROTOLUENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 4-ISOPROPYLTOLUENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| 4-METHYL-2-PENTANONE | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| ACETONE | 26 J | 130 J | 38 J | 43.5 | 49 J | 16 J | 12 U | 12 U | 8.4 J |
| BENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| BROMOBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| BROMOCHLOROMETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| BROMODICHLOROMETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| BROMOFORM | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| BROMOMETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| CARBON DISULFIDE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| CARBON TETRACHLORIDE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| CHLOROBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| CHLORODIBROMOMETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| CHLOROETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| CHLOROFORM | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| CHLOROMETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| CIS-1,2-DICHLOROETHENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 9.7 | 6 J | 6.1 U | 6.1 U |
| CIS-1,3-DICHLOROPROPENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| DIBROMOMETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| DICHLORODIFLUOROMETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| DIISOPROPYL ETHER | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| ETHYL TERT-BUTYL ETHER | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| ETHYLBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| ISOPROPYLBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| M+P-XYLENES | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| METHYL TERT-BUTYL ETHER | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| METHYLENE CHLORIDE | 5.5 B | 5.9 B | 5.8 B | 4.5 U | 3.2 B | 5.5 B | 4.9 B | 4.4 B | 3.7 B |
| NAPHTHALENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| N-BUTYLBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| N-PROPYLBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| O-XYLENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| SEC-BUTYLBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| STYRENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| TERT-AMYL METHYL ETHER | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| TERT-BUTYLBENZENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| TERTIARY-BUTYL ALCOHOL | 120 UR | 120 UR | 120 UR | 120 R | 120 UR | 120 UR | 120 UR | 120 UR | 120 UR |
| TETRACHLOROETHENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| TOLUENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| TRANS-1,2-DICHLOROETHENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| TRANS-1,3-DICHLOROPROPENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| TRICHLOROETHENE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| TRICHLOROFLUOROMETHANE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U |
| VINYL ACETATE | 12 UJ | 12 UJ | 12 UJ | 12 U | 12 U | 12 UJ | 12 U | 12 U | 12 U |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-513 | SB-514 | SB-514 | SB-514 | SB-514 | SB-515 | SB-515 | SB-517 | SB-517 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-513-0810 | SB-514-0406 | SB-514-0810 | SB-514-0810-AVG | SB-514-0810-D | SB-515-0406 | SB-515-0810 | SB-517-0406 | SB-517-0810 |
| SAMPLE DATE | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 8 | 8 | 4 | 8 | 4 | 8 |
| BOTTOM DEPTH | 10 | 6 | 10 | 10 | 10 | 6 | 10 | 6 | 10 |
| VINYL CHLORIDE | 5.8 U | 6 U | 5.9 U | 5.9 U | 5.9 U | 3.5 J | 0.48 J | 6.1 U | 6.1 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 2,4,5-TRICHLOROPHENOL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 2,4,6-TRICHLOROPHENOL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 2,4-DICHLOROPHENOL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 2,4-DIMETHYLPHENOL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 2,4-DINITROPHENOL | 770 U | 800 U | 780 U | 780 U | 780 U | 800 U | 820 U | 800 U | 800 U |
| 2,4-DINITROTOLUENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 2,6-DINITROTOLUENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 2-CHLORONAPHTHALENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 2-CHLOROPHENOL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 2-METHYLPHENOL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 2-NITROANILINE | 770 U | 800 U | 780 U | 780 U | 780 U | 800 U | 820 U | 800 U | 800 U |
| 2-NITROPHENOL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 3-NITROANILINE | 770 U | 800 U | 780 U | 780 U | 780 U | 800 U | 820 U | 800 U | 800 U |
| 4,6-DINITRO-2-METHYLPHENOL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 4-BROMOPHENYL PHENYL ETHER | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 4-CHLORO-3-METHYLPHENOL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 4-CHLOROANILINE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 4-CHLOROPHENYL PHENYL ETHER | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 4-METHYLPHENOL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 4-NITROANILINE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| 4-NITROPHENOL | 770 U | 800 U | 780 U | 780 U | 780 U | 800 U | 820 U | 800 U | 800 U |
| ACETOPHENONE | 78 U | 81 U | 79 U | 79 U | 79 U | 81 U | 82 U | 81 U | 81 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| BIS(2-CHLOROETHYL)ETHER | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 390 U | 400 U | 28 J | 26 | 24 J | 400 U | 410 U | 400 U | 30 J |
| BUTYL BENZYL PHTHALATE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| CAPROLACTAM | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| CARBAZOLE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| DIBENZOFURAN | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| DIETHYL PHTHALATE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| DIMETHYL PHTHALATE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| DI-N-BUTYL PHTHALATE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| DI-N-OCTYL PHTHALATE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| HEXACHLOROBENZENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| HEXACHLOROBUTADIENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| HEXACHLOROCYCLOPENTADIENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| HEXACHLOROETHANE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| ISOPHORONE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| NITROBENZENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| N-NITROSODIMETHYLAMINE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| N-NITROSO-DI-N-PROPYLAMINE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| N-NITROSODIPHENYLAMINE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| PENTACHLOROPHENOL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| PHENOL | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| ACENAPHTHENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| ACENAPHTHYLENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| ANTHRACENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| BAP EQUIVALENT-HALFND | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 455 | 400 U | 240 |
| BAP EQUIVALENT-POS | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 1.4 | 400 U | 40 |
| BENZO(A)ANTHRACENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 29 J |
| BENZO(A)PYRENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 30 J |
| BENZO(B)FLUORANTHENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 14 J | 400 U | 48 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 21 J |
| BENZO(K)FLUORANTHENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 16 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-513 | SB-514 | SB-514 | SB-514 | SB-514 | SB-515 | SB-515 | SB-517 | SB-517 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-513-0810 | SB-514-0406 | SB-514-0810 | SB-514-0810-AVG | SB-514-0810-D | SB-515-0406 | SB-515-0810 | SB-517-0406 | SB-517-0810 |
| SAMPLE DATE | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 8 | 8 | 4 | 8 | 4 | 8 |
| BOTTOM DEPTH | 10 | 6 | 10 | 10 | 10 | 6 | 10 | 6 | 10 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-513 | SB-514 | SB-514 | SB-514 | SB-514 | SB-515 | SB-515 | SB-517 | SB-517 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-513-0810 | SB-514-0406 | SB-514-0810 | SB-514-0810-AVG | SB-514-0810-D | SB-515-0406 | SB-515-0810 | SB-517-0406 | SB-517-0810 |
| SAMPLE DATE | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 8 | 8 | 4 | 8 | 4 | 8 |
| BOTTOM DEPTH | 10 | 6 | 10 | 10 | 10 | 6 | 10 | 6 | 10 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 32 J |
| DIBENZO(A,H)ANTHRACENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| FLUORANTHENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 57 J |
| FLUORENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| INDENO(1,2,3-CD)PYRENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 17 J |
| NAPHTHALENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 400 U |
| PHENANTHRENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 25 J |
| PYRENE | 390 U | 400 U | 390 U | 390 U | 390 U | 400 U | 410 U | 400 U | 48 J |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 14 | 0 U | 323 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 39 U | 40 U | 39 U | 39 U | 39 U | 40 U | 41 U | 40 U | 40 U |
| AROCLOR-1221 | 39 U | 40 U | 39 U | 39 U | 39 U | 40 U | 41 U | 40 U | 40 U |
| AROCLOR-1232 | 39 U | 40 U | 39 U | 39 U | 39 U | 40 U | 41 U | 40 U | 40 U |
| AROCLOR-1242 | 39 U | 40 U | 39 U | 39 U | 39 U | 40 U | 41 U | 40 U | 40 U |
| AROCLOR-1248 | 39 U | 40 U | 39 U | 39 U | 39 U | 40 U | 41 U | 40 U | 40 U |
| AROCLOR-1254 | 39 U | 40 U | 39 U | 39 U | 39 U | 40 U | 41 U | 40 U | 40 U |
| AROCLOR-1260 | 39 U | 40 U | 39 U | 39 U | 39 U | 40 U | 19 J | 40 U | 190 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 19 | 0 U | 190 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.0056 UL | 0.092 L | 0.22 L | 0.2 | 0.18 J | 0.17 J | 0.11 B | 0.26 J | 0.2 L |
| ARSENIC | 0.46 J | 0.39 J | 1.3 J | 0.86 | 0.42 L | 0.62 L | 0.22 L | 0.55 L | 0.75 L |
| BARIUM | 1.9 K | 12.4 K | 11.6 K | 11.45 | 11.3 | 7.8 | 10.4 | 8.2 | 12.9 |
| BERYLLIUM | 0.076 | 2.7 | 3.7 | 3 | 2.3 | 3.3 | 4.4 | 2.4 | 1.5 |
| CADMIUM | 0.0037 B | 0.029 K | 0.024 K | 0.057 | 0.09 K | 0.012 B | 0.02 K | 0.019 K | 0.12 K |
| CHROMIUM | 2.3 J | 11.7 J | 11.1 J | 10.9 | 10.7 J | 9.1 J | 10.6 J | 7.7 J | 11.3 J |
| COBALT | 0.98 | 9.1 | 8.8 | 7.65 | 6.5 J | 4.3 J | 6.2 J | 4.9 J | 4.6 J |
| COPPER | 1 J | 16.1 J | 11.7 J | 11.05 | 10.4 L | 28.7 L | 11.2 L | 14.7 L | 15.2 L |
| IRON | 2310 | 40100 | 51200 | 42200 | 33200 | 28700 | 22600 | 28700 | 18400 |
| LEAD | 0.71 J | 3.5 J | 5.6 J | 4.6 | 3.6 L | 2.8 L | 3.2 L | 3.5 L | 7.9 L |
| MANGANESE | 8.8 L | 280 L | 225 L | 205.5 | 186 L | 106 L | 277 L | 93.3 L | 53 L |
| MERCURY | 0.019 UL | 0.02 UL | 0.02 UL | 0.02 U | 0.02 UL | 0.02 UL | 0.021 UL | 0.02 UL | 0.02 UL |
| MOLYBDENUM | 0.077 UL | 0.08 UL | 0.09 B | 0.12 U | 0.15 B | 0.16 B | 0.083 B | 0.08 UL | 0.3 B |
| NICKEL | 0.76 J | 16.7 J | 15.9 J | 15.1 | 14.3 L | 18.7 L | 11.9 L | 16.3 L | 11.2 L |
| SELENIUM | 0.19 UL | 0.19 UL | 0.19 UL | 0.19 U | 0.19 UL | 0.19 UL | 0.2 UL | 1.8 L | 0.58 L |
| SILVER | 0.0079 B | 0.089 | 0.11 K | 0.098 | 0.086 K | 0.087 K | 0.079 | 0.12 | 0.073 |
| THALLIUM | 0.0052 B | 0.041 B | 0.061 B | 0.041 K | 0.041 K | 0.034 K | 0.038 K | 0.046 K | 0.035 K |
| VANADIUM | 3 J | 15.2 J | 16.5 J | 13.85 | 11.2 J | 13.5 J | 11.5 J | 12.7 J | 15.1 J |
| ZINC | 5.5 B | 35.3 | 62.3 | 50 | 37.7 | 58 | 28.6 | 19.1 | 41.3 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | 990 B | 9100 B | 8300 B | 5500 U | 2700 B | 2000 B | 2200 B | 1600 B | 1800 B |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 85.6 | 82.7 | 84.4 | 84.6 | 84.8 | 82.6 | 80.8 | 82.5 | 82.6 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-513 | SB-514 | SB-514 | SB-514 | SB-514 | SB-515 | SB-515 | SB-517 | SB-517 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-513-0810 | SB-514-0406 | SB-514-0810 | SB-514-0810-AVG | SB-514-0810-D | SB-515-0406 | SB-515-0810 | SB-517-0406 | SB-517-0810 |
| SAMPLE DATE | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 8 | 8 | 4 | 8 | 4 | 8 |
| BOTTOM DEPTH | 10 | 6 | 10 | 10 | 10 | 6 | 10 | 6 | 10 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-518 | SB-518 | SB-519 | SB-519 | SB-520 | SB-520 | SB-541A | SB-542 | SB-542 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-518-0406 | SB-518-0810 | SB-519-0406 | SB-519-0810 | SB-520-0406 | SB-520-0810 | SB-541A-4 | SB-542-3 | SB-542-4 |
| SAMPLE DATE | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20081111 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 3 | 4 |
| BOTTOM DEPTH | 6 | 10 | 6 | 10 | 6 | 10 | 4 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 0.48 J | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 1.1 B | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 2-BUTANONE | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 2-HEXANONE | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U | NA | NA | NA |
| ACETONE | 24 J | 14 J | 9 J | 14 J | 9.9 J | 12 U | NA | NA | NA |
| BENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| BROMOBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| BROMOFORM | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| BROMOMETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| CARBON DISULFIDE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| CHLOROBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| CHLOROETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| CHLOROFORM | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| CHLOROMETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| DIBROMOMETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| DIISOPROPYL ETHER | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| ETHYLBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| ISOPROPYLBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| M+P-XYLENES | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U | NA | NA | NA |
| METHYLENE CHLORIDE | 4.2 B | 5.7 B | 6.1 B | 5.1 B | 5.8 B | 5.1 B | NA | NA | NA |
| NAPHTHALENE | 6 U | 6.5 U | 0.69 B | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| N-BUTYLBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| N-PROPYLBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| O-XYLENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| STYRENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| TERT-AMYL METHYL ETHER | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | 120 UR | 130 UR | 120 UR | 120 UR | 120 UR | 120 UR | NA | NA | NA |
| TETRACHLOROETHENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| TOLUENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| TRICHLOROETHENE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 29 | NA | NA | NA |
| VINYL ACETATE | 12 U | 13 U | 12 U | 12 U | 12 U | 12 U | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-518 | SB-518 | SB-519 | SB-519 | SB-520 | SB-520 | SB-541A | SB-542 | SB-542 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-518-0406 | SB-518-0810 | SB-519-0406 | SB-519-0810 | SB-520-0406 | SB-520-0810 | SB-541A-4 | SB-542-3 | SB-542-4 |
| SAMPLE DATE | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20081111 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 3 | 4 |
| BOTTOM DEPTH | 6 | 10 | 6 | 10 | 6 | 10 | 4 | 3 | 4 |
| VINYL CHLORIDE | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U | 6 U | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 2,4-DINITROPHENOL | 790 U | 860 U | 770 U | 770 U | 800 U | 800 U | NA | NA | NA |
| 2,4-DINITROTOLUENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 2,6-DINITROTOLUENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 2-CHLOROPHENOL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 2-METHYLPHENOL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 2-NITROANILINE | 790 U | 860 U | 770 U | 770 U | 800 U | 800 U | NA | NA | NA |
| 2-NITROPHENOL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 3-NITROANILINE | 790 U | 860 U | 770 U | 770 U | 800 U | 800 U | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 4-CHLOROANILINE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 4-METHYLPHENOL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 4-NITROANILINE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| 4-NITROPHENOL | 790 U | 860 U | 770 U | 770 U | 800 U | 800 U | NA | NA | NA |
| ACETOPHENONE | 80 U | 87 U | 77 U | 77 U | 81 U | 80 U | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| CAPROLACTAM | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| CARBAZOLE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| DIBENZOFURAN | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| DIETHYL PHTHALATE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| DIMETHYL PHTHALATE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| HEXACHLOROBENZENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| HEXACHLOROBUTADIENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| HEXACHLOROETHANE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| ISOPHORONE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| NITROBENZENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| PENTACHLOROPHENOL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| PHENOL | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| ACENAPHTHENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| ACENAPHTHYLENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| ANTHRACENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 400 U | 430 U | 380 U | 380 U | 400 U | 424 | NA | NA | NA |
| BAP EQUIVALENT-POS | 400 U | 430 U | 380 U | 380 U | 400 U | 2.1 | NA | NA | NA |
| BENZO(A)ANTHRACENE | 400 U | 430 U | 380 U | 380 U | 400 U | 8.6 J | NA | NA | NA |
| BENZO(A)PYRENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 400 U | 430 U | 380 U | 380 U | 400 U | 12 J | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-518 | SB-518 | SB-519 | SB-519 | SB-520 | SB-520 | SB-541A | SB-542 | SB-542 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-518-0406 | SB-518-0810 | SB-519-0406 | SB-519-0810 | SB-520-0406 | SB-520-0810 | SB-541A-4 | SB-542-3 | SB-542-4 |
| SAMPLE DATE | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20081111 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 3 | 4 |
| BOTTOM DEPTH | 6 | 10 | 6 | 10 | 6 | 10 | 4 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-518 | SB-518 | SB-519 | SB-519 | SB-520 | SB-520 | SB-541A | SB-542 | SB-542 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-518-0406 | SB-518-0810 | SB-519-0406 | SB-519-0810 | SB-520-0406 | SB-520-0810 | SB-541A-4 | SB-542-3 | SB-542-4 |
| SAMPLE DATE | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20081111 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 3 | 4 |
| BOTTOM DEPTH | 6 | 10 | 6 | 10 | 6 | 10 | 4 | 3 | 4 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 400 U | 430 U | 380 U | 380 U | 400 U | 9.2 J | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| FLUORANTHENE | 400 U | 430 U | 380 U | 380 U | 400 U | 15 J | NA | NA | NA |
| FLUORENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| NAPHTHALENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| PHENANTHRENE | 400 U | 430 U | 380 U | 380 U | 400 U | 400 U | NA | NA | NA |
| PYRENE | 400 U | 430 U | 380 U | 380 U | 400 U | 12 J | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 56.8 | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 40 U | 43 U | 38 U | 38 U | 40 U | 40 U | 20 U | 20 U | 20 U |
| AROCLOR-1221 | 40 U | 43 U | 38 U | 38 U | 40 U | 40 U | 20 U | 20 U | 20 U |
| AROCLOR-1232 | 40 U | 43 U | 38 U | 38 U | 40 U | 40 U | 20 U | 20 U | 20 U |
| AROCLOR-1242 | 40 U | 43 U | 38 U | 38 U | 40 U | 40 U | 20 U | 20 U | 20 U |
| AROCLOR-1248 | 40 U | 43 U | 38 U | 38 U | 40 U | 40 U | 20 U | 20 U | 20 U |
| AROCLOR-1254 | 40 U | 43 U | 38 U | 38 U | 40 U | 40 U | 20 U | 20 U | 20 U |
| AROCLOR-1260 | 40 U | 43 U | 38 U | 38 U | 40 U | 40 U | 20 U | 20 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.21 J | 0.037 B | 0.18 J | 0.078 B | 0.082 B | 0.13 J | NA | NA | NA |
| ARSENIC | 2.2 L | 0.43 L | 0.61 L | 1.2 L | 1.2 L | 1.3 L | NA | NA | NA |
| BARIUM | 13.3 | 4.3 | 10.9 | 1.6 | 9 | 6.7 | NA | NA | NA |
| BERYLLIUM | 1.4 | 0.48 | 1.2 | 0.65 | 1.9 | 1.8 | NA | NA | NA |
| CADMIUM | 0.15 K | 0.0051 B | 0.037 K | 0.0092 B | 0.031 K | 0.031 K | NA | NA | NA |
| CHROMIUM | 13.2 J | 4.4 J | 7.7 J | 4.5 J | 9.4 J | 6.6 J | NA | NA | NA |
| COBALT | 3.7 J | 2.8 J | 2.8 J | 1.6 J | 5.3 J | 3.6 J | NA | NA | NA |
| COPPER | 16.2 L | 6.7 L | 10.2 L | 12.4 L | 7.5 L | 8.4 L | NA | NA | NA |
| IRON | 23400 | 8620 | 18300 | 9720 | 14200 | 13500 | NA | NA | NA |
| LEAD | 4 L | 2 L | 3.4 L | 1.2 L | 3.6 L | 2.5 L | NA | NA | NA |
| MANGANESE | 45.5 L | 28.1 L | 26.1 L | 21.3 L | 41.7 L | 32 L | NA | NA | NA |
| MERCURY | 0.02 UL | 0.022 UL | 0.019 UL | 0.019 UL | 0.02 UL | 0.02 UL | NA | NA | NA |
| MOLYBDENUM | 0.19 B | 0.086 UL | 0.093 B | 0.089 B | 0.094 B | 0.14 B | NA | NA | NA |
| NICKEL | 9.3 L | 3.8 L | 9.7 L | 2.6 L | 14.4 L | 8.3 L | NA | NA | NA |
| SELENIUM | 0.61 L | 0.21 UL | 0.57 L | 0.19 UL | 0.23 L | 0.19 UL | NA | NA | NA |
| SILVER | 0.088 | 0.036 | 0.087 | 0.047 | 0.067 | 0.049 | NA | NA | NA |
| THALLIUM | 0.048 K | 0.02 B | 0.043 K | 0.008 B | 0.042 K | 0.021 K | NA | NA | NA |
| VANADIUM | 21.1 J | 6.9 J | 11.5 J | 5.1 J | 16.6 J | 13.2 J | NA | NA | NA |
| ZINC | 26.7 | 19.8 | 20.2 | 13.1 | 30.4 | 21 | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | 1800 B | 1700 B | 1500 B | 1300 B | 1300 B | 1100 B | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 83.1 | 76.9 | 86.1 | 86.2 | 82.4 | 82.9 | NA | 84 | 82 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-518 | SB-518 | SB-519 | SB-519 | SB-520 | SB-520 | SB-541A | SB-542 | SB-542 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-518-0406 | SB-518-0810 | SB-519-0406 | SB-519-0810 | SB-520-0406 | SB-520-0810 | SB-541A-4 | SB-542-3 | SB-542-4 |
| SAMPLE DATE | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20081111 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 3 | 4 |
| BOTTOM DEPTH | 6 | 10 | 6 | 10 | 6 | 10 | 4 | 3 | 4 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-543A | SB-543A | SB-545 | SB-547 | SB-547 | SB-548 | SB-548 | SB-550A | SB-550A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-543A-3 | SB-543A-4 | SB-545-4 | SB-547-3 | SB-547-4 | SB-548-3 | SB-548-4 | SB-550A-3 | SB-550A-4 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081021 | 20081021 | 20081023 | 20081023 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-543A | SB-543A | SB-545 | SB-547 | SB-547 | SB-548 | SB-548 | SB-550A | SB-550A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-543A-3 | SB-543A-4 | SB-545-4 | SB-547-3 | SB-547-4 | SB-548-3 | SB-548-4 | SB-550A-3 | SB-550A-4 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081021 | 20081021 | 20081023 | 20081023 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-543A | SB-543A | SB-545 | SB-547 | SB-547 | SB-548 | SB-548 | SB-550A | SB-550A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-543A-3 | SB-543A-4 | SB-545-4 | SB-547-3 | SB-547-4 | SB-548-3 | SB-548-4 | SB-550A-3 | SB-550A-4 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081021 | 20081021 | 20081023 | 20081023 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-543A | SB-543A | SB-545 | SB-547 | SB-547 | SB-548 | SB-548 | SB-550A | SB-550A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-543A-3 | SB-543A-4 | SB-545-4 | SB-547-3 | SB-547-4 | SB-548-3 | SB-548-4 | SB-550A-3 | SB-550A-4 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081021 | 20081021 | 20081023 | 20081023 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 19 U | 19 U | 20 U | NA | NA | 19 U | 19 U | 20 U | 20 U |
| AROCLOR-1221 | 19 U | 19 U | 20 U | NA | NA | 19 U | 19 U | 20 U | 20 U |
| AROCLOR-1232 | 19 U | 19 U | 20 U | NA | NA | 19 U | 19 U | 20 U | 20 U |
| AROCLOR-1242 | 19 U | 19 U | 20 U | NA | NA | 19 U | 19 U | 20 U | 20 U |
| AROCLOR-1248 | 19 U | 19 U | 20 U | NA | NA | 19 U | 19 U | 20 U | 20 U |
| AROCLOR-1254 | 19 U | 19 U | 20 U | NA | NA | 19 U | 19 U | 20 U | 20 U |
| AROCLOR-1260 | 19 U | 19 U | 20 U | NA | NA | 19 U | 19 U | 20 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | NA | NA | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | 84 | 87 | 85 | 86 | 88 | 84 | 81 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-543A | SB-543A | SB-545 | SB-547 | SB-547 | SB-548 | SB-548 | SB-550A | SB-550A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-543A-3 | SB-543A-4 | SB-545-4 | SB-547-3 | SB-547-4 | SB-548-3 | SB-548-4 | SB-550A-3 | SB-550A-4 |
| SAMPLE DATE | 20081111 | 20081111 | 20081023 | 20081021 | 20081021 | 20081023 | 20081023 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-555A | SB-556 | SB-556 | SB-556 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-554-3 | SB-554-4 | SB-555-4 | SB-555-6 | SB-555-8 | SB-555A-10 | SB-556-4 | SB-556-6 | SB-556-8 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 6 | 8 |
| BOTTOM DEPTH | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-555A | SB-556 | SB-556 | SB-556 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-554-3 | SB-554-4 | SB-555-4 | SB-555-6 | SB-555-8 | SB-555A-10 | SB-556-4 | SB-556-6 | SB-556-8 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 6 | 8 |
| BOTTOM DEPTH | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-555A | SB-556 | SB-556 | SB-556 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-554-3 | SB-554-4 | SB-555-4 | SB-555-6 | SB-555-8 | SB-555A-10 | SB-556-4 | SB-556-6 | SB-556-8 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 6 | 8 |
| BOTTOM DEPTH | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-555A | SB-556 | SB-556 | SB-556 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-554-3 | SB-554-4 | SB-555-4 | SB-555-6 | SB-555-8 | SB-555A-10 | SB-556-4 | SB-556-6 | SB-556-8 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 6 | 8 |
| BOTTOM DEPTH | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 6 | 8 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | 910 U | 18 U | 19 U | 20 U | NA | NA | NA |
| AROCLOR-1221 | NA | NA | 910 U | 18 U | 19 U | 20 U | NA | NA | NA |
| AROCLOR-1232 | NA | NA | 910 U | 18 U | 19 U | 20 U | NA | NA | NA |
| AROCLOR-1242 | NA | NA | 910 U | 18 U | 19 U | 20 U | NA | NA | NA |
| AROCLOR-1248 | NA | NA | 910 U | 18 U | 19 U | 20 U | NA | NA | NA |
| AROCLOR-1254 | NA | NA | 9800 | 18 U | 19 U | 20 U | NA | NA | NA |
| AROCLOR-1260 | NA | NA | 7800 | 18 U | 250 | 20 U | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | 17600 | 0 U | 250 | 0 U | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 86 | 85 | 91 | 92 | 87 | 82 | 83 | 85 | 86 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-555A | SB-556 | SB-556 | SB-556 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-554-3 | SB-554-4 | SB-555-4 | SB-555-6 | SB-555-8 | SB-555A-10 | SB-556-4 | SB-556-6 | SB-556-8 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 6 | 8 |
| BOTTOM DEPTH | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 6 | 8 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 | SB-559 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-557-4 | SB-557-6 | SB-557-8 | SB-558-4 | SB-558-6 | SB-558-8 | SB-559-4 | SB-559-6 | SB-559-8 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 | SB-559 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-557-4 | SB-557-6 | SB-557-8 | SB-558-4 | SB-558-6 | SB-558-8 | SB-559-4 | SB-559-6 | SB-559-8 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 | SB-559 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-557-4 | SB-557-6 | SB-557-8 | SB-558-4 | SB-558-6 | SB-558-8 | SB-559-4 | SB-559-6 | SB-559-8 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 | SB-559 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-557-4 | SB-557-6 | SB-557-8 | SB-558-4 | SB-558-6 | SB-558-8 | SB-559-4 | SB-559-6 | SB-559-8 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 18 U | NA | NA | 19 U | NA | NA | 18 U | 19 U | 19 U |
| AROCLOR-1221 | 18 U | NA | NA | 19 U | NA | NA | 18 U | 19 U | 19 U |
| AROCLOR-1232 | 18 U | NA | NA | 19 U | NA | NA | 18 U | 19 U | 19 U |
| AROCLOR-1242 | 18 U | NA | NA | 19 U | NA | NA | 18 U | 19 U | 19 U |
| AROCLOR-1248 | 18 U | NA | NA | 19 U | NA | NA | 18 U | 19 U | 19 U |
| AROCLOR-1254 | 27 | NA | NA | 19 U | NA | NA | 18 U | 19 U | 19 U |
| AROCLOR-1260 | 18 U | NA | NA | 140 | NA | NA | 18 U | 19 U | 19 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 27 | NA | NA | 140 | NA | NA | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 91 | 86 | 86 | 87 | 86 | 81 | 94 | 88 | 87 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 | SB-559 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-557-4 | SB-557-6 | SB-557-8 | SB-558-4 | SB-558-6 | SB-558-8 | SB-559-4 | SB-559-6 | SB-559-8 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-560 | SB-561 | SB-561 | SB-561 | SB-561A | SB-561A | SB-562 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-560-4 | SB-561-4 | SB-561-6 | SB-561-8 | SB-561A-6 | SB-561A-8 | SB-562-4 | SB-562-6 | SB-562-8 |
| SAMPLE DATE | 20081022 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-560 | SB-561 | SB-561 | SB-561 | SB-561A | SB-561A | SB-562 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-560-4 | SB-561-4 | SB-561-6 | SB-561-8 | SB-561A-6 | SB-561A-8 | SB-562-4 | SB-562-6 | SB-562-8 |
| SAMPLE DATE | 20081022 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-560 | SB-561 | SB-561 | SB-561 | SB-561A | SB-561A | SB-562 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-560-4 | SB-561-4 | SB-561-6 | SB-561-8 | SB-561A-6 | SB-561A-8 | SB-562-4 | SB-562-6 | SB-562-8 |
| SAMPLE DATE | 20081022 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-560 | SB-561 | SB-561 | SB-561 | SB-561A | SB-561A | SB-562 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-560-4 | SB-561-4 | SB-561-6 | SB-561-8 | SB-561A-6 | SB-561A-8 | SB-562-4 | SB-562-6 | SB-562-8 |
| SAMPLE DATE | 20081022 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 19 U | NA | 18 U | 19 U | 19 U | 19 U | NA | NA | NA |
| AROCLOR-1221 | 19 U | NA | 18 U | 19 U | 19 U | 19 U | NA | NA | NA |
| AROCLOR-1232 | 19 U | NA | 18 U | 19 U | 19 U | 19 U | NA | NA | NA |
| AROCLOR-1242 | 19 U | NA | 18 U | 19 U | 19 U | 19 U | NA | NA | NA |
| AROCLOR-1248 | 19 U | NA | 18 U | 19 U | 19 U | 19 U | NA | NA | NA |
| AROCLOR-1254 | 19 U | NA | 18 U | 19 U | 19 U | 19 U | NA | NA | NA |
| AROCLOR-1260 | 19 U | NA | 18 U | 180 | 19 U | 19 U | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | NA | 0 U | 180 | 0 U | 0 U | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 89 | 89 | 91 | 88 | 87 | 88 | 89 | 86 | 87 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-560 | SB-561 | SB-561 | SB-561 | SB-561A | SB-561A | SB-562 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-560-4 | SB-561-4 | SB-561-6 | SB-561-8 | SB-561A-6 | SB-561A-8 | SB-562-4 | SB-562-6 | SB-562-8 |
| SAMPLE DATE | 20081022 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-563 | SB-563 | SB-563 | SB-564 | SB-565 | SB-566 | SB-566 | SB-566 | SB-567 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-563-4 | SB-563-6 | SB-563-8 | SB-564-4 | SB-565-4 | SB-566-4 | SB-566-6 | SB-566-8 | SB-567-4 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-563 | SB-563 | SB-563 | SB-564 | SB-565 | SB-566 | SB-566 | SB-566 | SB-567 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-563-4 | SB-563-6 | SB-563-8 | SB-564-4 | SB-565-4 | SB-566-4 | SB-566-6 | SB-566-8 | SB-567-4 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-563 | SB-563 | SB-563 | SB-564 | SB-565 | SB-566 | SB-566 | SB-566 | SB-567 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-563-4 | SB-563-6 | SB-563-8 | SB-564-4 | SB-565-4 | SB-566-4 | SB-566-6 | SB-566-8 | SB-567-4 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-563 | SB-563 | SB-563 | SB-564 | SB-565 | SB-566 | SB-566 | SB-566 | SB-567 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-563-4 | SB-563-6 | SB-563-8 | SB-564-4 | SB-565-4 | SB-566-4 | SB-566-6 | SB-566-8 | SB-567-4 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 20 U | NA | NA | 19 U | 19 U | 95 U | 20 U | 20 U | 19 U |
| AROCLOR-1221 | 20 U | NA | NA | 19 U | 19 U | 95 U | 20 U | 20 U | 19 U |
| AROCLOR-1232 | 20 U | NA | NA | 19 U | 19 U | 95 U | 20 U | 20 U | 19 U |
| AROCLOR-1242 | 20 U | NA | NA | 19 U | 19 U | 95 U | 20 U | 20 U | 19 U |
| AROCLOR-1248 | 20 U | NA | NA | 19 U | 19 U | 95 U | 20 U | 20 U | 19 U |
| AROCLOR-1254 | 20 U | NA | NA | 19 U | 19 U | 95 U | 20 U | 20 U | 19 U |
| AROCLOR-1260 | 20 U | NA | NA | 19 U | 19 U | 700 | 20 U | 20 U | 19 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | NA | NA | 0 U | 0 U | 700 | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 84 | 86 | 86 | 86 | 90 | 88 | 82 | 83 | 89 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-563 | SB-563 | SB-563 | SB-564 | SB-565 | SB-566 | SB-566 | SB-566 | SB-567 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-563-4 | SB-563-6 | SB-563-8 | SB-564-4 | SB-565-4 | SB-566-4 | SB-566-6 | SB-566-8 | SB-567-4 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-568 | SB-568 | SB-568 | SB-568 | SB-568 | SB-568A | SB-568A | SB-568A | SB-569 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-568-4 | SB-568-4-AVG | SB-568-4-D | SB-568-6 | SB-568-8 | SB-568A-10 | SB-568A-6 | SB-568A-8 | SB-569-4 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081111 | 20081022 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | 4 | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-568 | SB-568 | SB-568 | SB-568 | SB-568 | SB-568A | SB-568A | SB-568A | SB-569 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-568-4 | SB-568-4-AVG | SB-568-4-D | SB-568-6 | SB-568-8 | SB-568A-10 | SB-568A-6 | SB-568A-8 | SB-569-4 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081111 | 20081022 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | 4 | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-568 | SB-568 | SB-568 | SB-568 | SB-568 | SB-568A | SB-568A | SB-568A | SB-569 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-568-4 | SB-568-4-AVG | SB-568-4-D | SB-568-6 | SB-568-8 | SB-568A-10 | SB-568A-6 | SB-568A-8 | SB-569-4 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081111 | 20081022 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | 4 | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-568 | SB-568 | SB-568 | SB-568 | SB-568 | SB-568A | SB-568A | SB-568A | SB-569 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-568-4 | SB-568-4-AVG | SB-568-4-D | SB-568-6 | SB-568-8 | SB-568A-10 | SB-568A-6 | SB-568A-8 | SB-569-4 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081111 | 20081022 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | 4 | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 19 U | 19 U | 19 U | NA | NA | 20 U | 19 U | 19 U | 380 U |
| AROCLOR-1221 | 19 U | 19 U | 19 U | NA | NA | 20 U | 19 U | 19 U | 380 U |
| AROCLOR-1232 | 19 U | 19 U | 19 U | NA | NA | 20 U | 19 U | 19 U | 380 U |
| AROCLOR-1242 | 19 U | 19 U | 19 U | NA | NA | 20 U | 19 U | 19 U | 380 U |
| AROCLOR-1248 | 19 U | 19 U | 19 U | NA | NA | 20 U | 19 U | 19 U | 380 U |
| AROCLOR-1254 | 19 U | 19 U | 19 U | NA | NA | 20 U | 19 U | 19 U | 380 U |
| AROCLOR-1260 | 89 J | 66 | 43 J | NA | NA | 20 U | 19 U | 19 U | 4000 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 89 | 66 | 43 | NA | NA | 0 U | 0 U | 0 U | 4000 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 88 | 87.5 | 87 | 88 | 88 | 85 | 87 | 90 | 88 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-568 | SB-568 | SB-568 | SB-568 | SB-568 | SB-568A | SB-568A | SB-568A | SB-569 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-568-4 | SB-568-4-AVG | SB-568-4-D | SB-568-6 | SB-568-8 | SB-568A-10 | SB-568A-6 | SB-568A-8 | SB-569-4 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081111 | 20081022 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | 4 | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-569 | SB-569 | SB-570 | SB-570 | SB-570 | SB-570A | SB-570A | SB-570A | SB-571 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-569-6 | SB-569-8 | SB-570-4 | SB-570-6 | SB-570-8 | SB-570A-10 | SB-570A-6 | SB-570A-8 | SB-571-4 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081111 | 20081111 | 20081111 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 8 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-569 | SB-569 | SB-570 | SB-570 | SB-570 | SB-570A | SB-570A | SB-570A | SB-571 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-569-6 | SB-569-8 | SB-570-4 | SB-570-6 | SB-570-8 | SB-570A-10 | SB-570A-6 | SB-570A-8 | SB-571-4 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081111 | 20081111 | 20081111 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 8 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-569 | SB-569 | SB-570 | SB-570 | SB-570 | SB-570A | SB-570A | SB-570A | SB-571 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-569-6 | SB-569-8 | SB-570-4 | SB-570-6 | SB-570-8 | SB-570A-10 | SB-570A-6 | SB-570A-8 | SB-571-4 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081111 | 20081111 | 20081111 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 8 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-569 | SB-569 | SB-570 | SB-570 | SB-570 | SB-570A | SB-570A | SB-570A | SB-571 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-569-6 | SB-569-8 | SB-570-4 | SB-570-6 | SB-570-8 | SB-570A-10 | SB-570A-6 | SB-570A-8 | SB-571-4 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081111 | 20081111 | 20081111 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 8 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 20 U | 19 U | 36 U | NA | NA | 18 U | 19 U | 19 U | 18 U |
| AROCLOR-1221 | 20 U | 19 U | 36 U | NA | NA | 18 U | 19 U | 19 U | 18 U |
| AROCLOR-1232 | 20 U | 19 U | 36 U | NA | NA | 18 U | 19 U | 19 U | 18 U |
| AROCLOR-1242 | 20 U | 19 U | 36 U | NA | NA | 18 U | 19 U | 19 U | 18 U |
| AROCLOR-1248 | 20 U | 19 U | 36 U | NA | NA | 18 U | 19 U | 19 U | 18 U |
| AROCLOR-1254 | 20 U | 19 U | 36 U | NA | NA | 18 U | 19 U | 19 U | 18 U |
| AROCLOR-1260 | 33 | 300 | 390 | NA | NA | 34 | 19 U | 19 U | 18 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 33 | 300 | 390 | NA | NA | 34 | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 83 | 87 | 92 | 86 | 88 | 94 | 88 | 90 | 90 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-569 | SB-569 | SB-570 | SB-570 | SB-570 | SB-570A | SB-570A | SB-570A | SB-571 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-569-6 | SB-569-8 | SB-570-4 | SB-570-6 | SB-570-8 | SB-570A-10 | SB-570A-6 | SB-570A-8 | SB-571-4 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081111 | 20081111 | 20081111 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 8 | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-9**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

| LOCATION | | | SB-818 | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 | SB-819 | SB-819 | SB-819 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-818-03 | E-SB-818-05 | E-SB-818-07 | E-SB-818-09 | E-SB-819-03 | E-SB-819-05 | E-SB-819-07 | E-SB-819-07-AVG | E-SB-819-07-D | E-SB-819-09 |
| SAMPLE DATE | | | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 N(4) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 (5) | 63000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (5) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 N(4) | 18 U | 22 U | 20 U | 22 U | 18 U | 20 U | 18 U | 17.5 U | 17 U | 20 U |
| AROCLOR-1260 | 320 | 220 C | 18 U | 22 U | 20 U | 22 U | 96 | 20 U | 18 U | 17.5 U | 17 U | 54 |
| TOTAL AROCLOR | 320 (9) | 220 C(10) | 0 U | 0 U | 0 U | 0 U | 96 | 0 U | 0 U | 0 U | 0 U | 54 |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-818 | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 | SB-819 | SB-819 | SB-819 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-818-03 | E-SB-818-05 | E-SB-818-07 | E-SB-818-09 | E-SB-819-03 | E-SB-819-05 | E-SB-819-07 | E-SB-819-07-AVG | E-SB-819-07-D | E-SB-819-09 |
| SAMPLE DATE | | | | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-820 | SB-820 | SB-820 | SB-820 | SB-821 | SB-821 | SB-821 | SB-821 | SB-821 | SB-821 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-820-03 | E-SB-820-05 | E-SB-820-07 | E-SB-820-09 | E-SB-821-03 | E-SB-821-05 | E-SB-821-07 | E-SB-821-09 | E-SB-821-09-AVG | E-SB-821-09-D |
| SAMPLE DATE | | | | 20100915 | 20100915 | 20100915 | 20100915 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 19 U | 20 U | 19 U | 20 U | 21 U | 19 U | 20 U | 22 U | 21.5 U | 21 U |
| AROCLOR-1260 | 320 | 220 | C | 19 U | 20 U | 19 U | 20 U | 21 U | 37 J | 20 U | 60 J | 41.5 | 23 J |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | 0 U | 0 U | 0 U | 37 | 0 U | 60 | 41.5 | 23 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-820 | SB-820 | SB-820 | SB-820 | SB-821 | SB-821 | SB-821 | SB-821 | SB-821 | SB-821 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-820-03 | E-SB-820-05 | E-SB-820-07 | E-SB-820-09 | E-SB-821-03 | E-SB-821-05 | E-SB-821-07 | E-SB-821-09 | E-SB-821-09-AVG | E-SB-821-09-D |
| SAMPLE DATE | | | 20100915 | 20100915 | 20100915 | 20100915 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 |
| BOTTOM DEPTH | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | | SB-822 | SB-822 | SB-822 | SB-822 | SB-822 | SB-822 | SB-823 | SB-823 | SB-824 | SB-824 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-822-03 | E-SB-822-05 | E-SB-822-05-AVG | E-SB-822-05-D | E-SB-822-07 | E-SB-822-09 | E-SB-823-05 | E-SB-823-07 | E-SB-824-03 | E-SB-824-05 |
| SAMPLE DATE | | | | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 5 | 5 | 7 | 9 | 5 | 7 | 3 | 5 |
| BOTTOM DEPTH | | | | 3 | 5 | 5 | 5 | 7 | 9 | 5 | 7 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 (5) | 63000 | N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N(4) | 20 U | 21 U | 21 U | 21 U | 20 U | 20 U | 21 U | 21 U | 19 U | 19 U |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 21 U | 21 U | 21 U | 20 U | 20 U | 21 U | 21 U | 19 U | 37 |
| TOTAL AROCLOR | 320 (9) | 220 | C(10) | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 37 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-822 | SB-822 | SB-822 | SB-822 | SB-822 | SB-822 | SB-823 | SB-823 | SB-824 | SB-824 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-822-03 | E-SB-822-05 | E-SB-822-05-AVG | E-SB-822-05-D | E-SB-822-07 | E-SB-822-09 | E-SB-823-05 | E-SB-823-07 | E-SB-824-03 | E-SB-824-05 |
| SAMPLE DATE | | | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 5 | 5 | 5 | 7 | 9 | 5 | 7 | 3 | 5 |
| BOTTOM DEPTH | | | 3 | 5 | 5 | 5 | 7 | 9 | 5 | 7 | 3 | 5 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [3][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-824 | SB-824 | SB-824 | SB-824 | SB-825 | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-824-07 | E-SB-824-07-AVG | E-SB-824-07-D | E-SB-824-09 | E-SB-825-03 | E-SB-825-05 | E-SB-825-07 | E-SB-825-09 | E-SB-826-05 | E-SB-826-07 |
| SAMPLE DATE | | | | 20100915 | 20100915 | 20100915 | 20100915 | 20100913 | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 7 |
| BOTTOM DEPTH | | | | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 20 U | 20 U | 20 U | 21 U | 19 U | 21 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 20 U | 20 U | 21 U | 19 U | 21 U | 20 U | 20 U | 20 U | 20 U |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-824 | SB-824 | SB-824 | SB-824 | SB-825 | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-824-07 | E-SB-824-07-AVG | E-SB-824-07-D | E-SB-824-09 | E-SB-825-03 | E-SB-825-05 | E-SB-825-07 | E-SB-825-09 | E-SB-826-05 | E-SB-826-07 |
| SAMPLE DATE | | | | 20100915 | 20100915 | 20100915 | 20100915 | 20100913 | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 7 |
| BOTTOM DEPTH | | | | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 7 |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [3][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-826 | SB-826 | SB-826 | SB-827 | SB-827 | SB-827 | SB-827 | SB-828 | SB-828 | SB-829 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-826-09 | E-SB-826-09-AVG | E-SB-826-09-D | E-SB-827-03 | E-SB-827-05 | E-SB-827-07 | E-SB-827-09 | E-SB-828-03 | E-SB-828-09 | E-SB-829-03 |
| SAMPLE DATE | | | | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 9 | 3 |
| BOTTOM DEPTH | | | | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 490 J | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 370 J | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 170 J | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 580 J | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 330 J | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 460 J | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 430 J | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 320 J | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 500 J | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 620 J | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 350 J | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 2300 J | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | 77 U | NA | NA | 660 J | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 20 U | 20 U | 20 U | 20 U | 20 U | 390 U | 20000 U | 20 U | 21 U | 20 U |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 20 U | 20 UJ | 20 U | 20 U | **2500 J** | **260000 J** | **300** | 130 | 20 UJ |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | 0 U | 0 U | 0 U | **2500** | **260000** | **300** | 130 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-826 | SB-826 | SB-826 | SB-827 | SB-827 | SB-827 | SB-827 | SB-828 | SB-828 | SB-829 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-826-09 | E-SB-826-09-AVG | E-SB-826-09-D | E-SB-827-03 | E-SB-827-05 | E-SB-827-07 | E-SB-827-09 | E-SB-828-03 | E-SB-828-09 | E-SB-829-03 |
| SAMPLE DATE | | | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 |
| SAMPLE CODE | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 9 | 3 |
| BOTTOM DEPTH | | | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 9 | 3 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | **1500000** | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | 280 U | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-829 | SB-829 | SB-829 | SB-830 | SB-830 | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-829-05 | E-SB-829-07 | E-SB-829-09 | E-SB-830-03 | E-SB-830-05 | E-SB-830-07 | E-SB-830-09 | E-SB-831-03 | E-SB-831-05 | E-SB-831-07 |
| SAMPLE DATE | | | | 20100917 | 20100917 | 20100917 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 90 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 20 U | 23 U | 20 U | 20 U | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U |
| AROCLOR-1260 | 320 | 220 | C | 20 UJ | 23 UJ | 20 UJ | 20 U | 20 U | 20 U | 21 U | 20 U | 18 U | 20 U |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-829 | SB-829 | SB-829 | SB-830 | SB-830 | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-829-05 | E-SB-829-07 | E-SB-829-09 | E-SB-830-03 | E-SB-830-05 | E-SB-830-07 | E-SB-830-09 | E-SB-831-03 | E-SB-831-05 | E-SB-831-07 |
| SAMPLE DATE | | | 20100917 | 20100917 | 20100917 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [3][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-831 | SB-832 | SB-832 | SB-832 | SB-833 | SB-833 | SB-833 | SB-833 | SB-833A | SB-833A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-831-09 | E-SB-832-05 | E-SB-832-07 | E-SB-832-09 | E-SB-833-03 | E-SB-833-05 | E-SB-833-07 | E-SB-833-09 | E-SB-833A-06 | E-SB-833A-10 |
| SAMPLE DATE | | | | 20100913 | 20100917 | 20100917 | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20101012 | 20101012 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| BOTTOM DEPTH | | | | 9 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | 44000 U | 410 U | 3000 U |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | **2200000** | **18000** | **140000** |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 440 U | 4.1 U | 30 U |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | **9600000** | **140000** | **830000** |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | 13000 U | 120 U | 870 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | 120000 J | 1600 J | 6200 J |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | 26000 U | 240 U | 1700 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | 12000 U | **37000** | **38000 J** |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | **130000 J** | **17000** | **28000 J** |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | 110000 U | 1000 U | 7500 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 12000 U | 120 U | 840 U |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | 800000 B | 4100 U | 30000 U |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | 31000 U | 290 U | 2100 U |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | 31000 U | 290 U | 2100 U |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | 16000 U | 150 U | 1100 U |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | 16000 U | 1500 J | 1100 U |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | 18000 U | 170 U | 1200 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | 17000 U | 160 U | 1100 U |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | 16000 U | 150 U | 1100 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | 360000 B | 1900 U | 13000 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | 140000 B | 160 U | 1200 U |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 21000 U | 2900 J | 1400 U |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | 22000 U | 210 U | 1500 U |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 12000 U | 380 J | 820 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 7200000 B | 5800 UR | 42000 UR |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | 31000 U | 290 U | 2100 U |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | 44000 U | 410 U | 3000 U |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | 21000 U | 200 U | 1400 U |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | 25000 U | 230 U | 1700 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | 41000 U | 390 U | 2800 U |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | 46000 U | 440 U | 3100 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | 62000 U | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | 88000 U | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | 11000 U | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | 27000 | 100 U | 200 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | 28000 | 100 U | 200 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | **39347** | **401** | 200 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | **33242** | **340** | 200 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | **35000** | 100 U | 200 U |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | **27000** | **290** | 200 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | **27000** | **500** | 200 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 77 U | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | **42000** | 470 | 68 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | 81000 | 660 | 200 U |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | 11000 U | 100 U | 200 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | 11000 U | 310 | 460 |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | 88000 | 360 | 200 U |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | 60000 | 520 | 200 U |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | 415000 | 3110 | 460 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 20 U | 20 U | 24 U | 22 U | 20 U | 20 U | 20 U | 1100000 U | 210000 U | 210000 U |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 63 | 24 U | 22 U | **330** | 140 | 20 U | **24000000** | **510000** | **2000000** |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 63 | 0 U | 0 U | **330** | 140 | 0 U | **24000000** | **510000** | **2000000** |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | 0.031 U | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | **0.61 J** | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | 6.2 | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | 1.3 | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-831 | SB-832 | SB-832 | SB-832 | SB-833 | SB-833 | SB-833 | SB-833 | SB-833A | SB-833A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-831-09 | E-SB-832-05 | E-SB-832-07 | E-SB-832-09 | E-SB-833-03 | E-SB-833-05 | E-SB-833-07 | E-SB-833-09 | E-SB-833A-06 | E-SB-833A-10 |
| SAMPLE DATE | | | | 20100913 | 20100917 | 20100917 | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20101012 | 20101012 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| BOTTOM DEPTH | | | | 9 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | 0.011 B | NA | NA |
| CHROMIUM | 12000 [11] | 12000 | N[11] | NA | NA | NA | NA | NA | NA | NA | 3.2 | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | **5.3** | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | 4.3 | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | **10900** | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | 1.7 | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | 13.6 | NA | NA |
| MERCURY | 2.3 [12] | 2.3 | N[13] | NA | NA | NA | NA | NA | NA | NA | 0.02 U | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | 0.082 U | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | 8.6 | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | 0.59 J | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | 0.021 U | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | 0.017 U | NA | NA |
| VANADIUM | 7.8 | 39 | N[14] | NA | NA | NA | NA | NA | NA | NA | 3 | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | 43.7 | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | **28000000** | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | 630 J | 140000 J | 170000 J |
| TPH (C10-C32) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-833B | SB-833B | SB-833B | SB-833B | SB-833C | SB-833C | SB-833C | SB-833C | SB-833D | SB-833D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-833B-04 | E-SB-833B-06 | E-SB-833B-08 | E-SB-833B-10 | E-SB-833C-04 | E-SB-833C-06 | E-SB-833C-08 | E-SB-833C-10 | E-SB-833D-04 | E-SB-833D-06 |
| SAMPLE DATE | | | | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 | 6 |
| BOTTOM DEPTH | | | | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | 0.26 U | 0.31 U | 0.28 U | 0.33 U | 0.31 U | 0.31 U | 0.34 U | 0.28 U | 0.3 U | 0.34 U |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 0.28 U | 2.2 J | 2.1 J | 0.34 U | 0.33 U | 0.33 U | 0.36 U | 0.29 U | 0.31 U | 0.6 J |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 0.12 U | 0.69 B | 0.13 U | 0.71 B | 0.15 U | 0.15 U | 0.16 U | 0.61 B | 0.14 U | 0.16 U |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | 0.69 B | 12 | 11 | 1.4 B | 0.66 B | 0.94 B | 0.79 B | 0.49 B | 0.57 B | 2.7 B |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 0.47 U | 0.56 U | 0.51 U | 0.59 U | 0.56 U | 0.56 U | 0.61 U | 0.5 U | 0.54 U | 0.62 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 0.26 U | 0.31 U | 0.28 U | 0.33 U | 0.31 U | 0.31 U | 0.34 U | 0.28 U | 0.3 U | 0.39 J |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | 0.25 U | 0.29 U | 0.27 U | 0.31 U | 0.29 U | 0.3 U | 0.32 U | 0.26 U | 0.28 U | 0.32 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 0.25 U | 0.39 J | 0.5 J | 0.32 U | 0.3 U | 0.3 U | 0.33 U | 0.27 U | 0.29 U | 0.33 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 0.48 U | 0.57 U | 0.52 U | 0.6 U | 0.57 U | 0.57 U | 0.62 U | 0.51 U | 0.55 U | 0.63 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 1 U | 1.2 U | 1.1 U | 1.3 U | 1.2 U | 1.2 U | 1.3 U | 1.1 U | 1.2 U | 1.3 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | 0.15 U | 0.18 U | 0.16 U | 0.19 U | 0.18 U | 0.18 U | 0.2 U | 0.16 U | 0.17 U | 0.2 U |
| ACETONE | 7000000 | 6100000 | N | 4.8 B | 5.4 U | 5.4 B | 7.3 B | 5.4 U | 8 B | 5.9 U | 4.8 U | 5.9 B | 6.2 B |
| BENZENE | 12000 | 1100 | C | 0.17 U | 0.2 U | 0.18 U | 0.21 U | 0.2 U | 0.2 U | 0.22 U | 0.18 U | 0.19 U | 0.22 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 0.32 U | 0.38 U | 0.35 U | 0.4 U | 0.38 U | 0.38 U | 0.41 U | 0.34 U | 0.36 U | 0.42 U |
| CARBON TETRACHLORIDE | 4900 | 610 | C | 0.27 U | 0.32 U | 0.29 U | 0.33 U | 0.32 U | 0.32 U | 0.35 U | 0.28 U | 0.31 U | 0.35 U |
| CHLOROBENZENE | 160000 | 29000 | N | 0.24 U | 0.28 U | 0.26 U | 0.3 U | 0.28 U | 0.29 U | 0.31 U | 0.25 U | 0.27 U | 0.31 U |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | 0.26 U | 0.31 U | 0.28 U | 0.33 U | 0.31 U | 0.31 U | 0.34 U | 0.28 U | 0.3 U | 0.34 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 0.12 U | 0.14 U | 0.13 U | 0.14 U | 0.14 U | 0.14 U | 0.15 U | 0.12 U | 0.13 U | 0.15 U |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | 0.87 U | 1 U | 0.94 U | 1.1 U | 1 U | 1 U | 1.1 U | 0.92 U | 0.99 U | 1.1 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.49 U | 0.58 U | 0.53 U | 0.61 U | 0.58 U | 0.58 U | 0.63 U | 0.51 U | 0.55 U | 0.64 U |
| NAPHTHALENE | 160000 | 3600 | C | 0.14 U | 0.16 U | 0.15 U | 0.17 U | 0.16 U | 0.17 U | 0.18 U | 0.15 U | 0.16 U | 0.18 U |
| N-BUTYLBENZENE | NC | NC | | 0.17 U | 0.2 U | 0.18 U | 0.21 U | 0.2 U | 0.2 U | 0.22 U | 0.18 U | 0.19 U | 0.22 U |
| O-XYLENE | 1600000 [5] | 380000 | N | 0.25 U | 0.3 U | 0.27 U | 0.32 U | 0.3 U | 0.3 U | 0.33 U | 0.27 U | 0.29 U | 0.33 U |
| SEC-BUTYLBENZENE | NC | NC | | 0.13 U | 0.16 U | 0.14 U | 0.16 U | 0.16 U | 0.16 U | 0.17 U | 0.14 U | 0.15 U | 0.17 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 5.5 UR | 6.6 UR | 6 UR | 6.9 UR | 6.5 UR | 6.6 UR | 7.1 UR | 5.8 UR | 6.3 UR | 7.2 UR |
| TETRACHLOROETHENE | 1200 | 550 | C | 0.38 U | 0.45 U | 0.41 U | 0.49 J | 0.45 U | 0.45 U | 0.49 U | 0.4 U | 0.43 U | 0.49 U |
| TOLUENE | 630000 | 500000 | N | 0.2 U | 0.23 U | 0.21 U | 0.24 U | 0.23 U | 0.23 U | 0.25 U | 0.21 U | 0.22 U | 0.26 U |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | 0.49 U | 0.58 U | 0.53 U | 0.61 U | 0.58 U | 0.58 U | 0.63 U | 0.51 U | 0.55 U | 0.64 U |
| TRICHLOROETHENE | 1600 | 2800 | C | 0.3 U | 0.36 U | 0.33 U | 0.38 U | 0.36 U | 0.36 U | 0.39 U | 0.32 U | 0.35 U | 0.4 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 0.25 U | 0.29 U | 0.27 U | 0.31 U | 0.29 U | 0.3 U | 0.32 U | 0.26 U | 0.28 U | 0.32 U |
| VINYL CHLORIDE | 90 | 60 | C | 0.28 U | 0.34 U | 0.31 U | 0.35 U | 0.34 U | 0.34 U | 0.37 U | 0.3 U | 0.32 U | 0.37 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| ACENAPHTHENE | 470000 | 340000 | N | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| ANTHRACENE | 2300000 | 1700000 | N | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 1.4 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.4 U | 1.3 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| FLUORANTHENE | 310000 | 230000 | N | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| FLUORENE | 310000 | 230000 | N | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| NAPHTHALENE | 160000 | 3600 | C | 31 | 43 | 200 | 65 | 230 | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| PHENANTHRENE | 2300000 | 170000 | N[8] | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| PYRENE | 230000 | 170000 | N | 3.9 U | 4.1 U | 3.8 U | 3.9 U | 3.8 U | 3.9 U | 4 U | 4.1 U | 4 U | 4.2 U |
| TOTAL PAHS | NC | NC | | 31 | 43 | 200 | 65 | 230 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 20 U | 21 U | 20 U | 100 U | 20 U | 20 U | 20 U | 21 U | 21 U | 22 U |
| AROCLOR-1260 | 320 | 220 | C | 110 | 520 | 150 | 750 | 50 | 24 J | 20 U | 27 J | 21 U | 22 U |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 110 | 520 | 150 | 750 | 50 | 24 | 0 U | 27 | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-833B | SB-833B | SB-833B | SB-833B | SB-833C | SB-833C | SB-833C | SB-833C | SB-833D | SB-833D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-833B-04 | E-SB-833B-06 | E-SB-833B-08 | E-SB-833B-10 | E-SB-833C-04 | E-SB-833C-06 | E-SB-833C-08 | E-SB-833C-10 | E-SB-833D-04 | E-SB-833D-06 |
| SAMPLE DATE | | | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 | 6 |
| BOTTOM DEPTH | | | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 4 | 6 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | 110 J | 86 J | 64 J | 61 J | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [3][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-833D<br>E-SB-833D-08<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-833D<br>E-SB-833D-10<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-833E<br>E-SB-833E-06<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-833E<br>E-SB-833E-10<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-833F<br>E-SB-833F-04<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-833F<br>E-SB-833F-06<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-833F<br>E-SB-833F-08<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-833F<br>E-SB-833F-10<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-833G<br>E-SB-833G-06<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-833G<br>E-SB-833G-08<br>20101012<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | 0.32 U | 13 U | 770 U | 15 U | 15 U | 15 U | 14 U | 15 U | 0.26 U | 0.31 U |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 65 | 11 B | **52000 J** | 910 J | 340 J | 380 J | 320 J | 150 J | 2 J | 4.1 J |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 0.72 B | 30 J | 7.7 U | 34 J | 0.15 U | 36 J | 0.14 U | 0.15 U | 0.12 U | 0.68 B |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | 110 J | 52 B | **260000** | 4700 | 1500 | 1800 | 1500 | 720 | 7.5 | 21 |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 0.59 U | 3.8 U | 230 U | 4.3 U | 4.4 U | 4.5 U | 4.2 U | 4.5 U | 0.47 U | 0.57 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 12 | 6.6 U | 1900 J | 110 J | 57 J | 81 J | 71 J | 42 J | 0.26 U | 2.1 J |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | 0.31 U | 7.6 U | 450 U | 8.6 U | 8.8 U | 9.1 U | 8.5 U | 9 U | 0.25 U | 0.3 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 0.32 U | 3.7 U | 220 U | 4.1 U | 4.2 U | 4.4 U | 4.1 U | 4.3 U | 0.51 J | 13 |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 14 | 8.2 J | **2700 J** | 140 J | 89 J | 110 J | 93 J | 58 J | 1.6 J | 38 |
| 2-BUTANONE | 4700000 | 2800000 | N | 1.3 U | 33 U | 2000 U | 37 U | 38 U | 39 U | 36 U | 39 U | 1 U | 1.2 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | 0.19 U | 3.7 U | 220 U | 4.1 U | 4.2 U | 4.4 U | 4.1 U | 4.3 U | 0.15 U | 0.18 U |
| ACETONE | 7000000 | 6100000 | N | 7.1 B | 240 B | 16000 J | 260 J | 220 J | 260 J | 240 J | 260 J | 11 B | 7.2 B |
| BENZENE | 12000 | 1100 | C | 0.21 U | 9.1 U | 550 U | 10 U | 11 U | 11 U | 10 U | 11 U | 0.17 U | 0.4 J |
| CARBON DISULFIDE | 780000 | 82000 | N | 0.4 U | 9.1 U | 550 U | 10 U | 11 U | 11 U | 10 U | 11 U | 0.32 U | 0.38 U |
| CARBON TETRACHLORIDE | 4900 | 610 | C | 0.33 U | 4.9 U | 290 U | 5.5 U | 5.6 U | 5.8 U | 5.4 U | 5.8 U | 0.27 U | 0.88 J |
| CHLOROBENZENE | 160000 | 29000 | N | 0.3 U | 4.9 U | 290 U | 5.5 U | 5.6 U | 5.8 U | 5.4 U | 5.8 U | 39 | 120 |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | 0.32 U | 5.3 U | 310 U | 5.9 U | 6.1 U | 6.3 U | 5.8 U | 6.2 U | 0.26 U | 0.31 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 0.14 U | 5 U | 300 U | 5.6 U | 5.7 U | 5.9 U | 5.5 U | 5.9 U | 0.12 U | 0.14 U |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | 1.1 U | 4.7 U | 280 U | 5.3 U | 5.5 U | 5.6 U | 5.3 U | 5.6 U | 0.87 U | 1 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.6 U | 59 U | 4800 J | 66 U | 68 U | 70 U | 110 J | 69 U | 0.49 U | 0.58 U |
| NAPHTHALENE | 160000 | 3600 | C | 0.17 U | 5.1 U | 300 U | 5.8 U | 5.9 U | 6.1 U | 5.7 U | 6 U | 0.14 U | 0.17 U |
| N-BUTYLBENZENE | NC | NC | | 0.21 U | 6.1 U | 360 U | 6.9 U | 7.1 U | 7.3 U | 6.8 U | 7.2 U | 0.17 U | 0.2 U |
| O-XYLENE | 1600000 [5] | 380000 | N | 0.32 U | 6.5 U | 390 U | 7.3 U | 7.5 U | 7.7 U | 7.2 U | 7.7 U | 0.25 U | 0.3 U |
| SEC-BUTYLBENZENE | NC | NC | | 0.16 U | 3.6 U | 210 U | 4 U | 4.1 U | 4.3 U | 4 U | 4.2 U | 0.13 U | 0.16 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 6.8 UR | 310 J | 11000 UR | 210 UR | 210 UR | 220 UR | 200 UR | 220 UR | 5.5 UR | 6.6 UR |
| TETRACHLOROETHENE | 1200 | 550 | C | 0.47 U | 9.1 U | 550 U | 10 U | 11 U | 11 U | 10 U | 11 U | 0.38 U | 2.6 J |
| TOLUENE | 630000 | 500000 | N | 0.24 U | 13 U | 770 U | 15 U | 15 U | 15 U | 14 U | 15 U | 0.2 U | 0.23 U |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | 0.6 U | 6.2 U | 370 U | 7 U | 7.1 U | 7.3 U | 6.9 U | 7.3 U | 0.49 U | 0.58 U |
| TRICHLOROETHENE | 1600 | 2800 | C | 0.38 U | 7.4 U | 440 U | 8.3 U | 8.6 U | 8.8 U | 8.2 U | 8.7 U | 0.31 U | 2.2 J |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 0.31 U | 12 U | 730 U | 14 U | 14 U | 15 U | 14 U | 14 U | 0.25 U | 0.3 U |
| VINYL CHLORIDE | 90 | 60 | C | 0.35 U | 14 U | 820 U | 15 U | 16 U | 16 U | 15 U | 16 U | 0.28 U | 0.34 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| ACENAPHTHENE | 470000 | 340000 | N | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| ANTHRACENE | 2300000 | 1700000 | N | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| BENZO(A)PYRENE | 22 | 15 | C | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 1.4 U | 26 U | 1.3 U | 1.3 U | 1.3 U | 1.4 U | 1.4 U | 1.4 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| FLUORANTHENE | 310000 | 230000 | N | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| FLUORENE | 310000 | 230000 | N | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| NAPHTHALENE | 160000 | 3600 | C | 62 | 19 | 77 U | 3.9 U | 3.9 U | 17 | 4.1 U | 4.1 U | 4.2 U | 4 U |
| PHENANTHRENE | 2300000 | 170000 | N[8] | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| PYRENE | 230000 | 170000 | N | 3.9 U | 4.3 U | 77 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 4.1 U | 4.2 U | 4 U |
| TOTAL PAHS | NC | NC | | 62 | 19 | 0 U | 0 U | 0 U | 17 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 20 U | 22 U | 9900 U | 2000 U | 20 U | 210 U | 21 U | 210 U | 22 U | 21 U |
| AROCLOR-1260 | 320 | 220 | C | 48 | 22 U | **180000** | **27000** | **250** | **2300** | 100 | **1000** | 83 | 77 |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 48 | 0 U | **180000** | **27000** | **250** | **2300** | 100 | **1000** | 83 | 77 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-833D | SB-833D | SB-833E | SB-833E | SB-833F | SB-833F | SB-833F | SB-833F | SB-833G | SB-833G |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-833D-08 | E-SB-833D-10 | E-SB-833E-06 | E-SB-833E-10 | E-SB-833F-04 | E-SB-833F-06 | E-SB-833F-08 | E-SB-833F-10 | E-SB-833G-06 | E-SB-833G-08 |
| SAMPLE DATE | | | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 8 | 10 | 6 | 10 | 4 | 6 | 8 | 10 | 6 | 8 |
| BOTTOM DEPTH | | | 8 | 10 | 6 | 10 | 4 | 6 | 8 | 10 | 6 | 8 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | **1900000 J** | 7600 J | 3300 U | 3400 U | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | 56 J | 55 U | 55 U | 56 U | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-833G | SB-833H | SB-833H | SB-833H | SB-833I | SB-833I | SB-833J | SB-833J | SB-833J | SB-833J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-833G-10 | E-SB-833H-06 | E-SB-833H-08 | E-SB-833H-10 | E-SB-833I-08 | E-SB-833I-10 | E-SB-833J-04 | E-SB-833J-06 | E-SB-833J-08 | E-SB-833J-10 |
| SAMPLE DATE | | | | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 6 | 8 | 10 | 8 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | | | | 10 | 6 | 8 | 10 | 8 | 10 | 4 | 6 | 8 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | 0.3 U | 0.27 U | 19 U | 0.32 U | 320 U | 250 U | 0.33 U | 0.29 U | 0.3 U | 14 U |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 0.32 U | 5.9 | 180 J | 19 J | 21000 J | 11000 J | 0.35 U | 0.31 U | 0.31 U | 89 J |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 0.14 U | 0.6 B | 0.19 U | 0.15 U | 3.2 U | 2.5 U | 0.16 U | 0.14 U | 0.14 U | 33 J |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | 0.67 B | 38 | 970 | 96 | 110000 | 66000 | 1.1 B | 1.1 B | 0.46 B | 520 |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 0.55 U | 0.49 U | 5.7 U | 0.58 U | 94 U | 74 U | 0.6 U | 0.53 U | 0.54 U | 4.1 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 0.6 J | 3.2 J | 44 J | 5.3 | 910 J | 430 J | 0.33 U | 0.29 U | 0.3 U | 7 U |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | 0.29 U | 0.26 U | 11 U | 0.3 U | 190 U | 150 U | 0.31 U | 0.28 U | 0.28 U | 8.1 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 4.3 | 31 | 160 J | 5.9 | 2600 J | 3300 J | 0.32 U | 0.29 U | 0.29 U | 18 J |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 18 | 30 | 140 J | 9.9 | 2900 J | 2300 J | 0.61 U | 0.54 U | 0.55 U | 20 J |
| 2-BUTANONE | 4700000 | 2800000 | N | 1.2 U | 1.1 U | 49 U | 1.3 U | 810 U | 640 U | 1.3 U | 1.1 U | 1.2 U | 35 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | 0.18 U | 0.16 U | 5.4 U | 0.19 U | 91 U | 71 U | 0.19 U | 0.17 U | 0.17 U | 3.9 U |
| ACETONE | 7000000 | 6100000 | N | 15 B | 5 B | 190 U | 6.6 B | 4500 B | 3600 B | 24 B | 17 B | 5.2 U | 200 B |
| BENZENE | 12000 | 1100 | C | 0.34 J | 0.33 J | 14 U | 0.21 U | 230 U | 180 U | 0.21 U | 0.19 U | 0.19 U | 9.7 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 0.37 U | 0.33 U | 14 U | 0.39 U | 230 U | 180 U | 0.4 U | 0.36 U | 0.36 U | 9.7 U |
| CARBON TETRACHLORIDE | 4900 | 610 | C | 0.31 U | 0.28 U | 7.3 U | 0.33 U | 120 U | 95 U | 0.34 U | 0.3 U | 0.31 U | 5.2 U |
| CHLOROBENZENE | 160000 | 29000 | N | 170 | 51 | 52 J | 2 J | 210 J | 120 J | 0.3 U | 0.27 U | 0.27 U | 5.2 U |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | 0.3 U | 0.27 U | 7.8 U | 0.57 J | 130 U | 100 U | 0.33 U | 0.29 U | 0.3 U | 5.6 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 0.13 U | 0.12 U | 7.4 U | 0.14 U | 120 U | 96 U | 0.15 U | 0.13 U | 0.13 U | 5.3 U |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | 1 U | 0.9 U | 7 U | 1.1 U | 120 U | 92 U | 1.1 U | 0.98 U | 0.99 U | 5 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.56 U | 0.5 U | 87 U | 0.6 U | 1500 U | 1100 U | 0.62 U | 0.55 U | 0.56 U | 62 U |
| NAPHTHALENE | 160000 | 3600 | C | 0.16 U | 0.14 U | 7.6 U | 0.17 U | 130 U | 99 U | 0.17 U | 0.16 U | 0.16 U | 5.4 U |
| N-BUTYLBENZENE | NC | NC | | 0.19 U | 0.17 U | 9.1 U | 0.21 U | 150 U | 120 U | 0.21 U | 0.19 U | 0.19 U | 6.5 U |
| O-XYLENE | 1600000 [5] | 380000 | N | 0.29 U | 0.26 U | 9.6 U | 0.31 U | 160 U | 130 U | 0.32 U | 0.29 U | 0.29 U | 6.9 U |
| SEC-BUTYLBENZENE | NC | NC | | 0.15 U | 0.14 U | 5.3 U | 0.16 U | 89 U | 70 U | 0.17 U | 0.15 U | 0.15 U | 3.8 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 6.4 UR | 5.7 UR | 270 UR | 6.8 UR | 4500 UR | 3600 UR | 7 UR | 6.2 UR | 6.3 UR | 620 J |
| TETRACHLOROETHENE | 1200 | 550 | C | 0.44 U | 0.69 J | 14 U | 2.2 J | 230 U | 180 U | 0.48 U | 0.43 U | 0.43 U | 9.7 U |
| TOLUENE | 630000 | 500000 | N | 0.23 U | 0.2 U | 19 U | 0.24 U | 320 U | 270 J | 0.38 J | 0.27 J | 0.33 J | 16 J |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | 0.56 U | 0.5 U | 9.2 U | 0.6 U | 150 U | 120 U | 0.62 U | 0.55 U | 0.56 U | 6.6 U |
| TRICHLOROETHENE | 1600 | 2800 | C | 0.35 U | 0.32 J | 11 U | 0.59 J | 180 U | 140 U | 0.39 U | 0.34 U | 0.35 U | 7.9 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 0.29 U | 0.26 U | 18 U | 0.3 U | 300 U | 240 U | 0.31 U | 0.28 U | 0.28 U | 13 U |
| VINYL CHLORIDE | 90 | 60 | C | 0.33 U | 0.29 U | 20 U | 0.35 U | 340 U | 270 U | 0.36 U | 0.32 U | 0.32 U | 15 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U | 4 U | 3.9 U | 4.1 U |
| ACENAPHTHENE | 470000 | 340000 | N | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U | 4 U | 3.9 U | 4.1 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U | 4 U | 3.9 U | 4.1 U |
| ANTHRACENE | 2300000 | 1700000 | N | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U | 4 U | 3.9 U | 4.1 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 177 | 3.8 U | 4 U | 3.9 U | 4.1 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 155 | 3.8 U | 4 U | 3.9 U | 4.1 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 190 | 3.8 U | 4 U | 3.9 U | 4.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 120 | 3.8 U | 4 U | 3.9 U | 4.1 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 160 | 3.8 U | 4 U | 3.9 U | 4.1 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 84 | 3.8 U | 4 U | 3.9 U | 4.1 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U | 4 U | 3.9 U | 4.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 13 U | 120 | 1.3 U | 1.3 U | 1.3 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U | 4 U | 3.9 U | 4.1 U |
| FLUORANTHENE | 310000 | 230000 | N | 3.9 U | 3.9 U | 3.8 U | 4 U | 91 | 240 | 3.8 U | 4 U | 3.9 U | 4.1 U |
| FLUORENE | 310000 | 230000 | N | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U | 4 U | 3.9 U | 4.1 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U | 4 U | 3.9 U | 4.1 U |
| NAPHTHALENE | 160000 | 3600 | C | 3.9 U | 23 | 3.8 U | 4 U | 40 U | 39 U | 3.8 U | 4 U | 3.9 U | 4.1 U |
| PHENANTHRENE | 2300000 | 170000 | N[8] | 3.9 U | 3.9 U | 3.8 U | 4 U | 40 U | 39 U | 3.8 U | 4 U | 3.9 U | 4.1 U |
| PYRENE | 230000 | 170000 | N | 3.9 U | 3.9 U | 3.8 U | 4 U | 110 | 220 | 3.8 U | 4 U | 3.9 U | 4.1 U |
| TOTAL PAHS | NC | NC | | 0 U | 23 | 0 U | 0 U | 201 | 1134 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 20 U | 20 U | 20 U | 21 U | 21000 U | 20000 U | 20 U | 20 U | 20 U | 21 U |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 20 U | 20 U | 21 U | 220000 | 350000 | 160 | 39 J | 70 | 180 J |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | 0 U | 0 U | 220000 | 350000 | 160 | 39 | 70 | 180 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-833G | SB-833H | SB-833H | SB-833H | SB-833I | SB-833I | SB-833J | SB-833J | SB-833J | SB-833J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-833G-10 | E-SB-833H-06 | E-SB-833H-08 | E-SB-833H-10 | E-SB-833I-08 | E-SB-833I-10 | E-SB-833J-04 | E-SB-833J-06 | E-SB-833J-08 | E-SB-833J-10 |
| SAMPLE DATE | | | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 10 | 6 | 8 | 10 | 8 | 10 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | | | 10 | 6 | 8 | 10 | 8 | 10 | 4 | 6 | 8 | 10 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | **460000 K** | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | 1600 J | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [3][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-833K | SB-833K | SB-833K | SB-833L | SB-833L | SB-833L | SB-833M | SB-833M | SB-833M | SB-833M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-833K-06 | E-SB-833K-08 | E-SB-833K-10 | E-SB-833L-04 | E-SB-833L-06 | E-SB-833L-08 | E-SB-833M-04 | E-SB-833M-06 | E-SB-833M-08 | E-SB-833M-10 |
| SAMPLE DATE | | | | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 6 | 8 | 10 | 4 | 6 | 8 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | | | | 6 | 8 | 10 | 4 | 6 | 8 | 4 | 6 | 8 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | 300 U | 17 U | 82 U | 20 U | 15 U | 1600 U | 0.34 U | 0.28 U | 0.34 U | 0.31 U |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 22000 J | 370 J | 5800 | 420 J | 230 J | 77000 J | 0.36 U | 5.4 | 0.36 U | 0.33 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 3 U | 0.17 U | 0.82 U | 49 J | 0.15 U | 16 U | 0.16 U | 0.61 B | 0.16 U | 0.68 B |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | 120000 J | 1700 J | 28000 | 1900 | 1000 | 410000 J | 0.98 B | 25 | 0.68 B | 0.68 B |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 89 U | 4.9 U | 24 U | 6 U | 4.5 U | 460 U | 0.62 U | 0.51 U | 0.61 U | 0.56 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 1100 J | 68 J | 180 J | 42 J | 22 J | 3000 J | 0.34 U | 0.28 U | 0.34 U | 0.31 U |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | 180 U | 9.8 U | 51 J | 12 U | 9 U | 920 U | 0.32 U | 0.26 U | 0.32 U | 0.29 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 86 U | 4.7 U | 23 U | 5.8 U | 4.3 U | 440 U | 0.33 U | 0.27 U | 0.33 U | 0.3 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 1500 J | 98 J | 250 J | 67 J | 27 J | 4300 J | 0.62 U | 0.51 U | 0.62 U | 0.57 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 770 U | 71 J | 210 U | 52 U | 110 J | 3900 U | 1.3 U | 1.1 U | 1.3 U | 1.2 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | 86 U | 4.7 U | 23 U | 5.8 U | 4.3 U | 440 U | 0.2 U | 0.16 U | 0.2 U | 0.18 U |
| ACETONE | 7000000 | 6100000 | N | 3000 UJ | 170 UJ | 1100 B | 280 B | 190 B | 16000 UJ | 19 J | 7.7 B | 13 B | 16 B |
| BENZENE | 12000 | 1100 | C | 210 U | 12 U | 58 U | 14 U | 11 U | 1100 U | 0.22 U | 0.18 U | 0.22 U | 0.2 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 210 U | 12 U | 58 U | 14 U | 11 U | 1100 U | 0.42 U | 0.34 U | 0.41 U | 0.38 U |
| CARBON TETRACHLORIDE | 4900 | 610 | C | 110 U | 6.3 U | 31 U | 7.7 U | 5.8 U | 590 U | 0.35 U | 0.29 U | 0.35 U | 0.32 U |
| CHLOROBENZENE | 160000 | 29000 | N | 110 U | 6.3 U | 31 U | 7.7 U | 12 J | 4000 J | 0.31 U | 0.26 U | 0.31 U | 0.29 U |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | 120 U | 6.8 U | 33 U | 8.3 U | 6.2 U | 630 U | 0.34 U | 0.28 U | 0.34 U | 0.31 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 120 U | 6.4 U | 31 U | 7.8 U | 5.9 U | 590 U | 0.15 U | 0.12 U | 0.15 U | 0.14 U |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | 110 U | 6.1 U | 30 U | 14 J | 5.6 U | 570 U | 1.1 U | 0.93 U | 1.1 U | 1 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 1400 U | 76 U | 370 U | 93 U | 69 U | 9000 B | 0.63 U | 0.52 U | 0.63 U | 0.58 U |
| NAPHTHALENE | 160000 | 3600 | C | 120 U | 6.6 U | 32 U | 8.1 U | 6 U | 610 U | 0.18 U | 0.15 U | 0.18 U | 0.16 U |
| N-BUTYLBENZENE | NC | NC | | 140 U | 7.9 U | 38 U | 9.6 U | 7.2 U | 730 U | 0.22 U | 0.18 U | 0.22 U | 0.2 U |
| O-XYLENE | 1600000 [5] | 380000 | N | 150 U | 8.3 U | 41 U | 10 U | 7.7 U | 780 U | 0.33 U | 0.27 U | 0.33 U | 0.3 U |
| SEC-BUTYLBENZENE | NC | NC | | 84 U | 4.6 U | 23 U | 5.7 U | 4.2 U | 430 U | 0.17 U | 0.14 U | 0.17 U | 0.16 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 4300 UR | 240 UR | 1200 UR | 1200 J | 720 J | 22000 UR | 7.2 UR | 5.9 UR | 7.1 UR | 6.6 UR |
| TETRACHLOROETHENE | 1200 | 550 | C | 210 U | 12 U | 58 U | 14 U | 11 U | 1100 U | 0.49 U | 0.4 U | 0.49 U | 0.45 U |
| TOLUENE | 630000 | 500000 | N | 300 U | 17 U | 82 U | 48 J | 16 J | 1600 U | 0.29 J | 0.21 J | 0.39 J | 0.25 J |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | 140 U | 8 U | 39 U | 14 J | 7.3 U | 740 U | 0.63 U | 0.52 U | 0.63 U | 0.58 U |
| TRICHLOROETHENE | 1600 | 2800 | C | 170 U | 9.5 U | 47 U | 12 U | 8.8 U | 890 U | 0.4 U | 0.33 U | 0.39 U | 0.36 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 290 U | 16 U | 77 U | 19 U | 14 U | 1500 U | 0.32 U | 0.26 U | 0.32 U | 0.29 U |
| VINYL CHLORIDE | 90 | 60 | C | 320 U | 18 U | 87 U | 22 U | 16 U | 1600 U | 0.37 U | 0.3 U | 0.37 U | 0.34 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| ACENAPHTHENE | 470000 | 340000 | N | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| ANTHRACENE | 2300000 | 1700000 | N | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 39 U | 3.9 U | 142 | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 39 U | 3.9 U | 120 | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 39 U | 3.9 U | 220 | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| BENZO(A)PYRENE | 22 | 15 | C | 39 U | 3.9 U | 85 | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 39 U | 3.9 U | 130 | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 13 U | 1.3 U | 130 | 1.3 U | 1.3 U | 13 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| FLUORANTHENE | 310000 | 230000 | N | 39 U | 3.9 U | 370 | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| FLUORENE | 310000 | 230000 | N | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| NAPHTHALENE | 160000 | 3600 | C | 39 U | 3.9 U | 39 U | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| PHENANTHRENE | 2300000 | 170000 | N[8] | 39 U | 3.9 U | 190 | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| PYRENE | 230000 | 170000 | N | 39 U | 3.9 U | 270 | 3.9 U | 4 U | 38 U | 4 U | 3.8 U | 4 U | 4 U |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 1395 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 100000 U | 4000 U | 20000 U | 20 U | 410 U | 99000 U | 41 U | 99 U | 41 U | 20 U |
| AROCLOR-1260 | 320 | 220 | C | 970000 | 35000 | 270000 | 73 | 4500 | 700000 | 240 | 860 | 590 | 73 |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 970000 | 35000 | 270000 | 73 | 4500 | 700000 | 240 | 860 | 590 | 73 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-833K | SB-833K | SB-833K | SB-833L | SB-833L | SB-833L | SB-833M | SB-833M | SB-833M | SB-833M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-833K-06 | E-SB-833K-08 | E-SB-833K-10 | E-SB-833L-04 | E-SB-833L-06 | E-SB-833L-08 | E-SB-833M-04 | E-SB-833M-06 | E-SB-833M-08 | E-SB-833M-10 |
| SAMPLE DATE | | | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 6 | 8 | 10 | 4 | 6 | 8 | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | | | 6 | 8 | 10 | 4 | 6 | 8 | 4 | 6 | 8 | 10 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | **310000 J** | NA | **590000 K** | NA | 7300 J | **450000 J** | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | 110 J | NA | 76 J | NA | 56 UJ | 5000 | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-833N<br>E-SB-833N-04<br>20101014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-833N<br>E-SB-833N-06<br>20101014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-833N<br>E-SB-833N-08<br>20101014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-833N<br>E-SB-833N-10<br>20101014<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 |
|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | 0.31 U | 0.34 U | 0.35 U | 0.33 U |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 0.32 U | 0.35 U | 0.36 U | 1.4 B |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 0.14 U | 0.16 U | 0.16 U | 0.16 U |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | 0.23 U | 0.25 U | 0.51 B | 5.9 J |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 0.55 U | 0.61 U | 0.62 U | 0.6 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 0.31 U | 0.34 U | 0.35 U | 0.33 U |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | 0.29 U | 0.32 U | 0.33 U | 0.32 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 0.3 U | 0.33 U | 0.34 U | 0.32 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 0.56 U | 0.62 U | 0.63 U | 0.61 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 1.5 J | 1.3 U | 1.3 U | 1.3 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | 0.18 U | 0.2 U | 0.2 U | 0.19 U |
| ACETONE | 7000000 | 6100000 | N | 18 J | 5.9 U | 12 J | 13 J |
| BENZENE | 12000 | 1100 | C | 0.2 U | 0.21 U | 0.22 U | 0.21 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 0.38 U | 0.41 U | 0.42 U | 0.41 U |
| CARBON TETRACHLORIDE | 4900 | 610 | C | 0.32 U | 0.35 U | 0.35 U | 0.34 U |
| CHLOROBENZENE | 160000 | 29000 | N | 0.28 U | 0.31 U | 0.32 U | 0.31 U |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | 0.31 U | 0.37 J | 0.35 U | 0.33 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 0.14 U | 0.15 U | 0.15 U | 0.15 U |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | 1 U | 1.1 U | 1.2 U | 1.1 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 0.57 U | 0.63 U | 0.64 U | 0.62 U |
| NAPHTHALENE | 160000 | 3600 | C | 0.16 U | 2.3 B | 0.18 U | 0.18 U |
| N-BUTYLBENZENE | NC | NC | | 0.2 U | 0.21 U | 0.22 U | 0.21 U |
| O-XYLENE | 1600000 [5] | 380000 | N | 0.3 U | 0.33 U | 0.34 U | 0.32 U |
| SEC-BUTYLBENZENE | NC | NC | | 0.15 U | 0.17 U | 0.17 U | 0.17 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 6.5 UR | 11 J | 10 J | 7 J |
| TETRACHLOROETHENE | 1200 | 550 | C | 0.44 U | 0.49 U | 0.5 U | 0.48 U |
| TOLUENE | 630000 | 500000 | N | 0.32 J | 0.25 U | 0.41 J | 0.36 J |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | 0.57 U | 0.63 U | 0.64 U | 0.62 U |
| TRICHLOROETHENE | 1600 | 2800 | C | 0.36 U | 0.39 U | 0.4 U | 0.39 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 0.29 U | 0.32 U | 0.33 U | 0.32 U |
| VINYL CHLORIDE | 90 | 60 | C | 0.33 U | 0.36 U | 0.37 U | 0.36 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 40 U | 41 U | 40 U | 16 U |
| ACENAPHTHENE | 470000 | 340000 | N | 40 U | 41 U | 40 U | 16 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | 40 U | 41 U | 40 U | 16 U |
| ANTHRACENE | 2300000 | 1700000 | N | 40 U | 41 U | 40 U | 16 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 40 U | 267 | 60 | 16 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 40 U | 240 | 16 | 16 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 40 U | 41 U | 40 U | 16 U |
| BENZO(A)PYRENE | 22 | 15 | C | 40 U | 240 | 40 U | 16 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 40 U | 41 U | 160 | 16 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 40 U | 41 U | 40 U | 16 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 40 U | 41 U | 40 U | 16 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 13 U | 14 U | 13 U | 5.4 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 40 U | 41 U | 40 U | 16 U |
| FLUORANTHENE | 310000 | 230000 | N | 320 | 390 | 340 | 140 |
| FLUORENE | 310000 | 230000 | N | 40 U | 41 U | 40 U | 16 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 40 U | 41 U | 40 U | 16 U |
| NAPHTHALENE | 160000 | 3600 | C | 40 U | 41 U | 40 U | 16 U |
| PHENANTHRENE | 2300000 | 170000 | N[8] | 40 U | 41 U | 40 U | 16 U |
| PYRENE | 230000 | 170000 | N | 110 | 210 | 160 | 70 |
| TOTAL PAHS | NC | NC | | 430 | 840 | 660 | 210 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 21 U | 21 U | 100 U | 100 U |
| AROCLOR-1260 | 320 | 220 | C | 210 | 80 | 370 | 430 |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 210 | 80 | 370 | 430 |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][9] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-833N | SB-833N | SB-833N | SB-833N |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-833N-04 | E-SB-833N-06 | E-SB-833N-08 | E-SB-833N-10 |
| SAMPLE DATE | | | | 20101014 | 20101014 | 20101014 | 20101014 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 6 | 8 | 10 |
| BOTTOM DEPTH | | | | 4 | 6 | 8 | 10 |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 | N[11] | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 | N[13] | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[14] | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [3][9] | USEPA Regional Screening Levels (RSLs) [2][3] | | MRC-MW43A<br>MRC-MW43[0910]<br>20050517<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>10 | SB-001<br>SB-1-05<br>20031120<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-001<br>SB-1-10<br>20031120<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-002<br>SB-2-05<br>20031120<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-002<br>SB-2-10<br>20031120<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-003<br>SB-3-05<br>20031120<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-003<br>SB-3-10<br>20031120<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-004<br>SB-4-05<br>20031120<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-004<br>SB-4-10<br>20031120<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-010<br>SB-10-05<br>20031118<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U | 69 U | 68 U | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| ACETONE | 7000000 | 6100000 | N | NA | 30 J | 67 UJ | 17 J | 11 J | 12 J | 66 UJ | 35 J | 15 J | NA |
| BENZENE | 12000 | 1100 | C | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 1 U |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | 22 U | 20 U | 20 U | 20 U | 20 U | 20 U | 21 U | 20 U | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | 12 J | 9 J | 7 U | 7 U | 9 J | 11 J | 11 J | 11 J | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 1 U |
| N-BUTYLBENZENE | NC | NC | | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | 22 U | 20 U | 20 U | 20 U | 20 U | 20 U | 21 U | 20 U | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| TOLUENE | 630000 | 500000 | N | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 1 U |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1 U |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | 7 U | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| CARBAZOLE | 32000 | NC | | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 531 | 450 U | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 0.052 | 450 U | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 50 J | 450 U | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 52 J | 450 U | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| FLUORENE | 310000 | 230000 | N | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 460 U | 450 U | NA |
| PYRENE | 230000 | 170000 | N | NA | 480 U | 450 U | 440 U | 440 U | 440 U | 440 U | 57 J | 450 U | NA |
| TOTAL PAHS | NC | NC | | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 159 | 0 U | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U | 69 U | 68 U | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | 72 U | 67 U | 67 U | 66 U | 65 U | 66 U | 69 U | 68 U | NA |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | 3.6 UL | 3.4 UL | 3.3 UL | 3.3 UL | 3.3 UL | 3.3 UL | 3.5 UL | 3.4 UL | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | 5.5 L | 1.8 L | 2.1 L | 0.87 L | 1.5 L | 1.6 L | 4.9 L | 2.4 L | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | 3.6 | 3.4 U | 3.3 U | 3.3 U | 3.3 U | 3.3 U | 3.5 U | 3.4 U | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | MRC-MW43A | SB-001 | SB-001 | SB-002 | SB-002 | SB-003 | SB-003 | SB-004 | SB-004 | SB-010 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | MRC-MW43[0910] | SB-1-05 | SB-1-10 | SB-2-05 | SB-2-10 | SB-3-05 | SB-3-10 | SB-4-05 | SB-4-10 | SB-10-05 |
| SAMPLE DATE | | | 20050517 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 | 20031118 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 9 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | | | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| CADMIUM | 3.9 | 7 N | NA | 3.6 U | 3.4 U | 3.3 U | 3.3 U | 3.3 U | 3.3 U | 3.5 U | 3.4 U | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | 26 J | 13 B | 3.4 B | 3.3 UJ | 6.6 B | 5.2 B | 27 J | 14 B | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | 45 | 17 | 3.3 U | 3.3 U | 3.3 U | 3.3 U | 17 | 15 | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | 7.7 | 5 | 3.3 U | 3.3 U | 3.3 U | 3.3 U | 4.5 | 4.4 | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | 0.14 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.13 U | 0.14 U | 0.14 U | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | 14 | 30 | 3.3 U | 3.3 U | 3.3 U | 3.3 U | 9 | 8 | NA |
| SELENIUM | 39 | 39 N | NA | 3.6 U | 3.4 U | 3.3 U | 3.3 U | 3.3 U | 3.3 U | 3.5 U | 3.4 U | NA |
| SILVER | 39 | 39 N | NA | 3.6 UR | 3.4 UR | 3.3 UR | 3.3 UR | 3.3 UR | 3.3 UR | 3.5 UR | 3.4 UR | NA |
| THALLIUM | 0.55 | NC | NA | 2.9 U | 2.7 U | 2.7 U | 2.6 U | 2.6 U | 2.6 U | 2.8 U | 2.7 U | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | 79 | 76 | 33 U | 33 U | 33 U | 33 U | 35 U | 34 U | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | 29000 U | 27000 U | 27000 U | 26000 U | 26000 U | 26000 U | 230000 | 27000 U | 20000 U |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | 140 U | 130 U | 130 U | 130 U | 490 | 4400 | 190 | 140 U | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | 70 | 74 | 75 | 76 | 77 | 76 | 72 | 73 | 75 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | 690 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | | | | SB-011 | SB-012 | SB-013 | SB-014 | SB-015 | SB-016 | SB-017 | SB-018 | SB-019 | SB-019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-11-05 | SB-12-05 | SB-13-05 | SB-14-05 | SB-15-05 | SB-16-05 | SB-17-05 | SB-18-05 | SB-19-05 | SB-19-10 |
| SAMPLE DATE | | | | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031121 | 20031121 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 |
| BOTTOM DEPTH | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N(4) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 (5) | 63000 | N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 1 U | 1 U | 1 U | 1 U | 2 | 1 U | 1 U | 1 U | 1 U | 1 U |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| TOTAL XYLENES | 1600000 (5) | 63000 | N | 1 U | 1 U | 1 U | 1 U | 3 | 1 U | 1 U | 1 U | 1 U | 1 U |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N(4) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (9) | 220 | C(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | | | SB-011 | SB-012 | SB-013 | SB-014 | SB-015 | SB-016 | SB-017 | SB-018 | SB-019 | SB-019 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-11-05 | SB-12-05 | SB-13-05 | SB-14-05 | SB-15-05 | SB-16-05 | SB-17-05 | SB-18-05 | SB-19-05 | SB-19-10 |
| SAMPLE DATE | | | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031121 | 20031121 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 |
| BOTTOM DEPTH | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (11) | 12000 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (12) | 2.3 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(14) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | 27000 U | 27000 U | 25000 U | 25000 U | 27000 U | 25000 U | 28000 UJ | 29000 U | 56000 | 27000 U |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 75 | 75 | 81 | 80 | 75 | 79 | 70 | 70 | 80 | 74 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | | | SB-020 | SB-020 | SB-021 | SB-021 | SB-035 | SB-036 | SB-500 | SB-500 | SB-501 | SB-501 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-20-05 | SB-20-10 | SB-21-05 | SB-21-10 | SB-35-04 | SB-36-05 | SB-500-0406 | SB-500-0810 | SB-501-0406 | SB-501-0810 |
| SAMPLE DATE | | | 20031120 | 20031120 | 20031120 | 20031120 | 20040922 | 20040917 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 10 | 5 | 10 | 4 | 5 | 4 | 8 | 4 | 8 |
| BOTTOM DEPTH | | | 5 | 10 | 5 | 10 | 4 | 5 | 6 | 10 | 6 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 C | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 N | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 2100 | 14000 |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | 1.7 J | 6 U | 280 U | 2900 U |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 N(4) | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 4800 | 69000 |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | 6 U | 6 U | 4.4 J | 6 U | 280 U | 2900 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 N | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 610 J |
| 1,2-DICHLOROETHANE | 7000 | 430 C | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 C | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 17 J | 640 J |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | 57 U | 59 U | 11 U | 12 U | 550 U | 5800 U |
| 4-ISOPROPYLTOLUENE | NC | NC | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | 57 U | 59 U | 11 U | 12 U | 550 U | 5800 U |
| BENZENE | 12000 | 1100 C | 1 U | 1 U | 1 U | 6 | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| CARBON TETRACHLORIDE | 4900 | 610 C | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| CHLOROBENZENE | 160000 | 29000 N | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 N | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| M+P-XYLENES | 1600000 (5) | 63000 N(6) | NA | NA | NA | NA | 11 U | 12 U | 2.1 J | 12 U | 550 U | 5800 U |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | 7 J | 8 J | 1.4 B | 3 B | 280 U | 2900 U |
| NAPHTHALENE | 160000 | 3600 C | 1 U | 1 U | 1 U | 1 U | 6 U | 6 U | 2.6 B | 6 U | 280 U | 2900 U |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| O-XYLENE | 1600000 (5) | 380000 N | NA | NA | NA | NA | 6 U | 6 U | 1.3 J | 6 U | 280 U | 2900 U |
| SEC-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | 110 UR | 120 UR | 5500 UR | 58000 UR |
| TETRACHLOROETHENE | 1200 | 550 C | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| TOLUENE | 630000 | 500000 N | 1 U | 1 U | 1 U | 1 U | 6 U | 6 U | 0.49 J | 6 U | 280 U | 2900 U |
| TOTAL XYLENES | 1600000 (5) | 63000 N | 1 U | 1 U | 1 U | 1 U | NA | NA | 3.4 J | 12 U | 550 U | 5800 U |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| VINYL CHLORIDE | 90 | 60 C | NA | NA | NA | NA | 6 U | 6 U | 5.6 U | 6 U | 280 U | 2900 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| ACENAPHTHYLENE | 470000 | 340000 N(7) | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| BAP EQUIVALENT-POS | 22 | 15 C | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| BENZO(A)PYRENE | 22 | 15 C | NA | NA | NA | NA | 390 U | 400 UJ | 370 U | 400 U | 370 U | 390 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | 390 U | 400 UJ | 370 U | 400 U | 370 U | 390 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(7) | NA | NA | NA | NA | 390 U | 400 UJ | 370 U | 400 U | 370 U | 390 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | 390 U | 400 UJ | 370 U | 400 U | 370 U | 390 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | 390 U | 400 UJ | 370 U | 400 U | 370 U | 390 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | 390 U | 400 UJ | 370 U | 400 U | 370 U | 390 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| PHENANTHRENE | 2300000 | 170000 N(8) | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | 390 U | 400 U | 370 U | 400 U | 370 U | 390 U |
| TOTAL PAHS | NC | NC | NA | NA | NA | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 N(4) | NA | NA | NA | NA | 280 U | 300 U | 37 U | 40 U | 740 U | 3900 U |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | 280 U | 300 U | 37 U | 40 U | 5800 | 24000 |
| TOTAL AROCLOR | 320 (9) | 220 C(10) | NA | NA | NA | NA | 0 U | 0 U | 0 U | 0 U | 5800 | 24000 |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | 2.5 UL | 2.8 U | 0.091 B | 0.098 B | 0.068 B | 0.18 J |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | 1.6 | 1.3 | 0.31 L | 0.73 L | 1.1 L | 0.94 L |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | 6.2 | 8.5 | 6.5 | 13.8 |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | 2.5 U | 2.8 U | 0.33 | 0.57 | 0.44 | 3.1 |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | | | SB-020 | SB-020 | SB-021 | SB-021 | SB-035 | SB-036 | SB-500 | SB-500 | SB-501 | SB-501 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-20-05 | SB-20-10 | SB-21-05 | SB-21-10 | SB-35-04 | SB-36-05 | SB-500-0406 | SB-500-0810 | SB-501-0406 | SB-501-0810 |
| SAMPLE DATE | | | 20031120 | 20031120 | 20031120 | 20031120 | 20040922 | 20040917 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 10 | 5 | 10 | 4 | 5 | 4 | 8 | 4 | 8 |
| BOTTOM DEPTH | | | 5 | 10 | 5 | 10 | 4 | 5 | 6 | 10 | 6 | 10 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | 2.5 U | 2.8 U | 0.0084 B | 0.016 | 0.0056 B | 0.018 K |
| CHROMIUM | 12000 (11) | 12000 N(11) | NA | NA | NA | NA | 10 J | 5.6 K | 7.4 K | 10.8 K | 6 K | 15.7 K |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | 1.2 J | 1.7 J | 1.7 J | **4.1 J** |
| COPPER | 310 | 310 N | NA | NA | NA | NA | 6.1 | 4.7 L | 3.6 J | 4.5 J | 4.9 J | 12.4 J |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | **9880** | **10900** | **7710** | **25800** |
| LEAD | 400 | 400 | NA | NA | NA | NA | 4.6 | 2.8 UJ | 1.6 J | 1.3 J | 1.8 J | 5.1 J |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | 19.6 L | 18.6 L | 29 L | 70.4 L |
| MERCURY | 2.3 (12) | 2.3 N(13) | NA | NA | NA | NA | 0.1 U | 0.11 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | 0.13 B | 0.13 B | 0.17 B | 0.078 UL |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | 5.7 | 2.8 U | 4 | 6.4 | 2.1 | 14.7 |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | 2.5 U | 2.8 U | 0.56 L | 0.24 L | 0.18 UL | 0.46 L |
| SILVER | 39 | 39 N | NA | NA | NA | NA | 2.5 UR | 2.8 UL | 0.036 | 0.04 | 0.026 B | 0.078 |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | 2 U | 2.3 UL | 0.024 B | 0.033 B | 0.031 B | 0.052 B |
| VANADIUM | 7.8 | 39 N(14) | NA | NA | NA | NA | NA | NA | **10.8** | **17.3** | 7.1 | **20.7** |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | 25 UL | 28 UL | 5.7 J | 8.4 J | 7.4 J | 24.8 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | 26000 U | 26000 U | 28000 U | 27000 U | 12000 U | 12000 U | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | 110 U | 120 U | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | 15000 B | 640 J | 25000 B | 34000 B |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 77 | 77 | 73 | 73 | NA | NA | 89.3 | 83.3 | 89.5 | 84.7 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-502 | SB-502 | SB-503 | SB-504 | SB-504 | SB-505 | SB-505 | SB-506 | SB-506 | SB-507 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-502-0406 | SB-502-0810 | SB-503-0406 | SB-504-0406 | SB-504-0810 | SB-505-0406 | SB-505-0810 | SB-506-0406 | SB-506-0810 | SB-507-0406 |
| SAMPLE DATE | | | | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 8 | 4 | 4 | 8 | 4 | 8 | 4 | 8 | 4 |
| BOTTOM DEPTH | | | | 6 | 10 | 6 | 6 | 10 | 6 | 10 | 6 | 10 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | 5.8 U | 290 U | 6.1 U | 5.7 U | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 21 | 710 | 6.1 U | 5.7 U | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 5.8 U | 290 U | 6.1 U | 0.35 J | 0.35 J | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | 71 | 3700 | 6.1 U | 0.95 B | 0.63 B | 5.8 U | 0.45 B | 5.8 U | 6.4 U | 6.2 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 5.8 U | 290 U | 0.92 B | 0.95 B | 1.2 B | 5.8 U | 6.3 U | 5.8 U | 1 B | 6.2 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 5.8 U | 290 U | 6.1 U | 5.7 U | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | 5.8 U | 290 U | 6.1 U | 1.5 J | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 0.46 J | 290 U | 6.1 U | 5.7 U | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 5.8 U | 290 U | 6.1 U | 5.7 U | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 12 U | 580 U | 12 U | 11 U | 4.3 J | 12 U | 13 U | 12 U | 13 U | 2.6 J |
| 4-ISOPROPYLTOLUENE | NC | NC | | 5.8 U | 290 U | 6.1 U | 9 | 1.6 J | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| ACETONE | 7000000 | 6100000 | N | 12 J | 580 U | 12 U | 21 J | 74 J | 12 U | 13 U | 12 U | 14 J | 56 J |
| BENZENE | 12000 | 1100 | C | 5.8 U | 290 U | 6.1 U | 0.81 J | 0.78 J | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 5.8 U | 290 U | 6.1 U | 1.2 J | 2.4 J | 5.8 U | 6.3 U | 5.8 U | 4.2 J | 6.2 U |
| CARBON TETRACHLORIDE | 4900 | 610 | C | 5.8 U | 290 U | 6.1 U | 5.7 U | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| CHLOROBENZENE | 160000 | 29000 | N | 5.8 U | 290 U | 6.1 U | 1.8 J | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | 5.8 U | 290 U | 6.1 U | 5.7 U | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 5.8 U | 290 U | 6.1 U | 0.82 J | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | 12 U | 580 U | 12 U | 11 U | 12 U | 12 U | 13 U | 12 U | 13 U | 12 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 2.7 B | 290 U | 3.3 B | 3.4 B | 3.7 B | 3.1 B | 2.5 B | 2.3 B | 1.8 B | 6.5 B |
| NAPHTHALENE | 160000 | 3600 | C | 5.8 U | 290 U | 6.1 U | 1.3 B | 2.4 B | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| N-BUTYLBENZENE | NC | NC | | 5.8 U | 290 U | 6.1 U | 5.7 U | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| O-XYLENE | 1600000 [5] | 380000 | N | 5.8 U | 290 U | 6.1 U | 1.4 J | 0.8 J | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| SEC-BUTYLBENZENE | NC | NC | | 5.8 U | 290 U | 6.1 U | 5.7 U | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 120 UR | 5800 UR | 120 UR | 110 UR | 120 UR | 120 UR | 130 UR | 120 UR | 130 UR | 120 UR |
| TETRACHLOROETHENE | 1200 | 550 | C | 5.8 U | 290 U | 6.1 U | 5.7 U | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| TOLUENE | 630000 | 500000 | N | 5.8 U | 290 U | 6.1 U | 0.59 J | 0.47 J | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | 12 U | 580 U | 12 U | 2.2 J | 1.5 J | 12 U | 13 U | 12 U | 13 U | 12 U |
| TRICHLOROETHENE | 1600 | 2800 | C | 5.8 U | 290 U | 6.1 U | 5.7 U | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 5.8 U | 290 U | 6.1 U | 5.7 U | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| VINYL CHLORIDE | 90 | 60 | C | 5.8 U | 290 U | 6.1 U | 0.64 J | 5.8 U | 5.8 U | 6.3 U | 5.8 U | 6.4 U | 6.2 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 390 U | 3800 U | 400 U | 1500 U | 38 J | 380 U | 25 J | 380 U | 420 U | 410 U |
| CARBAZOLE | 32000 | NC | | 390 U | 3800 U | 400 U | 370 J | 22 J | 380 U | 410 U | 380 U | 420 U | 410 U |
| DIBENZOFURAN | 7800 | 7800 | N | 390 U | 3800 U | 400 U | 260 J | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 390 U | 3800 U | 400 U | 140 J | 12 J | 380 U | 410 U | 380 U | 420 U | 410 U |
| ACENAPHTHENE | 470000 | 340000 | N | 390 U | 3800 U | 400 U | 500 J | 21 J | 380 U | 410 U | 380 U | 420 U | 410 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | 390 U | 3800 U | 400 U | 1500 U | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U |
| ANTHRACENE | 2300000 | 1700000 | N | 390 U | 3800 U | 400 U | 1100 J | 26 J | 380 U | 410 U | 380 U | 420 U | 410 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **217** | 3800 U | **234** | **2167** | **287** | 380 U | **239** | 380 U | 420 U | 410 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **22** | 3800 U | **34** | **2167** | **97** | 380 U | 13 | 380 U | 420 U | 410 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 21 J | 3800 U | 28 J | **2000** | 83 J | 380 U | 9.7 J | 380 U | 420 U | 410 U |
| BENZO(A)PYRENE | 22 | 15 | C | **16 J** | 3800 U | **26 J** | **1500** | **73 J** | 380 U | 10 J | 380 U | 420 U | 410 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 31 J | 3800 U | 40 J | **1900** | 110 J | 380 U | 21 J | 380 U | 420 U | 410 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 11 J | 3800 U | 19 J | 710 J | 47 J | 380 U | 410 U | 380 U | 420 U | 410 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 9.3 J | 3800 U | 17 J | 770 J | 38 J | 380 U | 9.2 J | 380 U | 420 U | 410 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 13 J | 3800 U | 29 J | 1700 | 71 J | 380 U | 12 J | 380 U | 420 U | 410 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 390 U | 3800 U | 400 U | **200 J** | 380 U | 380 U | 410 U | 380 U | 420 U | 410 U |
| FLUORANTHENE | 310000 | 230000 | N | 32 J | 3800 U | 54 J | 4900 | 190 J | 380 U | 21 J | 380 U | 420 U | 410 U |
| FLUORENE | 310000 | 230000 | N | 390 U | 3800 U | 400 U | 510 J | 19 J | 380 U | 410 U | 380 U | 420 U | 410 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 10 J | 3800 U | 15 J | **680 J** | 43 J | 380 U | 410 U | 380 U | 420 U | 410 U |
| NAPHTHALENE | 160000 | 3600 | C | 390 U | 3800 U | 400 U | 330 J | 22 J | 380 U | 410 U | 380 U | 420 U | 410 U |
| PHENANTHRENE | 2300000 | 170000 | N[8] | 10 J | 3800 U | 25 J | 3900 | 100 J | 380 U | 410 U | 380 U | 420 U | 410 U |
| PYRENE | 230000 | 170000 | N | 20 J | 3800 U | 51 J | 3400 | 120 J | 380 U | 17 J | 380 U | 420 U | 410 U |
| TOTAL PAHS | NC | NC | | 173.3 | 0 U | 304 | 24240 | 975 | 0 U | 99.9 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 7700 U | 19000 U | 200 U | 1900 U | 380 U | 38 U | 210 U | 38 U | 42 U | 41 U |
| AROCLOR-1260 | 320 | 220 | C | **49000** | **65000** | **380** | **11000** | **2300** | 15 J | **650** | 38 U | 20 J | 41 U |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | **49000** | **65000** | **380** | **11000** | **2300** | 15 | **650** | 0 U | 20 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.17 L | 0.14 B | 0.1 B | 0.14 B | 0.13 B | 0.17 B | 0.12 B | 0.045 B | 0.033 B | 0.067 B |
| ARSENIC | 0.43 | 0.39 | C | **1.3 L** | **0.55 L** | **0.42 L** | **2** | **1.2 L** | **1.2 L** | **1.7** | **1.6** | **1 L** | **2.3** |
| BARIUM | 1600 | 1500 | N | 6.5 | 3.6 | 2.1 | 50.7 | 89.2 | 21.1 | 16.6 | 17.9 | 9.5 | 20.6 |
| BERYLLIUM | 16 | 16 | N | 0.15 | 0.11 | 0.015 B | 0.75 | 0.38 | 0.95 | 0.72 | 0.61 | 0.48 | 1.1 |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | | | SB-502 | SB-502 | SB-503 | SB-504 | SB-504 | SB-505 | SB-505 | SB-506 | SB-506 | SB-507 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-502-0406 | SB-502-0810 | SB-503-0406 | SB-504-0406 | SB-504-0810 | SB-505-0406 | SB-505-0810 | SB-506-0406 | SB-506-0810 | SB-507-0406 |
| SAMPLE DATE | | | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 4 | 8 | 4 | 4 | 8 | 4 | 8 | 4 | 8 | 4 |
| BOTTOM DEPTH | | | 6 | 10 | 6 | 6 | 10 | 6 | 10 | 6 | 10 | 6 |
| CADMIUM | 3.9 | 7 N | 0.056 | 0.035 | 0.018 | 0.67 | 0.38 K | 0.018 K | 0.069 K | 0.022 | 0.0077 B | 0.038 K |
| CHROMIUM | 12000 (11) | 12000 N(11) | 5.9 K | 3.3 K | 3.2 J | 12.9 J | 13.3 J | 10.2 J | 12.8 J | 8.7 J | 4.4 J | 11.1 J |
| COBALT | NC | 2.3 N | 1.1 J | 0.67 J | 0.18 | **8.6** | **4.5** | **6.3** | **4.6** | **3.3** | **2.4** | **3.3** |
| COPPER | 310 | 310 N | 2.3 J | 1.6 J | 1.9 J | 12.9 J | 16.6 J | 14.6 J | 11.7 J | 7 J | 4.6 J | 6.8 J |
| IRON | 5500 | 5500 N | **5570** | 4060 | 1980 | **15400** | **18900** | **17700** | **17000** | **8880** | **6210** | **13600** |
| LEAD | 400 | 400 | 3.6 J | 2.4 J | 2.4 J | 14.4 J | 10.4 J | 3.7 J | 4 J | 4.4 J | 2.4 J | 6.8 J |
| MANGANESE | 160 | 180 N | 44 L | 39.7 L | 3.5 | 88.8 | **168** | 34.5 | 31.3 | 41.5 | 29.3 | 44.7 |
| MERCURY | 2.3 (12) | 2.3 N(13) | 0.019 U | 0.019 U | 0.02 U | 0.079 | 0.29 | 0.019 U | 0.021 U | 0.019 U | 0.021 U | 0.021 U |
| MOLYBDENUM | NC | 39 N | 0.14 B | 0.18 B | 0.35 B | 0.38 B | 1.3 J | 0.15 B | 0.42 B | 0.12 B | 0.16 B | 0.33 B |
| NICKEL | 160 | 150 N | 1.6 | 1.4 | 0.39 B | 10.9 | 11.1 | 10.3 | 6.5 | 8.2 | 2.8 | 7.1 |
| SELENIUM | 39 | 39 N | 0.19 UL | 0.19 UL | 0.19 U | 0.21 | 0.31 | 0.31 | 0.2 | 0.19 U | 0.2 U | 0.21 |
| SILVER | 39 | 39 N | 0.031 B | 0.018 B | 0.016 B | 0.16 | 0.094 | 0.073 | 0.07 | 0.051 | 0.034 B | 0.077 |
| THALLIUM | 0.55 | NC | 0.015 B | 0.0085 B | 0.011 B | 0.099 K | 0.21 K | 0.051 B | 0.04 B | 0.047 B | 0.027 B | 0.13 K |
| VANADIUM | 7.8 | 39 N(14) | 7.2 | 4 | 5.3 J | **18.3 J** | **20.2 J** | **18.8 J** | **15.9 J** | **16 J** | 7.6 J | **17.5 J** |
| ZINC | 2300 | 2300 N | 13.9 J | 14.9 J | 2.8 | 41.1 | 45.7 | 19.5 | 18.1 | 26.3 | 9.8 | 25.4 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | 48000 | 37000 | 9900 J | 130000 B | 43000 | 2700 B | 7000 J | 17000 J | 3600 J | 4300 J |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 85.7 | 85.8 | 82.1 | 87.2 | 86 | 85.9 | 79.7 | 86.4 | 78.5 | 81.1 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [3][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-507 | SB-508 | SB-508 | SB-508 | SB-508 | SB-509 | SB-509 | SB-834 | SB-834 | SB-834 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-507-0810 | SB-508-0406 | SB-508-0406-AVG | SB-508-0406-D | SB-508-0810 | SB-509-0406 | SB-509-0810 | E-SB-834-05 | E-SB-834-07 | E-SB-834-09 |
| SAMPLE DATE | | | | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 | 20071129 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 4 | 4 | 4 | 8 | 4 | 8 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 10 | 6 | 6 | 6 | 10 | 6 | 10 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 12 U | 12 U | 12 U | 12 U | 4.6 J | 12 U | 11 U | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 8 J | 12 U | 12 U | 12 U | 13 J | 10 J | 15 J | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 11 U | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 5.3 B | 7.1 B | 6.25 U | 5.4 B | 7.2 B | 4.8 B | 4.3 B | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 120 UR | 120 UR | 120 R | 120 UR | 120 UR | 120 UR | 110 UR | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 11 U | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | 5.8 U | 5.8 U | 5.85 U | 5.9 U | 6 U | 5.8 U | 5.7 U | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 81 U | NA |
| CHRYSENE | 22000 | 15000 | C | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 380 U | 390 U | 390 U | 390 U | 400 U | 380 U | 380 U | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 38 U | 39 U | 39 U | 39 U | 40 U | 38 U | 38 U | 23 U | 20 U | 22 U |
| AROCLOR-1260 | 320 | 220 | C | 38 U | 39 U | 39 U | 39 U | 40 U | 38 U | 38 U | **280** | 23 J | 24 J |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | **280** | 23 | 24 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.036 B | 0.11 B | 0.0945 U | 0.079 B | 0.084 B | 0.059 L | 0.12 L | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **1.1 L** | **1.4** | **1.2** | **1 L** | **0.42 L** | **1.7 J** | **2.5 J** | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | 9.8 | 11.4 | 9.75 | 8.1 | 8.5 | 8.9 K | 5.7 K | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 1.6 | 0.85 | 0.79 | 0.73 | 1.5 | 0.62 | 0.33 | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-507 | SB-508 | SB-508 | SB-508 | SB-508 | SB-509 | SB-509 | SB-834 | SB-834 | SB-834 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-507-0810 | SB-508-0406 | SB-508-0406-AVG | SB-508-0406-D | SB-508-0810 | SB-509-0406 | SB-509-0810 | E-SB-834-05 | E-SB-834-07 | E-SB-834-09 |
| SAMPLE DATE | | | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 | 20071129 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 8 | 4 | 4 | 4 | 8 | 4 | 8 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | 10 | 6 | 6 | 6 | 10 | 6 | 10 | 5 | 7 | 9 |
| CADMIUM | 3.9 | 7 N | 0.028 | 0.014 B | 0.014 U | 0.014 B | 0.016 K | 0.016 B | 0.0087 B | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | 7.5 J | 9.1 J | 7.9 | 6.7 J | 13.2 J | 10 J | 8.3 J | NA | NA | NA |
| COBALT | NC | 2.3 N | 1.2 | 2.3 | 2 | 1.7 | **3.5** | 2.3 | 2.3 | NA | NA | NA |
| COPPER | 310 | 310 N | 6.3 J | 10.6 J | 9.4 | 8.2 J | 11.4 J | 11.3 J | 6.7 J | NA | NA | NA |
| IRON | 5500 | 5500 N | 3760 | **17700** | **14550** | **11400** | **8540** | **10300** | **10200** | NA | NA | NA |
| LEAD | 400 | 400 | 3.3 J | 3.4 J | 3.1 | 2.8 J | 3.3 J | 2.5 J | 1.4 J | NA | NA | NA |
| MANGANESE | 160 | 180 N | 8.1 | 14.3 J | 73.15 | 132 J | 18.8 | 27.1 L | 25.9 L | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | 0.019 U | 0.019 U | 0.0195 U | 0.02 U | 0.02 U | 0.019 UL | 0.019 UL | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | 0.11 B | 0.13 B | 0.111 U | 0.092 B | 0.079 UL | 0.1 B | 0.27 B | NA | NA | NA |
| NICKEL | 160 | 150 N | 4.2 | 6.6 | 6.1 | 5.6 | 10.3 | 5.4 J | 3.9 J | NA | NA | NA |
| SELENIUM | 39 | 39 N | 0.56 | 0.32 | 0.35 | 0.38 | 0.21 | 0.3 L | 0.18 UL | NA | NA | NA |
| SILVER | 39 | 39 N | 0.036 B | 0.078 | 0.0785 | 0.079 | 0.05 | 0.042 | 0.032 | NA | NA | NA |
| THALLIUM | 0.55 | NC | 0.041 B | 0.046 B | 0.041 U | 0.036 B | 0.035 B | 0.028 B | 0.02 B | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | **14.4 J** | **19.8 J** | **16.55** | **13.3 J** | **13.4 J** | **14.5 J** | **10.6 J** | NA | NA | NA |
| ZINC | 2300 | 2300 N | 8.5 | 16.8 J | 13.1 | 9.4 J | 14.8 | 10.7 B | 6 B | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | 2700 B | 1900 B | 1800 U | 1700 B | 2700 B | 13000 B | 5600 B | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 86.3 | 85.6 | 85.35 | 85.1 | 83.1 | 86.3 | 87.4 | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [3][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-835<br>E-SB-835-03<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-835<br>E-SB-835-05<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-835<br>E-SB-835-07<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-835<br>E-SB-835-09<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-836<br>E-SB-836-03<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-836<br>E-SB-836-05<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-836<br>E-SB-836-07<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-836<br>E-SB-836-09<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-837<br>E-SB-837-03<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-837<br>E-SB-837-05<br>20100917<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 81 U | NA | NA | NA | 78 U | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 19 U | 21 U | 21 U | 200 U | 23 U | 20 U | 20 U | 22 U | 18 U | 19 U |
| AROCLOR-1260 | 320 | 220 | C | 19 U | 310 | 94 | 3500 | 23 U | 22 J | 20 U | 22 U | 18 U | 19 U |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 310 | 94 | 3500 | 0 U | 22 | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-835 | SB-835 | SB-835 | SB-835 | SB-836 | SB-836 | SB-836 | SB-836 | SB-837 | SB-837 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-835-03 | E-SB-835-05 | E-SB-835-07 | E-SB-835-09 | E-SB-836-03 | E-SB-836-05 | E-SB-836-07 | E-SB-836-09 | E-SB-837-03 | E-SB-837-05 |
| SAMPLE DATE | | | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-837 | SB-837 | SB-838 | SB-838 | SB-838 | SB-838 | SB-839 | SB-839 | SB-839 | SB-839 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-837-07 | E-SB-837-09 | E-SB-838-3 | E-SB-838-5 | E-SB-838-7 | E-SB-838-9 | E-SB-839-03 | E-SB-839-05 | E-SB-839-07 | E-SB-839-09 |
| SAMPLE DATE | | | | 20100917 | 20100917 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 21 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1260 | 320 | 220 | C | 21 U | 59 | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 27 J |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 59 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 27 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-837 | SB-837 | SB-838 | SB-838 | SB-838 | SB-838 | SB-839 | SB-839 | SB-839 | SB-839 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-837-07 | E-SB-837-09 | E-SB-838-3 | E-SB-838-5 | E-SB-838-7 | E-SB-838-9 | E-SB-839-03 | E-SB-839-05 | E-SB-839-07 | E-SB-839-09 |
| SAMPLE DATE | | | 20100917 | 20100917 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 | SB-841 | SB-841 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-840-03 | E-SB-840-05 | E-SB-840-05-AVG | E-SB-840-05-D | E-SB-840-07 | E-SB-840-09 | E-SB-841-03 | E-SB-841-05 | E-SB-841-07 | E-SB-841-09 |
| SAMPLE DATE | | | | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 18 U | 20 U | 20 U | 20 U | 20 U | 19 U | 19 U | 19 U | 20 U | 20 U |
| AROCLOR-1260 | 320 | 220 | C | 18 U | 20 U | 20 U | 20 U | 20 U | 19 U | 19 U | 35 J | 68 | 140 |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 35 | 68 | 140 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-840<br>E-SB-840-03<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-840<br>E-SB-840-05<br>20100914<br>ORIG<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-840<br>E-SB-840-05-AVG<br>20100914<br>AVG<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-840<br>E-SB-840-05-D<br>20100914<br>DUP<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-840<br>E-SB-840-07<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-840<br>E-SB-840-09<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-841<br>E-SB-841-03<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-841<br>E-SB-841-05<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-841<br>E-SB-841-07<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-841<br>E-SB-841-09<br>20100914<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | | | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 | SB-843 | SB-844 | SB-844 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-842-3 | E-SB-842-5 | E-SB-842-7 | E-SB-842-9 | E-SB-843-03 | E-SB-843-05 | E-SB-843-07 | E-SB-843-09 | E-SB-844-03 | E-SB-844-05 |
| SAMPLE DATE | | | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 N(4) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 (5) | 63000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (5) | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (5) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 N(4) | 19 U | 20 U | 20 U | 20 U | 19 U | 20 U | 20 U | 19 U | 23 U | 22 U |
| AROCLOR-1260 | 320 | 220 C | 19 U | 20 U | 20 U | 20 U | 19 U | 20 U | 20 U | 19 U | 23 U | 120 |
| TOTAL AROCLOR | 320 (9) | 220 C(10) | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 120 |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 | SB-843 | SB-844 | SB-844 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-842-3 | E-SB-842-5 | E-SB-842-7 | E-SB-842-9 | E-SB-843-03 | E-SB-843-05 | E-SB-843-07 | E-SB-843-09 | E-SB-844-03 | E-SB-844-05 |
| SAMPLE DATE | | | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-845 | SB-846 | SB-846 | SB-846 | SB-846 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-844-07 | E-SB-844-09 | E-SB-845-03 | E-SB-845-05 | E-SB-845-07 | E-SB-845-09 | E-SB-846-03 | E-SB-846-05 | E-SB-846-07 | E-SB-846-09 |
| SAMPLE DATE | | | | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 21 U | 110 U | 44 | 18 U | 20 U | 94 U | 20 U | 18 U | 20 U | 21 U |
| AROCLOR-1260 | 320 | 220 | C | 21 U | 400 | 19 U | 18 U | 20 U | 350 | 20 U | 18 U | 20 U | 21 U |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 400 | 44 | 0 U | 0 U | 350 | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-845 | SB-846 | SB-846 | SB-846 | SB-846 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-844-07 | E-SB-844-09 | E-SB-845-03 | E-SB-845-05 | E-SB-845-07 | E-SB-845-09 | E-SB-846-03 | E-SB-846-05 | E-SB-846-07 | E-SB-846-09 |
| SAMPLE DATE | | | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-847 | SB-847 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-847-03 | E-SB-847-05 | E-SB-847-07 | E-SB-847-09 |
| SAMPLE DATE | | | | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1260 | 320 | 220 | C | 60 | 20 U | 20 U | 20 U |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 60 | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][9] | **USEPA Regional Screening Levels (RSLs)** [2][3] | **SB-847<br>E-SB-847-03<br>20100913<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3** | **SB-847<br>E-SB-847-05<br>20100913<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5** | **SB-847<br>E-SB-847-07<br>20100913<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7** | **SB-847<br>E-SB-847-09<br>20100913<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9** |
|---|---|---|---|---|---|---|
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [3][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-005 | SB-005 | SB-006 | SB-006 | SB-009 | SB-510 | SB-510 | SB-510 | SB-510 | SB-511 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-5-05 | SB-5-10 | SB-6-05 | SB-6-10 | SB-9-05 | SB-510-0406 | SB-510-0810 | SB-510-0810-AVG | SB-510-0810-D | SB-511-0406 |
| SAMPLE DATE | | | | 20031120 | 20031120 | 20031120 | 20031120 | 20031118 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 10 | 5 | 10 | 5 | 4 | 8 | 8 | 8 | 4 |
| BOTTOM DEPTH | | | | 5 | 10 | 5 | 10 | 5 | 6 | 10 | 10 | 10 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 64 U | 68 U | 65 U | 66 U | NA | 12 U | 12 U | 12 U | 12 U | 12 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| ACETONE | 7000000 | 6100000 | N | 64 UJ | 7 J | 7 J | 66 UJ | NA | 12 U | 8.9 J | 8.9 J | 12 U | 12 J |
| BENZENE | 12000 | 1100 | C | 6 U | 7 U | 7 U | 7 U | 1 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| CARBON TETRACHLORIDE | 4900 | 610 | C | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| CHLOROBENZENE | 160000 | 29000 | N | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | 19 U | 20 U | 19 U | 20 U | NA | 12 U | 12 U | 12 U | 12 U | 12 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 10 J | 10 J | 9 J | 10 J | NA | 5.2 B | 4.5 B | 4.5 U | 4.5 B | 5.6 B |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | 7 U | 7 U | 7 U | 1 U | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| N-BUTYLBENZENE | NC | NC | | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| O-XYLENE | 1600000 [5] | 380000 | N | 19 U | 20 U | 19 U | 20 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| SEC-BUTYLBENZENE | NC | NC | | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | 120 UR | 120 UR | 120 R | 120 UR | 120 UR |
| TETRACHLOROETHENE | 1200 | 550 | C | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| TOLUENE | 630000 | 500000 | N | 6 U | 7 U | 7 U | 7 U | 2 | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | 10 | 12 U | 12 U | 12 U | 12 U | 12 U |
| TRICHLOROETHENE | 1600 | 2800 | C | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| VINYL CHLORIDE | 90 | 60 | C | 6 U | 7 U | 7 U | 7 U | NA | 5.8 U | 5.8 U | 5.8 U | 5.8 U | 5.9 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U | 385 U | 390 U | 390 U |
| CARBAZOLE | 32000 | NC | | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U | 385 U | 390 U | 390 U |
| DIBENZOFURAN | 7800 | 7800 | N | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U | 385 U | 390 U | 390 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U | 385 U | 390 U | 390 U |
| ACENAPHTHENE | 470000 | 340000 | N | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U | 385 U | 390 U | 390 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U | 385 U | 390 U | 390 U |
| ANTHRACENE | 2300000 | 1700000 | N | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U | 385 U | 390 U | 390 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 420 U | 450 U | 430 U | 440 U | NA | 380 U | **236** | **230** | **224** | **413** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 420 U | 450 U | 430 U | 440 U | NA | 380 U | **46** | **38** | **29** | 1.9 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 34 J | 28.5 | 23 J | 8.8 J |
| BENZO(A)PYRENE | 22 | 15 | C | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | **34 J** | **27.5** | **21 J** | 390 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 64 J | 50.5 | 37 J | 9.8 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 27 J | 22 | 17 J | 390 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 18 J | 16 | 14 J | 390 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 42 J | 32.5 | 23 J | 8.7 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U | 385 U | 390 U | 390 U |
| FLUORANTHENE | 310000 | 230000 | N | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 78 J | 62 | 46 J | 12 J |
| FLUORENE | 310000 | 230000 | N | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U | 385 U | 390 U | 390 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 24 J | 20 | 16 J | 390 U |
| NAPHTHALENE | 160000 | 3600 | C | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 380 U | 385 U | 390 U | 390 U |
| PHENANTHRENE | 2300000 | 170000 | N[8] | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 25 J | 20 | 15 J | 390 U |
| PYRENE | 230000 | 170000 | N | 420 U | 450 U | 430 U | 440 U | NA | 380 UL | 59 J | 46.5 | 34 J | 9.2 J |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | NA | 0 U | 405 | 325.5 | 246 | 48.5 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 64 U | 68 U | 65 U | 66 U | NA | 38 U | 38 U | 38.5 U | 39 U | 39 U |
| AROCLOR-1260 | 320 | 220 | C | 64 U | 68 U | 65 U | 66 U | NA | 38 U | 16 J | 16 J | 39 U | 16 J |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | 0 U | 0 U | NA | 0 U | 16 | 8 | 0 U | 16 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 3.2 UL | 3.4 UL | 3.2 UL | 3.3 UL | NA | 0.13 L | 0.17 L | 0.155 | 0.14 L | 0.0056 UL |
| ARSENIC | 0.43 | 0.39 | C | **1.4 L** | **1.1 L** | **0.77 L** | **2 L** | NA | 0.26 J | 0.36 J | 0.31 | 0.26 J | **0.58 J** |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | 7.1 K | 7.8 K | 6.9 | 6 K | 7.7 K |
| BERYLLIUM | 16 | 16 | N | 3.2 U | 3.4 U | 3.2 U | 3.3 U | NA | 0.42 | 0.66 | 0.62 | 0.58 | 0.31 |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-005 | SB-005 | SB-006 | SB-006 | SB-009 | SB-510 | SB-510 | SB-510 | SB-510 | SB-511 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-5-05 | SB-5-10 | SB-6-05 | SB-6-10 | SB-9-05 | SB-510-0406 | SB-510-0810 | SB-510-0810-AVG | SB-510-0810-D | SB-511-0406 |
| SAMPLE DATE | | | 20031120 | 20031120 | 20031120 | 20031120 | 20031118 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 10 | 5 | 10 | 5 | 4 | 8 | 8 | 8 | 4 |
| BOTTOM DEPTH | | | 5 | 10 | 5 | 10 | 5 | 6 | 10 | 10 | 10 | 6 |
| CADMIUM | 3.9 | 7 N | 3.2 U | 3.4 U | 3.2 U | 3.3 U | NA | 0.018 B | 0.03 K | 0.01925 | 0.017 B | 0.0075 B |
| CHROMIUM | 12000 [11] | 12000 N[11] | 4.8 B | 3.8 B | 9.5 B | 22 J | NA | 8.5 J | 11.7 J | 10.9 | 10.1 J | 1.5 J |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | 1.2 | 1.9 | 1.95 | 2 | 0.82 |
| COPPER | 310 | 310 N | 3.6 | 3.4 U | 5.4 | 14 | NA | 5.5 J | 6.7 J | 6.75 | 6.8 J | 4.1 J |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | **15200** | **20900** | **19350** | **17800** | 1290 |
| LEAD | 400 | 400 | 3.2 U | 3.4 U | 4.8 | 7.1 | NA | 1.9 J | 1.7 J | 1.5 | 1.3 J | 3.2 J |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | 27.1 L | 73.6 J | 48.3 | 23 J | 2.2 L |
| MERCURY | 2.3 [12] | 2.3 N[13] | 0.13 U | 0.14 U | 0.12 U | 0.13 U | NA | 0.019 UL | 0.019 UL | 0.019 U | 0.019 UL | 0.02 UL |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | 0.076 UL | 0.16 B | 0.135 U | 0.11 B | 0.077 UL |
| NICKEL | 160 | 150 N | 4.5 | 4.6 | 4.8 | 21 | NA | 4 J | 6.5 J | 7.2 | 7.9 J | 1.8 J |
| SELENIUM | 39 | 39 N | 3.2 U | 3.4 U | 3.6 | 3.3 U | NA | 0.75 L | 0.18 UL | 0.185 U | 0.19 UL | 0.2 L |
| SILVER | 39 | 39 N | 3.2 UR | 3.4 UR | 3.2 UR | 3.3 UR | NA | 0.061 K | 0.069 K | 0.067 | 0.065 | 0.035 |
| THALLIUM | 0.55 | NC | 2.5 U | 2.7 U | 2.6 U | 2.7 U | NA | 0.024 B | 0.025 B | 0.023 U | 0.021 B | 0.045 B |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | **13 J** | **15.8 J** | **16.35** | **16.9 J** | 2.2 J |
| ZINC | 2300 | 2300 N | 32 U | 34 U | 32 U | 33 U | NA | 5.9 B | 9.8 B | 8.05 | 11.2 | 5.2 B |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | 25000 U | 27000 U | 26000 U | 27000 U | 26000 U | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | 130 U | 140 U | 130 U | 130 U | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | 4700 B | 10000 B | 8200 U | 6400 B | 1600 B |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 78 | 74 | 77 | 75 | 77 | 86.9 | 86.6 | 86.15 | 85.7 | 85.3 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-511 | SB-512 | SB-512 | SB-512 | SB-512 | SB-513 | SB-513 | SB-514 | SB-514 | SB-514 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-511-0810 | SB-512-0406 | SB-512-0810 | SB-512-0810-AVG | SB-512-0810-D | SB-513-0406 | SB-513-0810 | SB-514-0406 | SB-514-0810 | SB-514-0810-AVG |
| SAMPLE DATE | | | | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 |
| SAMPLE CODE | | | | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 4 | 8 | 8 | 8 | 4 | 8 | 4 | 8 | 8 |
| BOTTOM DEPTH | | | | 10 | 6 | 10 | 10 | 10 | 6 | 10 | 6 | 10 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 13 U | 11 U | 13 U | 13 U | 13 U | 2.7 J | 12 U | 9.3 J | 12 U | 12 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| ACETONE | 7000000 | 6100000 | N | 19 J | 11 U | 20 J | 16 | 12 J | 69 J | 26 J | 130 J | 38 J | 43.5 |
| BENZENE | 12000 | 1100 | C | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| CARBON TETRACHLORIDE | 4900 | 610 | C | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| CHLOROBENZENE | 160000 | 29000 | N | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | 13 U | 11 U | 13 U | 13 U | 13 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 5.7 B | 6.2 B | 4.8 B | 4.75 U | 4.7 B | 4.4 B | 5.5 B | 5.9 B | 5.8 B | 4.5 U |
| NAPHTHALENE | 160000 | 3600 | C | 6.3 U | 5.7 U | 110 J | 80.5 | 51 J | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| N-BUTYLBENZENE | NC | NC | | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| O-XYLENE | 1600000 [5] | 380000 | N | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| SEC-BUTYLBENZENE | NC | NC | | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 130 UR | 110 UR | 130 UR | 130 R | 130 UR | 120 UR | 120 UR | 120 UR | 120 UR | 120 R |
| TETRACHLOROETHENE | 1200 | 550 | C | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| TOLUENE | 630000 | 500000 | N | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | 13 U | 11 U | 13 U | 13 U | 13 U | 12 U | 12 U | 12 U | 12 U | 12 U |
| TRICHLOROETHENE | 1600 | 2800 | C | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| VINYL CHLORIDE | 90 | 60 | C | 6.3 U | 5.7 U | 6.3 U | 6.3 U | 6.3 U | 5.9 U | 5.8 U | 6 U | 5.9 U | 5.9 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U | 390 U | 400 U | 28 J | 26 |
| CARBAZOLE | 32000 | NC | | 410 U | 380 U | 410 U | 415 U | 420 U | 390 U | 390 U | 400 U | 390 U | 390 U |
| DIBENZOFURAN | 7800 | 7800 | N | 410 U | 380 U | 410 U | 91 J | 91 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 410 U | 380 U | 410 U | 63 J | 63 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| ACENAPHTHENE | 470000 | 340000 | N | 410 U | 380 U | 410 U | 35 J | 35 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | 410 U | 380 U | 410 U | 18 J | 18 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| ANTHRACENE | 2300000 | 1700000 | N | 410 U | 380 U | 410 U | 58 J | 58 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 410 U | 380 U | 303 | 379 | 456 | 432 | 390 U | 400 U | 390 U | 390 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 410 U | 380 U | 96 | 276 | 456 | 1 | 390 U | 400 U | 390 U | 390 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 410 U | 380 U | 63 J | 171.5 | 280 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| BENZO(A)PYRENE | 22 | 15 | C | 410 U | 380 U | 75 J | 192.5 | 310 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 410 U | 380 U | 98 J | 234 | 370 J | 10 J | 390 U | 400 U | 390 U | 390 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 410 U | 380 U | 68 J | 159 | 250 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 410 U | 380 U | 410 U | 150 J | 150 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 410 U | 380 U | 79 J | 219.5 | 360 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 410 U | 380 U | 410 U | 61 J | 61 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| FLUORANTHENE | 310000 | 230000 | N | 9.2 J | 380 U | 120 J | 360 | 600 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| FLUORENE | 310000 | 230000 | N | 410 U | 380 U | 410 U | 17 J | 17 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 410 U | 380 U | 48 J | 114 | 180 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| NAPHTHALENE | 160000 | 3600 | C | 410 U | 380 U | 410 U | 65 J | 65 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| PHENANTHRENE | 2300000 | 170000 | N[8] | 410 U | 380 U | 90 J | 320 | 550 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| PYRENE | 230000 | 170000 | N | 410 U | 380 U | 140 J | 425 | 710 J | 390 U | 390 U | 400 U | 390 U | 390 U |
| TOTAL PAHS | NC | NC | | 9.2 | 0 U | 781 | 2429 | 4077 | 10 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 41 U | 38 U | 41 U | 41.5 U | 42 U | 39 U | 39 U | 40 U | 39 U | 39 U |
| AROCLOR-1260 | 320 | 220 | C | 41 U | 38 U | 18 J | 35.5 | 53 J | 39 U | 39 U | 40 U | 39 U | 39 U |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | 18 | 35.5 | 53 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.006 UL | 0.15 L | 0.083 L | 0.1115 | 0.14 L | 0.056 L | 0.0056 UL | 0.092 L | 0.22 L | 0.2 |
| ARSENIC | 0.43 | 0.39 | C | 0.35 J | 0.59 J | 0.76 J | 1.08 | 1.4 L | 2.3 J | 0.46 J | 0.39 J | 1.3 J | 0.86 |
| BARIUM | 1600 | 1500 | N | 6.4 K | 12.5 K | 17.9 J | 25.2 | 32.5 J | 8.9 K | 1.9 K | 12.4 K | 11.6 K | 11.45 |
| BERYLLIUM | 16 | 16 | N | 0.42 | 0.96 | 0.77 | 0.735 | 0.7 | 0.3 | 0.076 | 2.7 | 3.7 | 3 |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-511 | SB-512 | SB-512 | SB-512 | SB-512 | SB-513 | SB-513 | SB-514 | SB-514 | SB-514 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-511-0810 | SB-512-0406 | SB-512-0810 | SB-512-0810-AVG | SB-512-0810-D | SB-513-0406 | SB-513-0810 | SB-514-0406 | SB-514-0810 | SB-514-0810-AVG |
| SAMPLE DATE | | | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 |
| SAMPLE CODE | | | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 8 | 4 | 8 | 8 | 8 | 4 | 8 | 4 | 8 | 8 |
| BOTTOM DEPTH | | | 10 | 6 | 10 | 10 | 10 | 6 | 10 | 6 | 10 | 10 |
| CADMIUM | 3.9 | 7 N | 0.011 B | 0.019 K | 0.55 | 0.3085 | 0.067 K | 0.009 B | 0.0037 B | 0.029 K | 0.024 K | 0.057 |
| CHROMIUM | 12000 [11] | 12000 N[11] | 4 J | 8.5 J | 8.9 J | 9 | 9.1 J | 7.8 J | 2.3 J | 11.7 J | 11.1 J | 10.9 |
| COBALT | NC | 2.3 N | 1 | **3** | 2.2 | 2.15 | 2.1 J | **4** | 0.98 | **9.1** | **8.8** | **7.65** |
| COPPER | 310 | 310 N | 4.7 J | 10.3 J | 11.3 J | 10.25 | 9.2 L | 3.5 J | 1 J | 16.1 J | 11.7 J | 11.05 |
| IRON | 5500 | 5500 N | 3240 | **15200** | **9820** | **9510** | **9200** | **8600** | 2310 | **40100** | **51200** | **42200** |
| LEAD | 400 | 400 | 2.2 J | 3.6 J | 8.6 J | 8.15 | 7.7 L | 3.2 J | 0.71 J | 3.5 J | 5.6 J | 4.6 |
| MANGANESE | 160 | 180 N | 4.8 L | 33.5 L | 68.2 L | 107.1 | 146 J | 47 L | 8.8 L | **280 L** | **225 L** | **205.5** |
| MERCURY | 2.3 [12] | 2.3 N[13] | 0.021 UL | 0.019 UL | 0.021 UL | 0.021 U | 0.021 UL | 0.02 UL | 0.019 UL | 0.02 UL | 0.02 UL | 0.02 U |
| MOLYBDENUM | NC | 39 N | 0.083 UL | 0.08 B | 0.28 B | 0.295 U | 0.31 B | 0.094 B | 0.077 UL | 0.08 UL | 0.09 B | 0.12 U |
| NICKEL | 160 | 150 N | 2.6 J | 11.5 J | 8 J | 7.4 | 6.8 L | 2.8 J | 0.76 J | 16.7 J | 15.9 J | 15.1 |
| SELENIUM | 39 | 39 N | 0.2 UL | 0.53 L | 0.54 L | 0.435 | 0.33 L | 0.19 UL | 0.19 UL | 0.19 UL | 0.19 UL | 0.19 U |
| SILVER | 39 | 39 N | 0.03 | 0.066 | 0.057 | 0.0635 | 0.07 | 0.03 | 0.0079 B | 0.089 | 0.11 K | 0.098 |
| THALLIUM | 0.55 | NC | 0.028 B | 0.053 B | 0.033 B | 0.028 K | 0.028 K | 0.035 B | 0.0052 B | 0.041 B | 0.061 B | 0.041 K |
| VANADIUM | 7.8 | 39 N[14] | 7.5 J | **12.6 J** | **12.4 J** | **13.6** | **14.8 J** | **12.3 J** | 3 J | **15.2 J** | **16.5 J** | **13.85** |
| ZINC | 2300 | 2300 N | 7 B | 12 | 13.5 | 14.6 | 15.7 | 9.3 B | 5.5 B | 35.3 | 62.3 | 50 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | 7200 B | 6100 B | 21000 B | 16750 | 23000 | 8400 B | 990 B | 9100 B | 8300 B | 5500 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 79.9 | 87.7 | 79.7 | 79.55 | 79.4 | 85.2 | 85.6 | 82.7 | 84.4 | 84.6 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-514 | SB-515 | SB-515 | SB-517 | SB-517 | SB-518 | SB-518 | SB-519 | SB-519 | SB-520 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-514-0810-D | SB-515-0406 | SB-515-0810 | SB-517-0406 | SB-517-0810 | SB-518-0406 | SB-518-0810 | SB-519-0406 | SB-519-0810 | SB-520-0406 |
| SAMPLE DATE | | | | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 |
| SAMPLE CODE | | | | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 8 | 4 |
| BOTTOM DEPTH | | | | 10 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 10 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | 5.9 U | 0.69 J | 0.69 J | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 1.1 B | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 13 U | 12 U | 12 U | 12 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| ACETONE | 7000000 | 6100000 | N | 49 J | 16 J | 12 U | 12 U | 8.4 J | 24 J | 14 J | 9 J | 14 J | 9.9 J |
| BENZENE | 12000 | 1100 | C | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| CARBON TETRACHLORIDE | 4900 | 610 | C | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| CHLOROBENZENE | 160000 | 29000 | N | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | 5.9 U | 9.7 | 6 J | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 13 U | 12 U | 12 U | 12 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 3.2 B | 5.5 B | 4.9 B | 4.4 B | 3.7 B | 4.2 B | 5.7 B | 6.1 B | 5.1 B | 5.8 B |
| NAPHTHALENE | 160000 | 3600 | C | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 0.69 B | 5.8 U | 6.1 U |
| N-BUTYLBENZENE | NC | NC | | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| O-XYLENE | 1600000 [5] | 380000 | N | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| SEC-BUTYLBENZENE | NC | NC | | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 120 UR | 120 UR | 120 UR | 120 UR | 120 UR | 120 UR | 130 UR | 120 UR | 120 UR | 120 UR |
| TETRACHLOROETHENE | 1200 | 550 | C | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| TOLUENE | 630000 | 500000 | N | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | 12 U | 12 U | 12 U | 12 U | 12 U | 12 U | 13 U | 12 U | 12 U | 12 U |
| TRICHLOROETHENE | 1600 | 2800 | C | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 5.9 U | 6.1 U | 6.2 U | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| VINYL CHLORIDE | 90 | 60 | C | 5.9 U | 3.5 J | 0.48 J | 6.1 U | 6.1 U | 6 U | 6.5 U | 5.8 U | 5.8 U | 6.1 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 24 J | 400 U | 410 U | 400 U | 30 J | 400 U | 430 U | 380 U | 380 U | 400 U |
| CARBAZOLE | 32000 | NC | | 390 U | 400 U | 410 U | 400 U | 400 U | 400 U | 430 U | 380 U | 380 U | 400 U |
| DIBENZOFURAN | 7800 | 7800 | N | 390 U | 400 U | 410 U | 400 U | 400 U | 400 U | 430 U | 380 U | 380 U | 400 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 390 U | 400 U | 410 U | 400 U | 400 U | 400 U | 430 U | 380 U | 380 U | 400 U |
| ACENAPHTHENE | 470000 | 340000 | N | 390 U | 400 U | 410 U | 400 U | 400 U | 400 U | 430 U | 380 U | 380 U | 400 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | 390 U | 400 U | 410 U | 400 U | 400 U | 400 U | 430 U | 380 U | 380 U | 400 U |
| ANTHRACENE | 2300000 | 1700000 | N | 390 U | 400 U | 410 U | 400 U | 400 U | 400 U | 430 U | 380 U | 380 U | 400 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 390 U | 400 U | **455** | 400 U | **240** | 400 U | 430 U | 380 U | 380 U | 400 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 390 U | 400 U | 1.4 | 400 U | **40** | 400 U | 430 U | 380 U | 380 U | 400 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 390 U | 400 U | 410 U | 400 U | 29 J | 400 U | 430 U | 380 U | 380 U | 400 U |
| BENZO(A)PYRENE | 22 | 15 | C | 390 U | 400 U | 410 U | 400 U | **30 J** | 400 U | 430 U | 380 U | 380 U | 400 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 390 U | 400 U | 14 J | 400 U | 48 J | 400 U | 430 U | 380 U | 380 U | 400 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 390 U | 400 U | 410 U | 400 U | 21 J | 400 U | 430 U | 380 U | 380 U | 400 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 390 U | 400 U | 410 U | 400 U | 16 J | 400 U | 430 U | 380 U | 380 U | 400 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 390 U | 400 U | 410 U | 400 U | 32 J | 400 U | 430 U | 380 U | 380 U | 400 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 390 U | 400 U | 410 U | 400 U | 400 U | 400 U | 430 U | 380 U | 380 U | 400 U |
| FLUORANTHENE | 310000 | 230000 | N | 390 U | 400 U | 410 U | 400 U | 57 J | 400 U | 430 U | 380 U | 380 U | 400 U |
| FLUORENE | 310000 | 230000 | N | 390 U | 400 U | 410 U | 400 U | 400 U | 400 U | 430 U | 380 U | 380 U | 400 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 390 U | 400 U | 410 U | 400 U | 17 J | 400 U | 430 U | 380 U | 380 U | 400 U |
| NAPHTHALENE | 160000 | 3600 | C | 390 U | 400 U | 410 U | 400 U | 400 U | 400 U | 430 U | 380 U | 380 U | 400 U |
| PHENANTHRENE | 2300000 | 170000 | N[8] | 390 U | 400 U | 410 U | 400 U | 25 J | 400 U | 430 U | 380 U | 380 U | 400 U |
| PYRENE | 230000 | 170000 | N | 390 U | 400 U | 410 U | 400 U | 48 J | 400 U | 430 U | 380 U | 380 U | 400 U |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 14 | 0 U | 323 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 39 U | 40 U | 41 U | 40 U | 40 U | 40 U | 43 U | 38 U | 38 U | 40 U |
| AROCLOR-1260 | 320 | 220 | C | 39 U | 40 U | 19 J | 40 U | 190 | 40 U | 43 U | 38 U | 38 U | 40 U |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | 19 | 0 U | 190 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.18 J | 0.17 J | 0.11 B | 0.26 J | 0.2 L | 0.21 J | 0.037 B | 0.18 J | 0.078 B | 0.082 B |
| ARSENIC | 0.43 | 0.39 | C | **0.42 L** | **0.62 L** | 0.22 L | **0.55 L** | **0.75 L** | **2.2 L** | **0.43 L** | **0.61 L** | **1.2 L** | **1.2 L** |
| BARIUM | 1600 | 1500 | N | 11.3 | 7.8 | 10.4 | 8.2 | 12.9 | 13.3 | 4.3 | 10.9 | 1.6 | 9 |
| BERYLLIUM | 16 | 16 | N | 2.3 | 3.3 | 4.4 | 2.4 | 1.5 | 1.4 | 0.48 | 1.2 | 0.65 | 1.9 |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-514 | SB-515 | SB-515 | SB-517 | SB-517 | SB-518 | SB-518 | SB-519 | SB-519 | SB-520 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-514-0810-D | SB-515-0406 | SB-515-0810 | SB-517-0406 | SB-517-0810 | SB-518-0406 | SB-518-0810 | SB-519-0406 | SB-519-0810 | SB-520-0406 |
| SAMPLE DATE | | | | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 |
| SAMPLE CODE | | | | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 8 | 4 |
| BOTTOM DEPTH | | | | 10 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 10 | 6 |
| CADMIUM | 3.9 | 7 | N | 0.09 K | 0.012 B | 0.02 K | 0.019 K | 0.12 K | 0.15 K | 0.0051 B | 0.037 K | 0.0092 B | 0.031 K |
| CHROMIUM | 12000 [11] | 12000 | N[11] | 10.7 J | 9.1 J | 10.6 J | 7.7 J | 11.3 J | 13.2 J | 4.4 J | 7.7 J | 4.5 J | 9.4 J |
| COBALT | NC | 2.3 | N | **6.5 J** | **4.3 J** | **6.2 J** | **4.9 J** | **4.6 J** | **3.7 J** | **2.8 J** | **2.8 J** | 1.6 J | **5.3 J** |
| COPPER | 310 | 310 | N | 10.4 L | 28.7 L | 11.2 L | 14.7 L | 15.2 L | 16.2 L | 6.7 L | 10.2 L | 12.4 L | 7.5 L |
| IRON | 5500 | 5500 | N | **33200** | **28700** | **22600** | **28700** | **18400** | **23400** | **8620** | **18300** | **9720** | **14200** |
| LEAD | 400 | 400 | | 3.6 L | 2.8 L | 3.2 L | 3.5 L | 7.9 L | 4 L | 2 L | 3.4 L | 1.2 L | 3.6 L |
| MANGANESE | 160 | 180 | N | **186 L** | 106 L | **277 L** | 93.3 L | 53 L | 45.5 L | 28.1 L | 26.1 L | 21.3 L | 41.7 L |
| MERCURY | 2.3 [12] | 2.3 | N[13] | 0.02 UL | 0.02 UL | 0.021 UL | 0.02 UL | 0.02 UL | 0.02 UL | 0.022 UL | 0.019 UL | 0.019 UL | 0.02 UL |
| MOLYBDENUM | NC | 39 | N | 0.15 B | 0.16 B | 0.083 B | 0.08 UL | 0.3 B | 0.19 B | 0.086 UL | 0.093 B | 0.089 B | 0.094 B |
| NICKEL | 160 | 150 | N | 14.3 L | 18.7 L | 11.9 L | 16.3 L | 11.2 L | 9.3 L | 3.8 L | 9.7 L | 2.6 L | 14.4 L |
| SELENIUM | 39 | 39 | N | 0.19 UL | 0.19 UL | 0.2 UL | 1.8 L | 0.58 L | 0.61 L | 0.21 UL | 0.57 L | 0.19 UL | 0.23 L |
| SILVER | 39 | 39 | N | 0.086 K | 0.087 K | 0.079 | 0.12 | 0.073 | 0.088 | 0.036 | 0.087 | 0.047 | 0.067 |
| THALLIUM | 0.55 | NC | | 0.041 K | 0.034 K | 0.038 K | 0.046 K | 0.035 K | 0.048 K | 0.02 B | 0.043 K | 0.008 B | 0.042 K |
| VANADIUM | 7.8 | 39 | N[14] | **11.2 J** | **13.5 J** | **11.5 J** | **12.7 J** | **15.1 J** | **21.1 J** | 6.9 J | **11.5 J** | 5.1 J | **16.6 J** |
| ZINC | 2300 | 2300 | N | 37.7 | 58 | 28.6 | 19.1 | 41.3 | 26.7 | 19.8 | 20.2 | 13.1 | 30.4 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | | 2700 B | 2000 B | 2200 B | 1600 B | 1800 B | 1800 B | 1700 B | 1500 B | 1300 B | 1300 B |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.8 | 82.6 | 80.8 | 82.5 | 82.6 | 83.1 | 76.9 | 86.1 | 86.2 | 82.4 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-520 | SB-541A | SB-542 | SB-542 | SB-543A | SB-543A | SB-545 | SB-547 | SB-547 | SB-548 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-520-0810 | SB-541A-4 | SB-542-3 | SB-542-4 | SB-543A-3 | SB-543A-4 | SB-545-4 | SB-547-3 | SB-547-4 | SB-548-3 |
| SAMPLE DATE | | | | 20071130 | 20081111 | 20081023 | 20081023 | 20081111 | 20081111 | 20081023 | 20081021 | 20081021 | 20081023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 |
| BOTTOM DEPTH | | | | 10 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | 0.48 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 12 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 12 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | 12 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 5.1 B | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 120 UR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | 12 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 29 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | 6 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **424** | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | 2.1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 8.6 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 12 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 9.2 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | 15 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | 400 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 12 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 56.8 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 40 U | 20 U | 20 U | 20 U | 19 U | 19 U | 20 U | NA | NA | 19 U |
| AROCLOR-1260 | 320 | 220 | C | 40 U | 20 U | 20 U | 20 U | 19 U | 19 U | 20 U | NA | NA | 19 U |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | NA | NA | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.13 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **1.3 L** | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | 6.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 1.8 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | | | SB-520 | SB-541A | SB-542 | SB-542 | SB-543A | SB-543A | SB-545 | SB-547 | SB-547 | SB-548 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-520-0810 | SB-541A-4 | SB-542-3 | SB-542-4 | SB-543A-3 | SB-543A-4 | SB-545-4 | SB-547-3 | SB-547-4 | SB-548-3 |
| SAMPLE DATE | | | 20071130 | 20081111 | 20081023 | 20081023 | 20081111 | 20081111 | 20081023 | 20081021 | 20081021 | 20081023 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 8 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 |
| BOTTOM DEPTH | | | 10 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 |
| CADMIUM | 3.9 | 7 N | 0.031 K | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (11) | 12000 N(11) | 6.6 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | **3.6 J** | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | 8.4 L | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | **13500** | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | 2.5 L | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | 32 L | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (12) | 2.3 N(13) | 0.02 UL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | 0.14 B | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | 8.3 L | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | 0.19 UL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | 0.049 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | 0.021 K | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(14) | **13.2 J** | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | 21 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | 1100 B | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 82.9 | NA | 84 | 82 | NA | NA | 84 | 87 | 85 | 86 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-548 | SB-550A | SB-550A | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-555A | SB-556 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-548-4 | SB-550A-3 | SB-550A-4 | SB-554-3 | SB-554-4 | SB-555-4 | SB-555-6 | SB-555-8 | SB-555A-10 | SB-556-4 |
| SAMPLE DATE | | | | 20081023 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081021 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 3 | 4 | 3 | 4 | 4 | 6 | 8 | 10 | 4 |
| BOTTOM DEPTH | | | | 4 | 3 | 4 | 3 | 4 | 4 | 6 | 8 | 10 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 19 U | 20 U | 20 U | NA | NA | 9800 | 18 U | 19 U | 20 U | NA |
| AROCLOR-1260 | 320 | 220 | C | 19 U | 20 U | 20 U | NA | NA | 7800 | 18 U | 250 | 20 U | NA |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | 0 U | NA | NA | 17600 | 0 U | 250 | 0 U | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-548 | SB-550A | SB-550A | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-555A | SB-556 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-548-4 | SB-550A-3 | SB-550A-4 | SB-554-3 | SB-554-4 | SB-555-4 | SB-555-6 | SB-555-8 | SB-555A-10 | SB-556-4 |
| SAMPLE DATE | | | 20081023 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081021 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 4 | 3 | 4 | 3 | 4 | 4 | 6 | 8 | 10 | 4 |
| BOTTOM DEPTH | | | 4 | 3 | 4 | 3 | 4 | 4 | 6 | 8 | 10 | 4 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 88 | 84 | 81 | 86 | 85 | 91 | 92 | 87 | 82 | 83 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-556 | SB-556 | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-556-6 | SB-556-8 | SB-557-4 | SB-557-6 | SB-557-8 | SB-558-4 | SB-558-6 | SB-558-8 | SB-559-4 | SB-559-6 |
| SAMPLE DATE | | | | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 |
| BOTTOM DEPTH | | | | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | NA | NA | 27 | NA | NA | 19 U | NA | NA | 18 U | 19 U |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | 18 U | NA | NA | 140 | NA | NA | 18 U | 19 U |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | NA | NA | 27 | NA | NA | 140 | NA | NA | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-556 | SB-556 | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-556-6 | SB-556-8 | SB-557-4 | SB-557-6 | SB-557-8 | SB-558-4 | SB-558-6 | SB-558-8 | SB-559-4 | SB-559-6 |
| SAMPLE DATE | | | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 |
| BOTTOM DEPTH | | | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 85 | 86 | 91 | 86 | 86 | 87 | 86 | 81 | 94 | 88 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-559 | SB-560 | SB-561 | SB-561 | SB-561 | SB-561A | SB-561A | SB-562 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-559-8 | SB-560-4 | SB-561-4 | SB-561-6 | SB-561-8 | SB-561A-6 | SB-561A-8 | SB-562-4 | SB-562-6 | SB-562-8 |
| SAMPLE DATE | | | | 20081022 | 20081022 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | | | | 8 | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 19 U | 19 U | NA | 18 U | 19 U | 19 U | 19 U | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 19 U | 19 U | NA | 18 U | 180 | 19 U | 19 U | NA | NA | NA |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | 0 U | NA | 0 U | 180 | 0 U | 0 U | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-559 | SB-560 | SB-561 | SB-561 | SB-561 | SB-561A | SB-561A | SB-562 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-559-8 | SB-560-4 | SB-561-4 | SB-561-6 | SB-561-8 | SB-561A-6 | SB-561A-8 | SB-562-4 | SB-562-6 | SB-562-8 |
| SAMPLE DATE | | | 20081022 | 20081022 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 8 | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | | | 8 | 4 | 4 | 6 | 8 | 6 | 8 | 4 | 6 | 8 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 87 | 89 | 89 | 91 | 88 | 87 | 88 | 89 | 86 | 87 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-563 | SB-563 | SB-563 | SB-564 | SB-565 | SB-566 | SB-566 | SB-566 | SB-567 | SB-568 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-563-4 | SB-563-6 | SB-563-8 | SB-564-4 | SB-565-4 | SB-566-4 | SB-566-6 | SB-566-8 | SB-567-4 | SB-568-4 |
| SAMPLE DATE | | | | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 | 20081021 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 | 4 |
| BOTTOM DEPTH | | | | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 20 U | NA | NA | 19 U | 19 U | 95 U | 20 U | 20 U | 19 U | 19 U |
| AROCLOR-1260 | 320 | 220 | C | 20 U | NA | NA | 19 U | 19 U | **700** | 20 U | 20 U | 19 U | 89 J |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 0 U | NA | NA | 0 U | 0 U | **700** | 0 U | 0 U | 0 U | 89 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-563 | SB-563 | SB-563 | SB-564 | SB-565 | SB-566 | SB-566 | SB-566 | SB-567 | SB-568 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-563-4 | SB-563-6 | SB-563-8 | SB-564-4 | SB-565-4 | SB-566-4 | SB-566-6 | SB-566-8 | SB-567-4 | SB-568-4 |
| SAMPLE DATE | | | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 | 20081021 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 | 4 |
| BOTTOM DEPTH | | | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 | 4 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 84 | 86 | 86 | 86 | 90 | 88 | 82 | 83 | 89 | 88 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-568 | SB-568 | SB-568 | SB-568 | SB-568A | SB-568A | SB-568A | SB-569 | SB-569 | SB-569 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-568-4-AVG | SB-568-4-D | SB-568-6 | SB-568-8 | SB-568A-10 | SB-568A-6 | SB-568A-8 | SB-569-4 | SB-569-6 | SB-569-8 |
| SAMPLE DATE | | | | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081111 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | | | | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 19 U | 19 U | NA | NA | 20 U | 19 U | 19 U | 380 U | 20 U | 19 U |
| AROCLOR-1260 | 320 | 220 | C | 66 | 43 J | NA | NA | 20 U | 19 U | 19 U | 4000 | 33 | 300 |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | 66 | 43 | NA | NA | 0 U | 0 U | 0 U | 4000 | 33 | 300 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-568 | SB-568 | SB-568 | SB-568 | SB-568A | SB-568A | SB-568A | SB-569 | SB-569 | SB-569 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-568-4-AVG | SB-568-4-D | SB-568-6 | SB-568-8 | SB-568A-10 | SB-568A-6 | SB-568A-8 | SB-569-4 | SB-569-6 | SB-569-8 |
| SAMPLE DATE | | | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081111 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | | | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 | 6 | 8 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[14] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 87.5 | 87 | 88 | 88 | 85 | 87 | 90 | 88 | 83 | 87 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-570 | SB-570 | SB-570 | SB-570A | SB-570A | SB-570A | SB-571 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-570-4 | SB-570-6 | SB-570-8 | SB-570A-10 | SB-570A-6 | SB-570A-8 | SB-571-4 |
| SAMPLE DATE | | | | 20081022 | 20081022 | 20081022 | 20081111 | 20081111 | 20081111 | 20081023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | | | | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NC | 4900 | N | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 78000 | 6200 | N[4] | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 700000 | 190000 | N | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 7000 | 430 | C | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 23000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 27000 | 2400 | C | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 4900 | 610 | C | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 160000 | 29000 | N | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [5] | 63000 | N[6] | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [5] | 380000 | N | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1200 | 550 | C | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [5] | 63000 | N | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 90 | 60 | C | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[7] | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[8] | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[4] | 36 U | NA | NA | 18 U | 19 U | 19 U | 18 U |
| AROCLOR-1260 | 320 | 220 | C | **390** | NA | NA | 34 | 19 U | 19 U | 18 U |
| TOTAL AROCLOR | 320 [9] | 220 | C[10] | **390** | NA | NA | 34 | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA |

**Table A-10**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-570 | SB-570 | SB-570 | SB-570A | SB-570A | SB-570A | SB-571 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-570-4 | SB-570-6 | SB-570-8 | SB-570A-10 | SB-570A-6 | SB-570A-8 | SB-571-4 |
| SAMPLE DATE | | | | 20081022 | 20081022 | 20081022 | 20081111 | 20081111 | 20081111 | 20081023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | | | | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [11] | 12000 | N[11] | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [12] | 2.3 | N[13] | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[14] | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 92 | 86 | 88 | 94 | 88 | 90 | 90 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA |

**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
5 - The value is for xylenes.
6 - The value is for xylene, mixture.
7 - The value for acenaphthene is used as a surrogate for acenaphthylene.
8 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
9 - The value is for PCB (total).
10 - The value is for polychlorinated biphenyls (high risk).
11 - The value is for trivalent chromium.
12 - The value is for mercury (inorganic/mercuric dichloride).
13 - The value is for mercuric chloride.
14 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-503 | SB-555A | SB-555A | SB-555A | SB-570A | SB-570A | SB-570A |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-503-1012 | SB-555A-12 | SB-555A-14 | SB-555A-16 | SB-570A-12 | SB-570A-14 | SB-570A-16 |
| SAMPLE DATE | 20071127 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 12 | 14 | 16 | 12 | 14 | 16 |
| BOTTOM DEPTH | 12 | 12 | 14 | 16 | 12 | 14 | 16 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 12 U | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 12 U | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 12 U | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | 12 U | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 12 U | NA | NA | NA | NA | NA | NA |
| ACETONE | 45 J | NA | NA | NA | NA | NA | NA |
| BENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| BROMOFORM | 5.9 U | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 5.9 U | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 5.9 U | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | 5.9 U | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | 12 U | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | 5.9 U | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 12 U | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 12 U | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 2.7 B | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| STYRENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | 5.9 U | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | 120 UR | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| TOLUENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 12 U | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 5.9 U | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-503 | SB-555A | SB-555A | SB-555A | SB-570A | SB-570A | SB-570A |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-503-1012 | SB-555A-12 | SB-555A-14 | SB-555A-16 | SB-570A-12 | SB-570A-14 | SB-570A-16 |
| SAMPLE DATE | 20071127 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 12 | 14 | 16 | 12 | 14 | 16 |
| BOTTOM DEPTH | 12 | 12 | 14 | 16 | 12 | 14 | 16 |
| TRICHLOROETHENE | 5.9 U | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 5.9 U | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | 12 U | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 5.9 U | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | 390 U | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 390 U | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 390 U | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 390 U | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 390 U | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 390 U | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 780 U | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 390 U | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 390 U | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 390 U | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 390 U | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 390 U | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 780 U | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 390 U | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 390 U | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 780 U | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 390 U | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 390 U | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 390 U | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 390 U | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 390 U | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | 390 U | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 390 U | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | 780 U | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | 79 U | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 390 U | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | 390 U | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 390 U | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 390 U | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 390 U | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 390 U | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | 390 U | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 390 U | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 390 U | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 390 U | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 390 U | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 390 U | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 390 U | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 390 U | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 390 U | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 390 U | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 390 U | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | 390 U | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | 390 U | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | 390 U | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 390 U | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 390 U | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 390 U | NA | NA | NA | NA | NA | NA |
| PHENOL | 390 U | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 390 U | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 390 U | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 390 U | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 390 U | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 390 U | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 390 U | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 390 U | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-503 | SB-555A | SB-555A | SB-555A | SB-570A | SB-570A | SB-570A |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-503-1012 | SB-555A-12 | SB-555A-14 | SB-555A-16 | SB-570A-12 | SB-570A-14 | SB-570A-16 |
| SAMPLE DATE | 20071127 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 12 | 14 | 16 | 12 | 14 | 16 |
| BOTTOM DEPTH | 12 | 12 | 14 | 16 | 12 | 14 | 16 |
| BENZO(A)PYRENE | 390 U | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 390 U | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 390 U | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 390 U | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-503 | SB-555A | SB-555A | SB-555A | SB-570A | SB-570A | SB-570A |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-503-1012 | SB-555A-12 | SB-555A-14 | SB-555A-16 | SB-570A-12 | SB-570A-14 | SB-570A-16 |
| SAMPLE DATE | 20071127 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 12 | 14 | 16 | 12 | 14 | 16 |
| BOTTOM DEPTH | 12 | 12 | 14 | 16 | 12 | 14 | 16 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 390 U | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 390 U | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 390 U | NA | NA | NA | NA | NA | NA |
| FLUORENE | 390 U | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 390 U | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 390 U | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 390 U | NA | NA | NA | NA | NA | NA |
| PYRENE | 390 U | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 39 U | 93 U | 20 U | 20 U | 19 U | 20 U | 20 U |
| AROCLOR-1221 | 39 U | 93 U | 20 U | 20 U | 19 U | 20 U | 20 U |
| AROCLOR-1232 | 39 U | 93 U | 20 U | 20 U | 19 U | 20 U | 20 U |
| AROCLOR-1242 | 39 U | 93 U | 20 U | 20 U | 19 U | 20 U | 20 U |
| AROCLOR-1248 | 39 U | 93 U | 20 U | 20 U | 19 U | 20 U | 20 U |
| AROCLOR-1254 | 39 U | 93 U | 20 U | 20 U | 19 U | 20 U | 20 U |
| AROCLOR-1260 | 39 U | 710 | 38 J | 20 U | 19 U | 20 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 710 | 38 | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 0.26 K | NA | NA | NA | NA | NA | NA |
| ARSENIC | 1.7 | NA | NA | NA | NA | NA | NA |
| BARIUM | 12.8 | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 1.5 | NA | NA | NA | NA | NA | NA |
| CADMIUM | 0.043 K | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 14.1 J | NA | NA | NA | NA | NA | NA |
| COBALT | 3.3 | NA | NA | NA | NA | NA | NA |
| COPPER | 12.4 J | NA | NA | NA | NA | NA | NA |
| IRON | 34200 | NA | NA | NA | NA | NA | NA |
| LEAD | 5.8 J | NA | NA | NA | NA | NA | NA |
| MANGANESE | 69.9 | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.02 U | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | 0.22 B | NA | NA | NA | NA | NA | NA |
| NICKEL | 12.1 | NA | NA | NA | NA | NA | NA |
| SELENIUM | 0.8 | NA | NA | NA | NA | NA | NA |
| SILVER | 0.1 K | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.056 K | NA | NA | NA | NA | NA | NA |
| VANADIUM | 17.4 J | NA | NA | NA | NA | NA | NA |
| ZINC | 17.5 | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | 1100 J | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | 84.3 | 89 | NA | NA | 86 | 85 | 84 |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-503 | SB-555A | SB-555A | SB-555A | SB-570A | SB-570A | SB-570A |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-503-1012 | SB-555A-12 | SB-555A-14 | SB-555A-16 | SB-570A-12 | SB-570A-14 | SB-570A-16 |
| SAMPLE DATE | 20071127 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 12 | 14 | 16 | 12 | 14 | 16 |
| BOTTOM DEPTH | 12 | 12 | 14 | 16 | 12 | 14 | 16 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 | SB-820 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-818-11 | E-SB-818-13 | E-SB-818-15 | E-SB-819-11 | E-SB-819-13 | E-SB-819-15 | E-SB-820-11 | E-SB-820-13 | E-SB-820-15 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 | SB-820 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-818-11 | E-SB-818-13 | E-SB-818-15 | E-SB-819-11 | E-SB-819-13 | E-SB-819-15 | E-SB-820-11 | E-SB-820-13 | E-SB-820-15 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 | SB-820 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-818-11 | E-SB-818-13 | E-SB-818-15 | E-SB-819-11 | E-SB-819-13 | E-SB-819-15 | E-SB-820-11 | E-SB-820-13 | E-SB-820-15 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 | SB-820 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-818-11 | E-SB-818-13 | E-SB-818-15 | E-SB-819-11 | E-SB-819-13 | E-SB-819-15 | E-SB-820-11 | E-SB-820-13 | E-SB-820-15 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 25 U | 24 U | 28 U | 25 U | 26 U | 25 U | 24 U | 26 U | 25 U |
| AROCLOR-1221 | 19 U | 18 U | 22 U | 19 U | 20 U | 19 U | 18 U | 19 U | 19 U |
| AROCLOR-1232 | 16 U | 16 U | 19 U | 17 U | 17 U | 16 U | 16 U | 17 U | 17 U |
| AROCLOR-1242 | 15 U | 15 U | 18 U | 15 U | 16 U | 15 U | 15 U | 16 U | 16 U |
| AROCLOR-1248 | 20 U | 20 U | 23 U | 20 U | 21 U | 20 U | 19 U | 21 U | 20 U |
| AROCLOR-1254 | 20 U | 20 U | 23 U | 20 U | 21 U | 20 U | 19 U | 21 U | 20 U |
| AROCLOR-1260 | 20 U | 20 U | 23 U | 20 U | 21 U | 20 U | 19 U | 21 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 | SB-820 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-818-11 | E-SB-818-13 | E-SB-818-15 | E-SB-819-11 | E-SB-819-13 | E-SB-819-15 | E-SB-820-11 | E-SB-820-13 | E-SB-820-15 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-824 | SB-824 | SB-824 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-821-11 | E-SB-821-13 | E-SB-821-15 | E-SB-822-11 | E-SB-822-13 | E-SB-822-15 | E-SB-824-11 | E-SB-824-13 | E-SB-824-15 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-824 | SB-824 | SB-824 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-821-11 | E-SB-821-13 | E-SB-821-15 | E-SB-822-11 | E-SB-822-13 | E-SB-822-15 | E-SB-824-11 | E-SB-824-13 | E-SB-824-15 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-824 | SB-824 | SB-824 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-821-11 | E-SB-821-13 | E-SB-821-15 | E-SB-822-11 | E-SB-822-13 | E-SB-822-15 | E-SB-824-11 | E-SB-824-13 | E-SB-824-15 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-824 | SB-824 | SB-824 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-821-11 | E-SB-821-13 | E-SB-821-15 | E-SB-822-11 | E-SB-822-13 | E-SB-822-15 | E-SB-824-11 | E-SB-824-13 | E-SB-824-15 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 25 U | 25 U | 26 U | 24 U | 28 U | 25 U | 25 U | 26 U | 25 U |
| AROCLOR-1221 | 19 U | 19 U | 20 U | 19 U | 22 U | 19 U | 19 U | 20 U | 19 U |
| AROCLOR-1232 | 16 U | 17 U | 17 U | 16 U | 19 U | 17 U | 17 U | 17 U | 17 U |
| AROCLOR-1242 | 15 U | 16 U | 16 U | 15 U | 18 U | 15 U | 16 U | 16 U | 15 U |
| AROCLOR-1248 | 20 U | 20 U | 21 U | 20 U | 23 U | 20 U | 21 U | 21 U | 20 U |
| AROCLOR-1254 | 20 U | 20 U | 21 U | 20 U | 23 U | 20 U | 21 U | 21 U | 20 U |
| AROCLOR-1260 | 20 U | 20 U | 21 U | 20 U | 23 U | 20 U | 21 U | 21 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-824 | SB-824 | SB-824 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-821-11 | E-SB-821-13 | E-SB-821-15 | E-SB-822-11 | E-SB-822-13 | E-SB-822-15 | E-SB-824-11 | E-SB-824-13 | E-SB-824-15 |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-827 | SB-827 | SB-827 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-11 | E-SB-825-13 | E-SB-825-15 | E-SB-826-11 | E-SB-826-13 | E-SB-826-15 | E-SB-827-11 | E-SB-827-13 | E-SB-827-15 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-827 | SB-827 | SB-827 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-11 | E-SB-825-13 | E-SB-825-15 | E-SB-826-11 | E-SB-826-13 | E-SB-826-15 | E-SB-827-11 | E-SB-827-13 | E-SB-827-15 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-827 | SB-827 | SB-827 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-11 | E-SB-825-13 | E-SB-825-15 | E-SB-826-11 | E-SB-826-13 | E-SB-826-15 | E-SB-827-11 | E-SB-827-13 | E-SB-827-15 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-827 | SB-827 | SB-827 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-11 | E-SB-825-13 | E-SB-825-15 | E-SB-826-11 | E-SB-826-13 | E-SB-826-15 | E-SB-827-11 | E-SB-827-13 | E-SB-827-15 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | 85 U |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 25 U | 27 U | 26 U | 26 U | 25 U | 25 U | 25 U | 1300 UJ | 53 U |
| AROCLOR-1221 | 19 U | 20 U | 20 U | 20 U | 19 U | 19 U | 19 U | 1000 UJ | 41 U |
| AROCLOR-1232 | 17 U | 18 U | 17 U | 17 U | 17 U | 17 U | 17 U | 890 UJ | 36 U |
| AROCLOR-1242 | 15 U | 16 U | 16 U | 16 U | 15 U | 16 U | 16 U | 830 UJ | 33 U |
| AROCLOR-1248 | 20 U | 22 U | 21 U | 21 U | 20 U | 20 U | 20 U | 1100 UJ | 43 U |
| AROCLOR-1254 | 20 U | 22 U | 21 U | 21 U | 20 U | 20 U | 20 U | 1100 UJ | 43 U |
| AROCLOR-1260 | 20 U | 22 U | 21 U | 21 U | 20 U | 20 U | 20 U | 15000 J | 180 J |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 15000 | 180 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-827 | SB-827 | SB-827 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-11 | E-SB-825-13 | E-SB-825-15 | E-SB-826-11 | E-SB-826-13 | E-SB-826-15 | E-SB-827-11 | E-SB-827-13 | E-SB-827-15 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-828 | SB-828 | SB-828 | SB-829 | SB-829 | SB-829 | SB-830 | SB-830 | SB-830 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-828-11 | E-SB-828-13 | E-SB-828-15 | E-SB-829-11 | E-SB-829-13 | E-SB-829-15 | E-SB-830-11 | E-SB-830-11-AVG | E-SB-830-11-D |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-828 | SB-828 | SB-828 | SB-829 | SB-829 | SB-829 | SB-830 | SB-830 | SB-830 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-828-11 | E-SB-828-13 | E-SB-828-15 | E-SB-829-11 | E-SB-829-13 | E-SB-829-15 | E-SB-830-11 | E-SB-830-11-AVG | E-SB-830-11-D |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-828 | SB-828 | SB-828 | SB-829 | SB-829 | SB-829 | SB-830 | SB-830 | SB-830 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-828-11 | E-SB-828-13 | E-SB-828-15 | E-SB-829-11 | E-SB-829-13 | E-SB-829-15 | E-SB-830-11 | E-SB-830-11-AVG | E-SB-830-11-D |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 260 J | NA | NA | 84 U | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | 220 J | NA | NA | 84 U | NA | NA | NA |
| C1-FLUORENES | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 350 J | NA | NA | 84 U | NA | NA | NA |
| C2-FLUORENES | NA | NA | 280 J | NA | NA | 84 U | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | 230 J | NA | NA | 84 U | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-828 | SB-828 | SB-828 | SB-829 | SB-829 | SB-829 | SB-830 | SB-830 | SB-830 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-828-11 | E-SB-828-13 | E-SB-828-15 | E-SB-829-11 | E-SB-829-13 | E-SB-829-15 | E-SB-830-11 | E-SB-830-11-AVG | E-SB-830-11-D |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 280 J | NA | NA | 84 U | NA | NA | NA |
| C3-FLUORENES | NA | NA | 230 J | NA | NA | 84 U | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | 310 J | NA | NA | 84 U | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | 420 J | NA | NA | 84 U | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 250 J | NA | NA | 84 U | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | 1600 J | NA | NA | 84 U | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | 390 J | NA | NA | 84 U | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 120 U | 30 U | 27 U | 27 U | 26 U | 26 U | 25 U | 25 U | 25 U |
| AROCLOR-1221 | 95 U | 23 U | 21 U | 20 U | 20 U | 20 U | 19 U | 19 U | 19 U |
| AROCLOR-1232 | 83 U | 20 U | 18 U | 18 U | 17 U | 17 U | 17 U | 17 U | 17 U |
| AROCLOR-1242 | 77 U | 18 U | 17 U | 17 U | 16 U | 16 U | 16 U | 16 U | 16 U |
| AROCLOR-1248 | 100 U | 24 U | 22 U | 22 U | 21 U | 21 U | 20 U | 20 U | 20 U |
| AROCLOR-1254 | 100 U | 24 U | 22 U | 22 U | 21 U | 21 U | 20 U | 20 U | 20 U |
| AROCLOR-1260 | 280 | 61 | 40 J | 22 UJ | 33 J | 21 UJ | 20 U | 20 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 280 | 61 | 40 | 0 U | 33 | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 3800 J | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 54 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-828 | SB-828 | SB-828 | SB-829 | SB-829 | SB-829 | SB-830 | SB-830 | SB-830 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-828-11 | E-SB-828-13 | E-SB-828-15 | E-SB-829-11 | E-SB-829-13 | E-SB-829-15 | E-SB-830-11 | E-SB-830-11-AVG | E-SB-830-11-D |
| SAMPLE DATE | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 | SB-831 | SB-832 | SB-832 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-830-13 | E-SB-830-15 | E-SB-831-11 | E-SB-831-13 | E-SB-831-15 | E-SB-831-15-AVG | E-SB-831-15-D | E-SB-832-11 | E-SB-832-13 |
| SAMPLE DATE | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 | SB-831 | SB-832 | SB-832 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-830-13 | E-SB-830-15 | E-SB-831-11 | E-SB-831-13 | E-SB-831-15 | E-SB-831-15-AVG | E-SB-831-15-D | E-SB-832-11 | E-SB-832-13 |
| SAMPLE DATE | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 13 |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 | SB-831 | SB-832 | SB-832 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-830-13 | E-SB-830-15 | E-SB-831-11 | E-SB-831-13 | E-SB-831-15 | E-SB-831-15-AVG | E-SB-831-15-D | E-SB-832-11 | E-SB-832-13 |
| SAMPLE DATE | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 13 |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 | SB-831 | SB-832 | SB-832 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-830-13 | E-SB-830-15 | E-SB-831-11 | E-SB-831-13 | E-SB-831-15 | E-SB-831-15-AVG | E-SB-831-15-D | E-SB-832-11 | E-SB-832-13 |
| SAMPLE DATE | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 13 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 27 U | 26 U | 25 U | 25 U | 25 U | 24.5 U | 24 U | 26 U | 27 U |
| AROCLOR-1221 | 21 U | 20 U | 19 U | 19 U | 19 U | 18.5 U | 18 U | 20 U | 21 U |
| AROCLOR-1232 | 18 U | 18 U | 17 U | 17 U | 17 U | 16.5 U | 16 U | 17 U | 18 U |
| AROCLOR-1242 | 17 U | 16 U | 16 U | 16 U | 15 U | 15 U | 15 U | 16 U | 17 U |
| AROCLOR-1248 | 22 U | 21 U | 20 U | 20 U | 20 U | 19.5 U | 19 U | 21 U | 22 U |
| AROCLOR-1254 | 22 U | 21 U | 20 U | 20 U | 20 U | 19.5 U | 19 U | 21 U | 22 U |
| AROCLOR-1260 | 33 J | 21 U | 20 U | 20 U | 20 U | 19.5 U | 19 U | 21 U | 22 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 33 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 | SB-831 | SB-832 | SB-832 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-830-13 | E-SB-830-15 | E-SB-831-11 | E-SB-831-13 | E-SB-831-15 | E-SB-831-15-AVG | E-SB-831-15-D | E-SB-832-11 | E-SB-832-13 |
| SAMPLE DATE | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 13 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-832 | SB-833 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 | SB-835 | SB-836 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-832-15 | E-SB-833-11 | E-SB-834-11 | E-SB-834-13 | E-SB-834-15 | E-SB-835-11 | E-SB-835-13 | E-SB-835-15 | E-SB-836-11 |
| SAMPLE DATE | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-832 | SB-833 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 | SB-835 | SB-836 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-832-15 | E-SB-833-11 | E-SB-834-11 | E-SB-834-13 | E-SB-834-15 | E-SB-835-11 | E-SB-835-13 | E-SB-835-15 | E-SB-836-11 |
| SAMPLE DATE | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-832 | SB-833 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 | SB-835 | SB-836 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-832-15 | E-SB-833-11 | E-SB-834-11 | E-SB-834-13 | E-SB-834-15 | E-SB-835-11 | E-SB-835-13 | E-SB-835-15 | E-SB-836-11 |
| SAMPLE DATE | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | 150 J | NA | NA | 88 U | NA | NA | 79 U | NA |
| C1-FLUORANTHENES/PYRENES | NA | 250 J | NA | NA | 88 U | NA | NA | 79 U | NA |
| C1-FLUORENES | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | 120 J | NA | NA | 88 U | NA | NA | 79 U | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U | NA |
| C2-FLUORENES | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U | NA |
| C2-NAPHTHALENES | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-832 | SB-833 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 | SB-835 | SB-836 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-832-15 | E-SB-833-11 | E-SB-834-11 | E-SB-834-13 | E-SB-834-15 | E-SB-835-11 | E-SB-835-13 | E-SB-835-15 | E-SB-836-11 |
| SAMPLE DATE | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U | NA |
| C3-FLUORENES | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U | NA |
| C3-NAPHTHALENES | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U | NA |
| C4-NAPHTHALENES | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 27 U | 2500 U | 27 U | 140 U | 28 U | 24 U | 25 U | 25 U | 24 U |
| AROCLOR-1221 | 21 U | 1900 U | 20 U | 110 U | 21 U | 19 U | 19 U | 19 U | 18 U |
| AROCLOR-1232 | 18 U | 1600 U | 18 U | 94 U | 18 U | 16 U | 17 U | 17 U | 16 U |
| AROCLOR-1242 | 17 U | 1500 U | 17 U | 87 U | 17 U | 15 U | 16 U | 15 U | 15 U |
| AROCLOR-1248 | 22 U | 2000 U | 22 U | 110 U | 22 U | 20 U | 21 U | 20 U | 20 U |
| AROCLOR-1254 | 22 U | 2000 U | 22 U | 110 U | 22 U | 20 U | 21 U | 20 U | 20 U |
| AROCLOR-1260 | 33 J | 61000 | 32 J | 350 | 27 J | 20 U | 190 | 20 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 33 | 61000 | 32 | 350 | 27 | 0 U | 190 | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-832 | SB-833 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 | SB-835 | SB-836 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-832-15 | E-SB-833-11 | E-SB-834-11 | E-SB-834-13 | E-SB-834-15 | E-SB-835-11 | E-SB-835-13 | E-SB-835-15 | E-SB-836-11 |
| SAMPLE DATE | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-836 | SB-836 | SB-837 | SB-837 | SB-837 | SB-837 | SB-837 | SB-838 | SB-838 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-836-13 | E-SB-836-15 | E-SB-837-11 | E-SB-837-13 | E-SB-837-13-AVG | E-SB-837-13-D | E-SB-837-15 | E-SB-838-11 | E-SB-838-13 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-836 | SB-836 | SB-837 | SB-837 | SB-837 | SB-837 | SB-837 | SB-838 | SB-838 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-836-13 | E-SB-836-15 | E-SB-837-11 | E-SB-837-13 | E-SB-837-13-AVG | E-SB-837-13-D | E-SB-837-15 | E-SB-838-11 | E-SB-838-13 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 13 |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-836 | SB-836 | SB-837 | SB-837 | SB-837 | SB-837 | SB-837 | SB-838 | SB-838 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-836-13 | E-SB-836-15 | E-SB-837-11 | E-SB-837-13 | E-SB-837-13-AVG | E-SB-837-13-D | E-SB-837-15 | E-SB-838-11 | E-SB-838-13 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 13 |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-836 | SB-836 | SB-837 | SB-837 | SB-837 | SB-837 | SB-837 | SB-838 | SB-838 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-836-13 | E-SB-836-15 | E-SB-837-11 | E-SB-837-13 | E-SB-837-13-AVG | E-SB-837-13-D | E-SB-837-15 | E-SB-838-11 | E-SB-838-13 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 13 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 27 U | 25 U | 25 U | 26 U | 25.5 U | 25 U | 25 U | 25 U | 25 U |
| AROCLOR-1221 | 20 U | 19 U | 19 U | 20 U | 19.5 U | 19 U | 19 U | 19 U | 19 U |
| AROCLOR-1232 | 18 U | 17 U | 17 U | 17 U | 17 U | 17 U | 17 U | 16 U | 16 U |
| AROCLOR-1242 | 17 U | 15 U | 15 U | 16 U | 15.5 U | 15 U | 16 U | 15 U | 15 U |
| AROCLOR-1248 | 22 U | 20 U | 20 U | 21 U | 20.5 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1254 | 22 U | 20 U | 20 U | 21 U | 20.5 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1260 | 26 J | 20 U | 20 U | 53 J | 181.5 | 310 J | 20 U | 20 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 26 | 0 U | 0 U | 53 | 181.5 | 310 | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-836 | SB-836 | SB-837 | SB-837 | SB-837 | SB-837 | SB-837 | SB-838 | SB-838 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-836-13 | E-SB-836-15 | E-SB-837-11 | E-SB-837-13 | E-SB-837-13-AVG | E-SB-837-13-D | E-SB-837-15 | E-SB-838-11 | E-SB-838-13 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 13 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-838 | SB-839 | SB-839 | SB-839 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-838-15 | E-SB-839-11 | E-SB-839-13 | E-SB-839-15 | E-SB-840-11 | E-SB-840-13 | E-SB-840-15 | E-SB-841-11 | E-SB-841-13 |
| SAMPLE DATE | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-838 | SB-839 | SB-839 | SB-839 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-838-15 | E-SB-839-11 | E-SB-839-13 | E-SB-839-15 | E-SB-840-11 | E-SB-840-13 | E-SB-840-15 | E-SB-841-11 | E-SB-841-13 |
| SAMPLE DATE | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-838 | SB-839 | SB-839 | SB-839 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-838-15 | E-SB-839-11 | E-SB-839-13 | E-SB-839-15 | E-SB-840-11 | E-SB-840-13 | E-SB-840-15 | E-SB-841-11 | E-SB-841-13 |
| SAMPLE DATE | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-838 | SB-839 | SB-839 | SB-839 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-838-15 | E-SB-839-11 | E-SB-839-13 | E-SB-839-15 | E-SB-840-11 | E-SB-840-13 | E-SB-840-15 | E-SB-841-11 | E-SB-841-13 |
| SAMPLE DATE | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 26 U | 24 U | 26 U | 25 U | 24 U | 120 U | 25 U | 24 U | 25 U |
| AROCLOR-1221 | 20 U | 18 U | 20 U | 19 U | 18 U | 93 U | 19 U | 19 U | 19 U |
| AROCLOR-1232 | 17 U | 16 U | 17 U | 17 U | 16 U | 82 U | 17 U | 16 U | 17 U |
| AROCLOR-1242 | 16 U | 15 U | 16 U | 15 U | 15 U | 76 U | 16 U | 15 U | 15 U |
| AROCLOR-1248 | 21 U | 20 U | 21 U | 20 U | 19 U | 99 U | 21 U | 20 U | 20 U |
| AROCLOR-1254 | 21 U | 20 U | 21 U | 20 U | 19 U | 99 U | 21 U | 20 U | 20 U |
| AROCLOR-1260 | 21 U | 20 U | 51 | 20 U | 19 U | 240 | 21 U | 20 U | 670 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 51 | 0 U | 0 U | 240 | 0 U | 0 U | 670 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-838 | SB-839 | SB-839 | SB-839 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-838-15 | E-SB-839-11 | E-SB-839-13 | E-SB-839-15 | E-SB-840-11 | E-SB-840-13 | E-SB-840-15 | E-SB-841-11 | E-SB-841-13 |
| SAMPLE DATE | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-841 | SB-842 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-841-15 | E-SB-842-11 | E-SB-842-11-AVG | E-SB-842-11-D | E-SB-842-13 | E-SB-842-15 | E-SB-843-11 | E-SB-843-11-AVG | E-SB-843-11-D |
| SAMPLE DATE | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-841 | SB-842 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-841-15 | E-SB-842-11 | E-SB-842-11-AVG | E-SB-842-11-D | E-SB-842-13 | E-SB-842-15 | E-SB-843-11 | E-SB-843-11-AVG | E-SB-843-11-D |
| SAMPLE DATE | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-841 | SB-842 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-841-15 | E-SB-842-11 | E-SB-842-11-AVG | E-SB-842-11-D | E-SB-842-13 | E-SB-842-15 | E-SB-843-11 | E-SB-843-11-AVG | E-SB-843-11-D |
| SAMPLE DATE | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-841 | SB-842 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-841-15 | E-SB-842-11 | E-SB-842-11-AVG | E-SB-842-11-D | E-SB-842-13 | E-SB-842-15 | E-SB-843-11 | E-SB-843-11-AVG | E-SB-843-11-D |
| SAMPLE DATE | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 25 U | 25 U | 25 U | 25 U | 24 U | 25 U | 26 U | 25.5 U | 25 U |
| AROCLOR-1221 | 19 U | 19 U | 19 U | 19 U | 18 U | 19 U | 20 U | 19.5 U | 19 U |
| AROCLOR-1232 | 17 U | 17 U | 17 U | 17 U | 16 U | 17 U | 17 U | 17 U | 17 U |
| AROCLOR-1242 | 16 U | 15 U | 15 U | 15 U | 15 U | 16 U | 16 U | 16 U | 16 U |
| AROCLOR-1248 | 20 U | 20 U | 20 U | 20 U | 20 U | 21 U | 21 U | 20.5 U | 20 U |
| AROCLOR-1254 | 20 U | 20 U | 20 U | 20 U | 20 U | 21 U | 21 U | 20.5 U | 20 U |
| AROCLOR-1260 | 20 U | 20 U | 20 U | 20 U | 20 U | 62 | 21 U | 20.5 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 62 | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-841 | SB-842 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-841-15 | E-SB-842-11 | E-SB-842-11-AVG | E-SB-842-11-D | E-SB-842-13 | E-SB-842-15 | E-SB-843-11 | E-SB-843-11-AVG | E-SB-843-11-D |
| SAMPLE DATE | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-843 | SB-843 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-846 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-843-13 | E-SB-843-15 | E-SB-844-11 | E-SB-844-13 | E-SB-844-15 | E-SB-845-11 | E-SB-845-13 | E-SB-845-15 | E-SB-846-11 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-843 | SB-843 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-846 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-843-13 | E-SB-843-15 | E-SB-844-11 | E-SB-844-13 | E-SB-844-15 | E-SB-845-11 | E-SB-845-13 | E-SB-845-15 | E-SB-846-11 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-843 | SB-843 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-846 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-843-13 | E-SB-843-15 | E-SB-844-11 | E-SB-844-13 | E-SB-844-15 | E-SB-845-11 | E-SB-845-13 | E-SB-845-15 | E-SB-846-11 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-843 | SB-843 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-846 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-843-13 | E-SB-843-15 | E-SB-844-11 | E-SB-844-13 | E-SB-844-15 | E-SB-845-11 | E-SB-845-13 | E-SB-845-15 | E-SB-846-11 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 25 U | 25 U | 25 U | 26 U | 25 U | 25 U | 140 U | 25 U | 24 U |
| AROCLOR-1221 | 19 U | 19 U | 19 U | 20 U | 19 U | 19 U | 110 U | 19 U | 19 U |
| AROCLOR-1232 | 17 U | 17 U | 17 U | 18 U | 17 U | 17 U | 95 U | 17 U | 16 U |
| AROCLOR-1242 | 16 U | 16 U | 15 U | 16 U | 15 U | 15 U | 88 U | 16 U | 15 U |
| AROCLOR-1248 | 21 U | 20 U | 20 U | 21 U | 20 U | 20 U | 110 U | 20 U | 20 U |
| AROCLOR-1254 | 21 U | 20 U | 20 U | 21 U | 20 U | 20 U | 110 U | 20 U | 20 U |
| AROCLOR-1260 | 21 U | 20 U | 20 U | 170 | 20 U | 20 U | 590 | 20 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 170 | 0 U | 0 U | 590 | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-843 | SB-843 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-846 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-843-13 | E-SB-843-15 | E-SB-844-11 | E-SB-844-13 | E-SB-844-15 | E-SB-845-11 | E-SB-845-13 | E-SB-845-15 | E-SB-846-11 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-846 | SB-846 | SB-847 | SB-847 | SB-847 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-846-13 | E-SB-846-15 | E-SB-847-11 | E-SB-847-13 | E-SB-847-15 | E-SB-847-15-AVG | E-SB-847-15-D |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-846 | SB-846 | SB-847 | SB-847 | SB-847 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-846-13 | E-SB-846-15 | E-SB-847-11 | E-SB-847-13 | E-SB-847-15 | E-SB-847-15-AVG | E-SB-847-15-D |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-846 | SB-846 | SB-847 | SB-847 | SB-847 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-846-13 | E-SB-846-15 | E-SB-847-11 | E-SB-847-13 | E-SB-847-15 | E-SB-847-15-AVG | E-SB-847-15-D |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-846 | SB-846 | SB-847 | SB-847 | SB-847 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-846-13 | E-SB-846-15 | E-SB-847-11 | E-SB-847-13 | E-SB-847-15 | E-SB-847-15-AVG | E-SB-847-15-D |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 27 U | 27 U | 25 U | 25 U | 25 U | 25 U | 25 U |
| AROCLOR-1221 | 20 U | 21 U | 19 U | 19 U | 19 U | 19 U | 19 U |
| AROCLOR-1232 | 18 U | 18 U | 16 U | 17 U | 17 U | 17 U | 17 U |
| AROCLOR-1242 | 17 U | 17 U | 15 U | 16 U | 16 U | 15.5 U | 15 U |
| AROCLOR-1248 | 22 U | 22 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1254 | 22 U | 22 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1260 | 22 U | 22 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA |

**Table A-11**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-846 | SB-846 | SB-847 | SB-847 | SB-847 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-846-13 | E-SB-846-15 | E-SB-847-11 | E-SB-847-13 | E-SB-847-15 | E-SB-847-15-AVG | E-SB-847-15-D |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

**Table A-12**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-503 | SB-555A | SB-555A | SB-555A | SB-570A | SB-570A | SB-570A | SB-818 | SB-818 | SB-818 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-503-1012 | SB-555A-12 | SB-555A-14 | SB-555A-16 | SB-570A-12 | SB-570A-14 | SB-570A-16 | E-SB-818-11 | E-SB-818-13 | E-SB-818-15 |
| SAMPLE DATE | | | | 20071127 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 12 | 14 | 16 | 12 | 14 | 16 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 12 | 12 | 14 | 16 | 12 | 14 | 16 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| ACETONE | 7000000 | 6100000 | N | 45 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 39 U | 710 | 38 J | 20 U | 19 U | 20 U | 20 U | 20 U | 20 U | 23 U |
| TOTAL AROCLOR | 320 [4] | 220 | C[5] | 0 U | 710 | 38 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.26 K | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 1.7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | 12.8 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 1.5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 0.043 K | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [6] | 12000 | N[6] | 14.1 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | 3.3 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 12.4 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | 34200 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 5.8 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | 69.9 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 12.1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 0.8 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | 0.1 K | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 0.056 K | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[7] | 17.4 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 17.5 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | | 1100 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.3 | 89 | NA | NA | 86 | 85 | 84 | NA | NA | NA |

**Table A-12**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 | SB-820 | SB-821 | SB-821 | SB-821 | SB-822 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-819-11 | E-SB-819-13 | E-SB-819-15 | E-SB-820-11 | E-SB-820-13 | E-SB-820-15 | E-SB-821-11 | E-SB-821-13 | E-SB-821-15 | E-SB-822-11 |
| SAMPLE DATE | | | | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100916 | 20100916 | 20100916 | 20100915 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 21 U | 20 U | 19 U | 21 U | 20 U | 20 U | 20 U | 21 U | 20 U |
| TOTAL AROCLOR | 320 [4] | 220 | C[5] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [6] | 12000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-12**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-822 | SB-822 | SB-824 | SB-824 | SB-824 | SB-825 | SB-825 | SB-825 | SB-826 | SB-826 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-822-13 | E-SB-822-15 | E-SB-824-11 | E-SB-824-13 | E-SB-824-15 | E-SB-825-11 | E-SB-825-13 | E-SB-825-15 | E-SB-826-11 | E-SB-826-13 |
| SAMPLE DATE | | | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100913 | 20100913 | 20100913 | 20100916 | 20100916 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | | | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | 23 U | 20 U | 21 U | 21 U | 20 U | 20 U | 22 U | 21 U | 21 U | 20 U |
| TOTAL AROCLOR | 320 [4] | 220 C[5] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [6] | 12000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-12**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-826 | SB-827 | SB-827 | SB-827 | SB-828 | SB-828 | SB-828 | SB-829 | SB-829 | SB-829 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-826-15 | E-SB-827-11 | E-SB-827-13 | E-SB-827-15 | E-SB-828-11 | E-SB-828-13 | E-SB-828-15 | E-SB-829-11 | E-SB-829-13 | E-SB-829-15 |
| SAMPLE DATE | | | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 260 J | NA | NA | 84 U |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 220 J | NA | NA | 84 U |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 86 U | NA | NA | 84 U |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 350 J | NA | NA | 84 U |
| C2-FLUORENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 280 J | NA | NA | 84 U |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 230 J | NA | NA | 84 U |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 280 J | NA | NA | 84 U |
| C3-FLUORENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 230 J | NA | NA | 84 U |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 310 J | NA | NA | 84 U |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 420 J | NA | NA | 84 U |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 250 J | NA | NA | 84 U |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 1600 J | NA | NA | 84 U |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | 85 U | NA | NA | 390 J | NA | NA | 84 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | 20 U | 20 U | 15000 J | 180 J | 280 | 61 | 40 J | 22 UJ | 33 J | 21 UJ |
| TOTAL AROCLOR | 320 [4] | 220 C[5] | 0 U | 0 U | 15000 | 180 | 280 | 61 | 40 | 0 U | 33 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [6] | 12000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | 3800 J | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-12**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-830 | SB-830 | SB-830 | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 | SB-831 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-830-11 | E-SB-830-11-AVG | E-SB-830-11-D | E-SB-830-13 | E-SB-830-15 | E-SB-831-11 | E-SB-831-13 | E-SB-831-15 | E-SB-831-15-AVG | E-SB-831-15-D |
| SAMPLE DATE | | | | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | | | | 11 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 20 U | 20 U | 33 J | 21 U | 20 U | 20 U | 20 U | 19.5 U | 19 U |
| TOTAL AROCLOR | 320 [4] | 220 | C[5] | 0 U | 0 U | 0 U | 33 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [6] | 12000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-12**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-832 | SB-832 | SB-832 | SB-833 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 | SB-835 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-832-11 | E-SB-832-13 | E-SB-832-15 | E-SB-833-11 | E-SB-834-11 | E-SB-834-13 | E-SB-834-15 | E-SB-835-11 | E-SB-835-13 | E-SB-835-15 |
| SAMPLE DATE | | | | 20100917 | 20100917 | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | 150 J | NA | NA | 88 U | NA | NA | 79 U |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | 250 J | NA | NA | 88 U | NA | NA | 79 U |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | 120 J | NA | NA | 88 U | NA | NA | 79 U |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U |
| C2-FLUORENES | NC | NC | | NA | NA | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U |
| C3-FLUORENES | NC | NC | | NA | NA | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | 79 U | NA | NA | 88 U | NA | NA | 79 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 21 U | 22 U | 33 J | 61000 | 32 J | 350 | 27 J | 20 U | 190 | 20 U |
| TOTAL AROCLOR | 320 [4] | 220 | C[5] | 0 U | 0 U | 33 | 61000 | 32 | 350 | 27 | 0 U | 190 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [6] | 12000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-12**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-836 | SB-836 | SB-836 | SB-837 | SB-837 | SB-837 | SB-837 | SB-837 | SB-838 | SB-838 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-836-11 | E-SB-836-13 | E-SB-836-15 | E-SB-837-11 | E-SB-837-13 | E-SB-837-13-AVG | E-SB-837-13-D | E-SB-837-15 | E-SB-838-11 | E-SB-838-13 |
| SAMPLE DATE | | | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100913 | 20100913 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 11 | 13 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | | | 11 | 13 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | 79 U | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | 20 U | 26 J | 20 U | 20 U | 53 J | 181.5 | **310 J** | 20 U | 20 U | 20 U |
| TOTAL AROCLOR | 320 [4] | 220 C[5] | 0 U | 26 | 0 U | 0 U | 53 | 181.5 | **310** | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [6] | 12000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-12**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-838 | SB-839 | SB-839 | SB-839 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 | SB-841 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-838-15 | E-SB-839-11 | E-SB-839-13 | E-SB-839-15 | E-SB-840-11 | E-SB-840-13 | E-SB-840-15 | E-SB-841-11 | E-SB-841-13 | E-SB-841-15 |
| SAMPLE DATE | | | | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 21 U | 20 U | 51 | 20 U | 19 U | 240 | 21 U | 20 U | 670 | 20 U |
| TOTAL AROCLOR | 320 [4] | 220 | C[5] | 0 U | 0 U | 51 | 0 U | 0 U | 240 | 0 U | 0 U | 670 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [6] | 12000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-12**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-842 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | E-SB-842-11 | E-SB-842-11-AVG | E-SB-842-11-D | E-SB-842-13 | E-SB-842-15 | E-SB-843-11 | E-SB-843-11-AVG | E-SB-843-11-D | E-SB-843-13 | E-SB-843-15 |
| SAMPLE DATE | | | | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 20 U | 20 U | 20 U | 62 | 21 U | 20.5 U | 20 U | 21 U | 20 U |
| TOTAL AROCLOR | 320 [4] | 220 | C[5] | 0 U | 0 U | 0 U | 0 U | 62 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [6] | 12000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-12**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-846 | SB-846 | SB-846 | SB-847 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-844-11 | E-SB-844-13 | E-SB-844-15 | E-SB-845-11 | E-SB-845-13 | E-SB-845-15 | E-SB-846-11 | E-SB-846-13 | E-SB-846-15 | E-SB-847-11 |
| SAMPLE DATE | | | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | 20 U | 170 | 20 U | 20 U | 590 | 20 U | 20 U | 22 U | 22 U | 20 U |
| TOTAL AROCLOR | 320 [4] | 220 C[5] | 0 U | 170 | 0 U | 0 U | 590 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [6] | 12000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-847 | SB-847 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|
| SAMPLE ID | | | E-SB-847-13 | E-SB-847-15 | E-SB-847-15-AVG | E-SB-847-15-D |
| SAMPLE DATE | | | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | | | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB |
| TOP DEPTH | | | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | | | 13 | 15 | 15 | 15 |
| **VOLATILES (UG/KG)** | | | | | | |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| AROCLOR-1260 | 320 | 220 C | 20 U | 20 U | 20 U | 20 U |
| TOTAL AROCLOR | 320 [4] | 220 C[5] | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA |
| CHROMIUM | 12000 [6] | 12000 N[6] | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[7] | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA |
| TPH (C10-C32) | NC | NC | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA |

**Table A-12**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block E**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 1.0.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - The value is for PCB (total).
5 - The value is for polychlorinated biphenyls (high risk).
6 - The value is for trivalent chromium.
7 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-024A | SB-024A | SB-056 | SB-056 | SB-093 | SB-093 | SB-094 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-24ARE-1 | F-SB-24ARE-2 | F-SB-56RE-1 | F-SB-56RE-2 | F-SB-93RE-1 | F-SB-93RE-2 | F-SB-94RE-1 |
| SAMPLE DATE | 20090922 | 20090922 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-024A | SB-024A | SB-056 | SB-056 | SB-093 | SB-093 | SB-094 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-24ARE-1 | F-SB-24ARE-2 | F-SB-56RE-1 | F-SB-56RE-2 | F-SB-93RE-1 | F-SB-93RE-2 | F-SB-94RE-1 |
| SAMPLE DATE | 20090922 | 20090922 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | 23 | 1.5 U | 1190 | 150 | 184 |
| BAP EQUIVALENT-POS | NA | NA | 22 | 1.5 U | 1190 | 150 | 184 |
| BENZO(A)ANTHRACENE | NA | NA | 17 | 1.1 U | 890 | 100 | 110 |
| BENZO(A)PYRENE | NA | NA | 17 | 1.5 U | 810 | 89 | 130 |
| BENZO(B)FLUORANTHENE | NA | NA | 21 | 1.4 U | 1200 | 140 | 150 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | 12 | 1.9 U | 390 | 46 | 91 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-024A | SB-024A | SB-056 | SB-056 | SB-093 | SB-093 | SB-094 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-24ARE-1 | F-SB-24ARE-2 | F-SB-56RE-1 | F-SB-56RE-2 | F-SB-93RE-1 | F-SB-93RE-2 | F-SB-94RE-1 |
| SAMPLE DATE | 20090922 | 20090922 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-024A | SB-024A | SB-056 | SB-056 | SB-093 | SB-093 | SB-094 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-24ARE-1 | F-SB-24ARE-2 | F-SB-56RE-1 | F-SB-56RE-2 | F-SB-93RE-1 | F-SB-93RE-2 | F-SB-94RE-1 |
| SAMPLE DATE | 20090922 | 20090922 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | 19 | 1 U | 860 | 100 | 150 |
| DIBENZO(A,H)ANTHRACENE | NA | NA | 1.6 U | 1.5 U | 120 | 30 | 19 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | 11 | 1.7 U | 460 | 66 | 81 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | 97 | 0 U | 4730 | 571 | 731 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | 23 U | 25 U | 24 U |
| AROCLOR-1221 | NA | NA | NA | NA | 18 U | 19 U | 18 U |
| AROCLOR-1232 | NA | NA | NA | NA | 16 U | 17 U | 16 U |
| AROCLOR-1242 | NA | NA | NA | NA | 14 U | 16 U | 15 U |
| AROCLOR-1248 | NA | NA | NA | NA | 19 U | 20 U | 20 U |
| AROCLOR-1254 | NA | NA | NA | NA | 19 U | 20 U | 20 U |
| AROCLOR-1260 | NA | NA | NA | NA | 120 | 20 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | 120 | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 1.5 L | 1 L | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-024A | SB-024A | SB-056 | SB-056 | SB-093 | SB-093 | SB-094 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-24ARE-1 | F-SB-24ARE-2 | F-SB-56RE-1 | F-SB-56RE-2 | F-SB-93RE-1 | F-SB-93RE-2 | F-SB-94RE-1 |
| SAMPLE DATE | 20090922 | 20090922 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 | SB-624 | SB-624 | SB-625 | SB-625 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-94RE-2 | F-SB-95RE-1 | F-SB-95RE-2 | F-SB-96RE-1 | F-SB-96RE-2 | F-SB-624-1 | F-SB-624-2 | F-SB-625-1 | F-SB-625-2 |
| SAMPLE DATE | 20090921 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 | SB-624 | SB-624 | SB-625 | SB-625 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-94RE-2 | F-SB-95RE-1 | F-SB-95RE-2 | F-SB-96RE-1 | F-SB-96RE-2 | F-SB-624-1 | F-SB-624-2 | F-SB-625-1 | F-SB-625-2 |
| SAMPLE DATE | 20090921 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 95 | 50001 | 2.6 | 602 | 1.6 U | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 95 | 49963 | 0.85 | 602 | 1.6 U | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 57 | 42000 | 8.5 | 390 | 1.1 U | NA | NA | NA | NA |
| BENZO(A)PYRENE | 55 | 38000 | 1.6 U | 410 | 1.6 U | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 58 | 55000 | 1.5 U | 580 | 1.5 U | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 24 | 23000 | 2.1 U | 250 | 2.1 U | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 | SB-624 | SB-624 | SB-625 | SB-625 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-94RE-2 | F-SB-95RE-1 | F-SB-95RE-2 | F-SB-96RE-1 | F-SB-96RE-2 | F-SB-624-1 | F-SB-624-2 | F-SB-625-1 | F-SB-625-2 |
| SAMPLE DATE | 20090921 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 | SB-624 | SB-624 | SB-625 | SB-625 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-94RE-2 | F-SB-95RE-1 | F-SB-95RE-2 | F-SB-96RE-1 | F-SB-96RE-2 | F-SB-624-1 | F-SB-624-2 | F-SB-625-1 | F-SB-625-2 |
| SAMPLE DATE | 20090921 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 73 | 33000 | 1.1 U | 340 | 1.1 U | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 25 | 76 U | 1.6 U | 67 | 1.6 U | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 36 | 20000 | 1.9 U | 250 | 1.8 U | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 328 | 211000 | 8.5 | 2287 | 0 U | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 26 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 20 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 17 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 16 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 21 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 21 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 21 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | 0.035 | 0.22 | 0.02 U | 0.58 |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 | SB-624 | SB-624 | SB-625 | SB-625 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-94RE-2 | F-SB-95RE-1 | F-SB-95RE-2 | F-SB-96RE-1 | F-SB-96RE-2 | F-SB-624-1 | F-SB-624-2 | F-SB-625-1 | F-SB-625-2 |
| SAMPLE DATE | 20090921 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-626 | SB-626 | SB-626B | SB-626C | SB-626D | SB-627 | SB-627 | SB-635C | SB-635D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-626-1 | F-SB-626-2 | F-SB-626B-(1-4) | F-SB-626C-1 | F-SB-626D-1 | F-SB-627-1 | F-SB-627-2 | F-SB-635C-1 | F-SB-635D-1 |
| SAMPLE DATE | 20090922 | 20090922 | 20091111 | 20091111 | 20091111 | 20090922 | 20090922 | 20091104 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 4 | 1 | 1 | 1 | 2 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-626 | SB-626 | SB-626B | SB-626C | SB-626D | SB-627 | SB-627 | SB-635C | SB-635D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-626-1 | F-SB-626-2 | F-SB-626B-(1-4) | F-SB-626C-1 | F-SB-626D-1 | F-SB-627-1 | F-SB-627-2 | F-SB-635C-1 | F-SB-635D-1 |
| SAMPLE DATE | 20090922 | 20090922 | 20091111 | 20091111 | 20091111 | 20090922 | 20090922 | 20091104 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 4 | 1 | 1 | 1 | 2 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | 1267 | 20 |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | 1267 | 19 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | 760 | 11 |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | 870 | 16 |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | 1200 | 8.9 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | 390 | 1.8 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-626 | SB-626 | SB-626B | SB-626C | SB-626D | SB-627 | SB-627 | SB-635C | SB-635D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-626-1 | F-SB-626-2 | F-SB-626B-(1-4) | F-SB-626C-1 | F-SB-626D-1 | F-SB-627-1 | F-SB-627-2 | F-SB-635C-1 | F-SB-635D-1 |
| SAMPLE DATE | 20090922 | 20090922 | 20091111 | 20091111 | 20091111 | 20090922 | 20090922 | 20091104 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 4 | 1 | 1 | 1 | 2 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-626 | SB-626 | SB-626B | SB-626C | SB-626D | SB-627 | SB-627 | SB-635C | SB-635D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-626-1 | F-SB-626-2 | F-SB-626B-(1-4) | F-SB-626C-1 | F-SB-626D-1 | F-SB-627-1 | F-SB-627-2 | F-SB-635C-1 | F-SB-635D-1 |
| SAMPLE DATE | 20090922 | 20090922 | 20091111 | 20091111 | 20091111 | 20090922 | 20090922 | 20091104 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 4 | 1 | 1 | 1 | 2 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | 790 | 8.1 |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | 150 | 1.4 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | 460 | 15 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | 4620 | 59 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.2 L | 2.7 L | 1.2 | 2.2 | 0.36 | 0.31 L | 0.38 L | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-626 | SB-626 | SB-626B | SB-626C | SB-626D | SB-627 | SB-627 | SB-635C | SB-635D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-626-1 | F-SB-626-2 | F-SB-626B-(1-4) | F-SB-626C-1 | F-SB-626D-1 | F-SB-627-1 | F-SB-627-2 | F-SB-635C-1 | F-SB-635D-1 |
| SAMPLE DATE | 20090922 | 20090922 | 20091111 | 20091111 | 20091111 | 20090922 | 20090922 | 20091104 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 4 | 1 | 1 | 1 | 2 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-636 | SB-636A | SB-636B | SB-636C | SB-636D | SB-637 | SB-637B | SB-637C | SB-638 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636-1 | F-SB-636A-1 | F-SB-636B-1 | F-SB-636C-1 | F-SB-636D-1 | F-SB-637-1 | F-SB-637B-1 | F-SB-637C-1 | F-SB-638-1 |
| SAMPLE DATE | 20091007 | 20091105 | 20091105 | 20091105 | 20091105 | 20091007 | 20091106 | 20091106 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-636 | SB-636A | SB-636B | SB-636C | SB-636D | SB-637 | SB-637B | SB-637C | SB-638 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636-1 | F-SB-636A-1 | F-SB-636B-1 | F-SB-636C-1 | F-SB-636D-1 | F-SB-637-1 | F-SB-637B-1 | F-SB-637C-1 | F-SB-638-1 |
| SAMPLE DATE | 20091007 | 20091105 | 20091105 | 20091105 | 20091105 | 20091007 | 20091106 | 20091106 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 163 | 410 | 1412 | 7120 | 6757 | 1186 | 6953 | 2075 | 1.4 U |
| BAP EQUIVALENT-POS | 163 | 410 | 1412 | 7120 | 6757 | 1186 | 6953 | 2075 | 1.4 U |
| BENZO(A)ANTHRACENE | 130 | 290 | 790 | 5700 | 4900 | 900 | 6200 | 1700 | 1 U |
| BENZO(A)PYRENE | 110 | 270 | 950 | 4800 | 4700 | 820 | 4600 | 1400 | 1.4 U |
| BENZO(B)FLUORANTHENE | 140 | 400 | 1200 | 7000 | 6200 | 1100 | 6500 | 1900 | 1.3 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 58 | 130 | 540 | 2500 | 2200 | 390 | 2800 | 870 | 1.8 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-636 | SB-636A | SB-636B | SB-636C | SB-636D | SB-637 | SB-637B | SB-637C | SB-638 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636-1 | F-SB-636A-1 | F-SB-636B-1 | F-SB-636C-1 | F-SB-636D-1 | F-SB-637-1 | F-SB-637B-1 | F-SB-637C-1 | F-SB-638-1 |
| SAMPLE DATE | 20091007 | 20091105 | 20091105 | 20091105 | 20091105 | 20091007 | 20091106 | 20091106 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-636 | SB-636A | SB-636B | SB-636C | SB-636D | SB-637 | SB-637B | SB-637C | SB-638 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636-1 | F-SB-636A-1 | F-SB-636B-1 | F-SB-636C-1 | F-SB-636D-1 | F-SB-637-1 | F-SB-637B-1 | F-SB-637C-1 | F-SB-638-1 |
| SAMPLE DATE | 20091007 | 20091105 | 20091105 | 20091105 | 20091105 | 20091007 | 20091106 | 20091106 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 110 | 300 | 890 | 5200 | 4900 | 840 | 5300 | 1500 | 0.97 U |
| DIBENZO(A,H)ANTHRACENE | 19 | 53 | 200 | 750 | 660 | 120 | 790 | 230 | 1.4 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 64 | 160 | 570 | 2700 | 2600 | 410 | 2600 | 750 | 1.6 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 631 | 1603 | 5140 | 28650 | 26160 | 4580 | 28790 | 8350 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | NA | NA | NA | NA | 24 U | NA | NA | 23 U |
| AROCLOR-1221 | 19 U | NA | NA | NA | NA | 18 U | NA | NA | 17 U |
| AROCLOR-1232 | 16 U | NA | NA | NA | NA | 16 U | NA | NA | 15 U |
| AROCLOR-1242 | 15 U | NA | NA | NA | NA | 15 U | NA | NA | 14 U |
| AROCLOR-1248 | 20 U | NA | NA | NA | NA | 19 U | NA | NA | 18 U |
| AROCLOR-1254 | 20 U | NA | NA | NA | NA | 19 U | NA | NA | 18 U |
| AROCLOR-1260 | 20 U | NA | NA | NA | NA | 19 U | NA | NA | 18 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | NA | NA | NA | NA | 0 U | NA | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-636 | SB-636A | SB-636B | SB-636C | SB-636D | SB-637 | SB-637B | SB-637C | SB-638 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636-1 | F-SB-636A-1 | F-SB-636B-1 | F-SB-636C-1 | F-SB-636D-1 | F-SB-637-1 | F-SB-637B-1 | F-SB-637C-1 | F-SB-638-1 |
| SAMPLE DATE | 20091007 | 20091105 | 20091105 | 20091105 | 20091105 | 20091007 | 20091106 | 20091106 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-639 | SB-640 | SB-641 | SB-641A | SB-641B | SB-641C | SB-642 | SB-642A | SB-642B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-639-1 | F-SB-640-1 | F-SB-641-1 | F-SB-641A-1 | F-SB-641B-1 | F-SB-641C-1 | F-SB-642-1 | F-SB-642A-1 | F-SB-642B-1 |
| SAMPLE DATE | 20091007 | 20091007 | 20091006 | 20091104 | 20091104 | 20091104 | 20091019 | 20091104 | 20091104 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-639 | SB-640 | SB-641 | SB-641A | SB-641B | SB-641C | SB-642 | SB-642A | SB-642B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-639-1 | F-SB-640-1 | F-SB-641-1 | F-SB-641A-1 | F-SB-641B-1 | F-SB-641C-1 | F-SB-642-1 | F-SB-642A-1 | F-SB-642B-1 |
| SAMPLE DATE | 20091007 | 20091007 | 20091006 | 20091104 | 20091104 | 20091104 | 20091019 | 20091104 | 20091104 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 79 | 74 | 1364 | 41 | 289 | 9111 | 1495 | 1.5 U | 57 |
| BAP EQUIVALENT-POS | 78 | 73 | 1364 | 41 | 289 | 9111 | 1495 | 1.5 U | 56 |
| BENZO(A)ANTHRACENE | 62 | 52 | 960 | 31 | 190 | 7400 | 1100 | 1.1 U | 42 |
| BENZO(A)PYRENE | 59 | 55 | 860 | 32 | 200 | 6300 | 1000 | 1.5 U | 44 |
| BENZO(B)FLUORANTHENE | 88 | 88 | 1300 | 38 | 290 | 8900 | 1200 | 1.4 U | 48 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 32 | 29 | 1.6 U | 19 | 95 | 3500 | 620 | 2 U | 40 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-639 | SB-640 | SB-641 | SB-641A | SB-641B | SB-641C | SB-642 | SB-642A | SB-642B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-639-1 | F-SB-640-1 | F-SB-641-1 | F-SB-641A-1 | F-SB-641B-1 | F-SB-641C-1 | F-SB-642-1 | F-SB-642A-1 | F-SB-642B-1 |
| SAMPLE DATE | 20091007 | 20091007 | 20091006 | 20091104 | 20091104 | 20091104 | 20091019 | 20091104 | 20091104 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-639 | SB-640 | SB-641 | SB-641A | SB-641B | SB-641C | SB-642 | SB-642A | SB-642B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-639-1 | F-SB-640-1 | F-SB-641-1 | F-SB-641A-1 | F-SB-641B-1 | F-SB-641C-1 | F-SB-642-1 | F-SB-642A-1 | F-SB-642B-1 |
| SAMPLE DATE | 20091007 | 20091007 | 20091006 | 20091104 | 20091104 | 20091104 | 20091019 | 20091104 | 20091104 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 66 | 57 | 840 | 33 | 190 | 6300 | 980 | 1 U | 48 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 210 | 1.5 U | 30 | 840 | 200 | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 34 | 37 | 670 | 15 | 100 | 3000 | 580 | 1.7 U | 24 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 341 | 318 | 4840 | 168 | 1095 | 36240 | 5680 | 0 U | 246 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | 24 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 18 U | 18 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 16 U | 16 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 15 U | 15 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 20 U | 20 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 20 U | 20 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 20 U | 20 U | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-639 | SB-640 | SB-641 | SB-641A | SB-641B | SB-641C | SB-642 | SB-642A | SB-642B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-639-1 | F-SB-640-1 | F-SB-641-1 | F-SB-641A-1 | F-SB-641B-1 | F-SB-641C-1 | F-SB-642-1 | F-SB-642A-1 | F-SB-642B-1 |
| SAMPLE DATE | 20091007 | 20091007 | 20091006 | 20091104 | 20091104 | 20091104 | 20091019 | 20091104 | 20091104 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642C | SB-643 | SB-643B | SB-643C | SB-644 | SB-645 | SB-645A | SB-645B | SB-645C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642C-1 | F-SB-643-1 | F-SB-643B-1 | F-SB-643C-1 | F-SB-644-1 | F-SB-645-1 | F-SB-645A-1 | F-SB-645B-1 | F-SB-645C-1 |
| SAMPLE DATE | 20091104 | 20091016 | 20091105 | 20091105 | 20091016 | 20091006 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-642C | SB-643 | SB-643B | SB-643C | SB-644 | SB-645 | SB-645A | SB-645B | SB-645C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642C-1 | F-SB-643-1 | F-SB-643B-1 | F-SB-643C-1 | F-SB-644-1 | F-SB-645-1 | F-SB-645A-1 | F-SB-645B-1 | F-SB-645C-1 |
| SAMPLE DATE | 20091104 | 20091016 | 20091105 | 20091105 | 20091016 | 20091006 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.7 | 708 | 118 | 1.4 U | 70 | 26715 | 111 | 112 | 369 |
| BAP EQUIVALENT-POS | 0.012 | 708 | 118 | 1.4 U | 70 | 26715 | 111 | 112 | 369 |
| BENZO(A)ANTHRACENE | 1.1 U | 360 | 77 | 1 U | 39 | 18000 | 68 | 79 | 260 |
| BENZO(A)PYRENE | 1.5 U | 490 | 70 | 1.4 U | 47 | 17000 | 66 | 78 | 240 |
| BENZO(B)FLUORANTHENE | 1.4 U | 630 | 110 | 1.3 U | 58 | 28000 | 96 | 110 | 330 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 300 | 32 | 1.9 U | 25 | 9.3 U | 45 | 47 | 120 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-642C | SB-643 | SB-643B | SB-643C | SB-644 | SB-645 | SB-645A | SB-645B | SB-645C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642C-1 | F-SB-643-1 | F-SB-643B-1 | F-SB-643C-1 | F-SB-644-1 | F-SB-645-1 | F-SB-645A-1 | F-SB-645B-1 | F-SB-645C-1 |
| SAMPLE DATE | 20091104 | 20091016 | 20091105 | 20091105 | 20091016 | 20091006 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642C | SB-643 | SB-643B | SB-643C | SB-644 | SB-645 | SB-645A | SB-645B | SB-645C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642C-1 | F-SB-643-1 | F-SB-643B-1 | F-SB-643C-1 | F-SB-644-1 | F-SB-645-1 | F-SB-645A-1 | F-SB-645B-1 | F-SB-645C-1 |
| SAMPLE DATE | 20091104 | 20091016 | 20091105 | 20091105 | 20091016 | 20091006 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 12 | 400 | 99 | 0.99 U | 44 | 15000 | 68 | 92 | 240 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 87 | 25 | 1.4 U | 9.4 | 4000 | 24 | 11 | 55 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 290 | 40 | 1.7 U | 32 | 11000 | 40 | 40 | 140 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 12 | 2557 | 453 | 0 U | 254.4 | 93000 | 407 | 457 | 1385 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642C | SB-643 | SB-643B | SB-643C | SB-644 | SB-645 | SB-645A | SB-645B | SB-645C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642C-1 | F-SB-643-1 | F-SB-643B-1 | F-SB-643C-1 | F-SB-644-1 | F-SB-645-1 | F-SB-645A-1 | F-SB-645B-1 | F-SB-645C-1 |
| SAMPLE DATE | 20091104 | 20091016 | 20091105 | 20091105 | 20091016 | 20091006 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-646 | SB-647 | SB-647A | SB-647B | SB-647C | SB-648 | SB-649 | SB-650 | SB-651 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-646-1 | F-SB-647-1 | F-SB-647A-1 | F-SB-647B-1 | F-SB-647C-1 | F-SB-648-1 | F-SB-649-1 | F-SB-650-1 | F-SB-651-1 |
| SAMPLE DATE | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-646 | SB-647 | SB-647A | SB-647B | SB-647C | SB-648 | SB-649 | SB-650 | SB-651 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-646-1 | F-SB-647-1 | F-SB-647A-1 | F-SB-647B-1 | F-SB-647C-1 | F-SB-648-1 | F-SB-649-1 | F-SB-650-1 | F-SB-651-1 |
| SAMPLE DATE | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 23 | 284 | 3838 | 283 | 5140 | 2.2 U | 2.2 U | 4.1 | 14 |
| BAP EQUIVALENT-POS | 23 | 284 | 3838 | 283 | 5140 | 2.2 U | 2.2 U | 3.1 | 13 |
| BENZO(A)ANTHRACENE | 13 | 160 | 2500 | 170 | 3400 | 1.2 U | 1.3 U | 1.2 U | 8.8 |
| BENZO(A)PYRENE | 15 | 180 | 2600 | 180 | 3500 | 2.2 U | 2.2 U | 3.1 J | 9.9 |
| BENZO(B)FLUORANTHENE | 24 | 300 | 3100 | 240 | 4500 | 1.6 U | 1.6 U | 1.6 U | 13 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.6 U | 7.9 U | 1600 | 97 | 1700 | 1.6 U | 1.7 U | 1.6 U | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-646 | SB-647 | SB-647A | SB-647B | SB-647C | SB-648 | SB-649 | SB-650 | SB-651 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-646-1 | F-SB-647-1 | F-SB-647A-1 | F-SB-647B-1 | F-SB-647C-1 | F-SB-648-1 | F-SB-649-1 | F-SB-650-1 | F-SB-651-1 |
| SAMPLE DATE | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-646 | SB-647 | SB-647A | SB-647B | SB-647C | SB-648 | SB-649 | SB-650 | SB-651 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-646-1 | F-SB-647-1 | F-SB-647A-1 | F-SB-647B-1 | F-SB-647C-1 | F-SB-648-1 | F-SB-649-1 | F-SB-650-1 | F-SB-651-1 |
| SAMPLE DATE | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 13 | 180 | 2400 | 170 | 3300 | 1.4 U | 1.4 U | 1.4 U | 8.9 |
| DIBENZO(A,H)ANTHRACENE | 2.8 J | 44 | 500 | 49 | 620 | 1.7 U | 1.8 U | 1.7 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 12 | 140 | 1600 | 120 | 2100 | 0.43 U | 0.44 U | 0.43 U | 8.8 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 79.8 | 1004 | 14300 | 1026 | 19120 | 0 U | 0 U | 3.1 | 49.4 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | 24 U |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | 18 U |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | 16 U |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | 15 U |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | 19 U |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | 19 U |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | 19 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-646 | SB-647 | SB-647A | SB-647B | SB-647C | SB-648 | SB-649 | SB-650 | SB-651 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-646-1 | F-SB-647-1 | F-SB-647A-1 | F-SB-647B-1 | F-SB-647C-1 | F-SB-648-1 | F-SB-649-1 | F-SB-650-1 | F-SB-651-1 |
| SAMPLE DATE | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-652 | SB-652A | SB-652B | SB-652C | SB-797 | SB-798 | SB-799 | SB-800 | SB-801 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652-1 | F-SB-652A-1 | F-SB-652B-1 | F-SB-652C-1 | F-SB-797-SS | F-SB-798-SS | F-SB-799-SS | F-SB-800-SS | F-SB-801-SS |
| SAMPLE DATE | 20091007 | 20091105 | 20091105 | 20091105 | 20100820 | 20100820 | 20100820 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-652 | SB-652A | SB-652B | SB-652C | SB-797 | SB-798 | SB-799 | SB-800 | SB-801 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652-1 | F-SB-652A-1 | F-SB-652B-1 | F-SB-652C-1 | F-SB-797-SS | F-SB-798-SS | F-SB-799-SS | F-SB-800-SS | F-SB-801-SS |
| SAMPLE DATE | 20091007 | 20091105 | 20091105 | 20091105 | 20100820 | 20100820 | 20100820 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | 55 | 3.7 U | 3.9 U | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | 46 | 3.7 U | 3.9 U | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | 340 | 3.7 U | 3.9 U | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | 15 U | 3.7 U | 3.9 U | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | 680 | 3.7 U | 3.9 U | NA | NA |
| BAP EQUIVALENT-HALFND | 342 | 228 | 505 | 19 | 3496 | 3.7 U | 13 | NA | NA |
| BAP EQUIVALENT-POS | 342 | 228 | 505 | 18 | 3496 | 3.7 U | 11 | NA | NA |
| BENZO(A)ANTHRACENE | 260 | 150 | 350 | 16 | 2300 | 3.7 U | 8.1 | NA | NA |
| BENZO(A)PYRENE | 230 | 150 | 340 | 13 | 2400 | 3.7 U | 9 | NA | NA |
| BENZO(B)FLUORANTHENE | 330 | 200 | 430 | 30 | 2800 | 3.7 U | 11 | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | 1700 | 3.7 U | 3.9 U | NA | NA |
| BENZO(K)FLUORANTHENE | 120 | 96 | 190 | 8.4 | 1400 | 3.7 U | 3.9 U | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-652 | SB-652A | SB-652B | SB-652C | SB-797 | SB-798 | SB-799 | SB-800 | SB-801 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652-1 | F-SB-652A-1 | F-SB-652B-1 | F-SB-652C-1 | F-SB-797-SS | F-SB-798-SS | F-SB-799-SS | F-SB-800-SS | F-SB-801-SS |
| SAMPLE DATE | 20091007 | 20091105 | 20091105 | 20091105 | 20100820 | 20100820 | 20100820 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 3700 J | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | 5800 J | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 1600 J | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 1300 J | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 950 J | NA | NA | NA | NA |

| LOCATION | SB-652 | SB-652A | SB-652B | SB-652C | SB-797 | SB-798 | SB-799 | SB-800 | SB-801 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652-1 | F-SB-652A-1 | F-SB-652B-1 | F-SB-652C-1 | F-SB-797-SS | F-SB-798-SS | F-SB-799-SS | F-SB-800-SS | F-SB-801-SS |
| SAMPLE DATE | 20091007 | 20091105 | 20091105 | 20091105 | 20100820 | 20100820 | 20100820 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 470 J | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 390 U | NA | NA | NA | NA |
| CHRYSENE | 250 | 160 | 350 | 15 | 2400 | 1.2 U | 11 | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 38 | 33 | 65 | 1.5 U | 430 | 3.7 U | 3.9 U | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | 4900 | 11 | 17 | NA | NA |
| FLUORENE | NA | NA | NA | NA | 370 | 3.7 U | 3.9 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 140 | 89 | 200 | 1.7 U | 1400 | 3.7 U | 3.9 U | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | 140 | 3.7 U | 3.9 U | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | 2600 | 3.7 U | 8 | NA | NA |
| PYRENE | NA | NA | NA | NA | 4200 | 9.1 | 17 | NA | NA |
| TOTAL PAHS | 1368 | 878 | 1925 | 82.4 | 28106 | 20.1 | 81.1 | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 18 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 16 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 15 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 20 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 20 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 20 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | 1 L | 0.18 L |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-652 | SB-652A | SB-652B | SB-652C | SB-797 | SB-798 | SB-799 | SB-800 | SB-801 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652-1 | F-SB-652A-1 | F-SB-652B-1 | F-SB-652C-1 | F-SB-797-SS | F-SB-798-SS | F-SB-799-SS | F-SB-800-SS | F-SB-801-SS |
| SAMPLE DATE | 20091007 | 20091105 | 20091105 | 20091105 | 20100820 | 20100820 | 20100820 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-802 |
|---|---|
| SAMPLE ID | F-SB-802-SS |
| SAMPLE DATE | 20100910 |
| SAMPLE CODE | NORMAL |
| MATRIX | SO |
| SAMPLE TYPE | NORMAL |
| SUBMATRIX | SS |
| TOP DEPTH | 1 |
| BOTTOM DEPTH | 1 |
| **VOLATILES (UG/KG)** | |
| 1,1,1,2-TETRACHLOROETHANE | NA |
| 1,1,1-TRICHLOROETHANE | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA |
| 1,1,2-TRICHLOROETHANE | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA |
| 1,1-DICHLOROETHANE | NA |
| 1,1-DICHLOROETHENE | NA |
| 1,1-DICHLOROPROPENE | NA |
| 1,2,3-TRICHLOROBENZENE | NA |
| 1,2,3-TRICHLOROPROPANE | NA |
| 1,2,3-TRIMETHYLBENZENE | NA |
| 1,2,4-TRICHLOROBENZENE | NA |
| 1,2,4-TRIMETHYLBENZENE | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA |
| 1,2-DIBROMOETHANE | NA |
| 1,2-DICHLOROBENZENE | NA |
| 1,2-DICHLOROETHANE | NA |
| 1,2-DICHLOROPROPANE | NA |
| 1,3,5-TRIMETHYLBENZENE | NA |
| 1,3-DICHLOROBENZENE | NA |
| 1,3-DICHLOROPROPANE | NA |
| 1,3-DICHLOROPROPENE | NA |
| 1,4-DICHLOROBENZENE | NA |
| 1,4-DIOXANE | NA |
| 2,2-DICHLOROPROPANE | NA |
| 2-BUTANONE | NA |
| 2-CHLOROETHYL VINYL ETHER | NA |
| 2-CHLOROTOLUENE | NA |
| 2-HEXANONE | NA |
| 4-CHLOROTOLUENE | NA |
| 4-ISOPROPYLTOLUENE | NA |
| 4-METHYL-2-PENTANONE | NA |
| ACETONE | NA |
| BENZENE | NA |
| BROMOBENZENE | NA |
| BROMOCHLOROMETHANE | NA |
| BROMODICHLOROMETHANE | NA |
| BROMOFORM | NA |
| BROMOMETHANE | NA |
| CARBON DISULFIDE | NA |
| CARBON TETRACHLORIDE | NA |
| CHLOROBENZENE | NA |
| CHLORODIBROMOMETHANE | NA |
| CHLOROETHANE | NA |
| CHLOROFORM | NA |
| CHLOROMETHANE | NA |
| CIS-1,2-DICHLOROETHENE | NA |
| CIS-1,3-DICHLOROPROPENE | NA |
| DIBROMOMETHANE | NA |
| DICHLORODIFLUOROMETHANE | NA |
| DIISOPROPYL ETHER | NA |
| ETHYL TERT-BUTYL ETHER | NA |
| ETHYLBENZENE | NA |
| FLUORODICHLOROMETHANE | NA |
| HEXACHLOROBUTADIENE | NA |
| ISOPROPYLBENZENE | NA |
| M+P-XYLENES | NA |
| METHYL TERT-BUTYL ETHER | NA |
| METHYLENE CHLORIDE | NA |
| NAPHTHALENE | NA |
| N-BUTYLBENZENE | NA |
| N-PROPYLBENZENE | NA |
| O-XYLENE | NA |
| SEC-BUTYLBENZENE | NA |
| STYRENE | NA |
| TERT-AMYL METHYL ETHER | NA |
| TERT-BUTYLBENZENE | NA |
| TERTIARY-BUTYL ALCOHOL | NA |
| TETRACHLOROETHENE | NA |
| TOLUENE | NA |
| TOTAL 1,2-DICHLOROETHENE | NA |
| TOTAL XYLENES | NA |
| TRANS-1,2-DICHLOROETHENE | NA |
| TRANS-1,3-DICHLOROPROPENE | NA |
| TRICHLOROETHENE | NA |
| TRICHLOROFLUOROMETHANE | NA |
| VINYL ACETATE | NA |

| LOCATION | **SB-802** |
|---|---|
| SAMPLE ID | **F-SB-802-SS** |
| SAMPLE DATE | **20100910** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SS** |
| TOP DEPTH | **1** |
| BOTTOM DEPTH | **1** |
| VINYL CHLORIDE | NA |
| **SEMIVOLATILES (UG/KG)** | |
| 1,1-BIPHENYL | NA |
| 1,2,4-TRICHLOROBENZENE | NA |
| 1,2-DICHLOROBENZENE | NA |
| 1,3-DICHLOROBENZENE | NA |
| 1,4-DICHLOROBENZENE | NA |
| 1,4-DIOXANE | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA |
| 2,4,5-TRICHLOROPHENOL | NA |
| 2,4,6-TRICHLOROPHENOL | NA |
| 2,4-DICHLOROPHENOL | NA |
| 2,4-DIMETHYLPHENOL | NA |
| 2,4-DINITROPHENOL | NA |
| 2,4-DINITROTOLUENE | NA |
| 2,6-DINITROTOLUENE | NA |
| 2-CHLORONAPHTHALENE | NA |
| 2-CHLOROPHENOL | NA |
| 2-METHYLPHENOL | NA |
| 2-NITROANILINE | NA |
| 2-NITROPHENOL | NA |
| 3&4-METHYLPHENOL | NA |
| 3,3'-DICHLOROBENZIDINE | NA |
| 3-NITROANILINE | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA |
| 4-CHLORO-3-METHYLPHENOL | NA |
| 4-CHLOROANILINE | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA |
| 4-METHYLPHENOL | NA |
| 4-NITROANILINE | NA |
| 4-NITROPHENOL | NA |
| ACETOPHENONE | NA |
| ANILINE | NA |
| ATRAZINE | NA |
| AZOBENZENE | NA |
| BENZALDEHYDE | NA |
| BENZIDINE | NA |
| BENZOIC ACID | NA |
| BENZYL ALCOHOL | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA |
| BIS(2-CHLOROETHYL)ETHER | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA |
| BUTYL BENZYL PHTHALATE | NA |
| CAPROLACTAM | NA |
| CARBAZOLE | NA |
| DIBENZOFURAN | NA |
| DIETHYL PHTHALATE | NA |
| DIMETHYL PHTHALATE | NA |
| DI-N-BUTYL PHTHALATE | NA |
| DI-N-OCTYL PHTHALATE | NA |
| HEXACHLOROBENZENE | NA |
| HEXACHLOROBUTADIENE | NA |
| HEXACHLOROCYCLOPENTADIENE | NA |
| HEXACHLOROETHANE | NA |
| ISOPHORONE | NA |
| NITROBENZENE | NA |
| N-NITROSODIMETHYLAMINE | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA |
| N-NITROSODIPHENYLAMINE | NA |
| PENTACHLOROPHENOL | NA |
| PHENOL | NA |
| PYRIDINE | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | |
| 1-METHYLNAPHTHALENE | NA |
| 2-METHYLNAPHTHALENE | NA |
| ACENAPHTHENE | NA |
| ACENAPHTHYLENE | NA |
| ANTHRACENE | NA |
| BAP EQUIVALENT-HALFND | NA |
| BAP EQUIVALENT-POS | NA |
| BENZO(A)ANTHRACENE | NA |
| BENZO(A)PYRENE | NA |
| BENZO(B)FLUORANTHENE | NA |
| BENZO(B+K)FLUORANTHENE | NA |
| BENZO(G,H,I)PERYLENE | NA |
| BENZO(K)FLUORANTHENE | NA |
| C1-CHRYSENES | NA |

| LOCATION | **SB-802** |
|---|---|
| SAMPLE ID | **F-SB-802-SS** |
| SAMPLE DATE | **20100910** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SS** |
| TOP DEPTH | **1** |
| BOTTOM DEPTH | **1** |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C1-FLUORANTHENES/PYRENES | NA |
| C1-FLUORENES | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA |
| C2-CHRYSENES | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C2-FLUORENES | NA |
| C2-NAPHTHALENES | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA |

| LOCATION | SB-802 |
|---|---|
| SAMPLE ID | F-SB-802-SS |
| SAMPLE DATE | 20100910 |
| SAMPLE CODE | NORMAL |
| MATRIX | SO |
| SAMPLE TYPE | NORMAL |
| SUBMATRIX | SS |
| TOP DEPTH | 1 |
| BOTTOM DEPTH | 1 |
| C3-CHRYSENES | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C3-FLUORENES | NA |
| C3-NAPHTHALENES | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA |
| C4-CHRYSENES | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA |
| C4-NAPHTHALENES | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA |
| CHRYSENE | NA |
| DIBENZO(A,H)ANTHRACENE | NA |
| FLUORANTHENE | NA |
| FLUORENE | NA |
| INDENO(1,2,3-CD)PYRENE | NA |
| NAPHTHALENE | NA |
| PHENANTHRENE | NA |
| PYRENE | NA |
| TOTAL PAHS | NA |
| **PESTICIDES/PCBS (UG/KG)** | |
| 4,4'-DDD | NA |
| 4,4'-DDE | NA |
| 4,4'-DDT | NA |
| ALDRIN | NA |
| ALPHA-BHC | NA |
| ALPHA-CHLORDANE | NA |
| AROCLOR-1016 | NA |
| AROCLOR-1221 | NA |
| AROCLOR-1232 | NA |
| AROCLOR-1242 | NA |
| AROCLOR-1248 | NA |
| AROCLOR-1254 | NA |
| AROCLOR-1260 | NA |
| BETA-BHC | NA |
| DELTA-BHC | NA |
| DIELDRIN | NA |
| ENDOSULFAN I | NA |
| ENDOSULFAN II | NA |
| ENDOSULFAN SULFATE | NA |
| ENDRIN | NA |
| ENDRIN ALDEHYDE | NA |
| ENDRIN KETONE | NA |
| GAMMA-BHC (LINDANE) | NA |
| GAMMA-CHLORDANE | NA |
| HEPTACHLOR | NA |
| HEPTACHLOR EPOXIDE | NA |
| METHOXYCHLOR | NA |
| TOTAL AROCLOR | NA |
| TOXAPHENE | NA |
| **METALS (MG/KG)** | |
| ANTIMONY | NA |
| ARSENIC | NA |
| BARIUM | NA |
| BERYLLIUM | NA |
| CADMIUM | NA |
| CHROMIUM | NA |
| COBALT | NA |
| COPPER | NA |
| IRON | NA |
| LEAD | NA |
| MANGANESE | NA |
| MERCURY | 0.017 UR |
| MOLYBDENUM | NA |
| NICKEL | NA |
| SELENIUM | NA |
| SILVER | NA |
| THALLIUM | NA |
| VANADIUM | NA |
| ZINC | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | |
| DIESEL RANGE ORGANICS | NA |
| GASOLINE RANGE ORGANICS | NA |
| TPH (C09-C36) | NA |
| TPH (C10-C32) | NA |
| **MISCELLANEOUS PARAMETERS (%)** | |
| PERCENT SOLIDS | NA |
| TOTAL SOLIDS | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | |
| HEXAVALENT CHROMIUM | NA |

| LOCATION | **SB-802** |
|---|---|
| SAMPLE ID | **F-SB-802-SS** |
| SAMPLE DATE | **20100910** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SS** |
| TOP DEPTH | **1** |
| BOTTOM DEPTH | **1** |
| TOTAL ORGANIC CARBON | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | |
| PH | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | |
| MERCURY (METHYL) | NA |
| **RADIONUCLIDES (PCI/G)** | |
| ACTINIUM-228 | NA |
| ALUMINUM-26 | NA |
| AMERICIUM-241 | NA |
| ANTIMONY-124 | NA |
| ANTIMONY-125 | NA |
| BERYLLIUM-7 | NA |
| BISMUTH-212 | NA |
| BISMUTH-214 | NA |
| CERIUM-139 | NA |
| CERIUM-144 | NA |
| CESIUM-134 | NA |
| CESIUM-137 | NA |
| CHROMIUM-51 | NA |
| COBALT-56 | NA |
| COBALT-57 | NA |
| COBALT-58 | NA |
| COBALT-60 | NA |
| EUROPIUM-152 | NA |
| EUROPIUM-154 | NA |
| EUROPIUM-155 | NA |
| IODINE-131 | NA |
| IRON-59 | NA |
| LEAD-212 | NA |
| LEAD-214 | NA |
| MANGANESE-54 | NA |
| NIOBIUM-94 | NA |
| NIOBIUM-95 | NA |
| POTASSIUM-40 | NA |
| PROTACTINIUM-234 | NA |
| RADIUM-226 | NA |
| RUTHENIUM-106 | NA |
| SCANDIUM-46 | NA |
| SILVER-110 | NA |
| SODIUM-22 | NA |
| THALLIUM-208 | NA |
| THORIUM-227 | NA |
| THORIUM-234 | NA |
| URANIUM-235 | NA |
| ZINC-65 | NA |

| LOCATION | SB-022 | SB-023 | SB-024 | SB-025 | SB-030 | SB-050 | SB-055 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-22A-SS | SB-23A-SS | SB-24A-SS | SB-25A-SS | SB-30A-SS | SB-50-SS | SB-55-SS |
| SAMPLE DATE | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,1,1-TRICHLOROETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,1,2,2-TETRACHLOROETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,1,2-TRICHLOROETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,1-DICHLOROETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,1-DICHLOROETHENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,1-DICHLOROPROPENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,2,3-TRICHLOROBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,2,3-TRICHLOROPROPANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,2,4-TRIMETHYLBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,2-DIBROMOETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,2-DICHLOROBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,2-DICHLOROETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,2-DICHLOROPROPANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,3,5-TRIMETHYLBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,3-DICHLOROBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,3-DICHLOROPROPANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 2-BUTANONE | 66 U | 55 U | 61 U | 60 U | 53 U | NA | 53 U |
| 2-CHLOROETHYL VINYL ETHER | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 2-CHLOROTOLUENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 2-HEXANONE | 66 U | 55 U | 61 U | 60 U | 53 U | NA | 53 U |
| 4-CHLOROTOLUENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 4-ISOPROPYLTOLUENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| 4-METHYL-2-PENTANONE | 66 U | 55 U | 61 U | 60 U | 53 U | NA | 53 U |
| ACETONE | 89 J | 55 UJ | 61 UJ | 60 UJ | 53 UJ | NA | 53 UJ |
| BENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| BROMOBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| BROMOCHLOROMETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| BROMODICHLOROMETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| BROMOFORM | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| BROMOMETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| CARBON DISULFIDE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| CARBON TETRACHLORIDE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| CHLOROBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| CHLORODIBROMOMETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| CHLOROETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| CHLOROFORM | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| CHLOROMETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| CIS-1,2-DICHLOROETHENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| CIS-1,3-DICHLOROPROPENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| DIBROMOMETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| DICHLORODIFLUOROMETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| M+P-XYLENES | 13 U | 11 U | 12 U | 12 U | 11 U | NA | 11 U |
| METHYL TERT-BUTYL ETHER | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| METHYLENE CHLORIDE | 11 B | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| NAPHTHALENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| N-BUTYLBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| N-PROPYLBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| O-XYLENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| SEC-BUTYLBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| STYRENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| TOLUENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| TRANS-1,3-DICHLOROPROPENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| TRICHLOROETHENE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| TRICHLOROFLUOROMETHANE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| VINYL ACETATE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |

| LOCATION | SB-022 | SB-023 | SB-024 | SB-025 | SB-030 | SB-050 | SB-055 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-22A-SS | SB-23A-SS | SB-24A-SS | SB-25A-SS | SB-30A-SS | SB-50-SS | SB-55-SS |
| SAMPLE DATE | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 2,4,5-TRICHLOROPHENOL | 1100 U | 950 U | 1000 U | 990 U | 900 U | NA | 890 U |
| 2,4,6-TRICHLOROPHENOL | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 2,4-DICHLOROPHENOL | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 2,4-DIMETHYLPHENOL | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 2,4-DINITROPHENOL | 1100 U | 950 U | 1000 U | 990 U | 900 U | NA | 890 U |
| 2,4-DINITROTOLUENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 2,6-DINITROTOLUENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 2-CHLORONAPHTHALENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 2-CHLOROPHENOL | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 2-METHYLPHENOL | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 2-NITROANILINE | 1100 U | 950 U | 1000 U | 990 U | 900 U | NA | 890 U |
| 2-NITROPHENOL | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 3&4-METHYLPHENOL | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 3,3'-DICHLOROBENZIDINE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 3-NITROANILINE | 1100 U | 950 U | 1000 U | 990 U | 900 U | NA | 890 U |
| 4,6-DINITRO-2-METHYLPHENOL | 1000 U | 870 U | 930 U | 910 U | 830 U | NA | 820 U |
| 4-BROMOPHENYL PHENYL ETHER | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 4-CHLORO-3-METHYLPHENOL | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 4-CHLOROANILINE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 4-CHLOROPHENYL PHENYL ETHER | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 1100 U | 950 U | 1000 U | 990 U | 900 U | NA | 890 U |
| 4-NITROPHENOL | 1100 U | 950 U | 1000 U | 990 U | 900 U | NA | 890 U |
| ACETOPHENONE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| BIS(2-CHLOROETHYL)ETHER | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| BUTYL BENZYL PHTHALATE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| CAPROLACTAM | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| CARBAZOLE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| DIBENZOFURAN | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| DIETHYL PHTHALATE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| DIMETHYL PHTHALATE | 430 U | 60 J | 400 U | 400 U | 360 U | NA | 350 U |
| DI-N-BUTYL PHTHALATE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| DI-N-OCTYL PHTHALATE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| HEXACHLOROBENZENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| HEXACHLOROBUTADIENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| HEXACHLOROCYCLOPENTADIENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| HEXACHLOROETHANE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| ISOPHORONE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| NITROBENZENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| N-NITROSODIPHENYLAMINE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| PENTACHLOROPHENOL | 1100 U | 950 U | 1000 U | 990 U | 900 U | NA | 890 U |
| PHENOL | 430 U | 420 | 400 U | 400 U | 360 U | NA | 350 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| ACENAPHTHENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| ACENAPHTHYLENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| ANTHRACENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| BAP EQUIVALENT-HALFND | 430 U | 380 U | 298 | 400 U | 401 | NA | 313 |
| BAP EQUIVALENT-POS | 430 U | 380 U | 78 | 400 U | 4.8 | NA | 121 |
| BENZO(A)ANTHRACENE | 430 U | 380 U | 74 J | 400 U | 44 J | NA | 110 J |
| BENZO(A)PYRENE | 430 U | 380 U | 63 J | 400 U | 360 U | NA | 99 J |
| BENZO(B)FLUORANTHENE | 430 U | 380 U | 66 J | 400 U | 360 U | NA | 94 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 70 J |
| BENZO(K)FLUORANTHENE | 430 U | 380 U | 57 J | 400 U | 37 J | NA | 110 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-022 | SB-023 | SB-024 | SB-025 | SB-030 | SB-050 | SB-055 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-22A-SS | SB-23A-SS | SB-24A-SS | SB-25A-SS | SB-30A-SS | SB-50-SS | SB-55-SS |
| SAMPLE DATE | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-022 | SB-023 | SB-024 | SB-025 | SB-030 | SB-050 | SB-055 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-22A-SS | SB-23A-SS | SB-24A-SS | SB-25A-SS | SB-30A-SS | SB-50-SS | SB-55-SS |
| SAMPLE DATE | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 430 U | 380 U | 77 J | 400 U | 55 J | NA | 130 J |
| DIBENZO(A,H)ANTHRACENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| FLUORANTHENE | 57 J | 380 U | 170 J | 400 U | 84 J | NA | 270 J |
| FLUORENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| INDENO(1,2,3-CD)PYRENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| NAPHTHALENE | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U |
| PHENANTHRENE | 44 J | 380 U | 92 J | 400 U | 74 J | NA | 160 J |
| PYRENE | 430 U | 380 U | 110 J | 400 U | 110 J | NA | 160 J |
| TOTAL PAHS | 101 | 0 U | 709 | 0 U | 404 | NA | 1203 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | 42 U |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | 42 U |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | 42 U |
| ALDRIN | NA | NA | NA | NA | NA | NA | 42 U |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | 42 U |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | 42 U |
| AROCLOR-1016 | 320 U | 280 U | 300 U | 300 U | 270 U | NA | 260 U |
| AROCLOR-1221 | 320 U | 280 U | 300 U | 300 U | 270 U | NA | 260 U |
| AROCLOR-1232 | 320 U | 280 U | 300 U | 300 U | 270 U | NA | 260 U |
| AROCLOR-1242 | 320 U | 280 U | 300 U | 300 U | 270 U | NA | 260 U |
| AROCLOR-1248 | 320 U | 280 U | 300 U | 300 U | 270 U | NA | 260 U |
| AROCLOR-1254 | 320 U | 280 U | 300 U | 300 U | 270 U | NA | 260 U |
| AROCLOR-1260 | 320 U | 280 U | 300 U | 300 U | 270 U | NA | 260 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | 42 U |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | 42 U |
| DIELDRIN | NA | NA | NA | NA | NA | NA | 42 U |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | 42 U |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | 42 U |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | 42 U |
| ENDRIN | NA | NA | NA | NA | NA | NA | 42 U |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | 42 U |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | 42 U |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | 42 U |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | 42 U |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | 42 U |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | 42 U |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | 42 U |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | 1000 U |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 3 U | 2.6 U | 2.8 U | 2.7 U | 2.7 UR | 2.4 U | 2.7 UR |
| ARSENIC | 1.3 | 2.2 | 3.4 | 0.6 | 2.3 L | 3.2 | 1.5 L |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 3 U | 2.6 U | 2.8 U | 5 | 2.7 U | 2.4 U | 2.7 U |
| CADMIUM | 3 U | 2.6 U | 2.8 U | 2.7 U | 2.7 UL | 2.4 U | 2.7 UL |
| CHROMIUM | 8.1 | 13 | 18 | 18 | 8.7 L | 9.4 | 13 L |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 4.9 K | 5.3 | 36 | 15 | 4.4 K | 17 | 74 |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 3 U | 5.4 | 67 | 5.9 | 4.5 J | 33 | 420 J |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.12 U | 0.1 U | 1.4 | 0.11 U | 0.11 UL | 0.42 | 0.11 UL |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 4.6 K | 7.1 | 14 | 27 | 4.5 K | 8.5 | 13 |
| SELENIUM | 3 U | 2.6 U | 2.8 U | 2.7 U | 2.7 UL | 2.4 U | 2.7 UL |
| SILVER | 3.2 U | 3.4 | 2.9 U | 2.9 U | 2.7 UR | 2.3 U | 2.7 UR |
| THALLIUM | 2.4 UL | 2 U | 2.2 U | 2.2 UL | 2.2 UL | 1.9 U | 2.1 UL |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 30 U | 26 U | 120 | 48 K | 27 UL | 100 | 58 J |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | 13000 U | 11000 U | 12000 U | 12000 U | 10000 U | NA | 13000 |
| GASOLINE RANGE ORGANICS | 130 U | 110 U | 120 U | 1200 | 110 U | NA | 110 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-022 | SB-023 | SB-024 | SB-025 | SB-030 | SB-050 | SB-055 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-22A-SS | SB-23A-SS | SB-24A-SS | SB-25A-SS | SB-30A-SS | SB-50-SS | SB-55-SS |
| SAMPLE DATE | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-056 | SB-093 | SB-094 | SB-095 | SB-096 | SB-236 | SB-236 | SB-237 | SB-237 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-56-SS | SB-93-SS | SB-94-SS | SB-95-SS | SB-96-SS | SB-236-01 | SB-236-SS | SB-237-01 | SB-237-SS |
| SAMPLE DATE | 20040913 | 20040916 | 20040916 | 20040916 | 20040916 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 2-BUTANONE | 82 U | 66 U | 54 U | 62 U | 57 UJ | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 2-HEXANONE | 82 U | 66 U | 54 U | 62 U | 57 UJ | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 82 U | 66 U | 54 U | 62 U | 57 UJ | NA | NA | NA | NA |
| ACETONE | 82 U | 66 U | 54 U | 62 U | 57 UJ | NA | NA | NA | NA |
| BENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| BROMOBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| BROMOFORM | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| BROMOMETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| CARBON DISULFIDE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| CHLOROBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| CHLOROETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| CHLOROFORM | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| CHLOROMETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| DIBROMOMETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| M+P-XYLENES | 16 U | 13 U | 11 U | 12 U | 11 UJ | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 8 U | 7 U | 5 U | 6 U | 8 J | NA | NA | NA | NA |
| NAPHTHALENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| N-BUTYLBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| N-PROPYLBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| O-XYLENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| STYRENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| TOLUENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| TRICHLOROETHENE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| VINYL ACETATE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |

| LOCATION | SB-056 | SB-093 | SB-094 | SB-095 | SB-096 | SB-236 | SB-236 | SB-237 | SB-237 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-56-SS | SB-93-SS | SB-94-SS | SB-95-SS | SB-96-SS | SB-236-01 | SB-236-SS | SB-237-01 | SB-237-SS |
| SAMPLE DATE | 20040913 | 20040916 | 20040916 | 20040916 | 20040916 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 |
| VINYL CHLORIDE | 8 U | 7 U | 5 U | 6 U | 6 UJ | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 1400 U | 11000 U | 9000 U | 1000 U | 960 U | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 1400 U | 11000 U | 9000 U | 1000 U | 960 U | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 2-METHYLPHENOL | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 2-NITROANILINE | 1400 U | 11000 U | 9000 U | 1000 U | 960 U | NA | NA | NA | NA |
| 2-NITROPHENOL | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 3-NITROANILINE | 1400 U | 11000 U | 9000 U | 1000 U | 960 U | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 1300 U | 10000 U | 8200 U | 960 U | 880 U | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 4-CHLOROANILINE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 1400 U | 11000 U | 9000 U | 1000 U | 960 U | NA | NA | NA | NA |
| 4-NITROPHENOL | 1400 U | 11000 U | 9000 U | 1000 U | 960 U | NA | NA | NA | NA |
| ACETOPHENONE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| CAPROLACTAM | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| CARBAZOLE | 560 U | 4500 U | 3600 U | 190 J | 380 U | NA | NA | NA | NA |
| DIBENZOFURAN | 560 U | 4500 U | 3600 U | 54 J | 380 U | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 560 U | 4500 U | 3600 U | 53 J | 380 U | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| HEXACHLOROETHANE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| ISOPHORONE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| NITROBENZENE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 1400 U | 11000 U | 9000 U | 1000 U | 960 U | NA | NA | NA | NA |
| PHENOL | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| ACENAPHTHENE | 560 U | 4500 U | 3600 U | 160 J | 380 U | NA | NA | NA | NA |
| ACENAPHTHYLENE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| ANTHRACENE | 560 U | 4500 U | 3600 U | 380 J | 380 U | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 560 U | 4189 | 2874 | 2132 | 380 U | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 560 U | 1939 | 1074 | 2132 | 380 U | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 560 U | 1800 J | 880 J | 1600 | 380 U | NA | NA | NA | NA |
| BENZO(A)PYRENE | 560 U | 1500 J | 850 J | 1600 | 380 U | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 560 U | 1600 J | 890 J | 1800 | 380 U | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 560 U | 1000 J | 3600 U | 1000 J | 380 U | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 560 U | 1500 J | 1000 J | 1600 | 380 U | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-056 | SB-093 | SB-094 | SB-095 | SB-096 | SB-236 | SB-236 | SB-237 | SB-237 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-56-SS | SB-93-SS | SB-94-SS | SB-95-SS | SB-96-SS | SB-236-01 | SB-236-SS | SB-237-01 | SB-237-SS |
| SAMPLE DATE | 20040913 | 20040916 | 20040916 | 20040916 | 20040916 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-056 | SB-093 | SB-094 | SB-095 | SB-096 | SB-236 | SB-236 | SB-237 | SB-237 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-56-SS | SB-93-SS | SB-94-SS | SB-95-SS | SB-96-SS | SB-236-01 | SB-236-SS | SB-237-01 | SB-237-SS |
| SAMPLE DATE | 20040913 | 20040916 | 20040916 | 20040916 | 20040916 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 560 U | 2300 J | 1100 J | 1700 | 380 U | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 560 U | 4500 U | 3600 U | 75 J | 380 U | NA | NA | NA | NA |
| FLUORANTHENE | 560 U | 3400 J | 2000 J | 3300 | 380 U | NA | NA | NA | NA |
| FLUORENE | 560 U | 4500 U | 3600 U | 130 J | 380 U | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 560 U | 820 J | 360 J | 990 | 380 U | NA | NA | NA | NA |
| NAPHTHALENE | 560 U | 4500 U | 3600 U | 420 U | 380 U | NA | NA | NA | NA |
| PHENANTHRENE | 560 U | 1600 J | 1100 J | 1600 | 380 U | NA | NA | NA | NA |
| PYRENE | 560 U | 4000 J | 1400 J | 2500 | 380 U | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 19520 | 9580 | 18435 | 0 U | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| 4,4'-DDE | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| 4,4'-DDT | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| ALDRIN | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| ALPHA-BHC | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| ALPHA-CHLORDANE | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| AROCLOR-1016 | 410 U | 330 U | 1300 U | 300 U | 280 U | NA | NA | NA | NA |
| AROCLOR-1221 | 410 U | 330 U | 1300 U | 300 U | 280 U | NA | NA | NA | NA |
| AROCLOR-1232 | 410 U | 330 U | 1300 U | 300 U | 280 U | NA | NA | NA | NA |
| AROCLOR-1242 | 410 U | 330 U | 1300 U | 300 U | 280 U | NA | NA | NA | NA |
| AROCLOR-1248 | 410 U | 330 U | 1300 U | 300 U | 280 U | NA | NA | NA | NA |
| AROCLOR-1254 | 410 U | 330 U | 1300 U | 300 U | 280 U | NA | NA | NA | NA |
| AROCLOR-1260 | 410 U | 800 | 1400 | 300 U | 280 U | NA | NA | NA | NA |
| BETA-BHC | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| DELTA-BHC | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| DIELDRIN | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| ENDOSULFAN I | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| ENDOSULFAN II | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| ENDRIN | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| ENDRIN KETONE | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| GAMMA-CHLORDANE | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| HEPTACHLOR | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| METHOXYCHLOR | 33 U | 54 U | 42 U | 49 U | 23 U | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 800 | 1400 | 0 U | 0 U | NA | NA | NA | NA |
| TOXAPHENE | 820 U | 1300 U | 1100 U | 1200 U | 570 U | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 4 UR | 3.1 UR | 2.6 UR | 3 UR | 2.9 UR | 2 L | 0.5 L | 4 L | 0.4 L |
| ARSENIC | 2.9 L | 1.8 L | 2.1 L | 2 L | 2 L | 4 | 3 | 5 | 3 B |
| BARIUM | NA | NA | NA | NA | NA | 83 | 36 | 68 | 42 |
| BERYLLIUM | 4 U | 3.1 UL | 2.6 UL | 3 UL | 2.9 UL | 0.7 | 1.4 | 0.6 | 1.6 |
| CADMIUM | 4 UL | 3.5 L | 4.5 L | 3 UL | 2.9 UL | 0.4 | 0.3 | 0.3 | 0.4 |
| CHROMIUM | 14 L | 110 | 25 | 14 | 9.3 K | 19.8 | 17.7 | 185 | 19.8 |
| COBALT | NA | NA | NA | NA | NA | 5.8 | 6.8 | 5.1 | 5.6 |
| COPPER | 11 | 21 L | 21 L | 34 L | 5.1 L | 22 | 14 | 33 | 12 |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 6.3 J | 73 L | 65 L | 100 L | 3.2 L | 51 | 11 | 63 | 8 B |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.16 UL | 0.68 | 0.97 | 0.15 | 0.12 U | 0.92 L | 0.29 L | 0.35 | 0.06 |
| MOLYBDENUM | NA | NA | NA | NA | NA | 0.6 B | 0.4 B | 63 | 0.6 B |
| NICKEL | 5.1 K | 11 | 11 | 8.1 | 5.4 K | 12 | 12 | 18 | 12 |
| SELENIUM | 4 UL | 3.1 UL | 2.6 UL | 3 UL | 2.9 UL | 2 U | 2 | 4 | 2 |
| SILVER | 4 UR | 3.1 UR | 2.6 UR | 3 UR | 2.9 UR | 0.9 | 0.04 U | 1.4 | 0.05 U |
| THALLIUM | 3.2 UL | 2.5 UL | 2 UL | 2.4 UL | 2.3 UL | 1 U | 0.8 U | 0.8 U | 0.9 U |
| VANADIUM | NA | NA | NA | NA | NA | 31 | 29.9 | 41.9 | 31 |
| ZINC | 40 UL | 100 K | 92 K | 81 K | 29 U | 82 | 35 | 99 | 28 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 17000 U | 150000 | 67000 | 12000 U | 11000 U | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 170 U | 130 U | 110 U | 120 U | 110 U | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | 0.4 U | NA |

| LOCATION | SB-056 | SB-093 | SB-094 | SB-095 | SB-096 | SB-236 | SB-236 | SB-237 | SB-237 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-56-SS | SB-93-SS | SB-94-SS | SB-95-SS | SB-96-SS | SB-236-01 | SB-236-SS | SB-237-01 | SB-237-SS |
| SAMPLE DATE | 20040913 | 20040916 | 20040916 | 20040916 | 20040916 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | 8.2 | 8.1 | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | 0.734 J | 0.071 J | 1.467 J | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-238 | SB-238 | SB-250 | SB-250 | SB-251 | SB-251 | SB-252 | SB-252 | SB-253 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-238-01 | SB-238-SS | SB-250-02 | SB-250-SS | SB-251-02 | SB-251-SS | SB-252-02 | SB-252-SS | SB-253-02 |
| SAMPLE DATE | 20050517 | 20050517 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 4.4 U | 5.2 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 2.19 U | 2.59 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | 4.37 U | 5.18 U | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 109 UR | 129 UR | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 2.87 J | 3.14 J | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 2.2 UR | 2.6 UR | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | 8.75 U | 10.4 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 2.19 U | 2.59 U | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 8.7 U | 10.4 U | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 27.2 J | 31 J | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 2.19 U | 2.59 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 0.72 J | 7.1 | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 4.4 U | 5.2 U | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 3.3 J | 5.2 U | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | 9 U | 10 U | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 1.9 J | 1.2 J | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 6.6 U | 7.8 U | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-238 | SB-238 | SB-250 | SB-250 | SB-251 | SB-251 | SB-252 | SB-252 | SB-253 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-238-01 | SB-238-SS | SB-250-02 | SB-250-SS | SB-251-02 | SB-251-SS | SB-252-02 | SB-252-SS | SB-253-02 |
| SAMPLE DATE | 20050517 | 20050517 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| VINYL CHLORIDE | 2.2 U | 2.6 U | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 203 U | 191 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 203 U | 191 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 203 U | 191 U | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 203 U | 191 U | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 395 U | 371 U | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 120 U | 112 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 407 U | 382 UJ | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 407 U | 382 UJ | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 407 U | 382 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 407 U | 382 U | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 598 U | 562 UJ | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 84 U | 79 UJ | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 84 U | 79 UJ | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 203 U | 191 UJ | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 407 U | 382 U | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 407 U | 382 U | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 203 U | 191 UJ | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 407 U | 382 U | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 802 U | 752 U | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 203 U | 191 UJ | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 407 U | 382 UJ | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 407 U | 382 U | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 120 U | 112 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 407 U | 382 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 407 U | 382 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 203 U | 191 UJ | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 120 U | 112 UJ | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | 407 U | 382 UJ | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | 407 U | 382 U | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | 203 U | 191 U | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | 802 UR | 752 UR | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | 802 U | 752 U | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | 407 U | 382 U | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 120 U | 112 U | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 120 U | 112 U | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 84 U | 79 UJ | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 203 U | 191 UJ | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 203 U | 40 J | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 120 U | 112 UJ | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 407 U | 382 UJ | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 407 U | 382 UJ | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 203 U | 191 U | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 203 U | 191 UJ | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 84 U | 79 U | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 203 U | 191 U | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 407 U | 382 UJ | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 203 U | 191 U | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | 120 U | 112 U | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | 203 U | 191 U | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | 120 U | 112 U | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 120 U | 112 U | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 120 U | 112 U | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 1000 U | 943 U | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 407 U | 382 U | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | 407 U | 382 U | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 83.7 U | 78.6 U | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 84 U | 79 U | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 84 U | 79 UJ | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 84 U | 79 UJ | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 84 U | 54 J | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 140 | 424 | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 98 | 424 | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 75 J | 241 J | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 74 J | 245 J | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 90 | 254 J | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 75 J | 344 J | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 87 | 225 J | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-238 | SB-238 | SB-250 | SB-250 | SB-251 | SB-251 | SB-252 | SB-252 | SB-253 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-238-01 | SB-238-SS | SB-250-02 | SB-250-SS | SB-251-02 | SB-251-SS | SB-252-02 | SB-252-SS | SB-253-02 |
| SAMPLE DATE | 20050517 | 20050517 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-238 | SB-238 | SB-250 | SB-250 | SB-251 | SB-251 | SB-252 | SB-252 | SB-253 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-238-01 | SB-238-SS | SB-250-02 | SB-250-SS | SB-251-02 | SB-251-SS | SB-252-02 | SB-252-SS | SB-253-02 |
| SAMPLE DATE | 20050517 | 20050517 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 92 | 287 J | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 84 U | 100 J | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 142 | 546 | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 84 U | 79 UJ | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 67 J | 274 J | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 84 U | 79 U | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 58 J | 249 | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 120 | 685 J | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 880 | 3504 | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 39 U | 37 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 39 U | 37 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 39 U | 37 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 39 U | 37 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 39 U | 37 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 39 U | 37 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 39 U | 154 | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 154 | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.3 UL | 1 L | 0.6 L | 0.8 L | 0.9 L | 1 L | 0.8 L | 0.7 L | 0.9 L |
| ARSENIC | 3 | 3 | 3 B | 1 B | 5 | 3 B | 4 | 2 B | 3 B |
| BARIUM | 41 | 86 | 30 | 37 | 40 | 40 | 27 | 31 | 36 |
| BERYLLIUM | 1.8 | 1.3 | 1 | 0.7 | 1 | 0.7 | 0.5 | 0.6 | 0.7 |
| CADMIUM | 0.6 | 2 | 0.2 B | 0.2 B | 0.1 B | 0.2 B | 0.2 B | 0.1 B | 0.09 B |
| CHROMIUM | 27.4 | 36.4 | 15.5 | 11.8 | 20.8 | 15.8 | 15.6 | 11.8 | 14 |
| COBALT | 8.4 | 6.4 | 2.8 | 5.8 | 7.1 | 5.9 | 3.5 | 3.6 | 4 |
| COPPER | 16 | 23 | 10 | 6 | 10 | 6 | 7 | 4 | 5 |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 30 | 148 | 5 B | 17 | 7 B | 7 B | 6 B | 10 | 5 B |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.08 | 0.24 | 0.03 | 0.04 | 0.01 | 0.02 | 0.04 | 0.04 | 0.03 |
| MOLYBDENUM | 0.8 B | 1 B | 0.6 B | 0.5 B | 0.5 B | 0.6 U | 0.7 B | 0.4 U | 0.5 B |
| NICKEL | 22 | 21 | 6 B | 8 | 9 | 9 B | 6 B | 6 B | 5 B |
| SELENIUM | 2 U | 2 U | 2 U | 2 | 3 | 2 U | 2 U | 2 U | 3 |
| SILVER | 0.06 U | 0.06 U | 0.06 U | 0.05 B | 0.05 U | 0.06 U | 0.05 U | 0.04 U | 0.2 B |
| THALLIUM | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 0.8 U | 0.9 U |
| VANADIUM | 35.9 | 49 | 27.2 | 20.5 | 35.6 | 24.8 | 27.9 | 20.3 | 25.5 |
| ZINC | 54 | 167 | 25 | 32 | 34 | 29 | 24 | 25 | 20 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 55700 | 271000 | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 10300 U | 13.1 U | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | 0.36 U | 0.49 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-238 | SB-238 | SB-250 | SB-250 | SB-251 | SB-251 | SB-252 | SB-252 | SB-253 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-238-01 | SB-238-SS | SB-250-02 | SB-250-SS | SB-251-02 | SB-251-SS | SB-252-02 | SB-252-SS | SB-253-02 |
| SAMPLE DATE | 20050517 | 20050517 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-253 | SB-265 | SB-265 | SB-266 | SB-266 | SB-267 | SB-267 | SB-268 | SB-268 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-253-SS | SB-265-02 | SB-265-SS | SB-266-02 | SB-266-SS | SB-267-02 | SB-267-SS | SB-268-02 | SB-268-SS |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-253 | SB-265 | SB-265 | SB-266 | SB-266 | SB-267 | SB-267 | SB-268 | SB-268 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-253-SS | SB-265-02 | SB-265-SS | SB-266-02 | SB-266-SS | SB-267-02 | SB-267-SS | SB-268-02 | SB-268-SS |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| 1,2-DICHLOROBENZENE | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| 1,3-DICHLOROBENZENE | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| 1,4-DICHLOROBENZENE | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| 1,4-DIOXANE | NA | 364 U | 358 U | 386 U | 366 U | 387 U | 375 U | 393 U | 7870 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | 110 U | 109 U | 117 U | 111 U | 117 U | 114 U | 119 U | 2380 U |
| 2,4,5-TRICHLOROPHENOL | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| 2,4,6-TRICHLOROPHENOL | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| 2,4-DICHLOROPHENOL | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| 2,4-DIMETHYLPHENOL | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| 2,4-DINITROPHENOL | NA | 552 U | 543 U | 585 U | 554 U | 586 U | 568 U | 596 U | 11900 U |
| 2,4-DINITROTOLUENE | NA | 77 U | 76 U | 82 U | 78 U | 82 U | 80 U | 83 U | 1670 U |
| 2,6-DINITROTOLUENE | NA | 77 U | 76 U | 82 U | 78 U | 82 U | 80 U | 83 U | 1670 U |
| 2-CHLORONAPHTHALENE | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| 2-CHLOROPHENOL | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| 2-METHYLPHENOL | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| 2-NITROANILINE | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| 2-NITROPHENOL | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| 3&4-METHYLPHENOL | NA | 740 U | 727 U | 784 U | 743 U | 785 U | 761 U | 798 U | 16000 U |
| 3,3'-DICHLOROBENZIDINE | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| 3-NITROANILINE | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | 110 U | 109 U | 117 U | 111 U | 117 U | 114 U | 119 U | 2380 U |
| 4-CHLORO-3-METHYLPHENOL | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| 4-CHLOROANILINE | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | 110 U | 109 U | 117 U | 111 U | 117 U | 114 U | 119 U | 2380 U |
| 4-NITROPHENOL | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | 740 U | 727 U | 784 U | 743 U | 785 U | 761 U | 798 U | 16000 U |
| BENZOIC ACID | NA | 740 U | 152 J | 784 U | 157 J | 333 J | 925 | 180 J | 16000 U |
| BENZYL ALCOHOL | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| BIS(2-CHLOROETHOXY)METHANE | NA | 110 U | 109 U | 117 U | 111 U | 117 U | 114 U | 119 U | 2380 U |
| BIS(2-CHLOROETHYL)ETHER | NA | 110 U | 109 U | 117 U | 111 U | 117 U | 114 U | 119 U | 2380 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | 77 U | 40 J | 82 U | 78 U | 82 U | 80 U | 83 U | 1670 U |
| BUTYL BENZYL PHTHALATE | NA | 188 U | 25 J | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | 43 J | 242 | 199 U | 158 J | 199 U | 193 U | 448 | 4640 |
| DIBENZOFURAN | NA | 110 U | 86 J | 117 U | 43 J | 117 U | 114 U | 140 | 1650 J |
| DIETHYL PHTHALATE | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| DIMETHYL PHTHALATE | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| DI-N-BUTYL PHTHALATE | NA | 32 J | 37 J | 199 U | 38 J | 199 U | 193 U | 37 J | 4050 U |
| DI-N-OCTYL PHTHALATE | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| HEXACHLOROBENZENE | NA | 77 U | 76 U | 82 U | 78 U | 82 U | 80 U | 83 U | 1670 U |
| HEXACHLOROBUTADIENE | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| HEXACHLOROCYCLOPENTADIENE | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| HEXACHLOROETHANE | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| ISOPHORONE | NA | 110 U | 109 U | 117 U | 111 U | 117 U | 114 U | 119 U | 2380 U |
| NITROBENZENE | NA | 188 U | 184 U | 199 U | 188 U | 199 U | 193 U | 203 U | 4050 U |
| N-NITROSODIMETHYLAMINE | NA | 110 U | 109 U | 117 U | 111 U | 117 U | 114 U | 119 U | 2380 U |
| N-NITROSO-DI-N-PROPYLAMINE | NA | 110 U | 109 U | 117 U | 111 U | 117 U | 114 U | 119 U | 2380 U |
| N-NITROSODIPHENYLAMINE | NA | 110 U | 109 U | 117 U | 111 U | 117 U | 114 U | 119 U | 2380 U |
| PENTACHLOROPHENOL | NA | 928 U | 911 U | 983 U | 931 U | 985 U | 955 U | 1000 U | 20000 U |
| PHENOL | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| PYRIDINE | NA | 375 U | 369 U | 398 U | 377 U | 399 U | 386 U | 405 U | 8110 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | 77.3 U | 76 U | 81.9 U | 77.6 U | 82.1 U | 79.5 U | 36.5 J | 1670 U |
| 2-METHYLNAPHTHALENE | NA | 77 U | 76 U | 82 U | 78 U | 82 U | 80 U | 32 J | 1670 U |
| ACENAPHTHENE | NA | 77 U | 174 | 82 U | 98 | 82 U | 80 U | 350 | 3620 |
| ACENAPHTHYLENE | NA | 77 U | 135 | 82 U | 44 J | 82 U | 80 U | 49 J | 1670 U |
| ANTHRACENE | NA | 109 | 870 | 30 J | 291 | 82 U | 41 J | 1000 | 9420 |
| BAP EQUIVALENT-HALFND | NA | 602 | 2545 | 192 | 1344 | 145 | 313 | 4262 | 38098 |
| BAP EQUIVALENT-POS | NA | 602 | 2545 | 151 | 1344 | 104 | 313 | 4262 | 38098 |
| BENZO(A)ANTHRACENE | NA | 432 | 1980 | 121 | 947 | 81 J | 209 | 2980 | 28700 |
| BENZO(A)PYRENE | NA | 401 | 1800 | 116 | 977 | 80 J | 212 | 3130 | 25600 |
| BENZO(B)FLUORANTHENE | NA | 374 | 2300 | 129 | 1090 | 83 | 229 | 4000 | 26700 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | 260 J | 450 J | 85 J | 253 J | 59 J | 113 J | 650 J | 13200 J |
| BENZO(K)FLUORANTHENE | NA | 405 | 1910 | 111 | 1100 | 90 | 241 | 2930 | 23000 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-253 | SB-265 | SB-265 | SB-266 | SB-266 | SB-267 | SB-267 | SB-268 | SB-268 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-253-SS | SB-265-02 | SB-265-SS | SB-266-02 | SB-266-SS | SB-267-02 | SB-267-SS | SB-268-02 | SB-268-SS |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-253 | SB-265 | SB-265 | SB-266 | SB-266 | SB-267 | SB-267 | SB-268 | SB-268 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-253-SS | SB-265-02 | SB-265-SS | SB-266-02 | SB-266-SS | SB-267-02 | SB-267-SS | SB-268-02 | SB-268-SS |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | 461 | 2090 | 135 | 1030 | 82 J | 229 | 2930 | 28400 |
| DIBENZO(A,H)ANTHRACENE | NA | 86 | 232 | 82 UJ | 117 | 82 UJ | 41 J | 307 | 5250 |
| FLUORANTHENE | NA | 802 | 4020 | 245 | 1940 | 173 | 395 | 8780 | 63200 |
| FLUORENE | NA | 32 J | 213 | 82 U | 94 | 82 U | 80 U | 331 | 3580 |
| INDENO(1,2,3-CD)PYRENE | NA | 295 | 635 | 92 J | 340 | 62 J | 138 J | 948 | 14500 |
| NAPHTHALENE | NA | 77 U | 36 J | 82 U | 78 U | 82 U | 80 U | 57 J | 1670 U |
| PHENANTHRENE | NA | 417 | 2740 | 127 | 1090 | 47 J | 163 | 3450 | 36100 |
| PYRENE | NA | 637 | 2570 | 178 | 1380 | 110 | 286 | 4530 | 45200 |
| TOTAL PAHS | NA | 4711 | 22155 | 1369 | 10791 | 867 | 2297 | 36454 | 326470 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | 36 U | NA | 36 U | NA | 38 U | NA | 39 U |
| AROCLOR-1221 | NA | NA | 36 U | NA | 36 U | NA | 38 U | NA | 39 U |
| AROCLOR-1232 | NA | NA | 36 U | NA | 36 U | NA | 38 U | NA | 39 U |
| AROCLOR-1242 | NA | NA | 36 U | NA | 36 U | NA | 38 U | NA | 39 U |
| AROCLOR-1248 | NA | NA | 36 U | NA | 36 U | NA | 38 U | NA | 39 U |
| AROCLOR-1254 | NA | NA | 36 U | NA | 36 U | NA | 96 | NA | 39 U |
| AROCLOR-1260 | NA | NA | 119 | NA | 756 | NA | 73 J | NA | 63 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | 119 | NA | 756 | NA | 169 | NA | 63 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 1 L | NA | 0.5 | NA | 1 | NA | 1 | NA | 2 L |
| ARSENIC | 3 B | NA | 5 | NA | 3 B | NA | 3 B | NA | 5 |
| BARIUM | 49 | NA | 29 | NA | 44 | NA | 79 | NA | 207 |
| BERYLLIUM | 0.6 | NA | 1.3 | NA | 0.8 | NA | 0.8 | NA | 1.4 |
| CADMIUM | 0.4 | NA | 0.8 | NA | 1.8 | NA | 0.7 | NA | 3 |
| CHROMIUM | 14.4 | NA | 55.8 | NA | 31.3 | NA | 16.4 | NA | 31.8 |
| COBALT | 4.9 | NA | 8.9 | NA | 8.5 | NA | 6 | NA | 11.7 |
| COPPER | 9 | NA | 17 | NA | 16 | NA | 16 | NA | 50 |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 31 | NA | 20 | NA | 43 | NA | 91 | NA | 447 |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.07 | NA | 0.09 | NA | 0.51 | NA | 0.07 | NA | 0.49 |
| MOLYBDENUM | 0.5 U | NA | 2 B | NA | 0.6 B | NA | 0.6 U | NA | 1 B |
| NICKEL | 8 B | NA | 20 | NA | 14 | NA | 9 | NA | 14 |
| SELENIUM | 2 U | NA | 2 U | NA | 3 | NA | 3 | NA | 2 U |
| SILVER | 0.2 B | NA | 1.1 | NA | 1.1 | NA | 0.06 B | NA | 0.3 B |
| THALLIUM | 1 U | NA | 1 U | NA | 1 U | NA | 1 U | NA | 1 U |
| VANADIUM | 29.5 | NA | 46.2 | NA | 33.4 | NA | 21.6 | NA | 35.8 |
| ZINC | 39 | NA | 50 | NA | 85 | NA | 287 | NA | 289 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | 3.6 | NA | 2 | NA | NA | NA | 3.6 |

| LOCATION | SB-253 | SB-265 | SB-265 | SB-266 | SB-266 | SB-267 | SB-267 | SB-268 | SB-268 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-253-SS | SB-265-02 | SB-265-SS | SB-266-02 | SB-266-SS | SB-267-02 | SB-267-SS | SB-268-02 | SB-268-SS |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | 8.4 | 8.3 | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | 0.63 | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-269 | SB-269 | SB-270 | SB-270 | SB-382 | SB-383 | SB-384 | SB-385 | SB-386 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-269-02 | SB-269-SS | SB-270-02 | SB-270-SS | SB-382-0102 | SB-383-0102 | SB-384-0102 | SB-385-0102 | SB-386-0102 |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-269 | SB-269 | SB-270 | SB-270 | SB-382 | SB-383 | SB-384 | SB-385 | SB-386 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-269-02 | SB-269-SS | SB-270-02 | SB-270-SS | SB-382-0102 | SB-383-0102 | SB-384-0102 | SB-385-0102 | SB-386-0102 |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 387 U | 377 UJ | 396 U | 389 U | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 117 U | 114 UJ | 120 U | 118 U | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 586 U | 571 UJ | 600 U | 589 U | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 82 U | 80 UJ | 84 U | 83 U | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 82 U | 80 UJ | 84 U | 83 U | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 786 U | 765 UJ | 803 U | 790 U | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 117 U | 114 UJ | 120 U | 118 U | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 117 U | 114 UJ | 120 U | 118 U | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | 786 U | 765 UJ | 803 UR | 790 U | NA | NA | NA | NA | NA |
| BENZOIC ACID | 786 U | 765 UJ | 217 J | 189 J | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | 47.5 J | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 117 U | 114 UJ | 120 U | 118 U | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 117 U | 114 UJ | 120 U | 118 U | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 82 U | 80 UJ | 84 U | 83 U | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 199 U | 123 J | 204 U | 32 J | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 117 U | 27 J | 120 U | 118 U | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 82 U | 80 UJ | 84 U | 83 U | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| ISOPHORONE | 117 U | 114 UJ | 120 U | 118 U | NA | NA | NA | NA | NA |
| NITROBENZENE | 199 U | 194 UJ | 204 U | 200 U | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | 117 U | 114 UJ | 120 U | 118 U | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 117 U | 114 UJ | 120 U | 118 U | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 117 U | 114 UJ | 120 U | 118 U | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 985 U | 959 UJ | 1010 U | 990 U | NA | NA | NA | NA | NA |
| PHENOL | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| PYRIDINE | 399 U | 388 UJ | 408 U | 401 U | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 82.1 U | 79.9 UJ | 83.9 U | 82.5 U | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 82 U | 80 UJ | 84 U | 83 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 82 U | 79 J | 84 U | 83 U | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 82 U | 80 UJ | 84 U | 83 U | NA | NA | NA | NA | NA |
| ANTHRACENE | 82 U | 256 J | 84 U | 66 J | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 82 U | 1883 | 123 | 369 | 1.5 U | 19000 | 1.5 U | 1.4 U | 1.4 U |
| BAP EQUIVALENT-POS | 82 U | 1883 | 81 | 369 | 1.5 U | 19000 | 1.5 U | 1.4 U | 1.4 U |
| BENZO(A)ANTHRACENE | 82 U | 1260 J | 73 J | 239 | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 82 U | 1310 J | 62 J | 258 | 1.5 U | 19000 | 1.5 U | 1.4 U | 1.4 U |
| BENZO(B)FLUORANTHENE | 82 U | 1520 J | 65 J | 250 | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 82 UJ | 662 J | 48 J | 175 J | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 82 U | 1360 J | 84 U | 244 | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-269 | SB-269 | SB-270 | SB-270 | SB-382 | SB-383 | SB-384 | SB-385 | SB-386 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-269-02 | SB-269-SS | SB-270-02 | SB-270-SS | SB-382-0102 | SB-383-0102 | SB-384-0102 | SB-385-0102 | SB-386-0102 |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-13**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-269 | SB-269 | SB-270 | SB-270 | SB-382 | SB-383 | SB-384 | SB-385 | SB-386 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-269-02 | SB-269-SS | SB-270-02 | SB-270-SS | SB-382-0102 | SB-383-0102 | SB-384-0102 | SB-385-0102 | SB-386-0102 |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 82 U | 1250 J | 69 J | 269 | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 82 U | 206 J | 84 UJ | 46 J | NA | NA | NA | NA | NA |
| FLUORANTHENE | 82 U | 2720 J | 163 | 600 | NA | NA | NA | NA | NA |
| FLUORENE | 82 U | 68 J | 84 U | 83 U | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 82 U | 745 J | 51 J | 135 J | NA | NA | NA | NA | NA |
| NAPHTHALENE | 82 U | 80 UJ | 84 U | 83 U | NA | NA | NA | NA | NA |
| PHENANTHRENE | 82 U | 987 J | 81 J | 265 | NA | NA | NA | NA | NA |
| PYRENE | 28 J | 1740 J | 113 | 371 | NA | NA | NA | NA | NA |
| TOTAL PAHS | 28 | 14163 | 725 | 2918 | 0 U | 19000 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | 37 U | NA | 38 U | 39 U | 37 U | 38 U | 36 U | 37 U |
| AROCLOR-1221 | NA | 37 U | NA | 38 U | 39 U | 37 U | 38 U | 36 U | 37 U |
| AROCLOR-1232 | NA | 37 U | NA | 38 U | 39 U | 37 U | 38 U | 36 U | 37 U |
| AROCLOR-1242 | NA | 37 U | NA | 38 U | 39 U | 37 U | 38 U | 36 U | 37 U |
| AROCLOR-1248 | NA | 37 U | NA | 38 U | 39 U | 37 U | 38 U | 36 U | 37 U |
| AROCLOR-1254 | NA | 37 U | NA | 38 U | 39 U | 37 U | 38 U | 36 U | 37 U |
| AROCLOR-1260 | NA | 95 | NA | 29 J | 39 U | 34 J | 38 U | 36 U | 37 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | 95 | NA | 29 | 0 U | 34 | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | 1 L | NA | 1 L | NA | NA | NA | NA | NA |
| ARSENIC | NA | 6 | NA | 3 B | NA | NA | NA | NA | NA |
| BARIUM | NA | 103 | NA | 64 | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | 1.7 | NA | 1.1 | NA | NA | NA | NA | NA |
| CADMIUM | NA | 0.7 | NA | 0.3 B | NA | NA | NA | NA | NA |
| CHROMIUM | NA | 26.1 | NA | 15.3 | NA | NA | NA | NA | NA |
| COBALT | NA | 6.6 | NA | 5.4 | NA | NA | NA | NA | NA |
| COPPER | NA | 15 | NA | 12 | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | 56 | NA | 64 | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | 0.18 | NA | 0.11 | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | 1 B | NA | 0.6 B | NA | NA | NA | NA | NA |
| NICKEL | NA | 13 | NA | 8 B | NA | NA | NA | NA | NA |
| SELENIUM | NA | 3 | NA | 2 U | NA | NA | NA | NA | NA |
| SILVER | NA | 0.06 U | NA | 0.06 U | NA | NA | NA | NA | NA |
| THALLIUM | NA | 1 U | NA | 1 U | NA | NA | NA | NA | NA |
| VANADIUM | NA | 42.8 | NA | 26.2 | NA | NA | NA | NA | NA |
| ZINC | NA | 74 | NA | 51 | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | 85.6 | 88 | 87 | 92 | 90 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | 0.51 | NA | 0.64 | NA | NA | NA | NA | NA |

| LOCATION | SB-269 | SB-269 | SB-270 | SB-270 | SB-382 | SB-383 | SB-384 | SB-385 | SB-386 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-269-02 | SB-269-SS | SB-270-02 | SB-270-SS | SB-382-0102 | SB-383-0102 | SB-384-0102 | SB-385-0102 | SB-386-0102 |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-387 | SB-388 | SB-389 | SB-390 | SB-391 | SB-392 | SB-393 | SB-394 | SB-395 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-387-0102 | SB-388-0102 | SB-389-0102 | SB-390-0102 | SB-391-0102 | SB-392-0102 | SB-393-0102 | SB-394-0102 | SB-395-0102 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-387 | SB-388 | SB-389 | SB-390 | SB-391 | SB-392 | SB-393 | SB-394 | SB-395 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-387-0102 | SB-388-0102 | SB-389-0102 | SB-390-0102 | SB-391-0102 | SB-392-0102 | SB-393-0102 | SB-394-0102 | SB-395-0102 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 12 | 380 | 220 | 9.9 | 1.6 U | 1.4 U | 450 | 140 | 1.6 U |
| BAP EQUIVALENT-POS | 12 | 380 | 220 | 9.9 | 1.6 U | 1.4 U | 450 | 140 | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 12 J | 380 | 220 J | 9.9 J | 1.6 U | 1.4 U | 450 | 140 J | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-387 | SB-388 | SB-389 | SB-390 | SB-391 | SB-392 | SB-393 | SB-394 | SB-395 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-387-0102 | SB-388-0102 | SB-389-0102 | SB-390-0102 | SB-391-0102 | SB-392-0102 | SB-393-0102 | SB-394-0102 | SB-395-0102 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-387 | SB-388 | SB-389 | SB-390 | SB-391 | SB-392 | SB-393 | SB-394 | SB-395 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-387-0102 | SB-388-0102 | SB-389-0102 | SB-390-0102 | SB-391-0102 | SB-392-0102 | SB-393-0102 | SB-394-0102 | SB-395-0102 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 12 | 380 | 220 | 9.9 | 0 U | 0 U | 450 | 140 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 35 U | 35 U | 36 U | 38 U | 39 U | 37 U | 35 U | 37 U | 40 U |
| AROCLOR-1221 | 35 U | 35 U | 36 U | 38 U | 39 U | 37 U | 35 U | 37 U | 40 U |
| AROCLOR-1232 | 35 U | 35 U | 36 U | 38 U | 39 U | 37 U | 35 U | 37 U | 40 U |
| AROCLOR-1242 | 35 U | 35 U | 36 U | 38 U | 39 U | 37 U | 35 U | 37 U | 40 U |
| AROCLOR-1248 | 35 U | 35 U | 36 U | 38 U | 39 U | 37 U | 35 U | 37 U | 40 U |
| AROCLOR-1254 | 35 U | 35 U | 36 U | 38 U | 39 U | 37 U | 35 U | 37 U | 40 U |
| AROCLOR-1260 | 35 U | 35 U | 36 U | 38 U | 39 U | 37 U | 22 J | 37 U | 40 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 22 | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 93.7 | 93.6 | 91.2 | 87 | 83.6 | 90.3 | 94.6 | 90 | 83.2 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-387 | SB-388 | SB-389 | SB-390 | SB-391 | SB-392 | SB-393 | SB-394 | SB-395 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-387-0102 | SB-388-0102 | SB-389-0102 | SB-390-0102 | SB-391-0102 | SB-392-0102 | SB-393-0102 | SB-394-0102 | SB-395-0102 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-396 | SB-397 | SB-398 | SB-399 | SB-400 | SB-401 | SB-402 | SB-403 | SB-404 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-396-0102 | SB-397-0102 | SB-398-0102 | SB-399-0102 | SB-400-0102 | SB-401-0102 | SB-402-0102 | SB-403-0102 | SB-404-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-396 | SB-397 | SB-398 | SB-399 | SB-400 | SB-401 | SB-402 | SB-403 | SB-404 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-396-0102 | SB-397-0102 | SB-398-0102 | SB-399-0102 | SB-400-0102 | SB-401-0102 | SB-402-0102 | SB-403-0102 | SB-404-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 80 | 80 | 29 | 1.4 U | 9.1 | 25 | 37 | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 80 | 80 | 29 | 1.4 U | 9.1 | 25 | 37 | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 80 J | 80 J | 29 J | 1.4 U | 9.1 J | 25 J | 37 J | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-396 | SB-397 | SB-398 | SB-399 | SB-400 | SB-401 | SB-402 | SB-403 | SB-404 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-396-0102 | SB-397-0102 | SB-398-0102 | SB-399-0102 | SB-400-0102 | SB-401-0102 | SB-402-0102 | SB-403-0102 | SB-404-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-396 | SB-397 | SB-398 | SB-399 | SB-400 | SB-401 | SB-402 | SB-403 | SB-404 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-396-0102 | SB-397-0102 | SB-398-0102 | SB-399-0102 | SB-400-0102 | SB-401-0102 | SB-402-0102 | SB-403-0102 | SB-404-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 80 | 80 | 29 | 0 U | 9.1 | 25 | 37 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 39 U | 35 U | 36 U | 36 U | 36 U | 41 U | 41 U | 37 U | 38 U |
| AROCLOR-1221 | 39 U | 35 U | 36 U | 36 U | 36 U | 41 U | 41 U | 37 U | 38 U |
| AROCLOR-1232 | 39 U | 35 U | 36 U | 36 U | 36 U | 41 U | 41 U | 37 U | 38 U |
| AROCLOR-1242 | 39 U | 35 U | 36 U | 36 U | 36 U | 41 U | 41 U | 37 U | 38 U |
| AROCLOR-1248 | 39 U | 35 U | 36 U | 36 U | 36 U | 41 U | 41 U | 37 U | 38 U |
| AROCLOR-1254 | 39 U | 35 U | 36 U | 36 U | 36 U | 41 U | 41 U | 37 U | 38 U |
| AROCLOR-1260 | 39 U | 35 U | 36 U | 36 U | 36 U | 41 U | 41 U | 37 U | 38 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 85.5 | 95.1 | 90.9 | 90.8 | 91.6 | 79.7 | 79.9 | 88.6 | 86.6 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-396 | SB-397 | SB-398 | SB-399 | SB-400 | SB-401 | SB-402 | SB-403 | SB-404 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-396-0102 | SB-397-0102 | SB-398-0102 | SB-399-0102 | SB-400-0102 | SB-401-0102 | SB-402-0102 | SB-403-0102 | SB-404-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-405 | SB-406 | SB-407 | SB-408 | SB-409 | SB-489 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-405-0102 | SB-406-0102 | SB-407-0102 | SB-408-0102 | SB-409-0102 | SB-489-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-405 | SB-406 | SB-407 | SB-408 | SB-409 | SB-489 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-405-0102 | SB-406-0102 | SB-407-0102 | SB-408-0102 | SB-409-0102 | SB-489-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 36 | 510 | 130 | 87 | 39 | 9.6 |
| BAP EQUIVALENT-POS | 36 | 510 | 130 | 87 | 39 | 9.6 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 36 J | 510 | 130 J | 87 J | 39 J | 9.6 J |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-405 | SB-406 | SB-407 | SB-408 | SB-409 | SB-489 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-405-0102 | SB-406-0102 | SB-407-0102 | SB-408-0102 | SB-409-0102 | SB-489-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-405 | SB-406 | SB-407 | SB-408 | SB-409 | SB-489 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-405-0102 | SB-406-0102 | SB-407-0102 | SB-408-0102 | SB-409-0102 | SB-489-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 36 | 510 | 130 | 87 | 39 | 9.6 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 36 U | 38 U | 42 U | 40 U | 43 U | 41 U |
| AROCLOR-1221 | 36 U | 38 U | 42 U | 40 U | 43 U | 41 U |
| AROCLOR-1232 | 36 U | 38 U | 42 U | 40 U | 43 U | 41 U |
| AROCLOR-1242 | 36 U | 38 U | 42 U | 40 U | 43 U | 41 U |
| AROCLOR-1248 | 36 U | 38 U | 42 U | 40 U | 43 U | 41 U |
| AROCLOR-1254 | 36 U | 38 U | 42 U | 40 U | 43 U | 41 U |
| AROCLOR-1260 | 36 U | 38 U | 42 U | 40 U | 43 U | 41 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 91.3 | 87.2 | 78.6 | 81.8 | 77.6 | 79.8 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-405 | SB-406 | SB-407 | SB-408 | SB-409 | SB-489 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-405-0102 | SB-406-0102 | SB-407-0102 | SB-408-0102 | SB-409-0102 | SB-489-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | |
| PH | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA |

**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-024A | SB-024A | SB-056 | SB-056 | SB-093 | SB-093 | SB-094 | SB-094 | SB-095 | SB-095 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-24ARE-1 | F-SB-24ARE-2 | F-SB-56RE-1 | F-SB-56RE-2 | F-SB-93RE-1 | F-SB-93RE-2 | F-SB-94RE-1 | F-SB-94RE-2 | F-SB-95RE-1 | F-SB-95RE-2 |
| SAMPLE DATE | | | | 20090922 | 20090922 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | | | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NC | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | 23 | 1.5 U | 1190 | 150 | 184 | 95 | 50001 | 2.6 |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | 22 | 1.5 U | 1190 | 150 | 184 | 95 | 49963 | 0.85 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | 17 | 1.1 U | 890 | 100 | 110 | 57 | 42000 | 8.5 |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | 17 | 1.5 U | 810 | 89 | 130 | 55 | 38000 | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | 21 | 1.4 U | 1200 | 140 | 150 | 58 | 55000 | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | 12 | 1.9 U | 390 | 46 | 91 | 24 | 23000 | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | 19 | 1 U | 860 | 100 | 150 | 73 | 33000 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | 1.6 U | 1.5 U | 120 | 30 | 19 | 25 | 76 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | 11 | 1.7 U | 460 | 66 | 81 | 36 | 20000 | 1.9 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | 97 | 0 U | 4730 | 571 | 731 | 328 | 211000 | 8.5 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | NA | NA | NA | NA | 19 U | 20 U | 20 U | 21 U | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | 120 | 20 U | 20 U | 21 U | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | 120 | 0 U | 0 U | 0 U | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | 1.5 L | 1 L | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-096<br>F-SB-96RE-1<br>20090921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-096<br>F-SB-96RE-2<br>20090921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-624<br>F-SB-624-1<br>20090921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-624<br>F-SB-624-2<br>20090921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-625<br>F-SB-625-1<br>20090921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-625<br>F-SB-625-2<br>20090921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-626<br>F-SB-626-1<br>20090922<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-626<br>F-SB-626-2<br>20090922<br>NORMAL<br>SO<br>NORMAL<br>SB<br>2<br>2 | SB-626B<br>F-SB-626B-(1-4)<br>20091111<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>4 | SB-626C<br>F-SB-626C-1<br>20091111<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NC | 610000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 602 | 1.6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 C | 602 | 1.6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 C | 390 | 1.1 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 410 | 1.6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 580 | 1.5 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 250 | 2.1 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 340 | 1.1 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 67 | 1.6 U | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 250 | 1.8 U | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 2287 | 0 U | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | 0.035 | 0.22 | 0.02 U | 0.58 | 2.2 L | 2.7 L | 1.2 | 2.2 |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-626D | SB-627 | SB-627 | SB-635C | SB-635D | SB-636 | SB-636A | SB-636B | SB-636C | SB-636D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-626D-1 | F-SB-627-1 | F-SB-627-2 | F-SB-635C-1 | F-SB-635D-1 | F-SB-636-1 | F-SB-636A-1 | F-SB-636B-1 | F-SB-636C-1 | F-SB-636D-1 |
| SAMPLE DATE | | | | 20091111 | 20090922 | 20090922 | 20091104 | 20091110 | 20091007 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NC | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | 1267 | 20 | 163 | 410 | 1412 | 7120 | 6757 |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | 1267 | 19 | 163 | 410 | 1412 | 7120 | 6757 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | 760 | 11 | 130 | 290 | 790 | 5700 | 4900 |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | 870 | 16 | 110 | 270 | 950 | 4800 | 4700 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | 1200 | 8.9 | 140 | 400 | 1200 | 7000 | 6200 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | 390 | 1.8 U | 58 | 130 | 540 | 2500 | 2200 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | 790 | 8.1 | 110 | 300 | 890 | 5200 | 4900 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | 150 | 1.4 U | 19 | 53 | 200 | 750 | 660 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | 460 | 15 | 64 | 160 | 570 | 2700 | 2600 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | 4620 | 59 | 631 | 1603 | 5140 | 28650 | 26160 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | NA | NA | NA | NA | NA | 20 U | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | 20 U | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | 0 U | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | 0.36 | 0.31 L | 0.38 L | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-637<br>F-SB-637-1<br>20091007<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-637B<br>F-SB-637B-1<br>20091106<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-637C<br>F-SB-637C-1<br>20091106<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-638<br>F-SB-638-1<br>20091007<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-639<br>F-SB-639-1<br>20091007<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-640<br>F-SB-640-1<br>20091007<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-641<br>F-SB-641-1<br>20091006<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-641A<br>F-SB-641A-1<br>20091104<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-641B<br>F-SB-641B-1<br>20091104<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-641C<br>F-SB-641C-1<br>20091104<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NC | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1186 | 6953 | 2075 | 1.4 U | 79 | 74 | 1364 | 41 | 289 | 9111 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1186 | 6953 | 2075 | 1.4 U | 78 | 73 | 1364 | 41 | 289 | 9111 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 900 | 6200 | 1700 | 1 U | 62 | 52 | 960 | 31 | 190 | 7400 |
| BENZO(A)PYRENE | 22 | 15 | C | 820 | 4600 | 1400 | 1.4 U | 59 | 55 | 860 | 32 | 200 | 6300 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1100 | 6500 | 1900 | 1.3 U | 88 | 88 | 1300 | 38 | 290 | 8900 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 390 | 2800 | 870 | 1.8 U | 32 | 29 | 1.6 U | 19 | 95 | 3500 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 840 | 5300 | 1500 | 0.97 U | 66 | 57 | 840 | 33 | 190 | 6300 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 120 | 790 | 230 | 1.4 U | 1.5 U | 1.5 U | 210 | 1.5 U | 30 | 840 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 410 | 2600 | 750 | 1.6 U | 34 | 37 | 670 | 15 | 100 | 3000 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 4580 | 28790 | 8350 | 0 U | 341 | 318 | 4840 | 168 | 1095 | 36240 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | 19 U | NA | NA | 18 U | 20 U | 20 U | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 19 U | NA | NA | 18 U | 20 U | 20 U | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | 0 U | NA | NA | 0 U | 0 U | 0 U | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-14**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | | | | SB-642 | SB-642A | SB-642B | SB-642C | SB-643 | SB-643B | SB-643C | SB-644 | SB-645 | SB-645A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-642-1 | F-SB-642A-1 | F-SB-642B-1 | F-SB-642C-1 | F-SB-643-1 | F-SB-643B-1 | F-SB-643C-1 | F-SB-644-1 | F-SB-645-1 | F-SB-645A-1 |
| SAMPLE DATE | | | | 20091019 | 20091104 | 20091104 | 20091104 | 20091016 | 20091105 | 20091105 | 20091016 | 20091006 | 20091105 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NC | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1495 | 1.5 U | 57 | 1.7 | 708 | 118 | 1.4 U | 70 | 26715 | 111 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1495 | 1.5 U | 56 | 0.012 | 708 | 118 | 1.4 U | 70 | 26715 | 111 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1100 | 1.1 U | 42 | 1.1 U | 360 | 77 | 1 U | 39 | 18000 | 68 |
| BENZO(A)PYRENE | 22 | 15 | C | 1000 | 1.5 U | 44 | 1.5 U | 490 | 70 | 1.4 U | 47 | 17000 | 66 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1200 | 1.4 U | 48 | 1.4 U | 630 | 110 | 1.3 U | 58 | 28000 | 96 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 620 | 2 U | 40 | 2 U | 300 | 32 | 1.9 U | 25 | 9.3 U | 45 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 980 | 1 U | 48 | 12 | 400 | 99 | 0.99 U | 44 | 15000 | 68 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 200 | 1.5 U | 1.5 U | 1.5 U | 87 | 25 | 1.4 U | 9.4 | 4000 | 24 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 580 | 1.7 U | 24 | 1.8 U | 290 | 40 | 1.7 U | 32 | 11000 | 40 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 5680 | 0 U | 246 | 12 | 2557 | 453 | 0 U | 254.4 | 93000 | 407 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-14**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-645B | SB-645C | SB-646 | SB-647 | SB-647A | SB-647B | SB-647C | SB-648 | SB-649 | SB-650 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-645B-1 | F-SB-645C-1 | F-SB-646-1 | F-SB-647-1 | F-SB-647A-1 | F-SB-647B-1 | F-SB-647C-1 | F-SB-648-1 | F-SB-649-1 | F-SB-650-1 |
| SAMPLE DATE | | | | 20091105 | 20091105 | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NC | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 112 | 369 | 23 | 284 | 3838 | 283 | 5140 | 2.2 U | 2.2 U | 4.1 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 112 | 369 | 23 | 284 | 3838 | 283 | 5140 | 2.2 U | 2.2 U | 3.1 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 79 | 260 | 13 | 160 | 2500 | 170 | 3400 | 1.2 U | 1.3 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 78 | 240 | 15 | 180 | 2600 | 180 | 3500 | 2.2 U | 2.2 U | 3.1 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 110 | 330 | 24 | 300 | 3100 | 240 | 4500 | 1.6 U | 1.6 U | 1.6 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 47 | 120 | 1.6 U | 7.9 U | 1600 | 97 | 1700 | 1.6 U | 1.7 U | 1.6 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 92 | 240 | 13 | 180 | 2400 | 170 | 3300 | 1.4 U | 1.4 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 11 | 55 | 2.8 J | 44 | 500 | 49 | 620 | 1.7 U | 1.8 U | 1.7 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 40 | 140 | 12 | 140 | 1600 | 120 | 2100 | 0.43 U | 0.44 U | 0.43 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 457 | 1385 | 79.8 | 1004 | 14300 | 1026 | 19120 | 0 U | 0 U | 3.1 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-14**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-651<br>F-SB-651-1<br>20091007<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-652<br>F-SB-652-1<br>20091007<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-652A<br>F-SB-652A-1<br>20091105<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-652B<br>F-SB-652B-1<br>20091105<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-652C<br>F-SB-652C-1<br>20091105<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>1 | SB-797<br>F-SB-797-SS<br>20100820<br>NORMAL<br>SO<br>NORMAL<br>SS<br>1<br>1 | SB-798<br>F-SB-798-SS<br>20100820<br>NORMAL<br>SO<br>NORMAL<br>SS<br>1<br>1 | SB-799<br>F-SB-799-SS<br>20100820<br>NORMAL<br>SO<br>NORMAL<br>SS<br>1<br>1 | SB-800<br>F-SB-800-SS<br>20100910<br>NORMAL<br>SO<br>NORMAL<br>SS<br>1<br>1 | SB-801<br>F-SB-801-SS<br>20100910<br>NORMAL<br>SO<br>NORMAL<br>SS<br>1<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NC | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | 55 | 3.7 U | 3.9 U | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | 46 | 3.7 U | 3.9 U | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | 340 | 3.7 U | 3.9 U | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | 15 U | 3.7 U | 3.9 U | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | 680 | 3.7 U | 3.9 U | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 14 | 342 | 228 | 505 | 19 | 3496 | 3.7 U | 13 | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | 13 | 342 | 228 | 505 | 18 | 3496 | 3.7 U | 11 | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 8.8 | 260 | 150 | 350 | 16 | 2300 | 3.7 U | 8.1 | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 9.9 | 230 | 150 | 340 | 13 | 2400 | 3.7 U | 9 | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 13 | 330 | 200 | 430 | 30 | 2800 | 3.7 U | 11 | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | 1700 | 3.7 U | 3.9 U | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 120 | 96 | 190 | 8.4 | 1400 | 3.7 U | 3.9 U | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | 3700 J | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | 5800 J | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | 1600 J | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | 1300 J | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | 950 J | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | 470 J | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 8.9 | 250 | 160 | 350 | 15 | 2400 | 1.2 U | 11 | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 38 | 33 | 65 | 1.5 U | 430 | 3.7 U | 3.9 U | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | 4900 | 11 | 17 | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | 370 | 3.7 U | 3.9 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 8.8 | 140 | 89 | 200 | 1.7 U | 1400 | 3.7 U | 3.9 U | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | 140 | 3.7 U | 3.9 U | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | 2600 | 3.7 U | 8 | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | 4200 | 9.1 | 17 | NA | NA |
| TOTAL PAHS | NC | NC | | 49.4 | 1368 | 878 | 1925 | 82.4 | 28106 | 20.1 | 81.1 | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | 19 U | 20 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 19 U | 20 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | 0 U | 0 U | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | 1 L | 0.18 L |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-802<br>F-SB-802-SS<br>20100910<br>NORMAL<br>SO<br>NORMAL<br>SS<br>1<br>1** |
|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA |
| ACETONE | 7000000 | 6100000 | N | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA |
| TOLUENE | 630000 | 500000 | N | NA |
| **SEMIVOLATILES (UG/KG)** | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA |
| BENZYL ALCOHOL | NC | 610000 | N | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA |
| CARBAZOLE | 32000 | NC | | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA |
| PHENOL | 2300000 | 1800000 | N | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA |
| CHRYSENE | 22000 | 15000 | C | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA |
| FLUORENE | 310000 | 230000 | N | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA |
| PYRENE | 230000 | 170000 | N | NA |
| TOTAL PAHS | NC | NC | | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | NA |
| AROCLOR-1260 | 320 | 220 | C | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA |
| **METALS (MG/KG)** | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA |
| ARSENIC | 0.43 | 0.39 | C | NA |
| BARIUM | 1600 | 1500 | N | NA |
| BERYLLIUM | 16 | 16 | N | NA |
| CADMIUM | 3.9 | 7 | N | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA |
| COBALT | NC | 2.3 | N | NA |
| COPPER | 310 | 310 | N | NA |
| LEAD | 400 | 400 | | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | 0.017 UR |
| MOLYBDENUM | NC | 39 | N | NA |
| NICKEL | 160 | 150 | N | NA |
| SELENIUM | 39 | 39 | N | NA |
| SILVER | 39 | 39 | N | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA |
| ZINC | 2300 | 2300 | N | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | |
| PERCENT SOLIDS | NC | NC | | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | |
| PH | NC | NC | | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA |

**Table A-14**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-022<br>SB-22A-SS<br>20040915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-023<br>SB-23A-SS<br>20040915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-024<br>SB-24A-SS<br>20040915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-025<br>SB-25A-SS<br>20040915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-030<br>SB-30A-SS<br>20040915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-050<br>SB-50-SS<br>20040915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-055<br>SB-55-SS<br>20040915<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-056<br>SB-56-SS<br>20040913<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-093<br>SB-93-SS<br>20040916<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 | SB-094<br>SB-94-SS<br>20040916<br>NORMAL<br>SO<br>NORMAL<br>SS<br>0<br>1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | 66 U | 55 U | 61 U | 60 U | 53 U | NA | 53 U | 82 U | 66 U | 54 U |
| ACETONE | 7000000 | 6100000 | N | 89 J | 55 UJ | 61 UJ | 60 UJ | 53 UJ | NA | 53 UJ | 82 U | 66 U | 54 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U | 8 U | 7 U | 5 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 11 B | 6 U | 6 U | 6 U | 5 U | NA | 5 U | 8 U | 7 U | 5 U |
| TOLUENE | 630000 | 500000 | N | 7 U | 6 U | 6 U | 6 U | 5 U | NA | 5 U | 8 U | 7 U | 5 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NC | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| CARBAZOLE | 32000 | NC | | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| DIBENZOFURAN | 7800 | 7800 | N | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| DIMETHYL PHTHALATE | NC | NC | | 430 U | 60 J | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| DI-N-OCTYL PHTHALATE | NC | NC | | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| PHENOL | 2300000 | 1800000 | N | 430 U | 420 | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| ACENAPHTHENE | 470000 | 340000 | N | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| ANTHRACENE | 2300000 | 1700000 | N | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 430 U | 380 U | 298 | 400 U | 401 | NA | 313 | 560 U | 4189 | 2874 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 430 U | 380 U | 78 | 400 U | 4.825 | NA | 121 | 560 U | 1939 | 1074 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 430 U | 380 U | 74 J | 400 U | 44 J | NA | 110 J | 560 U | 1800 J | 880 J |
| BENZO(A)PYRENE | 22 | 15 | C | 430 U | 380 U | 63 J | 400 U | 360 U | NA | 99 J | 560 U | 1500 J | 850 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 430 U | 380 U | 66 J | 400 U | 360 U | NA | 94 J | 560 U | 1600 J | 890 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 70 J | 560 U | 1000 J | 3600 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 430 U | 380 U | 57 J | 400 U | 37 J | NA | 110 J | 560 U | 1500 J | 1000 J |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 430 U | 380 U | 77 J | 400 U | 55 J | NA | 130 J | 560 U | 2300 J | 1100 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| FLUORANTHENE | 310000 | 230000 | N | 57 J | 380 U | 170 J | 400 U | 84 J | NA | 270 J | 560 U | 3400 J | 2000 J |
| FLUORENE | 310000 | 230000 | N | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 820 J | 360 J |
| NAPHTHALENE | 160000 | 3600 | C | 430 U | 380 U | 400 U | 400 U | 360 U | NA | 350 U | 560 U | 4500 U | 3600 U |
| PHENANTHRENE | 2300000 | 170000 | N[5] | 44 J | 380 U | 92 J | 400 U | 74 J | NA | 160 J | 560 U | 1600 J | 1100 J |
| PYRENE | 230000 | 170000 | N | 430 U | 380 U | 110 J | 400 U | 110 J | NA | 160 J | 560 U | 4000 J | 1400 J |
| TOTAL PAHS | NC | NC | | 101 | 0 U | 709 | 0 U | 404 | NA | 1203 | 0 U | 19520 | 9580 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | 320 U | 280 U | 300 U | 300 U | 270 U | NA | 260 U | 410 U | 330 U | 1300 U |
| AROCLOR-1260 | 320 | 220 | C | 320 U | 280 U | 300 U | 300 U | 270 U | NA | 260 U | 410 U | 800 | 1400 |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | 0 U | 0 U | 0 U | 0 U | 0 U | NA | 0 U | 0 U | 800 | 1400 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 3 U | 2.6 U | 2.8 U | 2.7 U | 2.7 UR | 2.4 U | 2.7 UR | 4 UR | 3.1 UR | 2.6 UR |
| ARSENIC | 0.43 | 0.39 | C | 1.3 | 2.2 | 3.4 | 0.6 | 2.3 L | 3.2 | 1.5 L | 2.9 L | 1.8 L | 2.1 L |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 3 U | 2.6 U | 2.8 U | 5 | 2.7 U | 2.4 U | 2.7 U | 4 U | 3.1 UL | 2.6 UL |
| CADMIUM | 3.9 | 7 | N | 3 U | 2.6 U | 2.8 U | 2.7 U | 2.7 UL | 2.4 U | 2.7 UL | 4 UL | 3.5 L | 4.5 L |
| CHROMIUM | 12000 [9] | 12000 | N[9] | 8.1 | 13 | 18 | 18 | 8.7 L | 9.4 | 13 L | 14 L | 110 | 25 |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 4.9 K | 5.3 | 36 | 15 | 4.4 K | 17 | 74 | 11 | 21 L | 21 L |
| LEAD | 400 | 400 | | 3 U | 5.4 | 67 | 5.9 | 4.5 J | 33 | 420 J | 6.3 J | 73 L | 65 L |
| MERCURY | 2.3 [10] | 2.3 | N[11] | 0.12 U | 0.1 U | 1.4 | 0.11 U | 0.11 UL | 0.42 | 0.11 UL | 0.16 UL | 0.68 | 0.97 |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 4.6 K | 7.1 | 14 | 27 | 4.5 K | 8.5 | 13 | 5.1 K | 11 | 11 |
| SELENIUM | 39 | 39 | N | 3 U | 2.6 U | 2.8 U | 2.7 U | 2.7 UL | 2.4 U | 2.7 UL | 4 UL | 3.1 UL | 2.6 UL |
| SILVER | 39 | 39 | N | 3.2 U | 3.4 | 2.9 U | 2.9 U | 2.7 UR | 2.3 U | 2.7 UR | 4 UR | 3.1 UR | 2.6 UR |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 30 U | 26 U | 120 | 48 K | 27 UL | 100 | 58 J | 40 UL | 100 K | 92 K |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 13000 U | 11000 U | 12000 U | 12000 U | 10000 U | NA | 13000 | 17000 U | 150000 | 67000 |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 130 U | 110 U | 120 U | 1200 | 110 U | NA | 110 U | 170 U | 130 U | 110 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-14**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | | | | SB-095 | SB-096 | SB-236 | SB-236 | SB-237 | SB-237 | SB-238 | SB-238 | SB-250 | SB-250 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-95-SS | SB-96-SS | SB-236-01 | SB-236-SS | SB-237-01 | SB-237-SS | SB-238-01 | SB-238-SS | SB-250-02 | SB-250-SS |
| SAMPLE DATE | | | | 20040916 | 20040916 | 20050509 | 20050509 | 20050509 | 20050509 | 20050517 | 20050517 | 20050509 | 20050509 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | | | | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | | | | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | 62 U | 57 UJ | NA | NA | NA | NA | 2.87 J | 3.14 J | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 62 U | 57 UJ | NA | NA | NA | NA | 27.2 J | 31 J | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 U | 6 UJ | NA | NA | NA | NA | 0.72 J | 7.1 | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 6 U | 8 J | NA | NA | NA | NA | 3.3 J | 5.2 U | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 U | 6 UJ | NA | NA | NA | NA | 1.9 J | 1.2 J | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | 802 U | 752 U | NA | NA |
| BENZYL ALCOHOL | NC | 610000 | N | NA | NA | NA | NA | NA | NA | 407 U | 382 U | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 420 U | 380 U | NA | NA | NA | NA | 84 U | 79 UJ | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 420 U | 380 U | NA | NA | NA | NA | 203 U | 191 UJ | NA | NA |
| CARBAZOLE | 32000 | NC | | 190 J | 380 U | NA | NA | NA | NA | 203 U | 40 J | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 54 J | 380 U | NA | NA | NA | NA | 120 U | 112 UJ | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 420 U | 380 U | NA | NA | NA | NA | 407 U | 382 UJ | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 420 U | 380 U | NA | NA | NA | NA | 203 U | 191 U | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | 53 J | 380 U | NA | NA | NA | NA | 203 U | 191 UJ | NA | NA |
| PHENOL | 2300000 | 1800000 | N | 420 U | 380 U | NA | NA | NA | NA | 407 U | 382 U | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | 83.7 U | 78.6 U | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 420 U | 380 U | NA | NA | NA | NA | 84 U | 79 U | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 160 J | 380 U | NA | NA | NA | NA | 84 U | 79 UJ | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | 420 U | 380 U | NA | NA | NA | NA | 84 U | 79 UJ | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 380 J | 380 U | NA | NA | NA | NA | 84 U | 54 J | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **2132** | 380 U | NA | NA | NA | NA | **140** | **424** | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | **2132** | 380 U | NA | NA | NA | NA | **98** | **424** | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **1600** | 380 U | NA | NA | NA | NA | 75 J | **241 J** | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | **1600** | 380 U | NA | NA | NA | NA | **74 J** | **245 J** | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **1800** | 380 U | NA | NA | NA | NA | 90 | **254 J** | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | 1000 J | 380 U | NA | NA | NA | NA | 75 J | 344 J | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | **1600** | 380 U | NA | NA | NA | NA | 87 | 225 J | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1700 | 380 U | NA | NA | NA | NA | 92 | 287 J | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **75 J** | 380 U | NA | NA | NA | NA | 84 U | **100 J** | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | 3300 | 380 U | NA | NA | NA | NA | 142 | 546 | NA | NA |
| FLUORENE | 310000 | 230000 | N | 130 J | 380 U | NA | NA | NA | NA | 84 U | 79 UJ | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **990** | 380 U | NA | NA | NA | NA | 67 J | **274 J** | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 420 U | 380 U | NA | NA | NA | NA | 84 U | 79 U | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | 1600 | 380 U | NA | NA | NA | NA | 58 J | 249 | NA | NA |
| PYRENE | 230000 | 170000 | N | 2500 | 380 U | NA | NA | NA | NA | 120 | 685 J | NA | NA |
| TOTAL PAHS | NC | NC | | 18435 | 0 U | NA | NA | NA | NA | 880 | 3504 | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | 300 U | 280 U | NA | NA | NA | NA | 39 U | 37 U | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 300 U | 280 U | NA | NA | NA | NA | 39 U | 154 | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | 0 U | 0 U | NA | NA | NA | NA | 0 U | 154 | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 3 UR | 2.9 UR | 2 L | 0.5 L | **4 L** | 0.4 L | 0.3 UL | 1 L | 0.6 L | 0.8 L |
| ARSENIC | 0.43 | 0.39 | C | **2 L** | **2 L** | **4** | **3** | **5** | 3 B | **3** | **3** | 3 B | 1 B |
| BARIUM | 1600 | 1500 | N | NA | NA | 83 | 36 | 68 | 42 | 41 | 86 | 30 | 37 |
| BERYLLIUM | 16 | 16 | N | 3 UL | 2.9 UL | 0.7 | 1.4 | 0.6 | 1.6 | 1.8 | 1.3 | 1 | 0.7 |
| CADMIUM | 3.9 | 7 | N | 3 UL | 2.9 UL | 0.4 | 0.3 | 0.3 | 0.4 | 0.6 | 2 | 0.2 B | 0.2 B |
| CHROMIUM | 12000 [9] | 12000 | N[9] | 14 | 9.3 K | 19.8 | 17.7 | 185 | 19.8 | 27.4 | 36.4 | 15.5 | 11.8 |
| COBALT | NC | 2.3 | N | NA | NA | **5.8** | **6.8** | **5.1** | **5.6** | **8.4** | **6.4** | **2.8** | **5.8** |
| COPPER | 310 | 310 | N | 34 L | 5.1 L | 22 | 14 | 33 | 12 | 16 | 23 | 10 | 6 |
| LEAD | 400 | 400 | | 100 L | 3.2 L | 51 | 11 | 63 | 8 B | 30 | 148 | 5 B | 17 |
| MERCURY | 2.3 [10] | 2.3 | N[11] | 0.15 | 0.12 U | 0.92 L | 0.29 L | 0.35 | 0.06 | 0.08 | 0.24 | 0.03 | 0.04 |
| MOLYBDENUM | NC | 39 | N | NA | NA | 0.6 B | 0.4 B | **63** | 0.6 B | 0.8 B | 1 B | 0.6 B | 0.5 B |
| NICKEL | 160 | 150 | N | 8.1 | 5.4 K | 12 | 12 | 18 | 12 | 22 | 21 | 6 B | 8 |
| SELENIUM | 39 | 39 | N | 3 UL | 2.9 UL | 2 U | 2 | 4 | 2 | 2 U | 2 U | 2 U | 2 |
| SILVER | 39 | 39 | N | 3 UR | 2.9 UR | 0.9 | 0.04 U | 1.4 | 0.05 U | 0.06 U | 0.06 U | 0.06 U | 0.05 B |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | **31** | **29.9** | **41.9** | **31** | **35.9** | **49** | **27.2** | **20.5** |
| ZINC | 2300 | 2300 | N | 81 K | 29 U | 82 | 35 | 99 | 28 | 54 | 167 | 25 | 32 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 12000 U | 11000 U | NA | NA | NA | NA | 55700 | **271000** | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 120 U | 110 U | NA | NA | NA | NA | 10300 U | 13.1 U | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | 0.4 U | NA | 0.36 U | **0.49** | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | 8.2 | 8.1 | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | 0.734 J | 0.071 J | 1.467 J | NA | NA | NA | NA | NA |

**Table A-14**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-251 | SB-251 | SB-252 | SB-252 | SB-253 | SB-253 | SB-265 | SB-265 | SB-266 | SB-266 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-251-02 | SB-251-SS | SB-252-02 | SB-252-SS | SB-253-02 | SB-253-SS | SB-265-02 | SB-265-SS | SB-266-02 | SB-266-SS |
| SAMPLE DATE | | | | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | | | | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | | | | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | 740 U | 152 J | 784 U | 157 J |
| BENZYL ALCOHOL | NC | 610000 | N | NA | NA | NA | NA | NA | NA | 375 U | 369 U | 398 U | 377 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | 77 U | 40 J | 82 U | 78 U |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | 188 U | 25 J | 199 U | 188 U |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | 43 J | 242 | 199 U | 158 J |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | 110 U | 86 J | 117 U | 43 J |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | 375 U | 369 U | 398 U | 377 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | 32 J | 37 J | 199 U | 38 J |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | 188 U | 184 U | 199 U | 188 U |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | 375 U | 369 U | 398 U | 377 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | 77.3 U | 76 U | 81.9 U | 77.6 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | 77 U | 76 U | 82 U | 78 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | 77 U | 174 | 82 U | 98 |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | 77 U | 135 | 82 U | 44 J |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | 109 | 870 | 30 J | 291 |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | **602** | **2545** | **192** | **1344** |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | **602** | **2545** | **151** | **1344** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | **432** | **1980** | 121 | **947** |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | **401** | **1800** | **116** | **977** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | **374** | **2300** | 129 | **1090** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | 260 J | 450 J | 85 J | 253 J |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | 405 | **1910** | 111 | 1100 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | 461 | 2090 | 135 | 1030 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | **86** | **232** | 82 UJ | **117** |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | 802 | 4020 | 245 | 1940 |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | 32 J | 213 | 82 U | 94 |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | **295** | **635** | 92 J | **340** |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | 77 U | 36 J | 82 U | 78 U |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | 417 | 2740 | 127 | 1090 |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | 637 | 2570 | 178 | 1380 |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | 4711 | 22155 | 1369 | 10791 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | NA | NA | NA | NA | NA | NA | NA | 36 U | NA | 36 U |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | 119 | NA | **756** |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | 119 | NA | **756** |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.9 L | 1 L | 0.8 L | 0.7 L | 0.9 L | 1 L | NA | 0.5 | NA | 1 |
| ARSENIC | 0.43 | 0.39 | C | **5** | 3 B | **4** | 2 B | 3 B | 3 B | NA | **5** | NA | 3 B |
| BARIUM | 1600 | 1500 | N | 40 | 40 | 27 | 31 | 36 | 49 | NA | 29 | NA | 44 |
| BERYLLIUM | 16 | 16 | N | 1 | 0.7 | 0.5 | 0.6 | 0.7 | 0.6 | NA | 1.3 | NA | 0.8 |
| CADMIUM | 3.9 | 7 | N | 0.1 B | 0.2 B | 0.2 B | 0.1 B | 0.09 B | 0.4 | NA | 0.8 | NA | 1.8 |
| CHROMIUM | 12000 [9] | 12000 | N[9] | 20.8 | 15.8 | 15.6 | 11.8 | 14 | 14.4 | NA | 55.8 | NA | 31.3 |
| COBALT | NC | 2.3 | N | **7.1** | **5.9** | **3.5** | **3.6** | **4** | **4.9** | NA | **8.9** | NA | **8.5** |
| COPPER | 310 | 310 | N | 10 | 6 | 7 | 4 | 5 | 9 | NA | 17 | NA | 16 |
| LEAD | 400 | 400 | | 7 B | 7 B | 6 B | 10 | 5 B | 31 | NA | 20 | NA | 43 |
| MERCURY | 2.3 [10] | 2.3 | N[11] | 0.01 | 0.02 | 0.04 | 0.04 | 0.03 | 0.07 | NA | 0.09 | NA | 0.51 |
| MOLYBDENUM | NC | 39 | N | 0.5 B | 0.6 U | 0.7 B | 0.4 U | 0.5 B | 0.5 U | NA | 2 B | NA | 0.6 B |
| NICKEL | 160 | 150 | N | 9 | 9 B | 6 B | 6 B | 5 B | 8 B | NA | 20 | NA | 14 |
| SELENIUM | 39 | 39 | N | 3 | 2 U | 2 U | 2 U | 3 | 2 U | NA | 2 U | NA | 3 |
| SILVER | 39 | 39 | N | 0.05 U | 0.06 U | 0.05 U | 0.04 U | 0.2 B | 0.2 B | NA | 1.1 | NA | 1.1 |
| VANADIUM | 7.8 | 39 | N[12] | **35.6** | **24.8** | **27.9** | **20.3** | **25.5** | **29.5** | NA | **46.2** | NA | **33.4** |
| ZINC | 2300 | 2300 | N | 34 | 29 | 24 | 25 | 20 | 39 | NA | 50 | NA | 85 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | **3.6** | NA | **2** |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | 8.4 | 8.3 | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | 0.63 |

**Table A-14**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-267 | SB-267 | SB-268 | SB-268 | SB-269 | SB-269 | SB-270 | SB-270 | SB-382 | SB-383 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-267-02 | SB-267-SS | SB-268-02 | SB-268-SS | SB-269-02 | SB-269-SS | SB-270-02 | SB-270-SS | SB-382-0102 | SB-383-0102 |
| SAMPLE DATE | | | | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20071015 | 20071015 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SS | SB | SS | SB | SS | SB | SS | SB | SB |
| TOP DEPTH | | | | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 |
| BOTTOM DEPTH | | | | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | 333 J | 925 | 180 J | 16000 U | 786 U | 765 UJ | 217 J | 189 J | NA | NA |
| BENZYL ALCOHOL | NC | 610000 | N | 399 U | 386 U | 405 U | 8110 U | 47.5 J | 388 UJ | 408 U | 401 U | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 82 U | 80 U | 83 U | 1670 U | 82 U | 80 UJ | 84 U | 83 U | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | 199 U | 193 U | 203 U | 4050 U | 199 U | 194 UJ | 204 U | 200 U | NA | NA |
| CARBAZOLE | 32000 | NC | | 199 U | 193 U | 448 | 4640 | 199 U | 123 J | 204 U | 32 J | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 117 U | 114 U | 140 | 1650 J | 117 U | 27 J | 120 U | 118 U | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | 399 U | 386 U | 405 U | 8110 U | 399 U | 388 UJ | 408 U | 401 U | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 199 U | 193 U | 37 J | 4050 U | 199 U | 194 UJ | 204 U | 200 U | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | 199 U | 193 U | 203 U | 4050 U | 199 U | 194 UJ | 204 U | 200 U | NA | NA |
| PHENOL | 2300000 | 1800000 | N | 399 U | 386 U | 405 U | 8110 U | 399 U | 388 UJ | 408 U | 401 U | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 82.1 U | 79.5 U | 36.5 J | 1670 U | 82.1 U | 79.9 UJ | 83.9 U | 82.5 U | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 82 U | 80 U | 32 J | 1670 U | 82 U | 80 UJ | 84 U | 83 U | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 82 U | 80 U | 350 | 3620 | 82 U | 79 J | 84 U | 83 U | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | 82 U | 80 U | 49 J | 1670 U | 82 U | 80 UJ | 84 U | 83 U | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 82 U | 41 J | 1000 | 9420 | 82 U | 256 J | 84 U | 66 J | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 145 | 313 | 4262 | 38098 | 82 U | 1883 | 123 | 369 | 1.5 U | 19000 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 104 | 313 | 4262 | 38098 | 82 U | 1883 | 81 | 369 | 1.5 U | 19000 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 81 J | 209 | 2980 | 28700 | 82 U | 1260 J | 73 J | 239 | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 80 J | 212 | 3130 | 25600 | 82 U | 1310 J | 62 J | 258 | 1.5 U | 19000 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 83 | 229 | 4000 | 26700 | 82 U | 1520 J | 65 J | 250 | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | 59 J | 113 J | 650 J | 13200 J | 82 UJ | 662 J | 48 J | 175 J | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 90 | 241 | 2930 | 23000 | 82 U | 1360 J | 84 U | 244 | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 82 J | 229 | 2930 | 28400 | 82 U | 1250 J | 69 J | 269 | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 82 UJ | 41 J | 307 | 5250 | 82 U | 206 J | 84 UJ | 46 J | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | 173 | 395 | 8780 | 63200 | 82 U | 2720 J | 163 | 600 | NA | NA |
| FLUORENE | 310000 | 230000 | N | 82 U | 80 U | 331 | 3580 | 82 U | 68 J | 84 U | 83 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 62 J | 138 J | 948 | 14500 | 82 U | 745 J | 51 J | 135 J | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 82 U | 80 U | 57 J | 1670 U | 82 U | 80 UJ | 84 U | 83 U | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | 47 J | 163 | 3450 | 36100 | 82 U | 987 J | 81 J | 265 | NA | NA |
| PYRENE | 230000 | 170000 | N | 110 | 286 | 4530 | 45200 | 28 J | 1740 J | 113 | 371 | NA | NA |
| TOTAL PAHS | NC | NC | | 867 | 2297 | 36454 | 326470 | 28 | 14163 | 725 | 2918 | 0 U | 19000 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | NA | 96 | NA | 39 U | NA | 37 U | NA | 38 U | 39 U | 37 U |
| AROCLOR-1260 | 320 | 220 | C | NA | 73 J | NA | 63 | NA | 95 | NA | 29 J | 39 U | 34 J |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | 169 | NA | 63 | NA | 95 | NA | 29 | 0 U | 34 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | 1 | NA | 2 L | NA | 1 L | NA | 1 L | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | 3 B | NA | 5 | NA | 6 | NA | 3 B | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | 79 | NA | 207 | NA | 103 | NA | 64 | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | 0.8 | NA | 1.4 | NA | 1.7 | NA | 1.1 | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | 0.7 | NA | 3 | NA | 0.7 | NA | 0.3 B | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | 16.4 | NA | 31.8 | NA | 26.1 | NA | 15.3 | NA | NA |
| COBALT | NC | 2.3 | N | NA | 6 | NA | 11.7 | NA | 6.6 | NA | 5.4 | NA | NA |
| COPPER | 310 | 310 | N | NA | 16 | NA | 50 | NA | 15 | NA | 12 | NA | NA |
| LEAD | 400 | 400 | | NA | 91 | NA | 447 | NA | 56 | NA | 64 | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | 0.07 | NA | 0.49 | NA | 0.18 | NA | 0.11 | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | 0.6 U | NA | 1 B | NA | 1 B | NA | 0.6 B | NA | NA |
| NICKEL | 160 | 150 | N | NA | 9 | NA | 14 | NA | 13 | NA | 8 B | NA | NA |
| SELENIUM | 39 | 39 | N | NA | 3 | NA | 2 U | NA | 3 | NA | 2 U | NA | NA |
| SILVER | 39 | 39 | N | NA | 0.06 B | NA | 0.3 B | NA | 0.06 U | NA | 0.06 U | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | 21.6 | NA | 35.8 | NA | 42.8 | NA | 26.2 | NA | NA |
| ZINC | 2300 | 2300 | N | NA | 287 | NA | 289 | NA | 74 | NA | 51 | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 85.6 | 88 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | 3.6 | NA | 0.51 | NA | 0.64 | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-14**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-384 | SB-385 | SB-386 | SB-387 | SB-388 | SB-389 | SB-390 | SB-391 | SB-392 | SB-393 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-384-0102 | SB-385-0102 | SB-386-0102 | SB-387-0102 | SB-388-0102 | SB-389-0102 | SB-390-0102 | SB-391-0102 | SB-392-0102 | SB-393-0102 |
| SAMPLE DATE | | | | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NC | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.4 U | 1.4 U | 12 | 380 | 220 | 9.9 | 1.6 U | 1.4 U | 450 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.4 U | 1.4 U | 12 | 380 | 220 | 9.9 | 1.6 U | 1.4 U | 450 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.4 U | 1.4 U | 12 J | 380 | 220 J | 9.9 J | 1.6 U | 1.4 U | 450 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 12 | 380 | 220 | 9.9 | 0 U | 0 U | 450 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | 38 U | 36 U | 37 U | 35 U | 35 U | 36 U | 38 U | 39 U | 37 U | 35 U |
| AROCLOR-1260 | 320 | 220 | C | 38 U | 36 U | 37 U | 35 U | 35 U | 36 U | 38 U | 39 U | 37 U | 22 J |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 22 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 87 | 92 | 90 | 93.7 | 93.6 | 91.2 | 87 | 83.6 | 90.3 | 94.6 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-14**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-394 | SB-395 | SB-396 | SB-397 | SB-398 | SB-399 | SB-400 | SB-401 | SB-402 | SB-403 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-394-0102 | SB-395-0102 | SB-396-0102 | SB-397-0102 | SB-398-0102 | SB-399-0102 | SB-400-0102 | SB-401-0102 | SB-402-0102 | SB-403-0102 |
| SAMPLE DATE | | | | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NC | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 140 | 1.6 U | 80 | 80 | 29 | 1.4 U | 9.1 | 25 | 37 | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 140 | 1.6 U | 80 | 80 | 29 | 1.4 U | 9.1 | 25 | 37 | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 140 J | 1.6 U | 80 J | 80 J | 29 J | 1.4 U | 9.1 J | 25 J | 37 J | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 140 | 0 U | 80 | 80 | 29 | 0 U | 9.1 | 25 | 37 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | 37 U | 40 U | 39 U | 35 U | 36 U | 36 U | 36 U | 41 U | 41 U | 37 U |
| AROCLOR-1260 | 320 | 220 | C | 37 U | 40 U | 39 U | 35 U | 36 U | 36 U | 36 U | 41 U | 41 U | 37 U |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 90 | 83.2 | 85.5 | 95.1 | 90.9 | 90.8 | 91.6 | 79.7 | 79.9 | 88.6 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-14**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-404<br>SB-404-0102<br>20071016<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>2 | SB-405<br>SB-405-0102<br>20071016<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>2 | SB-406<br>SB-406-0102<br>20071016<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>2 | SB-407<br>SB-407-0102<br>20071016<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>2 | SB-408<br>SB-408-0102<br>20071016<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>2 | SB-409<br>SB-409-0102<br>20071016<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>2 | SB-489<br>SB-489-0102<br>20071016<br>NORMAL<br>SO<br>NORMAL<br>SB<br>1<br>2 |
|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NC | 610000 | N | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NC | 260000 | C | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 36 | 510 | 130 | 87 | 39 | 9.6 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 36 | 510 | 130 | 87 | 39 | 9.6 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 36 J | 510 | 130 J | 87 J | 39 J | 9.6 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 36 | 510 | 130 | 87 | 39 | 9.6 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[6] | 38 U | 36 U | 38 U | 42 U | 40 U | 43 U | 41 U |
| AROCLOR-1260 | 320 | 220 | C | 38 U | 36 U | 38 U | 42 U | 40 U | 43 U | 41 U |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 86.6 | 91.3 | 87.2 | 78.6 | 81.8 | 77.6 | 79.8 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA |

**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - The value for acenaphthene is used as a surrogate for acenaphthylene.
5 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
6 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
7 - The value is for PCB (total).
8 - The value is for polychlorinated biphenyls (high risk).
9 - The value is for trivalent chromium.
10 - The value is for mercury (inorganic/mercuric dichloride).
11 - The value is for mercuric chloride.
12 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-024A | SB-024A | SB-024A | SB-055 | SB-056 | SB-056 | SB-056 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-24ARE-3 | F-SB-24ARE-4 | F-SB-24ARE-5 | F-SB-55RE-10 | F-SB-56RE-10 | F-SB-56RE-3 | F-SB-56RE-4 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090918 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 10 | 10 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 5 | 10 | 10 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-024A | SB-024A | SB-024A | SB-055 | SB-056 | SB-056 | SB-056 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-24ARE-3 | F-SB-24ARE-4 | F-SB-24ARE-5 | F-SB-55RE-10 | F-SB-56RE-10 | F-SB-56RE-3 | F-SB-56RE-4 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090918 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 10 | 10 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 5 | 10 | 10 | 3 | 4 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | NA | NA | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | NA | NA | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | 1.4 U | 1.4 U | 1.3 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | 2 U | 2 U | 1.9 U | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-024A | SB-024A | SB-024A | SB-055 | SB-056 | SB-056 | SB-056 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-24ARE-3 | F-SB-24ARE-4 | F-SB-24ARE-5 | F-SB-55RE-10 | F-SB-56RE-10 | F-SB-56RE-3 | F-SB-56RE-4 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090918 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 10 | 10 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 5 | 10 | 10 | 3 | 4 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | 1 U | 1.1 U | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | 1.7 U | 1.8 U | 1.7 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.086 | 0.083 | 0.021 U | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-024A | SB-024A | SB-024A | SB-055 | SB-056 | SB-056 | SB-056 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-24ARE-3 | F-SB-24ARE-4 | F-SB-24ARE-5 | F-SB-55RE-10 | F-SB-56RE-10 | F-SB-56RE-3 | F-SB-56RE-4 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090918 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 10 | 10 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 5 | 10 | 10 | 3 | 4 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-056 | SB-056 | SB-056 | SB-056 | SB-056 | SB-265RE | SB-265RE | SB-266RE | SB-266RE | SB-267RE | SB-267RE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-56RE-5 | F-SB-56RE-6 | F-SB-56RE-7 | F-SB-56RE-8 | F-SB-56RE-9 | F-SB-265RE-3 | F-SB-265RE-4 | F-SB-266RE-3 | F-SB-266RE-4 | F-SB-267RE-3 | F-SB-267RE-4 |
| SAMPLE DATE | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-056 | SB-056 | SB-056 | SB-056 | SB-056 | SB-265RE | SB-265RE | SB-266RE | SB-266RE | SB-267RE | SB-267RE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-56RE-5 | F-SB-56RE-6 | F-SB-56RE-7 | F-SB-56RE-8 | F-SB-56RE-9 | F-SB-265RE-3 | F-SB-265RE-4 | F-SB-266RE-3 | F-SB-266RE-4 | F-SB-267RE-3 | F-SB-267RE-4 |
| SAMPLE DATE | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 36 | 1.7 U | 2.5 | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 36 | 1.7 U | 0.87 | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 24 | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 26 | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 41 | 1.5 U | 8.7 | 1.4 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2.1 U | 2 U | 2 U | 2 U | 14 | 2.2 U | 2 U | 1.9 U | 1.9 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-056 | SB-056 | SB-056 | SB-056 | SB-056 | SB-265RE | SB-265RE | SB-266RE | SB-266RE | SB-267RE | SB-267RE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-56RE-5 | F-SB-56RE-6 | F-SB-56RE-7 | F-SB-56RE-8 | F-SB-56RE-9 | F-SB-265RE-3 | F-SB-265RE-4 | F-SB-266RE-3 | F-SB-266RE-4 | F-SB-267RE-3 | F-SB-267RE-4 |
| SAMPLE DATE | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 1 U | 1 U | 28 | 1.1 U | 1.1 U | 1 U | 1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.9 U | 1.9 U | 1.8 U | 1.7 U | 1.7 U | 29 | 1.9 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 162 | 0 U | 8.7 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | 25 U | 24 U | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | 19 U | 18 U | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | 17 U | 16 U | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | 15 U | 15 U | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | 20 U | 19 U | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | 20 U | 19 U | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | 20 U | 19 U | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | 0 U | 0 U | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-056 | SB-056 | SB-056 | SB-056 | SB-056 | SB-265RE | SB-265RE | SB-266RE | SB-266RE | SB-267RE | SB-267RE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-56RE-5 | F-SB-56RE-6 | F-SB-56RE-7 | F-SB-56RE-8 | F-SB-56RE-9 | F-SB-265RE-3 | F-SB-265RE-4 | F-SB-266RE-3 | F-SB-266RE-4 | F-SB-267RE-3 | F-SB-267RE-4 |
| SAMPLE DATE | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-269RE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-268RE-10 | F-SB-268RE-3 | F-SB-268RE-4 | F-SB-268RE-5 | F-SB-268RE-6 | F-SB-268RE-7 | F-SB-268RE-7-AVG | F-SB-268RE-7-D | F-SB-268RE-8 | F-SB-268RE-9 | F-SB-269RE-3 |
| SAMPLE DATE | 20091006 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20091006 | 20091006 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-269RE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-268RE-10 | F-SB-268RE-3 | F-SB-268RE-4 | F-SB-268RE-5 | F-SB-268RE-6 | F-SB-268RE-7 | F-SB-268RE-7-AVG | F-SB-268RE-7-D | F-SB-268RE-8 | F-SB-268RE-9 | F-SB-269RE-3 |
| SAMPLE DATE | 20091006 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20091006 | 20091006 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 441 | 7604 | 745 | 298 | 1376 | 709 | 1876 | 3043 | 4.8 | 116 | 1.6 U |
| BAP EQUIVALENT-POS | 441 | 7604 | 745 | 298 | 1376 | 709 | 1876 | 3043 | 4.0 | 116 | 1.6 U |
| BENZO(A)ANTHRACENE | 340 | 5700 | 550 | 220 | 1000 | 490 J | 1395 | 2300 J | 3.4 J | 87 | 1.1 U |
| BENZO(A)PYRENE | 280 | 5200 | 520 | 210 | 980 | 510 J | 1305 | 2100 J | 3.1 J | 75 | 1.6 U |
| BENZO(B)FLUORANTHENE | 450 | 6500 | 580 | 280 | 1200 | 590 J | 1595 | 2600 J | 3.2 J | 110 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 8.3 U | 2900 | 350 | 110 | 600 | 340 J | 720 | 1100 J | 1.6 U | 1.6 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-269RE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-268RE-10 | F-SB-268RE-3 | F-SB-268RE-4 | F-SB-268RE-5 | F-SB-268RE-6 | F-SB-268RE-7 | F-SB-268RE-7-AVG | F-SB-268RE-7-D | F-SB-268RE-8 | F-SB-268RE-9 | F-SB-269RE-3 |
| SAMPLE DATE | 20091006 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20091006 | 20091006 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 290 | 5400 | 480 | 210 | 850 | 500 J | 1250 | 2000 J | 2.9 J | 70 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 62 | 860 | 79 | 26 | 120 | 61 J | 190.5 | 320 J | 1.7 U | 16 | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 200 | 2900 | 290 | 110 | 490 | 260 J | 730 | 1200 J | 1.9 J | 49 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1622 | 29460 | 2849 | 1166 | 5240 | 2751 | 7185.5 | 11620 | 14.5 | 407 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-269RE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-268RE-10 | F-SB-268RE-3 | F-SB-268RE-4 | F-SB-268RE-5 | F-SB-268RE-6 | F-SB-268RE-7 | F-SB-268RE-7-AVG | F-SB-268RE-7-D | F-SB-268RE-8 | F-SB-268RE-9 | F-SB-269RE-3 |
| SAMPLE DATE | 20091006 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20091006 | 20091006 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-269RE | SB-270RE | SB-270RE | SB-383 | SB-383 | SB-388 | SB-388 | SB-388 | SB-389 | SB-389 | SB-390 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-269RE-4 | F-SB-270RE-3 | F-SB-270RE-4 | F-SB-383RE-3 | F-SB-383RE-4 | F-SB-388RE-3 | F-SB-388RE-4 | F-SB-388RE-5 | F-SB-389RE-3 | F-SB-389RE-4 | F-SB-390RE-6 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 5 | 3 | 4 | 6 |
| BOTTOM DEPTH | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 5 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-269RE | SB-270RE | SB-270RE | SB-383 | SB-383 | SB-388 | SB-388 | SB-388 | SB-389 | SB-389 | SB-390 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-269RE-4 | F-SB-270RE-3 | F-SB-270RE-4 | F-SB-383RE-3 | F-SB-383RE-4 | F-SB-388RE-3 | F-SB-388RE-4 | F-SB-388RE-5 | F-SB-389RE-3 | F-SB-389RE-4 | F-SB-390RE-6 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 5 | 3 | 4 | 6 |
| BOTTOM DEPTH | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 5 | 3 | 4 | 6 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.3 U | 1.3 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 1.9 U | 1.9 U | 2 U | 2 U | 2 U | 1.9 U | 1.9 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-269RE | SB-270RE | SB-270RE | SB-383 | SB-383 | SB-388 | SB-388 | SB-388 | SB-389 | SB-389 | SB-390 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-269RE-4 | F-SB-270RE-3 | F-SB-270RE-4 | F-SB-383RE-3 | F-SB-383RE-4 | F-SB-388RE-3 | F-SB-388RE-4 | F-SB-388RE-5 | F-SB-389RE-3 | F-SB-389RE-4 | F-SB-390RE-6 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 5 | 3 | 4 | 6 |
| BOTTOM DEPTH | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 5 | 3 | 4 | 6 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1 U | 1 U | 1.1 U | 1 U | 1 U | 1 U | 1 U | 1.1 U | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-269RE | SB-270RE | SB-270RE | SB-383 | SB-383 | SB-388 | SB-388 | SB-388 | SB-389 | SB-389 | SB-390 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-269RE-4 | F-SB-270RE-3 | F-SB-270RE-4 | F-SB-383RE-3 | F-SB-383RE-4 | F-SB-388RE-3 | F-SB-388RE-4 | F-SB-388RE-5 | F-SB-389RE-3 | F-SB-389RE-4 | F-SB-390RE-6 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 5 | 3 | 4 | 6 |
| BOTTOM DEPTH | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 5 | 3 | 4 | 6 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-390 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-397 | SB-397 | SB-405 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-390RE-7 | F-SB-393RE-3 | F-SB-393RE-4 | F-SB-393RE-5 | F-SB-393RE-5-AVG | F-SB-393RE-5-D | F-SB-393RE-6 | F-SB-393RE-7 | F-SB-397RE-6 | F-SB-397RE-7 | F-SB-405RE-10 |
| SAMPLE DATE | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 4 | 5 | 5 | 5 | 6 | 7 | 6 | 7 | 10 |
| BOTTOM DEPTH | 7 | 3 | 4 | 5 | 5 | 5 | 6 | 7 | 6 | 7 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-390 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-397 | SB-397 | SB-405 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-390RE-7 | F-SB-393RE-3 | F-SB-393RE-4 | F-SB-393RE-5 | F-SB-393RE-5-AVG | F-SB-393RE-5-D | F-SB-393RE-6 | F-SB-393RE-7 | F-SB-397RE-6 | F-SB-397RE-7 | F-SB-405RE-10 |
| SAMPLE DATE | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 4 | 5 | 5 | 5 | 6 | 7 | 6 | 7 | 10 |
| BOTTOM DEPTH | 7 | 3 | 4 | 5 | 5 | 5 | 6 | 7 | 6 | 7 | 10 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 329 | 1.5 U | 29 | 44 | 58 | 1.5 U | 1.5 U | 37 | 25 | 30 |
| BAP EQUIVALENT-POS | 1.5 U | 329 | 1.5 U | 28 | 43 | 58 | 1.5 U | 1.5 U | 36 | 24 | 29 |
| BENZO(A)ANTHRACENE | 1.1 U | 230 | 1.1 U | 21 J | 33 | 45 J | 1.1 U | 1.1 U | 27 | 18 | 31 |
| BENZO(A)PYRENE | 1.5 U | 230 | 1.5 U | 22 J | 33.5 | 45 J | 1.5 U | 1.5 U | 28 | 19 | 22 |
| BENZO(B)FLUORANTHENE | 1.4 U | 270 | 1.4 U | 29 J | 40.5 | 52 J | 1.4 U | 1.4 U | 34 | 21 | 30 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 120 | 2 U | 9.5 J | 19.25 | 29 J | 2 U | 1.9 U | 17 | 13 | 20 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-390 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-397 | SB-397 | SB-405 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-390RE-7 | F-SB-393RE-3 | F-SB-393RE-4 | F-SB-393RE-5 | F-SB-393RE-5-AVG | F-SB-393RE-5-D | F-SB-393RE-6 | F-SB-393RE-7 | F-SB-397RE-6 | F-SB-397RE-7 | F-SB-405RE-10 |
| SAMPLE DATE | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 4 | 5 | 5 | 5 | 6 | 7 | 6 | 7 | 10 |
| BOTTOM DEPTH | 7 | 3 | 4 | 5 | 5 | 5 | 6 | 7 | 6 | 7 | 10 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 250 | 1.1 U | 21 J | 33.5 | 46 J | 1.1 U | 1 U | 27 | 18 | 31 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 36 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.7 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 120 | 1.8 U | 13 J | 20 | 27 J | 1.8 U | 1.7 U | 15 | 10 | 11 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 1256 | 0 U | 115.5 | 179.75 | 244 | 0 U | 0 U | 148 | 99 | 145 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-390 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-397 | SB-397 | SB-405 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-390RE-7 | F-SB-393RE-3 | F-SB-393RE-4 | F-SB-393RE-5 | F-SB-393RE-5-AVG | F-SB-393RE-5-D | F-SB-393RE-6 | F-SB-393RE-7 | F-SB-397RE-6 | F-SB-397RE-7 | F-SB-405RE-10 |
| SAMPLE DATE | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 4 | 5 | 5 | 5 | 6 | 7 | 6 | 7 | 10 |
| BOTTOM DEPTH | 7 | 3 | 4 | 5 | 5 | 5 | 6 | 7 | 6 | 7 | 10 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-405 | SB-626 | SB-626 | SB-626 | SB-626C | SB-626D | SB-626D | SB-626D | SB-628 | SB-629 | SB-630 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-405RE-9 | F-SB-626-3 | F-SB-626-4 | F-SB-626-5 | F-SB-626C-3 | F-SB-626D-3 | F-SB-626D-3-AVG | F-SB-626D-3-D | F-SB-628-10 | F-SB-629-10 | F-SB-630-10 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090922 | 20091111 | 20091111 | 20091111 | 20091111 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 10 | 10 | 10 |
| BOTTOM DEPTH | 9 | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 10 | 10 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-405 | SB-626 | SB-626 | SB-626 | SB-626C | SB-626D | SB-626D | SB-626D | SB-628 | SB-629 | SB-630 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-405RE-9 | F-SB-626-3 | F-SB-626-4 | F-SB-626-5 | F-SB-626C-3 | F-SB-626D-3 | F-SB-626D-3-AVG | F-SB-626D-3-D | F-SB-628-10 | F-SB-629-10 | F-SB-630-10 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090922 | 20091111 | 20091111 | 20091111 | 20091111 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 10 | 10 | 10 |
| BOTTOM DEPTH | 9 | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 10 | 10 | 10 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2582 | NA | NA | NA | NA | NA | NA | NA | 1.6 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 2577 | NA | NA | NA | NA | NA | NA | NA | 1.6 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 3000 | NA | NA | NA | NA | NA | NA | NA | 1.2 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 1900 | NA | NA | NA | NA | NA | NA | NA | 1.6 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 2900 | NA | NA | NA | NA | NA | NA | NA | 1.5 U | 1.5 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1300 | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.1 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-405 | SB-626 | SB-626 | SB-626 | SB-626C | SB-626D | SB-626D | SB-626D | SB-628 | SB-629 | SB-630 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-405RE-9 | F-SB-626-3 | F-SB-626-4 | F-SB-626-5 | F-SB-626C-3 | F-SB-626D-3 | F-SB-626D-3-AVG | F-SB-626D-3-D | F-SB-628-10 | F-SB-629-10 | F-SB-630-10 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090922 | 20091111 | 20091111 | 20091111 | 20091111 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 10 | 10 | 10 |
| BOTTOM DEPTH | 9 | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 10 | 10 | 10 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 4400 | NA | NA | NA | NA | NA | NA | NA | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 8.2 U | NA | NA | NA | NA | NA | NA | NA | 1.6 U | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 700 | NA | NA | NA | NA | NA | NA | NA | 1.9 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 14200 | NA | NA | NA | NA | NA | NA | NA | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | 0.6 | 0.5 | 0.019 U | 0.13 | 1 | 0.86 | 0.72 | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-405 | SB-626 | SB-626 | SB-626 | SB-626C | SB-626D | SB-626D | SB-626D | SB-628 | SB-629 | SB-630 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-405RE-9 | F-SB-626-3 | F-SB-626-4 | F-SB-626-5 | F-SB-626C-3 | F-SB-626D-3 | F-SB-626D-3-AVG | F-SB-626D-3-D | F-SB-628-10 | F-SB-629-10 | F-SB-630-10 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090922 | 20091111 | 20091111 | 20091111 | 20091111 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 10 | 10 | 10 |
| BOTTOM DEPTH | 9 | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 10 | 10 | 10 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-631 | SB-632 | SB-632 | SB-633 | SB-633 | SB-634 | SB-634 | SB-635 | SB-635 | SB-635 | SB-635 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-631-10 | F-SB-632-10 | F-SB-632-9 | F-SB-633-10 | F-SB-633-9 | F-SB-634-10 | F-SB-634-9 | F-SB-635-10 | F-SB-635-10-AVG | F-SB-635-10-D | F-SB-635-9 |
| SAMPLE DATE | 20090918 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 9 | 10 | 9 | 10 | 9 | 10 | 10 | 10 | 9 |
| BOTTOM DEPTH | 10 | 10 | 9 | 10 | 9 | 10 | 9 | 10 | 10 | 10 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-631 | SB-632 | SB-632 | SB-633 | SB-633 | SB-634 | SB-634 | SB-635 | SB-635 | SB-635 | SB-635 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-631-10 | F-SB-632-10 | F-SB-632-9 | F-SB-633-10 | F-SB-633-9 | F-SB-634-10 | F-SB-634-9 | F-SB-635-10 | F-SB-635-10-AVG | F-SB-635-10-D | F-SB-635-9 |
| SAMPLE DATE | 20090918 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 9 | 10 | 9 | 10 | 9 | 10 | 10 | 10 | 9 |
| BOTTOM DEPTH | 10 | 10 | 9 | 10 | 9 | 10 | 9 | 10 | 10 | 10 | 9 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 65 | 2.7 | 1.7 U | 1.6 U | 1.8 U | 3.0 | 1.5 U | 17 | 34 | 276 |
| BAP EQUIVALENT-POS | 1.5 U | 64 | 1 | 1.7 U | 1.6 U | 1.8 U | 1.1 | 1.5 U | 17 | 33 | 275 |
| BENZO(A)ANTHRACENE | 1.1 U | 79 | 1.1 U | 1.2 U | 1.2 U | 1.3 U | 1.3 U | 1.1 UJ | 16 | 31 J | 220 |
| BENZO(A)PYRENE | 1.5 U | 40 | 1.5 U | 1.7 U | 1.6 U | 1.8 U | 1.7 U | 1.5 UJ | 13 | 25 J | 210 |
| BENZO(B)FLUORANTHENE | 1.4 U | 120 | 10 | 1.5 U | 1.5 U | 1.7 U | 11 | 1.4 UJ | 17 | 34 J | 310 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 59 | 2 U | 2.2 U | 2.1 U | 2.4 U | 2.3 U | 2 UJ | 7 | 13 J | 150 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-631 | SB-632 | SB-632 | SB-633 | SB-633 | SB-634 | SB-634 | SB-635 | SB-635 | SB-635 | SB-635 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-631-10 | F-SB-632-10 | F-SB-632-9 | F-SB-633-10 | F-SB-633-9 | F-SB-634-10 | F-SB-634-9 | F-SB-635-10 | F-SB-635-10-AVG | F-SB-635-10-D | F-SB-635-9 |
| SAMPLE DATE | 20090918 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 9 | 10 | 9 | 10 | 9 | 10 | 10 | 10 | 9 |
| BOTTOM DEPTH | 10 | 10 | 9 | 10 | 9 | 10 | 9 | 10 | 10 | 10 | 9 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 110 | 1.1 U | 1.2 U | 1.1 U | 1.3 U | 1.2 U | 1.1 UJ | 15.275 | 30 J | 310 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.8 U | 1.7 U | 1.5 UJ | 1.55 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 34 | 1.8 U | 1.9 U | 1.9 U | 2.1 U | 2 U | 1.8 UJ | 6.95 | 13 J | 100 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 442 | 10 | 0 U | 0 U | 0 U | 11 | 0 U | 73 | 146 | 1300 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-631 | SB-632 | SB-632 | SB-633 | SB-633 | SB-634 | SB-634 | SB-635 | SB-635 | SB-635 | SB-635 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-631-10 | F-SB-632-10 | F-SB-632-9 | F-SB-633-10 | F-SB-633-9 | F-SB-634-10 | F-SB-634-9 | F-SB-635-10 | F-SB-635-10-AVG | F-SB-635-10-D | F-SB-635-9 |
| SAMPLE DATE | 20090918 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 9 | 10 | 9 | 10 | 9 | 10 | 10 | 10 | 9 |
| BOTTOM DEPTH | 10 | 10 | 9 | 10 | 9 | 10 | 9 | 10 | 10 | 10 | 9 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-635C | SB-635C | SB-635C | SB-635C | SB-635C | SB-635D | SB-635D | SB-635D | SB-636 | SB-636 | SB-636 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-635C-3 | F-SB-635C-5 | F-SB-635C-7 | F-SB-635C-7-AVG | F-SB-635C-7-D | F-SB-635D-5 | F-SB-635D-7 | F-SB-635D-9 | F-SB-636-3 | F-SB-636-3-AVG | F-SB-636-3-D |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091110 | 20091110 | 20091110 | 20091007 | 20091007 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 7 | 7 | 5 | 7 | 9 | 3 | 3 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 7 | 7 | 5 | 7 | 9 | 3 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-635C | SB-635C | SB-635C | SB-635C | SB-635C | SB-635D | SB-635D | SB-635D | SB-636 | SB-636 | SB-636 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-635C-3 | F-SB-635C-5 | F-SB-635C-7 | F-SB-635C-7-AVG | F-SB-635C-7-D | F-SB-635D-5 | F-SB-635D-7 | F-SB-635D-9 | F-SB-636-3 | F-SB-636-3-AVG | F-SB-636-3-D |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091110 | 20091110 | 20091110 | 20091007 | 20091007 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 7 | 7 | 5 | 7 | 9 | 3 | 3 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 7 | 7 | 5 | 7 | 9 | 3 | 3 | 3 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 26 | 28 | 52 | 135 | 219 | 1.6 U | 1.6 U | 1.6 U | 116 | 101 | 86 |
| BAP EQUIVALENT-POS | 25 | 27 | 51 | 135 | 219 | 1.6 U | 1.6 U | 1.6 U | 116 | 101 | 86 |
| BENZO(A)ANTHRACENE | 18 | 18 | 55 J | 122.5 | 190 J | 1.1 U | 1.2 U | 1.2 U | 65 J | 51.5 | 38 J |
| BENZO(A)PYRENE | 20 | 21 | 36 J | 88 | 140 J | 1.6 U | 1.6 U | 1.6 U | 77 | 65 | 53 |
| BENZO(B)FLUORANTHENE | 21 | 26 | 75 J | 187.5 | 300 J | 1.4 U | 1.5 U | 1.5 U | 91 | 85 | 79 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 14 | 12 | 24 J | 59 | 94 J | 2 U | 2.1 U | 2.1 U | 40 J | 30 | 20 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-635C | SB-635C | SB-635C | SB-635C | SB-635C | SB-635D | SB-635D | SB-635D | SB-636 | SB-636 | SB-636 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-635C-3 | F-SB-635C-5 | F-SB-635C-7 | F-SB-635C-7-AVG | F-SB-635C-7-D | F-SB-635D-5 | F-SB-635D-7 | F-SB-635D-9 | F-SB-636-3 | F-SB-636-3-AVG | F-SB-636-3-D |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091110 | 20091110 | 20091110 | 20091007 | 20091007 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 7 | 7 | 5 | 7 | 9 | 3 | 3 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 7 | 7 | 5 | 7 | 9 | 3 | 3 | 3 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 20 | 22 | 66 J | 168 | 270 J | 1.1 U | 1.1 U | 1.1 U | 100 J | 76 | 52 J |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.6 U | 11.4 | 22 | 1.6 U | 1.6 U | 1.6 U | 17 | 17 | 17 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 14 | 13 | 19 J | 41.5 | 64 J | 1.8 U | 1.8 U | 1.9 U | 57 | 51 | 45 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 107 | 112 | 275 | 677.5 | 1080 | 0 U | 0 U | 0 U | 447 | 375.5 | 304 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | 27 U | 27 U | 27 U |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | 21 U | 21 U | 21 U |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | 18 U | 18 U | 18 U |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | 17 U | 17 U | 17 U |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | 22 U | 22 U | 22 U |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | 22 U | 22 U | 22 U |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | 22 U | 22 U | 22 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-635C | SB-635C | SB-635C | SB-635C | SB-635C | SB-635D | SB-635D | SB-635D | SB-636 | SB-636 | SB-636 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-635C-3 | F-SB-635C-5 | F-SB-635C-7 | F-SB-635C-7-AVG | F-SB-635C-7-D | F-SB-635D-5 | F-SB-635D-7 | F-SB-635D-9 | F-SB-636-3 | F-SB-636-3-AVG | F-SB-636-3-D |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091110 | 20091110 | 20091110 | 20091007 | 20091007 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 7 | 7 | 5 | 7 | 9 | 3 | 3 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 7 | 7 | 5 | 7 | 9 | 3 | 3 | 3 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-636 | SB-636 | SB-636 | SB-636A | SB-636A | SB-636A | SB-636A | SB-636A | SB-636B | SB-636B | SB-636B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636-5 | F-SB-636-7 | F-SB-636-9 | F-SB-636A-3 | F-SB-636A-5 | F-SB-636A-7 | F-SB-636A-7-AVG | F-SB-636A-7-D | F-SB-636B-3 | F-SB-636B-5 | F-SB-636B-7 |
| SAMPLE DATE | 20091007 | 20091019 | 20091019 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-636 | SB-636 | SB-636 | SB-636A | SB-636A | SB-636A | SB-636A | SB-636A | SB-636B | SB-636B | SB-636B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636-5 | F-SB-636-7 | F-SB-636-9 | F-SB-636A-3 | F-SB-636A-5 | F-SB-636A-7 | F-SB-636A-7-AVG | F-SB-636A-7-D | F-SB-636B-3 | F-SB-636B-5 | F-SB-636B-7 |
| SAMPLE DATE | 20091007 | 20091019 | 20091019 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 3 | 5 | 7 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 315 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 315 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 230 | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 220 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 290 | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 120 | 2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 2 U | 2.1 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-636 | SB-636 | SB-636 | SB-636A | SB-636A | SB-636A | SB-636A | SB-636A | SB-636B | SB-636B | SB-636B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636-5 | F-SB-636-7 | F-SB-636-9 | F-SB-636A-3 | F-SB-636A-5 | F-SB-636A-7 | F-SB-636A-7-AVG | F-SB-636A-7-D | F-SB-636B-3 | F-SB-636B-5 | F-SB-636B-7 |
| SAMPLE DATE | 20091007 | 20091019 | 20091019 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 3 | 5 | 7 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 210 | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 29 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 130 | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1229 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 16 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 15 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 19 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 19 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 27 J | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 27 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-636 | SB-636 | SB-636 | SB-636A | SB-636A | SB-636A | SB-636A | SB-636A | SB-636B | SB-636B | SB-636B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636-5 | F-SB-636-7 | F-SB-636-9 | F-SB-636A-3 | F-SB-636A-5 | F-SB-636A-7 | F-SB-636A-7-AVG | F-SB-636A-7-D | F-SB-636B-3 | F-SB-636B-5 | F-SB-636B-7 |
| SAMPLE DATE | 20091007 | 20091019 | 20091019 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 3 | 5 | 7 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-636C | SB-636C | SB-636C | SB-636D | SB-636D | SB-636D | SB-637 | SB-637 | SB-637B | SB-637B | SB-637B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636C-3 | F-SB-636C-5 | F-SB-636C-7 | F-SB-636D-3 | F-SB-636D-5 | F-SB-636D-7 | F-SB-637-3 | F-SB-637-5 | F-SB-637B-3 | F-SB-637B-5 | F-SB-637B-5-AVG |
| SAMPLE DATE | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091007 | 20091007 | 20091106 | 20091106 | 20091106 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-636C | SB-636C | SB-636C | SB-636D | SB-636D | SB-636D | SB-637 | SB-637 | SB-637B | SB-637B | SB-637B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636C-3 | F-SB-636C-5 | F-SB-636C-7 | F-SB-636D-3 | F-SB-636D-5 | F-SB-636D-7 | F-SB-637-3 | F-SB-637-5 | F-SB-637B-3 | F-SB-637B-5 | F-SB-637B-5-AVG |
| SAMPLE DATE | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091007 | 20091007 | 20091106 | 20091106 | 20091106 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 5 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 390 | 38 | 1.5 U | 34 | 1.5 U | 1.6 U | 3.7 | 68 | 1.5 U | 1.6 U | 1.55 U |
| BAP EQUIVALENT-POS | 390 | 38 | 1.5 U | 33 | 1.5 U | 1.6 U | 2.0 | 67 | 1.5 U | 1.6 U | 1.55 U |
| BENZO(A)ANTHRACENE | 310 | 24 | 1.1 U | 29 | 1.1 U | 1.1 U | 8.9 | 54 | 1.1 U | 1.2 U | 1.15 U |
| BENZO(A)PYRENE | 260 | 30 | 1.5 U | 25 | 1.5 U | 1.6 U | 1.6 U | 51 | 1.5 U | 1.6 U | 1.55 U |
| BENZO(B)FLUORANTHENE | 350 | 29 | 1.4 U | 35 | 1.4 U | 1.5 U | 11 | 79 | 1.4 U | 1.5 U | 1.45 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 150 | 14 | 1.9 U | 8.6 | 2 U | 2.1 U | 2.1 U | 28 | 2 U | 2.1 U | 2.05 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-636C | SB-636C | SB-636C | SB-636D | SB-636D | SB-636D | SB-637 | SB-637 | SB-637B | SB-637B | SB-637B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636C-3 | F-SB-636C-5 | F-SB-636C-7 | F-SB-636D-3 | F-SB-636D-5 | F-SB-636D-7 | F-SB-637-3 | F-SB-637-5 | F-SB-637B-3 | F-SB-637B-5 | F-SB-637B-5-AVG |
| SAMPLE DATE | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091007 | 20091007 | 20091106 | 20091106 | 20091106 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 270 | 22 | 1 U | 25 | 1 U | 1.1 U | 11 | 70 | 1 U | 1.1 U | 1.05 U |
| DIBENZO(A,H)ANTHRACENE | 48 | 1.5 U | 1.5 U | 1.7 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.55 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 140 | 22 | 1.7 U | 12 | 1.7 U | 1.8 U | 1.8 U | 27 | 1.7 U | 1.8 U | 1.75 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1528 | 141 | 0 U | 134.6 | 0 U | 0 U | 30.9 | 309 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | 26 U | 25 U | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | 19 U | 19 U | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | 17 U | 17 U | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | 16 U | 16 U | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | 21 U | 21 U | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | 21 U | 21 U | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | 21 U | 21 U | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | 0 U | 0 U | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-636C | SB-636C | SB-636C | SB-636D | SB-636D | SB-636D | SB-637 | SB-637 | SB-637B | SB-637B | SB-637B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636C-3 | F-SB-636C-5 | F-SB-636C-7 | F-SB-636D-3 | F-SB-636D-5 | F-SB-636D-7 | F-SB-637-3 | F-SB-637-5 | F-SB-637B-3 | F-SB-637B-5 | F-SB-637B-5-AVG |
| SAMPLE DATE | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091007 | 20091007 | 20091106 | 20091106 | 20091106 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 5 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-637B | SB-637C | SB-637C | SB-638 | SB-638 | SB-638 | SB-638 | SB-639 | SB-639 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-637B-5-D | F-SB-637C-3 | F-SB-637C-5 | F-SB-638-3 | F-SB-638-3-AVG | F-SB-638-3-D | F-SB-638-5 | F-SB-639-3 | F-SB-639-5 |
| SAMPLE DATE | 20091106 | 20091106 | 20091106 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 |
| BOTTOM DEPTH | 5 | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-637B | SB-637C | SB-637C | SB-638 | SB-638 | SB-638 | SB-638 | SB-639 | SB-639 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-637B-5-D | F-SB-637C-3 | F-SB-637C-5 | F-SB-638-3 | F-SB-638-3-AVG | F-SB-638-3-D | F-SB-638-5 | F-SB-639-3 | F-SB-639-5 |
| SAMPLE DATE | 20091106 | 20091106 | 20091106 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 |
| BOTTOM DEPTH | 5 | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 2.4 |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 0.78 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 7.8 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 1.9 U | 2 U | 2 U | 2 U | 2 U | 1.9 U | 2.1 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-637B | SB-637C | SB-637C | SB-638 | SB-638 | SB-638 | SB-638 | SB-639 | SB-639 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-637B-5-D | F-SB-637C-3 | F-SB-637C-5 | F-SB-638-3 | F-SB-638-3-AVG | F-SB-638-3-D | F-SB-638-5 | F-SB-639-3 | F-SB-639-5 |
| SAMPLE DATE | 20091106 | 20091106 | 20091106 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 |
| BOTTOM DEPTH | 5 | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1 U | 1 U | 1.1 U | 1.05 U | 1 U | 1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.7 U | 1.7 U | 1.8 U | 1.75 U | 1.7 U | 1.7 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 7.8 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | 25 U | 24.5 U | 24 U | 24 U | 26 U | 25 U |
| AROCLOR-1221 | NA | NA | NA | 19 U | 19 U | 19 U | 18 U | 20 U | 19 U |
| AROCLOR-1232 | NA | NA | NA | 16 U | 16 U | 16 U | 16 U | 17 U | 16 U |
| AROCLOR-1242 | NA | NA | NA | 15 U | 15 U | 15 U | 15 U | 16 U | 15 U |
| AROCLOR-1248 | NA | NA | NA | 20 U | 20 U | 20 U | 19 U | 21 U | 20 U |
| AROCLOR-1254 | NA | NA | NA | 20 U | 20 U | 20 U | 19 U | 21 U | 20 U |
| AROCLOR-1260 | NA | NA | NA | 20 U | 20 U | 20 U | 19 U | 21 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-637B | SB-637C | SB-637C | SB-638 | SB-638 | SB-638 | SB-638 | SB-639 | SB-639 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-637B-5-D | F-SB-637C-3 | F-SB-637C-5 | F-SB-638-3 | F-SB-638-3-AVG | F-SB-638-3-D | F-SB-638-5 | F-SB-639-3 | F-SB-639-5 |
| SAMPLE DATE | 20091106 | 20091106 | 20091106 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 |
| BOTTOM DEPTH | 5 | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-640 | SB-640 | SB-641 | SB-641 | SB-641A | SB-641B | SB-641C | SB-642 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-640-3 | F-SB-640-5 | F-SB-641-3 | F-SB-641-5 | F-SB-641A-3 | F-SB-641B-3 | F-SB-641C-3 | F-SB-642-3 |
| SAMPLE DATE | 20091007 | 20091007 | 20091006 | 20091006 | 20091104 | 20091104 | 20091104 | 20091019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 3 | 5 | 3 | 3 | 3 | 3 |
| BOTTOM DEPTH | 3 | 5 | 3 | 5 | 3 | 3 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-640 | SB-640 | SB-641 | SB-641 | SB-641A | SB-641B | SB-641C | SB-642 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-640-3 | F-SB-640-5 | F-SB-641-3 | F-SB-641-5 | F-SB-641A-3 | F-SB-641B-3 | F-SB-641C-3 | F-SB-642-3 |
| SAMPLE DATE | 20091007 | 20091007 | 20091006 | 20091006 | 20091104 | 20091104 | 20091104 | 20091019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 3 | 5 | 3 | 3 | 3 | 3 |
| BOTTOM DEPTH | 3 | 5 | 3 | 5 | 3 | 3 | 3 | 3 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 7.4 | 2.2 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 6.5 | 2.2 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 4.9 J | 1.3 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 4.7 J | 2.2 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 8.1 | 1.6 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 1.6 U | 1.6 U | 2 U | 1.9 U | 1.9 U | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 4.4 J | 1.4 U | 1.1 U | 1 U | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 5.4 J | 0.43 U | 1.8 U | 1.7 U | 1.7 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-640 | SB-640 | SB-641 | SB-641 | SB-641A | SB-641B | SB-641C | SB-642 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-640-3 | F-SB-640-5 | F-SB-641-3 | F-SB-641-5 | F-SB-641A-3 | F-SB-641B-3 | F-SB-641C-3 | F-SB-642-3 |
| SAMPLE DATE | 20091007 | 20091007 | 20091006 | 20091006 | 20091104 | 20091104 | 20091104 | 20091019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 3 | 5 | 3 | 3 | 3 | 3 |
| BOTTOM DEPTH | 3 | 5 | 3 | 5 | 3 | 3 | 3 | 3 |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 27.5 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 25 U | 25 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 19 U | 19 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 16 U | 17 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 15 U | 15 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 20 U | 20 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 20 U | 20 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 20 U | 20 U | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-640 | SB-640 | SB-641 | SB-641 | SB-641A | SB-641B | SB-641C | SB-642 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-640-3 | F-SB-640-5 | F-SB-641-3 | F-SB-641-5 | F-SB-641A-3 | F-SB-641B-3 | F-SB-641C-3 | F-SB-642-3 |
| SAMPLE DATE | 20091007 | 20091007 | 20091006 | 20091006 | 20091104 | 20091104 | 20091104 | 20091019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 3 | 5 | 3 | 3 | 3 | 3 |
| BOTTOM DEPTH | 3 | 5 | 3 | 5 | 3 | 3 | 3 | 3 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642 | SB-642 | SB-642 | SB-642 | SB-642 | SB-642A | SB-642A | SB-642A |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642-3-AVG | F-SB-642-3-D | F-SB-642-5 | F-SB-642-7 | F-SB-642-9 | F-SB-642A-3 | F-SB-642A-5 | F-SB-642A-7 |
| SAMPLE DATE | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091104 | 20091104 | 20091104 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642 | SB-642 | SB-642 | SB-642 | SB-642 | SB-642A | SB-642A | SB-642A |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642-3-AVG | F-SB-642-3-D | F-SB-642-5 | F-SB-642-7 | F-SB-642-9 | F-SB-642A-3 | F-SB-642A-5 | F-SB-642A-7 |
| SAMPLE DATE | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091104 | 20091104 | 20091104 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 28 | 1.5 U | 577 | 1.5 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 27 | 1.5 U | 577 | 1.5 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 19 | 1.1 U | 350 | 1.1 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 21 | 1.5 U | 410 | 1.5 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 26 | 1.4 U | 500 | 1.4 U | 1.5 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 1.9 U | 12 | 2 U | 220 | 2 U | 2.1 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1 U | 20 | 1.1 U | 350 | 1 U | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 54 | 1.5 U | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.7 U | 12 | 1.8 U | 250 | 1.7 U | 1.8 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642 | SB-642 | SB-642 | SB-642 | SB-642 | SB-642A | SB-642A | SB-642A |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642-3-AVG | F-SB-642-3-D | F-SB-642-5 | F-SB-642-7 | F-SB-642-9 | F-SB-642A-3 | F-SB-642A-5 | F-SB-642A-7 |
| SAMPLE DATE | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091104 | 20091104 | 20091104 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 110 | 0 U | 2134 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642 | SB-642 | SB-642 | SB-642 | SB-642 | SB-642A | SB-642A | SB-642A |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642-3-AVG | F-SB-642-3-D | F-SB-642-5 | F-SB-642-7 | F-SB-642-9 | F-SB-642A-3 | F-SB-642A-5 | F-SB-642A-7 |
| SAMPLE DATE | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091104 | 20091104 | 20091104 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642A | SB-642B | SB-642B | SB-642B | SB-642B | SB-642C | SB-642C | SB-642C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642A-9 | F-SB-642B-3 | F-SB-642B-5 | F-SB-642B-7 | F-SB-642B-9 | F-SB-642C-3 | F-SB-642C-5 | F-SB-642C-7 |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642A | SB-642B | SB-642B | SB-642B | SB-642B | SB-642C | SB-642C | SB-642C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642A-9 | F-SB-642B-3 | F-SB-642B-5 | F-SB-642B-7 | F-SB-642B-9 | F-SB-642C-3 | F-SB-642C-5 | F-SB-642C-7 |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 201 | 9.8 | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 201 | 8.9 | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 130 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 140 | 7.8 | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 180 | 11 | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 1.9 U | 89 | 2 U | 2 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1 U | 130 | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 21 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.7 U | 82 | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642A | SB-642B | SB-642B | SB-642B | SB-642B | SB-642C | SB-642C | SB-642C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642A-9 | F-SB-642B-3 | F-SB-642B-5 | F-SB-642B-7 | F-SB-642B-9 | F-SB-642C-3 | F-SB-642C-5 | F-SB-642C-7 |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 772 | 18.8 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642A | SB-642B | SB-642B | SB-642B | SB-642B | SB-642C | SB-642C | SB-642C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642A-9 | F-SB-642B-3 | F-SB-642B-5 | F-SB-642B-7 | F-SB-642B-9 | F-SB-642C-3 | F-SB-642C-5 | F-SB-642C-7 |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642C | SB-642C | SB-642C | SB-643 | SB-643 | SB-643 | SB-643 | SB-643B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642C-7-AVG | F-SB-642C-7-D | F-SB-642C-9 | F-SB-643-3 | F-SB-643-5 | F-SB-643-7 | F-SB-643-9 | F-SB-643B-3 |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091016 | 20091016 | 20091016 | 20091016 | 20091105 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642C | SB-642C | SB-642C | SB-643 | SB-643 | SB-643 | SB-643 | SB-643B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642C-7-AVG | F-SB-642C-7-D | F-SB-642C-9 | F-SB-643-3 | F-SB-643-5 | F-SB-643-7 | F-SB-643-9 | F-SB-643B-3 |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091016 | 20091016 | 20091016 | 20091016 | 20091105 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.55 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.55 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 1.55 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 2.1 U | 1.9 U | 2 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.55 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642C | SB-642C | SB-642C | SB-643 | SB-643 | SB-643 | SB-643 | SB-643B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642C-7-AVG | F-SB-642C-7-D | F-SB-642C-9 | F-SB-643-3 | F-SB-643-5 | F-SB-643-7 | F-SB-643-9 | F-SB-643B-3 |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091016 | 20091016 | 20091016 | 20091016 | 20091105 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-642C | SB-642C | SB-642C | SB-643 | SB-643 | SB-643 | SB-643 | SB-643B |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642C-7-AVG | F-SB-642C-7-D | F-SB-642C-9 | F-SB-643-3 | F-SB-643-5 | F-SB-643-7 | F-SB-643-9 | F-SB-643B-3 |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091016 | 20091016 | 20091016 | 20091016 | 20091105 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-643B | SB-643B | SB-643B | SB-643B | SB-643B | SB-643C | SB-643C | SB-643C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-643B-5 | F-SB-643B-7 | F-SB-643B-7-AVG | F-SB-643B-7-D | F-SB-643B-9 | F-SB-643C-3 | F-SB-643C-5 | F-SB-643C-7 |
| SAMPLE DATE | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-643B | SB-643B | SB-643B | SB-643B | SB-643B | SB-643C | SB-643C | SB-643C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-643B-5 | F-SB-643B-7 | F-SB-643B-7-AVG | F-SB-643B-7-D | F-SB-643B-9 | F-SB-643C-3 | F-SB-643C-5 | F-SB-643C-7 |
| SAMPLE DATE | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.6 U | 1.55 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.6 U | 1.55 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.2 U | 1.15 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.6 U | 1.55 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.5 U | 1.45 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2.1 U | 2.05 U | 2 U | 2 U | 2 U | 2.1 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.55 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.9 U | 1.85 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-643B | SB-643B | SB-643B | SB-643B | SB-643B | SB-643C | SB-643C | SB-643C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-643B-5 | F-SB-643B-7 | F-SB-643B-7-AVG | F-SB-643B-7-D | F-SB-643B-9 | F-SB-643C-3 | F-SB-643C-5 | F-SB-643C-7 |
| SAMPLE DATE | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-643B | SB-643B | SB-643B | SB-643B | SB-643B | SB-643C | SB-643C | SB-643C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-643B-5 | F-SB-643B-7 | F-SB-643B-7-AVG | F-SB-643B-7-D | F-SB-643B-9 | F-SB-643C-3 | F-SB-643C-5 | F-SB-643C-7 |
| SAMPLE DATE | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-643C | SB-644 | SB-644 | SB-644 | SB-644 | SB-644 | SB-644 | SB-645 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-643C-9 | F-SB-644-3 | F-SB-644-3-AVG | F-SB-644-3-D | F-SB-644-5 | F-SB-644-7 | F-SB-644-9 | F-SB-645-3 |
| SAMPLE DATE | 20091105 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091006 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-643C | SB-644 | SB-644 | SB-644 | SB-644 | SB-644 | SB-644 | SB-645 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-643C-9 | F-SB-644-3 | F-SB-644-3-AVG | F-SB-644-3-D | F-SB-644-5 | F-SB-644-7 | F-SB-644-9 | F-SB-645-3 |
| SAMPLE DATE | 20091105 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091006 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 89 | 1.6 U | 1.55 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 7.0 |
| BAP EQUIVALENT-POS | 89 | 1.6 U | 1.55 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 6.1 |
| BENZO(A)ANTHRACENE | 48 | 1.2 U | 1.15 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 4.9 J |
| BENZO(A)PYRENE | 51 | 1.6 U | 1.55 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 4.4 J |
| BENZO(B)FLUORANTHENE | 75 | 1.5 U | 1.45 U | 1.4 U | 1.4 U | 1.4 U | 1.6 U | 8.7 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 26 | 2.1 U | 2.05 U | 2 U | 2 U | 2 U | 2.2 U | 1.7 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 46 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 4.3 J |
| DIBENZO(A,H)ANTHRACENE | 23 | 1.6 U | 1.55 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 1.8 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 28 | 1.9 U | 1.85 U | 1.8 U | 1.8 U | 1.8 U | 1.9 U | 2.9 J |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-643C | SB-644 | SB-644 | SB-644 | SB-644 | SB-644 | SB-644 | SB-645 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-643C-9 | F-SB-644-3 | F-SB-644-3-AVG | F-SB-644-3-D | F-SB-644-5 | F-SB-644-7 | F-SB-644-9 | F-SB-645-3 |
| SAMPLE DATE | 20091105 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091006 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 297 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 25.2 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-643C | SB-644 | SB-644 | SB-644 | SB-644 | SB-644 | SB-644 | SB-645 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-643C-9 | F-SB-644-3 | F-SB-644-3-AVG | F-SB-644-3-D | F-SB-644-5 | F-SB-644-7 | F-SB-644-9 | F-SB-645-3 |
| SAMPLE DATE | 20091105 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091006 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-645 | SB-645 | SB-645A | SB-645B | SB-645B | SB-645B | SB-645C | SB-646 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-645-5 | F-SB-645-7 | F-SB-645A-3 | F-SB-645B-3 | F-SB-645B-3-AVG | F-SB-645B-3-D | F-SB-645C-3 | F-SB-646-3 |
| SAMPLE DATE | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 3 | 3 | 3 | 3 | 3 |
| BOTTOM DEPTH | 5 | 7 | 3 | 3 | 3 | 3 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-645 | SB-645 | SB-645A | SB-645B | SB-645B | SB-645B | SB-645C | SB-646 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-645-5 | F-SB-645-7 | F-SB-645A-3 | F-SB-645B-3 | F-SB-645B-3-AVG | F-SB-645B-3-D | F-SB-645C-3 | F-SB-646-3 |
| SAMPLE DATE | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 3 | 3 | 3 | 3 | 3 |
| BOTTOM DEPTH | 5 | 7 | 3 | 3 | 3 | 3 | 3 | 3 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2.3 | 2.3 | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.7 U | 2.4 U |
| BAP EQUIVALENT-POS | 0.27 | 0.19 | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.7 U | 2.4 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.3 U | 1.1 U | 1.1 U | 1.15 U | 1.2 U | 1.2 U | 1.4 U |
| BENZO(A)PYRENE | 2.2 U | 2.2 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.7 U | 2.4 U |
| BENZO(B)FLUORANTHENE | 1.7 J | 1.9 J | 1.4 U | 1.4 U | 1.45 U | 1.5 U | 1.5 U | 1.8 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.6 U | 1.7 U | 2 U | 2 U | 2.05 U | 2.1 U | 2.2 U | 1.8 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.4 U | 1.4 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.5 U |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.8 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.7 U | 1.9 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 0.96 J | 0.44 U | 1.8 U | 1.8 U | 1.85 U | 1.9 U | 1.9 U | 0.48 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-645 | SB-645 | SB-645A | SB-645B | SB-645B | SB-645B | SB-645C | SB-646 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-645-5 | F-SB-645-7 | F-SB-645A-3 | F-SB-645B-3 | F-SB-645B-3-AVG | F-SB-645B-3-D | F-SB-645C-3 | F-SB-646-3 |
| SAMPLE DATE | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 3 | 3 | 3 | 3 | 3 |
| BOTTOM DEPTH | 5 | 7 | 3 | 3 | 3 | 3 | 3 | 3 |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 2.66 | 1.9 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-645 | SB-645 | SB-645A | SB-645B | SB-645B | SB-645B | SB-645C | SB-646 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-645-5 | F-SB-645-7 | F-SB-645A-3 | F-SB-645B-3 | F-SB-645B-3-AVG | F-SB-645B-3-D | F-SB-645C-3 | F-SB-646-3 |
| SAMPLE DATE | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 3 | 3 | 3 | 3 | 3 |
| BOTTOM DEPTH | 5 | 7 | 3 | 3 | 3 | 3 | 3 | 3 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-646 | SB-646 | SB-646 | SB-646 | SB-647 | SB-647 | SB-647 | SB-647A |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-646-3-AVG | F-SB-646-3-D | F-SB-646-5 | F-SB-646-7 | F-SB-647-3 | F-SB-647-5 | F-SB-647-7 | F-SB-647A-3 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091105 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-646 | SB-646 | SB-646 | SB-646 | SB-647 | SB-647 | SB-647 | SB-647A |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-646-3-AVG | F-SB-646-3-D | F-SB-646-5 | F-SB-646-7 | F-SB-647-3 | F-SB-647-5 | F-SB-647-7 | F-SB-647A-3 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091105 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.3 U | 2.4 U | 2.1 U | 1.6 U |
| BAP EQUIVALENT-POS | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.3 U | 2.4 U | 2.1 U | 1.6 U |
| BENZO(A)ANTHRACENE | 1.3 U | 1.2 U | 1.3 U | 1.2 U | 1.3 U | 1.3 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.3 U | 2.4 U | 2.1 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.7 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 1.5 U | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.7 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.8 U | 1.6 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.45 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.3 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U | 1.9 U | 1.7 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 0.455 U | 0.43 U | 0.43 U | 0.43 U | 0.45 U | 0.46 U | 0.42 U | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-646 | SB-646 | SB-646 | SB-646 | SB-647 | SB-647 | SB-647 | SB-647A |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-646-3-AVG | F-SB-646-3-D | F-SB-646-5 | F-SB-646-7 | F-SB-647-3 | F-SB-647-5 | F-SB-647-7 | F-SB-647A-3 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091105 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-646 | SB-646 | SB-646 | SB-646 | SB-647 | SB-647 | SB-647 | SB-647A |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-646-3-AVG | F-SB-646-3-D | F-SB-646-5 | F-SB-646-7 | F-SB-647-3 | F-SB-647-5 | F-SB-647-7 | F-SB-647A-3 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091105 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-647B | SB-647C | SB-648 | SB-648 | SB-648 | SB-649 | SB-649 | SB-650 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-647B-3 | F-SB-647C-3 | F-SB-648-3 | F-SB-648-5 | F-SB-648-7 | F-SB-649-3 | F-SB-649-5 | F-SB-650-3 |
| SAMPLE DATE | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 3 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-647B | SB-647C | SB-648 | SB-648 | SB-648 | SB-649 | SB-649 | SB-650 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-647B-3 | F-SB-647C-3 | F-SB-648-3 | F-SB-648-5 | F-SB-648-7 | F-SB-649-3 | F-SB-649-5 | F-SB-650-3 |
| SAMPLE DATE | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 3 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 3 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 59 | 2.1 U | 2.2 U | 2.3 U | 2.2 U | 2.2 U | 2.1 U |
| BAP EQUIVALENT-POS | 1.6 U | 59 | 2.1 U | 2.2 U | 2.3 U | 2.2 U | 2.2 U | 2.1 U |
| BENZO(A)ANTHRACENE | 1.2 U | 26 | 1.2 U | 1.2 U | 1.3 U | 1.2 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 1.6 U | 30 | 2.1 U | 2.2 U | 2.3 U | 2.2 U | 2.2 U | 2.1 U |
| BENZO(B)FLUORANTHENE | 1.5 U | 54 | 1.5 U | 1.6 U | 1.7 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 15 | 1.6 U | 1.6 U | 1.7 U | 1.6 U | 1.6 U | 1.5 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 31 | 1.3 U | 1.4 U | 1.5 U | 1.3 U | 1.4 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 19 | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 18 | 0.41 U | 0.43 U | 0.46 U | 0.42 U | 0.43 U | 0.41 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-647B | SB-647C | SB-648 | SB-648 | SB-648 | SB-649 | SB-649 | SB-650 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-647B-3 | F-SB-647C-3 | F-SB-648-3 | F-SB-648-5 | F-SB-648-7 | F-SB-649-3 | F-SB-649-5 | F-SB-650-3 |
| SAMPLE DATE | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 3 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 3 |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 193 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-647B | SB-647C | SB-648 | SB-648 | SB-648 | SB-649 | SB-649 | SB-650 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-647B-3 | F-SB-647C-3 | F-SB-648-3 | F-SB-648-5 | F-SB-648-7 | F-SB-649-3 | F-SB-649-5 | F-SB-650-3 |
| SAMPLE DATE | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 3 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 3 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-650 | SB-650 | SB-650 | SB-651 | SB-651 | SB-652 | SB-652 | SB-652 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-650-3-AVG | F-SB-650-3-D | F-SB-650-5 | F-SB-651-3 | F-SB-651-5 | F-SB-652-3 | F-SB-652-5 | F-SB-652-7 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20091007 | 20091007 | 20091007 | 20091007 | 20091019 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-650 | SB-650 | SB-650 | SB-651 | SB-651 | SB-652 | SB-652 | SB-652 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-650-3-AVG | F-SB-650-3-D | F-SB-650-5 | F-SB-651-3 | F-SB-651-5 | F-SB-652-3 | F-SB-652-5 | F-SB-652-7 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20091007 | 20091007 | 20091007 | 20091007 | 20091019 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 7 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2.1 U | 2.1 U | 2.1 U | 1.5 U | 1.5 U | 33 | 391 | 1.5 U |
| BAP EQUIVALENT-POS | 2.1 U | 2.1 U | 2.1 U | 1.5 U | 1.5 U | 33 | 391 | 1.5 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 23 | 300 | 1.1 U |
| BENZO(A)PYRENE | 2.1 U | 2.1 U | 2.1 U | 1.5 U | 1.5 U | 25 | 260 | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.4 U | 35 | 330 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.55 U | 1.6 U | 1.6 U | 2 U | 2 U | 9 | 150 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 1.3 U | 1.1 U | 1 U | 25 | 270 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.65 U | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.6 U | 51 | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 0.41 U | 0.41 U | 0.42 U | 1.8 U | 1.7 U | 17 | 150 | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-650 | SB-650 | SB-650 | SB-651 | SB-651 | SB-652 | SB-652 | SB-652 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-650-3-AVG | F-SB-650-3-D | F-SB-650-5 | F-SB-651-3 | F-SB-651-5 | F-SB-652-3 | F-SB-652-5 | F-SB-652-7 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20091007 | 20091007 | 20091007 | 20091007 | 20091019 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 7 |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 134 | 1511 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | 25 U | 24 U | 25 U | 25 U | NA |
| AROCLOR-1221 | NA | NA | NA | 19 U | 19 U | 19 U | 19 U | NA |
| AROCLOR-1232 | NA | NA | NA | 16 U | 16 U | 17 U | 17 U | NA |
| AROCLOR-1242 | NA | NA | NA | 15 U | 15 U | 16 U | 15 U | NA |
| AROCLOR-1248 | NA | NA | NA | 20 U | 20 U | 20 U | 20 U | NA |
| AROCLOR-1254 | NA | NA | NA | 20 U | 20 U | 20 U | 20 U | NA |
| AROCLOR-1260 | NA | NA | NA | 20 U | 20 U | 20 U | 20 U | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | 0 U | 0 U | 0 U | 0 U | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-650 | SB-650 | SB-650 | SB-651 | SB-651 | SB-652 | SB-652 | SB-652 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-650-3-AVG | F-SB-650-3-D | F-SB-650-5 | F-SB-651-3 | F-SB-651-5 | F-SB-652-3 | F-SB-652-5 | F-SB-652-7 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20091007 | 20091007 | 20091007 | 20091007 | 20091019 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 7 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-652 | SB-652A | SB-652A | SB-652A | SB-652B | SB-652B | SB-652B | SB-652C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652-9 | F-SB-652A-3 | F-SB-652A-5 | F-SB-652A-7 | F-SB-652B-3 | F-SB-652B-5 | F-SB-652B-7 | F-SB-652C-3 |
| SAMPLE DATE | 20091019 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-652 | SB-652A | SB-652A | SB-652A | SB-652B | SB-652B | SB-652B | SB-652C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652-9 | F-SB-652A-3 | F-SB-652A-5 | F-SB-652A-7 | F-SB-652B-3 | F-SB-652B-5 | F-SB-652B-7 | F-SB-652C-3 |
| SAMPLE DATE | 20091019 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.3 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 2 U | 2 U | 2.1 U | 1.9 U | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 0.98 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.6 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-652 | SB-652A | SB-652A | SB-652A | SB-652B | SB-652B | SB-652B | SB-652C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652-9 | F-SB-652A-3 | F-SB-652A-5 | F-SB-652A-7 | F-SB-652B-3 | F-SB-652B-5 | F-SB-652B-7 | F-SB-652C-3 |
| SAMPLE DATE | 20091019 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-652 | SB-652A | SB-652A | SB-652A | SB-652B | SB-652B | SB-652B | SB-652C |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652-9 | F-SB-652A-3 | F-SB-652A-5 | F-SB-652A-7 | F-SB-652B-3 | F-SB-652B-5 | F-SB-652B-7 | F-SB-652C-3 |
| SAMPLE DATE | 20091019 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-652C | SB-652C | SB-797 | SB-797 | SB-798 | SB-798 | SB-798 | SB-798 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652C-5 | F-SB-652C-7 | F-SB-797-03 | F-SB-797-05 | F-SB-798-03 | F-SB-798-03-AVG | F-SB-798-03-D | F-SB-798-05 |
| SAMPLE DATE | 20091105 | 20091105 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 3 | 3 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 3 | 3 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-652C | SB-652C | SB-797 | SB-797 | SB-798 | SB-798 | SB-798 | SB-798 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652C-5 | F-SB-652C-7 | F-SB-797-03 | F-SB-797-05 | F-SB-798-03 | F-SB-798-03-AVG | F-SB-798-03-D | F-SB-798-05 |
| SAMPLE DATE | 20091105 | 20091105 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 3 | 3 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 3 | 3 | 3 | 5 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | 3.7 U | 4 U | 3.8 U | 3.65 U | 3.5 U | 3.6 U |
| 2-METHYLNAPHTHALENE | NA | NA | 3.7 U | 4 U | 3.8 U | 3.65 U | 3.5 U | 3.6 U |
| ACENAPHTHENE | NA | NA | 3.7 U | 15 | 3.8 U | 3.65 U | 3.5 U | 3.6 U |
| ACENAPHTHYLENE | NA | NA | 3.7 U | 4 U | 3.8 U | 3.65 U | 3.5 U | 3.6 U |
| ANTHRACENE | NA | NA | 3.7 U | 47 | 3.8 U | 3.65 U | 3.5 U | 3.6 U |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 3.7 U | 258 | 21 | 11 | 3.5 U | 3.6 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 3.7 U | 258 | 19 | 10 | 3.5 U | 3.6 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 3.7 U | 170 | 12 | 6.875 | 3.5 U | 3.6 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 3.7 U | 180 | 15 | 8.375 | 3.5 U | 3.6 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 3.7 U | 200 | 16 | 8.875 | 3.5 U | 3.6 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | 3.7 U | 120 | 11 | 6.375 | 3.5 U | 3.6 U |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 3.7 U | 120 | 10 | 5.875 | 3.5 U | 3.6 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 81 U | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.2 U | 170 | 14 | 7.3 | 1.2 U | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 3.7 U | 30 | 3.8 U | 3.65 U | 3.5 U | 3.6 U |
| FLUORANTHENE | NA | NA | 11 | 400 | 19 | 10.375 | 3.5 U | 3.6 U |
| FLUORENE | NA | NA | 3.7 U | 26 | 3.8 U | 3.65 U | 3.5 U | 3.6 U |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 3.7 U | 100 | 8.1 | 4.925 | 3.5 U | 3.6 U |
| NAPHTHALENE | NA | NA | 3.7 U | 4 U | 3.8 U | 3.65 U | 3.5 U | 3.6 U |

| LOCATION | SB-652C | SB-652C | SB-797 | SB-797 | SB-798 | SB-798 | SB-798 | SB-798 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652C-5 | F-SB-652C-7 | F-SB-797-03 | F-SB-797-05 | F-SB-798-03 | F-SB-798-03-AVG | F-SB-798-03-D | F-SB-798-05 |
| SAMPLE DATE | 20091105 | 20091105 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 3 | 3 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 3 | 3 | 3 | 5 |
| PHENANTHRENE | NA | NA | 3.7 U | 210 | 9.4 | 5.575 | 3.5 U | 3.6 U |
| PYRENE | NA | NA | 9.1 | 310 | 19 | 10.375 | 3.5 U | 3.6 U |
| TOTAL PAHS | 0 U | 0 U | 20.1 | 2098 | 133.5 | 66.75 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-652C | SB-652C | SB-797 | SB-797 | SB-798 | SB-798 | SB-798 | SB-798 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652C-5 | F-SB-652C-7 | F-SB-797-03 | F-SB-797-05 | F-SB-798-03 | F-SB-798-03-AVG | F-SB-798-03-D | F-SB-798-05 |
| SAMPLE DATE | 20091105 | 20091105 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 3 | 3 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 3 | 3 | 3 | 5 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-799 | SB-799 | SB-800 | SB-800 | SB-800 | SB-800 | SB-801 | SB-801 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-799-03 | F-SB-799-05 | F-SB-800-03 | F-SB-800-05 | F-SB-800-05-AVG | F-SB-800-05-D | F-SB-801-03 | F-SB-801-05 |
| SAMPLE DATE | 20100820 | 20100820 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 3 | 5 | 5 | 5 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 3 | 5 | 5 | 5 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-799 | SB-799 | SB-800 | SB-800 | SB-800 | SB-800 | SB-801 | SB-801 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-799-03 | F-SB-799-05 | F-SB-800-03 | F-SB-800-05 | F-SB-800-05-AVG | F-SB-800-05-D | F-SB-801-03 | F-SB-801-05 |
| SAMPLE DATE | 20100820 | 20100820 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 3 | 5 | 5 | 5 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 3 | 5 | 5 | 5 | 3 | 5 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.2 U | 1.2 U | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 3.6 U | 9.8 | NA | NA | NA | NA | NA | NA |
| FLUORENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-799 | SB-799 | SB-800 | SB-800 | SB-800 | SB-800 | SB-801 | SB-801 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-799-03 | F-SB-799-05 | F-SB-800-03 | F-SB-800-05 | F-SB-800-05-AVG | F-SB-800-05-D | F-SB-801-03 | F-SB-801-05 |
| SAMPLE DATE | 20100820 | 20100820 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 3 | 5 | 5 | 5 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 3 | 5 | 5 | 5 | 3 | 5 |
| PHENANTHRENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| PYRENE | 3.6 U | 3.7 U | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 9.8 | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | 1.8 L | 0.017 UR | 0.0175 R | 0.018 UR | 0.68 L | 0.018 UR |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-799 | SB-799 | SB-800 | SB-800 | SB-800 | SB-800 | SB-801 | SB-801 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-799-03 | F-SB-799-05 | F-SB-800-03 | F-SB-800-05 | F-SB-800-05-AVG | F-SB-800-05-D | F-SB-801-03 | F-SB-801-05 |
| SAMPLE DATE | 20100820 | 20100820 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 3 | 5 | 5 | 5 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 3 | 5 | 5 | 5 | 3 | 5 |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-802 | SB-802 |
|---|---|---|
| SAMPLE ID | F-SB-802-03 | F-SB-802-05 |
| SAMPLE DATE | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL |
| MATRIX | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL |
| SUBMATRIX | SB | SB |
| TOP DEPTH | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 |
| **VOLATILES (UG/KG)** | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA |
| 1,4-DIOXANE | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA |
| 2-BUTANONE | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA |
| 2-CHLOROTOLUENE | NA | NA |
| 2-HEXANONE | NA | NA |
| 4-CHLOROTOLUENE | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA |
| ACETONE | NA | NA |
| BENZENE | NA | NA |
| BROMOBENZENE | NA | NA |
| BROMOCHLOROMETHANE | NA | NA |
| BROMODICHLOROMETHANE | NA | NA |
| BROMOFORM | NA | NA |
| BROMOMETHANE | NA | NA |
| CARBON DISULFIDE | NA | NA |
| CARBON TETRACHLORIDE | NA | NA |
| CHLOROBENZENE | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA |
| CHLOROETHANE | NA | NA |
| CHLOROFORM | NA | NA |
| CHLOROMETHANE | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA |
| DIBROMOMETHANE | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA |
| DIISOPROPYL ETHER | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA |
| ETHYLBENZENE | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA |
| ISOPROPYLBENZENE | NA | NA |
| M+P-XYLENES | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA |
| METHYLENE CHLORIDE | NA | NA |
| NAPHTHALENE | NA | NA |
| N-BUTYLBENZENE | NA | NA |
| N-PROPYLBENZENE | NA | NA |
| O-XYLENE | NA | NA |
| SEC-BUTYLBENZENE | NA | NA |
| STYRENE | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA |
| TERT-BUTYLBENZENE | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA |
| TETRACHLOROETHENE | NA | NA |
| TOLUENE | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA |
| TOTAL XYLENES | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA |
| TRICHLOROETHENE | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA |
| VINYL ACETATE | NA | NA |
| VINYL CHLORIDE | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | |
| 1,1-BIPHENYL | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA |
| 1,4-DIOXANE | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA |

| LOCATION | SB-802 | SB-802 |
|---|---|---|
| SAMPLE ID | F-SB-802-03 | F-SB-802-05 |
| SAMPLE DATE | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL |
| MATRIX | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL |
| SUBMATRIX | SB | SB |
| TOP DEPTH | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 |
| 2,4-DIMETHYLPHENOL | NA | NA |
| 2,4-DINITROPHENOL | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA |
| 2-CHLOROPHENOL | NA | NA |
| 2-METHYLPHENOL | NA | NA |
| 2-NITROANILINE | NA | NA |
| 2-NITROPHENOL | NA | NA |
| 3&4-METHYLPHENOL | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA |
| 3-NITROANILINE | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA |
| 4-CHLOROANILINE | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA |
| 4-METHYLPHENOL | NA | NA |
| 4-NITROANILINE | NA | NA |
| 4-NITROPHENOL | NA | NA |
| ACETOPHENONE | NA | NA |
| ANILINE | NA | NA |
| ATRAZINE | NA | NA |
| AZOBENZENE | NA | NA |
| BENZALDEHYDE | NA | NA |
| BENZIDINE | NA | NA |
| BENZOIC ACID | NA | NA |
| BENZYL ALCOHOL | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA |
| CAPROLACTAM | NA | NA |
| CARBAZOLE | NA | NA |
| DIBENZOFURAN | NA | NA |
| DIETHYL PHTHALATE | NA | NA |
| DIMETHYL PHTHALATE | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA |
| HEXACHLOROBENZENE | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA |
| HEXACHLOROETHANE | NA | NA |
| ISOPHORONE | NA | NA |
| NITROBENZENE | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA |
| PENTACHLOROPHENOL | NA | NA |
| PHENOL | NA | NA |
| PYRIDINE | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | |
| 1-METHYLNAPHTHALENE | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA |
| ACENAPHTHENE | NA | NA |
| ACENAPHTHYLENE | NA | NA |
| ANTHRACENE | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA |
| BAP EQUIVALENT-POS | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA |
| BENZO(A)PYRENE | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA |
| C1-CHRYSENES | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA |
| C1-FLUORENES | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA |
| C2-CHRYSENES | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA |
| C2-FLUORENES | NA | NA |
| C2-NAPHTHALENES | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA |
| C3-CHRYSENES | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA |
| C3-FLUORENES | NA | NA |
| C3-NAPHTHALENES | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA |
| C4-CHRYSENES | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA |
| C4-NAPHTHALENES | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA |
| CHRYSENE | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA |
| FLUORANTHENE | NA | NA |
| FLUORENE | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA |
| NAPHTHALENE | NA | NA |

| LOCATION | SB-802 | SB-802 |
|---|---|---|
| SAMPLE ID | F-SB-802-03 | F-SB-802-05 |
| SAMPLE DATE | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL |
| MATRIX | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL |
| SUBMATRIX | SB | SB |
| TOP DEPTH | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 |
| PHENANTHRENE | NA | NA |
| PYRENE | NA | NA |
| TOTAL PAHS | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | |
| 4,4'-DDD | NA | NA |
| 4,4'-DDE | NA | NA |
| 4,4'-DDT | NA | NA |
| ALDRIN | NA | NA |
| ALPHA-BHC | NA | NA |
| ALPHA-CHLORDANE | NA | NA |
| AROCLOR-1016 | NA | NA |
| AROCLOR-1221 | NA | NA |
| AROCLOR-1232 | NA | NA |
| AROCLOR-1242 | NA | NA |
| AROCLOR-1248 | NA | NA |
| AROCLOR-1254 | NA | NA |
| AROCLOR-1260 | NA | NA |
| BETA-BHC | NA | NA |
| DELTA-BHC | NA | NA |
| DIELDRIN | NA | NA |
| ENDOSULFAN I | NA | NA |
| ENDOSULFAN II | NA | NA |
| ENDOSULFAN SULFATE | NA | NA |
| ENDRIN | NA | NA |
| ENDRIN ALDEHYDE | NA | NA |
| ENDRIN KETONE | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA |
| GAMMA-CHLORDANE | NA | NA |
| HEPTACHLOR | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA |
| METHOXYCHLOR | NA | NA |
| TOTAL AROCLOR | NA | NA |
| TOXAPHENE | NA | NA |
| **METALS (MG/KG)** | | |
| ANTIMONY | NA | NA |
| ARSENIC | NA | NA |
| BARIUM | NA | NA |
| BERYLLIUM | NA | NA |
| CADMIUM | NA | NA |
| CHROMIUM | NA | NA |
| COBALT | NA | NA |
| COPPER | NA | NA |
| IRON | NA | NA |
| LEAD | NA | NA |
| MANGANESE | NA | NA |
| MERCURY | 0.89 L | 0.022 UR |
| MOLYBDENUM | NA | NA |
| NICKEL | NA | NA |
| SELENIUM | NA | NA |
| SILVER | NA | NA |
| THALLIUM | NA | NA |
| VANADIUM | NA | NA |
| ZINC | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | |
| DIESEL RANGE ORGANICS | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA |
| TPH (C09-C36) | NA | NA |
| TPH (C10-C32) | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | |
| PERCENT SOLIDS | NA | NA |
| TOTAL SOLIDS | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | |
| HEXAVALENT CHROMIUM | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | |
| PH | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | |
| MERCURY (METHYL) | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | |
| ACTINIUM-228 | NA | NA |
| ALUMINUM-26 | NA | NA |
| AMERICIUM-241 | NA | NA |
| ANTIMONY-124 | NA | NA |
| ANTIMONY-125 | NA | NA |
| BERYLLIUM-7 | NA | NA |
| BISMUTH-212 | NA | NA |
| BISMUTH-214 | NA | NA |
| CERIUM-139 | NA | NA |
| CERIUM-144 | NA | NA |
| CESIUM-134 | NA | NA |
| CESIUM-137 | NA | NA |
| CHROMIUM-51 | NA | NA |
| COBALT-56 | NA | NA |
| COBALT-57 | NA | NA |
| COBALT-58 | NA | NA |
| COBALT-60 | NA | NA |
| EUROPIUM-152 | NA | NA |
| EUROPIUM-154 | NA | NA |
| EUROPIUM-155 | NA | NA |
| IODINE-131 | NA | NA |

| LOCATION | **SB-802** | **SB-802** |
|---|---|---|
| SAMPLE ID | **F-SB-802-03** | **F-SB-802-05** |
| SAMPLE DATE | **20100910** | **20100910** |
| SAMPLE CODE | **NORMAL** | **NORMAL** |
| MATRIX | **SO** | **SO** |
| SAMPLE TYPE | **NORMAL** | **NORMAL** |
| SUBMATRIX | **SB** | **SB** |
| TOP DEPTH | **3** | **5** |
| BOTTOM DEPTH | **3** | **5** |
| IRON-59 | NA | NA |
| LEAD-212 | NA | NA |
| LEAD-214 | NA | NA |
| MANGANESE-54 | NA | NA |
| NIOBIUM-94 | NA | NA |
| NIOBIUM-95 | NA | NA |
| POTASSIUM-40 | NA | NA |
| PROTACTINIUM-234 | NA | NA |
| RADIUM-226 | NA | NA |
| RUTHENIUM-106 | NA | NA |
| SCANDIUM-46 | NA | NA |
| SILVER-110 | NA | NA |
| SODIUM-22 | NA | NA |
| THALLIUM-208 | NA | NA |
| THORIUM-227 | NA | NA |
| THORIUM-234 | NA | NA |
| URANIUM-235 | NA | NA |
| ZINC-65 | NA | NA |

| LOCATION | MRC-MW46A | SB-022 | SB-022 | SB-023 | SB-023 | SB-024 | SB-024 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW46[0910] | SB-22-05 | SB-22-10 | SB-23-05 | SB-23-10 | SB-24-05 | SB-24-10 |
| SAMPLE DATE | 20050524 | 20031117 | 20031117 | 20031118 | 20031118 | 20031117 | 20031117 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1,1-TRICHLOROETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1,2-TRICHLOROETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1-DICHLOROETHENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1-DICHLOROPROPENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2,3-TRICHLOROBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2,3-TRICHLOROPROPANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2,4-TRIMETHYLBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2-DIBROMOETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2-DICHLOROBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2-DICHLOROETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2-DICHLOROPROPANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,3,5-TRIMETHYLBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,3-DICHLOROBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,3-DICHLOROPROPANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 2-BUTANONE | NA | 60 U | 60 U | 59 U | 58 U | 62 U | 60 U |
| 2-CHLOROETHYL VINYL ETHER | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 2-CHLOROTOLUENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 2-HEXANONE | NA | 60 U | 60 U | 59 U | 58 U | 62 U | 60 U |
| 4-CHLOROTOLUENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 4-ISOPROPYLTOLUENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 4-METHYL-2-PENTANONE | NA | 60 U | 60 U | 59 U | 58 U | 62 U | 60 U |
| ACETONE | NA | 40 J | 11 J | 16 J | 9 J | 28 J | 27 J |
| BENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| BROMOBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| BROMOCHLOROMETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| BROMODICHLOROMETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| BROMOFORM | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| BROMOMETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| CARBON DISULFIDE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| CARBON TETRACHLORIDE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| CHLOROBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| CHLORODIBROMOMETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| CHLOROETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| CHLOROFORM | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| CHLOROMETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| CIS-1,2-DICHLOROETHENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| CIS-1,3-DICHLOROPROPENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| DIBROMOMETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| DICHLORODIFLUOROMETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| ISOPROPYLBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| M+P-XYLENES | NA | 18 U | 18 U | 18 U | 17 U | 19 U | 18 U |
| METHYL TERT-BUTYL ETHER | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| METHYLENE CHLORIDE | NA | 6 U | 5 J | 6 J | 5 J | 6 U | 6 U |
| NAPHTHALENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| N-BUTYLBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| N-PROPYLBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| O-XYLENE | NA | 18 U | 18 U | 18 U | 17 U | 19 U | 18 U |
| SEC-BUTYLBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| STYRENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| TOLUENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| TRANS-1,3-DICHLOROPROPENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| TRICHLOROETHENE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| TRICHLOROFLUOROMETHANE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| VINYL ACETATE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| VINYL CHLORIDE | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 2,4,5-TRICHLOROPHENOL | NA | 1000 U | 980 U | 990 U | 970 U | 1000 U | 990 U |
| 2,4,6-TRICHLOROPHENOL | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 2,4-DICHLOROPHENOL | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |

| LOCATION | MRC-MW46A | SB-022 | SB-022 | SB-023 | SB-023 | SB-024 | SB-024 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW46[0910] | SB-22-05 | SB-22-10 | SB-23-05 | SB-23-10 | SB-24-05 | SB-24-10 |
| SAMPLE DATE | 20050524 | 20031117 | 20031117 | 20031118 | 20031118 | 20031117 | 20031117 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 5 | 5 | 10 |
| 2,4-DIMETHYLPHENOL | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 2,4-DINITROPHENOL | NA | 1000 U | 980 U | 990 U | 970 U | 1000 U | 990 U |
| 2,4-DINITROTOLUENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 2,6-DINITROTOLUENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 2-CHLORONAPHTHALENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 2-CHLOROPHENOL | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 2-METHYLPHENOL | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 2-NITROANILINE | NA | 1000 U | 980 U | 990 U | 970 U | 1000 U | 990 U |
| 2-NITROPHENOL | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 3&4-METHYLPHENOL | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 3,3'-DICHLOROBENZIDINE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 3-NITROANILINE | NA | 1000 U | 980 U | 980 U | 970 U | 1000 U | 990 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | 920 U | 900 U | 910 U | 890 U | 960 U | 910 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 4-CHLORO-3-METHYLPHENOL | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 4-CHLOROANILINE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | 1000 U | 980 U | 990 U | 970 U | 1000 U | 990 U |
| 4-NITROPHENOL | NA | 1000 U | 980 U | 990 U | 970 U | 1000 U | 990 U |
| ACETOPHENONE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| BIS(2-CHLOROETHYL)ETHER | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| BUTYL BENZYL PHTHALATE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| CAPROLACTAM | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| CARBAZOLE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| DIBENZOFURAN | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| DIETHYL PHTHALATE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| DIMETHYL PHTHALATE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| DI-N-BUTYL PHTHALATE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| DI-N-OCTYL PHTHALATE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| HEXACHLOROBENZENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| HEXACHLOROBUTADIENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| HEXACHLOROCYCLOPENTADIENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| HEXACHLOROETHANE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| ISOPHORONE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| NITROBENZENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| N-NITROSODIPHENYLAMINE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| PENTACHLOROPHENOL | NA | 1000 U | 980 U | 990 U | 970 U | 1000 U | 990 U |
| PHENOL | NA | 400 U | 390 U | 390 U | 390 U | 420 U | 400 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| ACENAPHTHENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| ACENAPHTHYLENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| ANTHRACENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| BAP EQUIVALENT-HALFND | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| BAP EQUIVALENT-POS | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| BENZO(A)ANTHRACENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| BENZO(A)PYRENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| BENZO(B)FLUORANTHENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| BENZO(K)FLUORANTHENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MRC-MW46A | SB-022 | SB-022 | SB-023 | SB-023 | SB-024 | SB-024 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW46[0910] | SB-22-05 | SB-22-10 | SB-23-05 | SB-23-10 | SB-24-05 | SB-24-10 |
| SAMPLE DATE | 20050524 | 20031117 | 20031117 | 20031118 | 20031118 | 20031117 | 20031117 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| DIBENZO(A,H)ANTHRACENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| FLUORANTHENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| FLUORENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| INDENO(1,2,3-CD)PYRENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| NAPHTHALENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| PHENANTHRENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| PYRENE | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U |
| TOTAL PAHS | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | 60 U | 59 U | 59 U | 58 U | 62 U | 59 U |
| AROCLOR-1221 | NA | 60 U | 59 U | 59 U | 58 U | 62 U | 59 U |
| AROCLOR-1232 | NA | 60 U | 59 U | 59 U | 58 U | 62 U | 59 U |
| AROCLOR-1242 | NA | 60 U | 59 U | 59 U | 58 U | 62 U | 59 U |
| AROCLOR-1248 | NA | 60 U | 59 U | 59 U | 58 U | 62 U | 59 U |
| AROCLOR-1254 | NA | 60 U | 59 U | 59 U | 58 U | 62 U | 59 U |
| AROCLOR-1260 | NA | 60 U | 59 U | 59 U | 58 U | 62 U | 59 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | NA | 3 UL | 2.9 UL | 3 UL | 2.9 UL | 3.1 UL | 3 UL |
| ARSENIC | NA | 2.9 L | 2.7 L | 1.5 L | 1 L | 3.5 L | 2.3 L |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | 3 U | 2.9 U | 3 U | 2.9 U | 3.1 U | 3 U |
| CADMIUM | NA | 3 U | 2.9 U | 3 U | 2.9 U | 3.1 U | 3 U |
| CHROMIUM | NA | 13 L | 16 L | 5.3 L | 2.9 UR | 13 L | 12 L |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | 10 | 13 | 3 U | 2.9 U | 28 | 7.8 |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | 10 L | 6 L | 3 UL | 2.9 UL | 46 L | 12 L |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.94 | 0.17 |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | 8.9 L | 14 L | 3.6 L | 2.9 UL | 12 L | 6.7 L |
| SELENIUM | NA | 3 UR | 2.9 UR | 3 UR | 2.9 UR | 3.1 UR | 3 UR |
| SILVER | NA | 3 U | 2.9 U | 3 U | 2.9 U | 3.1 U | 3 U |
| THALLIUM | NA | 2.4 UL | 2.3 UL | 2.4 UL | 2.3 UL | 2.5 UL | 2.4 UL |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | 60 UJ | 59 UJ | 59 UJ | 58 UJ | 100 J | 59 UJ |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | NA | 24000 U | 23000 U | 24000 U | 23000 U | 25000 U | 24000 U |
| GASOLINE RANGE ORGANICS | NA | 120 U | 120 U | 120 U | 120 U | 120 U | 120 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | 70 | 85 | 84 | 86 | 80 | 84 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | 238 U | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MRC-MW46A | SB-022 | SB-022 | SB-023 | SB-023 | SB-024 | SB-024 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW46[0910] | SB-22-05 | SB-22-10 | SB-23-05 | SB-23-10 | SB-24-05 | SB-24-10 |
| SAMPLE DATE | 20050524 | 20031117 | 20031117 | 20031118 | 20031118 | 20031117 | 20031117 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-025 | SB-025 | SB-026 | SB-027 | SB-028 | SB-029 | SB-030 | SB-093 | SB-093 | SB-093 | SB-093 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-25-05 | SB-25-10 | SB-26-10 | SB-27-10 | SB-28-10 | SB-29-10 | SB-30-05 | F-SB-93RE-10 | F-SB-93RE-3 | F-SB-93RE-4 | F-SB-93RE-5 |
| SAMPLE DATE | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 | 20031118 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 10 | 10 | 10 | 10 | 5 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 5 | 10 | 10 | 10 | 10 | 10 | 5 | 10 | 3 | 4 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 2-BUTANONE | 59 U | 59 U | 6 J | 67 U | 65 U | 9 J | 58 U | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 2-HEXANONE | 59 U | 59 U | 65 U | 67 U | 65 U | 66 U | 58 U | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 59 U | 59 U | 65 U | 67 U | 65 U | 66 U | 58 U | NA | NA | NA | NA |
| ACETONE | 59 U | 59 U | 48 J | 29 J | 14 J | 45 J | 58 U | NA | NA | NA | NA |
| BENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| BROMOBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| BROMOFORM | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| BROMOMETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| CARBON DISULFIDE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| CHLOROBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| CHLOROETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| CHLOROFORM | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| CHLOROMETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| DIBROMOMETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| M+P-XYLENES | 18 U | 18 U | 20 U | 20 U | 19 U | 20 U | 17 U | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 5 J | 6 J | 7 U | 7 J | 6 J | 7 U | 6 J | NA | NA | NA | NA |
| NAPHTHALENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| N-BUTYLBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| N-PROPYLBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| O-XYLENE | 18 U | 18 U | 20 U | 20 U | 19 U | 20 U | 17 U | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| STYRENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| TOLUENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| TRICHLOROETHENE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| VINYL ACETATE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| VINYL CHLORIDE | 6 U | 6 U | 7 U | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 980 U | 990 U | NA | NA | NA | NA | 960 U | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |

| LOCATION | SB-025 | SB-025 | SB-026 | SB-027 | SB-028 | SB-029 | SB-030 | SB-093 | SB-093 | SB-093 | SB-093 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-25-05 | SB-25-10 | SB-26-10 | SB-27-10 | SB-28-10 | SB-29-10 | SB-30-05 | F-SB-93RE-10 | F-SB-93RE-3 | F-SB-93RE-4 | F-SB-93RE-5 |
| SAMPLE DATE | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 | 20031118 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 10 | 10 | 10 | 10 | 5 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 5 | 10 | 10 | 10 | 10 | 10 | 5 | 10 | 3 | 4 | 5 |
| 2,4-DIMETHYLPHENOL | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 980 U | 990 U | NA | NA | NA | NA | 960 U | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 2-METHYLPHENOL | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 2-NITROANILINE | 980 U | 990 U | NA | NA | NA | NA | 960 U | NA | NA | NA | NA |
| 2-NITROPHENOL | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 3-NITROANILINE | 980 U | 990 U | NA | NA | NA | NA | 960 U | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 900 U | 910 U | NA | NA | NA | NA | 880 U | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 4-CHLOROANILINE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 980 U | 990 U | NA | NA | NA | NA | 960 U | NA | NA | NA | NA |
| 4-NITROPHENOL | 980 U | 990 U | NA | NA | NA | NA | 960 U | NA | NA | NA | NA |
| ACETOPHENONE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| CAPROLACTAM | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| CARBAZOLE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| DIBENZOFURAN | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| HEXACHLOROETHANE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| ISOPHORONE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| NITROBENZENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 980 U | 990 U | NA | NA | NA | NA | 960 U | NA | NA | NA | NA |
| PHENOL | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| ACENAPHTHENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| ACENAPHTHYLENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| ANTHRACENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 390 U | 400 U | NA | NA | NA | NA | 380 U | 1.5 U | 1.5 U | 1.5 U | 36 |
| BAP EQUIVALENT-POS | 390 U | 400 U | NA | NA | NA | NA | 380 U | 1.5 U | 1.5 U | 1.5 U | 35 |
| BENZO(A)ANTHRACENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | 1.1 U | 1.1 U | 1.1 U | 28 |
| BENZO(A)PYRENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | 1.5 U | 1.5 U | 1.5 U | 26 |
| BENZO(B)FLUORANTHENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | 1.4 U | 1.3 U | 1.4 U | 40 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | 2 U | 1.9 U | 2 U | 13 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-025 | SB-025 | SB-026 | SB-027 | SB-028 | SB-029 | SB-030 | SB-093 | SB-093 | SB-093 | SB-093 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-25-05 | SB-25-10 | SB-26-10 | SB-27-10 | SB-28-10 | SB-29-10 | SB-30-05 | F-SB-93RE-10 | F-SB-93RE-3 | F-SB-93RE-4 | F-SB-93RE-5 |
| SAMPLE DATE | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 | 20031118 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 10 | 10 | 10 | 10 | 5 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 5 | 10 | 10 | 10 | 10 | 10 | 5 | 10 | 3 | 4 | 5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | 1 U | 1 U | 1.1 U | 29 |
| DIBENZO(A,H)ANTHRACENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| FLUORENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | 1.7 U | 1.7 U | 1.8 U | 23 |
| NAPHTHALENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| PHENANTHRENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| PYRENE | 390 U | 400 U | NA | NA | NA | NA | 380 U | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | NA | NA | NA | NA | 0 U | 0 U | 0 U | 0 U | 159 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 59 U | 59 U | NA | NA | NA | NA | 58 U | 24 U | 24 U | 25 U | 24 U |
| AROCLOR-1221 | 59 U | 59 U | NA | NA | NA | NA | 58 U | 19 U | 18 U | 19 U | 18 U |
| AROCLOR-1232 | 59 U | 59 U | NA | NA | NA | NA | 58 U | 16 U | 16 U | 16 U | 16 U |
| AROCLOR-1242 | 59 U | 59 U | NA | NA | NA | NA | 58 U | 15 U | 15 U | 15 U | 15 U |
| AROCLOR-1248 | 59 U | 59 U | NA | NA | NA | NA | 58 U | 20 U | 19 U | 20 U | 19 U |
| AROCLOR-1254 | 59 U | 59 U | NA | NA | NA | NA | 58 U | 20 U | 19 U | 20 U | 19 U |
| AROCLOR-1260 | 59 U | 59 U | NA | NA | NA | NA | 58 U | 20 U | 19 U | 20 U | 19 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | NA | NA | NA | NA | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 2.9 UL | 3 UL | NA | NA | NA | NA | 2.9 UL | NA | NA | NA | NA |
| ARSENIC | 0.92 L | 1.7 L | NA | NA | NA | NA | 0.99 L | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 2.9 U | 4.6 | NA | NA | NA | NA | 3.2 | NA | NA | NA | NA |
| CADMIUM | 2.9 U | 3 U | NA | NA | NA | NA | 2.9 U | NA | NA | NA | NA |
| CHROMIUM | 11 L | 16 L | NA | NA | NA | NA | 19 L | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 8 | 19 | NA | NA | NA | NA | 21 | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 6.6 L | 14 L | NA | NA | NA | NA | 7.4 L | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.12 U | 0.12 U | NA | NA | NA | NA | 0.12 U | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 24 L | 46 L | NA | NA | NA | NA | 33 L | NA | NA | NA | NA |
| SELENIUM | 2.9 UR | 3 UR | NA | NA | NA | NA | 4.4 L | NA | NA | NA | NA |
| SILVER | 2.9 U | 3 U | NA | NA | NA | NA | 2.9 U | NA | NA | NA | NA |
| THALLIUM | 2.4 UL | 2.4 UL | NA | NA | NA | NA | 2.3 UL | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 59 UJ | 110 J | NA | NA | NA | NA | 58 UJ | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 24000 U | 24000 U | NA | NA | NA | NA | 23000 U | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 120 U | 120 U | 130 U | 130 U | 130 U | 130 U | 120 U | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | 85 | 84 | 77 | 75 | 77 | 76 | 87 | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-025 | SB-025 | SB-026 | SB-027 | SB-028 | SB-029 | SB-030 | SB-093 | SB-093 | SB-093 | SB-093 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-25-05 | SB-25-10 | SB-26-10 | SB-27-10 | SB-28-10 | SB-29-10 | SB-30-05 | F-SB-93RE-10 | F-SB-93RE-3 | F-SB-93RE-4 | F-SB-93RE-5 |
| SAMPLE DATE | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 | 20031118 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 10 | 10 | 10 | 10 | 5 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 5 | 10 | 10 | 10 | 10 | 10 | 5 | 10 | 3 | 4 | 5 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-093 | SB-093 | SB-093 | SB-093 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-93RE-6 | F-SB-93RE-7 | F-SB-93RE-8 | F-SB-93RE-9 | F-SB-94RE-10 | F-SB-94RE-3 | F-SB-94RE-4 | F-SB-94RE-5 | F-SB-94RE-6 | F-SB-94RE-7 | F-SB-94RE-8 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 6 | 7 | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-093 | SB-093 | SB-093 | SB-093 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-93RE-6 | F-SB-93RE-7 | F-SB-93RE-8 | F-SB-93RE-9 | F-SB-94RE-10 | F-SB-94RE-3 | F-SB-94RE-4 | F-SB-94RE-5 | F-SB-94RE-6 | F-SB-94RE-7 | F-SB-94RE-8 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 6 | 7 | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 25 | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 25 | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 12 | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 11 | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 15 | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 9.2 | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-093 | SB-093 | SB-093 | SB-093 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-93RE-6 | F-SB-93RE-7 | F-SB-93RE-8 | F-SB-93RE-9 | F-SB-94RE-10 | F-SB-94RE-3 | F-SB-94RE-4 | F-SB-94RE-5 | F-SB-94RE-6 | F-SB-94RE-7 | F-SB-94RE-8 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 6 | 7 | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 11 | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 9.8 | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 10 | 1.8 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 78 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | 25 U | 24 U | 25 U | 25 U | 25 U | 25 U | 24 U | 24 U | 25 U | 24 U |
| AROCLOR-1221 | 19 U | 19 U | 18 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 19 U | 18 U |
| AROCLOR-1232 | 16 U | 16 U | 16 U | 16 U | 17 U | 17 U | 16 U | 16 U | 16 U | 17 U | 16 U |
| AROCLOR-1242 | 15 U | 15 U | 15 U | 15 U | 16 U | 16 U | 15 U | 15 U | 15 U | 15 U | 15 U |
| AROCLOR-1248 | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1254 | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| AROCLOR-1260 | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-093 | SB-093 | SB-093 | SB-093 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-93RE-6 | F-SB-93RE-7 | F-SB-93RE-8 | F-SB-93RE-9 | F-SB-94RE-10 | F-SB-94RE-3 | F-SB-94RE-4 | F-SB-94RE-5 | F-SB-94RE-6 | F-SB-94RE-7 | F-SB-94RE-8 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 6 | 7 | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-094 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-096 | SB-096 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-94RE-9 | F-SB-95RE-10 | F-SB-95RE-3 | F-SB-95RE-4 | F-SB-95RE-5 | F-SB-95RE-6 | F-SB-95RE-7 | F-SB-95RE-8 | F-SB-95RE-9 | F-SB-96RE-10 | F-SB-96RE-3 |
| SAMPLE DATE | 20090921 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| BOTTOM DEPTH | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-094 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-096 | SB-096 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-94RE-9 | F-SB-95RE-10 | F-SB-95RE-3 | F-SB-95RE-4 | F-SB-95RE-5 | F-SB-95RE-6 | F-SB-95RE-7 | F-SB-95RE-8 | F-SB-95RE-9 | F-SB-96RE-10 | F-SB-96RE-3 |
| SAMPLE DATE | 20090921 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| BOTTOM DEPTH | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 29 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 71 | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.5 U | 28 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 71 | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 1.1 U | 20 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 52 | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 21 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 54 | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 28 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 67 | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 11 | 2 U | 2 U | 2 U | 2 U | 2.1 U | 2 U | 32 | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-094 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-096 | SB-096 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-94RE-9 | F-SB-95RE-10 | F-SB-95RE-3 | F-SB-95RE-4 | F-SB-95RE-5 | F-SB-95RE-6 | F-SB-95RE-7 | F-SB-95RE-8 | F-SB-95RE-9 | F-SB-96RE-10 | F-SB-96RE-3 |
| SAMPLE DATE | 20090921 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| BOTTOM DEPTH | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 20 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 48 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 23 | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 43 | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 123 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 296 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 24 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 18 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 16 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 15 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 20 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 20 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 20 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-094 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-096 | SB-096 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-94RE-9 | F-SB-95RE-10 | F-SB-95RE-3 | F-SB-95RE-4 | F-SB-95RE-5 | F-SB-95RE-6 | F-SB-95RE-7 | F-SB-95RE-8 | F-SB-95RE-9 | F-SB-96RE-10 | F-SB-96RE-3 |
| SAMPLE DATE | 20090921 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| BOTTOM DEPTH | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 | SB-236 | SB-237 | SB-238 | SB-295 | SB-295 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-96RE-4 | F-SB-96RE-5 | F-SB-96RE-6 | F-SB-96RE-7 | F-SB-96RE-8 | F-SB-96RE-9 | SB-236-05 | SB-237-05 | SB-238-05 | SB-295-0405 | SB-295-0910 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20050509 | 20050509 | 20050517 | 20051101 | 20051101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 5 | 5 | 4 | 9 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 5 | 5 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 518 U | 6 UJ | 6 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 518 U | 6 UJ | 6 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 6 UJ | 6 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 518 U | 6 UJ | 6 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 658 | 6 UJ | 6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 1300 U | 6 UJ | 6 U |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 139 J | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | 518 U | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | 51800 UR | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | 2590 U | 31 UR | 30 UR |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 518 UR | 6 UJ | 6 U |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 6 UJ | 6 U |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | 2590 U | 31 UJ | 30 U |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 165 J | 6 UJ | 6 U |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | 1040 U | 31 UJ | 30 U |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | 2590 UR | 21 J | 14 J |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 12 UJ | 12 U |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 12 UJ | 12 U |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 12 UJ | 12 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 12 UJ | 12 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 394 | 6 UJ | 6 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | 777 U | 6 UJ | 6 U |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 83.1 J | 6 UJ | 6 U |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | 270 J | 12 UJ | 12 U |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 12 UJ | 12 U |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | 147 J | 11 B | 8 B |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 159000 | 6 UJ | 6 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 125 J | 6 UJ | 6 U |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | 186 J | 6 UJ | 6 U |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 518 U | 6 UJ | 6 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | 3890 U | 12 UR | 12 UR |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | 12 UJ | 12 U |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | 456 J | 18 UJ | 18 U |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 6 UJ | 6 U |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 2 J | 12 U |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | 518 U | 6 UJ | 6 U |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | 259 UJ | 12 UJ | 12 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | 400 U | 400 U | 390 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | 121 U | 400 U | 390 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 1000 U | 980 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |

| LOCATION | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 | SB-236 | SB-237 | SB-238 | SB-295 | SB-295 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-96RE-4 | F-SB-96RE-5 | F-SB-96RE-6 | F-SB-96RE-7 | F-SB-96RE-8 | F-SB-96RE-9 | SB-236-05 | SB-237-05 | SB-238-05 | SB-295-0405 | SB-295-0910 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20050509 | 20050509 | 20050517 | 20051101 | 20051101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 5 | 5 | 4 | 9 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 5 | 5 | 5 | 10 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 68 J | 400 U | 390 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 606 U | 1000 U | 980 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 85 U | 400 U | 390 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 85 U | 400 U | 390 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 1000 U | 980 U |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 812 U | 400 U | 390 U |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 1000 U | 980 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 1000 U | 980 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 121 U | 400 U | 390 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 121 U | 1000 U | 980 U |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 1000 U | 980 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | 812 UR | 1000 U | 980 U |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | 812 U | 1000 U | 980 U |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | 121 U | 400 U | 390 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 121 U | 400 U | 390 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 85 U | 400 U | 390 U |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | 5690 | 400 U | 390 U |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | 3980 | 400 U | 390 U |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 85 U | 400 U | 390 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | 121 U | 400 U | 390 U |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 206 U | 400 U | 390 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | 121 U | 400 U | 390 U |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | 121 U | 400 U | 390 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | 81 J | 400 U | 390 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 1020 U | 1000 U | 980 U |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U | 390 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 3420 | 400 U | 390 U |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 6900 | 400 U | 390 U |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | 6960 | 400 U | 390 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | 69 J | 400 U | 390 U |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | 2510 | 400 U | 390 U |
| BAP EQUIVALENT-HALFND | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 18 | NA | NA | 2963 | 400 U | 390 U |
| BAP EQUIVALENT-POS | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 17 | NA | NA | 2963 | 400 U | 390 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 12 | NA | NA | 2700 | 400 U | 390 U |
| BENZO(A)PYRENE | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 13 | NA | NA | 1960 | 400 U | 390 U |
| BENZO(B)FLUORANTHENE | 1.6 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 18 | NA | NA | 2080 | 400 U | 390 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | 1240 J | 400 U | 390 U |
| BENZO(K)FLUORANTHENE | 2.2 U | 2 U | 2 U | 2 U | 2 U | 9.2 | NA | NA | 2010 | 400 U | 390 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 | SB-236 | SB-237 | SB-238 | SB-295 | SB-295 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-96RE-4 | F-SB-96RE-5 | F-SB-96RE-6 | F-SB-96RE-7 | F-SB-96RE-8 | F-SB-96RE-9 | SB-236-05 | SB-237-05 | SB-238-05 | SB-295-0405 | SB-295-0910 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20050509 | 20050509 | 20050517 | 20051101 | 20051101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 5 | 5 | 4 | 9 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 5 | 5 | 5 | 10 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 14 | NA | NA | 1800 | 400 U | 390 U |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | NA | NA | 392 J | 400 U | 390 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | 10000 | 400 U | 390 U |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | 6330 | 400 U | 390 U |
| INDENO(1,2,3-CD)PYRENE | 2 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 9.1 | NA | NA | 1110 J | 400 U | 390 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 31000 | 400 U | 390 U |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | 18600 | 400 U | 390 U |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | 7570 | 400 U | 390 U |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 75.3 | NA | NA | 103231 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | 39 U | 21 U | 20 U |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | 39 U | 21 U | 20 U |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | 39 U | 21 U | 20 U |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | 39 U | 21 U | 20 U |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | 39 U | 21 U | 20 U |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | 39 U | 21 U | 20 U |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | 39 U | 21 U | 20 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | 2 L | 0.3 UL | 0.3 L | 0.67 U | 0.78 U |
| ARSENIC | NA | NA | NA | NA | NA | NA | 7 | 2 B | 3 | 4.6 | 2.9 K |
| BARIUM | NA | NA | NA | NA | NA | NA | 103 | 35 | 24 | 22.8 | 15.1 |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | 0.6 | 3.2 | 2 | 0.96 | 3.2 |
| CADMIUM | NA | NA | NA | NA | NA | NA | 0.5 | 0.3 | 0.5 | 0.36 U | 0.41 U |
| CHROMIUM | NA | NA | NA | NA | NA | NA | 20.6 | 24.6 | 23.9 | 25.1 | 29 |
| COBALT | NA | NA | NA | NA | NA | NA | 6.2 | 8 | 14.8 | 3.2 B | 8.5 K |
| COPPER | NA | NA | NA | NA | NA | NA | 38 | 11 | 14 | 14.6 | 17.5 |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | 81 | 11 | 14 | 8 | 8.7 |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | 0.97 L | 0.01 | 0.07 | 0.01 | 0.01 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | 0.6 B | 0.5 U | 0.7 B | 0.41 K | 0.44 K |
| NICKEL | NA | NA | NA | NA | NA | NA | 17 | 23 | 27 | 9.7 | 24.3 |
| SELENIUM | NA | NA | NA | NA | NA | NA | 3 | 2 U | 2 U | 0.59 U | 0.68 U |
| SILVER | NA | NA | NA | NA | NA | NA | 2.3 | 0.05 U | 0.05 U | 0.72 | 0.99 |
| THALLIUM | NA | NA | NA | NA | NA | NA | 0.9 U | 1 U | 1 U | 1 U | 1.16 U |
| VANADIUM | NA | NA | NA | NA | NA | NA | 26.9 | 35.1 | 34.1 | 40.4 | 32.5 |
| ZINC | NA | NA | NA | NA | NA | NA | 131 | 41 | 57 | 27.1 | 32.2 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | 881000 | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | 21200 | 2800 U | 2600 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | 6100 U | 6000 U |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | 81 | 84 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | 0.4 U | 0.36 U | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | 7.7 | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | 1.21 J | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 | SB-236 | SB-237 | SB-238 | SB-295 | SB-295 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-96RE-4 | F-SB-96RE-5 | F-SB-96RE-6 | F-SB-96RE-7 | F-SB-96RE-8 | F-SB-96RE-9 | SB-236-05 | SB-237-05 | SB-238-05 | SB-295-0405 | SB-295-0910 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20050509 | 20050509 | 20050517 | 20051101 | 20051101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 5 | 5 | 4 | 9 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 5 | 5 | 5 | 10 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-296 | SB-296 | SB-297 | SB-297 | SB-298 | SB-298 | SB-299 | SB-299 | SB-382 | SB-382 | SB-382 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-296-0405 | SB-296-0910 | SB-297-0405 | SB-297-0910 | SB-298-0405 | SB-298-0910 | SB-299-0405 | SB-299-0910 | SB-382-0203 | SB-382-0405 | SB-382-0708 |
| SAMPLE DATE | 20051028 | 20051028 | 20051028 | 20051028 | 20051101 | 20051101 | 20051101 | 20051101 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 2 | 4 | 7 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 | 5 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 2-BUTANONE | 31 UR | 30 UR | 28 UR | 30 UR | 30 UR | 30 UR | 29 UR | 29 UR | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 2-HEXANONE | 31 UJ | 30 U | 28 U | 30 U | 30 U | 30 U | 29 UJ | 29 U | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 31 UJ | 30 U | 28 U | 30 U | 30 U | 30 U | 29 UJ | 29 U | NA | NA | NA |
| ACETONE | 29 J | 14 J | 37 L | 36 L | 29 B | 16 B | 29 UR | 16 B | NA | NA | NA |
| BENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| BROMOBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| BROMOFORM | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| BROMOMETHANE | 12 UJ | 12 U | 11 U | 12 U | 12 U | 12 U | 12 UJ | 12 U | NA | NA | NA |
| CARBON DISULFIDE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| CHLOROBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| CHLOROETHANE | 12 UJ | 12 U | 11 U | 12 U | 12 U | 12 U | 12 UJ | 12 U | NA | NA | NA |
| CHLOROFORM | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| CHLOROMETHANE | 12 UJ | 12 U | 11 U | 12 U | 12 U | 12 U | 12 UJ | 12 UJ | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| DIBROMOMETHANE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 12 UJ | 12 U | 11 U | 12 U | 12 U | 12 U | 12 UJ | 12 U | NA | NA | NA |
| DIISOPROPYL ETHER | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| ETHYLBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| ISOPROPYLBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| M+P-XYLENES | 12 UJ | 12 U | 11 U | 12 U | 12 U | 12 U | 12 UJ | 12 U | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 12 UJ | 12 U | 11 U | 12 U | 12 U | 12 U | 12 UJ | 12 U | NA | NA | NA |
| METHYLENE CHLORIDE | 8 B | 6 B | 7 B | 8 B | 6 U | 6 U | 6 UJ | 7 B | NA | NA | NA |
| NAPHTHALENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| N-BUTYLBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| N-PROPYLBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| O-XYLENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| STYRENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| TERT-AMYL METHYL ETHER | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | 12 UR | 12 UR | 11 UR | 12 UR | 12 UJ | 12 UJ | 12 UR | 12 UR | NA | NA | NA |
| TETRACHLOROETHENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| TOLUENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | 12 UJ | 12 U | 11 U | 12 U | 12 U | 12 U | 12 UJ | 12 U | NA | NA | NA |
| TOTAL XYLENES | 19 UJ | 18 U | 17 U | 18 U | 18 U | 18 U | 17 UJ | 18 U | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| TRICHLOROETHENE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 12 UJ | 12 U | 11 U | 12 U | 12 U | 12 U | 12 UJ | 12 U | NA | NA | NA |
| VINYL ACETATE | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA | NA | NA |
| VINYL CHLORIDE | 12 UJ | 12 U | 11 U | 12 U | 12 U | 12 U | 12 UJ | 12 U | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 1,4-DIOXANE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 1000 U | 970 U | 930 U | 970 U | 970 U | 990 U | 960 U | 960 U | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |

| LOCATION | SB-296 | SB-296 | SB-297 | SB-297 | SB-298 | SB-298 | SB-299 | SB-299 | SB-382 | SB-382 | SB-382 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-296-0405 | SB-296-0910 | SB-297-0405 | SB-297-0910 | SB-298-0405 | SB-298-0910 | SB-299-0405 | SB-299-0910 | SB-382-0203 | SB-382-0405 | SB-382-0708 |
| SAMPLE DATE | 20051028 | 20051028 | 20051028 | 20051028 | 20051101 | 20051101 | 20051101 | 20051101 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 2 | 4 | 7 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 | 5 | 8 |
| 2,4-DIMETHYLPHENOL | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 2,4-DINITROPHENOL | 1000 U | 970 U | 930 U | 970 U | 970 U | 990 U | 960 U | 960 U | NA | NA | NA |
| 2,4-DINITROTOLUENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 2,6-DINITROTOLUENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 2-CHLOROPHENOL | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 2-METHYLPHENOL | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 2-NITROANILINE | 1000 U | 970 U | 930 U | 970 U | 970 U | 990 U | 960 U | 960 U | NA | NA | NA |
| 2-NITROPHENOL | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 3&4-METHYLPHENOL | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 UR | 390 U | NA | NA | NA |
| 3-NITROANILINE | 1000 U | 970 U | 930 U | 970 U | 970 U | 990 U | 960 UR | 960 U | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 1000 U | 970 U | 930 U | 970 U | 970 U | 990 U | 960 U | 960 U | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 4-CHLOROANILINE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 UR | 390 U | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 1000 U | 970 U | 930 U | 970 U | 970 U | 990 U | 960 U | 960 U | NA | NA | NA |
| 4-NITROPHENOL | 1000 U | 970 U | 930 U | 970 U | 970 U | 990 U | 960 U | 960 U | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 UR | 390 U | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | 1000 U | 970 U | 930 U | 970 U | 970 U | 990 U | 960 UR | 960 U | NA | NA | NA |
| BENZOIC ACID | 1000 U | 970 U | 930 U | 970 U | 970 U | 990 U | 960 U | 960 UJ | NA | NA | NA |
| BENZYL ALCOHOL | 410 U | 390 U | 380 U | 390 UR | 390 U | 400 U | 380 UR | 390 U | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 410 U | 190 J | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| DIBENZOFURAN | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| DIETHYL PHTHALATE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| DIMETHYL PHTHALATE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| HEXACHLOROBENZENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| HEXACHLOROBUTADIENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 410 U | 390 U | 380 U | 390 UJ | 390 U | 400 U | 380 U | 390 UJ | NA | NA | NA |
| HEXACHLOROETHANE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| ISOPHORONE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| NITROBENZENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 UR | 390 U | NA | NA | NA |
| PENTACHLOROPHENOL | 1000 U | 970 U | 930 U | 970 U | 970 U | 990 U | 960 U | 960 U | NA | NA | NA |
| PHENOL | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| PYRIDINE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 UR | 390 U | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| ACENAPHTHENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| ACENAPHTHYLENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| ANTHRACENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | 1.7 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | 1.7 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| BENZO(A)PYRENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | 1.7 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-296 | SB-296 | SB-297 | SB-297 | SB-298 | SB-298 | SB-299 | SB-299 | SB-382 | SB-382 | SB-382 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-296-0405 | SB-296-0910 | SB-297-0405 | SB-297-0910 | SB-298-0405 | SB-298-0910 | SB-299-0405 | SB-299-0910 | SB-382-0203 | SB-382-0405 | SB-382-0708 |
| SAMPLE DATE | 20051028 | 20051028 | 20051028 | 20051028 | 20051101 | 20051101 | 20051101 | 20051101 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 2 | 4 | 7 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 | 5 | 8 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| FLUORANTHENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| FLUORENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| NAPHTHALENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| PHENANTHRENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| PYRENE | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 21 U | 20 U | 19 U | 20 U | 20 U | 20 U | 20 U | 20 U | 43 U | 41 U | 42 U |
| AROCLOR-1221 | 21 U | 20 U | 19 U | 20 U | 20 U | 20 U | 20 U | 20 U | 43 U | 41 U | 42 U |
| AROCLOR-1232 | 21 U | 20 U | 19 U | 20 U | 20 U | 20 U | 20 U | 20 U | 43 U | 41 U | 42 U |
| AROCLOR-1242 | 21 U | 20 U | 19 U | 20 U | 20 U | 20 U | 20 U | 20 U | 43 U | 41 U | 42 U |
| AROCLOR-1248 | 21 U | 20 U | 19 U | 20 U | 20 U | 20 U | 20 U | 20 U | 43 U | 41 U | 42 U |
| AROCLOR-1254 | 21 U | 20 U | 19 U | 20 U | 20 U | 20 U | 20 U | 20 U | 43 U | 41 U | 42 U |
| AROCLOR-1260 | 21 U | 20 U | 19 U | 20 U | 20 U | 20 U | 20 U | 20 U | 43 U | 41 U | 42 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 0.91 U | 0.74 U | 0.79 U | 0.82 U | 0.64 UL | 0.78 UL | 0.74 UL | 0.84 UL | NA | NA | NA |
| ARSENIC | 5.7 | 2.4 K | 3.3 | 3 K | 3.5 | 2 K | 1.3 K | 2.2 K | NA | NA | NA |
| BARIUM | 14.5 | 13.7 | 16.3 | 22.3 | 17.7 | 19.6 | 12.5 | 42.2 | NA | NA | NA |
| BERYLLIUM | 3.6 | 3.6 | 3.1 | 3.7 | 4.3 | 3.8 | 1.8 | 2.6 | NA | NA | NA |
| CADMIUM | 0.48 U | 0.39 U | 0.42 U | 0.44 U | 0.06 U | 0.08 U | 0.07 U | 0.08 U | NA | NA | NA |
| CHROMIUM | 38.7 | 21.1 | 26.1 | 19.2 | 16.3 K | 39.4 K | 18.6 K | 16 K | NA | NA | NA |
| COBALT | 32.3 | 6 K | 6 K | 8.7 K | 8 | 5.3 | 11 | 9.3 | NA | NA | NA |
| COPPER | 40.4 | 21.9 | 21.9 | 15.9 | 18 | 11.6 | 10.9 | 11.2 | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 9.9 | 7.6 | 8.3 | 8.5 | 8.4 | 10.4 | 4 | 11.2 | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.02 | 0.01 | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 B | NA | NA | NA |
| MOLYBDENUM | 0.55 K | 0.36 U | 0.43 K | 0.45 K | 0.32 | 0.35 | 0.18 U | 0.2 U | NA | NA | NA |
| NICKEL | 31.4 | 21.3 | 24 | 25.4 | 23.3 | 17.8 | 13.7 | 18.1 | NA | NA | NA |
| SELENIUM | 0.8 U | 0.65 U | 0.69 U | 0.72 U | 0.56 UL | 0.69 UL | 0.65 UL | 0.73 UL | NA | NA | NA |
| SILVER | 1.6 | 1.2 | 0.84 U | 0.88 U | 0.08 U | 0.07 U | 0.09 U | 0.11 U | NA | NA | NA |
| THALLIUM | 1.36 U | 1.11 U | 1.17 U | 1.3 B | 0.96 U | 1.17 U | 1.5 B | 2 B | NA | NA | NA |
| VANADIUM | 61.6 | 32.8 | 35.3 | 31.8 | 28.4 | 46.4 | 27.2 | 20.7 | NA | NA | NA |
| ZINC | 58 | 26.8 | 24.1 | 33.2 | 34.7 | 30.8 | 40.9 | 42.7 | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 2600 U | 2800 U | 2800 U | 2700 U | 2800 U | 2900 U | 2700 U | 2800 U | NA | NA | NA |
| TPH (C09-C36) | 4900 J | 5900 U | 3500 J | 3800 J | 3600 B | 2800 B | 2900 B | 2900 B | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | 76.2 | 80.4 | 79.2 |
| TOTAL SOLIDS | 80 | 84 | 88 | 84 | 84 | 83 | 86 | 85 | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-296 | SB-296 | SB-297 | SB-297 | SB-298 | SB-298 | SB-299 | SB-299 | SB-382 | SB-382 | SB-382 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-296-0405 | SB-296-0910 | SB-297-0405 | SB-297-0910 | SB-298-0405 | SB-298-0910 | SB-299-0405 | SB-299-0910 | SB-382-0203 | SB-382-0405 | SB-382-0708 |
| SAMPLE DATE | 20051028 | 20051028 | 20051028 | 20051028 | 20051101 | 20051101 | 20051101 | 20051101 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 2 | 4 | 7 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 | 5 | 8 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-383 | SB-383 | SB-383 | SB-384 | SB-384 | SB-384 | SB-385 | SB-385 | SB-385 | SB-386 | SB-386 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-383-0203 | SB-383-0405 | SB-383-0708 | SB-384-0203 | SB-384-0405 | SB-384-0708 | SB-385-0203 | SB-385-0405 | SB-385-0708 | SB-386-0203 | SB-386-0405 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-383 | SB-383 | SB-383 | SB-384 | SB-384 | SB-384 | SB-385 | SB-385 | SB-385 | SB-386 | SB-386 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-383-0203 | SB-383-0405 | SB-383-0708 | SB-384-0203 | SB-384-0405 | SB-384-0708 | SB-385-0203 | SB-385-0405 | SB-385-0708 | SB-386-0203 | SB-386-0405 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 51 | 38 | 10 | 1.5 U | 1.5 U | 1.7 U | 1.4 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 51 | 38 | 10 | 1.5 U | 1.5 U | 1.7 U | 1.4 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 51 J | 38 J | 10 J | 1.5 U | 1.5 U | 1.7 U | 1.4 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-383 | SB-383 | SB-383 | SB-384 | SB-384 | SB-384 | SB-385 | SB-385 | SB-385 | SB-386 | SB-386 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-383-0203 | SB-383-0405 | SB-383-0708 | SB-384-0203 | SB-384-0405 | SB-384-0708 | SB-385-0203 | SB-385-0405 | SB-385-0708 | SB-386-0203 | SB-386-0405 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 51 | 38 | 10 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 38 U | 42 U | 40 U | 38 U | 39 U | 43 U | 36 U | 36 U | 39 U | 37 U | 37 U |
| AROCLOR-1221 | 38 U | 42 U | 40 U | 38 U | 39 U | 43 U | 36 U | 36 U | 39 U | 37 U | 37 U |
| AROCLOR-1232 | 38 U | 42 U | 40 U | 38 U | 39 U | 43 U | 36 U | 36 U | 39 U | 37 U | 37 U |
| AROCLOR-1242 | 38 U | 42 U | 40 U | 38 U | 39 U | 43 U | 36 U | 36 U | 39 U | 37 U | 37 U |
| AROCLOR-1248 | 38 U | 42 U | 40 U | 38 U | 39 U | 43 U | 36 U | 36 U | 39 U | 37 U | 37 U |
| AROCLOR-1254 | 38 U | 42 U | 40 U | 38 U | 39 U | 43 U | 36 U | 36 U | 39 U | 37 U | 37 U |
| AROCLOR-1260 | 38 U | 42 U | 40 U | 38 U | 39 U | 43 U | 36 U | 36 U | 39 U | 37 U | 37 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | 87.2 | 79.2 | 83.1 | 86 | 84.6 | 76.6 | 91 | 93 | 84.7 | 89.2 | 89.5 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-383 | SB-383 | SB-383 | SB-384 | SB-384 | SB-384 | SB-385 | SB-385 | SB-385 | SB-386 | SB-386 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-383-0203 | SB-383-0405 | SB-383-0708 | SB-384-0203 | SB-384-0405 | SB-384-0708 | SB-385-0203 | SB-385-0405 | SB-385-0708 | SB-386-0203 | SB-386-0405 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-386 | SB-387 | SB-387 | SB-387 | SB-388 | SB-388 | SB-388 | SB-389 | SB-389 | SB-389 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-386-0708 | SB-387-0203 | SB-387-0405 | SB-387-0708 | SB-388-0203 | SB-388-0405 | SB-388-0708 | SB-389-0203 | SB-389-0405 | SB-389-0708 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 |
| BOTTOM DEPTH | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-386 | SB-387 | SB-387 | SB-387 | SB-388 | SB-388 | SB-388 | SB-389 | SB-389 | SB-389 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-386-0708 | SB-387-0203 | SB-387-0405 | SB-387-0708 | SB-388-0203 | SB-388-0405 | SB-388-0708 | SB-389-0203 | SB-389-0405 | SB-389-0708 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 |
| BOTTOM DEPTH | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.4 U | 1.5 U | 33 | 9.7 |
| BAP EQUIVALENT-POS | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.4 U | 1.5 U | 33 | 9.7 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.4 U | 1.5 U | 33 J | 9.7 J |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-386 | SB-387 | SB-387 | SB-387 | SB-388 | SB-388 | SB-388 | SB-389 | SB-389 | SB-389 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-386-0708 | SB-387-0203 | SB-387-0405 | SB-387-0708 | SB-388-0203 | SB-388-0405 | SB-388-0708 | SB-389-0203 | SB-389-0405 | SB-389-0708 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 |
| BOTTOM DEPTH | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 33 | 9.7 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 39 U | 36 U | 39 U | 37 U | 38 U | 36 U | 37 U | 39 U | 38 U | 38 U |
| AROCLOR-1221 | 39 U | 36 U | 39 U | 37 U | 38 U | 36 U | 37 U | 39 U | 38 U | 38 U |
| AROCLOR-1232 | 39 U | 36 U | 39 U | 37 U | 38 U | 36 U | 37 U | 39 U | 38 U | 38 U |
| AROCLOR-1242 | 39 U | 36 U | 39 U | 37 U | 38 U | 36 U | 37 U | 39 U | 38 U | 38 U |
| AROCLOR-1248 | 39 U | 36 U | 39 U | 37 U | 38 U | 36 U | 37 U | 39 U | 38 U | 38 U |
| AROCLOR-1254 | 39 U | 36 U | 39 U | 37 U | 38 U | 36 U | 37 U | 39 U | 38 U | 38 U |
| AROCLOR-1260 | 39 U | 36 U | 39 U | 37 U | 38 U | 36 U | 37 U | 39 U | 38 U | 38 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | |
| PERCENT SOLIDS | 84.1 | 91.4 | 84.4 | 88.8 | 87.6 | 90.8 | 90.3 | 85 | 87.5 | 86.4 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-386 | SB-387 | SB-387 | SB-387 | SB-388 | SB-388 | SB-388 | SB-389 | SB-389 | SB-389 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-386-0708 | SB-387-0203 | SB-387-0405 | SB-387-0708 | SB-388-0203 | SB-388-0405 | SB-388-0708 | SB-389-0203 | SB-389-0405 | SB-389-0708 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 |
| BOTTOM DEPTH | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-050 | SB-050 | SB-055 | SB-055 | SB-056 | SB-056 | SB-093 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-50-05 | SB-50-10 | SB-55-05 | SB-55-10 | SB-56-05 | SB-56-10 | SB-93-05 |
| SAMPLE DATE | 20040915 | 20040915 | 20040915 | 20040915 | 20040913 | 20040913 | 20040916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1-DICHLOROETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1-DICHLOROETHENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,1-DICHLOROPROPENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2-DIBROMOETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2-DICHLOROBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2-DICHLOROETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,2-DICHLOROPROPANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,3-DICHLOROBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,3-DICHLOROPROPANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 2-BUTANONE | NA | NA | 61 U | 62 U | 57 U | 58 U | 60 U |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 2-CHLOROTOLUENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 2-HEXANONE | NA | NA | 61 U | 62 U | 57 U | 58 U | 60 U |
| 4-CHLOROTOLUENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 4-ISOPROPYLTOLUENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| 4-METHYL-2-PENTANONE | NA | NA | 61 U | 62 U | 57 U | 58 U | 60 U |
| ACETONE | NA | NA | 61 UJ | 62 UJ | 57 UJ | 58 UJ | 60 U |
| BENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| BROMOBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| BROMOCHLOROMETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| BROMODICHLOROMETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| BROMOFORM | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| BROMOMETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| CARBON DISULFIDE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| CARBON TETRACHLORIDE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| CHLOROBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| CHLORODIBROMOMETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| CHLOROETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| CHLOROFORM | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| CHLOROMETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| DIBROMOMETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| DICHLORODIFLUOROMETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| M+P-XYLENES | NA | NA | 12 U | 12 U | 11 U | 12 U | 12 U |
| METHYL TERT-BUTYL ETHER | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| METHYLENE CHLORIDE | NA | NA | 7 B | 6 U | 6 U | 6 U | 6 U |
| NAPHTHALENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| N-BUTYLBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| N-PROPYLBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| O-XYLENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| SEC-BUTYLBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| STYRENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| TOLUENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| TRICHLOROETHENE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| TRICHLOROFLUOROMETHANE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| VINYL ACETATE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| VINYL CHLORIDE | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | 1000 U | 1000 U | 940 U | 970 U | 990 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 2,4-DICHLOROPHENOL | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |

| LOCATION | SB-050 | SB-050 | SB-055 | SB-055 | SB-056 | SB-056 | SB-093 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-50-05 | SB-50-10 | SB-55-05 | SB-55-10 | SB-56-05 | SB-56-10 | SB-93-05 |
| SAMPLE DATE | 20040915 | 20040915 | 20040915 | 20040915 | 20040913 | 20040913 | 20040916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| 2,4-DIMETHYLPHENOL | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 2,4-DINITROPHENOL | NA | NA | 1000 U | 1000 U | 940 U | 970 U | 990 U |
| 2,4-DINITROTOLUENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 2,6-DINITROTOLUENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 2-CHLORONAPHTHALENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 2-CHLOROPHENOL | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 2-METHYLPHENOL | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 2-NITROANILINE | NA | NA | 1000 U | 1000 U | 940 U | 970 U | 990 U |
| 2-NITROPHENOL | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 3&4-METHYLPHENOL | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 3,3'-DICHLOROBENZIDINE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 3-NITROANILINE | NA | NA | 1000 U | 1000 U | 940 U | 970 U | 990 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | 940 U | 960 U | 860 U | 890 U | 910 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 4-CHLOROANILINE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | 1000 U | 1000 U | 940 U | 970 U | 990 U |
| 4-NITROPHENOL | NA | NA | 1000 U | 1000 U | 940 U | 970 U | 990 U |
| ACETOPHENONE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| BUTYL BENZYL PHTHALATE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| CAPROLACTAM | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| CARBAZOLE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| DIBENZOFURAN | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| DIETHYL PHTHALATE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| DIMETHYL PHTHALATE | NA | NA | 410 U | 310 J | 380 U | 390 U | 400 U |
| DI-N-BUTYL PHTHALATE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| DI-N-OCTYL PHTHALATE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| HEXACHLOROBENZENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| HEXACHLOROBUTADIENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| HEXACHLOROETHANE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| ISOPHORONE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| NITROBENZENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| N-NITROSODIPHENYLAMINE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| PENTACHLOROPHENOL | NA | NA | 1000 U | 1000 U | 940 U | 970 U | 990 U |
| PHENOL | NA | NA | 480 | 420 U | 910 | 730 | 400 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| ACENAPHTHENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| ACENAPHTHYLENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| ANTHRACENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| BAP EQUIVALENT-HALFND | NA | NA | 410 U | 464 | 380 U | 390 U | 400 U |
| BAP EQUIVALENT-POS | NA | NA | 410 U | 254 | 380 U | 390 U | 400 U |
| BENZO(A)ANTHRACENE | NA | NA | 410 U | 220 J | 380 U | 390 U | 400 U |
| BENZO(A)PYRENE | NA | NA | 410 U | 200 J | 380 U | 390 U | 400 U |
| BENZO(B)FLUORANTHENE | NA | NA | 410 U | 190 J | 380 U | 390 U | 400 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | 410 U | 140 J | 380 U | 390 U | 400 U |
| BENZO(K)FLUORANTHENE | NA | NA | 410 U | 160 J | 380 U | 390 U | 400 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-050 | SB-050 | SB-055 | SB-055 | SB-056 | SB-056 | SB-093 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-50-05 | SB-50-10 | SB-55-05 | SB-55-10 | SB-56-05 | SB-56-10 | SB-93-05 |
| SAMPLE DATE | 20040915 | 20040915 | 20040915 | 20040915 | 20040913 | 20040913 | 20040916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | 410 U | 250 J | 380 U | 390 U | 400 U |
| DIBENZO(A,H)ANTHRACENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| FLUORANTHENE | NA | NA | 410 U | 490 | 380 U | 390 U | 400 U |
| FLUORENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| INDENO(1,2,3-CD)PYRENE | NA | NA | 410 U | 110 J | 380 U | 390 U | 400 U |
| NAPHTHALENE | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U |
| PHENANTHRENE | NA | NA | 410 U | 190 J | 380 U | 390 U | 400 U |
| PYRENE | NA | NA | 410 U | 370 J | 380 U | 390 U | 400 U |
| TOTAL PAHS | NA | NA | 0 U | 2320 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| 4,4'-DDE | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| 4,4'-DDT | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| ALDRIN | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| ALPHA-BHC | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| ALPHA-CHLORDANE | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| AROCLOR-1016 | NA | NA | 300 U | 310 U | 280 U | 280 U | 290 U |
| AROCLOR-1221 | NA | NA | 300 U | 310 U | 280 U | 280 U | 290 U |
| AROCLOR-1232 | NA | NA | 300 U | 310 U | 280 U | 280 U | 290 U |
| AROCLOR-1242 | NA | NA | 300 U | 310 U | 280 U | 280 U | 290 U |
| AROCLOR-1248 | NA | NA | 300 U | 310 U | 280 U | 280 U | 290 U |
| AROCLOR-1254 | NA | NA | 300 U | 310 U | 280 U | 280 U | 290 U |
| AROCLOR-1260 | NA | NA | 300 U | 310 U | 280 U | 280 U | 290 U |
| BETA-BHC | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| DELTA-BHC | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| DIELDRIN | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| ENDOSULFAN I | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| ENDOSULFAN II | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| ENDOSULFAN SULFATE | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| ENDRIN | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| ENDRIN ALDEHYDE | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| ENDRIN KETONE | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| GAMMA-BHC (LINDANE) | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| GAMMA-CHLORDANE | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| HEPTACHLOR | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| HEPTACHLOR EPOXIDE | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| METHOXYCHLOR | NA | NA | 24 U | NA | 22 U | NA | 23 U |
| TOTAL AROCLOR | NA | NA | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | 600 U | NA | 560 U | NA | 580 U |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 2.8 U | 2.7 U | 2.8 U | 2.8 UR | 2.6 UR | 2.9 UR | 3 UR |
| ARSENIC | 0.96 | 1.2 | 1.9 | 0.58 L | 0.53 UL | 0.58 UL | 0.59 UL |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 2.8 U | 2.7 U | 6.2 | 2.8 U | 2.6 U | 2.9 U | 3 UL |
| CADMIUM | 2.8 U | 2.7 U | 2.8 U | 2.8 UL | 2.6 UL | 2.9 UL | 3 UL |
| CHROMIUM | 13 | 5.8 | 15 | 8.4 L | 15 L | 10 L | 20 |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 8.7 | 10 | 56 | 12 | 10 | 4.7 K | 13 L |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 6.7 | 4.8 | 8.4 | 5.2 J | 3.2 J | 2.9 UJ | 8.7 L |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.11 U | 0.11 U | 0.11 U | 0.11 UL | 0.11 UL | 0.12 UL | 0.12 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 18 | 28 | 150 | 11 | 11 | 5.3 K | 17 |
| SELENIUM | 2.8 U | 2.7 U | 2.8 | 2.8 UL | 2.6 UL | 2.9 UL | 4.3 L |
| SILVER | 2.6 U | 2.5 U | 3 UL | 2.8 UR | 2.6 UR | 2.9 UR | 3 UR |
| THALLIUM | 2.2 UL | 2.2 UL | 2.2 U | 2.3 UL | 2.1 UL | 2.3 UL | 2.4 UL |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 43 K | 140 | 270 | 62 J | 26 UL | 29 UL | 30 U |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | 12000 U | 12000 U | 11000 U | 11000 U | 12000 U |
| GASOLINE RANGE ORGANICS | NA | NA | 120 U | 120 U | 110 U | 110 U | 120 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-050 | SB-050 | SB-055 | SB-055 | SB-056 | SB-056 | SB-093 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-50-05 | SB-50-10 | SB-55-05 | SB-55-10 | SB-56-05 | SB-56-10 | SB-93-05 |
| SAMPLE DATE | 20040915 | 20040915 | 20040915 | 20040915 | 20040913 | 20040913 | 20040916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-093 | SB-094 | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 | SB-390 | SB-390 | SB-390 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-93-10 | SB-94-05 | SB-94-10 | SB-95-05 | SB-95-10 | SB-96-05 | SB-96-10 | SB-390-0203 | SB-390-0405 | SB-390-0708 |
| SAMPLE DATE | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 2 | 4 | 7 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 | 5 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 2-BUTANONE | 59 U | 59 U | 57 U | 60 U | 58 U | 58 U | 58 U | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 2-HEXANONE | 59 U | 59 U | 57 U | 60 U | 58 U | 58 U | 58 U | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 59 U | 59 U | 57 U | 60 U | 58 U | 58 U | 58 U | NA | NA | NA |
| ACETONE | 59 U | 59 U | 57 U | 60 U | 58 U | 58 U | 58 U | NA | NA | NA |
| BENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| BROMOBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| BROMOFORM | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| BROMOMETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| CARBON DISULFIDE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| CHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| CHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| CHLOROFORM | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| CHLOROMETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| DIBROMOMETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| M+P-XYLENES | 12 U | 12 U | 11 U | 12 U | 12 U | 12 U | 12 U | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| METHYLENE CHLORIDE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| NAPHTHALENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| N-BUTYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| N-PROPYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| O-XYLENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| STYRENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| TOLUENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| TRICHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| VINYL ACETATE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| VINYL CHLORIDE | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1-BIPHENYL | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 980 U | 1000 U | 970 U | 1000 U | 980 U | 970 U | 990 U | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |

| LOCATION | SB-093 | SB-094 | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 | SB-390 | SB-390 | SB-390 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-93-10 | SB-94-05 | SB-94-10 | SB-95-05 | SB-95-10 | SB-96-05 | SB-96-10 | SB-390-0203 | SB-390-0405 | SB-390-0708 |
| SAMPLE DATE | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 2 | 4 | 7 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 | 5 | 8 |
| 2,4-DIMETHYLPHENOL | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 2,4-DINITROPHENOL | 980 U | 1000 U | 970 U | 1000 U | 980 U | 970 U | 990 U | NA | NA | NA |
| 2,4-DINITROTOLUENE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 2,6-DINITROTOLUENE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 2-CHLOROPHENOL | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 2-METHYLPHENOL | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 2-NITROANILINE | 980 U | 1000 U | 970 U | 1000 U | 980 U | 970 U | 990 U | NA | NA | NA |
| 2-NITROPHENOL | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 3&4-METHYLPHENOL | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 3-NITROANILINE | 980 U | 1000 U | 970 U | 1000 U | 980 U | 970 U | 990 U | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 900 U | 920 U | 890 U | 930 U | 900 U | 890 U | 910 U | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 4-CHLOROANILINE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 980 U | 1000 U | 970 U | 1000 U | 980 U | 970 U | 990 U | NA | NA | NA |
| 4-NITROPHENOL | 980 U | 1000 U | 970 U | 1000 U | 980 U | 970 U | 990 U | NA | NA | NA |
| ACETOPHENONE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| CAPROLACTAM | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| CARBAZOLE | 390 U | 200 J | 380 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| DIBENZOFURAN | 390 U | 73 J | 130 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| DIETHYL PHTHALATE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| DIMETHYL PHTHALATE | 390 U | 400 U | 390 U | 400 U | 77 J | 390 U | 400 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| HEXACHLOROBENZENE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| HEXACHLOROBUTADIENE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| HEXACHLOROETHANE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| ISOPHORONE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| NITROBENZENE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| PENTACHLOROPHENOL | 980 U | 1000 U | 970 U | 1000 U | 980 U | 970 U | 990 U | NA | NA | NA |
| PHENOL | 390 U | 400 U | 390 U | 140 J | 390 U | 390 U | 400 U | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| ACENAPHTHENE | 390 U | 110 J | 190 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| ACENAPHTHYLENE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| ANTHRACENE | 390 U | 270 J | 430 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 390 U | 847 | 1435 | 400 U | 390 U | 390 U | 400 U | 1.7 U | 990 | 1.6 U |
| BAP EQUIVALENT-POS | 390 U | 647 | 1240 | 400 U | 390 U | 390 U | 400 U | 1.7 U | 990 | 1.6 U |
| BENZO(A)ANTHRACENE | 390 U | 620 | 1200 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| BENZO(A)PYRENE | 390 U | 490 | 950 | 400 U | 390 U | 390 U | 400 U | 1.7 U | 990 | 1.6 U |
| BENZO(B)FLUORANTHENE | 390 U | 630 | 1000 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 390 U | 280 J | 600 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 390 U | 450 | 940 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-093 | SB-094 | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 | SB-390 | SB-390 | SB-390 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-93-10 | SB-94-05 | SB-94-10 | SB-95-05 | SB-95-10 | SB-96-05 | SB-96-10 | SB-390-0203 | SB-390-0405 | SB-390-0708 |
| SAMPLE DATE | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 2 | 4 | 7 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 | 5 | 8 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 390 U | 660 | 1200 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 390 U | 400 U | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| FLUORANTHENE | 390 U | 1500 | 2700 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| FLUORENE | 390 U | 110 J | 200 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 390 U | 270 J | 590 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| NAPHTHALENE | 390 U | 400 U | 58 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| PHENANTHRENE | 390 U | 1200 | 2200 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| PYRENE | 390 U | 1100 | 1900 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA |
| TOTAL PAHS | 0 U | 7690 | 14158 | 0 U | 0 U | 0 U | 0 U | 0 U | 990 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | |
| 4,4'-DDD | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| 4,4'-DDE | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| 4,4'-DDT | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| ALDRIN | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| ALPHA-BHC | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| ALPHA-CHLORDANE | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| AROCLOR-1016 | 290 U | 290 U | 290 U | 300 U | 290 U | 290 U | 290 U | 42 U | 40 U | 40 U |
| AROCLOR-1221 | 290 U | 290 U | 290 U | 300 U | 290 U | 290 U | 290 U | 42 U | 40 U | 40 U |
| AROCLOR-1232 | 290 U | 290 U | 290 U | 300 U | 290 U | 290 U | 290 U | 42 U | 40 U | 40 U |
| AROCLOR-1242 | 290 U | 290 U | 290 U | 300 U | 290 U | 290 U | 290 U | 42 U | 40 U | 40 U |
| AROCLOR-1248 | 290 U | 290 U | 290 U | 300 U | 290 U | 290 U | 290 U | 42 U | 40 U | 40 U |
| AROCLOR-1254 | 290 U | 290 U | 290 U | 300 U | 290 U | 290 U | 290 U | 42 U | 40 U | 40 U |
| AROCLOR-1260 | 290 U | 290 U | 290 U | 300 U | 290 U | 290 U | 290 U | 42 U | 40 U | 40 U |
| BETA-BHC | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| DELTA-BHC | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| DIELDRIN | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| ENDOSULFAN I | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| ENDOSULFAN II | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| ENDOSULFAN SULFATE | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| ENDRIN | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| ENDRIN ALDEHYDE | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| ENDRIN KETONE | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| GAMMA-BHC (LINDANE) | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| GAMMA-CHLORDANE | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| HEPTACHLOR | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| HEPTACHLOR EPOXIDE | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| METHOXYCHLOR | 23 U | 23 U | 46 U | 24 U | 23 U | 23 U | 23 U | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | 580 U | 590 U | 1100 U | 600 U | 580 U | 570 U | 580 U | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | |
| ANTIMONY | 2.8 UR | 2.9 UR | 2.8 UR | 2.9 UR | 2.9 UR | 2.6 UR | 3 UR | NA | NA | NA |
| ARSENIC | 0.56 UL | 0.58 UL | 0.55 UL | 0.58 UL | 0.59 UL | 0.52 UL | 0.59 UL | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 2.8 UL | 3.2 L | 2.8 UL | 5.2 L | 2.9 UL | 2.6 UL | 4.1 L | NA | NA | NA |
| CADMIUM | 2.8 UL | 2.9 UL | 2.8 UL | 2.9 UL | 2.9 UL | 2.6 UL | 3 UL | NA | NA | NA |
| CHROMIUM | 9.9 K | 14 | 20 | 19 | 9.6 K | 2.6 U | 17 | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 10 L | 21 L | 11 L | 24 L | 5.5 L | 4.3 L | 13 L | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 2.9 L | 6.7 L | 17 L | 5.2 L | 3.2 L | 2.6 UL | 4.3 L | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.11 U | 0.12 U | 0.11 U | 0.12 U | 0.12 U | 0.1 U | 0.12 U | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 4 K | 12 | 21 | 21 | 8.4 | 2.6 U | 22 | NA | NA | NA |
| SELENIUM | 2.8 UL | 4.2 L | 2.8 UL | 2.9 UL | 2.9 UL | 2.6 UL | 3 UL | NA | NA | NA |
| SILVER | 2.8 UR | 2.9 UR | 2.8 UR | 2.9 UR | 2.9 UR | 2.6 UR | 3 UR | NA | NA | NA |
| THALLIUM | 2.2 UL | 2.3 UL | 2.2 UL | 2.3 UL | 2.4 UL | 2.1 UL | 2.4 UL | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 28 U | 29 U | 33 K | 29 U | 29 U | 26 U | 30 U | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 12000 U | 17000 | 12000 U | 12000 U | 12000 U | 12000 U | 12000 | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 120 U | 120 U | 120 U | 120 U | 120 U | 120 U | 120 U | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | 78.4 | 82.8 | 82.3 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-093 | SB-094 | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 | SB-390 | SB-390 | SB-390 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-93-10 | SB-94-05 | SB-94-10 | SB-95-05 | SB-95-10 | SB-96-05 | SB-96-10 | SB-390-0203 | SB-390-0405 | SB-390-0708 |
| SAMPLE DATE | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 2 | 4 | 7 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 | 5 | 8 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-391 | SB-391 | SB-391 | SB-392 | SB-392 | SB-392 | SB-393 | SB-393 | SB-393 | SB-394 | SB-394 | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-391-0203 | SB-391-0405 | SB-391-0708 | SB-392-0203 | SB-392-0405 | SB-392-0708 | SB-393-0203 | SB-393-0405 | SB-393-0708 | SB-394-0203 | SB-394-0405 | SB-39 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 2007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | S |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | S |
| TOP DEPTH | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 |
| BOTTOM DEPTH | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-391 | SB-391 | SB-391 | SB-392 | SB-392 | SB-392 | SB-393 | SB-393 | SB-393 | SB-394 | SB-394 | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-391-0203 | SB-391-0405 | SB-391-0708 | SB-392-0203 | SB-392-0405 | SB-392-0708 | SB-393-0203 | SB-393-0405 | SB-393-0708 | SB-394-0203 | SB-394-0405 | SB-39 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 2007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | S |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | S |
| TOP DEPTH | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 |
| BOTTOM DEPTH | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2 U | 1.5 U | 1.5 U | 1.5 U | 20 | 1.5 U | 1.4 U | 7.5 | 1.5 U | 25 | 1.5 U | 1.5 |
| BAP EQUIVALENT-POS | 2 U | 1.5 U | 1.5 U | 1.5 U | 20 | 1.5 U | 1.4 U | 7.5 | 1.5 U | 25 | 1.5 U | 1.5 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 2 U | 1.5 U | 1.5 U | 1.5 U | 20 J | 1.5 U | 1.4 U | 7.5 J | 1.5 U | 25 J | 1.5 U | 1.5 |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-391 | SB-391 | SB-391 | SB-392 | SB-392 | SB-392 | SB-393 | SB-393 | SB-393 | SB-394 | SB-394 | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-391-0203 | SB-391-0405 | SB-391-0708 | SB-392-0203 | SB-392-0405 | SB-392-0708 | SB-393-0203 | SB-393-0405 | SB-393-0708 | SB-394-0203 | SB-394-0405 | SB-39 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 2007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | S |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | S |
| TOP DEPTH | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 |
| BOTTOM DEPTH | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 20 | 0 U | 0 U | 7.5 | 0 U | 25 | 0 U | 0 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 50 U | 38 U | 39 U | 37 U | 39 U | 39 U | 36 U | 35 U | 38 U | 36 U | 38 U | 38 |
| AROCLOR-1221 | 50 U | 38 U | 39 U | 37 U | 39 U | 39 U | 36 U | 35 U | 38 U | 36 U | 38 U | 38 |
| AROCLOR-1232 | 50 U | 38 U | 39 U | 37 U | 39 U | 39 U | 36 U | 35 U | 38 U | 36 U | 38 U | 38 |
| AROCLOR-1242 | 50 U | 38 U | 39 U | 37 U | 39 U | 39 U | 36 U | 35 U | 38 U | 36 U | 38 U | 38 |
| AROCLOR-1248 | 50 U | 38 U | 39 U | 37 U | 39 U | 39 U | 36 U | 35 U | 38 U | 36 U | 38 U | 38 |
| AROCLOR-1254 | 50 U | 38 U | 39 U | 37 U | 39 U | 39 U | 36 U | 35 U | 38 U | 36 U | 38 U | 38 |
| AROCLOR-1260 | 50 U | 38 U | 39 U | 37 U | 39 U | 39 U | 36 U | 35 U | 38 U | 36 U | 38 U | 38 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | 65.8 | 87 | 85.3 | 89.3 | 84.9 | 84.4 | 92.6 | 93.5 | 86.9 | 90.6 | 86.7 | 86.2 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-391 | SB-391 | SB-391 | SB-392 | SB-392 | SB-392 | SB-393 | SB-393 | SB-393 | SB-394 | SB-394 | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-391-0203 | SB-391-0405 | SB-391-0708 | SB-392-0203 | SB-392-0405 | SB-392-0708 | SB-393-0203 | SB-393-0405 | SB-393-0708 | SB-394-0203 | SB-394-0405 | SB-39 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 2007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | S |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | S |
| TOP DEPTH | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 |
| BOTTOM DEPTH | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | 394 | SB-395 | SB-395 | SB-395 | SB-396 | SB-396 | SB-396 | SB-397 | SB-397 | SB-397 | SB-398 | SB-398 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | 4-0708 | SB-395-0203 | SB-395-0405 | SB-395-0708 | SB-396-0203 | SB-396-0405 | SB-396-0708 | SB-397-0203 | SB-397-0405 | SB-397-0708 | SB-398-0203 | SB-398-0405 |
| SAMPLE DATE | 1016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | D | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | B | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-BIPHENYL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | 394 | SB-395 | SB-395 | SB-395 | SB-396 | SB-396 | SB-396 | SB-397 | SB-397 | SB-397 | SB-398 | SB-398 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | 4-0708 | SB-395-0203 | SB-395-0405 | SB-395-0708 | SB-396-0203 | SB-396-0405 | SB-396-0708 | SB-397-0203 | SB-397-0405 | SB-397-0708 | SB-398-0203 | SB-398-0405 |
| SAMPLE DATE | 1016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | O | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | B | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | ' | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | ) | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| 2,4-DIMETHYLPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 850 | 1.5 U | 33 | 1.5 U |
| BAP EQUIVALENT-POS | U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 850 | 1.5 U | 33 | 1.5 U |
| BENZO(A)ANTHRACENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 UJ | 850 | 1.5 U | 33 J | 1.5 U |
| BENZO(B)FLUORANTHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | 394 | SB-395 | SB-395 | SB-395 | SB-396 | SB-396 | SB-396 | SB-397 | SB-397 | SB-397 | SB-398 | SB-398 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | 4-0708 | SB-395-0203 | SB-395-0405 | SB-395-0708 | SB-396-0203 | SB-396-0405 | SB-396-0708 | SB-397-0203 | SB-397-0405 | SB-397-0708 | SB-398-0203 | SB-398-0405 |
| SAMPLE DATE | 1016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | D | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | B | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | ' | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | ) | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| C3-CHRYSENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 850 | 0 U | 33 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| 4,4'-DDD | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | U | 34 U | 38 U | 38 U | 38 U | 39 U | 39 U | 37 U | 35 U | 39 U | 38 U | 37 U |
| AROCLOR-1221 | U | 34 U | 38 U | 38 U | 38 U | 39 U | 39 U | 37 U | 35 U | 39 U | 38 U | 37 U |
| AROCLOR-1232 | U | 34 U | 38 U | 38 U | 38 U | 39 U | 39 U | 37 U | 35 U | 39 U | 38 U | 37 U |
| AROCLOR-1242 | U | 34 U | 38 U | 38 U | 38 U | 39 U | 39 U | 37 U | 35 U | 39 U | 38 U | 37 U |
| AROCLOR-1248 | U | 34 U | 38 U | 38 U | 38 U | 39 U | 39 U | 37 U | 35 U | 39 U | 38 U | 37 U |
| AROCLOR-1254 | U | 34 U | 38 U | 38 U | 38 U | 39 U | 39 U | 37 U | 35 U | 39 U | 38 U | 37 U |
| AROCLOR-1260 | U | 34 U | 38 U | 38 U | 38 U | 39 U | 39 U | 37 U | 19 J | 39 U | 38 U | 37 U |
| BETA-BHC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 19 | 0 U | 0 U | 0 U |
| TOXAPHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | | 95.9 | 86.9 | 87 | 86 | 84.8 | 83.8 | 89.4 | 95.1 | 85.2 | 86 | 89.4 |
| TOTAL SOLIDS | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | 394 | SB-395 | SB-395 | SB-395 | SB-396 | SB-396 | SB-396 | SB-397 | SB-397 | SB-397 | SB-398 | SB-398 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | 4-0708 | SB-395-0203 | SB-395-0405 | SB-395-0708 | SB-396-0203 | SB-396-0405 | SB-396-0708 | SB-397-0203 | SB-397-0405 | SB-397-0708 | SB-398-0203 | SB-398-0405 |
| SAMPLE DATE | 1016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | O | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | B | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| BISMUTH-212 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-398 | SB-399 | SB-399 | SB-399 | SB-400 | SB-400 | SB-400 | SB-401 | SB-401 | SB-401 | SB-402 | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-398-0708 | SB-399-0203 | SB-399-0405 | SB-399-0708 | SB-400-0203 | SB-400-0405 | SB-400-0708 | SB-401-0203 | SB-401-0405 | SB-401-0708 | SB-402-0203 | SB-40 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 2007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | S |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | S |
| TOP DEPTH | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-398 | SB-399 | SB-399 | SB-399 | SB-400 | SB-400 | SB-400 | SB-401 | SB-401 | SB-401 | SB-402 | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-398-0708 | SB-399-0203 | SB-399-0405 | SB-399-0708 | SB-400-0203 | SB-400-0405 | SB-400-0708 | SB-401-0203 | SB-401-0405 | SB-401-0708 | SB-402-0203 | SB-40 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 2007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | S |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | S |
| TOP DEPTH | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.4 U | 22 | 1.6 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 |
| BAP EQUIVALENT-POS | 1.5 U | 1.4 U | 22 | 1.6 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 1.4 U | 22 J | 1.6 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-398 | SB-399 | SB-399 | SB-399 | SB-400 | SB-400 | SB-400 | SB-401 | SB-401 | SB-401 | SB-402 | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-398-0708 | SB-399-0203 | SB-399-0405 | SB-399-0708 | SB-400-0203 | SB-400-0405 | SB-400-0708 | SB-401-0203 | SB-401-0405 | SB-401-0708 | SB-402-0203 | SB-40 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 2007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | S |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | S |
| TOP DEPTH | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 22 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 38 U | 37 U | 39 U | 40 U | 36 U | 39 U | 41 U | 37 U | 40 U | 38 U | 39 U | 39 |
| AROCLOR-1221 | 38 U | 37 U | 39 U | 40 U | 36 U | 39 U | 41 U | 37 U | 40 U | 38 U | 39 U | 39 |
| AROCLOR-1232 | 38 U | 37 U | 39 U | 40 U | 36 U | 39 U | 41 U | 37 U | 40 U | 38 U | 39 U | 39 |
| AROCLOR-1242 | 38 U | 37 U | 39 U | 40 U | 36 U | 39 U | 41 U | 37 U | 40 U | 38 U | 39 U | 39 |
| AROCLOR-1248 | 38 U | 37 U | 39 U | 40 U | 36 U | 39 U | 41 U | 37 U | 40 U | 38 U | 39 U | 39 |
| AROCLOR-1254 | 38 U | 37 U | 39 U | 40 U | 36 U | 39 U | 41 U | 37 U | 40 U | 38 U | 39 U | 39 |
| AROCLOR-1260 | 38 U | 37 U | 39 U | 40 U | 36 U | 39 U | 41 U | 37 U | 40 U | 38 U | 39 U | 39 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | 86.3 | 89.9 | 84.5 | 83.3 | 92.1 | 84.1 | 80.3 | 88.3 | 83.1 | 86 | 84.7 | 83.6 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-398 | SB-399 | SB-399 | SB-399 | SB-400 | SB-400 | SB-400 | SB-401 | SB-401 | SB-401 | SB-402 | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-398-0708 | SB-399-0203 | SB-399-0405 | SB-399-0708 | SB-400-0203 | SB-400-0405 | SB-400-0708 | SB-401-0203 | SB-401-0405 | SB-401-0708 | SB-402-0203 | SB-40 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 2007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | S |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | S |
| TOP DEPTH | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | 402 | SB-402 | SB-403 | SB-403 | SB-403 | SB-404 | SB-404 | SB-404 | SB-405 | SB-405 | SB-405 | SB-406 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | 2-0405 | SB-402-0708 | SB-403-0203 | SB-403-0405 | SB-403-0708 | SB-404-0203 | SB-404-0405 | SB-404-0708 | SB-405-0203 | SB-405-0405 | SB-405-0708 | SB-406-0203 |
| SAMPLE DATE | 1016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | D | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | B | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-BIPHENYL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | 402 | SB-402 | SB-403 | SB-403 | SB-403 | SB-404 | SB-404 | SB-404 | SB-405 | SB-405 | SB-405 | SB-406 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | 2-0405 | SB-402-0708 | SB-403-0203 | SB-403-0405 | SB-403-0708 | SB-404-0203 | SB-404-0405 | SB-404-0708 | SB-405-0203 | SB-405-0405 | SB-405-0708 | SB-406-0203 |
| SAMPLE DATE | 1016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | D | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | B | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| 2,4-DIMETHYLPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 18 | 72 | 1.4 U | 330 | 230 | 320 |
| BAP EQUIVALENT-POS | U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 18 | 72 | 1.4 U | 330 | 230 | 320 |
| BENZO(A)ANTHRACENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 18 J | 72 J | 1.4 U | 330 J | 230 J | 320 J |
| BENZO(B)FLUORANTHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | 402 | SB-402 | SB-403 | SB-403 | SB-403 | SB-404 | SB-404 | SB-404 | SB-405 | SB-405 | SB-405 | SB-406 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | 2-0405 | SB-402-0708 | SB-403-0203 | SB-403-0405 | SB-403-0708 | SB-404-0203 | SB-404-0405 | SB-404-0708 | SB-405-0203 | SB-405-0405 | SB-405-0708 | SB-406-0203 |
| SAMPLE DATE | 1016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | D | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | B | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| C3-CHRYSENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | U | 0 U | 0 U | 0 U | 0 U | 0 U | 18 | 72 | 0 U | 330 | 230 | 320 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| 4,4'-DDD | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | U | 39 U | 37 U | 39 U | 40 U | 41 U | 42 U | 43 U | 37 U | 40 U | 43 U | 38 U |
| AROCLOR-1221 | U | 39 U | 37 U | 39 U | 40 U | 41 U | 42 U | 43 U | 37 U | 40 U | 43 U | 38 U |
| AROCLOR-1232 | U | 39 U | 37 U | 39 U | 40 U | 41 U | 42 U | 43 U | 37 U | 40 U | 43 U | 38 U |
| AROCLOR-1242 | U | 39 U | 37 U | 39 U | 40 U | 41 U | 42 U | 43 U | 37 U | 40 U | 43 U | 38 U |
| AROCLOR-1248 | U | 39 U | 37 U | 39 U | 40 U | 41 U | 42 U | 43 U | 37 U | 40 U | 43 U | 38 U |
| AROCLOR-1254 | U | 39 U | 37 U | 39 U | 40 U | 41 U | 42 U | 43 U | 37 U | 40 U | 43 U | 38 U |
| AROCLOR-1260 | U | 39 U | 37 U | 39 U | 40 U | 41 U | 42 U | 43 U | 37 U | 40 U | 43 U | 21 J |
| BETA-BHC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 21 |
| TOXAPHENE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | | 84.1 | 88.4 | 84.7 | 83.5 | 81.2 | 78 | 76.5 | 90.3 | 83.3 | 77.4 | 87.5 |
| TOTAL SOLIDS | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | 402 | SB-402 | SB-403 | SB-403 | SB-403 | SB-404 | SB-404 | SB-404 | SB-405 | SB-405 | SB-405 | SB-406 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | 2-0405 | SB-402-0708 | SB-403-0203 | SB-403-0405 | SB-403-0708 | SB-404-0203 | SB-404-0405 | SB-404-0708 | SB-405-0203 | SB-405-0405 | SB-405-0708 | SB-406-0203 |
| SAMPLE DATE | 1016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | D | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | MAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | B | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| BISMUTH-212 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-406 | SB-406 | SB-407 | SB-407 | SB-407 | SB-408 | SB-408 | SB-408 | SB-409 | SB-409 | SB-409 | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-406-0405 | SB-406-0708 | SB-407-0203 | SB-407-0405 | SB-407-0708 | SB-408-0203 | SB-408-0405 | SB-408-0708 | SB-409-0203 | SB-409-0405 | SB-409-0708 | SB-40 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 2007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | S |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | S |
| TOP DEPTH | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-406 | SB-406 | SB-407 | SB-407 | SB-407 | SB-408 | SB-408 | SB-408 | SB-409 | SB-409 | SB-409 | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-406-0405 | SB-406-0708 | SB-407-0203 | SB-407-0405 | SB-407-0708 | SB-408-0203 | SB-408-0405 | SB-408-0708 | SB-409-0203 | SB-409-0405 | SB-409-0708 | SB-40 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 2007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | S |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | S |
| TOP DEPTH | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 62 | 85 | 190 | 110 | 30 | 50 | 12 | 1.6 U | 1.6 U | 67 | 1.8 U | 260 |
| BAP EQUIVALENT-POS | 62 | 85 | 190 | 110 | 30 | 50 | 12 | 1.6 U | 1.6 U | 67 | 1.8 U | 260 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 62 J | 85 J | 190 J | 110 J | 30 J | 50 J | 12 J | 1.6 U | 1.6 U | 67 J | 1.8 U | 260 |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-406 | SB-406 | SB-407 | SB-407 | SB-407 | SB-408 | SB-408 | SB-408 | SB-409 | SB-409 | SB-409 | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-406-0405 | SB-406-0708 | SB-407-0203 | SB-407-0405 | SB-407-0708 | SB-408-0203 | SB-408-0405 | SB-408-0708 | SB-409-0203 | SB-409-0405 | SB-409-0708 | SB-40 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 2007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | S |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | S |
| TOP DEPTH | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 62 | 85 | 190 | 110 | 30 | 50 | 12 | 0 U | 0 U | 67 | 0 U | 260 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 41 U | 42 U | 42 U | 45 U | 45 U | 39 U | 38 U | 41 U | 40 U | 42 U | 45 U | 43 |
| AROCLOR-1221 | 41 U | 42 U | 42 U | 45 U | 45 U | 39 U | 38 U | 41 U | 40 U | 42 U | 45 U | 43 |
| AROCLOR-1232 | 41 U | 42 U | 42 U | 45 U | 45 U | 39 U | 38 U | 41 U | 40 U | 42 U | 45 U | 43 |
| AROCLOR-1242 | 41 U | 42 U | 42 U | 45 U | 45 U | 39 U | 38 U | 41 U | 40 U | 42 U | 45 U | 43 |
| AROCLOR-1248 | 41 U | 42 U | 42 U | 45 U | 45 U | 39 U | 38 U | 41 U | 40 U | 42 U | 45 U | 43 |
| AROCLOR-1254 | 41 U | 42 U | 42 U | 45 U | 45 U | 39 U | 38 U | 41 U | 40 U | 42 U | 45 U | 43 |
| AROCLOR-1260 | 41 U | 42 U | 42 U | 45 U | 45 U | 39 U | 15 J | 41 U | 40 U | 42 U | 45 U | 43 |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 15 | 0 U | 0 U | 0 U | 0 U | 0 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | 79.9 | 78.3 | 78.1 | 73.7 | 72.7 | 83.8 | 86.1 | 81.1 | 81.6 | 78.5 | 73.5 | 76.3 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-406 | SB-406 | SB-407 | SB-407 | SB-407 | SB-408 | SB-408 | SB-408 | SB-409 | SB-409 | SB-409 | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-406-0405 | SB-406-0708 | SB-407-0203 | SB-407-0405 | SB-407-0708 | SB-408-0203 | SB-408-0405 | SB-408-0708 | SB-409-0203 | SB-409-0405 | SB-409-0708 | SB-4 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 2007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | S |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NOR |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | S |
| TOP DEPTH | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | 489 | SB-489 | SB-489 | SB-490 | SB-490 |
|---|---|---|---|---|---|
| SAMPLE ID | 9-0203 | SB-489-0405 | SB-489-0708 | SB-490-0405 | SB-490-0708 |
| SAMPLE DATE | 1016 | 20071016 | 20071016 | 20071017 | 20071017 |
| SAMPLE CODE | MAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | O | SO | SO | SO | SO |
| SAMPLE TYPE | MAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | B | SB | SB | SB | SB |
| TOP DEPTH | 2 | 4 | 7 | 4 | 7 |
| BOTTOM DEPTH | 3 | 5 | 8 | 5 | 8 |
| **VOLATILES (UG/KG)** | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | | NA | NA | NA | NA |
| 1,4-DIOXANE | | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | | NA | NA | NA | NA |
| 2-BUTANONE | | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | | NA | NA | NA | NA |
| 2-HEXANONE | | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | | NA | NA | NA | NA |
| ACETONE | | NA | NA | NA | NA |
| BENZENE | | NA | NA | NA | NA |
| BROMOBENZENE | | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | | NA | NA | NA | NA |
| BROMOFORM | | NA | NA | NA | NA |
| BROMOMETHANE | | NA | NA | NA | NA |
| CARBON DISULFIDE | | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | | NA | NA | NA | NA |
| CHLOROBENZENE | | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | | NA | NA | NA | NA |
| CHLOROETHANE | | NA | NA | NA | NA |
| CHLOROFORM | | NA | NA | NA | NA |
| CHLOROMETHANE | | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | | NA | NA | NA | NA |
| DIBROMOMETHANE | | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | | NA | NA | NA | NA |
| DIISOPROPYL ETHER | | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | | NA | NA | NA | NA |
| ETHYLBENZENE | | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | | NA | NA | NA | NA |
| ISOPROPYLBENZENE | | NA | NA | NA | NA |
| M+P-XYLENES | | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | | NA | NA | NA | NA |
| METHYLENE CHLORIDE | | NA | NA | NA | NA |
| NAPHTHALENE | | NA | NA | NA | NA |
| N-BUTYLBENZENE | | NA | NA | NA | NA |
| N-PROPYLBENZENE | | NA | NA | NA | NA |
| O-XYLENE | | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | | NA | NA | NA | NA |
| STYRENE | | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | | NA | NA | NA | NA |
| TETRACHLOROETHENE | | NA | NA | NA | NA |
| TOLUENE | | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | | NA | NA | NA | NA |
| TOTAL XYLENES | | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | | NA | NA | NA | NA |
| TRICHLOROETHENE | | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | | NA | NA | NA | NA |
| VINYL ACETATE | | NA | NA | NA | NA |
| VINYL CHLORIDE | | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | |
| 1,1-BIPHENYL | | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | | NA | NA | NA | NA |
| 1,4-DIOXANE | | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | | NA | NA | NA | NA |

| LOCATION | 489 | SB-489 | SB-489 | SB-490 | SB-490 |
|---|---|---|---|---|---|
| SAMPLE ID | 9-0203 | SB-489-0405 | SB-489-0708 | SB-490-0405 | SB-490-0708 |
| SAMPLE DATE | 1016 | 20071016 | 20071016 | 20071017 | 20071017 |
| SAMPLE CODE | MAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | O | SO | SO | SO | SO |
| SAMPLE TYPE | MAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | B | SB | SB | SB | SB |
| TOP DEPTH | 2 | 4 | 7 | 4 | 7 |
| BOTTOM DEPTH | 3 | 5 | 8 | 5 | 8 |
| 2,4-DIMETHYLPHENOL | | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | | NA | NA | NA | NA |
| 2-CHLOROPHENOL | | NA | NA | NA | NA |
| 2-METHYLPHENOL | | NA | NA | NA | NA |
| 2-NITROANILINE | | NA | NA | NA | NA |
| 2-NITROPHENOL | | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | | NA | NA | NA | NA |
| 3-NITROANILINE | | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | | NA | NA | NA | NA |
| 4-CHLOROANILINE | | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | | NA | NA | NA | NA |
| 4-METHYLPHENOL | | NA | NA | NA | NA |
| 4-NITROANILINE | | NA | NA | NA | NA |
| 4-NITROPHENOL | | NA | NA | NA | NA |
| ACETOPHENONE | | NA | NA | NA | NA |
| ANILINE | | NA | NA | NA | NA |
| ATRAZINE | | NA | NA | NA | NA |
| AZOBENZENE | | NA | NA | NA | NA |
| BENZALDEHYDE | | NA | NA | NA | NA |
| BENZIDINE | | NA | NA | NA | NA |
| BENZOIC ACID | | NA | NA | NA | NA |
| BENZYL ALCOHOL | | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | | NA | NA | NA | NA |
| CAPROLACTAM | | NA | NA | NA | NA |
| CARBAZOLE | | NA | NA | NA | NA |
| DIBENZOFURAN | | NA | NA | NA | NA |
| DIETHYL PHTHALATE | | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | | NA | NA | NA | NA |
| HEXACHLOROBENZENE | | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | | NA | NA | NA | NA |
| HEXACHLOROETHANE | | NA | NA | NA | NA |
| ISOPHORONE | | NA | NA | NA | NA |
| NITROBENZENE | | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | | NA | NA | NA | NA |
| PENTACHLOROPHENOL | | NA | NA | NA | NA |
| PHENOL | | NA | NA | NA | NA |
| PYRIDINE | | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | |
| 1-METHYLNAPHTHALENE | | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | | NA | NA | NA | NA |
| ACENAPHTHENE | | NA | NA | NA | NA |
| ACENAPHTHYLENE | | NA | NA | NA | NA |
| ANTHRACENE | | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | | 9.8 | 21 | 110 | 31 |
| BAP EQUIVALENT-POS | | 9.8 | 21 | 110 | 31 |
| BENZO(A)ANTHRACENE | | NA | NA | NA | NA |
| BENZO(A)PYRENE | J | 9.8 J | 21 J | 110 J | 31 J |
| BENZO(B)FLUORANTHENE | | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | | NA | NA | NA | NA |
| C1-CHRYSENES | | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | | NA | NA | NA | NA |
| C1-FLUORENES | | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | | NA | NA | NA | NA |
| C2-CHRYSENES | | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | | NA | NA | NA | NA |
| C2-FLUORENES | | NA | NA | NA | NA |
| C2-NAPHTHALENES | | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | | NA | NA | NA | NA |

| LOCATION | 489 | SB-489 | SB-489 | SB-490 | SB-490 |
|---|---|---|---|---|---|
| SAMPLE ID | 9-0203 | SB-489-0405 | SB-489-0708 | SB-490-0405 | SB-490-0708 |
| SAMPLE DATE | 1016 | 20071016 | 20071016 | 20071017 | 20071017 |
| SAMPLE CODE | MAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | O | SO | SO | SO | SO |
| SAMPLE TYPE | MAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | B | SB | SB | SB | SB |
| TOP DEPTH | 2 | 4 | 7 | 4 | 7 |
| BOTTOM DEPTH | 3 | 5 | 8 | 5 | 8 |
| C3-CHRYSENES | | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | | NA | NA | NA | NA |
| C3-FLUORENES | | NA | NA | NA | NA |
| C3-NAPHTHALENES | | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | | NA | NA | NA | NA |
| C4-CHRYSENES | | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | | NA | NA | NA | NA |
| C4-NAPHTHALENES | | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | | NA | NA | NA | NA |
| CHRYSENE | | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | | NA | NA | NA | NA |
| FLUORANTHENE | | NA | NA | NA | NA |
| FLUORENE | | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | | NA | NA | NA | NA |
| NAPHTHALENE | | NA | NA | NA | NA |
| PHENANTHRENE | | NA | NA | NA | NA |
| PYRENE | | NA | NA | NA | NA |
| TOTAL PAHS | | 9.8 | 21 | 110 | 31 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | |
| 4,4'-DDD | | NA | NA | NA | NA |
| 4,4'-DDE | | NA | NA | NA | NA |
| 4,4'-DDT | | NA | NA | NA | NA |
| ALDRIN | | NA | NA | NA | NA |
| ALPHA-BHC | | NA | NA | NA | NA |
| ALPHA-CHLORDANE | | NA | NA | NA | NA |
| AROCLOR-1016 | U | 42 U | 45 U | 42 U | 38 U |
| AROCLOR-1221 | U | 42 U | 45 U | 42 U | 38 U |
| AROCLOR-1232 | U | 42 U | 45 U | 42 U | 38 U |
| AROCLOR-1242 | U | 42 U | 45 U | 42 U | 38 U |
| AROCLOR-1248 | U | 42 U | 45 U | 42 U | 38 U |
| AROCLOR-1254 | U | 42 U | 45 U | 42 U | 38 U |
| AROCLOR-1260 | U | 42 U | 45 U | 42 U | 38 U |
| BETA-BHC | | NA | NA | NA | NA |
| DELTA-BHC | | NA | NA | NA | NA |
| DIELDRIN | | NA | NA | NA | NA |
| ENDOSULFAN I | | NA | NA | NA | NA |
| ENDOSULFAN II | | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | | NA | NA | NA | NA |
| ENDRIN | | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | | NA | NA | NA | NA |
| ENDRIN KETONE | | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | | NA | NA | NA | NA |
| GAMMA-CHLORDANE | | NA | NA | NA | NA |
| HEPTACHLOR | | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | | NA | NA | NA | NA |
| METHOXYCHLOR | | NA | NA | NA | NA |
| TOTAL AROCLOR | U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | |
| ANTIMONY | | NA | NA | NA | NA |
| ARSENIC | | NA | NA | NA | NA |
| BARIUM | | NA | NA | NA | NA |
| BERYLLIUM | | NA | NA | NA | NA |
| CADMIUM | | NA | NA | NA | NA |
| CHROMIUM | | NA | NA | NA | NA |
| COBALT | | NA | NA | NA | NA |
| COPPER | | NA | NA | NA | NA |
| IRON | | NA | NA | NA | NA |
| LEAD | | NA | NA | NA | NA |
| MANGANESE | | NA | NA | NA | NA |
| MERCURY | | NA | NA | NA | NA |
| MOLYBDENUM | | NA | NA | NA | NA |
| NICKEL | | NA | NA | NA | NA |
| SELENIUM | | NA | NA | NA | NA |
| SILVER | | NA | NA | NA | NA |
| THALLIUM | | NA | NA | NA | NA |
| VANADIUM | | NA | NA | NA | NA |
| ZINC | | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | |
| DIESEL RANGE ORGANICS | | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | | NA | NA | NA | NA |
| TPH (C09-C36) | | NA | NA | NA | NA |
| TPH (C10-C32) | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | |
| PERCENT SOLIDS | | 79.3 | 73.3 | 79.4 | 86.6 |
| TOTAL SOLIDS | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | |
| HEXAVALENT CHROMIUM | | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | |
| PH | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | |
| MERCURY (METHYL) | | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | |
| ACTINIUM-228 | | NA | NA | NA | NA |
| ALUMINUM-26 | | NA | NA | NA | NA |
| AMERICIUM-241 | | NA | NA | NA | NA |
| ANTIMONY-124 | | NA | NA | NA | NA |
| ANTIMONY-125 | | NA | NA | NA | NA |
| BERYLLIUM-7 | | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | 489 | SB-489 | SB-489 | SB-490 | SB-490 |
|---|---|---|---|---|---|
| SAMPLE ID | 9-0203 | SB-489-0405 | SB-489-0708 | SB-490-0405 | SB-490-0708 |
| SAMPLE DATE | 1016 | 20071016 | 20071016 | 20071017 | 20071017 |
| SAMPLE CODE | MAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | O | SO | SO | SO | SO |
| SAMPLE TYPE | MAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | B | SB | SB | SB | SB |
| TOP DEPTH | | 4 | 7 | 4 | 7 |
| BOTTOM DEPTH | | 5 | 8 | 5 | 8 |
| BISMUTH-212 | | NA | NA | NA | NA |
| BISMUTH-214 | | NA | NA | NA | NA |
| CERIUM-139 | | NA | NA | NA | NA |
| CERIUM-144 | | NA | NA | NA | NA |
| CESIUM-134 | | NA | NA | NA | NA |
| CESIUM-137 | | NA | NA | NA | NA |
| CHROMIUM-51 | | NA | NA | NA | NA |
| COBALT-56 | | NA | NA | NA | NA |
| COBALT-57 | | NA | NA | NA | NA |
| COBALT-58 | | NA | NA | NA | NA |
| COBALT-60 | | NA | NA | NA | NA |
| EUROPIUM-152 | | NA | NA | NA | NA |
| EUROPIUM-154 | | NA | NA | NA | NA |
| EUROPIUM-155 | | NA | NA | NA | NA |
| IODINE-131 | | NA | NA | NA | NA |
| IRON-59 | | NA | NA | NA | NA |
| LEAD-212 | | NA | NA | NA | NA |
| LEAD-214 | | NA | NA | NA | NA |
| MANGANESE-54 | | NA | NA | NA | NA |
| NIOBIUM-94 | | NA | NA | NA | NA |
| NIOBIUM-95 | | NA | NA | NA | NA |
| POTASSIUM-40 | | NA | NA | NA | NA |
| PROTACTINIUM-234 | | NA | NA | NA | NA |
| RADIUM-226 | | NA | NA | NA | NA |
| RUTHENIUM-106 | | NA | NA | NA | NA |
| SCANDIUM-46 | | NA | NA | NA | NA |
| SILVER-110 | | NA | NA | NA | NA |
| SODIUM-22 | | NA | NA | NA | NA |
| THALLIUM-208 | | NA | NA | NA | NA |
| THORIUM-227 | | NA | NA | NA | NA |
| THORIUM-234 | | NA | NA | NA | NA |
| URANIUM-235 | | NA | NA | NA | NA |
| ZINC-65 | | NA | NA | NA | NA |

**Table A-15**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-024A<br>F-SB-24ARE-3<br>20090922<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-024A<br>F-SB-24ARE-4<br>20090922<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-024A<br>F-SB-24ARE-5<br>20090922<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-055<br>F-SB-55RE-10<br>20090918<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-056<br>F-SB-56RE-10<br>20090918<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-056<br>F-SB-56RE-3<br>20090918<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-056<br>F-SB-56RE-4<br>20090918<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-056<br>F-SB-56RE-5<br>20090918<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-056<br>F-SB-56RE-6<br>20090918<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-056<br>F-SB-56RE-7<br>20090918<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.1 U | |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | 1.4 U | 1.4 U | 1.3 U | 1.4 U | 1.5 U | 1.5 U | 1.4 U | |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | 2 U | 2 U | 1.9 U | 1.9 U | 2.1 U | 2.1 U | 2 U | |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | 1 U | 1.1 U | 1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.9 U | 1.9 U | 1.8 U | |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| TOTAL PAHS | NC | NC | | NA | NA | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.086 | 0.083 | 0.021 U | NA | NA | NA | NA | NA | NA | NA | |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-056 | SB-056 | SB-265RE | SB-265RE | SB-266RE | SB-266RE | SB-267RE | SB-267RE | SB-268RE | SB-268RE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-56RE-8 | F-SB-56RE-9 | F-SB-265RE-3 | F-SB-265RE-4 | F-SB-266RE-3 | F-SB-266RE-4 | F-SB-267RE-3 | F-SB-267RE-4 | F-SB-268RE-10 | F-SB-268RE-3 |
| SAMPLE DATE | | | | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20091006 | 20090921 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 | 10 | 3 |
| BOTTOM DEPTH | | | | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 | 10 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 36 | 1.7 U | 2.5 | 1.5 U | 1.5 U | 1.5 U | 441 | 7604 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 36 | 1.7 U | 0.87 | 1.5 U | 1.5 U | 1.5 U | 441 | 7604 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 24 | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 340 | 5700 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 26 | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 280 | 5200 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 41 | 1.5 U | 8.7 | 1.4 U | 1.4 U | 1.4 U | 450 | 6500 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 14 | 2.2 U | 2 U | 1.9 U | 1.9 U | 2 U | 8.3 U | 2900 |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1 U | 28 | 1.1 U | 1.1 U | 1 U | 1 U | 1.1 U | 290 | 5400 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 62 | 860 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.7 U | 29 | 1.9 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 200 | 2900 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 162 | 0 U | 8.7 | 0 U | 0 U | 0 U | 1622 | 29460 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | 20 U | 19 U | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | 0 U | 0 U | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-269RE | SB-269RE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-268RE-4 | F-SB-268RE-5 | F-SB-268RE-6 | F-SB-268RE-7 | F-SB-268RE-7-AVG | F-SB-268RE-7-D | F-SB-268RE-8 | F-SB-268RE-9 | F-SB-269RE-3 | F-SB-269RE-4 |
| SAMPLE DATE | | | | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20091006 | 20091006 | 20090921 | 20090921 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 | 4 |
| BOTTOM DEPTH | | | | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 745 | 298 | 1376 | 709 | 1876 | 3043 | 4.8 | 116 | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 745 | 298 | 1376 | 709 | 1876 | 3043 | 4.0 | 116 | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 550 | 220 | 1000 | 490 J | 1395 | 2300 J | 3.4 J | 87 | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 520 | 210 | 980 | 510 J | 1305 | 2100 J | 3.1 J | 75 | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 580 | 280 | 1200 | 590 J | 1595 | 2600 J | 3.2 J | 110 | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 350 | 110 | 600 | 340 J | 720 | 1100 J | 1.6 U | 1.6 U | 2 U | 1.9 U |
| CHRYSENE | 22000 | 15000 | C | 480 | 210 | 850 | 500 J | 1250 | 2000 J | 2.9 J | 70 | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 79 | 26 | 120 | 61 J | 190.5 | 320 J | 1.7 U | 16 | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 290 | 110 | 490 | 260 J | 730 | 1200 J | 1.9 J | 49 | 1.8 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 2849 | 1166 | 5240 | 2751 | 7185.5 | 11620 | 14.5 | 407 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-270RE | SB-270RE | SB-383 | SB-383 | SB-388 | SB-388 | SB-388 | SB-389 | SB-389 | SB-390 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | F-SB-270RE-3 | F-SB-270RE-4 | F-SB-383RE-3 | F-SB-383RE-4 | F-SB-388RE-3 | F-SB-388RE-4 | F-SB-388RE-5 | F-SB-389RE-3 | F-SB-389RE-4 | F-SB-390RE-6 |
| SAMPLE DATE | | | 20090921 | 20090921 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 4 | 3 | 4 | 3 | 4 | 5 | 3 | 4 | 6 |
| BOTTOM DEPTH | | | 3 | 4 | 3 | 4 | 3 | 4 | 5 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 (4) | 63000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (4) | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.3 U | 1.3 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 1.9 U | 1.9 U | 2 U | 2 U | 2 U | 1.9 U | 1.9 U | 2 U | 2 U | 2 U |
| CHRYSENE | 22000 | 15000 C | 1 U | 1 U | 1.1 U | 1 U | 1 U | 1 U | 1 U | 1.1 U | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (8) | 220 C(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-390 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-393 | SB-397 | SB-397 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-390RE-7 | F-SB-393RE-3 | F-SB-393RE-4 | F-SB-393RE-5 | F-SB-393RE-5-AVG | F-SB-393RE-5-D | F-SB-393RE-6 | F-SB-393RE-7 | F-SB-397RE-6 | F-SB-397RE-7 |
| SAMPLE DATE | | | | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 3 | 4 | 5 | 5 | 5 | 6 | 7 | 6 | 7 |
| BOTTOM DEPTH | | | | 7 | 3 | 4 | 5 | 5 | 5 | 6 | 7 | 6 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 329 | 1.5 U | 29 | 44 | 58 | 1.5 U | 1.5 U | 37 | 25 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 329 | 1.5 U | 28 | 43 | 58 | 1.5 U | 1.5 U | 36 | 24 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 230 | 1.1 U | 21 J | 33 | 45 J | 1.1 U | 1.1 U | 27 | 18 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 230 | 1.5 U | 22 J | 33.5 | 45 J | 1.5 U | 1.5 U | 28 | 19 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 270 | 1.4 U | 29 J | 40.5 | 52 J | 1.4 U | 1.4 U | 34 | 21 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 120 | 2 U | 9.5 J | 19.25 | 29 J | 2 U | 1.9 U | 17 | 13 |
| CHRYSENE | 22000 | 15000 | C | 1 U | 250 | 1.1 U | 21 J | 33.5 | 46 J | 1.1 U | 1 U | 27 | 18 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 36 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 120 | 1.8 U | 13 J | 20 | 27 J | 1.8 U | 1.7 U | 15 | 10 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 1256 | 0 U | 115.5 | 179.75 | 244 | 0 U | 0 U | 148 | 99 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-405 | SB-405 | SB-626 | SB-626 | SB-626 | SB-626C | SB-626D | SB-626D | SB-626D | SB-628 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-405RE-10 | F-SB-405RE-9 | F-SB-626-3 | F-SB-626-4 | F-SB-626-5 | F-SB-626C-3 | F-SB-626D-3 | F-SB-626D-3-AVG | F-SB-626D-3-D | F-SB-628-10 |
| SAMPLE DATE | | | | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20091111 | 20091111 | 20091111 | 20091111 | 20090918 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 9 | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 10 |
| BOTTOM DEPTH | | | | 10 | 9 | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 30 | 2582 | NA | NA | NA | NA | NA | NA | NA | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 29 | 2577 | NA | NA | NA | NA | NA | NA | NA | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 31 | 3000 | NA | NA | NA | NA | NA | NA | NA | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 22 | 1900 | NA | NA | NA | NA | NA | NA | NA | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 30 | 2900 | NA | NA | NA | NA | NA | NA | NA | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 20 | 1300 | NA | NA | NA | NA | NA | NA | NA | 2.1 U |
| CHRYSENE | 22000 | 15000 | C | 31 | 4400 | NA | NA | NA | NA | NA | NA | NA | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.7 U | 8.2 U | NA | NA | NA | NA | NA | NA | NA | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 11 | 700 | NA | NA | NA | NA | NA | NA | NA | 1.9 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 145 | 14200 | NA | NA | NA | NA | NA | NA | NA | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | 0.6 | 0.5 | 0.019 U | 0.13 | 1 | 0.86 | 0.72 | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-629 | SB-630 | SB-631 | SB-632 | SB-632 | SB-633 | SB-633 | SB-634 | SB-634 | SB-635 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | F-SB-629-10 | F-SB-630-10 | F-SB-631-10 | F-SB-632-10 | F-SB-632-9 | F-SB-633-10 | F-SB-633-9 | F-SB-634-10 | F-SB-634-9 | F-SB-635-10 |
| SAMPLE DATE | | | | | 20090918 | 20090918 | 20090918 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | | 10 | 10 | 10 | 10 | 9 | 10 | 9 | 10 | 9 | 10 |
| BOTTOM DEPTH | | | | | 10 | 10 | 10 | 10 | 9 | 10 | 9 | 10 | 9 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 | [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 | [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | 1.6 U | 1.5 U | 1.5 U | 65 | 2.7 | 1.7 U | 1.6 U | 1.8 U | 3.0 | 1.5 U |
| BAP EQUIVALENT-POS | 22 | | 15 | C | 1.6 U | 1.5 U | 1.5 U | 64 | 1 | 1.7 U | 1.6 U | 1.8 U | 1.1 | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | 1.2 U | 1.1 U | 1.1 U | 79 | 1.1 U | 1.2 U | 1.2 U | 1.3 U | 1.3 U | 1.1 UJ |
| BENZO(A)PYRENE | 22 | | 15 | C | 1.6 U | 1.5 U | 1.5 U | 40 | 1.5 U | 1.7 U | 1.6 U | 1.8 U | 1.7 U | 1.5 UJ |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | 1.5 U | 1.4 U | 1.4 U | 120 | 10 | 1.5 U | 1.5 U | 1.7 U | 11 | 1.4 UJ |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | 2.1 U | 2 U | 2 U | 59 | 2 U | 2.2 U | 2.1 U | 2.4 U | 2.3 U | 2 UJ |
| CHRYSENE | 22000 | | 15000 | C | 1.1 U | 1.1 U | 1.1 U | 110 | 1.1 U | 1.2 U | 1.1 U | 1.3 U | 1.2 U | 1.1 UJ |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.8 U | 1.7 U | 1.5 UJ |
| FLUORANTHENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | 1.8 U | 1.8 U | 1.8 U | 34 | 1.8 U | 1.9 U | 1.9 U | 2.1 U | 2 U | 1.8 UJ |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | | NC | | 0 U | 0 U | 0 U | 442 | 10 | 0 U | 0 U | 0 U | 11 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 | [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 | [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 | [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-635 | SB-635 | SB-635 | SB-635C | SB-635C | SB-635C | SB-635C | SB-635C | SB-635D | SB-635D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | F-SB-635-10-AVG | F-SB-635-10-D | F-SB-635-9 | F-SB-635C-3 | F-SB-635C-5 | F-SB-635C-7 | F-SB-635C-7-AVG | F-SB-635C-7-D | F-SB-635D-5 | F-SB-635D-7 |
| SAMPLE DATE | | | 20090922 | 20090922 | 20090922 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091110 | 20091110 |
| SAMPLE CODE | | | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 10 | 10 | 9 | 3 | 5 | 7 | 7 | 7 | 5 | 7 |
| BOTTOM DEPTH | | | 10 | 10 | 9 | 3 | 5 | 7 | 7 | 7 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 (4) | 63000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (4) | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | **17** | **34** | **276** | **26** | **28** | **52** | **135** | **219** | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 C | **17** | **33** | **275** | **25** | **27** | **51** | **135** | **219** | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 15.775 | 31 J | **220** | 18 | 18 | 55 J | 122.5 | **190 J** | 1.1 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 C | 12.875 | **25 J** | **210** | **20** | **21** | **36 J** | **88** | **140 J** | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 17.35 | 34 J | **310** | 21 | 26 | 75 J | **187.5** | **300 J** | 1.4 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 7 | 13 J | 150 | 14 | 12 | 24 J | 59 | 94 J | 2 U | 2.1 U |
| CHRYSENE | 22000 | 15000 C | 15.275 | 30 J | 310 | 20 | 22 | 66 J | 168 | 270 J | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.55 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 11.4 | **22** | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 6.95 | 13 J | 100 | 14 | 13 | 19 J | 41.5 | 64 J | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 73 | 146 | 1300 | 107 | 112 | 275 | 677.5 | 1080 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (8) | 220 C(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-635D | SB-636 | SB-636 | SB-636 | SB-636 | SB-636 | SB-636 | SB-636A | SB-636A | SB-636A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-635D-9 | F-SB-636-3 | F-SB-636-3-AVG | F-SB-636-3-D | F-SB-636-5 | F-SB-636-7 | F-SB-636-9 | F-SB-636A-3 | F-SB-636A-5 | F-SB-636A-7 |
| SAMPLE DATE | | | | 20091110 | 20091007 | 20091007 | 20091007 | 20091007 | 20091019 | 20091019 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | **116** | **101** | **86** | **315** | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | **116** | **101** | **86** | **315** | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 65 J | 51.5 | 38 J | **230** | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | **77** | **65** | **53** | **220** | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 91 | 85 | 79 | **290** | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 40 J | 30 | 20 J | 120 | 2 U | 2 U | 2 U | 2.1 U | 2.1 U |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 100 J | 76 | 52 J | 210 | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | **17** | **17** | **17** | **29** | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 57 | 51 | 45 | 130 | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 447 | 375.5 | 304 | 1229 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | 22 U | 22 U | 22 U | 27 J | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | 0 U | 0 U | 0 U | 27 | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-636A | SB-636A | SB-636B | SB-636B | SB-636B | SB-636C | SB-636C | SB-636C | SB-636D | SB-636D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | F-SB-636A-7-AVG | F-SB-636A-7-D | F-SB-636B-3 | F-SB-636B-5 | F-SB-636B-7 | F-SB-636C-3 | F-SB-636C-5 | F-SB-636C-7 | F-SB-636D-3 | F-SB-636D-5 |
| SAMPLE DATE | | | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 7 | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| BOTTOM DEPTH | | | 7 | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 (4) | 63000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (4) | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 390 | 38 | 1.5 U | 34 | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 390 | 38 | 1.5 U | 33 | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 310 | 24 | 1.1 U | 29 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 C | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 260 | 30 | 1.5 U | 25 | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.5 U | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 350 | 29 | 1.4 U | 35 | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2.1 U | 2.1 U | 2 U | 2.1 U | 2 U | 150 | 14 | 1.9 U | 8.6 | 2 U |
| CHRYSENE | 22000 | 15000 C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 270 | 22 | 1 U | 25 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 48 | 1.5 U | 1.5 U | 1.7 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 140 | 22 | 1.7 U | 12 | 1.7 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 0 U | 1528 | 141 | 0 U | 134.6 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (8) | 220 C(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-636D | SB-637 | SB-637 | SB-637B | SB-637B | SB-637B | SB-637B | SB-637C | SB-637C | SB-638 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-636D-7 | F-SB-637-3 | F-SB-637-5 | F-SB-637B-3 | F-SB-637B-5 | F-SB-637B-5-AVG | F-SB-637B-5-D | F-SB-637C-3 | F-SB-637C-5 | F-SB-638-3 |
| SAMPLE DATE | | | | 20091105 | 20091007 | 20091007 | 20091106 | 20091106 | 20091106 | 20091106 | 20091106 | 20091106 | 20091007 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 3 | 5 | 3 |
| BOTTOM DEPTH | | | | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 3 | 5 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 3.7 | 68 | 1.5 U | 1.6 U | 1.55 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 2.0 | 67 | 1.5 U | 1.6 U | 1.55 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 8.9 | 54 | 1.1 U | 1.2 U | 1.15 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | 51 | 1.5 U | 1.6 U | 1.55 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 11 | 79 | 1.4 U | 1.5 U | 1.45 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2.1 U | 28 | 2 U | 2.1 U | 2.05 U | 2 U | 1.9 U | 2 U | 2 U |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 11 | 70 | 1 U | 1.1 U | 1.05 U | 1 U | 1 U | 1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.55 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 27 | 1.7 U | 1.8 U | 1.75 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 30.9 | 309 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | 21 U | 21 U | NA | NA | NA | NA | NA | NA | 20 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | 0 U | 0 U | NA | NA | NA | NA | NA | NA | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-638 | SB-638 | SB-638 | SB-639 | SB-639 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-638-3-AVG | F-SB-638-3-D | F-SB-638-5 | F-SB-639-3 | F-SB-639-5 |
| SAMPLE DATE | | | | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 3 | 5 | 3 | 5 |
| BOTTOM DEPTH | | | | 3 | 3 | 5 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 2.4 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 0.78 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 7.8 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 1.9 U | 2.1 U | 2 U |
| CHRYSENE | 22000 | 15000 | C | 1.05 U | 1 U | 1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.75 U | 1.7 U | 1.7 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 7.8 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 20 U | 19 U | 21 U | 20 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-640 | SB-640 | SB-641 | SB-641 | SB-641A | SB-641B | SB-641C | SB-642 | SB-642 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-640-3 | F-SB-640-5 | F-SB-641-3 | F-SB-641-5 | F-SB-641A-3 | F-SB-641B-3 | F-SB-641C-3 | F-SB-642-3 | F-SB-642-3-AVG |
| SAMPLE DATE | | | | 20091007 | 20091007 | 20091006 | 20091006 | 20091104 | 20091104 | 20091104 | 20091019 | 20091019 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 3 | 5 | 3 | 3 | 3 | 3 | 3 |
| BOTTOM DEPTH | | | | 3 | 5 | 3 | 5 | 3 | 3 | 3 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 7.4 | 2.2 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 6.5 | 2.2 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 4.9 J | 1.3 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 4.7 J | 2.2 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 8.1 | 1.6 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 1.6 U | 1.6 U | 2 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 4.4 J | 1.4 U | 1.1 U | 1 U | 1 U | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 5.4 J | 0.43 U | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 27.5 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 20 U | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-642 | SB-642 | SB-642 | SB-642 | SB-642A | SB-642A | SB-642A | SB-642A | SB-642B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-642-3-D | F-SB-642-5 | F-SB-642-7 | F-SB-642-9 | F-SB-642A-3 | F-SB-642A-5 | F-SB-642A-7 | F-SB-642A-9 | F-SB-642B-3 |
| SAMPLE DATE | | | | 20091019 | 20091019 | 20091019 | 20091019 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 |
| SAMPLE CODE | | | | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 28 | 1.5 U | 577 | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 27 | 1.5 U | 577 | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 19 | 1.1 U | 350 | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 21 | 1.5 U | 410 | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 26 | 1.4 U | 500 | 1.4 U | 1.5 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 12 | 2 U | 220 | 2 U | 2.1 U | 2 U | 2 U | 1.9 U |
| CHRYSENE | 22000 | 15000 | C | 1 U | 20 | 1.1 U | 350 | 1 U | 1.1 U | 1 U | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 54 | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 12 | 1.8 U | 250 | 1.7 U | 1.8 U | 1.7 U | 1.8 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 110 | 0 U | 2134 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-642B | SB-642B | SB-642B | SB-642C | SB-642C | SB-642C | SB-642C | SB-642C | SB-642C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-642B-5 | F-SB-642B-7 | F-SB-642B-9 | F-SB-642C-3 | F-SB-642C-5 | F-SB-642C-7 | F-SB-642C-7-AVG | F-SB-642C-7-D | F-SB-642C-9 |
| SAMPLE DATE | | | | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 201 | 9.8 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.55 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 201 | 8.9 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.55 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 130 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 140 | 7.8 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.55 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 180 | 11 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 89 | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2.1 U |
| CHRYSENE | 22000 | 15000 | C | 130 | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 21 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.55 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 82 | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 772 | 18.8 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-643 | SB-643 | SB-643 | SB-643 | SB-643B | SB-643B | SB-643B | SB-643B | SB-643B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-643-3 | F-SB-643-5 | F-SB-643-7 | F-SB-643-9 | F-SB-643B-3 | F-SB-643B-5 | F-SB-643B-7 | F-SB-643B-7-AVG | F-SB-643B-7-D |
| SAMPLE DATE | | | | 20091016 | 20091016 | 20091016 | 20091016 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.55 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.55 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.15 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.55 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.45 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2.1 U | 2.05 U | 2 U |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.55 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.9 U | 1.85 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-643B | SB-643C | SB-643C | SB-643C | SB-643C | SB-644 | SB-644 | SB-644 | SB-644 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-643B-9 | F-SB-643C-3 | F-SB-643C-5 | F-SB-643C-7 | F-SB-643C-9 | F-SB-644-3 | F-SB-644-3-AVG | F-SB-644-3-D | F-SB-644-5 |
| SAMPLE DATE | | | | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091016 | 20091016 | 20091016 | 20091016 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 3 | 5 | 7 | 9 | 3 | 3 | 3 | 5 |
| BOTTOM DEPTH | | | | 9 | 3 | 5 | 7 | 9 | 3 | 3 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 89 | 1.6 U | 1.55 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 89 | 1.6 U | 1.55 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 48 | 1.2 U | 1.15 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 51 | 1.6 U | 1.55 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 75 | 1.5 U | 1.45 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2.1 U | 2 U | 26 | 2.1 U | 2.05 U | 2 U | 2 U |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1 U | 1.1 U | 1.1 U | 46 | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 23 | 1.6 U | 1.55 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.7 U | 1.8 U | 1.8 U | 28 | 1.9 U | 1.85 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 297 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-644 | SB-644 | SB-645 | SB-645 | SB-645 | SB-645A | SB-645B | SB-645B | SB-645B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | F-SB-644-7 | F-SB-644-9 | F-SB-645-3 | F-SB-645-5 | F-SB-645-7 | F-SB-645A-3 | F-SB-645B-3 | F-SB-645B-3-AVG | F-SB-645B-3-D |
| SAMPLE DATE | | | | | 20091016 | 20091016 | 20091006 | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | | 7 | 9 | 3 | 5 | 7 | 3 | 3 | 3 | 3 |
| BOTTOM DEPTH | | | | | 7 | 9 | 3 | 5 | 7 | 3 | 3 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 | [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 | [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | 1.5 U | 1.7 U | 7.0 | 2.3 | 2.3 | 1.5 U | 1.5 U | 1.55 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | | 15 | C | 1.5 U | 1.7 U | 6.1 | 0.27 | 0.19 | 1.5 U | 1.5 U | 1.55 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | 1.1 U | 1.2 U | 4.9 J | 1.2 U | 1.3 U | 1.1 U | 1.1 U | 1.15 U | 1.2 U |
| BENZO(A)PYRENE | 22 | | 15 | C | 1.5 U | 1.7 U | 4.4 J | 2.2 U | 2.2 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | 1.4 U | 1.6 U | 8.7 | 1.7 J | 1.9 J | 1.4 U | 1.4 U | 1.45 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | 2 U | 2.2 U | 1.7 U | 1.6 U | 1.7 U | 2 U | 2 U | 2.05 U | 2.1 U |
| CHRYSENE | 22000 | | 15000 | C | 1.1 U | 1.2 U | 4.3 J | 1.4 U | 1.4 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | 1.5 U | 1.7 U | 1.8 U | 1.7 U | 1.8 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U |
| FLUORANTHENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | 1.8 U | 1.9 U | 2.9 J | 0.96 J | 0.44 U | 1.8 U | 1.8 U | 1.85 U | 1.9 U |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | | NC | | 0 U | 0 U | 25.2 | 2.66 | 1.9 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 | [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 | [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 | [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-645C | SB-646 | SB-646 | SB-646 | SB-646 | SB-646 | SB-647 | SB-647 | SB-647 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-645C-3 | F-SB-646-3 | F-SB-646-3-AVG | F-SB-646-3-D | F-SB-646-5 | F-SB-646-7 | F-SB-647-3 | F-SB-647-5 | F-SB-647-7 |
| SAMPLE DATE | | | | 20091105 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 3 | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.7 U | 2.4 U | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.3 U | 2.4 U | 2.1 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.7 U | 2.4 U | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.3 U | 2.4 U | 2.1 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.4 U | 1.3 U | 1.2 U | 1.3 U | 1.2 U | 1.3 U | 1.3 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.7 U | 2.4 U | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.3 U | 2.4 U | 2.1 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.8 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.2 U | 1.8 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.8 U | 1.6 U |
| CHRYSENE | 22000 | 15000 | C | 1.2 U | 1.5 U | 1.45 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.7 U | 1.9 U | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U | 1.9 U | 1.7 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 0.48 U | 0.455 U | 0.43 U | 0.43 U | 0.43 U | 0.45 U | 0.46 U | 0.42 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-647A | SB-647B | SB-647C | SB-648 | SB-648 | SB-648 | SB-649 | SB-649 | SB-650 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-647A-3 | F-SB-647B-3 | F-SB-647C-3 | F-SB-648-3 | F-SB-648-5 | F-SB-648-7 | F-SB-649-3 | F-SB-649-5 | F-SB-650-3 |
| SAMPLE DATE | | | | 20091105 | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 3 |
| BOTTOM DEPTH | | | | 3 | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.6 U | 59 | 2.1 U | 2.2 U | 2.3 U | 2.2 U | 2.2 U | 2.1 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.6 U | 59 | 2.1 U | 2.2 U | 2.3 U | 2.2 U | 2.2 U | 2.1 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.2 U | 26 | 1.2 U | 1.2 U | 1.3 U | 1.2 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | 30 | 2.1 U | 2.2 U | 2.3 U | 2.2 U | 2.2 U | 2.1 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | 54 | 1.5 U | 1.6 U | 1.7 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2.1 U | 15 | 1.6 U | 1.6 U | 1.7 U | 1.6 U | 1.6 U | 1.5 U |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 31 | 1.3 U | 1.4 U | 1.5 U | 1.3 U | 1.4 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 19 | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 1.8 U | 18 | 0.41 U | 0.43 U | 0.46 U | 0.42 U | 0.43 U | 0.41 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 193 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-650 | SB-650 | SB-650 | SB-651 | SB-651 | SB-652 | SB-652 | SB-652 | SB-652 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-650-3-AVG | F-SB-650-3-D | F-SB-650-5 | F-SB-651-3 | F-SB-651-5 | F-SB-652-3 | F-SB-652-5 | F-SB-652-7 | F-SB-652-9 |
| SAMPLE DATE | | | | 20091006 | 20091006 | 20091006 | 20091007 | 20091007 | 20091007 | 20091007 | 20091019 | 20091019 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 2.1 U | 2.1 U | 2.1 U | 1.5 U | 1.5 U | 33 | 391 | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 2.1 U | 2.1 U | 2.1 U | 1.5 U | 1.5 U | 33 | 391 | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 23 | 300 | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 2.1 U | 2.1 U | 2.1 U | 1.5 U | 1.5 U | 25 | 260 | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.4 U | 35 | 330 | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.55 U | 1.6 U | 1.6 U | 2 U | 2 U | 9 | 150 | 2 U | 2 U |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 1.3 U | 1.3 U | 1.1 U | 1 U | 25 | 270 | 1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.65 U | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.6 U | 51 | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 0.41 U | 0.41 U | 0.42 U | 1.8 U | 1.7 U | 17 | 150 | 1.7 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 134 | 1511 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | 20 U | 20 U | 20 U | 20 U | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | 0 U | 0 U | 0 U | 0 U | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-652A | SB-652A | SB-652A | SB-652B | SB-652B | SB-652B | SB-652C | SB-652C | SB-652C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-652A-3 | F-SB-652A-5 | F-SB-652A-7 | F-SB-652B-3 | F-SB-652B-5 | F-SB-652B-7 | F-SB-652C-3 | F-SB-652C-5 | F-SB-652C-7 |
| SAMPLE DATE | | | | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.3 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2 U | 2.1 U | 1.9 U | 2 U | 2 U | 2 U | 2 U |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1.1 U | 1.1 U | 1.1 U | 0.98 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.6 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-797 | SB-797 | SB-798 | SB-798 | SB-798 | SB-798 | SB-799 | SB-799 | SB-800 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-797-03 | F-SB-797-05 | F-SB-798-03 | F-SB-798-03-AVG | F-SB-798-03-D | F-SB-798-05 | F-SB-799-03 | F-SB-799-05 | F-SB-800-03 |
| SAMPLE DATE | | | | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 | 20100910 |
| SAMPLE CODE | | | | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 | 3 |
| BOTTOM DEPTH | | | | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 3.7 U | 4 U | 3.8 U | 3.65 U | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.7 U | 4 U | 3.8 U | 3.65 U | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 3.7 U | 15 | 3.8 U | 3.65 U | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 3.7 U | 4 U | 3.8 U | 3.65 U | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 3.7 U | 47 | 3.8 U | 3.65 U | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 3.7 U | 258 | 21 | 11 | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3.7 U | 258 | 19 | 10 | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.7 U | 170 | 12 | 6.875 | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 3.7 U | 180 | 15 | 8.375 | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3.7 U | 200 | 16 | 8.875 | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 3.7 U | 120 | 11 | 6.375 | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.7 U | 120 | 10 | 5.875 | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| CHRYSENE | 22000 | 15000 | C | 1.2 U | 170 | 14 | 7.3 | 1.2 U | 1.2 U | 1.2 U | 1.2 U | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.7 U | 30 | 3.8 U | 3.65 U | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| FLUORANTHENE | 310000 | 230000 | N | 11 | 400 | 19 | 10.375 | 3.5 U | 3.6 U | 3.6 U | 9.8 | NA |
| FLUORENE | 310000 | 230000 | N | 3.7 U | 26 | 3.8 U | 3.65 U | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.7 U | 100 | 8.1 | 4.925 | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| NAPHTHALENE | 160000 | 3600 | C | 3.7 U | 4 U | 3.8 U | 3.65 U | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 3.7 U | 210 | 9.4 | 5.575 | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| PYRENE | 230000 | 170000 | N | 9.1 | 310 | 19 | 10.375 | 3.5 U | 3.6 U | 3.6 U | 3.7 U | NA |
| TOTAL PAHS | NC | NC | | 20.1 | 2098 | 133.5 | 66.75 | 0 U | 0 U | 0 U | 9.8 | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | 1.8 L |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-800 | SB-800 | SB-800 | SB-801 | SB-801 | SB-802 | SB-802 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-800-05 | F-SB-800-05-AVG | F-SB-800-05-D | F-SB-801-03 | F-SB-801-05 | F-SB-802-03 | F-SB-802-05 |
| SAMPLE DATE | | | | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 5 | 5 | 3 | 5 | 3 | 5 |
| BOTTOM DEPTH | | | | 5 | 5 | 5 | 3 | 5 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.017 UR | 0.0175 R | 0.018 UR | 0.68 L | 0.018 UR | 0.89 L | 0.022 UR |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | MRC-MW46A<br>MRC-MW46[0910]<br>20050524<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>10 | SB-022<br>SB-22-05<br>20031117<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-022<br>SB-22-10<br>20031117<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-023<br>SB-23-05<br>20031118<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-023<br>SB-23-10<br>20031118<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-024<br>SB-24-05<br>20031117<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-024<br>SB-24-10<br>20031117<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-025<br>SB-25-05<br>20031117<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-025<br>SB-25-10<br>20031117<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-026<br>SB-26-10<br>20031117<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 7 U |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 7 U |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | 60 U | 60 U | 59 U | 58 U | 62 U | 60 U | 59 U | 59 U | 6 J |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 7 U |
| ACETONE | 7000000 | 6100000 | N | NA | 40 J | 11 J | 16 J | 9 J | 28 J | 27 J | 59 U | 59 U | 48 J |
| ETHYLBENZENE | 780000 | 5400 | C | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 7 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 7 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | 18 U | 18 U | 18 U | 17 U | 19 U | 18 U | 18 U | 18 U | 20 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | 6 U | 5 J | 6 J | 5 J | 6 U | 6 U | 5 J | 6 J | 7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 7 U |
| N-BUTYLBENZENE | NC | NC | | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 7 U |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | 18 U | 18 U | 18 U | 17 U | 19 U | 18 U | 18 U | 18 U | 20 U |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 7 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| CARBAZOLE | 32000 | NC | | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| PHENOL | 2300000 | 1800000 | N | NA | 400 U | 390 U | 390 U | 390 U | 420 U | 400 U | 390 U | 400 U | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| CHRYSENE | 22000 | 15000 | C | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| FLUORENE | 310000 | 230000 | N | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| PYRENE | 230000 | 170000 | N | NA | 400 U | 390 U | 390 U | 390 U | 390 U | 400 U | 390 U | 400 U | NA |
| TOTAL PAHS | NC | NC | | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | 60 U | 59 U | 59 U | 58 U | 62 U | 59 U | 59 U | 59 U | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | 3 UL | 2.9 UL | 3 UL | 2.9 UL | 3.1 UL | 3 UL | 2.9 UL | 3 UL | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | 2.9 L | 2.7 L | 1.5 L | 1 L | 3.5 L | 2.3 L | 0.92 L | 1.7 L | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | 3 U | 2.9 U | 3 U | 2.9 U | 3.1 U | 3 U | 2.9 U | 4.6 | NA |
| CADMIUM | 3.9 | 7 | N | NA | 3 U | 2.9 U | 3 U | 2.9 U | 3.1 U | 3 U | 2.9 U | 3 U | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | 13 L | 16 L | 5.3 L | 2.9 UR | 13 L | 12 L | 11 L | 16 L | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | 10 | 13 | 3 U | 2.9 U | 28 | 7.8 | 8 | 19 | NA |
| LEAD | 400 | 400 | | NA | 10 L | 6 L | 3 UL | 2.9 UL | 46 L | 12 L | 6.6 L | 14 L | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.94 | 0.17 | 0.12 U | 0.12 U | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | 8.9 L | 14 L | 3.6 L | 2.9 UL | 12 L | 6.7 L | 24 L | 46 L | NA |
| SELENIUM | 39 | 39 | N | NA | 3 UR | 2.9 UR | 3 UR | 2.9 UR | 3.1 UR | 3 UR | 2.9 UR | 3 UR | NA |
| SILVER | 39 | 39 | N | NA | 3 U | 2.9 U | 3 U | 2.9 U | 3.1 U | 3 U | 2.9 U | 3 U | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | 60 UJ | 59 UJ | 59 UJ | 58 UJ | 100 J | 59 UJ | 59 UJ | 110 J | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | 24000 U | 23000 U | 24000 U | 23000 U | 25000 U | 24000 U | 24000 U | 24000 U | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | 120 U | 120 U | 120 U | 120 U | 120 U | 120 U | 120 U | 120 U | 130 U |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | 70 | 85 | 84 | 86 | 80 | 84 | 85 | 84 | 77 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-027 | SB-028 | SB-029 | SB-030 | SB-093 | SB-093 | SB-093 | SB-093 | SB-093 | SB-093 | SB-093 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | SB-27-10 | SB-28-10 | SB-29-10 | SB-30-05 | F-SB-93RE-10 | F-SB-93RE-3 | F-SB-93RE-4 | F-SB-93RE-5 | F-SB-93RE-6 | F-SB-93RE-7 | |
| SAMPLE DATE | | | | | 20031117 | 20031117 | 20031117 | 20031118 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | |
| MATRIX | | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | |
| SUBMATRIX | | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | |
| TOP DEPTH | | | | | 10 | 10 | 10 | 5 | 10 | 3 | 4 | 5 | 6 | 7 | |
| BOTTOM DEPTH | | | | | 10 | 10 | 10 | 5 | 10 | 3 | 4 | 5 | 6 | 7 | |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | | 6200 | N | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA | NA | NA | |
| 1,3,5-TRIMETHYLBENZENE | NC | | 78000 | N | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA | NA | NA | |
| 2-BUTANONE | 4700000 | | 2800000 | N | 67 U | 65 U | 9 J | 58 U | NA | NA | NA | NA | NA | NA | |
| 4-ISOPROPYLTOLUENE | NC | | NC | | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA | NA | NA | |
| ACETONE | 7000000 | | 6100000 | N | 29 J | 14 J | 45 J | 58 U | NA | NA | NA | NA | NA | NA | |
| ETHYLBENZENE | 780000 | | 5400 | C | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA | NA | NA | |
| ISOPROPYLBENZENE | 780000 | | 210000 | N | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA | NA | NA | |
| M+P-XYLENES | 1600000 | [4] | 63000 | N[5] | 20 U | 19 U | 20 U | 17 U | NA | NA | NA | NA | NA | NA | |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | 7 J | 6 J | 7 U | 6 J | NA | NA | NA | NA | NA | NA | |
| NAPHTHALENE | 160000 | | 3600 | C | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA | NA | NA | |
| N-BUTYLBENZENE | NC | | NC | | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA | NA | NA | |
| O-XYLENE | 1600000 | [4] | 380000 | N | 20 U | 19 U | 20 U | 17 U | NA | NA | NA | NA | NA | NA | |
| TOTAL XYLENES | 1600000 | [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| TRICHLOROFLUOROMETHANE | NC | | 79000 | N | 7 U | 6 U | 7 U | 6 U | NA | NA | NA | NA | NA | NA | |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | | 120000 | N | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | | 35000 | C | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| CARBAZOLE | 32000 | | NC | | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| DIBENZOFURAN | 7800 | | 7800 | N | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| DIMETHYL PHTHALATE | NC | | NC | | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| N-NITROSODIPHENYLAMINE | 130000 | | 99000 | C | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| PHENOL | 2300000 | | 1800000 | N | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| ACENAPHTHENE | 470000 | | 340000 | N | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| ANTHRACENE | 2300000 | | 1700000 | N | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | NA | NA | NA | 380 U | 1.5 U | 1.5 U | 1.5 U | 36 | 1.5 U | 1.5 U | |
| BAP EQUIVALENT-POS | 22 | | 15 | C | NA | NA | NA | 380 U | 1.5 U | 1.5 U | 1.5 U | 35 | 1.5 U | 1.5 U | |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | NA | NA | NA | 380 U | 1.1 U | 1.1 U | 1.1 U | 28 | 1.1 U | 1.1 U | |
| BENZO(A)PYRENE | 22 | | 15 | C | NA | NA | NA | 380 U | 1.5 U | 1.5 U | 1.5 U | 26 | 1.5 U | 1.5 U | |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | NA | NA | NA | 380 U | 1.4 U | 1.3 U | 1.4 U | 40 | 1.4 U | 1.4 U | |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[7] | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | NA | NA | NA | 380 U | 2 U | 1.9 U | 2 U | 13 | 2 U | 2 U | |
| CHRYSENE | 22000 | | 15000 | C | NA | NA | NA | 380 U | 1 U | 1 U | 1.1 U | 29 | 1 U | 1.1 U | |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | NA | NA | NA | 380 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | |
| FLUORANTHENE | 310000 | | 230000 | N | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| FLUORENE | 310000 | | 230000 | N | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | NA | NA | NA | 380 U | 1.7 U | 1.7 U | 1.8 U | 23 | 1.7 U | 1.8 U | |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| PHENANTHRENE | 2300000 | | 170000 | N[7] | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| PYRENE | 230000 | | 170000 | N | NA | NA | NA | 380 U | NA | NA | NA | NA | NA | NA | |
| TOTAL PAHS | NC | | NC | | NA | NA | NA | 0 U | 0 U | 0 U | 0 U | 159 | 0 U | 0 U | |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | | 220 | C | NA | NA | NA | 58 U | 20 U | 19 U | 20 U | 19 U | 20 U | 20 U | |
| TOTAL AROCLOR | 320 | [8] | 220 | C[9] | NA | NA | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | |
| **METALS (MG/KG)** | | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | NA | NA | NA | 2.9 UL | NA | NA | NA | NA | NA | NA | |
| ARSENIC | 0.43 | | 0.39 | C | NA | NA | NA | 0.99 L | NA | NA | NA | NA | NA | NA | |
| BARIUM | 1600 | | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| BERYLLIUM | 16 | | 16 | N | NA | NA | NA | 3.2 | NA | NA | NA | NA | NA | NA | |
| CADMIUM | 3.9 | | 7 | N | NA | NA | NA | 2.9 U | NA | NA | NA | NA | NA | NA | |
| CHROMIUM | 12000 | [10] | 12000 | N[13] | NA | NA | NA | 19 L | NA | NA | NA | NA | NA | NA | |
| COBALT | NC | | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| COPPER | 310 | | 310 | N | NA | NA | NA | 21 | NA | NA | NA | NA | NA | NA | |
| LEAD | 400 | | 400 | | NA | NA | NA | 7.4 L | NA | NA | NA | NA | NA | NA | |
| MERCURY | 2.3 | [11] | 2.3 | N[12] | NA | NA | NA | 0.12 U | NA | NA | NA | NA | NA | NA | |
| MOLYBDENUM | NC | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| NICKEL | 160 | | 150 | N | NA | NA | NA | 33 L | NA | NA | NA | NA | NA | NA | |
| SELENIUM | 39 | | 39 | N | NA | NA | NA | 4.4 L | NA | NA | NA | NA | NA | NA | |
| SILVER | 39 | | 39 | N | NA | NA | NA | 2.9 U | NA | NA | NA | NA | NA | NA | |
| VANADIUM | 7.8 | | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| ZINC | 2300 | | 2300 | N | NA | NA | NA | 58 UJ | NA | NA | NA | NA | NA | NA | |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | 23000 U | NA | NA | NA | NA | NA | NA | |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | 130 U | 130 U | 130 U | 120 U | NA | NA | NA | NA | NA | NA | |
| TPH (C09-C36) | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | | NC | | 75 | 77 | 76 | 87 | NA | NA | NA | NA | NA | NA | |
| TOTAL SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | | |
| PH | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-093 | SB-093 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-93RE-8 | F-SB-93RE-9 | F-SB-94RE-10 | F-SB-94RE-3 | F-SB-94RE-4 | F-SB-94RE-5 | F-SB-94RE-6 | F-SB-94RE-7 | F-SB-94RE-8 | F-SB-94RE-9 |
| SAMPLE DATE | | | | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| BOTTOM DEPTH | | | | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 25 | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 25 | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 12 | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 11 | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 15 | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 9.2 | 2 U | 2 U | 2 U |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 11 | 1.1 U | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 9.8 | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 10 | 1.8 U | 1.7 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 78 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U | 20 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-096 | SB-096 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | F-SB-95RE-10 | F-SB-95RE-3 | F-SB-95RE-4 | F-SB-95RE-5 | F-SB-95RE-6 | F-SB-95RE-7 | F-SB-95RE-8 | F-SB-95RE-9 | F-SB-96RE-10 | F-SB-96RE-3 |
| SAMPLE DATE | | | | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090921 | 20090921 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| BOTTOM DEPTH | | | | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 29 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 71 | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 28 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 71 | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 20 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 52 | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 21 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 54 | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 28 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 67 | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 11 | 2 U | 2 U | 2 U | 2 U | 2.1 U | 2 U | 32 | 2 U | 2 U |
| CHRYSENE | 22000 | 15000 | C | 20 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 48 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 23 | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 43 | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 123 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 296 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-16**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block F**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-096<br>F-SB-96RE-4<br>20090921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-096<br>F-SB-96RE-5<br>20090921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-096<br>F-SB-96RE-6<br>20090921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-096<br>F-SB-96RE-7<br>20090921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-096<br>F-SB-96RE-8<br>20090921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 | SB-096<br>F-SB-96RE-9<br>20090921<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 | SB-236<br>SB-236-05<br>20050509<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-237<br>SB-237-05<br>20050509<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-238<br>SB-238-05<br>20050517<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-295<br>SB-295-0405<br>20051101<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | 658 | 6 UJ |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 N | NA | NA | NA | NA | NA | NA | NA | NA | 139 J | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | 2590 U | 31 UR |
| 4-ISOPROPYLTOLUENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | 165 J | 6 UJ |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | 2590 UR | 21 J |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | 394 | 6 UJ |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | 83.1 J | 6 UJ |
| M+P-XYLENES | 1600000 [4] | 63000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | 270 J | 12 UJ |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | 147 J | 11 B |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | 159000 | 6 UJ |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | 125 J | 6 UJ |
| O-XYLENE | 1600000 [4] | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | 186 J | 6 UJ |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | 456 J | 18 UJ |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | NA | NA | NA | NA | 259 U | 2 J |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 N | NA | NA | NA | NA | NA | NA | NA | NA | 68 J | 400 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA | NA | 85 U | 400 U |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | 5690 | 400 U |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | 3980 | 400 U |
| DIMETHYL PHTHALATE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 C | NA | NA | NA | NA | NA | NA | NA | NA | 81 J | 400 U |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | 412 U | 400 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | 3420 | 400 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | 6900 | 400 U |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | 6960 | 400 U |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | 69 J | 400 U |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | 2510 | 400 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 18 | NA | NA | 2963 | 400 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 17 | NA | NA | 2963 | 400 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 12 | NA | NA | 2700 | 400 U |
| BENZO(A)PYRENE | 22 | 15 C | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 13 | NA | NA | 1960 | 400 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.6 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 18 | NA | NA | 2080 | 400 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | 1240 J | 400 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2.2 U | 2 U | 2 U | 2 U | 2 U | 9.2 | NA | NA | 2010 | 400 U |
| CHRYSENE | 22000 | 15000 C | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 14 | NA | NA | 1800 | 400 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | NA | NA | 392 J | 400 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | 10000 | 400 U |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | 6330 | 400 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 2 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 9.1 | NA | NA | 1110 J | 400 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | 31000 | 400 U |
| PHENANTHRENE | 2300000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | 18600 | 400 U |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | 7570 | 400 U |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 0 U | 75.3 | NA | NA | 103231 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | 39 U | 21 U |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | NA | NA | NA | NA | NA | NA | NA | NA | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | 2 L | 0.3 UL | 0.3 L | 0.67 U |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | 7 | 2 B | 3 | 4.6 |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | 103 | 35 | 24 | 22.8 |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | 0.6 | 3.2 | 2 | 0.96 |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | 0.5 | 0.3 | 0.5 | 0.36 U |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | 20.6 | 24.6 | 23.9 | 25.1 |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | 6.2 | 8 | 14.8 | 3.2 B |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | 38 | 11 | 14 | 14.6 |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | 81 | 11 | 14 | 8 |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | 0.97 L | 0.01 | 0.07 | 0.01 |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | 0.6 B | 0.5 U | 0.7 B | 0.41 K |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | 17 | 23 | 27 | 9.7 |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | 3 | 2 U | 2 U | 0.59 U |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | 2.3 | 0.05 U | 0.05 U | 0.72 |
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | 26.9 | 35.1 | 34.1 | 40.4 |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | 131 | 41 | 57 | 27.1 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | 881000 | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | 21200 | 2800 U |
| TPH (C09-C36) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | 6100 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | 81 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | 7.7 | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 N | NA | NA | NA | NA | NA | NA | 1.21 J | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-295 | SB-296 | SB-296 | SB-297 | SB-297 | SB-298 | SB-298 | SB-299 | SB-299 | SB-382 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-295-0910 | SB-296-0405 | SB-296-0910 | SB-297-0405 | SB-297-0910 | SB-298-0405 | SB-298-0910 | SB-299-0405 | SB-299-0910 | SB-382-0203 |
| SAMPLE DATE | | | | 20051101 | 20051028 | 20051028 | 20051028 | 20051028 | 20051101 | 20051101 | 20051101 | 20051101 | 20071015 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 2 |
| BOTTOM DEPTH | | | | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 U | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 30 UR | 31 UR | 30 UR | 28 UR | 30 UR | 30 UR | 30 UR | 29 UR | 29 UR | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | 6 U | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA |
| ACETONE | 7000000 | 6100000 | N | 14 J | 29 J | 14 J | 37 L | 36 L | 29 B | 16 B | 29 UR | 16 B | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 U | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 6 U | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 12 U | 12 UJ | 12 U | 11 U | 12 U | 12 U | 12 U | 12 UJ | 12 U | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 8 B | 8 B | 6 B | 7 B | 8 B | 6 U | 6 U | 6 UJ | 7 B | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA |
| N-BUTYLBENZENE | NC | NC | | 6 U | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 U | 6 UJ | 6 U | 6 U | 6 U | 6 U | 6 U | 6 UJ | 6 U | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | 18 U | 19 UJ | 18 U | 17 U | 18 U | 18 U | 18 U | 17 UJ | 18 U | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 12 U | 12 UJ | 12 U | 11 U | 12 U | 12 U | 12 U | 12 UJ | 12 U | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | 390 U | 410 U | 190 J | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| CARBAZOLE | 32000 | NC | | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| DIMETHYL PHTHALATE | NC | NC | | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 UR | 390 U | NA |
| PHENOL | 2300000 | 1800000 | N | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | 1.7 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | 1.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | 1.7 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| CHRYSENE | 22000 | 15000 | C | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| FLUORANTHENE | 310000 | 230000 | N | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| FLUORENE | 310000 | 230000 | N | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| NAPHTHALENE | 160000 | 3600 | C | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| PYRENE | 230000 | 170000 | N | 390 U | 410 U | 390 U | 380 U | 390 U | 390 U | 400 U | 380 U | 390 U | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 20 U | 21 U | 20 U | 19 U | 20 U | 20 U | 20 U | 20 U | 20 U | 43 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.78 U | 0.91 U | 0.74 U | 0.79 U | 0.82 U | 0.64 UL | 0.78 UL | 0.74 UL | 0.84 UL | NA |
| ARSENIC | 0.43 | 0.39 | C | **2.9 K** | **5.7** | **2.4 K** | **3.3** | **3 K** | **3.5** | **2 K** | **1.3 K** | **2.2 K** | NA |
| BARIUM | 1600 | 1500 | N | 15.1 | 14.5 | 13.7 | 16.3 | 22.3 | 17.7 | 19.6 | 12.5 | 42.2 | NA |
| BERYLLIUM | 16 | 16 | N | 3.2 | 3.6 | 3.6 | 3.1 | 3.7 | 4.3 | 3.8 | 1.8 | 2.6 | NA |
| CADMIUM | 3.9 | 7 | N | 0.41 U | 0.48 U | 0.39 U | 0.42 U | 0.44 U | 0.06 U | 0.08 U | 0.07 U | 0.08 U | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 29 | 38.7 | 21.1 | 26.1 | 19.2 | 16.3 K | 39.4 K | 18.6 K | 16 K | NA |
| COBALT | NC | 2.3 | N | **8.5 K** | **32.3** | **6 K** | **6 K** | **8.7 K** | **8** | **5.3** | **11** | **9.3** | NA |
| COPPER | 310 | 310 | N | 17.5 | 40.4 | 21.9 | 21.9 | 15.9 | 18 | 11.6 | 10.9 | 11.2 | NA |
| LEAD | 400 | 400 | | 8.7 | 9.9 | 7.6 | 8.3 | 8.5 | 8.4 | 10.4 | 4 | 11.2 | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.01 U | 0.02 | 0.01 | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 B | NA |
| MOLYBDENUM | NC | 39 | N | 0.44 K | 0.55 K | 0.36 U | 0.43 K | 0.45 K | 0.32 | 0.35 | 0.18 U | 0.2 U | NA |
| NICKEL | 160 | 150 | N | 24.3 | 31.4 | 21.3 | 24 | 25.4 | 23.3 | 17.8 | 13.7 | 18.1 | NA |
| SELENIUM | 39 | 39 | N | 0.68 U | 0.8 U | 0.65 U | 0.69 U | 0.72 U | 0.56 UL | 0.69 UL | 0.65 UL | 0.73 UL | NA |
| SILVER | 39 | 39 | N | 0.99 | 1.6 | 1.2 | 0.84 U | 0.88 U | 0.08 U | 0.07 U | 0.09 U | 0.11 U | NA |
| VANADIUM | 7.8 | 39 | N[13] | **32.5** | **61.6** | **32.8** | **35.3** | **31.8** | **28.4** | **46.4** | **27.2** | **20.7** | NA |
| ZINC | 2300 | 2300 | N | 32.2 | 58 | 26.8 | 24.1 | 33.2 | 34.7 | 30.8 | 40.9 | 42.7 | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 2600 U | 2600 U | 2800 U | 2800 U | 2700 U | 2800 U | 2900 U | 2700 U | 2800 U | NA |
| TPH (C09-C36) | NC | NC | | 6000 U | 4900 J | 5900 U | 3500 J | 3800 J | 3600 B | 2800 B | 2900 B | 2900 B | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | 76.2 |
| TOTAL SOLIDS | NC | NC | | 84 | 80 | 84 | 88 | 84 | 84 | 83 | 86 | 85 | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-382 | SB-382 | SB-383 | SB-383 | SB-383 | SB-384 | SB-384 | SB-384 | SB-385 | SB-385 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-382-0405 | SB-382-0708 | SB-383-0203 | SB-383-0405 | SB-383-0708 | SB-384-0203 | SB-384-0405 | SB-384-0708 | SB-385-0203 | SB-385-0405 |
| SAMPLE DATE | | | | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | | | | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.6 U | 51 | 38 | 10 | 1.5 U | 1.5 U | 1.7 U | 1.4 U | 1.4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.6 U | 51 | 38 | 10 | 1.5 U | 1.5 U | 1.7 U | 1.4 U | 1.4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | 51 J | 38 J | 10 J | 1.5 U | 1.5 U | 1.7 U | 1.4 U | 1.4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 51 | 38 | 10 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 41 U | 42 U | 38 U | 42 U | 40 U | 38 U | 39 U | 43 U | 36 U | 36 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 80.4 | 79.2 | 87.2 | 79.2 | 83.1 | 86 | 84.6 | 76.6 | 91 | 93 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-385 | SB-386 | SB-386 | SB-386 | SB-387 | SB-387 | SB-387 | SB-388 | SB-388 | SB-388 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-385-0708 | SB-386-0203 | SB-386-0405 | SB-386-0708 | SB-387-0203 | SB-387-0405 | SB-387-0708 | SB-388-0203 | SB-388-0405 | SB-388-0708 |
| SAMPLE DATE | | | | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 |
| BOTTOM DEPTH | | | | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 39 U | 37 U | 37 U | 39 U | 36 U | 39 U | 37 U | 38 U | 36 U | 37 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.7 | 89.2 | 89.5 | 84.1 | 91.4 | 84.4 | 88.8 | 87.6 | 90.8 | 90.3 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-389 | SB-389 | SB-389 |
|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-389-0203 | SB-389-0405 | SB-389-0708 |
| SAMPLE DATE | | | | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB |
| TOP DEPTH | | | | 2 | 4 | 7 |
| BOTTOM DEPTH | | | | 3 | 5 | 8 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 33 | 9.7 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 33 | 9.7 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 33 J | 9.7 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 33 | 9.7 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 39 U | 38 U | 38 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[13] | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NC | NC | | 85 | 87.5 | 86.4 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | |
| PH | NC | NC | | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-050 | SB-050 | SB-055 | SB-055 | SB-056 | SB-056 | SB-093 | SB-093 | SB-094 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-50-05 | SB-50-10 | SB-55-05 | SB-55-10 | SB-56-05 | SB-56-10 | SB-93-05 | SB-93-10 | SB-94-05 |
| SAMPLE DATE | | | | 20040915 | 20040915 | 20040915 | 20040915 | 20040913 | 20040913 | 20040916 | 20040916 | 20040916 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | | | | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | 61 U | 62 U | 57 U | 58 U | 60 U | 59 U | 59 U |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| ACETONE | 7000000 | 6100000 | N | NA | NA | 61 UJ | 62 UJ | 57 UJ | 58 UJ | 60 U | 59 U | 59 U |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | 12 U | 12 U | 11 U | 12 U | 12 U | 12 U | 12 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | 7 B | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| N-BUTYLBENZENE | NC | NC | | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U | 6 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U | 390 U | 400 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U | 390 U | 400 U |
| CARBAZOLE | 32000 | NC | | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U | 390 U | 200 J |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U | 390 U | 73 J |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | 410 U | 310 J | 380 U | 390 U | 400 U | 390 U | 400 U |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U | 390 U | 400 U |
| PHENOL | 2300000 | 1800000 | N | NA | NA | 480 | 420 U | 910 | 730 | 400 U | 390 U | 400 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U | 390 U | 400 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U | 390 U | 110 J |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U | 390 U | 400 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U | 390 U | 270 J |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | 410 U | **464** | 380 U | 390 U | 400 U | 390 U | **847** |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | 410 U | **254** | 380 U | 390 U | 400 U | 390 U | **647** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | 410 U | **220 J** | 380 U | 390 U | 400 U | 390 U | **620** |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | 410 U | **200 J** | 380 U | 390 U | 400 U | 390 U | **490** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | 410 U | **190 J** | 380 U | 390 U | 400 U | 390 U | **630** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | 410 U | 140 J | 380 U | 390 U | 400 U | 390 U | 280 J |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | 410 U | 160 J | 380 U | 390 U | 400 U | 390 U | 450 |
| CHRYSENE | 22000 | 15000 | C | NA | NA | 410 U | 250 J | 380 U | 390 U | 400 U | 390 U | 660 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U | 390 U | 400 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | 410 U | 490 | 380 U | 390 U | 400 U | 390 U | 1500 |
| FLUORENE | 310000 | 230000 | N | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U | 390 U | 110 J |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | 410 U | 110 J | 380 U | 390 U | 400 U | 390 U | **270 J** |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | 410 U | 420 U | 380 U | 390 U | 400 U | 390 U | 400 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | 410 U | 190 J | 380 U | 390 U | 400 U | 390 U | 1200 |
| PYRENE | 230000 | 170000 | N | NA | NA | 410 U | 370 J | 380 U | 390 U | 400 U | 390 U | 1100 |
| TOTAL PAHS | NC | NC | | NA | NA | 0 U | 2320 | 0 U | 0 U | 0 U | 0 U | 7690 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | 300 U | 310 U | 280 U | 280 U | 290 U | 290 U | 290 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 2.8 U | 2.7 U | 2.8 U | 2.8 UR | 2.6 UR | 2.9 UR | 3 UR | 2.8 UR | 2.9 UR |
| ARSENIC | 0.43 | 0.39 | C | **0.96** | **1.2** | **1.9** | **0.58 L** | 0.53 UL | 0.58 UL | 0.59 UL | 0.56 UL | 0.58 UL |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 2.8 U | 2.7 U | 6.2 | 2.8 U | 2.6 U | 2.9 U | 3 UL | 2.8 UL | 3.2 L |
| CADMIUM | 3.9 | 7 | N | 2.8 U | 2.7 U | 2.8 U | 2.8 UL | 2.6 UL | 2.9 UL | 3 UL | 2.8 UL | 2.9 UL |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 13 | 5.8 | 15 | 8.4 L | 15 L | 10 L | 20 | 9.9 K | 14 |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 8.7 | 10 | 56 | 12 | 10 | 4.7 K | 13 L | 10 L | 21 L |
| LEAD | 400 | 400 | | 6.7 | 4.8 | 8.4 | 5.2 J | 3.2 J | 2.9 UJ | 8.7 L | 2.9 L | 6.7 L |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.11 U | 0.11 U | 0.11 U | 0.11 UL | 0.11 UL | 0.12 UL | 0.12 U | 0.11 U | 0.12 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 18 | 28 | 150 | 11 | 11 | 5.3 K | 17 | 4 K | 12 |
| SELENIUM | 39 | 39 | N | 2.8 U | 2.7 U | 2.8 | 2.8 UL | 2.6 UL | 2.9 UL | 4.3 L | 2.8 UL | 4.2 L |
| SILVER | 39 | 39 | N | 2.6 U | 2.5 U | 3 UL | 2.8 UR | 2.6 UR | 2.9 UR | 3 UR | 2.8 UR | 2.9 UR |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 43 K | 140 | 270 | 62 J | 26 UL | 29 UL | 30 U | 28 U | 29 U |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | 12000 U | 12000 U | 11000 U | 11000 U | 12000 U | 12000 U | 17000 |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | 120 U | 120 U | 110 U | 110 U | 120 U | 120 U | 120 U |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 | SB-390 | SB-390 | SB-390 | SB-391 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | SB-94-10 | SB-95-05 | SB-95-10 | SB-96-05 | SB-96-10 | SB-390-0203 | SB-390-0405 | SB-390-0708 | SB-391-0203 |
| SAMPLE DATE | | | | | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20071015 | 20071015 | 20071015 | 20071016 |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | | 10 | 5 | 10 | 5 | 10 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | | | | | 10 | 5 | 10 | 5 | 10 | 3 | 5 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | | 6200 | N | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | | 78000 | N | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | | 2800000 | N | 57 U | 60 U | 58 U | 58 U | 58 U | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | | NC | | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| ACETONE | 7000000 | | 6100000 | N | 57 U | 60 U | 58 U | 58 U | 58 U | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | | 5400 | C | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | | 210000 | N | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 | [4] | 63000 | N[5] | 11 U | 12 U | 12 U | 12 U | 12 U | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | | NC | | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| O-XYLENE | 1600000 | [4] | 380000 | N | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | | 79000 | N | 6 U | 6 U | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | | 120000 | N | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | | 35000 | C | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| CARBAZOLE | 32000 | | NC | | 380 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | | 7800 | N | 130 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | | NC | | 390 U | 400 U | 77 J | 390 U | 400 U | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | | 99000 | C | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| PHENOL | 2300000 | | 1800000 | N | 390 U | 140 J | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | | 340000 | N | 190 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | | 1700000 | N | 430 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | **1435** | 400 U | 390 U | 390 U | 400 U | 1.7 U | **990** | 1.6 U | 2 U |
| BAP EQUIVALENT-POS | 22 | | 15 | C | **1240** | 400 U | 390 U | 390 U | 400 U | 1.7 U | **990** | 1.6 U | 2 U |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | **1200** | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | | 15 | C | **950** | 400 U | 390 U | 390 U | 400 U | 1.7 U | **990** | 1.6 U | 2 U |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | **1000** | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[7] | 600 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | 940 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| CHRYSENE | 22000 | | 15000 | C | 1200 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | 390 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | | 230000 | N | 2700 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| FLUORENE | 310000 | | 230000 | N | 200 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | **590** | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | 58 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | | 170000 | N[7] | 2200 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| PYRENE | 230000 | | 170000 | N | 1900 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| TOTAL PAHS | NC | | NC | | 14158 | 0 U | 0 U | 0 U | 0 U | 0 U | 990 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | | 220 | C | 290 U | 300 U | 290 U | 290 U | 290 U | 42 U | 40 U | 40 U | 50 U |
| TOTAL AROCLOR | 320 | [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | 2.8 UR | 2.9 UR | 2.9 UR | 2.6 UR | 3 UR | NA | NA | NA | NA |
| ARSENIC | 0.43 | | 0.39 | C | 0.55 UL | 0.58 UL | 0.59 UL | 0.52 UL | 0.59 UL | NA | NA | NA | NA |
| BARIUM | 1600 | | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | | 16 | N | 2.8 UL | 5.2 L | 2.9 UL | 2.6 UL | 4.1 L | NA | NA | NA | NA |
| CADMIUM | 3.9 | | 7 | N | 2.8 UL | 2.9 UL | 2.9 UL | 2.6 UL | 3 UL | NA | NA | NA | NA |
| CHROMIUM | 12000 | [10] | 12000 | N[10] | 20 | 19 | 9.6 K | 2.6 U | 17 | NA | NA | NA | NA |
| COBALT | NC | | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | | 310 | N | 11 L | 24 L | 5.5 L | 4.3 L | 13 L | NA | NA | NA | NA |
| LEAD | 400 | | 400 | | 17 L | 5.2 L | 3.2 L | 2.6 UL | 4.3 L | NA | NA | NA | NA |
| MERCURY | 2.3 | [11] | 2.3 | N[12] | 0.11 U | 0.12 U | 0.12 U | 0.1 U | 0.12 U | NA | NA | NA | NA |
| MOLYBDENUM | NC | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | | 150 | N | 21 | 21 | 8.4 | 2.6 U | 22 | NA | NA | NA | NA |
| SELENIUM | 39 | | 39 | N | 2.8 UL | 2.9 UL | 2.9 UL | 2.6 UL | 3 UL | NA | NA | NA | NA |
| SILVER | 39 | | 39 | N | 2.8 UR | 2.9 UR | 2.9 UR | 2.6 UR | 3 UR | NA | NA | NA | NA |
| VANADIUM | 7.8 | | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | | 2300 | N | 33 K | 29 U | 29 U | 26 U | 30 U | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | 12000 U | 12000 U | 12000 U | 12000 U | 12000 | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | 120 U | 120 U | 120 U | 120 U | 120 U | NA | NA | NA | NA |
| TPH (C09-C36) | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | 78.4 | 82.8 | 82.3 | 65.8 |
| TOTAL SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-391 | SB-391 | SB-392 | SB-392 | SB-392 | SB-393 | SB-393 | SB-393 | SB-394 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-391-0405 | SB-391-0708 | SB-392-0203 | SB-392-0405 | SB-392-0708 | SB-393-0203 | SB-393-0405 | SB-393-0708 | SB-394-0203 |
| SAMPLE DATE | | | | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | | | | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.5 U | 20 | 1.5 U | 1.4 U | 7.5 | 1.5 U | 25 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 20 | 1.5 U | 1.4 U | 7.5 | 1.5 U | 25 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 20 J | 1.5 U | 1.4 U | 7.5 J | 1.5 U | 25 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 20 | 0 U | 0 U | 7.5 | 0 U | 25 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 38 U | 39 U | 37 U | 39 U | 39 U | 36 U | 35 U | 38 U | 36 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 87 | 85.3 | 89.3 | 84.9 | 84.4 | 92.6 | 93.5 | 86.9 | 90.6 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-394 | SB-394 | SB-395 | SB-395 | SB-395 | SB-396 | SB-396 | SB-396 | SB-397 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | SB-394-0405 | SB-394-0708 | SB-395-0203 | SB-395-0405 | SB-395-0708 | SB-396-0203 | SB-396-0405 | SB-396-0708 | SB-397-0203 |
| SAMPLE DATE | | | | | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | | | | | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 | [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 | [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 | [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | 1.5 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | | 15 | C | 1.5 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | | 15 | C | 1.5 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 UJ |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | | 220 | C | 38 U | 38 U | 34 U | 38 U | 38 U | 38 U | 39 U | 39 U | 37 U |
| TOTAL AROCLOR | 320 | [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 | [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 | [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | | NC | | 86.7 | 86.2 | 95.9 | 86.9 | 87 | 86 | 84.8 | 83.8 | 89.4 |
| TOTAL SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-397 | SB-397 | SB-398 | SB-398 | SB-398 | SB-399 | SB-399 | SB-399 | SB-400 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-397-0405 | SB-397-0708 | SB-398-0203 | SB-398-0405 | SB-398-0708 | SB-399-0203 | SB-399-0405 | SB-399-0708 | SB-400-0203 |
| SAMPLE DATE | | | | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | | | | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **850** | 1.5 U | **33** | 1.5 U | 1.5 U | 1.4 U | **22** | 1.6 U | 1.4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **850** | 1.5 U | **33** | 1.5 U | 1.5 U | 1.4 U | **22** | 1.6 U | 1.4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | **850** | 1.5 U | **33 J** | 1.5 U | 1.5 U | 1.4 U | **22 J** | 1.6 U | 1.4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 850 | 0 U | 33 | 0 U | 0 U | 0 U | 22 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 19 J | 39 U | 38 U | 37 U | 38 U | 37 U | 39 U | 40 U | 36 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 19 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 95.1 | 85.2 | 86 | 89.4 | 86.3 | 89.9 | 84.5 | 83.3 | 92.1 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-400 | SB-400 | SB-401 | SB-401 | SB-401 | SB-402 | SB-402 | SB-402 | SB-403 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-400-0405 | SB-400-0708 | SB-401-0203 | SB-401-0405 | SB-401-0708 | SB-402-0203 | SB-402-0405 | SB-402-0708 | SB-403-0203 |
| SAMPLE DATE | | | | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | | | | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 39 U | 41 U | 37 U | 40 U | 38 U | 39 U | 39 U | 39 U | 37 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.1 | 80.3 | 88.3 | 83.1 | 86 | 84.7 | 83.6 | 84.1 | 88.4 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-403 | SB-403 | SB-404 | SB-404 | SB-404 | SB-405 | SB-405 | SB-405 | SB-406 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-403-0405 | SB-403-0708 | SB-404-0203 | SB-404-0405 | SB-404-0708 | SB-405-0203 | SB-405-0405 | SB-405-0708 | SB-406-0203 |
| SAMPLE DATE | | | | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | | | | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 1.6 U | 18 | 72 | 1.4 U | 330 | 230 | 320 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 18 | 72 | 1.4 U | 330 | 230 | 320 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 18 J | 72 J | 1.4 U | 330 J | 230 J | 320 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 18 | 72 | 0 U | 330 | 230 | 320 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 39 U | 40 U | 41 U | 42 U | 43 U | 37 U | 40 U | 43 U | 21 J |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 21 |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.7 | 83.5 | 81.2 | 78 | 76.5 | 90.3 | 83.3 | 77.4 | 87.5 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-406 | SB-406 | SB-407 | SB-407 | SB-407 | SB-408 | SB-408 | SB-408 | SB-409 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-406-0405 | SB-406-0708 | SB-407-0203 | SB-407-0405 | SB-407-0708 | SB-408-0203 | SB-408-0405 | SB-408-0708 | SB-409-0203 |
| SAMPLE DATE | | | | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | | | | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 62 | 85 | 190 | 110 | 30 | 50 | 12 | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 62 | 85 | 190 | 110 | 30 | 50 | 12 | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 62 J | 85 J | 190 J | 110 J | 30 J | 50 J | 12 J | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 62 | 85 | 190 | 110 | 30 | 50 | 12 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 41 U | 42 U | 42 U | 45 U | 45 U | 39 U | 15 J | 41 U | 40 U |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 15 | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 79.9 | 78.3 | 78.1 | 73.7 | 72.7 | 83.8 | 86.1 | 81.1 | 81.6 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-409 | SB-409 | SB-489 | SB-489 | SB-489 | SB-490 | SB-490 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-409-0405 | SB-409-0708 | SB-489-0203 | SB-489-0405 | SB-489-0708 | SB-490-0405 | SB-490-0708 |
| SAMPLE DATE | | | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071017 | 20071017 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 4 | 7 | 2 | 4 | 7 | 4 | 7 |
| BOTTOM DEPTH | | | 5 | 8 | 3 | 5 | 8 | 5 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 N | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 (4) | 63000 N(5) | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (4) | 380000 N | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 2,4-DIMETHYLPHENOL | 160000 | 120000 N | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 46000 | 35000 C | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 C | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(6) | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 67 | 1.8 U | 260 | 9.8 | 21 | 110 | 31 |
| BAP EQUIVALENT-POS | 22 | 15 C | 67 | 1.8 U | 260 | 9.8 | 21 | 110 | 31 |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 67 J | 1.8 U | 260 J | 9.8 J | 21 J | 110 J | 31 J |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 67 | 0 U | 260 | 9.8 | 21 | 110 | 31 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | 42 U | 45 U | 43 U | 42 U | 45 U | 42 U | 38 U |
| TOTAL AROCLOR | 320 (8) | 220 C(9) | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (10) | 12000 N(10) | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (11) | 2.3 N(12) | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(13) | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 78.5 | 73.5 | 76.3 | 79.3 | 73.3 | 79.4 | 86.6 |
| TOTAL SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 N | NA | NA | NA | NA | NA | NA | NA |

**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - The value is for xylenes.
5 - The value is for xylene, mixture.
6 - The value for acenaphthene is used as a surrogate for acenaphthylene.
7 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
8 - The value is for PCB (total).
9 - The value is for polychlorinated biphenyls (high risk).
10 - The value is for trivalent chromium.
11 - The value is for mercury (inorganic/mercuric dichloride).
12 - The value is for mercuric chloride.
13 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

**Table A-19**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-194 | SB-194 | SB-198 | SB-198 | SB-254 | SB-254 | SB-255 | SB-255 | SB-257RE | SB-257RE | SB-653 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-194RE-1 | G-SB-194RE-2 | G-SB-198RE-1 | G-SB-198RE-2 | G-SB-254RE-1 | G-SB-254RE-2 | G-SB-255RE-1 | G-SB-255RE-2 | G-SB-257RE-1 | G-SB-257RE-2 | G-SB-653-1 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20090930 | 20090930 | 20091001 | 20091001 | 20091002 | 20091002 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-194 | SB-194 | SB-198 | SB-198 | SB-254 | SB-254 | SB-255 | SB-255 | SB-257RE | SB-257RE | SB-653 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-194RE-1 | G-SB-194RE-2 | G-SB-198RE-1 | G-SB-198RE-2 | G-SB-254RE-1 | G-SB-254RE-2 | G-SB-255RE-1 | G-SB-255RE-2 | G-SB-257RE-1 | G-SB-257RE-2 | G-SB-653-1 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20090930 | 20090930 | 20091001 | 20091001 | 20091002 | 20091002 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1192 | 4.2 | 163 | 228 | 30 | 41 | 720 | 74 | 32 | 1.5 U | 144 |
| BAP EQUIVALENT-POS | 1192 | 2.7 | 163 | 228 | 30 | 41 | 720 | 74 | 31 | 1.5 U | 144 |
| BENZO(A)ANTHRACENE | 780 | 1.1 U | 84 | 140 | 13 | 17 | 330 | 31 | 25 | 1.1 U | 80 |
| BENZO(A)PYRENE | 800 | 1.5 U | 100 | 150 | 11 | 18 | 490 | 42 | 24 | 1.5 U | 86 |
| BENZO(B)FLUORANTHENE | 1000 | 8.5 | 120 | 170 | 21 | 29 | 560 | 50 | 27 | 1.4 U | 96 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 340 | 2 U | 53 | 70 | 1.9 U | 9.3 | 190 | 16 | 15 | 1.9 U | 40 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 860 | 7.8 | 89 | 130 | 18 | 16 | 390 | 36 | 29 | 1 U | 79 |
| DIBENZO(A,H)ANTHRACENE | 160 | 1.5 U | 34 | 37 | 14 | 16 | 110 | 20 | 1.5 U | 1.5 U | 34 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-194 | SB-194 | SB-198 | SB-198 | SB-254 | SB-254 | SB-255 | SB-255 | SB-257RE | SB-257RE | SB-653 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-194RE-1 | G-SB-194RE-2 | G-SB-198RE-1 | G-SB-198RE-2 | G-SB-254RE-1 | G-SB-254RE-2 | G-SB-255RE-1 | G-SB-255RE-2 | G-SB-257RE-1 | G-SB-257RE-2 | G-SB-653-1 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20090930 | 20090930 | 20091001 | 20091001 | 20091002 | 20091002 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| INDENO(1,2,3-CD)PYRENE | 500 | 18 | 75 | 87 | 19 | 23 | 290 | 39 | 14 | 1.7 U | 62 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 4440 | 34.3 | 555 | 784 | 96 | 128.3 | 2360 | 234 | 134 | 0 U | 477 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-19**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-194 | SB-194 | SB-198 | SB-198 | SB-254 | SB-254 | SB-255 | SB-255 | SB-257RE | SB-257RE | SB-653 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-194RE-1 | G-SB-194RE-2 | G-SB-198RE-1 | G-SB-198RE-2 | G-SB-254RE-1 | G-SB-254RE-2 | G-SB-255RE-1 | G-SB-255RE-2 | G-SB-257RE-1 | G-SB-257RE-2 | G-SB-653-1 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20090930 | 20090930 | 20091001 | 20091001 | 20091002 | 20091002 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-653 | SB-653A | SB-653B | SB-653D | SB-654 | SB-654 | SB-654B | SB-654C | SB-655 | SB-655 | SB-656 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653-2 | G-SB-653A-1 | G-SB-653B-1 | G-SB-653D-1 | G-SB-654-1 | G-SB-654-2 | G-SB-654B-1 | G-SB-654C-1 | G-SB-655-1 | G-SB-655-2 | G-SB-656-1 |
| SAMPLE DATE | 20090930 | 20091029 | 20091029 | 20091029 | 20090930 | 20090930 | 20091030 | 20091030 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| BOTTOM DEPTH | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-653 | SB-653A | SB-653B | SB-653D | SB-654 | SB-654 | SB-654B | SB-654C | SB-655 | SB-655 | SB-656 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653-2 | G-SB-653A-1 | G-SB-653B-1 | G-SB-653D-1 | G-SB-654-1 | G-SB-654-2 | G-SB-654B-1 | G-SB-654C-1 | G-SB-655-1 | G-SB-655-2 | G-SB-656-1 |
| SAMPLE DATE | 20090930 | 20091029 | 20091029 | 20091029 | 20090930 | 20090930 | 20091030 | 20091030 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| BOTTOM DEPTH | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 396 | 368 | 174 | 46 | 65 | 399 | 98 | 52 | 55 | 12 | 76 |
| BAP EQUIVALENT-POS | 396 | 368 | 174 | 45 | 64 | 399 | 98 | 52 | 51 | 11 | 75 |
| BENZO(A)ANTHRACENE | 230 | 180 | 86 | 20 | 53 | 340 | 91 | 38 | 5.2 U | 7.7 | 38 |
| BENZO(A)PYRENE | 250 | 240 | 110 | 36 | 49 | 270 | 75 | 38 | 43 | 9.2 | 60 |
| BENZO(B)FLUORANTHENE | 270 | 270 | 130 | 42 | 59 | 300 | 93 | 69 | 76 | 12 | 66 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 110 | 100 | 40 | 8.9 | 13 | 130 | 35 | 15 | 9.3 U | 1.9 U | 25 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 240 | 230 | 98 | 22 | 57 | 330 | 92 | 52 | 71 | 8.8 | 56 |
| DIBENZO(A,H)ANTHRACENE | 79 | 65 | 34 | 1.4 U | 1.5 U | 48 | 1.5 U | 1.5 U | 7.1 U | 1.4 U | 1.4 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-653 | SB-653A | SB-653B | SB-653D | SB-654 | SB-654 | SB-654B | SB-654C | SB-655 | SB-655 | SB-656 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653-2 | G-SB-653A-1 | G-SB-653B-1 | G-SB-653D-1 | G-SB-654-1 | G-SB-654-2 | G-SB-654B-1 | G-SB-654C-1 | G-SB-655-1 | G-SB-655-2 | G-SB-656-1 |
| SAMPLE DATE | 20090930 | 20091029 | 20091029 | 20091029 | 20090930 | 20090930 | 20091030 | 20091030 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| BOTTOM DEPTH | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| INDENO(1,2,3-CD)PYRENE | 160 | 170 | 78 | 30 | 39 | 150 | 39 | 27 | 8.2 U | 1.7 U | 46 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1339 | 1255 | 576 | 158.9 | 270 | 1568 | 425 | 239 | 190 | 37.7 | 291 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-653 | SB-653A | SB-653B | SB-653D | SB-654 | SB-654 | SB-654B | SB-654C | SB-655 | SB-655 | SB-656 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653-2 | G-SB-653A-1 | G-SB-653B-1 | G-SB-653D-1 | G-SB-654-1 | G-SB-654-2 | G-SB-654B-1 | G-SB-654C-1 | G-SB-655-1 | G-SB-655-2 | G-SB-656-1 |
| SAMPLE DATE | 20090930 | 20091029 | 20091029 | 20091029 | 20090930 | 20090930 | 20091030 | 20091030 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| BOTTOM DEPTH | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-19**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-656 | SB-656C | SB-656D | SB-657A | SB-657B | SB-657D | SB-658B | SB-658C | SB-659C | SB-659D | SB-662A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656-2 | G-SB-656C-2 | G-SB-656D-2 | G-SB-657A-1 | G-SB-657B-1 | G-SB-657D-1 | G-SB-658B-1 | G-SB-658C-1 | G-SB-659C-1 | G-SB-659D-1 | G-SB-662A-1 |
| SAMPLE DATE | 20090930 | 20091029 | 20091029 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-656 | SB-656C | SB-656D | SB-657A | SB-657B | SB-657D | SB-658B | SB-658C | SB-659C | SB-659D | SB-662A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656-2 | G-SB-656C-2 | G-SB-656D-2 | G-SB-657A-1 | G-SB-657B-1 | G-SB-657D-1 | G-SB-658B-1 | G-SB-658C-1 | G-SB-659C-1 | G-SB-659D-1 | G-SB-662A-1 |
| SAMPLE DATE | 20090930 | 20091029 | 20091029 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 226 | 4.2 | 59 | 1893 | 1188 | 31 | 58 | 72 | 81 | 23 | 627 |
| BAP EQUIVALENT-POS | 226 | 2.6 | 58 | 1893 | 1180 | 30 | 58 | 71 | 80 | 22 | 627 |
| BENZO(A)ANTHRACENE | 110 | 1.1 U | 48 | 1000 | 1300 | 26 | 52 | 46 | 78 | 21 | 380 |
| BENZO(A)PYRENE | 130 | 1.4 U | 43 | 1300 | 870 | 22 | 46 | 55 | 59 | 17 | 450 |
| BENZO(B)FLUORANTHENE | 190 | 26 | 74 | 1200 | 1700 | 42 | 61 | 78 | 130 | 31 | 500 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 62 | 1.9 U | 22 | 610 | 860 | 1.9 U | 29 | 25 | 2 U | 2 U | 260 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 130 | 1 U | 56 | 1200 | 1400 | 24 | 65 | 55 | 81 | 17 | 370 |
| DIBENZO(A,H)ANTHRACENE | 54 | 1.4 U | 1.5 U | 290 | 14 U | 1.4 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 59 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-19**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-656 | SB-656C | SB-656D | SB-657A | SB-657B | SB-657D | SB-658B | SB-658C | SB-659C | SB-659D | SB-662A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656-2 | G-SB-656C-2 | G-SB-656D-2 | G-SB-657A-1 | G-SB-657B-1 | G-SB-657D-1 | G-SB-658B-1 | G-SB-658C-1 | G-SB-659C-1 | G-SB-659D-1 | G-SB-662A-1 |
| SAMPLE DATE | 20090930 | 20091029 | 20091029 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| INDENO(1,2,3-CD)PYRENE | 110 | 1.7 U | 30 | 760 | 16 U | 14 | 1.7 U | 32 | 1.8 U | 1.8 U | 270 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 786 | 26 | 273 | 6360 | 6130 | 128 | 253 | 291 | 348 | 86 | 2289 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-656 | SB-656C | SB-656D | SB-657A | SB-657B | SB-657D | SB-658B | SB-658C | SB-659C | SB-659D | SB-662A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656-2 | G-SB-656C-2 | G-SB-656D-2 | G-SB-657A-1 | G-SB-657B-1 | G-SB-657D-1 | G-SB-658B-1 | G-SB-658C-1 | G-SB-659C-1 | G-SB-659D-1 | G-SB-662A-1 |
| SAMPLE DATE | 20090930 | 20091029 | 20091029 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-662B | SB-662C | SB-669 | SB-669 | SB-670 | SB-670 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662B-1 | G-SB-662C-1 | G-SB-669-1 | G-SB-669-2 | G-SB-670-1 | G-SB-670-2 | G-SB-671-1 | G-SB-671-2 | G-SB-671-2-AVG | G-SB-671-2-D | G-SB-671B-1 |
| SAMPLE DATE | 20091029 | 20091029 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-662B | SB-662C | SB-669 | SB-669 | SB-670 | SB-670 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662B-1 | G-SB-662C-1 | G-SB-669-1 | G-SB-669-2 | G-SB-670-1 | G-SB-670-2 | G-SB-671-1 | G-SB-671-2 | G-SB-671-2-AVG | G-SB-671-2-D | G-SB-671B-1 |
| SAMPLE DATE | 20091029 | 20091029 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 | 58 | 44 | 105 | 55 | 22 | 434 | 1.5 U | 1.5 U | 1.5 U | 229 |
| BAP EQUIVALENT-POS | 0.01 | 58 | 44 | 105 | 55 | 21 | 434 | 1.5 U | 1.5 U | 1.5 U | 229 |
| BENZO(A)ANTHRACENE | 1.1 U | 48 | 20 | 49 | 24 | 15 | 270 | 1.1 U | 1.1 U | 1.1 U | 140 |
| BENZO(A)PYRENE | 1.4 U | 43 | 21 | 58 | 29 | 15 | 300 | 1.5 U | 1.5 U | 1.5 U | 150 |
| BENZO(B)FLUORANTHENE | 1.3 U | 68 | 29 | 81 | 39 | 22 | 320 | 1.4 U | 1.4 U | 1.4 U | 180 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 24 | 13 | 28 | 10 | 10 | 170 | 2 U | 2 U | 2 U | 60 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 10 | 57 | 26 | 50 | 26 | 15 | 240 | 1 U | 1 U | 1 U | 140 |
| DIBENZO(A,H)ANTHRACENE | 1.4 U | 1.5 U | 16 | 28 | 17 | 1.5 U | 59 | 1.5 U | 1.5 U | 1.5 U | 37 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-662B | SB-662C | SB-669 | SB-669 | SB-670 | SB-670 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662B-1 | G-SB-662C-1 | G-SB-669-1 | G-SB-669-2 | G-SB-670-1 | G-SB-670-2 | G-SB-671-1 | G-SB-671-2 | G-SB-671-2-AVG | G-SB-671-2-D | G-SB-671B-1 |
| SAMPLE DATE | 20091029 | 20091029 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 27 | 23 | 54 | 27 | 22 | 140 | 1.7 U | 1.7 U | 1.7 U | 94 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 10 | 267 | 148 | 348 | 172 | 99 | 1499 | 0 U | 0 U | 0 U | 801 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-662B | SB-662C | SB-669 | SB-669 | SB-670 | SB-670 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662B-1 | G-SB-662C-1 | G-SB-669-1 | G-SB-669-2 | G-SB-670-1 | G-SB-670-2 | G-SB-671-1 | G-SB-671-2 | G-SB-671-2-AVG | G-SB-671-2-D | G-SB-671B-1 |
| SAMPLE DATE | 20091029 | 20091029 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671C | SB-671D | SB-672 | SB-672 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677A | SB-677B | SB-677D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671C-1 | G-SB-671D-1 | G-SB-672-1 | G-SB-672-2 | G-SB-677-1 | G-SB-677-1-AVG | G-SB-677-1-D | G-SB-677-2 | G-SB-677A-1 | G-SB-677B-1 | G-SB-677D-1 |
| SAMPLE DATE | 20091111 | 20091111 | 20090929 | 20090929 | 20091001 | 20091001 | 20091001 | 20091001 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671C | SB-671D | SB-672 | SB-672 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677A | SB-677B | SB-677D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671C-1 | G-SB-671D-1 | G-SB-672-1 | G-SB-672-2 | G-SB-677-1 | G-SB-677-1-AVG | G-SB-677-1-D | G-SB-677-2 | G-SB-677A-1 | G-SB-677B-1 | G-SB-677D-1 |
| SAMPLE DATE | 20091111 | 20091111 | 20090929 | 20090929 | 20091001 | 20091001 | 20091001 | 20091001 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 24 | 22 | 60 | 57 | 20437 | 14418 | 8400 | 1978 | 1193 | 77 | 14 |
| BAP EQUIVALENT-POS | 23 | 22 | 58 | 57 | 20437 | 14418 | 8400 | 1978 | 1193 | 77 | 13 |
| BENZO(A)ANTHRACENE | 12 | 13 | 32 | 37 | 15000 J | 10500 | 6000 J | 1500 | 750 | 49 | 1.1 U |
| BENZO(A)PYRENE | 17 | 16 | 44 | 43 | 14000 J | 9900 | 5800 J | 1300 | 820 | 59 | 13 |
| BENZO(B)FLUORANTHENE | 21 | 18 | 53 | 58 | 16000 J | 11050 | 6100 J | 1600 | 850 | 88 | 1.3 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 8.9 | 9.5 | 29 | 16 | 5100 J | 3700 | 2300 J | 560 | 370 | 28 | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 15 | 12 | 39 | 41 | 16000 J | 11300 | 6600 J | 1500 | 800 | 55 | 11 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 3.7 U | 1.5 U | 2600 J | 1850 | 1100 J | 290 | 160 | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671C | SB-671D | SB-672 | SB-672 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677A | SB-677B | SB-677D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671C-1 | G-SB-671D-1 | G-SB-672-1 | G-SB-672-2 | G-SB-677-1 | G-SB-677-1-AVG | G-SB-677-1-D | G-SB-677-2 | G-SB-677A-1 | G-SB-677B-1 | G-SB-677D-1 |
| SAMPLE DATE | 20091111 | 20091111 | 20090929 | 20090929 | 20091001 | 20091001 | 20091001 | 20091001 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| INDENO(1,2,3-CD)PYRENE | 24 | 24 | 56 | 38 | 6700 J | 4650 | 2600 J | 710 | 480 | 36 | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 97.9 | 92.5 | 253 | 233 | 75400 | 52950 | 30500 | 7460 | 4230 | 315 | 24 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671C | SB-671D | SB-672 | SB-672 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677A | SB-677B | SB-677D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671C-1 | G-SB-671D-1 | G-SB-672-1 | G-SB-672-2 | G-SB-677-1 | G-SB-677-1-AVG | G-SB-677-1-D | G-SB-677-2 | G-SB-677A-1 | G-SB-677B-1 | G-SB-677D-1 |
| SAMPLE DATE | 20091111 | 20091111 | 20090929 | 20090929 | 20091001 | 20091001 | 20091001 | 20091001 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-678 | SB-678 | SB-678B | SB-678C | SB-679 | SB-679 | SB-679C | SB-679D | SB-680 | SB-680 | SB-680D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678-1 | G-SB-678-2 | G-SB-678B-1 | G-SB-678C-1 | G-SB-679-1 | G-SB-679-2 | G-SB-679C-1 | G-SB-679D-1 | G-SB-680-1 | G-SB-680-2 | G-SB-680D-1 |
| SAMPLE DATE | 20091001 | 20091001 | 20091111 | 20091030 | 20091001 | 20091001 | 20091030 | 20091030 | 20091001 | 20091001 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-678 | SB-678 | SB-678B | SB-678C | SB-679 | SB-679 | SB-679C | SB-679D | SB-680 | SB-680 | SB-680D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678-1 | G-SB-678-2 | G-SB-678B-1 | G-SB-678C-1 | G-SB-679-1 | G-SB-679-2 | G-SB-679C-1 | G-SB-679D-1 | G-SB-680-1 | G-SB-680-2 | G-SB-680D-1 |
| SAMPLE DATE | 20091001 | 20091001 | 20091111 | 20091030 | 20091001 | 20091001 | 20091030 | 20091030 | 20091001 | 20091001 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 208 | 249 | 8306 | 33 | 596 | 114 | 424 | 151 | 666 | 449 | 87 |
| BAP EQUIVALENT-POS | 208 | 249 | 8306 | 32 | 596 | 114 | 424 | 151 | 666 | 449 | 87 |
| BENZO(A)ANTHRACENE | 100 | 190 | 3700 | 12 | 520 | 47 | 160 | 51 | 420 | 260 | 49 J |
| BENZO(A)PYRENE | 130 | 160 | 5700 | 26 | 400 | 72 | 280 | 98 | 430 | 300 | 60 J |
| BENZO(B)FLUORANTHENE | 150 | 210 | 6700 | 27 | 510 | 71 | 340 | 110 | 560 | 350 | 78 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 65 | 83 | 2100 | 8.6 | 190 | 35 | 130 | 44 | 170 | 150 | 25 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 120 | 170 | 4500 | 15 | 460 | 57 | 160 | 49 | 460 | 290 | 47 J |
| DIBENZO(A,H)ANTHRACENE | 43 | 38 | 1200 | 1.5 U | 73 | 24 | 75 | 30 | 110 | 68 | 9.9 J |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-678 | SB-678 | SB-678B | SB-678C | SB-679 | SB-679 | SB-679C | SB-679D | SB-680 | SB-680 | SB-680D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678-1 | G-SB-678-2 | G-SB-678B-1 | G-SB-678C-1 | G-SB-679-1 | G-SB-679-2 | G-SB-679C-1 | G-SB-679D-1 | G-SB-680-1 | G-SB-680-2 | G-SB-680D-1 |
| SAMPLE DATE | 20091001 | 20091001 | 20091111 | 20091030 | 20091001 | 20091001 | 20091030 | 20091030 | 20091001 | 20091001 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| INDENO(1,2,3-CD)PYRENE | 94 | 98 | 3400 | 22 | 180 | 54 | 180 | 67 | 260 | 180 | 38 J |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 702 | 949 | 27300 | 110.6 | 2333 | 360 | 1325 | 449 | 2410 | 1598 | 306.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-19**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-678 | SB-678 | SB-678B | SB-678C | SB-679 | SB-679 | SB-679C | SB-679D | SB-680 | SB-680 | SB-680D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678-1 | G-SB-678-2 | G-SB-678B-1 | G-SB-678C-1 | G-SB-679-1 | G-SB-679-2 | G-SB-679C-1 | G-SB-679D-1 | G-SB-680-1 | G-SB-680-2 | G-SB-680D-1 |
| SAMPLE DATE | 20091001 | 20091001 | 20091111 | 20091030 | 20091001 | 20091001 | 20091030 | 20091030 | 20091001 | 20091001 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-680D | SB-680D | SB-693A | SB-693B | SB-693D | SB-734 | SB-735 | SB-735A | SB-735B | SB-735C | SB-736 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680D-1-AVG | G-SB-680D-1-D | G-SB-693A-2 | G-SB-693B-2 | G-SB-693D-2 | G-SB-734-0-4 | G-SB-735-1 | G-SB-735A-1 | G-SB-735B-1 | G-SB-735C-1 | G-SB-736-1 |
| SAMPLE DATE | 20091102 | 20091102 | 20091027 | 20091027 | 20091027 | 20090923 | 20091021 | 20091112 | 20091112 | 20091112 | 20091021 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 2 | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-680D | SB-680D | SB-693A | SB-693B | SB-693D | SB-734 | SB-735 | SB-735A | SB-735B | SB-735C | SB-736 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680D-1-AVG | G-SB-680D-1-D | G-SB-693A-2 | G-SB-693B-2 | G-SB-693D-2 | G-SB-734-0-4 | G-SB-735-1 | G-SB-735A-1 | G-SB-735B-1 | G-SB-735C-1 | G-SB-736-1 |
| SAMPLE DATE | 20091102 | 20091102 | 20091027 | 20091027 | 20091027 | 20090923 | 20091021 | 20091112 | 20091112 | 20091112 | 20091021 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 2 | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1671 | 3256 | 23 | 72 | 71 | 530 | 474 | 2101 | 6250 | 256 | 572 |
| BAP EQUIVALENT-POS | 1671 | 3256 | 22 | 72 | 71 | 523 | 474 | 2101 | 6250 | 255 | 572 |
| BENZO(A)ANTHRACENE | 824.5 | 1600 J | 16 | 41 | 42 | 560 | 320 | 1600 | 4600 | 190 | 410 |
| BENZO(A)PYRENE | 1230 | 2400 J | 17 | 49 | 47 | 380 | 330 | 1400 | 4300 | 200 | 390 |
| BENZO(B)FLUORANTHENE | 1289 | 2500 J | 20 | 45 | 54 | 520 | 340 | 1900 | 5700 | 240 | 560 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 232.5 | 440 J | 2.1 U | 27 | 21 | 250 | 130 | 1000 | 2500 | 110 | 240 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 873.5 | 1700 J | 19 | 48 | 55 | 470 | 340 | 1800 | 4800 | 210 | 370 |
| DIBENZO(A,H)ANTHRACENE | 169.95 | 330 J | 1.6 U | 11 | 11 | 15 U | 57 | 260 | 660 | 1.6 U | 61 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-680D | SB-680D | SB-693A | SB-693B | SB-693D | SB-734 | SB-735 | SB-735A | SB-735B | SB-735C | SB-736 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680D-1-AVG | G-SB-680D-1-D | G-SB-693A-2 | G-SB-693B-2 | G-SB-693D-2 | G-SB-734-0-4 | G-SB-735-1 | G-SB-735A-1 | G-SB-735B-1 | G-SB-735C-1 | G-SB-736-1 |
| SAMPLE DATE | 20091102 | 20091102 | 20091027 | 20091027 | 20091027 | 20090923 | 20091021 | 20091112 | 20091112 | 20091112 | 20091021 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 2 | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 |
| INDENO(1,2,3-CD)PYRENE | 569 | 1100 J | 12 | 30 | 35 | 320 | 190 | 790 | 2300 | 110 | 210 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 5188.45 | 10070 | 84 | 251 | 265 | 2500 | 1707 | 8750 | 24860 | 1060 | 2241 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | 810000 | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-680D | SB-680D | SB-693A | SB-693B | SB-693D | SB-734 | SB-735 | SB-735A | SB-735B | SB-735C | SB-736 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680D-1-AVG | G-SB-680D-1-D | G-SB-693A-2 | G-SB-693B-2 | G-SB-693D-2 | G-SB-734-0-4 | G-SB-735-1 | G-SB-735A-1 | G-SB-735B-1 | G-SB-735C-1 | G-SB-736-1 |
| SAMPLE DATE | 20091102 | 20091102 | 20091027 | 20091027 | 20091027 | 20090923 | 20091021 | 20091112 | 20091112 | 20091112 | 20091021 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 2 | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-736B | SB-736C | SB-737 | SB-738 | SB-738 | SB-738 | SB-739 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-736B-1 | G-SB-736C-1 | G-SB-737-1 | G-SB-738-2 | G-SB-738-2-AVG | G-SB-738-2-D | G-SB-739-2 |
| SAMPLE DATE | 20091112 | 20091112 | 20091021 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-736B | SB-736C | SB-737 | SB-738 | SB-738 | SB-738 | SB-739 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-736B-1 | G-SB-736C-1 | G-SB-737-1 | G-SB-738-2 | G-SB-738-2-AVG | G-SB-738-2-D | G-SB-739-2 |
| SAMPLE DATE | 20091112 | 20091112 | 20091021 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1255 | 1513 | 123 | 5.8 | 5.1 | 4.5 | 27 |
| BAP EQUIVALENT-POS | 1253 | 1513 | 123 | 4.8 | 4.3 | 3.7 | 27 |
| BENZO(A)ANTHRACENE | 1200 | 1200 | 74 | 3.3 J | 3.05 | 2.8 J | 15 |
| BENZO(A)PYRENE | 950 | 1000 | 97 | 3.6 J | 3.2 | 2.8 J | 18 |
| BENZO(B)FLUORANTHENE | 1300 | 1400 | 120 | 5.7 J | 4.55 | 3.4 J | 26 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 550 | 650 | 44 | 1.7 U | 1.475 | 2.1 J | 1.6 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1300 | 1100 | 91 | 3.5 J | 3.35 | 3.2 J | 17 |
| DIBENZO(A,H)ANTHRACENE | 3.4 U | 190 | 1.5 U | 1.8 U | 1.75 U | 1.7 U | 3.8 J |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-736B | SB-736C | SB-737 | SB-738 | SB-738 | SB-738 | SB-739 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-736B-1 | G-SB-736C-1 | G-SB-737-1 | G-SB-738-2 | G-SB-738-2-AVG | G-SB-738-2-D | G-SB-739-2 |
| SAMPLE DATE | 20091112 | 20091112 | 20091021 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| INDENO(1,2,3-CD)PYRENE | 460 | 550 | 57 | 3.4 J | 2.9 | 2.4 J | 11 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 5760 | 6090 | 483 | 19.5 | 18.1 | 16.7 | 90.8 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-736B | SB-736C | SB-737 | SB-738 | SB-738 | SB-738 | SB-739 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-736B-1 | G-SB-736C-1 | G-SB-737-1 | G-SB-738-2 | G-SB-738-2-AVG | G-SB-738-2-D | G-SB-739-2 |
| SAMPLE DATE | 20091112 | 20091112 | 20091021 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | G-TP-1 | G-TP-1 | G-TP-2 | G-TP-2 | G-TP-2 | G-TP-2 | G-TP-2 | SB-091 | SB-091 | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-1-3-1-2 | G-TP-1-4-1-2 | G-TP-2-1-1-3 | G-TP-2-2-1-3 | G-TP-2-4-1-3 | G-TP-2-6-1-2 | G-TP-2-7-1-2 | G-SB-91RE-1 | G-SB-91RE-2 | G-SB-91REA-1 | G-SB-91REB-1 |
| SAMPLE DATE | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20090930 | 20090930 | 20091030 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | G-TP-1 | G-TP-1 | G-TP-2 | G-TP-2 | G-TP-2 | G-TP-2 | G-TP-2 | SB-091 | SB-091 | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-1-3-1-2 | G-TP-1-4-1-2 | G-TP-2-1-1-3 | G-TP-2-2-2-1-3 | G-TP-2-4-1-3 | G-TP-2-6-1-2 | G-TP-2-7-1-2 | G-SB-91RE-1 | G-SB-91RE-2 | G-SB-91REA-1 | G-SB-91REB-1 |
| SAMPLE DATE | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20090930 | 20090930 | 20091030 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 35 U | NA | 4.2 U | NA | 4.2 U | 13 U | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 460 | NA | 4.2 U | NA | 4.2 U | 13 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 340 | NA | 4.2 U | NA | 4.2 U | 13 U | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 1200 | NA | 4.2 U | NA | 4.2 U | 140 | NA | NA | NA | NA | NA |
| ANTHRACENE | 2800 | NA | 4.2 U | NA | 10 | 270 | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 11699 | NA | 4.2 U | NA | 58 | 1283 | NA | 13342 | 107 | 62 | 1.4 U |
| BAP EQUIVALENT-POS | 11699 | NA | 4.2 U | NA | 56 | 1283 | NA | 13342 | 107 | 61 | 1.4 U |
| BENZO(A)ANTHRACENE | 11000 | NA | 4.2 U | NA | 32 | 910 | NA | 6500 | 36 | 31 | 1.1 U |
| BENZO(A)PYRENE | 7500 J | NA | 4.2 U | NA | 46 J | 820 J | NA | 9300 | 64 | 47 | 1.4 U |
| BENZO(B)FLUORANTHENE | 10000 | NA | 4.2 U | NA | 35 | 940 | NA | 11000 | 65 | 70 | 1.3 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 5600 | NA | 4.2 U | NA | 26 | 690 | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 4800 | NA | 4.2 U | NA | 4.2 U | 420 | NA | 3400 | 26 | 20 | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | 41000 J | NA | 82 U | NA | NA | 1100 J | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | 47000 J | NA | 82 U | NA | NA | 1200 J | NA | NA | NA | NA |
| C1-FLUORENES | NA | 1200 J | NA | 82 U | NA | NA | 87 U | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | 33000 J | NA | 82 U | NA | NA | 820 J | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | 20000 J | NA | 82 U | NA | NA | 590 J | NA | NA | NA | NA |
| C2-FLUORENES | NA | 3800 J | NA | 82 U | NA | NA | 87 U | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | 1800 J | NA | 82 U | NA | NA | 87 U | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | 31000 J | NA | 82 U | NA | NA | 770 J | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | 7000 J | NA | 82 U | NA | NA | 210 J | NA | NA | NA | NA |
| C3-FLUORENES | NA | 7200 J | NA | 82 U | NA | NA | 200 J | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | 4000 J | NA | 82 U | NA | NA | 87 U | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | 17000 J | NA | 82 U | NA | NA | 450 J | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | 3000 J | NA | 82 U | NA | NA | 92 J | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | 4100 J | NA | 82 U | NA | NA | 92 J | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | 5900 J | NA | 82 U | NA | NA | 160 J | NA | NA | NA | NA |
| CHRYSENE | 11000 | NA | 1.4 U | NA | 39 | 1000 | NA | 8200 | 42 | 42 | 0.99 U |
| DIBENZO(A,H)ANTHRACENE | 1600 J | NA | 4.2 U | NA | 4.2 U | 220 J | NA | 1700 | 27 | 1.5 U | 1.4 U |
| FLUORANTHENE | 20000 | NA | 4.2 U | NA | 48 | 1400 | NA | NA | NA | NA | NA |
| FLUORENE | 600 | NA | 4.2 U | NA | 4.2 U | 13 U | NA | NA | NA | NA | NA |

| LOCATION | G-TP-1 | G-TP-1 | G-TP-2 | G-TP-2 | G-TP-2 | G-TP-2 | G-TP-2 | SB-091 | SB-091 | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-1-3-1-2 | G-TP-1-4-1-2 | G-TP-2-1-1-3 | G-TP-2-2-1-3 | G-TP-2-4-1-3 | G-TP-2-6-1-2 | G-TP-2-7-1-2 | G-SB-91RE-1 | G-SB-91RE-2 | G-SB-91REA-1 | G-SB-91REB-1 |
| SAMPLE DATE | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20090930 | 20090930 | 20091030 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 1 |
| INDENO(1,2,3-CD)PYRENE | 4400 J | NA | 4.2 U | NA | 34 J | 530 J | NA | 5500 | 56 | 38 | 1.7 U |
| NAPHTHALENE | 660 | NA | 4.2 U | NA | 4.2 U | 53 | NA | NA | NA | NA | NA |
| PHENANTHRENE | 12000 | NA | 4.2 U | NA | 25 | 570 | NA | NA | NA | NA | NA |
| PYRENE | 28000 | NA | 9.4 | NA | 71 | 2300 | NA | NA | NA | NA | NA |
| TOTAL PAHS | 121960 | NA | 9.4 | NA | 366 | 10263 | NA | 45600 | 316 | 248 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | G-TP-1 | G-TP-1 | G-TP-2 | G-TP-2 | G-TP-2 | G-TP-2 | G-TP-2 | SB-091 | SB-091 | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-1-3-1-2 | G-TP-1-4-1-2 | G-TP-2-1-1-3 | G-TP-2-2-1-3 | G-TP-2-4-1-3 | G-TP-2-6-1-2 | G-TP-2-7-1-2 | G-SB-91RE-1 | G-SB-91RE-2 | G-SB-91REA-1 | G-SB-91REB-1 |
| SAMPLE DATE | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20090930 | 20090930 | 20091030 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-091C | SB-092 | SB-092 | SB-092C | SB-092D | SB-092D | SB-092D | SB-183 | SB-194 | SB-195 | SB-196 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REC-1 | G-SB-92RE-1 | G-SB-92RE-2 | G-SB-92REC-1 | G-SB-92RED-1 | G-SB-92RED-1-AVG | G-SB-92RED-1-D | SB-183-SS | SB-194-SS | SB-195-SS | SB-196-SS |
| SAMPLE DATE | 20091102 | 20090929 | 20090929 | 20091102 | 20091102 | 20091102 | 20091102 | 20041102 | 20050511 | 20050510 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 1 J | 2 U |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.5 | 2 U |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 1.2 J | 2 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 4.1 U | 4.8 U | 3.9 U |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.05 U | 2.38 U | 1.97 U |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | 4.11 U | 4.75 U | 3.93 U |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | 103 U | 119 U | 98.3 U |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | 3.36 J | 14.5 | 4.16 J |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 UR | 2.4 UR | 2 UR |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | 8.22 U | 9.51 U | 7.87 U |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.05 U | 2.38 U | 1.97 U |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | 8.2 U | 9.5 U | 7.9 U |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | 30.5 J | 128 J | 29.3 J |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | 1 U | 2.05 U | 2.38 U | 1.97 U |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | 1.8 J | 2.1 J | 2 U |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | 1 U | 2.1 U | 2.4 U | 2 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | 4.1 U | 4.8 U | 3.9 U |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | 4.1 U | 4.8 U | 3.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | 1 U | 2.1 U | 2.4 U | 2 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | 8 U | 10 U | 8 U |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | 1 U | 1.6 J | 3.6 | 0.79 J |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | 1 U | 6.2 U | 7.1 U | 5.9 U |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 1.3 J | 2 U |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | 363 U | 388 U | 360 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | 110 U | 117 U | 109 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |

| LOCATION | SB-091C | SB-092 | SB-092 | SB-092C | SB-092D | SB-092D | SB-092D | SB-183 | SB-194 | SB-195 | SB-196 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REC-1 | G-SB-92RE-1 | G-SB-92RE-2 | G-SB-92REC-1 | G-SB-92RED-1 | G-SB-92RED-1-AVG | G-SB-92RED-1-D | SB-183-SS | SB-194-SS | SB-195-SS | SB-196-SS |
| SAMPLE DATE | 20091102 | 20090929 | 20090929 | 20091102 | 20091102 | 20091102 | 20091102 | 20041102 | 20050511 | 20050510 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 551 U | 587 U | 545 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 738 U | 787 U | 730 U |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 110 U | 117 U | 109 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 110 U | 117 U | 109 U |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | 738 U | 787 U | 730 U |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | 40.9 B | 174 J | 49.6 B |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | 110 U | 117 U | 109 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | 110 U | 117 U | 109 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 U |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | 110 U | 117 U | 109 U |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 54 B | 200 U | 185 U |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | 110 U | 117 U | 109 U |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | 110 U | 117 U | 109 U |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | 110 U | 117 U | 109 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | 110 U | 117 U | 109 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 925 U | 986 U | 916 U |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 77.1 U | 82.2 U | 76.3 U |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 U |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 J |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | 36 J | 82 U | 100 |
| BAP EQUIVALENT-HALFND | 229 | 65 | 71 | 21 | 22 | 29 | 36 | NA | 516 | 112 | 1242 |
| BAP EQUIVALENT-POS | 229 | 64 | 70 | 20 | 21 | 28 | 35 | NA | 516 | 67 | 1242 |
| BENZO(A)ANTHRACENE | 1.1 U | 48 | 52 | 14 | 19 | 20.5 | 22 | NA | 335 | 43 J | 757 |
| BENZO(A)PYRENE | 160 | 50 | 56 | 16 | 19 | 23.5 | 28 | NA | 382 | 56 J | 949 |
| BENZO(B)FLUORANTHENE | 180 | 61 | 54 | 19 | 1.3 UJ | 15.325 | 30 J | NA | 314 | 62 J | 838 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | 150 | 82 U | 273 |
| BENZO(K)FLUORANTHENE | 62 | 22 | 29 | 2 U | 1.9 U | 5.975 | 11 | NA | 402 | 82 U | 1070 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 62 | 51 | 57 | 14 | 22 | 23 | 24 | NA | 423 | 58 J | 933 |
| DIBENZO(A,H)ANTHRACENE | 38 | 1.5 U | 1.5 U | 1.6 U | 1.4 U | 1.45 U | 1.5 U | NA | 50 J | 82 U | 95 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | 504 | 82 J | 1140 |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 U |

| LOCATION | SB-091C | SB-092 | SB-092 | SB-092C | SB-092D | SB-092D | SB-092D | SB-183 | SB-194 | SB-195 | SB-196 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REC-1 | G-SB-92RE-1 | G-SB-92RE-2 | G-SB-92REC-1 | G-SB-92RED-1 | G-SB-92RED-1-AVG | G-SB-92RED-1-D | SB-183-SS | SB-194-SS | SB-195-SS | SB-196-SS |
| SAMPLE DATE | 20091102 | 20090929 | 20090929 | 20091102 | 20091102 | 20091102 | 20091102 | 20041102 | 20050511 | 20050510 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| INDENO(1,2,3-CD)PYRENE | 120 | 27 | 31 | 10 | 1.6 UJ | 9.9 | 19 J | NA | 143 | 82 U | 264 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 U |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | 109 | 30 J | 291 |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | 682 | 91 | 1720 |
| TOTAL PAHS | 622 | 259 | 279 | 73 | 60 | 97 | 134 | NA | 3530 | 422 | 8506 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | 36 U | 38 U | 35 U |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | 36 U | 38 U | 35 U |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | 36 U | 38 U | 35 U |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | 36 U | 38 U | 35 U |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | 36 U | 38 U | 35 U |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | 36 U | 38 U | 35 U |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | 36 U | 38 U | 13 J |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | 0 U | 0 U | 13 |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | 0.6 L | 2 | 0.9 L |
| ARSENIC | NA | 5.4 | 3.3 | NA | NA | NA | NA | NA | 2 B | 2 B | 1 B |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | 34 | 55 | 22 |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | 0.6 | 0.7 | 0.3 |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | 0.1 B | 0.2 B | 0.2 B |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | 11.2 | 14.7 | 11.4 |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | 7.2 | 15.8 | 3.2 |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | 6 | 9 | 5 |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | 5 | 8 | 4 |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | 0.02 | 0.02 | 0.02 |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | 0.4 U | 0.6 B | 0.5 U |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | 11 | 11 | 5 |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | 2 U | 2 U | 2 U |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | 0.04 U | 0.05 U | 0.05 U |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | 0.9 U | 1 U | 1 U |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | 20.2 | 25.7 | 20.9 |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | 26 | 32 | 16 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | 12000 U | 77200 | 29600 | 114000 |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | 10700 U | 12500 U | 9600 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | 7.1 | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-091C | SB-092 | SB-092 | SB-092C | SB-092D | SB-092D | SB-092D | SB-183 | SB-194 | SB-195 | SB-196 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REC-1 | G-SB-92RE-1 | G-SB-92RE-2 | G-SB-92REC-1 | G-SB-92RED-1 | G-SB-92RED-1-AVG | G-SB-92RED-1-D | SB-183-SS | SB-194-SS | SB-195-SS | SB-196-SS |
| SAMPLE DATE | 20091102 | 20090929 | 20090929 | 20091102 | 20091102 | 20091102 | 20091102 | 20041102 | 20050511 | 20050510 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-197 | SB-198 | SB-199 | SB-740 | SB-741 | SB-742 | SB-743 | SB-744 | SB-745 | SB-745A | SB-745B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-197-SS | SB-198-SS | SB-199-SS | G-SB-740-2 | G-SB-741-2 | G-SB-742-2 | G-SB-743-2 | G-SB-744-2 | G-SB-745-2 | G-SB-745A-2 | G-SB-745B-2 |
| SAMPLE DATE | 20050511 | 20050511 | 20050511 | 20091008 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 1.5 J | 2.2 U | 0.83 J | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 4.7 U | 4.4 U | 4.5 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 2.34 U | 2.21 U | 2.25 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | 4.68 U | 4.42 U | 4.5 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 117 U | 111 U | 112 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 5.52 J | 10.9 | 9 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 2.3 UR | 2.2 UR | 2.2 UR | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | 9.37 U | 8.85 U | 9 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 2.34 U | 2.21 U | 2.25 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 9.4 U | 8.8 U | 9 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 62.9 J | 105 J | 10.4 J | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 2.34 U | 2.21 U | 2.25 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 2.7 | 1.6 J | 6.2 | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 4.7 U | 4.4 U | 4.5 U | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 4.7 U | 4.4 U | 4.5 U | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 2.3 U | 2.2 U | 2.9 | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | 9 U | 9 U | 9 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 2 J | 2.2 U | 1.6 J | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 7 U | 6.6 U | 6.7 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1.1 J | 2.2 U | 0.65 J | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 402 U | 368 U | 361 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 122 U | 112 U | 109 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-197 | SB-198 | SB-199 | SB-740 | SB-741 | SB-742 | SB-743 | SB-744 | SB-745 | SB-745A | SB-745B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-197-SS | SB-198-SS | SB-199-SS | G-SB-740-2 | G-SB-741-2 | G-SB-742-2 | G-SB-743-2 | G-SB-744-2 | G-SB-745-2 | G-SB-745A-2 | G-SB-745B-2 |
| SAMPLE DATE | 20050511 | 20050511 | 20050511 | 20091008 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2,4-DICHLOROPHENOL | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 609 U | 558 U | 547 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 85 U | 78 U | 77 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 85 U | 78 U | 77 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 817 U | 748 U | 733 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 122 U | 112 U | 109 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 122 U | 112 U | 109 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | 817 U | 748 U | 733 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | 74.4 B | 80.2 B | 40.9 B | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 122 U | 112 U | 109 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 122 U | 112 U | 109 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 85 U | 78 U | 77 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 122 U | 112 U | 109 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 35 B | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 85 U | 78 U | 77 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | 122 U | 112 U | 109 U | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | 122 U | 112 U | 109 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 122 U | 112 U | 109 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 122 U | 112 U | 109 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 1020 U | 938 U | 919 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 85.3 U | 78.2 U | 76.5 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 85 U | 78 U | 77 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 85 U | 78 U | 77 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 85 U | 78 U | 77 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 85 U | 27 J | 44 J | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 115 | 226 | 186 | 2.1 U | 2.3 | 11 | 59 | 71 | 277 | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 73 | 187 | 147 | 2.1 U | 0.19 | 9.6 | 59 | 71 | 277 | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 56 J | 117 | 142 | 1.2 U | 1.3 U | 5.7 J | 33 | 46 | 200 | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 59 J | 154 | 117 | 2.1 U | 2.3 U | 7.4 J | 40 | 49 | 180 | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 39 J | 111 | 89 | 1.5 U | 1.9 J | 11 | 46 | 61 | 310 | 1.5 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 51 J | 92 | 62 J | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 52 J | 130 | 111 | 1.6 U | 1.7 U | 1.7 U | 19 | 21 | 7.9 U | 2.1 U | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 66 J | 153 | 164 | 1.3 U | 1.4 U | 7.2 J | 37 | 46 | 210 | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 85 U | 78 U | 77 U | 1.6 U | 1.8 U | 1.8 U | 8.1 | 7.5 J | 36 J | 1.6 U | 1.5 U |
| FLUORANTHENE | 92 | 212 | 297 | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 85 U | 78 U | 21 J | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-197 | SB-198 | SB-199 | SB-740 | SB-741 | SB-742 | SB-743 | SB-744 | SB-745 | SB-745A | SB-745B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-197-SS | SB-198-SS | SB-199-SS | G-SB-740-2 | G-SB-741-2 | G-SB-742-2 | G-SB-743-2 | G-SB-744-2 | G-SB-745-2 | G-SB-745A-2 | G-SB-745B-2 |
| SAMPLE DATE | 20050511 | 20050511 | 20050511 | 20091008 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| INDENO(1,2,3-CD)PYRENE | 38 J | 86 | 61 J | 0.41 U | 0.45 U | 5.6 J | 24 | 31 | 100 | 1.8 U | 1.7 U |
| NAPHTHALENE | 85 U | 78 U | 77 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 26 J | 46 J | 280 | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 95 | 214 | 332 | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 574 | 1342 | 1720 | 0 U | 1.9 | 36.9 | 207.1 | 261.5 | 1036 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 40 U | 36 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 40 U | 36 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 40 U | 36 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 40 U | 36 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 40 U | 36 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 40 U | 12 J | 37 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 40 U | 36 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 12 | 0 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 1 L | 0.7 L | 1 L | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 5 | 2 B | 3 B | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 74 | 39 | 33 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 1.3 | 0.5 | 0.5 | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 0.3 B | 0.2 B | 0.1 B | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 19.8 | 13.1 | 13.8 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | 51.2 | 5.8 | 7.6 | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 10 | 7 | 6 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 13 | 11 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.02 | 0.04 | 0.02 | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | 0.8 B | 0.5 U | 0.5 U | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 18 | 8 | 6 | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 2 U | 2 U | 2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 0.06 U | 0.05 U | 0.05 U | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 1 U | 1 U | 1 U | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 39.2 | 22.2 | 26.2 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 45 | 23 | 20 | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 32200 | 163000 | 139000 | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 11600 U | 10500 U | 10100 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-197 | SB-198 | SB-199 | SB-740 | SB-741 | SB-742 | SB-743 | SB-744 | SB-745 | SB-745A | SB-745B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-197-SS | SB-198-SS | SB-199-SS | G-SB-740-2 | G-SB-741-2 | G-SB-742-2 | G-SB-743-2 | G-SB-744-2 | G-SB-745-2 | G-SB-745A-2 | G-SB-745B-2 |
| SAMPLE DATE | 20050511 | 20050511 | 20050511 | 20091008 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-745C | SB-746 | SB-747 | SB-747 | SB-747 | SB-748 | SB-749 | SB-750 | SB-751 | SB-752 | SB-753 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-745C-2 | G-SB-746-2 | G-SB-747-2 | G-SB-747-2-AVG | G-SB-747-2-D | G-SB-748-2 | G-SB-749-2 | G-SB-750-2 | G-SB-751-2 | G-SB-752-2 | G-SB-753-2 |
| SAMPLE DATE | 20091021 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-745C | SB-746 | SB-747 | SB-747 | SB-747 | SB-748 | SB-749 | SB-750 | SB-751 | SB-752 | SB-753 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-745C-2 | G-SB-746-2 | G-SB-747-2 | G-SB-747-2-AVG | G-SB-747-2-D | G-SB-748-2 | G-SB-749-2 | G-SB-750-2 | G-SB-751-2 | G-SB-752-2 | G-SB-753-2 |
| SAMPLE DATE | 20091021 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2661 | 140 | 2.2 U | 53 | 105 | 2.2 U | 2.5 | 1.5 U | 1.5 U | 18 | 17 |
| BAP EQUIVALENT-POS | 2661 | 140 | 2.2 U | 53 | 105 | 2.2 U | 0.81 | 1.5 U | 1.5 U | 18 | 16 |
| BENZO(A)ANTHRACENE | 1800 | 95 | 1.2 UJ | 25.3 | 50 J | 1.3 U | 1.1 U | 1.1 U | 1.1 U | 13 | 15 |
| BENZO(A)PYRENE | 1800 | 93 | 2.2 UJ | 32.55 | 64 J | 2.2 U | 1.5 U | 1.5 U | 1.5 U | 14 | 13 |
| BENZO(B)FLUORANTHENE | 2300 | 150 | 1.6 UJ | 55.4 | 110 J | 1.6 U | 8.1 | 1.4 U | 1.3 U | 15 | 17 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 930 | 1.6 U | 1.6 U | 1.65 U | 1.7 U | 1.6 U | 2 U | 2 U | 1.9 U | 1.9 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1600 | 92 | 1.3 UJ | 29.325 | 58 J | 1.4 U | 1.1 U | 1 U | 1 U | 14 | 14 |
| DIBENZO(A,H)ANTHRACENE | 340 | 17 | 1.7 UJ | 9.925 | 19 J | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-745C | SB-746 | SB-747 | SB-747 | SB-747 | SB-748 | SB-749 | SB-750 | SB-751 | SB-752 | SB-753 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-745C-2 | G-SB-746-2 | G-SB-747-2 | G-SB-747-2-AVG | G-SB-747-2-D | G-SB-748-2 | G-SB-749-2 | G-SB-750-2 | G-SB-751-2 | G-SB-752-2 | G-SB-753-2 |
| SAMPLE DATE | 20091021 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| INDENO(1,2,3-CD)PYRENE | 1000 | 57 | 0.42 UJ | 29.105 | 58 J | 0.43 U | 1.8 U | 1.7 U | 1.7 U | 9.3 | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 9770 | 504 | 0 U | 179.5 | 359 | 0 U | 8.1 | 0 U | 0 U | 65.3 | 59 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | 31 J | 34 J | 39 J |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-745C | SB-746 | SB-747 | SB-747 | SB-747 | SB-748 | SB-749 | SB-750 | SB-751 | SB-752 | SB-753 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-745C-2 | G-SB-746-2 | G-SB-747-2 | G-SB-747-2-AVG | G-SB-747-2-D | G-SB-748-2 | G-SB-749-2 | G-SB-750-2 | G-SB-751-2 | G-SB-752-2 | G-SB-753-2 |
| SAMPLE DATE | 20091021 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-19**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-754 | SB-755 | SB-756 | SB-757 | SB-758 | SB-759 | SB-760 | SB-761 | SB-761A | SB-761B | SB-761C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-754-2 | G-SB-755-2 | G-SB-756-2 | G-SB-757-2 | G-SB-758-2 | G-SB-759-1 | G-SB-760-1 | G-SB-761-1 | G-SB-761A-1 | G-SB-761B-1 | G-SB-761C-1 |
| SAMPLE DATE | 20091021 | 20091103 | 20091103 | 20091103 | 20091103 | 20091113 | 20091113 | 20090930 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-754 | SB-755 | SB-756 | SB-757 | SB-758 | SB-759 | SB-760 | SB-761 | SB-761A | SB-761B | SB-761C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-754-2 | G-SB-755-2 | G-SB-756-2 | G-SB-757-2 | G-SB-758-2 | G-SB-759-1 | G-SB-760-1 | G-SB-761-1 | G-SB-761A-1 | G-SB-761B-1 | G-SB-761C-1 |
| SAMPLE DATE | 20091021 | 20091103 | 20091103 | 20091103 | 20091103 | 20091113 | 20091113 | 20090930 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 6012 | 1.6 U | 3202 | 112 | 1252 | 751 | 11 | 214 | 131 | 37081 |
| BAP EQUIVALENT-POS | 1.6 U | 6012 | 1.6 U | 3202 | 112 | 1252 | 751 | 10 | 214 | 131 | 37081 |
| BENZO(A)ANTHRACENE | 1.2 U | 4300 | 1.1 U | 2200 | 50 | 860 | 450 | 9.7 | 110 | 110 | 34000 |
| BENZO(A)PYRENE | 1.6 U | 4100 | 1.6 U | 2200 | 78 | 810 | 510 | 8.3 | 150 | 89 | 24000 |
| BENZO(B)FLUORANTHENE | 1.5 U | 5700 | 1.4 U | 2800 | 92 | 960 | 700 | 9.6 | 140 | 95 | 27000 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 1800 | 2 U | 930 | 40 | 440 | 250 | 1.9 U | 61 | 43 | 14000 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 4100 | 1.1 U | 2400 | 54 | 890 | 470 | 9.3 | 130 | 130 | 41000 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 660 | 1.6 U | 370 | 14 | 200 | 95 | 1.5 U | 29 | 16 | 5300 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-754 | SB-755 | SB-756 | SB-757 | SB-758 | SB-759 | SB-760 | SB-761 | SB-761A | SB-761B | SB-761C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-754-2 | G-SB-755-2 | G-SB-756-2 | G-SB-757-2 | G-SB-758-2 | G-SB-759-1 | G-SB-760-1 | G-SB-761-1 | G-SB-761A-1 | G-SB-761B-1 | G-SB-761C-1 |
| SAMPLE DATE | 20091021 | 20091103 | 20091103 | 20091103 | 20091103 | 20091113 | 20091113 | 20090930 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 2300 | 1.8 U | 1200 | 51 | 550 | 280 | 1.7 U | 97 | 51 | 15000 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 22960 | 0 U | 12100 | 379 | 4710 | 2755 | 36.9 | 717 | 534 | 160300 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 170000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-754 | SB-755 | SB-756 | SB-757 | SB-758 | SB-759 | SB-760 | SB-761 | SB-761A | SB-761B | SB-761C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-754-2 | G-SB-755-2 | G-SB-756-2 | G-SB-757-2 | G-SB-758-2 | G-SB-759-1 | G-SB-760-1 | G-SB-761-1 | G-SB-761A-1 | G-SB-761B-1 | G-SB-761C-1 |
| SAMPLE DATE | 20091021 | 20091103 | 20091103 | 20091103 | 20091103 | 20091113 | 20091113 | 20090930 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761D | SB-762 | SB-762A | SB-762B | SB-762C | SB-762D | SB-763 | SB-763A | SB-763B | SB-763C | SB-763D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761D-1 | G-SB-762-1 | G-SB-762A-1 | G-SB-762B-1 | G-SB-762C-1 | G-SB-762D-1 | G-SB-763-1 | G-SB-763A-1 | G-SB-763B-1 | G-SB-763C-1 | G-SB-763D-1 |
| SAMPLE DATE | 20091022 | 20091001 | 20091022 | 20091023 | 20091022 | 20091022 | 20091001 | 20091023 | 20091027 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761D | SB-762 | SB-762A | SB-762B | SB-762C | SB-762D | SB-763 | SB-763A | SB-763B | SB-763C | SB-763D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761D-1 | G-SB-762-1 | G-SB-762A-1 | G-SB-762B-1 | G-SB-762C-1 | G-SB-762D-1 | G-SB-763-1 | G-SB-763A-1 | G-SB-763B-1 | G-SB-763C-1 | G-SB-763D-1 |
| SAMPLE DATE | 20091022 | 20091001 | 20091022 | 20091023 | 20091022 | 20091022 | 20091001 | 20091023 | 20091027 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 38270 | 1.6 U | 461 | 1.5 U | 76 | 67 | 13 | 740 | 83 | 198 | 71 |
| BAP EQUIVALENT-POS | 38270 | 1.6 U | 461 | 1.5 U | 75 | 66 | 12 | 740 | 83 | 198 | 70 |
| BENZO(A)ANTHRACENE | 31000 | 1.1 U | 310 | 1.1 U | 73 | 43 | 9.1 | 500 | 52 | 130 | 49 |
| BENZO(A)PYRENE | 27000 | 1.6 U | 320 | 1.5 U | 58 | 53 | 8.4 | 530 | 67 | 140 | 54 |
| BENZO(B)FLUORANTHENE | 27000 | 1.4 U | 360 | 1.4 U | 61 | 56 | 9.4 | 600 | 65 | 160 | 75 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 13000 | 2 U | 140 | 2 U | 31 | 24 | 2.1 U | 260 | 35 | 72 | 34 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 40000 | 1.1 U | 340 | 1 U | 78 | 48 | 11 | 540 | 61 | 150 | 62 |
| DIBENZO(A,H)ANTHRACENE | 3900 | 1.6 U | 58 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 69 | 1.5 U | 20 | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761D | SB-762 | SB-762A | SB-762B | SB-762C | SB-762D | SB-763 | SB-763A | SB-763B | SB-763C | SB-763D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761D-1 | G-SB-762-1 | G-SB-762A-1 | G-SB-762B-1 | G-SB-762C-1 | G-SB-762D-1 | G-SB-763-1 | G-SB-763A-1 | G-SB-763B-1 | G-SB-763C-1 | G-SB-763D-1 |
| SAMPLE DATE | 20091022 | 20091001 | 20091022 | 20091023 | 20091022 | 20091022 | 20091001 | 20091023 | 20091027 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| INDENO(1,2,3-CD)PYRENE | 14000 | 1.8 U | 140 | 1.7 U | 31 | 28 | 19 | 280 | 36 | 79 | 32 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 155900 | 0 U | 1668 | 0 U | 332 | 252 | 56.9 | 2779 | 316 | 751 | 306 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761D | SB-762 | SB-762A | SB-762B | SB-762C | SB-762D | SB-763 | SB-763A | SB-763B | SB-763C | SB-763D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761D-1 | G-SB-762-1 | G-SB-762A-1 | G-SB-762B-1 | G-SB-762C-1 | G-SB-762D-1 | G-SB-763-1 | G-SB-763A-1 | G-SB-763B-1 | G-SB-763C-1 | G-SB-763D-1 |
| SAMPLE DATE | 20091022 | 20091001 | 20091022 | 20091023 | 20091022 | 20091022 | 20091001 | 20091023 | 20091027 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-764 | SB-764A | SB-764B | SB-764C | SB-764D | SB-765 | SB-765A | SB-765B | SB-765C | SB-765D | SB-803 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764-1 | G-SB-764A-1 | G-SB-764B-1 | G-SB-764C-1 | G-SB-764D-1 | G-SB-765-1 | G-SB-765A-1 | G-SB-765B-1 | G-SB-765C-1 | G-SB-765D-1 | G-SB-803-SS |
| SAMPLE DATE | 20091002 | 20091027 | 20091113 | 20091027 | 20091027 | 20091002 | 20091028 | 20091113 | 20091028 | 20091028 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-764 | SB-764A | SB-764B | SB-764C | SB-764D | SB-765 | SB-765A | SB-765B | SB-765C | SB-765D | SB-803 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764-1 | G-SB-764A-1 | G-SB-764B-1 | G-SB-764C-1 | G-SB-764D-1 | G-SB-765-1 | G-SB-765A-1 | G-SB-765B-1 | G-SB-765C-1 | G-SB-765D-1 | G-SB-803-SS |
| SAMPLE DATE | 20091002 | 20091027 | 20091113 | 20091027 | 20091027 | 20091002 | 20091028 | 20091113 | 20091028 | 20091028 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| BAP EQUIVALENT-HALFND | 27 | 580 | 21 | 26405 | 38666 | 2.5 | 619 | 53 | 318 | 38 | 3.9 U |
| BAP EQUIVALENT-POS | 26 | 580 | 20 | 26405 | 38666 | 0.81 | 619 | 53 | 318 | 37 | 3.9 U |
| BENZO(A)ANTHRACENE | 1.1 U | 370 | 12 | 19000 | 24000 | 1.1 U | 460 | 30 | 170 | 11 | 3.9 U |
| BENZO(A)PYRENE | 23 | 390 | 14 | 18000 | 27000 | 1.5 U | 410 | 41 | 210 | 30 | 3.9 U |
| BENZO(B)FLUORANTHENE | 26 | 430 | 25 | 20000 | 28000 | 8 | 470 | 42 | 230 | 33 | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| BENZO(K)FLUORANTHENE | 1.9 U | 170 | 11 | 8300 | 14000 | 1.9 U | 170 | 25 | 77 | 1.9 U | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 400 | 14 | 22000 | 26000 | 8.9 | 540 | 40 | 220 | 12 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 89 | 1.5 U | 3300 | 4600 | 1.5 U | 88 | 1.6 U | 53 | 1.5 U | 3.9 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |

| LOCATION | SB-764 | SB-764A | SB-764B | SB-764C | SB-764D | SB-765 | SB-765A | SB-765B | SB-765C | SB-765D | SB-803 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764-1 | G-SB-764A-1 | G-SB-764B-1 | G-SB-764C-1 | G-SB-764D-1 | G-SB-765-1 | G-SB-765A-1 | G-SB-765B-1 | G-SB-765C-1 | G-SB-765D-1 | G-SB-803-SS |
| SAMPLE DATE | 20091002 | 20091027 | 20091113 | 20091027 | 20091027 | 20091002 | 20091028 | 20091113 | 20091028 | 20091028 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 190 | 25 | 11000 | 17000 | 1.7 U | 260 | 41 | 140 | 26 | 3.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| TOTAL PAHS | 49 | 2039 | 101 | 101600 | 140600 | 16.9 | 2398 | 219 | 1100 | 112 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-764 | SB-764A | SB-764B | SB-764C | SB-764D | SB-765 | SB-765A | SB-765B | SB-765C | SB-765D | SB-803 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764-1 | G-SB-764A-1 | G-SB-764B-1 | G-SB-764C-1 | G-SB-764D-1 | G-SB-765-1 | G-SB-765A-1 | G-SB-765B-1 | G-SB-765C-1 | G-SB-765D-1 | G-SB-803-SS |
| SAMPLE DATE | 20091002 | 20091027 | 20091113 | 20091027 | 20091027 | 20091002 | 20091028 | 20091113 | 20091028 | 20091028 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-804 | SB-805 | SB-806 | SB-807 | SB-808 | SB-809 | SB-810 | SB-811 | SB-812 | SB-813 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-804-SS | G-SB-805-SS | G-SB-806-SS | G-SB-807-SS | G-SB-808-SS | G-SB-809-SS | G-SB-810-SS | G-SB-811-SS | G-SB-812-SS | G-SB-813-SS |
| SAMPLE DATE | 20100823 | 20100824 | 20100824 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100824 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-804 | SB-805 | SB-806 | SB-807 | SB-808 | SB-809 | SB-810 | SB-811 | SB-812 | SB-813 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-804-SS | G-SB-805-SS | G-SB-806-SS | G-SB-807-SS | G-SB-808-SS | G-SB-809-SS | G-SB-810-SS | G-SB-811-SS | G-SB-812-SS | G-SB-813-SS |
| SAMPLE DATE | 20100823 | 20100824 | 20100824 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100824 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 3.9 U | 3.8 U | 140 | 3.8 U | 3.4 U | 3.7 U | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| 2-METHYLNAPHTHALENE | 3.9 U | 3.8 U | 220 | 3.8 U | 3.4 U | 3.7 U | 4.4 U | 3.9 U | 9.2 | 3.8 U |
| ACENAPHTHENE | 3.9 U | 3.8 U | 300 J | 3.8 U | 3.4 UJ | 3.7 U | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| ACENAPHTHYLENE | 3.9 U | 3.8 U | 750 | 3.8 U | 3.4 U | 3.7 U | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| ANTHRACENE | 3.9 U | 3.8 U | 1500 J | 3.8 U | 27 | 3.7 U | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 3.9 U | 3.8 U | 5726 | 20 | 351 | 16 | 4.4 U | 14 | 37 | 3.8 U |
| BAP EQUIVALENT-POS | 3.9 U | 3.8 U | 5707 | 18 | 351 | 14 | 4.4 U | 11 | 35 | 3.8 U |
| BENZO(A)ANTHRACENE | 3.9 U | 3.8 U | 4600 | 12 | 160 | 10 | 4.4 U | 8.8 | 3.9 U | 3.8 U |
| BENZO(A)PYRENE | 3.9 U | 3.8 U | 4400 J | 14 | 240 | 11 | 4.4 U | 9.3 | 32 J | 3.8 U |
| BENZO(B)FLUORANTHENE | 3.9 U | 3.8 U | 5900 J | 14 | 230 | 16 | 4.4 U | 12 | 27 J | 3.8 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.9 U | 3.8 U | 3000 J | 14 | 250 | 13 | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| BENZO(K)FLUORANTHENE | 3.9 U | 3.8 U | 2200 J | 8 | 100 | 3.7 U | 4.4 U | 3.9 U | 30 J | 3.8 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 260 J |
| C1-FLUORANTHENES/PYRENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 270 J |
| C1-FLUORENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C1-PHENANTHRENES/ANTHRACENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 130 J |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 140 J |
| C2-FLUORENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C2-NAPHTHALENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C2-PHENANTHRENES/ANTHRACENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 160 J |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C3-FLUORENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C3-NAPHTHALENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C3-PHENANTHRENES/ANTHRACENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 100 J |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C4-NAPHTHALENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C4-PHENANTHRENES/ANTHRACENES | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| CHRYSENE | 1.3 U | 1.3 U | 4800 | 15 | 200 | 18 | 1.5 U | 10 | 25 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 3.9 U | 3.8 U | 38 U | 3.8 U | 54 | 3.7 U | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| FLUORANTHENE | 3.9 U | 3.8 U | 6300 J | 16 | 180 | 13 | 4.4 U | 13 | 50 J | 22 J |
| FLUORENE | 3.9 U | 3.8 U | 390 J | 3.8 U | 3.4 U | 3.7 U | 4.4 U | 3.9 U | 3.9 U | 3.8 U |

| LOCATION | SB-804 | SB-805 | SB-806 | SB-807 | SB-808 | SB-809 | SB-810 | SB-811 | SB-812 | SB-813 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-804-SS | G-SB-805-SS | G-SB-806-SS | G-SB-807-SS | G-SB-808-SS | G-SB-809-SS | G-SB-810-SS | G-SB-811-SS | G-SB-812-SS | G-SB-813-SS |
| SAMPLE DATE | 20100823 | 20100824 | 20100824 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100824 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| INDENO(1,2,3-CD)PYRENE | 3.9 U | 3.8 U | 2300 J | 10 | 170 | 7.5 | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| NAPHTHALENE | 3.9 U | 3.8 U | 290 | 3.8 U | 7.3 | 3.7 U | 4.4 U | 3.9 U | 7.9 | 3.8 U |
| PHENANTHRENE | 3.9 U | 3.8 U | 2900 J | 3.8 U | 28 | 3.7 U | 4.4 U | 3.9 U | 32 J | 3.8 U |
| PYRENE | 3.9 U | 3.8 U | 12000 | 27 | 420 | 17 | 4.4 U | 17 | 35 | 12 |
| TOTAL PAHS | 0 U | 0 U | 51850 | 130 | 2066.3 | 105.5 | 0 U | 70.1 | 248.1 | 34 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-804 | SB-805 | SB-806 | SB-807 | SB-808 | SB-809 | SB-810 | SB-811 | SB-812 | SB-813 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-804-SS | G-SB-805-SS | G-SB-806-SS | G-SB-807-SS | G-SB-808-SS | G-SB-809-SS | G-SB-810-SS | G-SB-811-SS | G-SB-812-SS | G-SB-813-SS |
| SAMPLE DATE | 20100823 | 20100824 | 20100824 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100824 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-086 | SB-091 | SB-092 | SB-254 | SB-254 | SB-254 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-81-SS | SB-82-SS | SB-83-SS | SB-84-SS | SB-85-SS | SB-86-SS | SB-91-SS | SB-92-SS | SB-254-SS[12] | SB-254-SS[18] | SB-254-SS[6] |
| SAMPLE DATE | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20040927 | 20040927 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SB | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.5 | 0.5 |
| BOTTOM DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.5 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 2-BUTANONE | 64 UJ | 62 UJ | 60 UJ | 58 UJ | 58 UJ | 60 UL | 58 UL | 54 UL | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 2-HEXANONE | 64 UJ | 62 UJ | 60 UJ | 58 UJ | 58 UJ | 60 UL | 58 UL | 54 UL | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 64 UJ | 62 UJ | 60 UJ | 58 UJ | 58 UJ | 60 UL | 58 UL | 54 UL | NA | NA | NA |
| ACETONE | 64 UJ | 62 UJ | 60 UJ | 77 J | 58 UJ | 60 UL | 58 UL | 54 UL | NA | NA | NA |
| BENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| BROMOBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| BROMOFORM | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| BROMOMETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| CARBON DISULFIDE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| CHLOROBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| CHLOROETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| CHLOROFORM | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| CHLOROMETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| DIBROMOMETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 UJ | 6 UJ | 6 UJ | 47 J | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| M+P-XYLENES | 13 UJ | 12 UJ | 12 UJ | 12 UJ | 12 UJ | 12 UL | 12 UL | 11 UL | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| METHYLENE CHLORIDE | 6 UJ | 7 J | 6 UJ | 6 UJ | 6 UJ | 6 J | 6 UL | 5 UL | NA | NA | NA |
| NAPHTHALENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 J | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| N-BUTYLBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| N-PROPYLBENZENE | 6 UJ | 6 UJ | 6 UJ | 7 J | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| O-XYLENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| STYRENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| TOLUENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| TRICHLOROETHENE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| VINYL ACETATE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| VINYL CHLORIDE | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 1100 U | 5200 U | 990 U | 4800 U | 4900 U | 5000 UJ | 5000 U | 4500 U | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |

| LOCATION | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-086 | SB-091 | SB-092 | SB-254 | SB-254 | SB-254 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-81-SS | SB-82-SS | SB-83-SS | SB-84-SS | SB-85-SS | SB-86-SS | SB-91-SS | SB-92-SS | SB-254-SS[12] | SB-254-SS[18] | SB-254-SS[6] |
| SAMPLE DATE | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20040927 | 20040927 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SB | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.5 | 0.5 |
| BOTTOM DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.5 | 0.5 |
| 2,4-DICHLOROPHENOL | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 2,4-DINITROPHENOL | 1100 U | 5200 U | 990 U | 4800 U | 4900 U | 5000 UJ | 5000 U | 4500 U | NA | NA | NA |
| 2,4-DINITROTOLUENE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 2,6-DINITROTOLUENE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 2-CHLOROPHENOL | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 2-METHYLPHENOL | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 2-NITROANILINE | 1100 U | 5200 U | 990 U | 4800 U | 4900 U | 5000 UJ | 5000 U | 4500 U | NA | NA | NA |
| 2-NITROPHENOL | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 3&4-METHYLPHENOL | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 UJ | 1800 UJ | NA | NA | NA |
| 3-NITROANILINE | 1100 U | 5200 U | 990 U | 4800 U | 4900 U | 5000 UJ | 5000 U | 4500 U | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 1000 U | 4800 U | 910 U | 4500 U | 4500 U | 4600 UJ | 4600 U | 4200 U | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 4-CHLOROANILINE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 1100 U | 5200 U | 990 U | 4800 U | 4900 U | 5000 UJ | 5000 U | 4500 U | NA | NA | NA |
| 4-NITROPHENOL | 1100 U | 5200 U | 990 U | 4800 U | 4900 U | 5000 UJ | 5000 U | 4500 U | NA | NA | NA |
| ACETOPHENONE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 UJ | 1800 UJ | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 UJ | 1800 UJ | NA | NA | NA |
| CAPROLACTAM | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| CARBAZOLE | 430 U | 2100 U | 400 U | 250 J | 320 J | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| DIBENZOFURAN | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| DIETHYL PHTHALATE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| DIMETHYL PHTHALATE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 430 UJ | 2100 U | 400 U | 1900 U | 1900 UJ | 2000 UJ | 2000 UJ | 1800 UJ | NA | NA | NA |
| HEXACHLOROBENZENE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| HEXACHLOROBUTADIENE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| HEXACHLOROETHANE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| ISOPHORONE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| NITROBENZENE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| PENTACHLOROPHENOL | 1100 U | 5200 U | 990 U | 4800 U | 4900 U | 5000 UJ | 5000 U | 4500 U | NA | NA | NA |
| PHENOL | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 940 J | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 260 J | 1800 U | NA | NA | NA |
| ACENAPHTHENE | 430 U | 2100 U | 400 U | 320 J | 300 J | 2000 UJ | 640 J | 240 J | 77 U | 75 U | 77 U |
| ACENAPHTHYLENE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | 77 U | 75 U | 77 U |
| ANTHRACENE | 430 U | 2100 U | 400 U | 780 J | 730 J | 2000 UJ | 2300 K | 950 J | 77 U | 75 U | 77 U |
| BAP EQUIVALENT-HALFND | 378 | 2100 U | 400 U | 5264 | 4984 | 1785 | 38001 | 20536 | 104 | 77 | 213 |
| BAP EQUIVALENT-POS | 141 | 2100 U | 400 U | 5264 | 4984 | 685 | 38001 | 20536 | 66 | 32 | 174 |
| BENZO(A)ANTHRACENE | 91 J | 2100 U | 400 U | 3100 J | 2900 J | 550 J | 27000 J | 13000 J | 44 J | 24 J | 111 |
| BENZO(A)PYRENE | 110 J | 2100 U | 400 U | 3400 J | 3100 J | 530 J | 24000 J | 13000 J | 53 J | 29 J | 144 |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | 22000 J | 10000 J | 42 J | 75 U | 128 |
| BENZO(B+K)FLUORANTHENE | 220 J | 2100 U | 400 U | 7200 J | 6700 J | 990 J | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 430 UJ | 2100 U | 400 U | 1600 J | 1500 J | 2000 UJ | 24000 J | 15000 J | 49 J | 75 U | 44 J |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | 17000 J | 12000 J | 47 J | 29 J | 146 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 130 J | 2100 U | 400 U | 3600 J | 3700 J | 600 J | 31000 J | 16000 J | 58 J | 34 J | 143 |
| DIBENZO(A,H)ANTHRACENE | 430 UJ | 2100 U | 400 U | 680 J | 780 J | 2000 UJ | 7200 J | 4100 J | 77 U | 75 U | 77 U |
| FLUORANTHENE | 190 J | 220 J | 400 U | 5900 J | 5600 J | 1200 J | 21000 K | 10000 | 63 J | 37 J | 158 |
| FLUORENE | 430 U | 2100 U | 400 U | 270 J | 380 J | 2000 UJ | 490 J | 1800 U | 77 U | 75 U | 77 U |

| LOCATION | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-086 | SB-091 | SB-092 | SB-254 | SB-254 | SB-254 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-81-SS | SB-82-SS | SB-83-SS | SB-84-SS | SB-85-SS | SB-86-SS | SB-91-SS | SB-92-SS | SB-254-SS[12] | SB-254-SS[18] | SB-254-SS[6] |
| SAMPLE DATE | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20040927 | 20040927 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SB | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.5 | 0.5 |
| BOTTOM DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.5 | 0.5 |
| INDENO(1,2,3-CD)PYRENE | 430 UJ | 2100 U | 400 U | 1500 J | 1400 J | 2000 UJ | 17000 J | 10000 J | 38 J | 75 U | 49 J |
| NAPHTHALENE | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 380 J | 230 J | 77 U | 75 U | 77 U |
| PHENANTHRENE | 110 J | 2100 U | 400 U | 2800 J | 3800 J | 800 J | 13000 K | 5500 | 77 U | 75 U | 77 U |
| PYRENE | 200 J | 2100 U | 400 U | 4600 J | 6900 J | 1000 J | 55000 J | 27000 J | 66 J | 30 J | 185 |
| TOTAL PAHS | 1051 | 220 | 0 U | 35750 | 37790 | 5670 | 262270 | 137020 | 460 | 183 | 1108 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| AROCLOR-1016 | 330 U | 310 U | 290 U | 280 U | 290 U | 300 UJ | 290 U | 260 U | NA | NA | 36 U |
| AROCLOR-1221 | 330 U | 310 U | 290 U | 280 U | 290 U | 300 UJ | 290 U | 260 U | NA | NA | 36 U |
| AROCLOR-1232 | 330 U | 310 U | 290 U | 280 U | 290 U | 300 UJ | 290 U | 260 U | NA | NA | 36 U |
| AROCLOR-1242 | 330 U | 310 U | 290 U | 280 U | 290 U | 300 UJ | 290 U | 260 U | NA | NA | 36 U |
| AROCLOR-1248 | 330 U | 310 U | 290 U | 280 U | 290 U | 300 UJ | 290 U | 260 U | NA | NA | 36 U |
| AROCLOR-1254 | 330 U | 310 U | 290 U | 280 U | 290 U | 300 UJ | 290 U | 260 U | NA | NA | 36 U |
| AROCLOR-1260 | 330 U | 310 U | 290 U | 280 U | 290 U | 410 J | 780 | 260 U | NA | NA | 11 J |
| BETA-BHC | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | 46 U | 47 UJ | 1200 U | 1100 U | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 410 | 780 | 0 U | NA | NA | 11 |
| TOXAPHENE | NA | NA | NA | NA | 1200 U | 1200 UJ | 12000 U | 11000 U | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.2 UL | 2.6 UL | 2.8 U | 2.5 U | 3.9 L | 2.6 UL | 2.5 UL | 2.7 UL | NA | NA | NA |
| ARSENIC | 3.6 | 2 | 0.93 | 2.7 | 3 | 3.2 | 2.1 | 37 | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 3.2 U | 2.6 U | 2.8 U | 2.5 U | 2.3 U | 2.6 U | 5.4 | 4.1 | NA | NA | NA |
| CADMIUM | 3.2 UL | 2.6 UL | 2.8 U | 2.5 U | 14 | 5.7 | 2.5 U | 2.7 U | NA | NA | NA |
| CHROMIUM | 21 | 21 | 15 | 19 | 48 | 30 | 25 J | 34 J | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 14 | 16 | 12 | 20 | 45 | 28 | 15 J | 14 J | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 43 | 47 | 6.5 | 210 | 340 | 110 J | 60 K | 93 K | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.22 | 0.23 | 0.11 U | 4.2 | 1.4 | 0.41 | 0.1 U | 0.11 U | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 12 | 13 | 14 | 7.9 | 13 | 280 J | 21 K | 270 K | NA | NA | NA |
| SELENIUM | 3.2 U | 2.6 U | 2.8 U | 2.5 U | 2.3 U | 2.6 UL | 4.7 | 3.7 | NA | NA | NA |
| SILVER | 3.2 UL | 2.6 UL | 2.8 UL | 2.5 UL | 2.3 UL | 2.6 UR | 2.5 UR | 2.7 UR | NA | NA | NA |
| THALLIUM | 2.5 U | 2 U | 2.2 UL | 2 UL | 1.8 U | 2.1 U | 2 U | 2.2 U | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 64 | 73 | 41 K | 93 | 170 | 290 | 84 | 120 | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 12000 U | 12000 UJ | 12000 U | 12000 | 11000 U | 120000 J | 23000 | 12000 | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 130 U | 120 U | 120 U | 15000 | 340 | 120 UJ | 120 U | 110 U | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-086 | SB-091 | SB-092 | SB-254 | SB-254 | SB-254 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-81-SS | SB-82-SS | SB-83-SS | SB-84-SS | SB-85-SS | SB-86-SS | SB-91-SS | SB-92-SS | SB-254-SS[12] | SB-254-SS[18] | SB-254-SS[6] |
| SAMPLE DATE | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20040927 | 20040927 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SB | SB | SS |
| TOP DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.5 | 0.5 |
| BOTTOM DEPTH | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.5 | 0.5 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-255 | SB-255 | SB-255 | SB-256 | SB-256 | SB-256 | SB-257 | SB-257 | SB-257 | SB-258 | SB-258 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-255-SS[12] | SB-255-SS[18] | SB-255-SS[6] | SB-256-SS[12] | SB-256-SS[18] | SB-256-SS[6] | SB-257-SS[12] | SB-257-SS[18] | SB-257-SS[6] | SB-258-SS[12] | SB-258-SS[18] |
| SAMPLE DATE | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SS | SB | SB | SS | SB | SB |
| TOP DEPTH | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 |
| BOTTOM DEPTH | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-255 | SB-255 | SB-255 | SB-256 | SB-256 | SB-256 | SB-257 | SB-257 | SB-257 | SB-258 | SB-258 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-255-SS[12] | SB-255-SS[18] | SB-255-SS[6] | SB-256-SS[12] | SB-256-SS[18] | SB-256-SS[6] | SB-257-SS[12] | SB-257-SS[18] | SB-257-SS[6] | SB-258-SS[12] | SB-258-SS[18] |
| SAMPLE DATE | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SS | SB | SB | SS | SB | SB |
| TOP DEPTH | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 |
| BOTTOM DEPTH | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 78 U | 74 U | 76 U | 77 U | 76 U | 79 U | 86 U | 77 U | 79 U | 82 U | 82 U |
| ACENAPHTHYLENE | 78 U | 74 U | 76 U | 77 U | 76 U | 79 U | 86 U | 77 U | 79 U | 82 U | 82 U |
| ANTHRACENE | 78 U | 74 U | 51 J | 77 U | 76 U | 79 U | 86 U | 77 U | 79 U | 82 U | 82 U |
| BAP EQUIVALENT-HALFND | 90 | 74 U | 1339 | 77 U | 76 U | 95 | 86 U | 77 U | 157 | 82 U | 82 U |
| BAP EQUIVALENT-POS | 0.022 | 74 U | 1339 | 77 U | 76 U | 51 | 86 U | 77 U | 117 | 82 U | 82 U |
| BENZO(A)ANTHRACENE | 78 U | 74 U | 629 | 77 U | 76 U | 23 J | 86 U | 77 U | 66 J | 82 U | 82 U |
| BENZO(A)PYRENE | 78 U | 74 U | 937 | 77 U | 76 U | 45 J | 86 U | 77 U | 88 | 82 U | 82 U |
| BENZO(B)FLUORANTHENE | 78 U | 74 U | 688 | 77 U | 76 U | 39 J | 86 U | 77 U | 95 | 82 U | 82 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 78 U | 74 U | 832 | 77 U | 76 U | 79 U | 86 U | 77 U | 79 | 82 U | 82 U |
| BENZO(K)FLUORANTHENE | 78 U | 74 U | 673 | 77 U | 76 U | 24 J | 86 U | 77 U | 76 J | 82 U | 82 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22 J | 74 U | 827 | 77 U | 76 U | 27 J | 86 U | 77 U | 76 J | 82 U | 82 U |
| DIBENZO(A,H)ANTHRACENE | 78 U | 74 U | 205 | 77 U | 76 U | 79 U | 86 U | 77 U | 79 U | 82 U | 82 U |
| FLUORANTHENE | 78 U | 74 U | 792 | 77 U | 76 U | 30 J | 86 U | 77 U | 97 | 82 U | 82 U |
| FLUORENE | 78 U | 74 U | 76 U | 77 U | 76 U | 79 U | 86 U | 77 U | 79 U | 82 U | 82 U |

| LOCATION | SB-255 | SB-255 | SB-255 | SB-256 | SB-256 | SB-256 | SB-257 | SB-257 | SB-257 | SB-258 | SB-258 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-255-SS[12] | SB-255-SS[18] | SB-255-SS[6] | SB-256-SS[12] | SB-256-SS[18] | SB-256-SS[6] | SB-257-SS[12] | SB-257-SS[18] | SB-257-SS[6] | SB-258-SS[12] | SB-258-SS[18] |
| SAMPLE DATE | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SS | SB | SB | SS | SB | SB |
| TOP DEPTH | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 |
| BOTTOM DEPTH | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 |
| INDENO(1,2,3-CD)PYRENE | 78 U | 74 U | 578 | 77 U | 76 U | 79 U | 86 U | 77 U | 123 | 82 U | 82 U |
| NAPHTHALENE | 78 U | 74 U | 76 U | 77 U | 76 U | 79 U | 86 U | 77 U | 79 U | 82 U | 82 U |
| PHENANTHRENE | 78 U | 74 U | 192 | 77 U | 76 U | 79 U | 86 U | 77 U | 26 J | 82 U | 82 U |
| PYRENE | 39 J | 74 U | 1480 | 26 J | 76 U | 45 J | 86 U | 77 U | 89 | 82 U | 82 U |
| TOTAL PAHS | 61 | 0 U | 7884 | 26 | 0 U | 233 | 0 U | 0 U | 815 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | 34 U | NA | NA | 37 U | NA | NA | 37 U | NA | NA |
| AROCLOR-1221 | NA | NA | 34 U | NA | NA | 37 U | NA | NA | 37 U | NA | NA |
| AROCLOR-1232 | NA | NA | 34 U | NA | NA | 37 U | NA | NA | 37 U | NA | NA |
| AROCLOR-1242 | NA | NA | 34 U | NA | NA | 37 U | NA | NA | 37 U | NA | NA |
| AROCLOR-1248 | NA | NA | 34 U | NA | NA | 37 U | NA | NA | 37 U | NA | NA |
| AROCLOR-1254 | NA | NA | 34 U | NA | NA | 37 U | NA | NA | 37 U | NA | NA |
| AROCLOR-1260 | NA | NA | 8.2 J | NA | NA | 37 U | NA | NA | 18 J | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | 8.2 | NA | NA | 0 U | NA | NA | 18 | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-255 | SB-255 | SB-255 | SB-256 | SB-256 | SB-256 | SB-257 | SB-257 | SB-257 | SB-258 | SB-258 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-255-SS[12] | SB-255-SS[18] | SB-255-SS[6] | SB-256-SS[12] | SB-256-SS[18] | SB-256-SS[6] | SB-257-SS[12] | SB-257-SS[18] | SB-257-SS[6] | SB-258-SS[12] | SB-258-SS[18] |
| SAMPLE DATE | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SS | SB | SB | SS | SB | SB |
| TOP DEPTH | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 |
| BOTTOM DEPTH | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-258 | SB-259 | SB-259 | SB-259 | SB-260 | SB-260 | SB-260 | SB-261 | SB-261 | SB-261 | SB-410 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-258-SS[6] | SB-259-SS[12] | SB-259-SS[18] | SB-259-SS[6] | SB-260-SS[12] | SB-260-SS[18] | SB-260-SS[6] | SB-261-SS[12] | SB-261-SS[18] | SB-261-SS[6] | SB-410-0102 |
| SAMPLE DATE | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SS | SB | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| BOTTOM DEPTH | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-258 | SB-259 | SB-259 | SB-259 | SB-260 | SB-260 | SB-260 | SB-261 | SB-261 | SB-261 | SB-410 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-258-SS[6] | SB-259-SS[12] | SB-259-SS[18] | SB-259-SS[6] | SB-260-SS[12] | SB-260-SS[18] | SB-260-SS[6] | SB-261-SS[12] | SB-261-SS[18] | SB-261-SS[6] | SB-410-0102 |
| SAMPLE DATE | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SS | SB | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| BOTTOM DEPTH | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 2 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 33 J | 79 U | 78 U | 81 U | 80 U | 386 | 300 U | 84 U | 83 U | 81 U | NA |
| ACENAPHTHYLENE | 38 J | 79 U | 78 U | 81 U | 80 U | 378 U | 300 U | 84 U | 564 | 81 U | NA |
| ANTHRACENE | 119 | 28 J | 54 J | 34 J | 73 J | 1190 | 312 | 84 U | 288 | 81 U | NA |
| BAP EQUIVALENT-HALFND | 1072 | 290 | 352 | 461 | 244 | 7481 | 2832 | 144 | 2255 | 134 | 12 |
| BAP EQUIVALENT-POS | 1072 | 290 | 313 | 461 | 204 | 7481 | 2832 | 102 | 2255 | 94 | 12 |
| BENZO(A)ANTHRACENE | 696 | 168 | 233 | 255 | 166 | 4730 | 1820 | 69 J | 441 | 69 J | NA |
| BENZO(A)PYRENE | 821 J | 164 | 247 | 292 | 161 | 5570 J | 2160 J | 80 J | 1600 | 73 J | 12 J |
| BENZO(B)FLUORANTHENE | 924 J | 146 | 197 | 262 | 173 | 6240 J | 2510 J | 93 | 3040 | 91 | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 175 J | 131 | 158 | 236 | 56 J | 1250 J | 393 J | 40 J | 737 J | 81 U | NA |
| BENZO(K)FLUORANTHENE | 1010 J | 169 | 247 | 277 | 173 | 6090 J | 2410 J | 87 | 1710 | 94 | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 847 | 190 | 257 | 296 | 183 | 5080 | 2030 | 79 J | 2060 | 69 J | NA |
| DIBENZO(A,H)ANTHRACENE | 57 J | 76 J | 78 U | 88 | 80 U | 577 J | 158 J | 84 U | 208 | 81 U | NA |
| FLUORANTHENE | 1390 | 367 | 550 | 486 | 401 | 8940 | 3290 | 125 | 383 | 137 | NA |
| FLUORENE | 29 J | 79 U | 78 U | 81 U | 28 J | 342 J | 84 J | 84 U | 83 U | 81 U | NA |

**Table A-19**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-258 | SB-259 | SB-259 | SB-259 | SB-260 | SB-260 | SB-260 | SB-261 | SB-261 | SB-261 | SB-410 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-258-SS[6] | SB-259-SS[12] | SB-259-SS[18] | SB-259-SS[6] | SB-260-SS[12] | SB-260-SS[18] | SB-260-SS[6] | SB-261-SS[12] | SB-261-SS[18] | SB-261-SS[6] | SB-410-0102 |
| SAMPLE DATE | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SS | SB | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| BOTTOM DEPTH | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 2 |
| INDENO(1,2,3-CD)PYRENE | 212 J | 167 | 205 | 258 | 69 J | 1710 J | 545 J | 47 J | 795 | 37 J | NA |
| NAPHTHALENE | 84 U | 79 U | 78 U | 81 U | 80 U | 378 U | 300 U | 84 U | 83 U | 81 U | NA |
| PHENANTHRENE | 471 | 145 | 239 | 180 | 313 | 4550 | 1180 | 29 J | 33 J | 47 J | NA |
| PYRENE | 1340 | 343 | 450 | 554 | 302 | 8150 | 3000 | 99 | 862 | 105 | NA |
| TOTAL PAHS | 8162 | 2094 | 2837 | 3218 | 2098 | 54805 | 19892 | 748 | 12721 | 722 | 12 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 39 U | NA | NA | 38 U | NA | NA | 37 U | NA | NA | 38 U | NA |
| AROCLOR-1221 | 39 U | NA | NA | 38 U | NA | NA | 37 U | NA | NA | 38 U | NA |
| AROCLOR-1232 | 39 U | NA | NA | 38 U | NA | NA | 37 U | NA | NA | 38 U | NA |
| AROCLOR-1242 | 39 U | NA | NA | 38 U | NA | NA | 37 U | NA | NA | 38 U | NA |
| AROCLOR-1248 | 39 U | NA | NA | 38 U | NA | NA | 37 U | NA | NA | 38 U | NA |
| AROCLOR-1254 | 39 U | NA | NA | 38 U | NA | NA | 37 U | NA | NA | 38 U | NA |
| AROCLOR-1260 | 1190 J | NA | NA | 101 | NA | NA | 378 | NA | NA | 38 U | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 1190 | NA | NA | 101 | NA | NA | 378 | NA | NA | 0 U | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 93.3 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-258 | SB-259 | SB-259 | SB-259 | SB-260 | SB-260 | SB-260 | SB-261 | SB-261 | SB-261 | SB-410 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-258-SS[6] | SB-259-SS[12] | SB-259-SS[18] | SB-259-SS[6] | SB-260-SS[12] | SB-260-SS[18] | SB-260-SS[6] | SB-261-SS[12] | SB-261-SS[18] | SB-261-SS[6] | SB-410-0102 |
| SAMPLE DATE | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SS | SB | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| BOTTOM DEPTH | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 2 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-411 | SB-412 | SB-413 | SB-414 | SB-415 | SB-416 | SB-417 | SB-418 | SB-419 | SB-420 | SB-421 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-411-0102 | SB-412-0102 | SB-413-0102 | SB-414-0102 | SB-415-0102 | SB-416-0102 | SB-417-0102 | SB-418-0102 | SB-419-0102 | SB-420-0102 | SB-421-0102 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-411 | SB-412 | SB-413 | SB-414 | SB-415 | SB-416 | SB-417 | SB-418 | SB-419 | SB-420 | SB-421 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-411-0102 | SB-412-0102 | SB-413-0102 | SB-414-0102 | SB-415-0102 | SB-416-0102 | SB-417-0102 | SB-418-0102 | SB-419-0102 | SB-420-0102 | SB-421-0102 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 160 | 140 | 1.4 U | 3000 | 210 | 11 | 13 | 43 | 21 | 1.6 U |
| BAP EQUIVALENT-POS | 1.6 U | 160 | 140 | 1.4 U | 3000 | 210 | 11 | 13 | 43 | 21 | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 160 J | 140 J | 1.4 U | 3000 | 210 J | 11 J | 13 J | 43 J | 21 J | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-411 | SB-412 | SB-413 | SB-414 | SB-415 | SB-416 | SB-417 | SB-418 | SB-419 | SB-420 | SB-421 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-411-0102 | SB-412-0102 | SB-413-0102 | SB-414-0102 | SB-415-0102 | SB-416-0102 | SB-417-0102 | SB-418-0102 | SB-419-0102 | SB-420-0102 | SB-421-0102 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 160 | 140 | 0 U | 3000 | 210 | 11 | 13 | 43 | 21 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | 83.9 | 88.8 | 85.1 | 95.9 | 84.8 | 92.5 | 90.8 | 91.8 | 83.5 | 93 | 82.9 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-411 | SB-412 | SB-413 | SB-414 | SB-415 | SB-416 | SB-417 | SB-418 | SB-419 | SB-420 | SB-421 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-411-0102 | SB-412-0102 | SB-413-0102 | SB-414-0102 | SB-415-0102 | SB-416-0102 | SB-417-0102 | SB-418-0102 | SB-419-0102 | SB-420-0102 | SB-421-0102 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-19**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-422 | SB-423 | SB-424 | SB-425 | SB-426 | SB-427 | SB-428 | SB-429 | SB-430 | SB-431 | SB-432 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-422-0102 | SB-423-0102 | SB-424-0102 | SB-425-0102 | SB-426-0102 | SB-427-0102 | SB-428-0102 | SB-429-0102 | SB-430-0102 | SB-431-0102 | SB-432-0102 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-422 | SB-423 | SB-424 | SB-425 | SB-426 | SB-427 | SB-428 | SB-429 | SB-430 | SB-431 | SB-432 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-422-0102 | SB-423-0102 | SB-424-0102 | SB-425-0102 | SB-426-0102 | SB-427-0102 | SB-428-0102 | SB-429-0102 | SB-430-0102 | SB-431-0102 | SB-432-0102 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 9.9 | 990 | 75 | 80 | 340 | 64 | 12 | 2000 | 390 | 1.4 U |
| BAP EQUIVALENT-POS | 1.5 U | 9.9 | 990 | 75 | 80 | 340 | 64 | 12 | 2000 | 390 | 1.4 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 9.9 J | 990 | 75 J | 80 J | 340 J | 64 J | 12 J | 2000 | 390 | 1.4 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-422 | SB-423 | SB-424 | SB-425 | SB-426 | SB-427 | SB-428 | SB-429 | SB-430 | SB-431 | SB-432 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-422-0102 | SB-423-0102 | SB-424-0102 | SB-425-0102 | SB-426-0102 | SB-427-0102 | SB-428-0102 | SB-429-0102 | SB-430-0102 | SB-431-0102 | SB-432-0102 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 9.9 | 990 | 75 | 80 | 340 | 64 | 12 | 2000 | 390 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | 87.7 | 92.2 | 89 | 93.9 | 85.6 | 90.1 | 92.3 | 95.4 | 91.1 | 92.1 | 92.7 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-422 | SB-423 | SB-424 | SB-425 | SB-426 | SB-427 | SB-428 | SB-429 | SB-430 | SB-431 | SB-432 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-422-0102 | SB-423-0102 | SB-424-0102 | SB-425-0102 | SB-426-0102 | SB-427-0102 | SB-428-0102 | SB-429-0102 | SB-430-0102 | SB-431-0102 | SB-432-0102 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-19**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-433 | SB-434 | SB-435 | SB-436 | SB-437 | SB-438 | SB-439 | SB-440 | SB-441 | SB-442 | SB-443 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-433-0102 | SB-434-0102 | SB-435-0102 | SB-436-0102 | SB-437-0102 | SB-438-0102 | SB-439-0102 | SB-440-0102 | SB-441-0102 | SB-442-0102 | SB-443-0102 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-433 | SB-434 | SB-435 | SB-436 | SB-437 | SB-438 | SB-439 | SB-440 | SB-441 | SB-442 | SB-443 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-433-0102 | SB-434-0102 | SB-435-0102 | SB-436-0102 | SB-437-0102 | SB-438-0102 | SB-439-0102 | SB-440-0102 | SB-441-0102 | SB-442-0102 | SB-443-0102 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 45 | 1.5 U | 19 | 47 | 230 | 1.4 U | 15 | 1.5 U | 120 | 15 | 53 |
| BAP EQUIVALENT-POS | 45 | 1.5 U | 19 | 47 | 230 | 1.4 U | 15 | 1.5 U | 120 | 15 | 53 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 45 J | 1.5 U | 19 J | 47 J | 230 J | 1.4 U | 15 J | 1.5 U | 120 J | 15 J | 53 J |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-433 | SB-434 | SB-435 | SB-436 | SB-437 | SB-438 | SB-439 | SB-440 | SB-441 | SB-442 | SB-443 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-433-0102 | SB-434-0102 | SB-435-0102 | SB-436-0102 | SB-437-0102 | SB-438-0102 | SB-439-0102 | SB-440-0102 | SB-441-0102 | SB-442-0102 | SB-443-0102 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 45 | 0 U | 19 | 47 | 230 | 0 U | 15 | 0 U | 120 | 15 | 53 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | 95.5 | 87.2 | 89.9 | 87 | 89.8 | 89.8 | 86.5 | 87.8 | 89.1 | 84.6 | 87.1 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-433 | SB-434 | SB-435 | SB-436 | SB-437 | SB-438 | SB-439 | SB-440 | SB-441 | SB-442 | SB-443 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-433-0102 | SB-434-0102 | SB-435-0102 | SB-436-0102 | SB-437-0102 | SB-438-0102 | SB-439-0102 | SB-440-0102 | SB-441-0102 | SB-442-0102 | SB-443-0102 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-19**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-444 | SB-445 | SB-446 | SB-447 | SB-448 | SB-449 | SB-450 | SB-451 | SB-452 | SB-453 | SB-454 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-444-0102 | SB-445-0102 | SB-446-0102 | SB-447-0102 | SB-448-0102 | SB-449-0102 | SB-450-0102 | SB-451-0102 | SB-452-0102 | SB-453-0102 | SB-454-0102 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-444 | SB-445 | SB-446 | SB-447 | SB-448 | SB-449 | SB-450 | SB-451 | SB-452 | SB-453 | SB-454 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-444-0102 | SB-445-0102 | SB-446-0102 | SB-447-0102 | SB-448-0102 | SB-449-0102 | SB-450-0102 | SB-451-0102 | SB-452-0102 | SB-453-0102 | SB-454-0102 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 8.6 | 17 | 110 | 1.5 U | 22 | 1.4 U | 12 | 1.5 U | 120 | 7.9 | 1.6 U |
| BAP EQUIVALENT-POS | 8.6 | 17 | 110 | 1.5 U | 22 | 1.4 U | 12 | 1.5 U | 120 | 7.9 | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 8.6 J | 17 J | 110 J | 1.5 U | 22 J | 1.4 U | 12 J | 1.5 U | 120 J | 7.9 J | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-444 | SB-445 | SB-446 | SB-447 | SB-448 | SB-449 | SB-450 | SB-451 | SB-452 | SB-453 | SB-454 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-444-0102 | SB-445-0102 | SB-446-0102 | SB-447-0102 | SB-448-0102 | SB-449-0102 | SB-450-0102 | SB-451-0102 | SB-452-0102 | SB-453-0102 | SB-454-0102 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 8.6 | 17 | 110 | 0 U | 22 | 0 U | 12 | 0 U | 120 | 7.9 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | 86.7 | 82.7 | 89.8 | 85.7 | 87.7 | 90.8 | 85.1 | 86.2 | 91.4 | 86.3 | 81.7 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-444 | SB-445 | SB-446 | SB-447 | SB-448 | SB-449 | SB-450 | SB-451 | SB-452 | SB-453 | SB-454 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-444-0102 | SB-445-0102 | SB-446-0102 | SB-447-0102 | SB-448-0102 | SB-449-0102 | SB-450-0102 | SB-451-0102 | SB-452-0102 | SB-453-0102 | SB-454-0102 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-19**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-455 | SB-456 | SB-457 | SB-457 | SB-458 | SB-458 | SB-459 | SB-459 | SB-460 | SB-460 | SB-461 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-455-0102 | SB-456-0102 | SB-457-0000 | SB-457-0102 | SB-458-0000 | SB-458-0102 | SB-459-0000 | SB-459-0102 | SB-460-0000 | SB-460-0102 | SB-461-0000 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 2 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-455 | SB-456 | SB-457 | SB-457 | SB-458 | SB-458 | SB-459 | SB-459 | SB-460 | SB-460 | SB-461 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-455-0102 | SB-456-0102 | SB-457-0000 | SB-457-0102 | SB-458-0000 | SB-458-0102 | SB-459-0000 | SB-459-0102 | SB-460-0000 | SB-460-0102 | SB-461-0000 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 2 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 300 | 260 | 8.9 | 1.5 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 300 | 260 | 8.9 | 1.5 U | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 300 J | 260 J | 8.9 J | 1.5 U | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-455 | SB-456 | SB-457 | SB-457 | SB-458 | SB-458 | SB-459 | SB-459 | SB-460 | SB-460 | SB-461 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-455-0102 | SB-456-0102 | SB-457-0000 | SB-457-0102 | SB-458-0000 | SB-458-0102 | SB-459-0000 | SB-459-0102 | SB-460-0000 | SB-460-0102 | SB-461-0000 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 2 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 300 | 260 | 8.9 | 0 U | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | 1.4 | 1.6 | 2.3 | 2.4 | 0.91 L | 1.8 L | 0.99 L | 1.9 L | 0.8 L |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | 85.4 | 87.8 | 86.4 | 89.6 | 88.1 | 87.7 | 87.5 | 87.6 | 89.8 | 90.5 | 86.4 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-455 | SB-456 | SB-457 | SB-457 | SB-458 | SB-458 | SB-459 | SB-459 | SB-460 | SB-460 | SB-461 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-455-0102 | SB-456-0102 | SB-457-0000 | SB-457-0102 | SB-458-0000 | SB-458-0102 | SB-459-0000 | SB-459-0102 | SB-460-0000 | SB-460-0102 | SB-461-0000 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | 2 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-461 | SB-494 | SB-494 | SB-495 | SB-495 | SB-496 | SB-496 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-461-0102 | SB-494-0000 | SB-494-0102 | SB-495-0000 | SB-495-0102 | SB-496-0000 | SB-496-0102 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| BOTTOM DEPTH | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-461 | SB-494 | SB-494 | SB-495 | SB-495 | SB-496 | SB-496 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-461-0102 | SB-494-0000 | SB-494-0102 | SB-495-0000 | SB-495-0102 | SB-496-0000 | SB-496-0102 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| BOTTOM DEPTH | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-461 | SB-494 | SB-494 | SB-495 | SB-495 | SB-496 | SB-496 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-461-0102 | SB-494-0000 | SB-494-0102 | SB-495-0000 | SB-495-0102 | SB-496-0000 | SB-496-0102 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| BOTTOM DEPTH | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 2.5 L | 1.3 L | 1.6 L | 0.92 L | 0.92 L | 1.2 L | 1.1 L |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | 87.3 | 88.9 | 87.9 | 90.6 | 90.9 | 89.8 | 90.3 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-461 | SB-494 | SB-494 | SB-495 | SB-495 | SB-496 | SB-496 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-461-0102 | SB-494-0000 | SB-494-0102 | SB-495-0000 | SB-495-0102 | SB-496-0000 | SB-496-0102 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| BOTTOM DEPTH | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-194 | SB-194 | SB-198 | SB-198 | SB-254 | SB-254 | SB-255 | SB-255 | SB-257RE | SB-257RE | SB-653 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-194RE-1 | G-SB-194RE-2 | G-SB-198RE-1 | G-SB-198RE-2 | G-SB-254RE-1 | G-SB-254RE-2 | G-SB-255RE-1 | G-SB-255RE-2 | G-SB-257RE-1 | G-SB-257RE-2 | G-SB-653-1 |
| SAMPLE DATE | | | 20090930 | 20090930 | 20090929 | 20090929 | 20090930 | 20090930 | 20091001 | 20091001 | 20091002 | 20091002 | 20090930 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| BOTTOM DEPTH | | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | **1192** | 4.2 | **163** | **228** | **30** | **41** | **720** | **74** | **32** | 1.5 U | **144** |
| BAP EQUIVALENT-POS | 22 | 15 C | **1192** | 2.7 | **163** | **228** | **30** | **41** | **720** | **74** | **31** | 1.5 U | **144** |
| BENZO(A)ANTHRACENE | 220 | 150 C | **780** | 1.1 U | 84 | 140 | 13 | 17 | **330** | 31 | 25 | 1.1 U | 80 |
| BENZO(A)PYRENE | 22 | 15 C | **800** | 1.5 U | **100** | **150** | 11 | **18** | **490** | **42** | **24** | 1.5 U | **86** |
| BENZO(B)FLUORANTHENE | 220 | 150 C | **1000** | 8.5 | 120 | **170** | 21 | 29 | **560** | 50 | 27 | 1.4 U | 96 |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 340 | 2 U | 53 | 70 | 1.9 U | 9.3 | 190 | 16 | 15 | 1.9 U | 40 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 860 | 7.8 | 89 | 130 | 18 | 16 | 390 | 36 | 29 | 1 U | 79 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | **160** | 1.5 U | **34** | **37** | 14 | **16** | **110** | **20** | 1.5 U | 1.5 U | **34** |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | **500** | 18 | 75 | 87 | 19 | 23 | **290** | 39 | 14 | 1.7 U | 62 |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 4440 | 34.3 | 555 | 784 | 96 | 128.3 | 2360 | 234 | 134 | 0 U | 477 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-653 | SB-653A | SB-653B | SB-653D | SB-654 | SB-654 | SB-654B | SB-654C | SB-655 | SB-655 | SB-656 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | G-SB-653-2 | G-SB-653A-1 | G-SB-653B-1 | G-SB-653D-1 | G-SB-654-1 | G-SB-654-2 | G-SB-654B-1 | G-SB-654C-1 | G-SB-655-1 | G-SB-655-2 | G-SB-656-1 |
| SAMPLE DATE | | | | | 20090930 | 20091029 | 20091029 | 20091029 | 20090930 | 20090930 | 20091030 | 20091030 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| BOTTOM DEPTH | | | | | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | 396 | 368 | 174 | 46 | 65 | 399 | 98 | 52 | 55 | 12 | 76 |
| BAP EQUIVALENT-POS | 22 | | 15 | C | 396 | 368 | 174 | 45 | 64 | 399 | 98 | 52 | 51 | 11 | 75 |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | 230 | 180 | 86 | 20 | 53 | 340 | 91 | 38 | 5.2 U | 7.7 | 38 |
| BENZO(A)PYRENE | 22 | | 15 | C | 250 | 240 | 110 | 36 | 49 | 270 | 75 | 38 | 43 | 9.2 | 60 |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | 270 | 270 | 130 | 42 | 59 | 300 | 93 | 69 | 76 | 12 | 66 |
| BENZO(B+K)FLUORANTHENE | 220 | [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | 110 | 100 | 40 | 8.9 | 13 | 130 | 35 | 15 | 9.3 U | 1.9 U | 25 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | | 15000 | C | 240 | 230 | 98 | 22 | 57 | 330 | 92 | 52 | 71 | 8.8 | 56 |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | 79 | 65 | 34 | 1.4 U | 1.5 U | 48 | 1.5 U | 1.5 U | 7.1 U | 1.4 U | 1.4 U |
| FLUORANTHENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | 160 | 170 | 78 | 30 | 39 | 150 | 39 | 27 | 8.2 U | 1.7 U | 46 |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | | NC | | 1339 | 1255 | 576 | 158.9 | 270 | 1568 | 425 | 239 | 190 | 37.7 | 291 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 | [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 | [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 | [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | | |
| PH | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-656 | SB-656C | SB-656D | SB-657A | SB-657B | SB-657D | SB-658B | SB-658C | SB-659C | SB-659D | SB-662A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | G-SB-656-2 | G-SB-656C-2 | G-SB-656D-2 | G-SB-657A-1 | G-SB-657B-1 | G-SB-657D-1 | G-SB-658B-1 | G-SB-658C-1 | G-SB-659C-1 | G-SB-659D-1 | G-SB-662A-1 |
| SAMPLE DATE | | | | | 20090930 | 20091029 | 20091029 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | 226 | 4.2 | 59 | 1893 | 1188 | 31 | 58 | 72 | 81 | 23 | 627 |
| BAP EQUIVALENT-POS | 22 | | 15 | C | 226 | 2.6 | 58 | 1893 | 1180 | 30 | 58 | 71 | 80 | 22 | 627 |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | 110 | 1.1 U | 48 | 1000 | 1300 | 26 | 52 | 46 | 78 | 21 | 380 |
| BENZO(A)PYRENE | 22 | | 15 | C | 130 | 1.4 U | 43 | 1300 | 870 | 22 | 46 | 55 | 59 | 17 | 450 |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | 190 | 26 | 74 | 1200 | 1700 | 42 | 61 | 78 | 130 | 31 | 500 |
| BENZO(B+K)FLUORANTHENE | 220 | [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | 62 | 1.9 U | 22 | 610 | 860 | 1.9 U | 29 | 25 | 2 U | 2 U | 260 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | | 15000 | C | 130 | 1 U | 56 | 1200 | 1400 | 24 | 65 | 55 | 81 | 17 | 370 |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | 54 | 1.4 U | 1.5 U | 290 | 14 U | 1.4 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 59 |
| FLUORANTHENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | 110 | 1.7 U | 30 | 760 | 16 U | 14 | 1.7 U | 32 | 1.8 U | 1.8 U | 270 |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | | NC | | 786 | 26 | 273 | 6360 | 6130 | 128 | 253 | 291 | 348 | 86 | 2289 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 | [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 | [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 | [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | | |
| PH | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-662B | SB-662C | SB-669 | SB-669 | SB-670 | SB-670 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-662B-1 | G-SB-662C-1 | G-SB-669-1 | G-SB-669-2 | G-SB-670-1 | G-SB-670-2 | G-SB-671-1 | G-SB-671-2 | G-SB-671-2-AVG | G-SB-671-2-D | G-SB-671B-1 |
| SAMPLE DATE | | | | 20091029 | 20091029 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091111 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 | 58 | 44 | 105 | 55 | 22 | 434 | 1.5 U | 1.5 U | 1.5 U | 229 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 0.01 | 58 | 44 | 105 | 55 | 21 | 434 | 1.5 U | 1.5 U | 1.5 U | 229 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 48 | 20 | 49 | 24 | 15 | 270 | 1.1 U | 1.1 U | 1.1 U | 140 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.4 U | 43 | 21 | 58 | 29 | 15 | 300 | 1.5 U | 1.5 U | 1.5 U | 150 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.3 U | 68 | 29 | 81 | 39 | 22 | 320 | 1.4 U | 1.4 U | 1.4 U | 180 |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 24 | 13 | 28 | 10 | 10 | 170 | 2 U | 2 U | 2 U | 60 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 10 | 57 | 26 | 50 | 26 | 15 | 240 | 1 U | 1 U | 1 U | 140 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.4 U | 1.5 U | 16 | 28 | 17 | 1.5 U | 59 | 1.5 U | 1.5 U | 1.5 U | 37 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 27 | 23 | 54 | 27 | 22 | 140 | 1.7 U | 1.7 U | 1.7 U | 94 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 10 | 267 | 148 | 348 | 172 | 99 | 1499 | 0 U | 0 U | 0 U | 801 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-671C | SB-671D | SB-672 | SB-672 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677A | SB-677B | SB-677D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | G-SB-671C-1 | G-SB-671D-1 | G-SB-672-1 | G-SB-672-2 | G-SB-677-1 | G-SB-677-1-AVG | G-SB-677-1-D | G-SB-677-2 | G-SB-677A-1 | G-SB-677B-1 | G-SB-677D-1 |
| SAMPLE DATE | | | | | 20091111 | 20091111 | 20090929 | 20090929 | 20091001 | 20091001 | 20091001 | 20091001 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | 24 | 22 | 60 | 57 | 20437 | 14418 | 8400 | 1978 | 1193 | 77 | 14 |
| BAP EQUIVALENT-POS | 22 | | 15 | C | 23 | 22 | 58 | 57 | 20437 | 14418 | 8400 | 1978 | 1193 | 77 | 13 |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | 12 | 13 | 32 | 37 | 15000 J | 10500 | 6000 J | 1500 | 750 | 49 | 1.1 U |
| BENZO(A)PYRENE | 22 | | 15 | C | 17 | 16 | 44 | 43 | 14000 J | 9900 | 5800 J | 1300 | 820 | 59 | 13 |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | 21 | 18 | 53 | 58 | 16000 J | 11050 | 6100 J | 1600 | 850 | 88 | 1.3 U |
| BENZO(B+K)FLUORANTHENE | 220 | [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | 8.9 | 9.5 | 29 | 16 | 5100 J | 3700 | 2300 J | 560 | 370 | 28 | 1.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | | 15000 | C | 15 | 12 | 39 | 41 | 16000 J | 11300 | 6600 J | 1500 | 800 | 55 | 11 |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | 1.5 U | 1.6 U | 3.7 U | 1.5 U | 2600 J | 1850 | 1100 J | 290 | 160 | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | 24 | 24 | 56 | 38 | 6700 J | 4650 | 2600 J | 710 | 480 | 36 | 1.7 U |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | | NC | | 97.9 | 92.5 | 253 | 233 | 75400 | 52950 | 30500 | 7460 | 4230 | 315 | 24 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 | [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 | [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 | [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | | |
| PH | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-678 | SB-678 | SB-678B | SB-678C | SB-679 | SB-679 | SB-679C | SB-679D | SB-680 | SB-680 | SB-680D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-678-1 | G-SB-678-2 | G-SB-678B-1 | G-SB-678C-1 | G-SB-679-1 | G-SB-679-2 | G-SB-679C-1 | G-SB-679D-1 | G-SB-680-1 | G-SB-680-2 | G-SB-680D-1 |
| SAMPLE DATE | | | 20091001 | 20091001 | 20091111 | 20091030 | 20091001 | 20091001 | 20091030 | 20091030 | 20091001 | 20091001 | 20091102 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| BOTTOM DEPTH | | | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 208 | 249 | 8306 | 33 | 596 | 114 | 424 | 151 | 666 | 449 | 87 |
| BAP EQUIVALENT-POS | 22 | 15 C | 208 | 249 | 8306 | 32 | 596 | 114 | 424 | 151 | 666 | 449 | 87 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 100 | 190 | 3700 | 12 | 520 | 47 | 160 | 51 | 420 | 260 | 49 J |
| BENZO(A)PYRENE | 22 | 15 C | 130 | 160 | 5700 | 26 | 400 | 72 | 280 | 98 | 430 | 300 | 60 J |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 150 | 210 | 6700 | 27 | 510 | 71 | 340 | 110 | 560 | 350 | 78 J |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 65 | 83 | 2100 | 8.6 | 190 | 35 | 130 | 44 | 170 | 150 | 25 J |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 120 | 170 | 4500 | 15 | 460 | 57 | 160 | 49 | 460 | 290 | 47 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 43 | 38 | 1200 | 1.5 U | 73 | 24 | 75 | 30 | 110 | 68 | 9.9 J |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 94 | 98 | 3400 | 22 | 180 | 54 | 180 | 67 | 260 | 180 | 38 J |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 702 | 949 | 27300 | 110.6 | 2333 | 360 | 1325 | 449 | 2410 | 1598 | 306.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-680D | SB-680D | SB-693A | SB-693B | SB-693D | SB-734 | SB-735 | SB-735A | SB-735B | SB-735C | SB-736 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-680D-1-AVG | G-SB-680D-1-D | G-SB-693A-2 | G-SB-693B-2 | G-SB-693D-2 | G-SB-734-0-4 | G-SB-735-1 | G-SB-735A-1 | G-SB-735B-1 | G-SB-735C-1 | G-SB-736-1 |
| SAMPLE DATE | | | | 20091102 | 20091102 | 20091027 | 20091027 | 20091027 | 20090923 | 20091021 | 20091112 | 20091112 | 20091112 | 20091021 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 2 | 2 | 2 | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 1 | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1671 | 3256 | 23 | 72 | 71 | 530 | 474 | 2101 | 6250 | 256 | 572 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1671 | 3256 | 22 | 72 | 71 | 523 | 474 | 2101 | 6250 | 255 | 572 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 824.5 | 1600 J | 16 | 41 | 42 | 560 | 320 | 1600 | 4600 | 190 | 410 |
| BENZO(A)PYRENE | 22 | 15 | C | 1230 | 2400 J | 17 | 49 | 47 | 380 | 330 | 1400 | 4300 | 200 | 390 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1289 | 2500 J | 20 | 45 | 54 | 520 | 340 | 1900 | 5700 | 240 | 560 |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 232.5 | 440 J | 2.1 U | 27 | 21 | 250 | 130 | 1000 | 2500 | 110 | 240 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 873.5 | 1700 J | 19 | 48 | 55 | 470 | 340 | 1800 | 4800 | 210 | 370 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 169.95 | 330 J | 1.6 U | 11 | 11 | 15 U | 57 | 260 | 660 | 1.6 U | 61 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 569 | 1100 J | 12 | 30 | 35 | 320 | 190 | 790 | 2300 | 110 | 210 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 5188.45 | 10070 | 84 | 251 | 265 | 2500 | 1707 | 8750 | 24860 | 1060 | 2241 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | 810000 | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-736B | SB-736C | SB-737 | SB-738 | SB-738 | SB-738 | SB-739 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-736B-1 | G-SB-736C-1 | G-SB-737-1 | G-SB-738-2 | G-SB-738-2-AVG | G-SB-738-2-D | G-SB-739-2 |
| SAMPLE DATE | | | | 20091112 | 20091112 | 20091021 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **1255** | **1513** | **123** | 5.8 | 5.1 | 4.5 | **27** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **1253** | **1513** | **123** | 4.8 | 4.3 | 3.7 | **27** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **1200** | **1200** | 74 | 3.3 J | 3.05 | 2.8 J | 15 |
| BENZO(A)PYRENE | 22 | 15 | C | **950** | **1000** | **97** | 3.6 J | 3.2 | 2.8 J | **18** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **1300** | **1400** | 120 | 5.7 J | 4.55 | 3.4 J | 26 |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 550 | 650 | 44 | 1.7 U | 1.475 | 2.1 J | 1.6 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1300 | 1100 | 91 | 3.5 J | 3.35 | 3.2 J | 17 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.4 U | **190** | 1.5 U | 1.8 U | 1.75 U | 1.7 U | 3.8 J |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **460** | **550** | 57 | 3.4 J | 2.9 | 2.4 J | 11 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 5760 | 6090 | 483 | 19.5 | 18.1 | 16.7 | 90.8 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | G-TP-1 | G-TP-1 | G-TP-2 | G-TP-2 | G-TP-2 | G-TP-2 | G-TP-2 | SB-091 | SB-091 | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-TP-1-3-1-2 | G-TP-1-4-1-2 | G-TP-2-1-1-3 | G-TP-2-2-1-3 | G-TP-2-4-1-3 | G-TP-2-6-1-2 | G-TP-2-7-1-2 | G-SB-91RE-1 | G-SB-91RE-2 | G-SB-91REA-1 | G-SB-91REB-1 |
| SAMPLE DATE | | | | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20090930 | 20090930 | 20091030 | 20091102 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | | | | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 1 | 2 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 35 U | NA | 4.2 U | NA | 4.2 U | 13 U | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 460 | NA | 4.2 U | NA | 4.2 U | 13 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 340 | NA | 4.2 U | NA | 4.2 U | 13 U | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | 1200 | NA | 4.2 U | NA | 4.2 U | 140 | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 2800 | NA | 4.2 U | NA | 10 | 270 | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 11699 | NA | 4.2 U | NA | 58 | 1283 | NA | 13342 | 107 | 62 | 1.4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 11699 | NA | 4.2 U | NA | 58 | 1283 | NA | 13342 | 107 | 61 | 1.4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 11000 | NA | 4.2 U | NA | 32 | 910 | NA | 6500 | 36 | 31 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 7500 J | NA | 4.2 U | NA | 46 J | 820 J | NA | 9300 | 64 | 47 | 1.4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 10000 | NA | 4.2 U | NA | 35 | 940 | NA | 11000 | 65 | 70 | 1.3 U |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | 5600 | NA | 4.2 U | NA | 26 | 690 | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4800 | NA | 4.2 U | NA | 4.2 U | 420 | NA | 3400 | 26 | 20 | 1.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 41000 J | NA | 82 U | NA | NA | 1100 J | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | 47000 J | NA | 82 U | NA | NA | 1200 J | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | 1200 J | NA | 82 U | NA | NA | 87 U | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 33000 J | NA | 82 U | NA | NA | 820 J | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 20000 J | NA | 82 U | NA | NA | 590 J | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | 3800 J | NA | 82 U | NA | NA | 87 U | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | 1800 J | NA | 82 U | NA | NA | 87 U | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 31000 J | NA | 82 U | NA | NA | 770 J | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 7000 J | NA | 82 U | NA | NA | 210 J | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | 7200 J | NA | 82 U | NA | NA | 200 J | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | 4000 J | NA | 82 U | NA | NA | 87 U | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 17000 J | NA | 82 U | NA | NA | 450 J | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 3000 J | NA | 82 U | NA | NA | 92 J | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | 4100 J | NA | 82 U | NA | NA | 92 J | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 5900 J | NA | 82 U | NA | NA | 160 J | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 11000 | NA | 1.4 U | NA | 39 | 1000 | NA | 8200 | 42 | 42 | 0.99 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1600 J | NA | 4.2 U | NA | 4.2 U | 220 J | NA | 1700 | 27 | 1.5 U | 1.4 U |
| FLUORANTHENE | 310000 | 230000 | N | 20000 | NA | 4.2 U | NA | 48 | 1400 | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 600 | NA | 4.2 U | NA | 4.2 U | 13 U | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4400 J | NA | 4.2 U | NA | 34 J | 530 J | NA | 5500 | 56 | 38 | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | 660 | NA | 4.2 U | NA | 4.2 U | 53 | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | 12000 | NA | 4.2 U | NA | 25 | 570 | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 28000 | NA | 9.4 | NA | 71 | 2300 | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 121960 | NA | 9.4 | NA | 366 | 10263 | NA | 45600 | 316 | 248 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-091C G-SB-91REC-1 20091102 NORMAL SO NORMAL SB 1 1 | SB-092 G-SB-92RE-1 20090929 NORMAL SO NORMAL SB 1 1 | SB-092 G-SB-92RE-2 20090929 NORMAL SO NORMAL SB 2 2 | SB-092C G-SB-92REC-1 20091102 NORMAL SO NORMAL SB 1 1 | SB-092D G-SB-92RED-1 20091102 ORIG SO NORMAL SB 1 1 | SB-092D G-SB-92RED-1-AVG 20091102 AVG SO NORMAL SB 1 1 | SB-092D G-SB-92RED-1-D 20091102 DUP SO NORMAL SB 1 1 | SB-183 SB-183-SS 20041102 NORMAL SO NORMAL SS 0 0 | SB-194 SB-194-SS 20050511 NORMAL SO NORMAL SS 0 1 | SB-195 SB-195-SS 20050510 NORMAL SO NORMAL SS 0 1 | SB-196 SB-196-SS 20050511 NORMAL SO NORMAL SS 0 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 1 J | 2 U |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.5 | 2 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 1.2 J | 2 U |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 3.36 J | 14.5 | 4.16 J |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 30.5 J | 128 J | 29.3 J |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 1.8 J | 2.1 J | 2 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | 4.1 U | 4.8 U | 3.9 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | 1 U | 2.1 U | 2.4 U | 2 U |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 2.4 U | 2 U |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | 1 U | 1.6 J | 3.6 | 0.79 J |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | 2.1 U | 1.3 J | 2 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 40.9 B | 174 J | 49.6 B |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 187 U | 200 U | 185 U |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 374 U | 399 U | 371 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | 77.1 U | 82.2 U | 76.3 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 J |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 36 J | 82 U | 100 |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **229** | **65** | **71** | **21** | **22** | **29** | **36** | NA | **516** | **112** | **1242** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **229** | **64** | **70** | **20** | **21** | **28** | **35** | NA | **516** | **67** | **1242** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 48 | 52 | 14 | 19 | 20.5 | 22 | NA | **335** | 43 J | **757** |
| BENZO(A)PYRENE | 22 | 15 | C | **160** | **50** | **56** | **16** | **19** | **23.5** | **28** | NA | **382** | **56 J** | **949** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **180** | 61 | 54 | 19 | 1.3 UJ | 15.325 | 30 J | NA | **314** | 62 J | **838** |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | 150 | 82 U | 273 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 62 | 22 | 29 | 2 U | 1.9 U | 5.975 | 11 | NA | 402 | 82 U | 1070 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 62 | 51 | 57 | 14 | 22 | 23 | 24 | NA | 423 | 58 J | 933 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **33** | 1.5 U | 1.5 U | 1.6 U | 1.4 U | 1.45 U | 1.5 U | NA | **50 J** | 82 U | **93** |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 504 | 82 J | 1140 |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 120 | 27 | 31 | 10 | 1.6 UJ | 9.9 | 19 J | NA | 143 | 82 U | **264** |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | 77 U | 82 U | 76 U |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | 109 | 30 J | 291 |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | 682 | 91 | 1720 |
| TOTAL PAHS | NC | NC | | 622 | 259 | 279 | 73 | 60 | 97 | 134 | NA | 3530 | 422 | 8506 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | 36 U | 38 U | 35 U |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | 36 U | 38 U | 13 J |
| TOTAL AROCLOR | 320 [8] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | 0 U | 0 U | 13 |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | 0.6 L | 2 | 0.9 L |
| ARSENIC | 0.43 | 0.39 | C | NA | **5.4** | **3.3** | NA | NA | NA | NA | NA | 2 B | 2 B | 1 B |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | 34 | 55 | 22 |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | 0.6 | 0.7 | 0.3 |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | 0.1 B | 0.2 B | 0.2 B |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | 11.2 | 14.7 | 11.4 |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | **7.2** | **15.8** | **3.2** |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | 6 | 9 | 5 |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | 5 | 8 | 4 |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | 0.02 | 0.02 | 0.02 |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | 11 | 11 | 5 |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | 2 U | 2 U | 2 U |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | **20.2** | **25.7** | **20.9** |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | 26 | 32 | 16 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | 12000 U | 77200 | 29600 | 114000 |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 10700 U | 12500 U | 9600 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 7.1 | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-197 | SB-198 | SB-199 | SB-740 | SB-741 | SB-742 | SB-743 | SB-744 | SB-745 | SB-745A | SB-745B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-197-SS | SB-198-SS | SB-199-SS | G-SB-740-2 | G-SB-741-2 | G-SB-742-2 | G-SB-743-2 | G-SB-744-2 | G-SB-745-2 | G-SB-745A-2 | G-SB-745B-2 |
| SAMPLE DATE | | | | 20050511 | 20050511 | 20050511 | 20091008 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SS | SS | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 0 | 0 | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 1.5 J | 2.2 U | 0.83 J | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 5.52 J | 10.9 | 9 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 62.9 J | 105 J | 10.4 J | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 2.7 | 1.6 J | 6.2 | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 4.7 U | 4.4 U | 4.5 U | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 2.3 U | 2.2 U | 2.9 | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | 2.3 U | 2.2 U | 2.2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 2 J | 2.2 U | 1.6 J | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | 1.1 J | 2.2 U | 0.65 J | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | 74.4 B | 80.2 B | 40.9 B | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 207 U | 190 U | 186 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | 414 U | 380 U | 372 U | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 85.3 U | 78.2 U | 76.5 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 85 U | 78 U | 77 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 85 U | 78 U | 77 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | 85 U | 78 U | 77 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 85 U | 27 J | 44 J | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 115 | 226 | 186 | 2.1 U | 2.3 | 11 | 59 | 71 | 277 | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 73 | 187 | 147 | 2.1 U | 0.19 | 9.6 | 59 | 71 | 277 | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 56 J | 117 | 142 | 1.2 U | 1.3 U | 5.7 J | 33 | 46 | 200 | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 59 J | 154 | 117 | 2.1 U | 2.3 U | 7.4 J | 40 | 49 | 180 | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 39 J | 111 | 89 | 1.5 U | 1.9 J | 11 | 46 | 61 | 310 | 1.5 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | 51 J | 92 | 62 J | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 52 J | 130 | 111 | 1.6 U | 1.7 U | 1.7 U | 19 | 21 | 7.9 U | 2.1 U | 1.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 66 J | 153 | 164 | 1.3 U | 1.4 U | 7.2 J | 37 | 46 | 210 | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 85 U | 78 U | 77 U | 1.6 U | 1.8 U | 1.8 U | 8.1 | 7.5 J | 35 J | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | 92 | 212 | 297 | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 85 U | 78 U | 21 J | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 38 J | 86 | 61 J | 0.41 U | 0.45 U | 5.6 J | 24 | 31 | 100 | 1.8 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | 85 U | 78 U | 77 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | 26 J | 46 J | 280 | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 95 | 214 | 332 | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 574 | 1342 | 1720 | 0 U | 1.9 | 36.9 | 207.1 | 261.5 | 1036 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[7] | 40 U | 12 J | 37 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | 40 U | 36 U | 37 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[8] | 0 U | 12 | 0 U | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 1 L | 0.7 L | 1 L | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 5 | 2 B | 3 B | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | 74 | 39 | 33 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 1.3 | 0.5 | 0.5 | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 0.3 B | 0.2 B | 0.1 B | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | 19.8 | 13.1 | 13.8 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | 51.2 | 5.8 | 7.6 | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 10 | 7 | 6 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 13 | 11 | 5 | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | 0.02 | 0.04 | 0.02 | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 18 | 8 | 6 | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 2 U | 2 U | 2 U | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | 39.2 | 22.2 | 26.2 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 45 | 23 | 20 | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 32200 | 163000 | 139000 | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 11600 U | 10500 U | 10100 U | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-745C G-SB-745C-2 20091021 NORMAL SO NORMAL SB 2 2 | SB-746 G-SB-746-2 20091009 NORMAL SO NORMAL SB 2 2 | SB-747 G-SB-747-2 20091009 ORIG SO NORMAL SB 2 2 | SB-747 G-SB-747-2-AVG 20091009 AVG SO NORMAL SB 2 2 | SB-747 G-SB-747-2-D 20091009 DUP SO NORMAL SB 2 2 | SB-748 G-SB-748-2 20091009 NORMAL SO NORMAL SB 2 2 | SB-749 G-SB-749-2 20091021 NORMAL SO NORMAL SB 2 2 | SB-750 G-SB-750-2 20091021 NORMAL SO NORMAL SB 2 2 | SB-751 G-SB-751-2 20091021 NORMAL SO NORMAL SB 2 2 | SB-752 G-SB-752-2 20091021 NORMAL SO NORMAL SB 2 2 | SB-753 G-SB-753-2 20091021 NORMAL SO NORMAL SB 2 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | | | | | | | | | | |
| SAMPLE DATE | | | | | | | | | | | | | | |
| SAMPLE CODE | | | | | | | | | | | | | | |
| MATRIX | | | | | | | | | | | | | | |
| SAMPLE TYPE | | | | | | | | | | | | | | |
| SUBMATRIX | | | | | | | | | | | | | | |
| TOP DEPTH | | | | | | | | | | | | | | |
| BOTTOM DEPTH | | | | | | | | | | | | | | |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 2661 | 140 | 2.2 U | 53 | 105 | 2.2 U | 2.5 | 1.5 U | 1.5 U | 18 | 17 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 2661 | 140 | 2.2 U | 53 | 105 | 2.2 U | 0.81 | 1.5 U | 1.5 U | 18 | 16 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1800 | 95 | 1.2 UJ | 25.3 | 50 J | 1.3 U | 1.1 U | 1.1 U | 1.1 U | 13 | 15 |
| BENZO(A)PYRENE | 22 | 15 | C | 1800 | 93 | 2.2 UJ | 32.55 | 64 J | 2.2 U | 1.5 U | 1.5 U | 1.5 U | 14 | 13 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 2300 | 150 | 1.6 UJ | 55.4 | 110 J | 1.6 U | 8.1 | 1.4 U | 1.3 U | 15 | 17 |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 930 | 1.6 U | 1.6 U | 1.65 U | 1.7 U | 1.6 U | 2 U | 2 U | 1.9 U | 1.9 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1600 | 92 | 1.3 UJ | 29.325 | 58 J | 1.4 U | 1.1 U | 1 U | 1 U | 14 | 14 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 340 | 17 | 1.7 UJ | 9.925 | 19 J | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1000 | 57 | 0.42 UJ | 29.105 | 58 J | 0.43 U | 1.8 U | 1.7 U | 1.7 U | 9.3 | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 9770 | 504 | 0 U | 179.5 | 359 | 0 U | 8.1 | 0 U | 0 U | 65.3 | 59 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | 31 J | 34 J | 39 J |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-754 G-SB-754-2 20091021 NORMAL SO NORMAL SB 2 2 | SB-755 G-SB-755-2 20091103 NORMAL SO NORMAL SB 2 2 | SB-756 G-SB-756-2 20091103 NORMAL SO NORMAL SB 2 2 | SB-757 G-SB-757-2 20091103 NORMAL SO NORMAL SB 2 2 | SB-758 G-SB-758-2 20091103 NORMAL SO NORMAL SB 2 2 | SB-759 G-SB-759-1 20091113 NORMAL SO NORMAL SB 1 1 | SB-760 G-SB-760-1 20091113 NORMAL SO NORMAL SB 1 1 | SB-761 G-SB-761-1 20090930 NORMAL SO NORMAL SB 1 1 | SB-761A G-SB-761A-1 20091022 NORMAL SO NORMAL SB 1 1 | SB-761B G-SB-761B-1 20091022 NORMAL SO NORMAL SB 1 1 | SB-761C G-SB-761C-1 20091022 NORMAL SO NORMAL SB 1 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | 1.6 U | 6012 | 1.6 U | 3202 | 112 | 1252 | 751 | 11 | 214 | 131 | 37081 |
| BAP EQUIVALENT-POS | 22 | | 15 | C | 1.6 U | 6012 | 1.6 U | 3202 | 112 | 1252 | 751 | 10 | 214 | 131 | 37081 |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | 1.2 U | 4300 | 1.1 U | 2200 | 50 | 860 | 450 | 9.7 | 110 | 110 | 34000 |
| BENZO(A)PYRENE | 22 | | 15 | C | 1.6 U | 4100 | 1.6 U | 2200 | 78 | 810 | 510 | 8.3 | 150 | 89 | 24000 |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | 1.5 U | 5700 | 1.4 U | 2800 | 92 | 960 | 700 | 9.6 | 140 | 95 | 27000 |
| BENZO(B+K)FLUORANTHENE | 220 | [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | 2.1 U | 1800 | 2 U | 930 | 40 | 440 | 250 | 1.9 U | 61 | 43 | 14000 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | | 15000 | C | 1.1 U | 4100 | 1.1 U | 2400 | 54 | 890 | 470 | 9.3 | 130 | 130 | 41000 |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | 1.6 U | 660 | 1.6 U | 370 | 14 | 200 | 95 | 1.5 U | 29 | 16 | 5300 |
| FLUORANTHENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | 1.8 U | 2300 | 1.8 U | 1200 | 51 | 550 | 280 | 1.7 U | 97 | 51 | 15000 |
| NAPHTHALENE | 160000 | | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | | NC | | 0 U | 22960 | 0 U | 12100 | 379 | 4710 | 2755 | 36.9 | 717 | 534 | 160300 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 | [8] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 | [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 | [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | 170000 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | | |
| PH | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-761D G-SB-761D-1 20091022 NORMAL SO NORMAL SB 1 1 | SB-762 G-SB-762-1 20091001 NORMAL SO NORMAL SB 1 1 | SB-762A G-SB-762A-1 20091022 NORMAL SO NORMAL SB 1 1 | SB-762B G-SB-762B-1 20091023 NORMAL SO NORMAL SB 1 1 | SB-762C G-SB-762C-1 20091022 NORMAL SO NORMAL SB 1 1 | SB-762D G-SB-762D-1 20091022 NORMAL SO NORMAL SB 1 1 | SB-763 G-SB-763-1 20091001 NORMAL SO NORMAL SB 1 1 | SB-763A G-SB-763A-1 20091023 NORMAL SO NORMAL SB 1 1 | SB-763B G-SB-763B-1 20091027 NORMAL SO NORMAL SB 1 1 | SB-763C G-SB-763C-1 20091023 NORMAL SO NORMAL SB 1 1 | SB-763D G-SB-763D-1 20091023 NORMAL SO NORMAL SB 1 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 38270 | 1.6 U | 461 | 1.5 U | 76 | 67 | 13 | 740 | 83 | 198 | 71 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 38270 | 1.6 U | 461 | 1.5 U | 75 | 66 | 12 | 740 | 83 | 198 | 70 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 31000 | 1.1 U | 310 | 1.1 U | 73 | 43 | 9.1 | 500 | 52 | 130 | 49 |
| BENZO(A)PYRENE | 22 | 15 | C | 27000 | 1.6 U | 320 | 1.5 U | 58 | 53 | 8.4 | 530 | 67 | 140 | 54 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 27000 | 1.4 U | 360 | 1.4 U | 61 | 56 | 9.4 | 600 | 65 | 160 | 75 |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 13000 | 2 U | 140 | 2 U | 31 | 24 | 2.1 U | 260 | 35 | 72 | 34 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 40000 | 1.1 U | 340 | 1 U | 78 | 48 | 11 | 540 | 61 | 150 | 62 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3900 | 1.6 U | 53 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 63 | 1.5 U | 20 | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 14000 | 1.8 U | 140 | 1.7 U | 31 | 28 | 19 | 280 | 36 | 79 | 32 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 155900 | 0 U | 1668 | 0 U | 332 | 252 | 56.9 | 2779 | 316 | 751 | 306 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-764 G-SB-764-1 20091002 NORMAL SO NORMAL SB 1 1 | SB-764A G-SB-764A-1 20091027 NORMAL SO NORMAL SB 1 1 | SB-764B G-SB-764B-1 20091113 NORMAL SO NORMAL SB 1 1 | SB-764C G-SB-764C-1 20091027 NORMAL SO NORMAL SB 1 1 | SB-764D G-SB-764D-1 20091027 NORMAL SO NORMAL SB 1 1 | SB-765 G-SB-765-1 20091002 NORMAL SO NORMAL SB 1 1 | SB-765A G-SB-765A-1 20091028 NORMAL SO NORMAL SB 1 1 | SB-765B G-SB-765B-1 20091113 NORMAL SO NORMAL SB 1 1 | SB-765C G-SB-765C-1 20091028 NORMAL SO NORMAL SB 1 1 | SB-765D G-SB-765D-1 20091028 NORMAL SO NORMAL SB 1 1 | SB-803 G-SB-803-SS 20100826 NORMAL SO NORMAL SS 0 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 27 | 580 | 21 | 26405 | 38666 | 2.5 | 619 | 53 | 318 | 38 | 3.9 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 26 | 580 | 20 | 26405 | 38666 | 0.81 | 619 | 53 | 318 | 37 | 3.9 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 370 | 12 | 19000 | 24000 | 1.1 U | 460 | 30 | 170 | 11 | 3.9 U |
| BENZO(A)PYRENE | 22 | 15 | C | 23 | 390 | 14 | 18000 | 27000 | 1.5 U | 410 | 41 | 210 | 30 | 3.9 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 26 | 430 | 25 | 20000 | 28000 | 8 | 470 | 42 | 230 | 33 | 3.9 U |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 170 | 11 | 8300 | 14000 | 1.9 U | 170 | 25 | 77 | 1.9 U | 3.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1 U | 400 | 14 | 22000 | 26000 | 8.9 | 540 | 40 | 220 | 12 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 89 | 1.5 U | 3300 | 4600 | 1.5 U | 68 | 1.6 U | 53 | 1.5 U | 3.9 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 190 | 25 | 11000 | 17000 | 1.7 U | 260 | 41 | 140 | 26 | 3.9 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| TOTAL PAHS | NC | NC | | 49 | 2039 | 101 | 101600 | 140600 | 16.9 | 2398 | 219 | 1100 | 112 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-804 G-SB-804-SS 20100823 NORMAL SO NORMAL SS 0 1 | SB-805 G-SB-805-SS 20100824 NORMAL SO NORMAL SS 0 1 | SB-806 G-SB-806-SS 20100824 NORMAL SO NORMAL SS 0 1 | SB-807 G-SB-807-SS 20100825 NORMAL SO NORMAL SS 0 1 | SB-808 G-SB-808-SS 20100825 NORMAL SO NORMAL SS 0 1 | SB-809 G-SB-809-SS 20100825 NORMAL SO NORMAL SS 0 1 | SB-810 G-SB-810-SS 20100823 NORMAL SO NORMAL SS 0 1 | SB-811 G-SB-811-SS 20100823 NORMAL SO NORMAL SS 0 1 | SB-812 G-SB-812-SS 20100824 NORMAL SO NORMAL SS 0 1 | SB-813 G-SB-813-SS 20100826 NORMAL SO NORMAL SS 0 1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 3.9 U | 3.8 U | 140 | 3.8 U | 3.4 U | 3.7 U | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.9 U | 3.8 U | 220 | 3.8 U | 3.4 U | 3.7 U | 4.4 U | 3.9 U | 9.2 | 3.8 U |
| ACENAPHTHENE | 470000 | 340000 | N | 3.9 U | 3.8 U | 300 J | 3.8 U | 3.4 UJ | 3.7 U | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | 3.9 U | 3.8 U | 750 | 3.8 U | 3.4 U | 3.7 U | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| ANTHRACENE | 2300000 | 1700000 | N | 3.9 U | 3.8 U | 1500 J | 3.8 U | 27 | 3.7 U | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 3.9 U | 3.8 U | 5726 | 20 | 351 | 16 | 4.4 U | 14 | 37 | 3.8 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3.9 U | 3.8 U | 5707 | 18 | 351 | 14 | 4.4 U | 11 | 35 | 3.8 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.9 U | 3.8 U | 4600 | 12 | 160 | 10 | 4.4 U | 8.8 | 3.9 U | 3.8 U |
| BENZO(A)PYRENE | 22 | 15 | C | 3.9 U | 3.8 U | 4400 J | 14 | 240 | 11 | 4.4 U | 9.3 | 32 J | 3.8 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3.9 U | 3.8 U | 5900 J | 14 | 230 | 16 | 4.4 U | 12 | 27 J | 3.8 U |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | 3.9 U | 3.8 U | 3000 J | 14 | 250 | 13 | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.9 U | 3.8 U | 2200 J | 8 | 100 | 3.7 U | 4.4 U | 3.9 U | 30 J | 3.8 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 260 J |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 270 J |
| C1-FLUORENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 130 J |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 140 J |
| C2-FLUORENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C2-NAPHTHALENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 160 J |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C3-FLUORENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C3-NAPHTHALENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 100 J |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C4-NAPHTHALENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 77 U | NA | 76 U | NA | 74 U | 90 U | NA | 79 U | 76 U |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 1.3 U | 4800 | 15 | 200 | 18 | 1.5 U | 10 | 25 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.9 U | 3.8 U | 38 U | 3.8 U | 54 | 3.7 U | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| FLUORANTHENE | 310000 | 230000 | N | 3.9 U | 3.8 U | 6300 J | 16 | 180 | 13 | 4.4 U | 13 | 50 J | 22 J |
| FLUORENE | 310000 | 230000 | N | 3.9 U | 3.8 U | 390 J | 3.8 U | 3.4 U | 3.7 U | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.9 U | 3.8 U | 2300 J | 10 | 170 | 7.5 | 4.4 U | 3.9 U | 3.9 U | 3.8 U |
| NAPHTHALENE | 160000 | 3600 | C | 3.9 U | 3.8 U | 290 | 3.8 U | 7.3 | 3.7 U | 4.4 U | 3.9 U | 7.9 | 3.8 U |
| PHENANTHRENE | 2300000 | 170000 | N[6] | 3.9 U | 3.8 U | 2900 J | 3.8 U | 28 | 3.7 U | 4.4 U | 3.9 U | 32 J | 3.8 U |
| PYRENE | 230000 | 170000 | N | 3.9 U | 3.8 U | 12000 | 27 | 420 | 17 | 4.4 U | 17 | 35 | 12 |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 51850 | 130 | 2066.3 | 105.5 | 0 U | 70.1 | 248.1 | 34 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-086 | SB-091 | SB-092 | SB-254 | SB-254 | SB-254 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | | SB-81-SS | SB-82-SS | SB-83-SS | SB-84-SS | SB-85-SS | SB-86-SS | SB-91-SS | SB-92-SS | SB-254-SS[12] | SB-254-SS[18] | SB-254-SS[6] |
| SAMPLE DATE | | | | | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20040927 | 20040927 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | | SS | SS | SS | SS | SS | SS | SS | SS | SB | SB | SS |
| TOP DEPTH | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.5 | 0.5 |
| BOTTOM DEPTH | | | | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1.5 | 0.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | | 3300 | C | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | | 24000 | N | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | | 6200 | N | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| 2-BUTANONE | 4700000 | | 2800000 | N | 64 UJ | 62 UJ | 60 UJ | 58 UJ | 58 UJ | 60 UL | 58 UL | 54 UL | NA | NA | NA |
| ACETONE | 7000000 | | 6100000 | N | 64 UJ | 62 UJ | 60 UJ | 77 J | 58 UJ | 60 UL | 58 UL | 54 UL | NA | NA | NA |
| CARBON DISULFIDE | 780000 | | 82000 | N | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | | 210000 | N | 6 UJ | 6 UJ | 6 UJ | 47 J | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | | 11000 | C | 6 UJ | 7 J | 6 UJ | 6 UJ | 6 UJ | 6 J | 6 UL | 5 UL | NA | NA | NA |
| NAPHTHALENE | 160000 | | 3600 | C | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 J | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| N-PROPYLBENZENE | NC | | 340000 | N | 6 UJ | 6 UJ | 6 UJ | 7 J | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| TOLUENE | 630000 | | 500000 | N | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| TRICHLOROETHENE | 1600 | | 2800 | C | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 6 UL | 6 UL | 5 UL | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | | NC | | 430 U | 2100 U | 400 U | 250 J | 320 J | 2000 UJ | 2000 U | 1800 U | NA | NA | NA |
| PHENOL | 2300000 | | 1800000 | N | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 940 J | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | | 31000 | N | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 260 J | 1800 U | NA | NA | NA |
| ACENAPHTHENE | 470000 | | 340000 | N | 430 U | 2100 U | 400 U | 320 J | 300 J | 2000 UJ | 640 J | 240 J | 77 U | 75 U | 77 U |
| ACENAPHTHYLENE | 470000 | | 340000 | N[6] | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 2000 U | 1800 U | 77 U | 75 U | 77 U |
| ANTHRACENE | 2300000 | | 1700000 | N | 430 U | 2100 U | 400 U | 780 J | 730 J | 2000 UJ | 2300 K | 950 J | 77 U | 75 U | 77 U |
| BAP EQUIVALENT-HALFND | 22 | | 15 | | 378 | 2100 U | 400 U | 5264 | 4984 | 1785 | 38001 | 20536 | 104 | 77 | 213 |
| BAP EQUIVALENT-POS | 22 | | 15 | C | 141 | 2100 U | 400 U | 5264 | 4984 | 685 | 38001 | 20536 | 66 | 32 | 174 |
| BENZO(A)ANTHRACENE | 220 | | 150 | C | 91 J | 2100 U | 400 U | 3100 J | 2900 J | 550 J | 27000 J | 13000 J | 44 J | 24 J | 111 |
| BENZO(A)PYRENE | 22 | | 15 | C | 110 J | 2100 U | 400 U | 3400 J | 3100 J | 530 J | 24000 J | 13000 J | 53 J | 29 J | 144 |
| BENZO(B)FLUORANTHENE | 220 | | 150 | C | NA | NA | NA | NA | NA | NA | 22000 J | 10000 J | 42 J | 75 U | 128 |
| BENZO(B+K)FLUORANTHENE | 220 | [5] | 150 | C[5] | 220 J | 2100 U | 400 U | 7200 J | 6700 J | 990 J | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | | 170000 | N[6] | 430 UJ | 2100 U | 400 U | 1600 J | 1500 J | 2000 UJ | 24000 J | 15000 J | 49 J | 75 U | 44 J |
| BENZO(K)FLUORANTHENE | 2200 | | 1500 | C | NA | NA | NA | NA | NA | NA | 17000 J | 12000 J | 47 J | 29 J | 146 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | | 15000 | C | 130 J | 2100 U | 400 U | 3600 J | 3700 J | 600 J | 31000 J | 16000 J | 58 J | 34 J | 143 |
| DIBENZO(A,H)ANTHRACENE | 22 | | 15 | C | 430 UJ | 2100 U | 400 U | 680 J | 780 J | 2000 UJ | 7200 J | 4100 J | 77 U | 75 U | 77 U |
| FLUORANTHENE | 310000 | | 230000 | N | 190 J | 220 J | 400 U | 5900 J | 5600 J | 1200 J | 21000 K | 10000 | 63 J | 37 J | 158 |
| FLUORENE | 310000 | | 230000 | N | 430 U | 2100 U | 400 U | 270 J | 380 J | 2000 UJ | 490 J | 1800 U | 77 U | 75 U | 77 U |
| INDENO(1,2,3-CD)PYRENE | 220 | | 150 | C | 430 UJ | 2100 U | 400 U | 1500 J | 1400 J | 2000 UJ | 17000 J | 10000 J | 38 J | 75 U | 49 J |
| NAPHTHALENE | 160000 | | 3600 | C | 430 U | 2100 U | 400 U | 1900 U | 1900 U | 2000 UJ | 380 J | 230 J | 77 U | 75 U | 77 U |
| PHENANTHRENE | 2300000 | | 170000 | N[6] | 110 J | 2100 U | 400 U | 2800 J | 3800 J | 800 J | 13000 K | 5500 | 77 U | 75 U | 77 U |
| PYRENE | 230000 | | 170000 | N | 200 J | 2100 U | 400 U | 4600 J | 6900 J | 1000 J | 55000 J | 27000 J | 66 J | 30 J | 185 |
| TOTAL PAHS | NC | | NC | | 1051 | 220 | 0 U | 35750 | 37790 | 5670 | 262270 | 137020 | 460 | 183 | 1108 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | | 110 | N[7] | 330 U | 310 U | 290 U | 280 U | 290 U | 300 UJ | 290 U | 260 U | NA | NA | 36 U |
| AROCLOR-1260 | 320 | | 220 | C | 330 U | 310 U | 290 U | 280 U | 290 U | 410 J | 780 | 260 U | NA | NA | 11 J |
| TOTAL AROCLOR | 320 | [8] | 220 | C[9] | 0 U | 0 U | 0 U | 0 U | 0 U | 410 | 780 | 0 U | NA | NA | 11 |
| **METALS (MG/KG)** | | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | | 3.1 | N | 3.2 UL | 2.6 UL | 2.8 U | 2.5 U | 3.9 L | 2.6 UL | 2.5 UL | 2.7 UL | NA | NA | NA |
| ARSENIC | 0.43 | | 0.39 | C | 3.6 | 2 | 0.93 | 2.7 | 3 | 3.2 | 2.1 | 37 | NA | NA | NA |
| BARIUM | 1600 | | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | | 16 | N | 3.2 U | 2.6 U | 2.8 U | 2.5 U | 2.3 U | 2.6 U | 5.4 | 4.1 | NA | NA | NA |
| CADMIUM | 3.9 | | 7 | N | 3.2 UL | 2.6 UL | 2.8 U | 2.5 U | 14 | 5.7 | 2.5 U | 2.7 U | NA | NA | NA |
| CHROMIUM | 12000 | [10] | 12000 | N[10] | 21 | 21 | 15 | 19 | 48 | 30 | 25 J | 34 J | NA | NA | NA |
| COBALT | NC | | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | | 310 | N | 14 | 16 | 12 | 20 | 45 | 28 | 15 J | 14 J | NA | NA | NA |
| LEAD | 400 | | 400 | | 43 | 47 | 6.5 | 210 | 340 | 110 J | 60 K | 93 K | NA | NA | NA |
| MERCURY | 2.3 | [11] | 2.3 | N[12] | 0.22 | 0.23 | 0.11 U | 4.2 | 1.4 | 0.41 | 0.1 U | 0.11 U | NA | NA | NA |
| NICKEL | 160 | | 150 | N | 12 | 13 | 14 | 7.9 | 13 | 280 J | 21 K | 270 K | NA | NA | NA |
| SELENIUM | 39 | | 39 | N | 3.2 U | 2.6 U | 2.8 U | 2.5 U | 2.3 U | 2.6 UL | 4.7 | 3.7 | NA | NA | NA |
| VANADIUM | 7.8 | | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | | 2300 | N | 64 | 73 | 41 K | 93 | 170 | 290 | 84 | 120 | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | | NC | | 12000 U | 12000 UJ | 12000 U | 12000 | 11000 U | 120000 J | 23000 | 12000 | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | | NC | | 130 U | 120 U | 120 U | 15000 | 340 | 120 UJ | 120 U | 110 U | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | | |
| PH | NC | | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-255 | SB-255 | SB-255 | SB-256 | SB-256 | SB-256 | SB-257 | SB-257 | SB-257 | SB-258 | SB-258 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-255-SS[12] | SB-255-SS[18] | SB-255-SS[6] | SB-256-SS[12] | SB-256-SS[18] | SB-256-SS[6] | SB-257-SS[12] | SB-257-SS[18] | SB-257-SS[6] | SB-258-SS[12] | SB-258-SS[18] |
| SAMPLE DATE | | | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SS | SB | SB | SS | SB | SB | SS | SB | SB |
| TOP DEPTH | | | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 |
| BOTTOM DEPTH | | | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | 78 U | 74 U | 76 U | 77 U | 76 U | 79 U | 86 U | 77 U | 79 U | 82 U | 82 U |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | 78 U | 74 U | 76 U | 77 U | 76 U | 79 U | 86 U | 77 U | 79 U | 82 U | 82 U |
| ANTHRACENE | 2300000 | 1700000 N | 78 U | 74 U | 51 J | 77 U | 76 U | 79 U | 86 U | 77 U | 79 U | 82 U | 82 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | 90 | 74 U | 1339 | 77 U | 76 U | 95 | 86 U | 77 U | 157 | 82 U | 82 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 0.022 | 74 U | 1339 | 77 U | 76 U | 51 | 86 U | 77 U | 117 | 82 U | 82 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 78 U | 74 U | 629 | 77 U | 76 U | 23 J | 86 U | 77 U | 66 J | 82 U | 82 U |
| BENZO(A)PYRENE | 22 | 15 C | 78 U | 74 U | 937 | 77 U | 76 U | 45 J | 86 U | 77 U | 88 | 82 U | 82 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 78 U | 74 U | 688 | 77 U | 76 U | 39 J | 86 U | 77 U | 95 | 82 U | 82 U |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | 78 U | 74 U | 832 | 77 U | 76 U | 79 U | 86 U | 77 U | 79 | 82 U | 82 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 78 U | 74 U | 673 | 77 U | 76 U | 24 J | 86 U | 77 U | 76 J | 82 U | 82 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 22 J | 74 U | 827 | 77 U | 76 U | 27 J | 86 U | 77 U | 76 J | 82 U | 82 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 78 U | 74 U | 205 | 77 U | 76 U | 79 U | 86 U | 77 U | 79 U | 82 U | 82 U |
| FLUORANTHENE | 310000 | 230000 N | 78 U | 74 U | 792 | 77 U | 76 U | 30 J | 86 U | 77 U | 97 | 82 U | 82 U |
| FLUORENE | 310000 | 230000 N | 78 U | 74 U | 76 U | 77 U | 76 U | 79 U | 86 U | 77 U | 79 U | 82 U | 82 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 78 U | 74 U | 578 | 77 U | 76 U | 79 U | 86 U | 77 U | 123 | 82 U | 82 U |
| NAPHTHALENE | 160000 | 3600 C | 78 U | 74 U | 76 U | 77 U | 76 U | 79 U | 86 U | 77 U | 79 U | 82 U | 82 U |
| PHENANTHRENE | 2300000 | 170000 N[6] | 78 U | 74 U | 192 | 77 U | 76 U | 79 U | 86 U | 77 U | 26 J | 82 U | 82 U |
| PYRENE | 230000 | 170000 N | 39 J | 74 U | 1480 | 26 J | 76 U | 45 J | 86 U | 77 U | 89 | 82 U | 82 U |
| TOTAL PAHS | NC | NC | 61 | 0 U | 7884 | 26 | 0 U | 233 | 0 U | 0 U | 815 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 N[7] | NA | NA | 34 U | NA | NA | 37 U | NA | NA | 37 U | NA | NA |
| AROCLOR-1260 | 320 | 220 C | NA | NA | 8.2 J | NA | NA | 37 U | NA | NA | 18 J | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | NA | NA | 8.2 | NA | NA | 0 U | NA | NA | 18 | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-258 | SB-259 | SB-259 | SB-259 | SB-260 | SB-260 | SB-260 | SB-261 | SB-261 | SB-261 | SB-410 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-258-SS[6] | SB-259-SS[12] | SB-259-SS[18] | SB-259-SS[6] | SB-260-SS[12] | SB-260-SS[18] | SB-260-SS[6] | SB-261-SS[12] | SB-261-SS[18] | SB-261-SS[6] | SB-410-0102 |
| SAMPLE DATE | | | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20071017 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SS | SB | SB | SS | SB | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | | | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| BOTTOM DEPTH | | | 0.5 | 1 | 1.5 | 1 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | 33 J | 79 U | 78 U | 81 U | 80 U | 386 | 300 U | 84 U | 83 U | 81 U | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[4] | 38 J | 79 U | 78 U | 81 U | 80 U | 378 U | 300 U | 84 U | 564 | 81 U | NA |
| ANTHRACENE | 2300000 | 1700000 N | 119 | 28 J | 54 J | 34 J | 73 J | 1190 | 312 | 84 U | 288 | 81 U | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1072 | 290 | 352 | 461 | 244 | 7481 | 2832 | 144 | 2255 | 134 | 12 |
| BAP EQUIVALENT-POS | 22 | 15 C | 1072 | 290 | 313 | 461 | 204 | 7481 | 2832 | 102 | 2255 | 94 | 12 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 696 | 168 | 233 | 255 | 166 | 4730 | 1820 | 69 J | 441 | 69 J | NA |
| BENZO(A)PYRENE | 22 | 15 C | 821 J | 164 | 247 | 292 | 161 | 5570 J | 2160 J | 80 J | 1600 | 73 J | 12 J |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 924 J | 146 | 197 | 262 | 173 | 6240 J | 2510 J | 93 | 3040 | 91 | NA |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | 175 J | 131 | 158 | 236 | 56 J | 1250 J | 393 J | 40 J | 737 J | 81 U | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 1010 J | 169 | 247 | 277 | 173 | 6090 J | 2410 J | 87 | 1710 | 94 | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 847 | 190 | 257 | 296 | 183 | 5080 | 2030 | 79 J | 2060 | 69 J | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 57 J | 76 J | 78 U | 88 | 80 U | 577 J | 158 J | 84 U | 208 | 81 U | NA |
| FLUORANTHENE | 310000 | 230000 N | 1390 | 367 | 550 | 486 | 401 | 8940 | 3290 | 125 | 383 | 137 | NA |
| FLUORENE | 310000 | 230000 N | 29 J | 79 U | 78 U | 81 U | 28 J | 342 J | 84 J | 84 U | 83 U | 81 U | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 212 J | 167 | 205 | 258 | 69 J | 1710 J | 545 J | 47 J | 795 | 37 J | NA |
| NAPHTHALENE | 160000 | 3600 C | 84 U | 79 U | 78 U | 81 U | 80 U | 378 U | 300 U | 84 U | 83 U | 81 U | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | 471 | 145 | 239 | 180 | 313 | 4550 | 1180 | 29 J | 33 J | 47 J | NA |
| PYRENE | 230000 | 170000 N | 1340 | 343 | 450 | 554 | 302 | 8150 | 3000 | 99 | 862 | 105 | NA |
| TOTAL PAHS | NC | NC | 8162 | 2094 | 2837 | 3218 | 2098 | 54805 | 19892 | 748 | 12721 | 722 | 12 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 N[7] | 39 U | NA | NA | 38 U | NA | NA | 37 U | NA | NA | 38 U | NA |
| AROCLOR-1260 | 320 | 220 C | 1190 J | NA | NA | 101 | NA | NA | 378 | NA | NA | 38 U | NA |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | 1190 | NA | NA | 101 | NA | NA | 378 | NA | NA | 0 U | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 93.3 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-411 | SB-412 | SB-413 | SB-414 | SB-415 | SB-416 | SB-417 | SB-418 | SB-419 | SB-420 | SB-421 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-411-0102 | SB-412-0102 | SB-413-0102 | SB-414-0102 | SB-415-0102 | SB-416-0102 | SB-417-0102 | SB-418-0102 | SB-419-0102 | SB-420-0102 | SB-421-0102 |
| SAMPLE DATE | | | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.6 U | 160 | 140 | 1.4 U | 3000 | 210 | 11 | 13 | 43 | 21 | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.6 U | 160 | 140 | 1.4 U | 3000 | 210 | 11 | 13 | 43 | 21 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 1.6 U | 160 J | 140 J | 1.4 U | 3000 | 210 J | 11 J | 13 J | 43 J | 21 J | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 160 | 140 | 0 U | 3000 | 210 | 11 | 13 | 43 | 21 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 83.9 | 88.8 | 85.1 | 95.9 | 84.8 | 92.5 | 90.8 | 91.8 | 83.5 | 93 | 82.9 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-422 | SB-423 | SB-424 | SB-425 | SB-426 | SB-427 | SB-428 | SB-429 | SB-430 | SB-431 | SB-432 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-422-0102 | SB-423-0102 | SB-424-0102 | SB-425-0102 | SB-426-0102 | SB-427-0102 | SB-428-0102 | SB-429-0102 | SB-430-0102 | SB-431-0102 | SB-432-0102 |
| SAMPLE DATE | | | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.5 U | 9.9 | 990 | 75 | 80 | 340 | 64 | 12 | 2000 | 390 | 1.4 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.5 U | 9.9 | 990 | 75 | 80 | 340 | 64 | 12 | 2000 | 390 | 1.4 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 9.9 J | 990 | 75 J | 80 J | 340 J | 64 J | 12 J | 2000 | 390 | 1.4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 9.9 | 990 | 75 | 80 | 340 | 64 | 12 | 2000 | 390 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 87.7 | 92.2 | 89 | 93.9 | 85.6 | 90.1 | 92.3 | 95.4 | 91.1 | 92.1 | 92.7 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-433 | SB-434 | SB-435 | SB-436 | SB-437 | SB-438 | SB-439 | SB-440 | SB-441 | SB-442 | SB-443 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-433-0102 | SB-434-0102 | SB-435-0102 | SB-436-0102 | SB-437-0102 | SB-438-0102 | SB-439-0102 | SB-440-0102 | SB-441-0102 | SB-442-0102 | SB-443-0102 |
| SAMPLE DATE | | | | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 45 | 1.5 U | 19 | 47 | 230 | 1.4 U | 15 | 1.5 U | 120 | 15 | 53 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 45 | 1.5 U | 19 | 47 | 230 | 1.4 U | 15 | 1.5 U | 120 | 15 | 53 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 45 J | 1.5 U | 19 J | 47 J | 230 J | 1.4 U | 15 J | 1.5 U | 120 J | 15 J | 53 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 45 | 0 U | 19 | 47 | 230 | 0 U | 15 | 0 U | 120 | 15 | 53 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 95.5 | 87.2 | 89.9 | 87 | 89.8 | 89.8 | 86.5 | 87.8 | 89.1 | 84.6 | 87.1 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-444 | SB-445 | SB-446 | SB-447 | SB-448 | SB-449 | SB-450 | SB-451 | SB-452 | SB-453 | SB-454 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-444-0102 | SB-445-0102 | SB-446-0102 | SB-447-0102 | SB-448-0102 | SB-449-0102 | SB-450-0102 | SB-451-0102 | SB-452-0102 | SB-453-0102 | SB-454-0102 |
| SAMPLE DATE | | | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 8.6 | 17 | 110 | 1.5 U | 22 | 1.4 U | 12 | 1.5 U | 120 | 7.9 | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 8.6 | 17 | 110 | 1.5 U | 22 | 1.4 U | 12 | 1.5 U | 120 | 7.9 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 8.6 J | 17 J | 110 J | 1.5 U | 22 J | 1.4 U | 12 J | 1.5 U | 120 J | 7.9 J | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 8.6 | 17 | 110 | 0 U | 22 | 0 U | 12 | 0 U | 120 | 7.9 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 86.7 | 82.7 | 89.8 | 85.7 | 87.7 | 90.8 | 85.1 | 86.2 | 91.4 | 86.3 | 81.7 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-455 | SB-456 | SB-457 | SB-457 | SB-458 | SB-458 | SB-459 | SB-459 | SB-460 | SB-460 | SB-461 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-455-0102 | SB-456-0102 | SB-457-0000 | SB-457-0102 | SB-458-0000 | SB-458-0102 | SB-459-0000 | SB-459-0102 | SB-460-0000 | SB-460-0102 | SB-461-0000 |
| SAMPLE DATE | | | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | | | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 |
| BOTTOM DEPTH | | | 2 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 | 2 | 0 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[4] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.5 U | 1.5 U | 300 | 260 | 8.9 | 1.5 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.5 U | 1.5 U | 300 | 260 | 8.9 | 1.5 U | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 1.5 U | 300 J | 260 J | 8.9 J | 1.5 U | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 C[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 300 | 260 | 8.9 | 0 U | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 C[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | 1.4 | 1.6 | 2.3 | 2.4 | 0.91 L | 1.8 L | 0.99 L | 1.9 L | 0.8 L |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[13] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 85.4 | 87.8 | 86.4 | 89.6 | 88.1 | 87.7 | 87.5 | 87.6 | 89.8 | 90.5 | 86.4 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-20**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-461 | SB-494 | SB-494 | SB-495 | SB-495 | SB-496 | SB-496 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-461-0102 | SB-494-0000 | SB-494-0102 | SB-495-0000 | SB-495-0102 | SB-496-0000 | SB-496-0102 |
| SAMPLE DATE | | | | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | | | | 1 | 0 | 1 | 0 | 1 | 0 | 1 |
| BOTTOM DEPTH | | | | 2 | 0 | 2 | 0 | 2 | 0 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | 220 [5] | 150 | C[5] | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | |
| AROCLOR-1254 | 320 | 110 | N[7] | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [8] | 220 | C[9] | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | **2.5 L** | **1.3 L** | **1.6 L** | **0.92 L** | **0.92 L** | **1.2 L** | **1.1 L** |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [10] | 12000 | N[10] | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [11] | 2.3 | N[12] | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[13] | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 87.3 | 88.9 | 87.9 | 90.6 | 90.9 | 89.8 | 90.3 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA |

**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - The value for acenaphthene is used as a surrogate for acenaphthylene.
5 - The value is for benzo(b)fluoranthene.
6 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
7 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
8 - The value is for PCB (total).
9 - The value is for polychlorinated biphenyls (high risk).
10 - The value is for trivalent chromium.
11 - The value is for mercury (inorganic/mercuric dichloride).
12 - The value is for mercuric chloride.
13 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

| LOCATION | SB-194 | SB-194 | SB-194 | SB-196 | SB-196 | SB-196 | SB-196 | SB-196 | SB-196 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-194RE-3 | G-SB-194RE-4 | G-SB-194RE-5 | G-SB-196RE-10 | G-SB-196RE-6 | G-SB-196RE-7 | G-SB-196RE-7-AVG | G-SB-196RE-7-D | G-SB-196RE-8 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 10 | 6 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 3 | 4 | 5 | 10 | 6 | 7 | 7 | 7 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-194 | SB-194 | SB-194 | SB-196 | SB-196 | SB-196 | SB-196 | SB-196 | SB-196 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-194RE-3 | G-SB-194RE-4 | G-SB-194RE-5 | G-SB-196RE-10 | G-SB-196RE-6 | G-SB-196RE-7 | G-SB-196RE-7-AVG | G-SB-196RE-7-D | G-SB-196RE-8 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 10 | 6 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 3 | 4 | 5 | 10 | 6 | 7 | 7 | 7 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 10 | 1.5 U | 51 | 21 | 424 | 57 | 45 | 33 | 1.6 U |
| BAP EQUIVALENT-POS | 9.1 | 1.5 U | 50 | 20 | 424 | 56 | 44 | 33 | 1.6 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 31 | 14 | 250 | 37 J | 29 | 21 J | 1.2 U |
| BENZO(A)PYRENE | 9.1 | 1.5 U | 40 | 16 | 280 | 45 J | 35.5 | 26 J | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.3 U | 1.4 U | 38 | 15 | 340 | 45 J | 36 | 27 J | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 2 U | 24 | 13 | 110 | 20 J | 16 | 12 J | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-194 | SB-194 | SB-194 | SB-196 | SB-196 | SB-196 | SB-196 | SB-196 | SB-196 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-194RE-3 | G-SB-194RE-4 | G-SB-194RE-5 | G-SB-196RE-10 | G-SB-196RE-6 | G-SB-196RE-7 | G-SB-196RE-7-AVG | G-SB-196RE-7-D | G-SB-196RE-8 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 10 | 6 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 3 | 4 | 5 | 10 | 6 | 7 | 7 | 7 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 7.6 | 1.1 U | 42 | 18 | 260 | 42 | 34.5 | 27 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 66 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.8 U | 26 | 9.8 | 180 | 26 | 21.5 | 17 | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 16.7 | 0 U | 201 | 85.8 | 1486 | 215 | 172.5 | 130 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-194 | SB-194 | SB-194 | SB-196 | SB-196 | SB-196 | SB-196 | SB-196 | SB-196 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-194RE-3 | G-SB-194RE-4 | G-SB-194RE-5 | G-SB-196RE-10 | G-SB-196RE-6 | G-SB-196RE-7 | G-SB-196RE-7-AVG | G-SB-196RE-7-D | G-SB-196RE-8 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 10 | 6 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 3 | 4 | 5 | 10 | 6 | 7 | 7 | 7 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-196 | SB-197 | SB-197 | SB-197 | SB-197 | SB-198 | SB-198 | SB-198 | SB-198 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-196RE-9 | G-SB-197RE-6 | G-SB-197RE-6-AVG | G-SB-197RE-6-D | G-SB-197RE-7 | G-SB-198RE-3 | G-SB-198RE-4 | G-SB-198RE-5 | G-SB-198RE-6 |
| SAMPLE DATE | 20091001 | 20091002 | 20091002 | 20091002 | 20091002 | 20090929 | 20090929 | 20090929 | 20091019 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 6 | 6 | 6 | 7 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 9 | 6 | 6 | 6 | 7 | 3 | 4 | 5 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-196 | SB-197 | SB-197 | SB-197 | SB-197 | SB-198 | SB-198 | SB-198 | SB-198 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-196RE-9 | G-SB-197RE-6 | G-SB-197RE-6-AVG | G-SB-197RE-6-D | G-SB-197RE-7 | G-SB-198RE-3 | G-SB-198RE-4 | G-SB-198RE-5 | G-SB-198RE-6 |
| SAMPLE DATE | 20091001 | 20091002 | 20091002 | 20091002 | 20091002 | 20090929 | 20090929 | 20090929 | 20091019 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 6 | 6 | 6 | 7 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 9 | 6 | 6 | 6 | 7 | 3 | 4 | 5 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 319 | 24 | 36 | 49 | 1.6 U | 34 | 635 | 88 | 471 |
| BAP EQUIVALENT-POS | 319 | 23 | 36 | 48 | 1.6 U | 33 | 635 | 88 | 471 |
| BENZO(A)ANTHRACENE | 190 | 17 J | 24.5 | 32 J | 1.1 U | 24 | 340 | 46 | 310 |
| BENZO(A)PYRENE | 230 | 18 J | 28.5 | 39 J | 1.6 U | 26 | 410 | 60 | 330 |
| BENZO(B)FLUORANTHENE | 240 | 19 J | 27.5 | 36 J | 1.4 U | 28 | 490 | 66 | 350 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 110 | 7.8 J | 13.4 | 19 J | 2 U | 12 | 180 | 23 | 180 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-196 | SB-197 | SB-197 | SB-197 | SB-197 | SB-198 | SB-198 | SB-198 | SB-198 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-196RE-9 | G-SB-197RE-6 | G-SB-197RE-6-AVG | G-SB-197RE-6-D | G-SB-197RE-7 | G-SB-198RE-3 | G-SB-198RE-4 | G-SB-198RE-5 | G-SB-198RE-6 |
| SAMPLE DATE | 20091001 | 20091002 | 20091002 | 20091002 | 20091002 | 20090929 | 20090929 | 20090929 | 20091019 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 6 | 6 | 6 | 7 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 9 | 6 | 6 | 6 | 7 | 3 | 4 | 5 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 230 | 19 J | 27.5 | 36 J | 1.1 U | 27 | 400 | 51 | 290 |
| DIBENZO(A,H)ANTHRACENE | 33 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 110 | 12 | 53 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 120 | 12 J | 17.5 | 23 J | 1.8 U | 19 | 300 | 43 | 200 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1153 | 92.8 | 138.9 | 185 | 0 U | 136 | 2230 | 301 | 1713 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-196 | SB-197 | SB-197 | SB-197 | SB-197 | SB-198 | SB-198 | SB-198 | SB-198 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-196RE-9 | G-SB-197RE-6 | G-SB-197RE-6-AVG | G-SB-197RE-6-D | G-SB-197RE-7 | G-SB-198RE-3 | G-SB-198RE-4 | G-SB-198RE-5 | G-SB-198RE-6 |
| SAMPLE DATE | 20091001 | 20091002 | 20091002 | 20091002 | 20091002 | 20090929 | 20090929 | 20090929 | 20091019 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 6 | 6 | 6 | 7 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 9 | 6 | 6 | 6 | 7 | 3 | 4 | 5 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-198 | SB-198 | SB-198 | SB-199 | SB-199 | SB-255 | SB-255 | SB-255 | SB-424 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-198RE-7 | G-SB-198RE-8 | G-SB-198RE-9 | G-SB-199RE-6 | G-SB-199RE-7 | G-SB-255RE-3 | G-SB-255RE-4 | G-SB-255RE-5 | G-SB-424RE-5 |
| SAMPLE DATE | 20091019 | 20091019 | 20091019 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 9 | 6 | 7 | 3 | 4 | 5 | 5 |
| BOTTOM DEPTH | 7 | 8 | 9 | 6 | 7 | 3 | 4 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-198 | SB-198 | SB-198 | SB-199 | SB-199 | SB-255 | SB-255 | SB-255 | SB-424 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-198RE-7 | G-SB-198RE-8 | G-SB-198RE-9 | G-SB-199RE-6 | G-SB-199RE-7 | G-SB-255RE-3 | G-SB-255RE-4 | G-SB-255RE-5 | G-SB-424RE-5 |
| SAMPLE DATE | 20091019 | 20091019 | 20091019 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 9 | 6 | 7 | 3 | 4 | 5 | 5 |
| BOTTOM DEPTH | 7 | 8 | 9 | 6 | 7 | 3 | 4 | 5 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.6 U | 1.6 U | 14 | 13 | 42 | 1.5 U | 106 | 1.7 |
| BAP EQUIVALENT-POS | 1.5 U | 1.6 U | 1.6 U | 13 | 12 | 41 | 1.5 U | 106 | 0.0092 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.2 U | 1.2 U | 12 | 10 | 25 | 1.1 U | 49 | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.6 U | 1.6 U | 9.1 | 8.4 | 33 | 1.5 U | 76 | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.5 U | 1.5 U | 11 | 8.2 | 38 | 1.4 U | 76 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 2.1 U | 2.1 U | 2 U | 2 U | 16 | 2 U | 35 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-198 | SB-198 | SB-198 | SB-199 | SB-199 | SB-255 | SB-255 | SB-255 | SB-424 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-198RE-7 | G-SB-198RE-8 | G-SB-198RE-9 | G-SB-199RE-6 | G-SB-199RE-7 | G-SB-255RE-3 | G-SB-255RE-4 | G-SB-255RE-5 | G-SB-424RE-5 |
| SAMPLE DATE | 20091019 | 20091019 | 20091019 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 9 | 6 | 7 | 3 | 4 | 5 | 5 |
| BOTTOM DEPTH | 7 | 8 | 9 | 6 | 7 | 3 | 4 | 5 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1.1 U | 1.1 U | 11 | 11 | 28 | 1 U | 65 | 9.2 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 13 | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.8 U | 1.8 U | 18 | 17 | 20 | 1.7 U | 43 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 61.1 | 54.6 | 160 | 0 U | 357 | 9.2 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-198 | SB-198 | SB-198 | SB-199 | SB-199 | SB-255 | SB-255 | SB-255 | SB-424 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-198RE-7 | G-SB-198RE-8 | G-SB-198RE-9 | G-SB-199RE-6 | G-SB-199RE-7 | G-SB-255RE-3 | G-SB-255RE-4 | G-SB-255RE-5 | G-SB-424RE-5 |
| SAMPLE DATE | 20091019 | 20091019 | 20091019 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 9 | 6 | 7 | 3 | 4 | 5 | 5 |
| BOTTOM DEPTH | 7 | 8 | 9 | 6 | 7 | 3 | 4 | 5 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-424 | SB-424 | SB-424 | SB-437 | SB-437 | SB-441 | SB-441 | SB-453 | SB-453 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-424RE-5-AVG | G-SB-424RE-5-D | G-SB-424RE-6 | G-SB-437RE-3 | G-SB-437RE-4 | G-SB-441RE-7 | G-SB-441RE-8 | G-SB-453RE-5 | G-SB-453RE-6 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090930 | 20090930 | 20090929 | 20090929 | 20091001 | 20091001 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 6 | 3 | 4 | 7 | 8 | 5 | 6 |
| BOTTOM DEPTH | 5 | 5 | 6 | 3 | 4 | 7 | 8 | 5 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-424 | SB-424 | SB-424 | SB-437 | SB-437 | SB-441 | SB-441 | SB-453 | SB-453 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-424RE-5-AVG | G-SB-424RE-5-D | G-SB-424RE-6 | G-SB-437RE-3 | G-SB-437RE-4 | G-SB-441RE-7 | G-SB-441RE-8 | G-SB-453RE-5 | G-SB-453RE-6 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090930 | 20090930 | 20090929 | 20090929 | 20091001 | 20091001 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 6 | 3 | 4 | 7 | 8 | 5 | 6 |
| BOTTOM DEPTH | 5 | 5 | 6 | 3 | 4 | 7 | 8 | 5 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.2 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 80 | 11 | 24 | 23 |
| BAP EQUIVALENT-POS | 0.0092 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 80 | 9.4 | 23 | 23 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 51 | 1.1 U | 16 | 15 |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 47 | 1.5 U | 17 | 17 |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 54 | 58 | 18 | 17 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 2 U | 2 U | 2 U | 29 | 15 | 2.1 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-424 | SB-424 | SB-424 | SB-437 | SB-437 | SB-441 | SB-441 | SB-453 | SB-453 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-424RE-5-AVG | G-SB-424RE-5-D | G-SB-424RE-6 | G-SB-437RE-3 | G-SB-437RE-4 | G-SB-441RE-7 | G-SB-441RE-8 | G-SB-453RE-5 | G-SB-453RE-6 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090930 | 20090930 | 20090929 | 20090929 | 20091001 | 20091001 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 6 | 3 | 4 | 7 | 8 | 5 | 6 |
| BOTTOM DEPTH | 5 | 5 | 6 | 3 | 4 | 7 | 8 | 5 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 4.875 | 1.1 U | 1.1 U | 1 U | 1.1 U | 61 | 23 | 16 | 15 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 19 | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 34 | 34 | 24 | 23 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 4.6 | 0 U | 0 U | 0 U | 0 U | 295 | 130 | 91 | 87 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-424 | SB-424 | SB-424 | SB-437 | SB-437 | SB-441 | SB-441 | SB-453 | SB-453 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-424RE-5-AVG | G-SB-424RE-5-D | G-SB-424RE-6 | G-SB-437RE-3 | G-SB-437RE-4 | G-SB-441RE-7 | G-SB-441RE-8 | G-SB-453RE-5 | G-SB-453RE-6 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090930 | 20090930 | 20090929 | 20090929 | 20091001 | 20091001 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 6 | 3 | 4 | 7 | 8 | 5 | 6 |
| BOTTOM DEPTH | 5 | 5 | 6 | 3 | 4 | 7 | 8 | 5 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-456 | SB-456 | SB-457 | SB-457 | SB-653 | SB-653 | SB-653 | SB-653 | SB-653 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-456RE-10 | G-SB-456RE-9 | G-SB-457RE-3 | G-SB-457RE-4 | G-SB-653-3 | G-SB-653-5 | G-SB-653-6 | G-SB-653-7 | G-SB-653-8 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20090930 | 20090930 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 9 | 3 | 4 | 3 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 10 | 9 | 3 | 4 | 3 | 5 | 6 | 7 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-456 | SB-456 | SB-457 | SB-457 | SB-653 | SB-653 | SB-653 | SB-653 | SB-653 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-456RE-10 | G-SB-456RE-9 | G-SB-457RE-3 | G-SB-457RE-4 | G-SB-653-3 | G-SB-653-5 | G-SB-653-6 | G-SB-653-7 | G-SB-653-8 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20090930 | 20090930 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 9 | 3 | 4 | 3 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 10 | 9 | 3 | 4 | 3 | 5 | 6 | 7 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 78 | 142 | 34 | 13 | 18 | 5209 | 3.9 | 1.7 U | 1.4 U |
| BAP EQUIVALENT-POS | 78 | 142 | 33 | 12 | 17 | 5209 | 2.1 | 1.7 U | 1.4 U |
| BENZO(A)ANTHRACENE | 33 | 61 | 18 | 10 | 14 | 3400 | 21 | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 45 | 88 | 27 | 10 | 14 | 3500 | 1.6 U | 1.7 U | 1.4 U |
| BENZO(B)FLUORANTHENE | 46 | 93 | 27 | 14 | 15 | 4200 | 1.5 U | 1.5 U | 1.3 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 14 | 36 | 12 | 2 U | 2 U | 1500 | 2.2 U | 2.2 U | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-456 | SB-456 | SB-457 | SB-457 | SB-653 | SB-653 | SB-653 | SB-653 | SB-653 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-456RE-10 | G-SB-456RE-9 | G-SB-457RE-3 | G-SB-457RE-4 | G-SB-653-3 | G-SB-653-5 | G-SB-653-6 | G-SB-653-7 | G-SB-653-8 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20090930 | 20090930 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 9 | 3 | 4 | 3 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 10 | 9 | 3 | 4 | 3 | 5 | 6 | 7 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 41 | 71 | 20 | 9.3 | 17 | 4000 | 23 | 1.2 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 21 | 32 | 1.5 U | 1.5 U | 1.5 U | 700 | 1.6 U | 1.7 U | 1.4 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 40 | 64 | 17 | 1.7 U | 1.8 U | 2300 | 1.9 U | 1.9 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 240 | 445 | 121 | 43.3 | 60 | 19600 | 44 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-456 | SB-456 | SB-457 | SB-457 | SB-653 | SB-653 | SB-653 | SB-653 | SB-653 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-456RE-10 | G-SB-456RE-9 | G-SB-457RE-3 | G-SB-457RE-4 | G-SB-653-3 | G-SB-653-5 | G-SB-653-6 | G-SB-653-7 | G-SB-653-8 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20090930 | 20090930 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 9 | 3 | 4 | 3 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 10 | 9 | 3 | 4 | 3 | 5 | 6 | 7 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-653 | SB-653 | SB-653 | SB-653A | SB-653A | SB-653A | SB-653B | SB-653B | SB-653B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653-9 | G-SB-653-9-AVG | G-SB-653-9-D | G-SB-653A-3 | G-SB-653A-5 | G-SB-653A-7 | G-SB-653B-3 | G-SB-653B-5 | G-SB-653B-7 |
| SAMPLE DATE | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-653 | SB-653 | SB-653 | SB-653A | SB-653A | SB-653A | SB-653B | SB-653B | SB-653B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653-9 | G-SB-653-9-AVG | G-SB-653-9-D | G-SB-653A-3 | G-SB-653A-5 | G-SB-653A-7 | G-SB-653B-3 | G-SB-653B-5 | G-SB-653B-7 |
| SAMPLE DATE | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 3 | 5 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.4 U | 1.45 U | 1.5 U | 1.4 U | 3663 | 1.4 U | 30 | 98 | 34 |
| BAP EQUIVALENT-POS | 1.4 U | 1.45 U | 1.5 U | 1.4 U | 3663 | 1.4 U | 29 | 98 | 33 |
| BENZO(A)ANTHRACENE | 1 U | 1.05 U | 1.1 U | 1 U | 1900 | 1 U | 1.1 U | 54 | 11 |
| BENZO(A)PYRENE | 1.4 U | 1.45 U | 1.5 U | 1.4 U | 2400 | 1.4 U | 24 | 78 | 29 |
| BENZO(B)FLUORANTHENE | 1.3 U | 1.35 U | 1.4 U | 1.3 U | 2900 | 1.3 U | 29 | 85 | 31 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 1.95 U | 2 U | 1.8 U | 1000 | 1.8 U | 1.9 U | 27 | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-653 | SB-653 | SB-653 | SB-653A | SB-653A | SB-653A | SB-653B | SB-653B | SB-653B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653-9 | G-SB-653-9-AVG | G-SB-653-9-D | G-SB-653A-3 | G-SB-653A-5 | G-SB-653A-7 | G-SB-653B-3 | G-SB-653B-5 | G-SB-653B-7 |
| SAMPLE DATE | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 3 | 5 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 0.99 U | 0.995 U | 1 U | 0.97 U | 2600 | 0.98 U | 1 U | 66 | 11 |
| DIBENZO(A,H)ANTHRACENE | 1.4 U | 1.45 U | 1.5 U | 1.4 U | 600 | 1.4 U | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.7 U | 1.7 U | 1.6 U | 1700 | 1.6 U | 22 | 55 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 13100 | 0 U | 75 | 365 | 82 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-653 | SB-653 | SB-653 | SB-653A | SB-653A | SB-653A | SB-653B | SB-653B | SB-653B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653-9 | G-SB-653-9-AVG | G-SB-653-9-D | G-SB-653A-3 | G-SB-653A-5 | G-SB-653A-7 | G-SB-653B-3 | G-SB-653B-5 | G-SB-653B-7 |
| SAMPLE DATE | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 3 | 5 | 7 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-653D | SB-653D | SB-653D | SB-654 | SB-654 | SB-654B | SB-654B | SB-654C | SB-654C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653D-3 | G-SB-653D-5 | G-SB-653D-7 | G-SB-654-3 | G-SB-654-5 | G-SB-654B-3 | G-SB-654B-5 | G-SB-654C-3 | G-SB-654C-5 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-653D | SB-653D | SB-653D | SB-654 | SB-654 | SB-654B | SB-654B | SB-654C | SB-654C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653D-3 | G-SB-653D-5 | G-SB-653D-7 | G-SB-654-3 | G-SB-654-5 | G-SB-654B-3 | G-SB-654B-5 | G-SB-654C-3 | G-SB-654C-5 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 3 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 49 | 1.5 U | 68 | 67 | 7.8 | 10059 | 2.8 | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 48 | 1.5 U | 67 | 66 | 6.2 | 10059 | 1.1 | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 17 | 1.1 U | 62 | 49 | 19 | 8000 | 11 | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 39 | 1.5 U | 51 | 53 | 1.5 U | 6800 | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 44 | 1.4 U | 66 | 51 | 43 | 7500 | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 10 | 2 U | 28 | 23 | 1.9 U | 3100 | 1.9 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-653D | SB-653D | SB-653D | SB-654 | SB-654 | SB-654B | SB-654B | SB-654C | SB-654C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653D-3 | G-SB-653D-5 | G-SB-653D-7 | G-SB-654-3 | G-SB-654-5 | G-SB-654B-3 | G-SB-654B-5 | G-SB-654C-3 | G-SB-654C-5 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 3 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 20 | 1.1 U | 74 | 57 | 19 | 8000 | 9.2 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1300 | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 31 | 1.8 U | 30 | 28 | 1.7 U | 3700 | 1.7 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 161 | 0 U | 311 | 261 | 81 | 38400 | 20.2 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-653D | SB-653D | SB-653D | SB-654 | SB-654 | SB-654B | SB-654B | SB-654C | SB-654C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653D-3 | G-SB-653D-5 | G-SB-653D-7 | G-SB-654-3 | G-SB-654-5 | G-SB-654B-3 | G-SB-654B-5 | G-SB-654C-3 | G-SB-654C-5 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 3 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-656 | SB-656 | SB-656 | SB-656 | SB-656 | SB-656 | SB-656C | SB-656C | SB-656C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656-3 | G-SB-656-5 | G-SB-656-6 | G-SB-656-7 | G-SB-656-8 | G-SB-656-9 | G-SB-656C-4 | G-SB-656C-6 | G-SB-656C-8 |
| SAMPLE DATE | 20090930 | 20090930 | 20091020 | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 4 | 6 | 8 |
| BOTTOM DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-656 | SB-656 | SB-656 | SB-656 | SB-656 | SB-656 | SB-656C | SB-656C | SB-656C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656-3 | G-SB-656-5 | G-SB-656-6 | G-SB-656-7 | G-SB-656-8 | G-SB-656-9 | G-SB-656C-4 | G-SB-656C-6 | G-SB-656C-8 |
| SAMPLE DATE | 20090930 | 20090930 | 20091020 | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 4 | 6 | 8 |
| BOTTOM DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 9.8 | 437 | 175 | 2.6 | 1.6 U | 1.5 U | 32 | 66 | 1.6 U |
| BAP EQUIVALENT-POS | 8.9 | 437 | 174 | 0.85 | 1.6 U | 1.5 U | 31 | 65 | 1.6 U |
| BENZO(A)ANTHRACENE | 1.1 U | 200 | 100 | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 29 | 1.2 U |
| BENZO(A)PYRENE | 8 | 310 | 140 | 1.6 U | 1.6 U | 1.5 U | 26 | 53 | 1.6 U |
| BENZO(B)FLUORANTHENE | 9.1 | 330 | 150 | 8.5 | 1.4 U | 1.4 U | 28 | 55 | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 130 | 75 | 2.1 U | 2 U | 2 U | 2 U | 13 | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-656 | SB-656 | SB-656 | SB-656 | SB-656 | SB-656 | SB-656C | SB-656C | SB-656C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656-3 | G-SB-656-5 | G-SB-656-6 | G-SB-656-7 | G-SB-656-8 | G-SB-656-9 | G-SB-656C-4 | G-SB-656C-6 | G-SB-656C-8 |
| SAMPLE DATE | 20090930 | 20090930 | 20091020 | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 4 | 6 | 8 |
| BOTTOM DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 260 | 110 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 34 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 51 | 1.7 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 210 | 86 | 1.9 U | 1.8 U | 1.8 U | 23 | 38 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 17.1 | 1491 | 661 | 8.5 | 0 U | 0 U | 77 | 222 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-656 | SB-656 | SB-656 | SB-656 | SB-656 | SB-656 | SB-656C | SB-656C | SB-656C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656-3 | G-SB-656-5 | G-SB-656-6 | G-SB-656-7 | G-SB-656-8 | G-SB-656-9 | G-SB-656C-4 | G-SB-656C-6 | G-SB-656C-8 |
| SAMPLE DATE | 20090930 | 20090930 | 20091020 | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 4 | 6 | 8 |
| BOTTOM DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-656C | SB-656C | SB-656D | SB-656D | SB-656D | SB-657A | SB-657A | SB-657A | SB-657A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656C-8-AVG | G-SB-656C-8-D | G-SB-656D-4 | G-SB-656D-6 | G-SB-656D-8 | G-SB-657A-3 | G-SB-657A-5 | G-SB-657A-5-AVG | G-SB-657A-5-D |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 4 | 6 | 8 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | 8 | 8 | 4 | 6 | 8 | 3 | 5 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-656C | SB-656C | SB-656D | SB-656D | SB-656D | SB-657A | SB-657A | SB-657A | SB-657A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656C-8-AVG | G-SB-656C-8-D | G-SB-656D-4 | G-SB-656D-6 | G-SB-656D-8 | G-SB-657A-3 | G-SB-657A-5 | G-SB-657A-5-AVG | G-SB-657A-5-D |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 4 | 6 | 8 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | 8 | 8 | 4 | 6 | 8 | 3 | 5 | 5 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.55 U | 1.5 U | 22 | 22 | 17 | 35 | 1207 | 1073 | 940 |
| BAP EQUIVALENT-POS | 1.55 U | 1.5 U | 21 | 21 | 16 | 35 | 1207 | 1073 | 939 |
| BENZO(A)ANTHRACENE | 1.15 U | 1.1 U | 19 | 19 | 18 | 12 | 900 | 835 | 770 |
| BENZO(A)PYRENE | 1.55 U | 1.5 U | 16 | 15 | 11 | 28 | 810 | 775 | 740 |
| BENZO(B)FLUORANTHENE | 1.45 U | 1.4 U | 34 | 34 | 29 | 32 | 850 | 815 | 780 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.05 U | 2 U | 2 U | 2 U | 1.9 U | 2 U | 390 | 340 | 290 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-656C | SB-656C | SB-656D | SB-656D | SB-656D | SB-657A | SB-657A | SB-657A | SB-657A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656C-8-AVG | G-SB-656C-8-D | G-SB-656D-4 | G-SB-656D-6 | G-SB-656D-8 | G-SB-657A-3 | G-SB-657A-5 | G-SB-657A-5-AVG | G-SB-657A-5-D |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 4 | 6 | 8 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | 8 | 8 | 4 | 6 | 8 | 3 | 5 | 5 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.05 U | 1 U | 17 | 18 | 15 | 11 | 850 | 765 | 680 |
| DIBENZO(A,H)ANTHRACENE | 1.55 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 170 J | 85.775 | 3.1 UJ |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.75 U | 1.7 U | 1.8 U | 9.4 | 1.7 U | 22 | 470 | 435 | 400 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 86 | 95.4 | 73 | 105 | 4440 | 4050 | 3660 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-656C | SB-656C | SB-656D | SB-656D | SB-656D | SB-657A | SB-657A | SB-657A | SB-657A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656C-8-AVG | G-SB-656C-8-D | G-SB-656D-4 | G-SB-656D-6 | G-SB-656D-8 | G-SB-657A-3 | G-SB-657A-5 | G-SB-657A-5-AVG | G-SB-657A-5-D |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 4 | 6 | 8 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | 8 | 8 | 4 | 6 | 8 | 3 | 5 | 5 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-657A | SB-657A | SB-657B | SB-657B | SB-657B | SB-657B | SB-657B | SB-657B | SB-657D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657A-7 | G-SB-657A-9 | G-SB-657B-3 | G-SB-657B-5 | G-SB-657B-5-AVG | G-SB-657B-5-D | G-SB-657B-7 | G-SB-657B-9 | G-SB-657D-3 |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 5 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 5 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-657A | SB-657A | SB-657B | SB-657B | SB-657B | SB-657B | SB-657B | SB-657B | SB-657D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657A-7 | G-SB-657A-9 | G-SB-657B-3 | G-SB-657B-5 | G-SB-657B-5-AVG | G-SB-657B-5-D | G-SB-657B-7 | G-SB-657B-9 | G-SB-657D-3 |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 5 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 5 | 5 | 7 | 9 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 214 | 5922 | 21 | 1434 | 818 | 203 | 14 | 655 | 44 |
| BAP EQUIVALENT-POS | 214 | 5922 | 20 | 1431 | 817 | 203 | 14 | 655 | 43 |
| BENZO(A)ANTHRACENE | 110 | 4000 | 18 | 1400 J | 770 | 140 J | 12 | 440 | 32 |
| BENZO(A)PYRENE | 140 | 4000 | 14 | 1100 J | 620 | 140 J | 10 | 460 | 32 |
| BENZO(B)FLUORANTHENE | 140 | 4100 | 33 | 1200 J | 675 | 150 J | 23 | 480 | 54 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 59 | 1800 | 1.9 U | 860 J | 469 | 78 J | 2 U | 220 | 13 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-657A | SB-657A | SB-657B | SB-657B | SB-657B | SB-657B | SB-657B | SB-657B | SB-657D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657A-7 | G-SB-657A-9 | G-SB-657B-3 | G-SB-657B-5 | G-SB-657B-5-AVG | G-SB-657B-5-D | G-SB-657B-7 | G-SB-657B-9 | G-SB-657D-3 |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 5 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 5 | 5 | 7 | 9 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 130 | 4300 | 18 | 1200 J | 675 | 150 J | 11 | 520 | 37 |
| DIBENZO(A,H)ANTHRACENE | 39 | 840 | 1.5 U | 5.9 U | 13.975 | 25 | 1.5 U | 72 | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 97 | 2500 | 8.1 | 610 J | 346 | 82 J | 1.8 U | 280 | 21 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 715 | 21540 | 91.1 | 6370 | 3567.5 | 765 | 56 | 2472 | 189 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-657A | SB-657A | SB-657B | SB-657B | SB-657B | SB-657B | SB-657B | SB-657B | SB-657D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657A-7 | G-SB-657A-9 | G-SB-657B-3 | G-SB-657B-5 | G-SB-657B-5-AVG | G-SB-657B-5-D | G-SB-657B-7 | G-SB-657B-9 | G-SB-657D-3 |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 5 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 5 | 5 | 7 | 9 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-657D | SB-657D | SB-657D | SB-658B | SB-658B | SB-658B | SB-658B | SB-658C | SB-658C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657D-5 | G-SB-657D-7 | G-SB-657D-9 | G-SB-658B-3 | G-SB-658B-5 | G-SB-658B-7 | G-SB-658B-9 | G-SB-658C-3 | G-SB-658C-5 |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-657D | SB-657D | SB-657D | SB-658B | SB-658B | SB-658B | SB-658B | SB-658C | SB-658C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657D-5 | G-SB-657D-7 | G-SB-657D-9 | G-SB-658B-3 | G-SB-658B-5 | G-SB-658B-7 | G-SB-658B-9 | G-SB-658C-3 | G-SB-658C-5 |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 558 | 1.5 U | 64 | 32 | 692 |
| BAP EQUIVALENT-POS | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 558 | 1.5 U | 64 | 31 | 692 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 320 | 1.1 U | 46 | 20 | 430 |
| BENZO(A)PYRENE | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 370 | 1.5 U | 50 | 23 | 480 |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 410 | 1.4 U | 55 | 43 | 500 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 1.9 U | 1.9 U | 170 | 2 U | 21 | 16 | 280 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-657D | SB-657D | SB-657D | SB-658B | SB-658B | SB-658B | SB-658B | SB-658C | SB-658C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657D-5 | G-SB-657D-7 | G-SB-657D-9 | G-SB-658B-3 | G-SB-658B-5 | G-SB-658B-7 | G-SB-658B-9 | G-SB-658C-3 | G-SB-658C-5 |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1 U | 1 U | 1 U | 430 | 1 U | 50 | 26 | 550 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 89 | 1.5 U | 1.6 U | 1.5 U | 86 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 240 | 1.7 U | 32 | 14 | 300 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 2029 | 0 U | 254 | 142 | 2626 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-657D | SB-657D | SB-657D | SB-658B | SB-658B | SB-658B | SB-658B | SB-658C | SB-658C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657D-5 | G-SB-657D-7 | G-SB-657D-9 | G-SB-658B-3 | G-SB-658B-5 | G-SB-658B-7 | G-SB-658B-9 | G-SB-658C-3 | G-SB-658C-5 |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-658C | SB-658C | SB-659C | SB-659C | SB-659C | SB-659C | SB-659D | SB-659D | SB-659D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658C-7 | G-SB-658C-9 | G-SB-659C-3 | G-SB-659C-5 | G-SB-659C-7 | G-SB-659C-9 | G-SB-659D-3 | G-SB-659D-5 | G-SB-659D-7 |
| SAMPLE DATE | 20091028 | 20091028 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-658C | SB-658C | SB-659C | SB-659C | SB-659C | SB-659C | SB-659D | SB-659D | SB-659D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658C-7 | G-SB-658C-9 | G-SB-659C-3 | G-SB-659C-5 | G-SB-659C-7 | G-SB-659C-9 | G-SB-659D-3 | G-SB-659D-5 | G-SB-659D-7 |
| SAMPLE DATE | 20091028 | 20091028 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 415 | 8.6 | 4.1 | 1.5 U | 1657 | 1.5 U | 1.5 U | 24 |
| BAP EQUIVALENT-POS | 21 | 415 | 7.0 | 2.4 | 1.5 U | 1655 | 1.5 U | 1.5 U | 23 |
| BENZO(A)ANTHRACENE | 14 | 200 | 31 | 1.1 U | 1.1 U | 1300 | 1.1 U | 1.1 U | 19 |
| BENZO(A)PYRENE | 17 | 280 | 1.5 U | 1.5 U | 1.5 U | 1300 | 1.5 U | 1.5 U | 18 |
| BENZO(B)FLUORANTHENE | 15 | 300 | 39 | 24 | 1.4 U | 1400 | 1.4 U | 1.4 U | 31 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 9.8 | 110 | 2 U | 2 U | 2 U | 750 | 2 U | 1.9 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-658C | SB-658C | SB-659C | SB-659C | SB-659C | SB-659C | SB-659D | SB-659D | SB-659D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658C-7 | G-SB-658C-9 | G-SB-659C-3 | G-SB-659C-5 | G-SB-659C-7 | G-SB-659C-9 | G-SB-659D-3 | G-SB-659D-5 | G-SB-659D-7 |
| SAMPLE DATE | 20091028 | 20091028 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 19 | 270 | 23 | 1.1 U | 1 U | 1600 | 1 U | 1 U | 18 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 71 | 1.5 U | 1.5 U | 1.5 U | 3.3 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 11 | 130 | 1.7 U | 1.8 U | 1.7 U | 760 | 1.7 U | 1.7 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 85.8 | 1361 | 93 | 24 | 0 U | 7110 | 0 U | 0 U | 86 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-658C | SB-658C | SB-659C | SB-659C | SB-659C | SB-659C | SB-659D | SB-659D | SB-659D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658C-7 | G-SB-658C-9 | G-SB-659C-3 | G-SB-659C-5 | G-SB-659C-7 | G-SB-659C-9 | G-SB-659D-3 | G-SB-659D-5 | G-SB-659D-7 |
| SAMPLE DATE | 20091028 | 20091028 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-659D | SB-659D | SB-659D |
|---|---|---|---|
| SAMPLE ID | G-SB-659D-7-AVG | G-SB-659D-7-D | G-SB-659D-9 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 |
| BOTTOM DEPTH | 7 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA |
| ACETONE | NA | NA | NA |
| BENZENE | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA |
| BROMOFORM | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA |
| CHLOROFORM | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA |
| O-XYLENE | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA |
| STYRENE | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA |
| TOLUENE | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-659D | SB-659D | SB-659D |
|---|---|---|---|
| SAMPLE ID | G-SB-659D-7-AVG | G-SB-659D-7-D | G-SB-659D-9 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 |
| BOTTOM DEPTH | 7 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | |
| 1,1-BIPHENYL | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA |
| ANILINE | NA | NA | NA |
| ATRAZINE | NA | NA | NA |
| AZOBENZENE | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA |
| BENZIDINE | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA |
| CARBAZOLE | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA |
| ISOPHORONE | NA | NA | NA |
| NITROBENZENE | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA |
| PHENOL | NA | NA | NA |
| PYRIDINE | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA |
| ANTHRACENE | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 20 | 17 | 1.5 U |
| BAP EQUIVALENT-POS | 19 | 16 | 1.5 U |
| BENZO(A)ANTHRACENE | 18 | 17 | 1.1 U |
| BENZO(A)PYRENE | 16 | 14 | 1.5 U |
| BENZO(B)FLUORANTHENE | 15.85 | 1.4 UJ | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA |

| LOCATION | SB-659D | SB-659D | SB-659D |
|---|---|---|---|
| SAMPLE ID | G-SB-659D-7-AVG | G-SB-659D-7-D | G-SB-659D-9 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 |
| BOTTOM DEPTH | 7 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA |
| CHRYSENE | 16 | 14 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA |
| FLUORENE | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.7 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA |
| PYRENE | NA | NA | NA |
| TOTAL PAHS | 65.5 | 45 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | |
| 4,4'-DDD | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA |
| ALDRIN | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA |
| BETA-BHC | NA | NA | NA |
| DELTA-BHC | NA | NA | NA |
| DIELDRIN | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA |
| ENDRIN | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA |
| TOXAPHENE | NA | NA | NA |
| **METALS (MG/KG)** | | | |
| ANTIMONY | NA | NA | NA |
| ARSENIC | NA | NA | NA |
| BARIUM | NA | NA | NA |
| BERYLLIUM | NA | NA | NA |
| CADMIUM | NA | NA | NA |
| CHROMIUM | NA | NA | NA |
| COBALT | NA | NA | NA |
| COPPER | NA | NA | NA |
| IRON | NA | NA | NA |
| LEAD | NA | NA | NA |
| MANGANESE | NA | NA | NA |
| MERCURY | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA |
| NICKEL | NA | NA | NA |
| SELENIUM | NA | NA | NA |
| SILVER | NA | NA | NA |
| THALLIUM | NA | NA | NA |
| VANADIUM | NA | NA | NA |
| ZINC | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | |

| LOCATION | SB-659D | SB-659D | SB-659D |
|---|---|---|---|
| SAMPLE ID | G-SB-659D-7-AVG | G-SB-659D-7-D | G-SB-659D-9 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 9 |
| BOTTOM DEPTH | 7 | 7 | 9 |
| DIESEL RANGE ORGANICS | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | |
| PERCENT SOLIDS | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | |
| PH | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | |
| MERCURY (METHYL) | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | |
| ACTINIUM-228 | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA |
| CERIUM-139 | NA | NA | NA |
| CERIUM-144 | NA | NA | NA |
| CESIUM-134 | NA | NA | NA |
| CESIUM-137 | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA |
| COBALT-56 | NA | NA | NA |
| COBALT-57 | NA | NA | NA |
| COBALT-58 | NA | NA | NA |
| COBALT-60 | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA |
| IODINE-131 | NA | NA | NA |
| IRON-59 | NA | NA | NA |
| LEAD-212 | NA | NA | NA |
| LEAD-214 | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA |
| RADIUM-226 | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA |
| SILVER-110 | NA | NA | NA |
| SODIUM-22 | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA |
| THORIUM-227 | NA | NA | NA |
| THORIUM-234 | NA | NA | NA |
| URANIUM-235 | NA | NA | NA |
| ZINC-65 | NA | NA | NA |

| LOCATION | SB-661 | SB-661 | SB-662 | SB-662 | SB-662 | SB-662 | SB-662 | SB-662A | SB-662A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-661-6 | G-SB-661-7 | G-SB-662-10 | G-SB-662-6 | G-SB-662-7 | G-SB-662-8 | G-SB-662-9 | G-SB-662A-3 | G-SB-662A-5 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 10 | 6 | 7 | 8 | 9 | 3 | 5 |
| BOTTOM DEPTH | 6 | 7 | 10 | 6 | 7 | 8 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-661 | SB-661 | SB-662 | SB-662 | SB-662 | SB-662 | SB-662 | SB-662A | SB-662A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-661-6 | G-SB-661-7 | G-SB-662-10 | G-SB-662-6 | G-SB-662-7 | G-SB-662-8 | G-SB-662-9 | G-SB-662A-3 | G-SB-662A-5 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 10 | 6 | 7 | 8 | 9 | 3 | 5 |
| BOTTOM DEPTH | 6 | 7 | 10 | 6 | 7 | 8 | 9 | 3 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.5 U | 139 | 855 | 233 | 2.9 | 4214 | 60 | 51 |
| BAP EQUIVALENT-POS | 1.6 U | 1.5 U | 139 | 855 | 233 | 1.1 | 4214 | 59 | 50 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 93 | 570 | 160 | 1.2 U | 2900 | 39 | 37 |
| BENZO(A)PYRENE | 1.6 U | 1.5 U | 97 | 590 | 160 | 1.6 U | 3000 | 45 | 38 |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 110 | 630 | 170 | 11 | 3200 | 70 | 59 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 42 | 260 | 68 | 2.1 U | 1100 | 25 | 15 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-661 | SB-661 | SB-662 | SB-662 | SB-662 | SB-662 | SB-662 | SB-662A | SB-662A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-661-6 | G-SB-661-7 | G-SB-662-10 | G-SB-662-6 | G-SB-662-7 | G-SB-662-8 | G-SB-662-9 | G-SB-662A-3 | G-SB-662A-5 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 10 | 6 | 7 | 8 | 9 | 3 | 5 |
| BOTTOM DEPTH | 6 | 7 | 10 | 6 | 7 | 8 | 9 | 3 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 100 | 640 | 180 | 11 | 3400 | 47 | 38 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.5 U | 16 | 110 | 30 | 1.6 U | 440 | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 52 | 320 | 91 | 1.8 U | 1500 | 28 | 25 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 510 | 3120 | 859 | 22 | 15540 | 254 | 212 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-661 | SB-661 | SB-662 | SB-662 | SB-662 | SB-662 | SB-662 | SB-662A | SB-662A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-661-6 | G-SB-661-7 | G-SB-662-10 | G-SB-662-6 | G-SB-662-7 | G-SB-662-8 | G-SB-662-9 | G-SB-662A-3 | G-SB-662A-5 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 10 | 6 | 7 | 8 | 9 | 3 | 5 |
| BOTTOM DEPTH | 6 | 7 | 10 | 6 | 7 | 8 | 9 | 3 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-662A | SB-662A | SB-662B | SB-662B | SB-662B | SB-662B | SB-662B | SB-662B | SB-662C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662A-7 | G-SB-662A-9 | G-SB-662B-3 | G-SB-662B-5 | G-SB-662B-7 | G-SB-662B-7-AVG | G-SB-662B-7-D | G-SB-662B-9 | G-SB-662C-3 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-662A | SB-662A | SB-662B | SB-662B | SB-662B | SB-662B | SB-662B | SB-662B | SB-662C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662A-7 | G-SB-662A-9 | G-SB-662B-3 | G-SB-662B-5 | G-SB-662B-7 | G-SB-662B-7-AVG | G-SB-662B-7-D | G-SB-662B-9 | G-SB-662C-3 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 702 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 3172 | 6069 |
| BAP EQUIVALENT-POS | 21 | 702 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 3172 | 6069 |
| BENZO(A)ANTHRACENE | 14 | 360 | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 2000 | 4400 |
| BENZO(A)PYRENE | 16 | 490 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 2200 | 4100 |
| BENZO(B)FLUORANTHENE | 36 | 560 | 1.4 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 2500 | 5000 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 210 | 2 U | 2 U | 2.1 U | 2.1 U | 2.1 U | 970 | 2400 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-662A | SB-662A | SB-662B | SB-662B | SB-662B | SB-662B | SB-662B | SB-662B | SB-662C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662A-7 | G-SB-662A-9 | G-SB-662B-3 | G-SB-662B-5 | G-SB-662B-7 | G-SB-662B-7-AVG | G-SB-662B-7-D | G-SB-662B-9 | G-SB-662C-3 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 16 | 430 | 1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 2200 | 4500 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 84 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 380 | 740 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 330 | 1.7 U | 1.7 U | 1.9 U | 1.9 U | 1.9 U | 1300 | 2600 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 82 | 2464 | 0 U | 0 U | 0 U | 0 U | 0 U | 11550 | 23740 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-662A | SB-662A | SB-662B | SB-662B | SB-662B | SB-662B | SB-662B | SB-662B | SB-662C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662A-7 | G-SB-662A-9 | G-SB-662B-3 | G-SB-662B-5 | G-SB-662B-7 | G-SB-662B-7-AVG | G-SB-662B-7-D | G-SB-662B-9 | G-SB-662C-3 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-662C | SB-662C | SB-662C | SB-663 | SB-663 | SB-663 | SB-663 | SB-664 | SB-664 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662C-5 | G-SB-662C-7 | G-SB-662C-9 | G-SB-663-6 | G-SB-663-6-AVG | G-SB-663-6-D | G-SB-663-7 | G-SB-664-6 | G-SB-664-7 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 6 | 6 | 6 | 7 | 6 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 6 | 6 | 6 | 7 | 6 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-662C | SB-662C | SB-662C | SB-663 | SB-663 | SB-663 | SB-663 | SB-664 | SB-664 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662C-5 | G-SB-662C-7 | G-SB-662C-9 | G-SB-663-6 | G-SB-663-6-AVG | G-SB-663-6-D | G-SB-663-7 | G-SB-664-6 | G-SB-664-7 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 6 | 6 | 6 | 7 | 6 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 6 | 6 | 6 | 7 | 6 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 19 | 1.7 | 2268 | 1.6 U | 1.55 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 19 | 0.009 | 2268 | 1.6 U | 1.55 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1700 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 14 | 1.5 U | 1500 | 1.6 U | 1.55 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 37 | 1.4 U | 1800 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 670 | 2 U | 2 U | 2 U | 2 U | 2.1 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-662C | SB-662C | SB-662C | SB-663 | SB-663 | SB-663 | SB-663 | SB-664 | SB-664 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662C-5 | G-SB-662C-7 | G-SB-662C-9 | G-SB-663-6 | G-SB-663-6-AVG | G-SB-663-6-D | G-SB-663-7 | G-SB-664-6 | G-SB-664-7 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 6 | 6 | 6 | 7 | 6 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 6 | 6 | 6 | 7 | 6 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 16 | 8.5 | 1900 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 310 | 1.6 U | 1.55 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 9.5 | 1.8 U | 990 | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.9 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 76.5 | 8.5 | 8870 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-662C | SB-662C | SB-662C | SB-663 | SB-663 | SB-663 | SB-663 | SB-664 | SB-664 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662C-5 | G-SB-662C-7 | G-SB-662C-9 | G-SB-663-6 | G-SB-663-6-AVG | G-SB-663-6-D | G-SB-663-7 | G-SB-664-6 | G-SB-664-7 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 6 | 6 | 6 | 7 | 6 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 6 | 6 | 6 | 7 | 6 | 7 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-665 | SB-665 | SB-666 | SB-666 | SB-667 | SB-667 | SB-668 | SB-668 | SB-671 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-665-6 | G-SB-665-7 | G-SB-666-6 | G-SB-666-7 | G-SB-667-6 | G-SB-667-7 | G-SB-668-6 | G-SB-668-7 | G-SB-671-3 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 3 |
| BOTTOM DEPTH | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-665 | SB-665 | SB-666 | SB-666 | SB-667 | SB-667 | SB-668 | SB-668 | SB-671 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-665-6 | G-SB-665-7 | G-SB-666-6 | G-SB-666-7 | G-SB-667-6 | G-SB-667-7 | G-SB-668-6 | G-SB-668-7 | G-SB-671-3 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 3 |
| BOTTOM DEPTH | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 1.7 U | 246 |
| BAP EQUIVALENT-POS | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 1.7 U | 246 |
| BENZO(A)ANTHRACENE | 1.3 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 180 |
| BENZO(A)PYRENE | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 1.7 U | 170 |
| BENZO(B)FLUORANTHENE | 1.6 U | 1.6 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 210 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.3 U | 2.2 U | 2 U | 2 U | 2 U | 2.2 U | 2.1 U | 2.2 U | 76 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-665 | SB-665 | SB-666 | SB-666 | SB-667 | SB-667 | SB-668 | SB-668 | SB-671 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-665-6 | G-SB-665-7 | G-SB-666-6 | G-SB-666-7 | G-SB-667-6 | G-SB-667-7 | G-SB-668-6 | G-SB-668-7 | G-SB-671-3 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 3 |
| BOTTOM DEPTH | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.2 U | 1.2 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 160 |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 1.7 U | 27 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 2 U | 1.9 U | 1.8 U | 1.7 U | 1.8 U | 1.9 U | 1.8 U | 1.9 U | 92 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 915 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-665 | SB-665 | SB-666 | SB-666 | SB-667 | SB-667 | SB-668 | SB-668 | SB-671 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-665-6 | G-SB-665-7 | G-SB-666-6 | G-SB-666-7 | G-SB-667-6 | G-SB-667-7 | G-SB-668-6 | G-SB-668-7 | G-SB-671-3 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 3 |
| BOTTOM DEPTH | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671-4 | G-SB-671-5 | G-SB-671-6 | G-SB-671-7 | G-SB-671-7-AVG | G-SB-671-7-D | G-SB-671-8 | G-SB-671-9 | G-SB-671RE-10 |
| SAMPLE DATE | 20090929 | 20090929 | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 10 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671-4 | G-SB-671-5 | G-SB-671-6 | G-SB-671-7 | G-SB-671-7-AVG | G-SB-671-7-D | G-SB-671-8 | G-SB-671-9 | G-SB-671RE-10 |
| SAMPLE DATE | 20090929 | 20090929 | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 10 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 10 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 121 | 15223 | 439 | 859 | 430 | 1.6 U | 127 | 1986 | 1.6 U |
| BAP EQUIVALENT-POS | 121 | 15223 | 439 | 859 | 430 | 1.6 U | 127 | 1986 | 1.6 U |
| BENZO(A)ANTHRACENE | 71 | 6600 | 220 | 390 J | 195.3 | 1.2 UJ | 71 | 1100 | 1.2 U |
| BENZO(A)PYRENE | 79 | 10000 | 310 | 620 J | 310.4 | 1.6 UJ | 92 | 1400 | 1.6 U |
| BENZO(B)FLUORANTHENE | 94 | 11000 | 280 | 500 J | 250.375 | 1.5 UJ | 78 | 1300 | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 39 | 4600 | 140 | 290 J | 145.525 | 2.1 UJ | 42 | 770 | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671-4 | G-SB-671-5 | G-SB-671-6 | G-SB-671-7 | G-SB-671-7-AVG | G-SB-671-7-D | G-SB-671-8 | G-SB-671-9 | G-SB-671RE-10 |
| SAMPLE DATE | 20090929 | 20090929 | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 10 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 10 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 72 | 6700 | 300 | 470 J | 235.275 | 1.1 UJ | 75 | 1300 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 20 | 2700 | 59 | 110 J | 55.4 | 1.6 UJ | 14 | 250 | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 51 | 7100 | 180 | 370 J | 185.475 | 1.9 UJ | 52 | 870 | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 426 | 48700 | 1489 | 2750 | 1375 | 0 U | 424 | 6990 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671-4 | G-SB-671-5 | G-SB-671-6 | G-SB-671-7 | G-SB-671-7-AVG | G-SB-671-7-D | G-SB-671-8 | G-SB-671-9 | G-SB-671RE-10 |
| SAMPLE DATE | 20090929 | 20090929 | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 10 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 10 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671B | SB-671B | SB-671B | SB-671B | SB-671C | SB-671C | SB-671C | SB-671C | SB-671C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671B-3 | G-SB-671B-5 | G-SB-671B-7 | G-SB-671B-9 | G-SB-671C-3 | G-SB-671C-5 | G-SB-671C-7 | G-SB-671C-7-AVG | G-SB-671C-7-D |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671B | SB-671B | SB-671B | SB-671B | SB-671C | SB-671C | SB-671C | SB-671C | SB-671C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671B-3 | G-SB-671B-5 | G-SB-671B-7 | G-SB-671B-9 | G-SB-671C-3 | G-SB-671C-5 | G-SB-671C-7 | G-SB-671C-7-AVG | G-SB-671C-7-D |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 190 | 18 | 1.7 U | 1.7 U | 24 | 36 | 1.5 U | 1.55 U | 1.6 U |
| BAP EQUIVALENT-POS | 190 | 17 | 1.7 U | 1.7 U | 23 | 35 | 1.5 U | 1.55 U | 1.6 U |
| BENZO(A)ANTHRACENE | 120 | 12 | 1.2 U | 1.2 U | 10 | 25 | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 120 | 12 | 1.7 U | 1.7 U | 18 | 25 | 1.5 U | 1.55 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 160 | 14 | 1.5 U | 1.6 U | 17 | 44 | 1.4 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 62 | 2.1 U | 2.2 U | 2.2 U | 8.8 | 12 | 2 U | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671B | SB-671B | SB-671B | SB-671B | SB-671C | SB-671C | SB-671C | SB-671C | SB-671C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671B-3 | G-SB-671B-5 | G-SB-671B-7 | G-SB-671B-9 | G-SB-671C-3 | G-SB-671C-5 | G-SB-671C-7 | G-SB-671C-7-AVG | G-SB-671C-7-D |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 130 | 11 | 1.2 U | 1.2 U | 12 | 36 | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 34 | 1.6 U | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 69 | 23 | 1.9 U | 2 U | 26 | 30 | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 695 | 72 | 0 U | 0 U | 91.8 | 172 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-671B | SB-671B | SB-671B | SB-671B | SB-671C | SB-671C | SB-671C | SB-671C | SB-671C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671B-3 | G-SB-671B-5 | G-SB-671B-7 | G-SB-671B-9 | G-SB-671C-3 | G-SB-671C-5 | G-SB-671C-7 | G-SB-671C-7-AVG | G-SB-671C-7-D |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671C | SB-671D | SB-671D | SB-671D | SB-671D | SB-673 | SB-673 | SB-674 | SB-674 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671C-9 | G-SB-671D-3 | G-SB-671D-5 | G-SB-671D-7 | G-SB-671D-9 | G-SB-673-6 | G-SB-673-7 | G-SB-674-6 | G-SB-674-7 |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 6 | 7 | 6 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 6 | 7 | 6 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671C | SB-671D | SB-671D | SB-671D | SB-671D | SB-673 | SB-673 | SB-674 | SB-674 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671C-9 | G-SB-671D-3 | G-SB-671D-5 | G-SB-671D-7 | G-SB-671D-9 | G-SB-673-6 | G-SB-673-7 | G-SB-674-6 | G-SB-674-7 |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 6 | 7 | 6 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 6 | 7 | 6 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 114 | 1.6 U | 4.8 | 16 | 1.5 U | 1.5 U | 4.0 | 27 |
| BAP EQUIVALENT-POS | 1.6 U | 114 | 1.6 U | 3.0 | 15 | 1.5 U | 1.5 U | 2.3 | 26 |
| BENZO(A)ANTHRACENE | 1.2 U | 96 | 1.2 U | 1.2 U | 8.7 | 1.1 U | 1.1 U | 12 | 23 |
| BENZO(A)PYRENE | 1.6 U | 67 | 1.6 U | 1.7 U | 11 | 1.5 U | 1.5 U | 1.6 U | 19 |
| BENZO(B)FLUORANTHENE | 1.5 U | 88 | 1.5 U | 8.8 | 12 | 1.4 U | 1.4 U | 11 | 21 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 39 | 2.1 U | 2.2 U | 2.1 U | 2 U | 2 U | 2.1 U | 9.7 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-671C | SB-671D | SB-671D | SB-671D | SB-671D | SB-673 | SB-673 | SB-674 | SB-674 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671C-9 | G-SB-671D-3 | G-SB-671D-5 | G-SB-671D-7 | G-SB-671D-9 | G-SB-673-6 | G-SB-673-7 | G-SB-674-6 | G-SB-674-7 |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 6 | 7 | 6 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 6 | 7 | 6 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 83 | 1.1 U | 1.1 U | 8.7 | 1.1 U | 1.1 U | 11 | 25 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 23 | 1.6 U | 1.7 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.9 U | 47 | 1.8 U | 21 | 23 | 1.8 U | 1.8 U | 1.9 U | 23 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 443 | 0 U | 29.8 | 63.4 | 0 U | 0 U | 34 | 120.7 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-671C | SB-671D | SB-671D | SB-671D | SB-671D | SB-673 | SB-673 | SB-674 | SB-674 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671C-9 | G-SB-671D-3 | G-SB-671D-5 | G-SB-671D-7 | G-SB-671D-9 | G-SB-673-6 | G-SB-673-7 | G-SB-674-6 | G-SB-674-7 |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 6 | 7 | 6 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 6 | 7 | 6 | 7 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-675 | SB-675 | SB-676 | SB-676 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-675-6 | G-SB-675-7 | G-SB-676-6 | G-SB-676-7 | G-SB-677-3 | G-SB-677-4 | G-SB-677-5 | G-SB-677-6 | G-SB-677-7 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 6 | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-675 | SB-675 | SB-676 | SB-676 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-675-6 | G-SB-675-7 | G-SB-676-6 | G-SB-676-7 | G-SB-677-3 | G-SB-677-4 | G-SB-677-5 | G-SB-677-6 | G-SB-677-7 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 6 | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 127 | 16 | 1.5 U | 1.6 U | 46 | 40 | 1811 | 21 | 1.5 U |
| BAP EQUIVALENT-POS | 127 | 15 | 1.5 U | 1.6 U | 45 | 40 | 1811 | 20 | 1.5 U |
| BENZO(A)ANTHRACENE | 100 | 16 | 1.1 U | 1.2 U | 34 | 36 | 1500 | 13 | 1.1 U |
| BENZO(A)PYRENE | 73 | 12 | 1.5 U | 1.6 U | 35 | 30 | 1300 | 16 | 1.5 U |
| BENZO(B)FLUORANTHENE | 93 | 16 | 1.4 U | 1.5 U | 42 | 41 | 1300 | 15 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 32 | 2 U | 2 U | 2.1 U | 22 | 17 | 540 | 12 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-675 | SB-675 | SB-676 | SB-676 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-675-6 | G-SB-675-7 | G-SB-676-6 | G-SB-676-7 | G-SB-677-3 | G-SB-677-4 | G-SB-677-5 | G-SB-677-6 | G-SB-677-7 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 6 | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 100 | 14 | 1.1 U | 1.1 U | 36 | 40 | 1500 | 17 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 28 | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 160 | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 58 | 1.8 U | 1.8 U | 1.8 U | 19 | 18 | 640 | 11 | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 484 | 58 | 0 U | 0 U | 188 | 182 | 6940 | 84 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-675 | SB-675 | SB-676 | SB-676 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-675-6 | G-SB-675-7 | G-SB-676-6 | G-SB-676-7 | G-SB-677-3 | G-SB-677-4 | G-SB-677-5 | G-SB-677-6 | G-SB-677-7 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 6 | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-677 | SB-677 | SB-677A | SB-677A | SB-677A | SB-677A | SB-677B | SB-677B | SB-677B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-677-8 | G-SB-677-9 | G-SB-677A-3 | G-SB-677A-5 | G-SB-677A-7 | G-SB-677A-9 | G-SB-677B-3 | G-SB-677B-5 | G-SB-677B-7 |
| SAMPLE DATE | 20091020 | 20091020 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-677 | SB-677 | SB-677A | SB-677A | SB-677A | SB-677A | SB-677B | SB-677B | SB-677B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-677-8 | G-SB-677-9 | G-SB-677A-3 | G-SB-677A-5 | G-SB-677A-7 | G-SB-677A-9 | G-SB-677B-3 | G-SB-677B-5 | G-SB-677B-7 |
| SAMPLE DATE | 20091020 | 20091020 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 40 | 269 | 4.2 | 21 | 44 | 119 | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 39 | 269 | 2.5 | 20 | 43 | 119 | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 26 | 190 | 1.1 U | 16 | 28 | 78 | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 31 | 180 | 1.5 U | 15 | 32 | 94 | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 54 | 210 | 25 | 37 | 54 | 100 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 17 | 84 | 1.9 U | 2 U | 24 | 60 | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-677 | SB-677 | SB-677A | SB-677A | SB-677A | SB-677A | SB-677B | SB-677B | SB-677B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-677-8 | G-SB-677-9 | G-SB-677A-3 | G-SB-677A-5 | G-SB-677A-7 | G-SB-677A-9 | G-SB-677B-3 | G-SB-677B-5 | G-SB-677B-7 |
| SAMPLE DATE | 20091020 | 20091020 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 32 | 230 | 1 U | 19 | 34 | 87 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 38 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 1.7 U | 100 | 1.7 U | 1.8 U | 23 | 62 | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 160 | 1032 | 25 | 87 | 195 | 481 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-677 | SB-677 | SB-677A | SB-677A | SB-677A | SB-677A | SB-677B | SB-677B | SB-677B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-677-8 | G-SB-677-9 | G-SB-677A-3 | G-SB-677A-5 | G-SB-677A-7 | G-SB-677A-9 | G-SB-677B-3 | G-SB-677B-5 | G-SB-677B-7 |
| SAMPLE DATE | 20091020 | 20091020 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-677B | SB-677B | SB-677B | SB-677D | SB-677D | SB-677D | SB-677D | SB-678 | SB-678 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-677B-9 | G-SB-677B-9-AVG | G-SB-677B-9-D | G-SB-677D-3 | G-SB-677D-5 | G-SB-677D-7 | G-SB-677D-9 | G-SB-678-3 | G-SB-678-4 |
| SAMPLE DATE | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091001 | 20091001 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 4 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-677B | SB-677B | SB-677B | SB-677D | SB-677D | SB-677D | SB-677D | SB-678 | SB-678 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-677B-9 | G-SB-677B-9-AVG | G-SB-677B-9-D | G-SB-677D-3 | G-SB-677D-5 | G-SB-677D-7 | G-SB-677D-9 | G-SB-678-3 | G-SB-678-4 |
| SAMPLE DATE | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091001 | 20091001 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 4 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 203 | 327 | 452 | 12 | 4746 | 78 | 38 | 36 | 103 |
| BAP EQUIVALENT-POS | 202 | 327 | 452 | 12 | 4746 | 78 | 37 | 36 | 103 |
| BENZO(A)ANTHRACENE | 140 J | 205 | 270 J | 8.6 | 3100 | 25 | 14 | 24 | 63 |
| BENZO(A)PYRENE | 160 J | 235 | 310 J | 8 | 3200 | 44 | 30 | 28 | 72 |
| BENZO(B)FLUORANTHENE | 180 J | 255 | 330 J | 27 | 3700 | 46 | 31 | 33 | 83 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 74 J | 107 | 140 J | 1.9 U | 1300 | 16 | 7.7 | 12 | 37 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-677B | SB-677B | SB-677B | SB-677D | SB-677D | SB-677D | SB-677D | SB-678 | SB-678 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-677B-9 | G-SB-677B-9-AVG | G-SB-677B-9-D | G-SB-677D-3 | G-SB-677D-5 | G-SB-677D-7 | G-SB-677D-9 | G-SB-678-3 | G-SB-678-4 |
| SAMPLE DATE | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091001 | 20091001 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 4 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 160 J | 235 | 310 J | 8.7 | 3200 | 25 | 17 | 31 | 79 |
| DIBENZO(A,H)ANTHRACENE | 1.6 UJ | 31.4 | 62 J | 1.5 U | 650 | 23 | 1.5 U | 1.5 U | 12 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 91 J | 135.5 | 180 J | 1.7 U | 2000 | 38 | 25 | 18 | 44 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 805 | 1203.5 | 1602 | 52.3 | 17150 | 217 | 124.7 | 146 | 390 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-677B | SB-677B | SB-677B | SB-677D | SB-677D | SB-677D | SB-677D | SB-678 | SB-678 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-677B-9 | G-SB-677B-9-AVG | G-SB-677B-9-D | G-SB-677D-3 | G-SB-677D-5 | G-SB-677D-7 | G-SB-677D-9 | G-SB-678-3 | G-SB-678-4 |
| SAMPLE DATE | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091001 | 20091001 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 4 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678B | SB-678B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678-5 | G-SB-678-6 | G-SB-678-7 | G-SB-678-8 | G-SB-678-8-AVG | G-SB-678-8-D | G-SB-678-9 | G-SB-678B-3 | G-SB-678B-3-AVG |
| SAMPLE DATE | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 3 | 3 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678B | SB-678B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678-5 | G-SB-678-6 | G-SB-678-7 | G-SB-678-8 | G-SB-678-8-AVG | G-SB-678-8-D | G-SB-678-9 | G-SB-678B-3 | G-SB-678B-3-AVG |
| SAMPLE DATE | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 3 | 3 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 3 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1905 | 106 | 379 | 1.5 U | 17 | 34 | 2 | 22 | 18 |
| BAP EQUIVALENT-POS | 1905 | 105 | 379 | 1.5 U | 17 | 33 | 0.84 | 22 | 17 |
| BENZO(A)ANTHRACENE | 1100 | 52 | 200 | 1.1 UJ | 11.275 | 22 J | 1.1 U | 12 | 6.275 |
| BENZO(A)PYRENE | 1300 | 86 | 260 | 1.5 UJ | 13.875 | 27 J | 1.5 U | 16 | 12.85 |
| BENZO(B)FLUORANTHENE | 1600 | 86 | 270 | 1.4 UJ | 10.85 | 21 J | 8.4 | 21 | 16 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 470 | 47 | 110 | 2 UJ | 8.5 | 16 J | 2 U | 1.9 U | 1.95 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678B | SB-678B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678-5 | G-SB-678-6 | G-SB-678-7 | G-SB-678-8 | G-SB-678-8-AVG | G-SB-678-8-D | G-SB-678-9 | G-SB-678B-3 | G-SB-678B-3-AVG |
| SAMPLE DATE | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 3 | 3 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 3 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1200 | 65 | 240 | 1.1 UJ | 13.275 | 26 J | 1.1 U | 13 | 6.75 |
| DIBENZO(A,H)ANTHRACENE | 250 | 1.5 U | 53 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 790 | 51 | 180 | 1.8 UJ | 8.95 | 17 J | 1.8 U | 24 | 22 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 6710 | 387 | 1313 | 0 U | 64.5 | 129 | 8.4 | 86 | 63.35 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678B | SB-678B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678-5 | G-SB-678-6 | G-SB-678-7 | G-SB-678-8 | G-SB-678-8-AVG | G-SB-678-8-D | G-SB-678-9 | G-SB-678B-3 | G-SB-678B-3-AVG |
| SAMPLE DATE | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 3 | 3 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 3 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-678B | SB-678B | SB-678B | SB-678B | SB-678C | SB-678C | SB-678C | SB-678C | SB-679 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678B-3-D | G-SB-678B-5 | G-SB-678B-7 | G-SB-678B-9 | G-SB-678C-3 | G-SB-678C-5 | G-SB-678C-7 | G-SB-678C-9 | G-SB-679-3 |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091030 | 20091030 | 20091030 | 20091030 | 20091001 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-678B | SB-678B | SB-678B | SB-678B | SB-678C | SB-678C | SB-678C | SB-678C | SB-679 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678B-3-D | G-SB-678B-5 | G-SB-678B-7 | G-SB-678B-9 | G-SB-678C-3 | G-SB-678C-5 | G-SB-678C-7 | G-SB-678C-9 | G-SB-679-3 |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091030 | 20091030 | 20091030 | 20091030 | 20091001 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 14 | 140 | 1.5 U | 946 | 1.5 U | 1.5 U | 1.6 U | 28 | 71 |
| BAP EQUIVALENT-POS | 13 | 140 | 1.5 U | 946 | 1.5 U | 1.5 U | 1.6 U | 27 | 71 |
| BENZO(A)ANTHRACENE | 1.1 U | 59 | 1.1 U | 580 | 1.1 U | 1.1 U | 1.2 U | 10 | 44 |
| BENZO(A)PYRENE | 9.7 | 88 | 1.5 U | 640 | 1.5 U | 1.5 U | 1.6 U | 21 | 58 |
| BENZO(B)FLUORANTHENE | 11 | 100 | 1.4 U | 870 | 1.4 U | 1.4 U | 1.5 U | 26 | 40 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 28 | 2 U | 230 | 2 U | 2 U | 2.1 U | 2.1 U | 65 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-678B | SB-678B | SB-678B | SB-678B | SB-678C | SB-678C | SB-678C | SB-678C | SB-679 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678B-3-D | G-SB-678B-5 | G-SB-678B-7 | G-SB-678B-9 | G-SB-678C-3 | G-SB-678C-5 | G-SB-678C-7 | G-SB-678C-9 | G-SB-679-3 |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091030 | 20091030 | 20091030 | 20091030 | 20091001 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 73 | 1 U | 700 | 1.1 U | 1.1 U | 1.1 U | 11 | 53 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 29 | 1.5 U | 120 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 20 | 64 | 1.7 U | 380 | 1.8 U | 1.8 U | 1.9 U | 23 | 35 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 40.7 | 441 | 0 U | 3520 | 0 U | 0 U | 0 U | 91 | 295 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-678B | SB-678B | SB-678B | SB-678B | SB-678C | SB-678C | SB-678C | SB-678C | SB-679 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678B-3-D | G-SB-678B-5 | G-SB-678B-7 | G-SB-678B-9 | G-SB-678C-3 | G-SB-678C-5 | G-SB-678C-7 | G-SB-678C-9 | G-SB-679-3 |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091030 | 20091030 | 20091030 | 20091030 | 20091001 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-679 | SB-679 | SB-679 | SB-679 | SB-679 | SB-679 | SB-679C | SB-679C | SB-679C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-679-4 | G-SB-679-5 | G-SB-679-6 | G-SB-679-7 | G-SB-679-8 | G-SB-679-9 | G-SB-679C-3 | G-SB-679C-5 | G-SB-679C-7 |
| SAMPLE DATE | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-679 | SB-679 | SB-679 | SB-679 | SB-679 | SB-679 | SB-679C | SB-679C | SB-679C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-679-4 | G-SB-679-5 | G-SB-679-6 | G-SB-679-7 | G-SB-679-8 | G-SB-679-9 | G-SB-679C-3 | G-SB-679C-5 | G-SB-679C-7 |
| SAMPLE DATE | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 5 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 12 | 222 | 36 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 11 | 222 | 35 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 94 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 9.8 | 160 | 30 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 8.1 | 160 | 31 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 66 | 13 | 2 U | 2 U | 2 U | 2 U | 1.9 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-679 | SB-679 | SB-679 | SB-679 | SB-679 | SB-679 | SB-679C | SB-679C | SB-679C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-679-4 | G-SB-679-5 | G-SB-679-6 | G-SB-679-7 | G-SB-679-8 | G-SB-679-9 | G-SB-679C-3 | G-SB-679C-5 | G-SB-679C-7 |
| SAMPLE DATE | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 5 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 7.9 | 110 | 14 | 1.1 U | 1.1 U | 1.1 U | 1 U | 1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 27 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 89 | 21 | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 25.8 | 706 | 109 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-679 | SB-679 | SB-679 | SB-679 | SB-679 | SB-679 | SB-679C | SB-679C | SB-679C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-679-4 | G-SB-679-5 | G-SB-679-6 | G-SB-679-7 | G-SB-679-8 | G-SB-679-9 | G-SB-679C-3 | G-SB-679C-5 | G-SB-679C-7 |
| SAMPLE DATE | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 5 | 7 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-679C | SB-679C | SB-679C | SB-679D | SB-679D | SB-679D | SB-679D |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-679C-9 | G-SB-679C-9-AVG | G-SB-679C-9-D | G-SB-679D-3 | G-SB-679D-5 | G-SB-679D-7 | G-SB-679D-9 |
| SAMPLE DATE | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-679C | SB-679C | SB-679C | SB-679D | SB-679D | SB-679D | SB-679D |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-679C-9 | G-SB-679C-9-AVG | G-SB-679C-9-D | G-SB-679D-3 | G-SB-679D-5 | G-SB-679D-7 | G-SB-679D-9 |
| SAMPLE DATE | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 111 | 56 | 1.6 U | 1.5 U | 17 | 1.5 U | 20 |
| BAP EQUIVALENT-POS | 111 | 56 | 1.6 U | 1.5 U | 16 | 1.5 U | 20 |
| BENZO(A)ANTHRACENE | 23 J | 11.775 | 1.1 UJ | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 68 J | 34.4 | 1.6 UJ | 1.5 U | 16 | 1.5 U | 16 |
| BENZO(B)FLUORANTHENE | 77 J | 38.85 | 1.4 UJ | 1.4 U | 1.4 U | 1.4 U | 17 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 13 | 7 | 2 U | 1.9 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-679C | SB-679C | SB-679C | SB-679D | SB-679D | SB-679D | SB-679D |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-679C-9 | G-SB-679C-9-AVG | G-SB-679C-9-D | G-SB-679D-3 | G-SB-679D-5 | G-SB-679D-7 | G-SB-679D-9 |
| SAMPLE DATE | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 33 J | 16.775 | 1.1 UJ | 1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 28 J | 14.4 | 1.6 UJ | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 52 J | 26.45 | 1.8 UJ | 1.7 U | 1.8 U | 1.8 U | 19 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 294 | 147 | 0 U | 0 U | 16 | 0 U | 52 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-679C | SB-679C | SB-679C | SB-679D | SB-679D | SB-679D | SB-679D |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-679C-9 | G-SB-679C-9-AVG | G-SB-679C-9-D | G-SB-679D-3 | G-SB-679D-5 | G-SB-679D-7 | G-SB-679D-9 |
| SAMPLE DATE | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680D | SB-680D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680-3 | G-SB-680-4 | G-SB-680-5 | G-SB-680-6 | G-SB-680-7 | G-SB-680-8 | G-SB-680-9 | G-SB-680D-3 | G-SB-680D-7 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091102 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 7 |
| BOTTOM DEPTH | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680D | SB-680D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680-3 | G-SB-680-4 | G-SB-680-5 | G-SB-680-6 | G-SB-680-7 | G-SB-680-8 | G-SB-680-9 | G-SB-680D-3 | G-SB-680D-7 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091102 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 7 |
| BOTTOM DEPTH | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 24 | 799 | 1112 | 24698 | 604 | 1.5 U | 1.5 U | 76 | 2081 |
| BAP EQUIVALENT-POS | 23 | 799 | 1112 | 24698 | 604 | 1.5 U | 1.5 U | 76 | 2080 |
| BENZO(A)ANTHRACENE | 18 | 530 | 740 | 15000 | 420 | 1.1 U | 1.1 U | 47 | 950 |
| BENZO(A)PYRENE | 18 | 550 | 760 | 17000 | 430 | 1.5 U | 1.5 U | 48 | 1700 |
| BENZO(B)FLUORANTHENE | 18 | 690 | 900 | 18000 | 450 | 1.4 U | 1.4 U | 67 | 1800 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 11 | 330 | 400 | 8100 | 210 | 2 U | 2 U | 26 | 620 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680D | SB-680D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680-3 | G-SB-680-4 | G-SB-680-5 | G-SB-680-6 | G-SB-680-7 | G-SB-680-8 | G-SB-680-9 | G-SB-680D-3 | G-SB-680D-7 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091102 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 7 |
| BOTTOM DEPTH | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 21 | 590 | 840 | 17000 | 390 | 1 U | 1.1 U | 57 | 1300 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 93 | 140 | 3300 | 61 | 1.5 U | 1.5 U | 13 | 3.3 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 11 | 300 | 430 | 10000 | 240 | 1.7 U | 1.8 U | 35 | 970 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 97 | 3083 | 4210 | 88400 | 2201 | 0 U | 0 U | 293 | 7340 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680D | SB-680D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680-3 | G-SB-680-4 | G-SB-680-5 | G-SB-680-6 | G-SB-680-7 | G-SB-680-8 | G-SB-680-9 | G-SB-680D-3 | G-SB-680D-7 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091102 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 7 |
| BOTTOM DEPTH | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 7 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-680D | SB-681 | SB-681 | SB-682 | SB-682 | SB-683 | SB-683 | SB-684 | SB-684 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680D-9 | G-SB-681-5 | G-SB-681-6 | G-SB-682-5 | G-SB-682-6 | G-SB-683-5 | G-SB-683-6 | G-SB-684-5 | G-SB-684-5-AVG |
| SAMPLE DATE | 20091102 | 20090924 | 20090924 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 |
| BOTTOM DEPTH | 9 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-680D | SB-681 | SB-681 | SB-682 | SB-682 | SB-683 | SB-683 | SB-684 | SB-684 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680D-9 | G-SB-681-5 | G-SB-681-6 | G-SB-682-5 | G-SB-682-6 | G-SB-683-5 | G-SB-683-6 | G-SB-684-5 | G-SB-684-5-AVG |
| SAMPLE DATE | 20091102 | 20090924 | 20090924 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 |
| BOTTOM DEPTH | 9 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 10 | 83 | 1.5 U | 1.5 U | 24 | 149 | 1.6 U | 2.8 | 58 |
| BAP EQUIVALENT-POS | 9.4 | 82 | 1.5 U | 1.5 U | 23 | 149 | 1.6 U | 1.1 | 57 |
| BENZO(A)ANTHRACENE | 1.1 U | 99 | 1.1 U | 1.1 U | 21 | 76 | 1.1 U | 11 J | 50 |
| BENZO(A)PYRENE | 8.4 | 60 | 1.5 U | 1.5 U | 16 | 92 | 1.6 U | 1.5 UJ | 32.375 |
| BENZO(B)FLUORANTHENE | 10 | 83 | 1.4 U | 1.3 U | 26 | 120 | 1.4 U | 1.4 UJ | 55.35 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 42 | 1.9 U | 1.9 U | 9 | 50 | 2 U | 2 UJ | 16 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-680D | SB-681 | SB-681 | SB-682 | SB-682 | SB-683 | SB-683 | SB-684 | SB-684 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680D-9 | G-SB-681-5 | G-SB-681-6 | G-SB-682-5 | G-SB-682-6 | G-SB-683-5 | G-SB-683-6 | G-SB-684-5 | G-SB-684-5-AVG |
| SAMPLE DATE | 20091102 | 20090924 | 20090924 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 |
| BOTTOM DEPTH | 9 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 80 | 1 U | 1 U | 20 | 100 | 1.1 U | 1 UJ | 39.75 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 31 | 1.6 U | 1.5 UJ | 12.875 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 35 | 1.7 U | 1.7 U | 20 | 59 | 1.8 U | 1.7 UJ | 22.925 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 18.4 | 399 | 0 U | 0 U | 112 | 528 | 0 U | 11 | 227 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-680D | SB-681 | SB-681 | SB-682 | SB-682 | SB-683 | SB-683 | SB-684 | SB-684 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680D-9 | G-SB-681-5 | G-SB-681-6 | G-SB-682-5 | G-SB-682-6 | G-SB-683-5 | G-SB-683-6 | G-SB-684-5 | G-SB-684-5-AVG |
| SAMPLE DATE | 20091102 | 20090924 | 20090924 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 |
| BOTTOM DEPTH | 9 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-684 | SB-684 | SB-685 | SB-685 | SB-685 | SB-685 | SB-686 | SB-686 | SB-687 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-684-5-D | G-SB-684-6 | G-SB-685-3 | G-SB-685-4 | G-SB-685-4-AVG | G-SB-685-4-D | G-SB-686-3 | G-SB-686-4 | G-SB-687-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 3 | 4 | 4 | 4 | 3 | 4 | 3 |
| BOTTOM DEPTH | 5 | 6 | 3 | 4 | 4 | 4 | 3 | 4 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-684 | SB-684 | SB-685 | SB-685 | SB-685 | SB-685 | SB-686 | SB-686 | SB-687 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-684-5-D | G-SB-684-6 | G-SB-685-3 | G-SB-685-4 | G-SB-685-4-AVG | G-SB-685-4-D | G-SB-686-3 | G-SB-686-4 | G-SB-687-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 3 | 4 | 4 | 4 | 3 | 4 | 3 |
| BOTTOM DEPTH | 5 | 6 | 3 | 4 | 4 | 4 | 3 | 4 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 114 | 1.5 U | 11 | 48 | 44 | 40 | 1.4 U | 1.5 U | 10 |
| BAP EQUIVALENT-POS | 114 | 1.5 U | 10 | 47 | 43 | 39 | 1.4 U | 1.5 U | 9.2 |
| BENZO(A)ANTHRACENE | 89 J | 1.1 U | 1.1 U | 40 | 36 | 32 | 1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 64 J | 1.5 U | 9.1 | 36 | 33 | 30 | 1.4 U | 1.5 U | 7.9 |
| BENZO(B)FLUORANTHENE | 110 J | 1.4 U | 9.5 | 43 | 39 | 35 | 1.3 U | 1.4 U | 13 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 31 J | 2 U | 1.9 U | 18 | 19.5 | 21 | 1.9 U | 1.9 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-684 | SB-684 | SB-685 | SB-685 | SB-685 | SB-685 | SB-686 | SB-686 | SB-687 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-684-5-D | G-SB-684-6 | G-SB-685-3 | G-SB-685-4 | G-SB-685-4-AVG | G-SB-685-4-D | G-SB-686-3 | G-SB-686-4 | G-SB-687-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 3 | 4 | 4 | 4 | 3 | 4 | 3 |
| BOTTOM DEPTH | 5 | 6 | 3 | 4 | 4 | 4 | 3 | 4 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 79 J | 1.1 U | 11 | 41 | 42.5 | 44 | 0.99 U | 1 U | 9.2 |
| DIBENZO(A,H)ANTHRACENE | 25 J | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 45 J | 1.8 U | 1.7 U | 23 | 21 | 19 | 1.7 U | 1.7 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 443 | 0 U | 29.6 | 201 | 191 | 181 | 0 U | 0 U | 30.1 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-684 | SB-684 | SB-685 | SB-685 | SB-685 | SB-685 | SB-686 | SB-686 | SB-687 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-684-5-D | G-SB-684-6 | G-SB-685-3 | G-SB-685-4 | G-SB-685-4-AVG | G-SB-685-4-D | G-SB-686-3 | G-SB-686-4 | G-SB-687-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 3 | 4 | 4 | 4 | 3 | 4 | 3 |
| BOTTOM DEPTH | 5 | 6 | 3 | 4 | 4 | 4 | 3 | 4 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-687 | SB-688 | SB-688 | SB-689 | SB-689 | SB-690 | SB-690 | SB-690 | SB-690 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-687-4 | G-SB-688-3 | G-SB-688-4 | G-SB-689-7 | G-SB-689-8 | G-SB-690-7 | G-SB-690-7-AVG | G-SB-690-7-D | G-SB-690-8 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 7 | 8 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 4 | 3 | 4 | 7 | 8 | 7 | 7 | 7 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-687 | SB-688 | SB-688 | SB-689 | SB-689 | SB-690 | SB-690 | SB-690 | SB-690 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-687-4 | G-SB-688-3 | G-SB-688-4 | G-SB-689-7 | G-SB-689-8 | G-SB-690-7 | G-SB-690-7-AVG | G-SB-690-7-D | G-SB-690-8 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 7 | 8 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 4 | 3 | 4 | 7 | 8 | 7 | 7 | 7 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 16 | 13 | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 6.4 | 12 | 1.5 U |
| BAP EQUIVALENT-POS | 15 | 12 | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 6.0 | 11 | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.2 U | 4.4 | 8.2 | 1.1 U |
| BENZO(A)PYRENE | 13 | 11 | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 4.325 | 7.8 | 1.5 U |
| BENZO(B)FLUORANTHENE | 13 | 1.4 U | 1.5 U | 1.4 U | 1.4 U | 1.6 U | 4.6 | 8.4 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 1.9 U | 2.1 U | 2 U | 2 U | 2.2 U | 2.05 U | 1.9 U | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-687 | SB-688 | SB-688 | SB-689 | SB-689 | SB-690 | SB-690 | SB-690 | SB-690 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-687-4 | G-SB-688-3 | G-SB-688-4 | G-SB-689-7 | G-SB-689-8 | G-SB-690-7 | G-SB-690-7-AVG | G-SB-690-7-D | G-SB-690-8 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 7 | 8 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 4 | 3 | 4 | 7 | 8 | 7 | 7 | 7 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 13 | 8.7 | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 7.8 | 8.5 | 1.8 U | 1.8 U | 1.8 U | 2 UJ | 9 | 17 J | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 46.8 | 28.2 | 0 U | 0 U | 0 U | 0 U | 20.7 | 41.4 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-687 | SB-688 | SB-688 | SB-689 | SB-689 | SB-690 | SB-690 | SB-690 | SB-690 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-687-4 | G-SB-688-3 | G-SB-688-4 | G-SB-689-7 | G-SB-689-8 | G-SB-690-7 | G-SB-690-7-AVG | G-SB-690-7-D | G-SB-690-8 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 7 | 8 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 4 | 3 | 4 | 7 | 8 | 7 | 7 | 7 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-691 | SB-691 | SB-692 | SB-692 | SB-693 | SB-693 | SB-693 | SB-693 | SB-693 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-691-7 | G-SB-691-8 | G-SB-692-7 | G-SB-692-8 | G-SB-693-5 | G-SB-693-6 | G-SB-693-7 | G-SB-693-8 | G-SB-693-9 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 7 | 8 | 5 | 6 | 7 | 8 | 9 |
| BOTTOM DEPTH | 7 | 8 | 7 | 8 | 5 | 6 | 7 | 8 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-691 | SB-691 | SB-692 | SB-692 | SB-693 | SB-693 | SB-693 | SB-693 | SB-693 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-691-7 | G-SB-691-8 | G-SB-692-7 | G-SB-692-8 | G-SB-693-5 | G-SB-693-6 | G-SB-693-7 | G-SB-693-8 | G-SB-693-9 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 7 | 8 | 5 | 6 | 7 | 8 | 9 |
| BOTTOM DEPTH | 7 | 8 | 7 | 8 | 5 | 6 | 7 | 8 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 3.4 | 1.6 U | 1.5 U | 1.5 U | 4469 | 21 | 2.7 | 1.6 U | 2.7 |
| BAP EQUIVALENT-POS | 1.7 | 1.6 U | 1.5 U | 1.5 U | 4469 | 20 | 0.93 | 1.6 U | 0.91 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 3000 | 16 | 1.2 U | 1.2 U | 9 |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 3100 | 16 | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 3400 | 17 | 9.2 | 1.5 U | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 1.9 U | 2 U | 1600 | 2.1 U | 2.1 U | 2.1 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-691 | SB-691 | SB-692 | SB-692 | SB-693 | SB-693 | SB-693 | SB-693 | SB-693 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-691-7 | G-SB-691-8 | G-SB-692-7 | G-SB-692-8 | G-SB-693-5 | G-SB-693-6 | G-SB-693-7 | G-SB-693-8 | G-SB-693-9 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 7 | 8 | 5 | 6 | 7 | 8 | 9 |
| BOTTOM DEPTH | 7 | 8 | 7 | 8 | 5 | 6 | 7 | 8 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1 U | 1.1 U | 3300 | 14 | 9.4 | 1.1 U | 11 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 540 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 17 | 1.8 U | 1.7 U | 1.8 U | 1700 | 8.2 | 1.9 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 17 | 0 U | 0 U | 0 U | 16640 | 71.2 | 18.6 | 0 U | 20 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-691 | SB-691 | SB-692 | SB-692 | SB-693 | SB-693 | SB-693 | SB-693 | SB-693 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-691-7 | G-SB-691-8 | G-SB-692-7 | G-SB-692-8 | G-SB-693-5 | G-SB-693-6 | G-SB-693-7 | G-SB-693-8 | G-SB-693-9 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 8 | 7 | 8 | 5 | 6 | 7 | 8 | 9 |
| BOTTOM DEPTH | 7 | 8 | 7 | 8 | 5 | 6 | 7 | 8 | 9 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-693A | SB-693A | SB-693A | SB-693B | SB-693B | SB-693B | SB-693D | SB-693D | SB-693D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-693A-4 | G-SB-693A-6 | G-SB-693A-8 | G-SB-693B-4 | G-SB-693B-6 | G-SB-693B-8 | G-SB-693D-4 | G-SB-693D-6 | G-SB-693D-8 |
| SAMPLE DATE | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-693A | SB-693A | SB-693A | SB-693B | SB-693B | SB-693B | SB-693D | SB-693D | SB-693D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-693A-4 | G-SB-693A-6 | G-SB-693A-8 | G-SB-693B-4 | G-SB-693B-6 | G-SB-693B-8 | G-SB-693D-4 | G-SB-693D-6 | G-SB-693D-8 |
| SAMPLE DATE | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 55 | 386 | 242 | 77 | 23 | 14 | 15 | 780 | 65 |
| BAP EQUIVALENT-POS | 54 | 386 | 242 | 77 | 23 | 13 | 15 | 780 | 65 |
| BENZO(A)ANTHRACENE | 42 | 250 | 160 | 48 | 14 | 9.5 | 13 | 570 | 44 J |
| BENZO(A)PYRENE | 42 | 270 | 170 | 52 | 18 | 11 | 12 | 550 | 44 J |
| BENZO(B)FLUORANTHENE | 49 | 280 | 170 | 61 | 18 | 12 | 12 | 610 | 49 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 18 | 150 | 100 | 25 | 10 | 2.1 U | 2 U | 270 | 20 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-693A | SB-693A | SB-693A | SB-693B | SB-693B | SB-693B | SB-693D | SB-693D | SB-693D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-693A-4 | G-SB-693A-6 | G-SB-693A-8 | G-SB-693B-4 | G-SB-693B-6 | G-SB-693B-8 | G-SB-693D-4 | G-SB-693D-6 | G-SB-693D-8 |
| SAMPLE DATE | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 57 | 290 | 190 | 64 | 21 | 13 | 16 | 640 | 51 J |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 45 | 28 | 10 | 1.6 U | 1.6 U | 1.5 U | 78 | 8.5 J |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 27 | 160 | 97 | 36 | 13 | 1.9 U | 1.7 U | 310 | 28 J |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 235 | 1445 | 915 | 296 | 94 | 45.5 | 53 | 3028 | 244.5 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-693A | SB-693A | SB-693A | SB-693B | SB-693B | SB-693B | SB-693D | SB-693D | SB-693D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-693A-4 | G-SB-693A-6 | G-SB-693A-8 | G-SB-693B-4 | G-SB-693B-6 | G-SB-693B-8 | G-SB-693D-4 | G-SB-693D-6 | G-SB-693D-8 |
| SAMPLE DATE | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-693D | SB-693D | SB-694 | SB-694 | SB-695 | SB-695 | SB-695 | SB-695 | SB-696 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-693D-8-AVG | G-SB-693D-8-D | G-SB-694-5 | G-SB-694-6 | G-SB-695-5 | G-SB-695-5-AVG | G-SB-695-5-D | G-SB-695-6 | G-SB-696-5 |
| SAMPLE DATE | 20091027 | 20091027 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 5 | 6 | 5 | 5 | 5 | 6 | 5 |
| BOTTOM DEPTH | 8 | 8 | 5 | 6 | 5 | 5 | 5 | 6 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-693D | SB-693D | SB-694 | SB-694 | SB-695 | SB-695 | SB-695 | SB-695 | SB-696 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-693D-8-AVG | G-SB-693D-8-D | G-SB-694-5 | G-SB-694-6 | G-SB-695-5 | G-SB-695-5-AVG | G-SB-695-5-D | G-SB-695-6 | G-SB-696-5 |
| SAMPLE DATE | 20091027 | 20091027 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 5 | 6 | 5 | 5 | 5 | 6 | 5 |
| BOTTOM DEPTH | 8 | 8 | 5 | 6 | 5 | 5 | 5 | 6 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 354 | 644 | 20 | 1.6 U | 50 | 44 | 39 | 25 | 43 |
| BAP EQUIVALENT-POS | 354 | 644 | 19 | 1.6 U | 49 | 43 | 38 | 24 | 42 |
| BENZO(A)ANTHRACENE | 247 | 450 J | 11 | 1.1 U | 41 | 35 | 29 | 18 | 24 |
| BENZO(A)PYRENE | 242 | 440 J | 14 | 1.6 U | 38 | 33.5 | 29 | 19 | 34 |
| BENZO(B)FLUORANTHENE | 254.5 | 460 J | 15 | 1.4 U | 41 | 35 | 29 | 20 | 35 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 120 | 220 J | 2.1 U | 2 U | 17 | 14.5 | 12 | 9.5 | 15 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-693D | SB-693D | SB-694 | SB-694 | SB-695 | SB-695 | SB-695 | SB-695 | SB-696 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-693D-8-AVG | G-SB-693D-8-D | G-SB-694-5 | G-SB-694-6 | G-SB-695-5 | G-SB-695-5-AVG | G-SB-695-5-D | G-SB-695-6 | G-SB-696-5 |
| SAMPLE DATE | 20091027 | 20091027 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 5 | 6 | 5 | 5 | 5 | 6 | 5 |
| BOTTOM DEPTH | 8 | 8 | 5 | 6 | 5 | 5 | 5 | 6 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 305.5 | 560 J | 16 | 1.1 U | 43 | 36.5 | 30 | 20 | 28 |
| DIBENZO(A,H)ANTHRACENE | 45.75 | 83 J | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 149 | 270 J | 21 | 1.8 U | 25 | 27.5 | 30 | 11 | 22 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1363.75 | 2483 | 77 | 0 U | 205 | 182 | 159 | 97.5 | 158 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-693D | SB-693D | SB-694 | SB-694 | SB-695 | SB-695 | SB-695 | SB-695 | SB-696 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-693D-8-AVG | G-SB-693D-8-D | G-SB-694-5 | G-SB-694-6 | G-SB-695-5 | G-SB-695-5-AVG | G-SB-695-5-D | G-SB-695-6 | G-SB-696-5 |
| SAMPLE DATE | 20091027 | 20091027 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 5 | 6 | 5 | 5 | 5 | 6 | 5 |
| BOTTOM DEPTH | 8 | 8 | 5 | 6 | 5 | 5 | 5 | 6 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-696 | SB-697 | SB-697 | SB-698 | SB-698 | SB-699 | SB-699 | SB-700 | SB-700 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-696-6 | G-SB-697-10 | G-SB-697-9 | G-SB-698-10 | G-SB-698-9 | G-SB-699-3 | G-SB-699-4 | G-SB-700-3 | G-SB-700-4 |
| SAMPLE DATE | 20091001 | 20090930 | 20090930 | 20090930 | 20090930 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 10 | 9 | 10 | 9 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 6 | 10 | 9 | 10 | 9 | 3 | 4 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-696 | SB-697 | SB-697 | SB-698 | SB-698 | SB-699 | SB-699 | SB-700 | SB-700 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-696-6 | G-SB-697-10 | G-SB-697-9 | G-SB-698-10 | G-SB-698-9 | G-SB-699-3 | G-SB-699-4 | G-SB-700-3 | G-SB-700-4 |
| SAMPLE DATE | 20091001 | 20090930 | 20090930 | 20090930 | 20090930 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 10 | 9 | 10 | 9 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 6 | 10 | 9 | 10 | 9 | 3 | 4 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 126 | 1.6 U | 1.5 U | 18 | 2.5 | 136 | 14 | 17 | 33 |
| BAP EQUIVALENT-POS | 126 | 1.6 U | 1.5 U | 17 | 0.84 | 136 | 13 | 16 | 32 |
| BENZO(A)ANTHRACENE | 55 | 1.2 U | 1.1 U | 12 | 1.1 U | 92 | 12 | 7.9 | 13 |
| BENZO(A)PYRENE | 89 | 1.6 U | 1.5 U | 12 | 1.5 U | 96 | 11 | 14 | 26 |
| BENZO(B)FLUORANTHENE | 94 | 1.5 U | 1.4 U | 18 | 8.4 | 100 | 12 | 13 | 31 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 38 | 2.1 U | 2 U | 1.9 U | 1.9 U | 44 | 2 U | 1.9 U | 8.1 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-696 | SB-697 | SB-697 | SB-698 | SB-698 | SB-699 | SB-699 | SB-700 | SB-700 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-696-6 | G-SB-697-10 | G-SB-697-9 | G-SB-698-10 | G-SB-698-9 | G-SB-699-3 | G-SB-699-4 | G-SB-700-3 | G-SB-700-4 |
| SAMPLE DATE | 20091001 | 20090930 | 20090930 | 20090930 | 20090930 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 10 | 9 | 10 | 9 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 6 | 10 | 9 | 10 | 9 | 3 | 4 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 77 | 1.1 U | 1.1 U | 14 | 1 U | 99 | 9.9 | 1 U | 18 |
| DIBENZO(A,H)ANTHRACENE | 16 | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 14 | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 57 | 1.8 U | 1.8 U | 20 | 1.7 U | 59 | 1.8 U | 1.7 U | 18 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 426 | 0 U | 0 U | 76 | 8.4 | 504 | 44.9 | 34.9 | 114.1 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-696 | SB-697 | SB-697 | SB-698 | SB-698 | SB-699 | SB-699 | SB-700 | SB-700 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-696-6 | G-SB-697-10 | G-SB-697-9 | G-SB-698-10 | G-SB-698-9 | G-SB-699-3 | G-SB-699-4 | G-SB-700-3 | G-SB-700-4 |
| SAMPLE DATE | 20091001 | 20090930 | 20090930 | 20090930 | 20090930 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 10 | 9 | 10 | 9 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 6 | 10 | 9 | 10 | 9 | 3 | 4 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-701 | SB-701 | SB-702 | SB-702 | SB-703 | SB-703 | SB-704 | SB-704 | SB-704 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-701-3 | G-SB-701-4 | G-SB-702-3 | G-SB-702-4 | G-SB-703-7 | G-SB-703-8 | G-SB-704-10 | G-SB-704-3 | G-SB-704-4 |
| SAMPLE DATE | 20090929 | 20090929 | 20091007 | 20091007 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 3 | 4 | 7 | 8 | 10 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 3 | 4 | 7 | 8 | 10 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-701 | SB-701 | SB-702 | SB-702 | SB-703 | SB-703 | SB-704 | SB-704 | SB-704 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-701-3 | G-SB-701-4 | G-SB-702-3 | G-SB-702-4 | G-SB-703-7 | G-SB-703-8 | G-SB-704-10 | G-SB-704-3 | G-SB-704-4 |
| SAMPLE DATE | 20090929 | 20090929 | 20091007 | 20091007 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 3 | 4 | 7 | 8 | 10 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 3 | 4 | 7 | 8 | 10 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 67 | 65 | 1.5 U | 3.1 | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 67 | 65 | 1.5 U | 1.3 | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 25 | 27 | 1.1 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 48 | 45 | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 45 | 47 | 1.4 U | 13 | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 21 | 21 | 2 U | 2.1 U | 2.1 U | 2 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-701 | SB-701 | SB-702 | SB-702 | SB-703 | SB-703 | SB-704 | SB-704 | SB-704 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-701-3 | G-SB-701-4 | G-SB-702-3 | G-SB-702-4 | G-SB-703-7 | G-SB-703-8 | G-SB-704-10 | G-SB-704-3 | G-SB-704-4 |
| SAMPLE DATE | 20090929 | 20090929 | 20091007 | 20091007 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 3 | 4 | 7 | 8 | 10 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 3 | 4 | 7 | 8 | 10 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 35 | 35 | 1.1 U | 8.7 | 1.1 U | 1.1 U | 1.1 U | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 8.9 | 9.1 | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 31 | 30 | 1.8 U | 1.9 U | 1.9 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 213.9 | 214.1 | 0 U | 21.7 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-701 | SB-701 | SB-702 | SB-702 | SB-703 | SB-703 | SB-704 | SB-704 | SB-704 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-701-3 | G-SB-701-4 | G-SB-702-3 | G-SB-702-4 | G-SB-703-7 | G-SB-703-8 | G-SB-704-10 | G-SB-704-3 | G-SB-704-4 |
| SAMPLE DATE | 20090929 | 20090929 | 20091007 | 20091007 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 3 | 4 | 7 | 8 | 10 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 3 | 4 | 7 | 8 | 10 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-704 | SB-704 | SB-704 | SB-704 | SB-704 | SB-705 | SB-705 | SB-706 | SB-706 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-704-5 | G-SB-704-6 | G-SB-704-7 | G-SB-704-8 | G-SB-704-9 | G-SB-705-3 | G-SB-705-4 | G-SB-706-10 | G-SB-706-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 10 | 3 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 10 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-704 | SB-704 | SB-704 | SB-704 | SB-704 | SB-705 | SB-705 | SB-706 | SB-706 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-704-5 | G-SB-704-6 | G-SB-704-7 | G-SB-704-8 | G-SB-704-9 | G-SB-705-3 | G-SB-705-4 | G-SB-706-10 | G-SB-706-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 10 | 3 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 10 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 20 |
| BAP EQUIVALENT-POS | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 19 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 14 |
| BENZO(A)PYRENE | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 14 |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 17 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 2.1 U | 2 U | 2 U | 2 U | 2 U | 2.1 U | 7.9 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-704 | SB-704 | SB-704 | SB-704 | SB-704 | SB-705 | SB-705 | SB-706 | SB-706 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-704-5 | G-SB-704-6 | G-SB-704-7 | G-SB-704-8 | G-SB-704-9 | G-SB-705-3 | G-SB-705-4 | G-SB-706-10 | G-SB-706-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 10 | 3 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 10 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1 U | 1.1 U | 16 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 20 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 88.9 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-704 | SB-704 | SB-704 | SB-704 | SB-704 | SB-705 | SB-705 | SB-706 | SB-706 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-704-5 | G-SB-704-6 | G-SB-704-7 | G-SB-704-8 | G-SB-704-9 | G-SB-705-3 | G-SB-705-4 | G-SB-706-10 | G-SB-706-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 10 | 3 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 10 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-707 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-706-4 | G-SB-706-5 | G-SB-706-6 | G-SB-706-6-AVG | G-SB-706-6-D | G-SB-706-7 | G-SB-706-8 | G-SB-706-9 | G-SB-707-3 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-707 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-706-4 | G-SB-706-5 | G-SB-706-6 | G-SB-706-6-AVG | G-SB-706-6-D | G-SB-706-7 | G-SB-706-8 | G-SB-706-9 | G-SB-707-3 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 1.15 U | 1.2 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.4 U | 1.45 U | 1.5 U | 1.4 U | 1.5 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 2 U | 1.9 U | 2 U | 2.1 U | 2 U | 2.1 U | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-707 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-706-4 | G-SB-706-5 | G-SB-706-6 | G-SB-706-6-AVG | G-SB-706-6-D | G-SB-706-7 | G-SB-706-8 | G-SB-706-9 | G-SB-707-3 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1 U | 1 U | 1.05 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.7 U | 1.7 U | 1.75 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-707 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-706-4 | G-SB-706-5 | G-SB-706-6 | G-SB-706-6-AVG | G-SB-706-6-D | G-SB-706-7 | G-SB-706-8 | G-SB-706-9 | G-SB-707-3 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-707 | SB-708 | SB-708 | SB-708 | SB-708 | SB-708 | SB-709 | SB-709 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-707-4 | G-SB-708-3 | G-SB-708-4 | G-SB-708-5 | G-SB-708-6 | G-SB-708-7 | G-SB-709-3 | G-SB-709-4 |
| SAMPLE DATE | 20090922 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| BOTTOM DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-707 | SB-708 | SB-708 | SB-708 | SB-708 | SB-708 | SB-709 | SB-709 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-707-4 | G-SB-708-3 | G-SB-708-4 | G-SB-708-5 | G-SB-708-6 | G-SB-708-7 | G-SB-709-3 | G-SB-709-4 |
| SAMPLE DATE | 20090922 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| BOTTOM DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 548 | 2823 | 91 | 1.6 U | 1.5 U | 51 | 1.6 U |
| BAP EQUIVALENT-POS | 1.5 U | 548 | 2823 | 90 | 1.6 U | 1.5 U | 50 | 1.6 U |
| BENZO(A)ANTHRACENE | 1.1 U | 420 | 1900 | 56 | 1.2 U | 1.1 U | 44 | 1.2 U |
| BENZO(A)PYRENE | 1.5 U | 370 | 2000 | 70 | 1.6 U | 1.5 U | 38 | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 490 | 2500 | 95 | 1.5 U | 1.4 U | 47 | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 190 | 1100 | 40 | 2.1 U | 2 U | 23 | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-707 | SB-708 | SB-708 | SB-708 | SB-708 | SB-708 | SB-709 | SB-709 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-707-4 | G-SB-708-3 | G-SB-708-4 | G-SB-708-5 | G-SB-708-6 | G-SB-708-7 | G-SB-709-3 | G-SB-709-4 |
| SAMPLE DATE | 20090922 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| BOTTOM DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 410 | 2100 | 58 | 1.1 U | 1.1 U | 42 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 64 | 270 | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 210 | 1000 | 44 | 1.9 U | 1.8 U | 25 | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 2154 | 10870 | 363 | 0 U | 0 U | 219 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |

| LOCATION | SB-707 | SB-708 | SB-708 | SB-708 | SB-708 | SB-708 | SB-709 | SB-709 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-707-4 | G-SB-708-3 | G-SB-708-4 | G-SB-708-5 | G-SB-708-6 | G-SB-708-7 | G-SB-709-3 | G-SB-709-4 |
| SAMPLE DATE | 20090922 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| BOTTOM DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-710 | SB-710 | SB-710 | SB-710 | SB-712 | SB-712 | SB-713 | SB-713 | SB-714 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-710-3 | G-SB-710-4 | G-SB-710-4-AVG | G-SB-710-4-D | G-SB-712-3 | G-SB-712-4 | G-SB-713-3 | G-SB-713-4 | G-SB-714-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 | 20091008 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 |
| BOTTOM DEPTH | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-710 | SB-710 | SB-710 | SB-710 | SB-712 | SB-712 | SB-713 | SB-713 | SB-714 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-710-3 | G-SB-710-4 | G-SB-710-4-AVG | G-SB-710-4-D | G-SB-712-3 | G-SB-712-4 | G-SB-713-3 | G-SB-713-4 | G-SB-714-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 | 20091008 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 |
| BOTTOM DEPTH | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 24 | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 820 |
| BAP EQUIVALENT-POS | 23 | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 820 |
| BENZO(A)ANTHRACENE | 19 | 1.2 U | 1.2 U | 1.2 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 460 |
| BENZO(A)PYRENE | 18 | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 540 |
| BENZO(B)FLUORANTHENE | 23 | 1.5 U | 1.5 U | 1.5 U | 1.3 U | 1.4 U | 1.4 U | 1.4 U | 740 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 10 | 2.1 U | 2.1 U | 2.1 U | 1.9 U | 2 U | 2 U | 2 U | 7.6 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-710 | SB-710 | SB-710 | SB-710 | SB-712 | SB-712 | SB-713 | SB-713 | SB-714 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-710-3 | G-SB-710-4 | G-SB-710-4-AVG | G-SB-710-4-D | G-SB-712-3 | G-SB-712-4 | G-SB-713-3 | G-SB-713-4 | G-SB-714-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 | 20091008 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 |
| BOTTOM DEPTH | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 20 | 1.1 U | 1.1 U | 1.1 U | 0.99 U | 1 U | 1.1 U | 1 U | 540 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 120 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 9.8 | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 390 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 99.8 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 2790 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-710 | SB-710 | SB-710 | SB-710 | SB-712 | SB-712 | SB-713 | SB-713 | SB-714 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-710-3 | G-SB-710-4 | G-SB-710-4-AVG | G-SB-710-4-D | G-SB-712-3 | G-SB-712-4 | G-SB-713-3 | G-SB-713-4 | G-SB-714-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 | 20091008 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 |
| BOTTOM DEPTH | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-714 | SB-714 | SB-714 | SB-714 | SB-714 | SB-714 | SB-715 | SB-715 | SB-716 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-714-4 | G-SB-714-5 | G-SB-714-6 | G-SB-714-6-AVG | G-SB-714-6-D | G-SB-714-7 | G-SB-715-3 | G-SB-715-4 | G-SB-716-10 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 3 | 4 | 10 |
| BOTTOM DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 3 | 4 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-714 | SB-714 | SB-714 | SB-714 | SB-714 | SB-714 | SB-715 | SB-715 | SB-716 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-714-4 | G-SB-714-5 | G-SB-714-6 | G-SB-714-6-AVG | G-SB-714-6-D | G-SB-714-7 | G-SB-715-3 | G-SB-715-4 | G-SB-716-10 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 3 | 4 | 10 |
| BOTTOM DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 3 | 4 | 10 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2492 | 4583 | 53040 | 27129 | 1218 | 2404 | 48 | 23 | 1.5 U |
| BAP EQUIVALENT-POS | 2492 | 4583 | 53040 | 27129 | 1218 | 2404 | 48 | 22 | 1.5 U |
| BENZO(A)ANTHRACENE | 1600 | 3300 | 43000 J | 21855 | 710 J | 2100 | 46 | 22 | 1.1 U |
| BENZO(A)PYRENE | 1600 | 3000 | 35000 J | 17895 | 790 J | 1600 | 35 | 16 | 1.5 U |
| BENZO(B)FLUORANTHENE | 2600 | 4300 | 51000 J | 26100 | 1200 J | 2400 | 55 | 27 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 39 U | 61 U | 71 U | 36.4 U | 1.8 U | 4.2 U | 22 | 14 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-714 | SB-714 | SB-714 | SB-714 | SB-714 | SB-714 | SB-715 | SB-715 | SB-716 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-714-4 | G-SB-714-5 | G-SB-714-6 | G-SB-714-6-AVG | G-SB-714-6-D | G-SB-714-7 | G-SB-715-3 | G-SB-715-4 | G-SB-716-10 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 3 | 4 | 10 |
| BOTTOM DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 3 | 4 | 10 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1800 | 3100 | 40000 J | 20355 | 710 J | 2000 | 46 | 22 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 360 | 630 | 6500 J | 3340 | 180 J | 260 | 1.4 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1100 | 1900 | 21000 J | 10780 | 560 J | 920 | 22 | 9.2 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 9060 | 16230 | 196500 | 100325 | 4150 | 9280 | 226 | 110.2 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-714 | SB-714 | SB-714 | SB-714 | SB-714 | SB-714 | SB-715 | SB-715 | SB-716 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-714-4 | G-SB-714-5 | G-SB-714-6 | G-SB-714-6-AVG | G-SB-714-6-D | G-SB-714-7 | G-SB-715-3 | G-SB-715-4 | G-SB-716-10 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 3 | 4 | 10 |
| BOTTOM DEPTH | 4 | 5 | 6 | 6 | 6 | 7 | 3 | 4 | 10 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-716 | SB-716 | SB-716 | SB-716 | SB-716 | SB-716 | SB-717 | SB-717 | SB-718 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-716-3 | G-SB-716-5 | G-SB-716-6 | G-SB-716-7 | G-SB-716-8 | G-SB-716-9 | G-SB-717-3 | G-SB-717-4 | G-SB-718-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 |
| BOTTOM DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-716 | SB-716 | SB-716 | SB-716 | SB-716 | SB-716 | SB-717 | SB-717 | SB-718 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-716-3 | G-SB-716-5 | G-SB-716-6 | G-SB-716-7 | G-SB-716-8 | G-SB-716-9 | G-SB-717-3 | G-SB-717-4 | G-SB-718-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 |
| BOTTOM DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 1.5 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 1.5 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.2 U | 1.1 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 1.5 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.6 U | 1.4 U | 1.5 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2 U | 2 U | 2.1 U | 2 U | 2.2 U | 2 U | 2.1 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-716 | SB-716 | SB-716 | SB-716 | SB-716 | SB-716 | SB-717 | SB-717 | SB-718 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-716-3 | G-SB-716-5 | G-SB-716-6 | G-SB-716-7 | G-SB-716-8 | G-SB-716-9 | G-SB-717-3 | G-SB-717-4 | G-SB-718-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 |
| BOTTOM DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.2 U | 1.1 U | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 1.5 U | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.9 U | 1.8 U | 1.8 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-716 | SB-716 | SB-716 | SB-716 | SB-716 | SB-716 | SB-717 | SB-717 | SB-718 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-716-3 | G-SB-716-5 | G-SB-716-6 | G-SB-716-7 | G-SB-716-8 | G-SB-716-9 | G-SB-717-3 | G-SB-717-4 | G-SB-718-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 |
| BOTTOM DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-718 | SB-719 | SB-719 | SB-720 | SB-720 | SB-720 | SB-720 | SB-720 | SB-721 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-718-4 | G-SB-719-3 | G-SB-719-4 | G-SB-720-3 | G-SB-720-4 | G-SB-720-5 | G-SB-720-6 | G-SB-720-7 | G-SB-721-3 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 |
| BOTTOM DEPTH | 4 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-718 | SB-719 | SB-719 | SB-720 | SB-720 | SB-720 | SB-720 | SB-720 | SB-721 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-718-4 | G-SB-719-3 | G-SB-719-4 | G-SB-720-3 | G-SB-720-4 | G-SB-720-5 | G-SB-720-6 | G-SB-720-7 | G-SB-721-3 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 |
| BOTTOM DEPTH | 4 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 1.5 U | 2381 | 177 | 10 | 2.3 U | 2.6 | 4.9 |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 1.5 U | 2381 | 177 | 9.3 | 2.3 U | 0.45 | 4.0 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 1000 | 80 | 7 J | 1.3 U | 2 J | 3.5 J |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.5 U | 1600 | 120 | 6.9 J | 2.3 U | 2.4 U | 2.6 J |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.4 U | 2100 | 160 | 11 | 1.7 U | 2.5 J | 7 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 2 U | 2 U | 15 U | 3.4 U | 1.6 U | 1.7 U | 1.8 U | 1.7 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-718 | SB-719 | SB-719 | SB-720 | SB-720 | SB-720 | SB-720 | SB-720 | SB-721 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-718-4 | G-SB-719-3 | G-SB-719-4 | G-SB-720-3 | G-SB-720-4 | G-SB-720-5 | G-SB-720-6 | G-SB-720-7 | G-SB-721-3 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 |
| BOTTOM DEPTH | 4 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1.1 U | 1 U | 1100 | 82 | 5.9 J | 1.5 U | 1.8 J | 7.7 J |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.5 U | 350 | 25 | 1.7 U | 1.8 U | 1.9 U | 1.8 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.8 U | 1.7 U | 1200 | 84 | 5.8 J | 0.46 U | 0.46 U | 3.2 J |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 7350 | 551 | 36.6 | 0 U | 6.3 | 24 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-718 | SB-719 | SB-719 | SB-720 | SB-720 | SB-720 | SB-720 | SB-720 | SB-721 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-718-4 | G-SB-719-3 | G-SB-719-4 | G-SB-720-3 | G-SB-720-4 | G-SB-720-5 | G-SB-720-6 | G-SB-720-7 | G-SB-721-3 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 |
| BOTTOM DEPTH | 4 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-721 | SB-721 | SB-721 | SB-721 | SB-722 | SB-722 | SB-723 | SB-723 | SB-723 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-721-4 | G-SB-721-5 | G-SB-721-6 | G-SB-721-7 | G-SB-722-3 | G-SB-722-4 | G-SB-723-3 | G-SB-723-3-AVG | G-SB-723-3-D |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20090923 | 20090923 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 3 | 4 | 3 | 3 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 3 | 4 | 3 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-721 | SB-721 | SB-721 | SB-721 | SB-722 | SB-722 | SB-723 | SB-723 | SB-723 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-721-4 | G-SB-721-5 | G-SB-721-6 | G-SB-721-7 | G-SB-722-3 | G-SB-722-4 | G-SB-723-3 | G-SB-723-3-AVG | G-SB-723-3-D |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20090923 | 20090923 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 3 | 4 | 3 | 3 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 3 | 4 | 3 | 3 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 637 | 2.2 U | 2.2 U | 2.3 U | 8.2 | 142 | 1.6 U | 1.7 | 2.6 |
| BAP EQUIVALENT-POS | 637 | 2.2 U | 2.2 U | 2.3 U | 6.7 | 142 | 1.6 U | 0.94 | 0.94 |
| BENZO(A)ANTHRACENE | 360 | 1.3 U | 1.2 U | 1.3 U | 28 | 99 | 1.2 U | 1.15 U | 1.1 U |
| BENZO(A)PYRENE | 410 | 2.2 U | 2.2 U | 2.3 U | 1.4 U | 110 | 1.6 U | 1.55 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 640 | 1.6 U | 1.6 U | 1.7 U | 39 | 140 | 1.5 U | 5.075 | 9.4 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 6.3 U | 1.7 U | 1.6 U | 1.7 U | 1.9 U | 60 | 2.1 U | 2.05 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-721 | SB-721 | SB-721 | SB-721 | SB-722 | SB-722 | SB-723 | SB-723 | SB-723 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-721-4 | G-SB-721-5 | G-SB-721-6 | G-SB-721-7 | G-SB-722-3 | G-SB-722-4 | G-SB-723-3 | G-SB-723-3-AVG | G-SB-723-3-D |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20090923 | 20090923 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 3 | 4 | 3 | 3 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 3 | 4 | 3 | 3 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 400 | 1.4 U | 1.4 U | 1.4 U | 28 | 91 | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 95 | 1.7 U | 1.7 U | 1.8 U | 1.4 U | 1.5 U | 1.6 U | 1.55 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 320 | 0.44 U | 0.43 U | 0.45 U | 1.7 U | 70 | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 2225 | 0 U | 0 U | 0 U | 95 | 570 | 0 U | 4.7 | 9.4 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-721 | SB-721 | SB-721 | SB-721 | SB-722 | SB-722 | SB-723 | SB-723 | SB-723 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-721-4 | G-SB-721-5 | G-SB-721-6 | G-SB-721-7 | G-SB-722-3 | G-SB-722-4 | G-SB-723-3 | G-SB-723-3-AVG | G-SB-723-3-D |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20090923 | 20090923 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 3 | 4 | 3 | 3 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 3 | 4 | 3 | 3 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | 1200 | 1090 | 980 |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-723 | SB-724 | SB-724 | SB-724 | SB-724 | SB-725 | SB-725 | SB-726 | SB-726 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-723-4 | G-SB-724-3 | G-SB-724-4 | G-SB-724-6 | G-SB-724-7 | G-SB-725-3 | G-SB-725-4 | G-SB-726-10 | G-SB-726-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 | 20090923 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 6 | 7 | 3 | 4 | 10 | 3 |
| BOTTOM DEPTH | 4 | 3 | 4 | 6 | 7 | 3 | 4 | 10 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-723 | SB-724 | SB-724 | SB-724 | SB-724 | SB-725 | SB-725 | SB-726 | SB-726 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-723-4 | G-SB-724-3 | G-SB-724-4 | G-SB-724-6 | G-SB-724-7 | G-SB-725-3 | G-SB-725-4 | G-SB-726-10 | G-SB-726-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 | 20090923 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 6 | 7 | 3 | 4 | 10 | 3 |
| BOTTOM DEPTH | 4 | 3 | 4 | 6 | 7 | 3 | 4 | 10 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 3125 | 844 | 46 | 1.6 U | 1.5 U | 1.5 U | 2.2 U | 4263 |
| BAP EQUIVALENT-POS | 1.6 U | 3125 | 844 | 46 | 1.6 U | 1.5 U | 1.5 U | 2.2 U | 4263 |
| BENZO(A)ANTHRACENE | 1.2 U | 2100 | 570 | 32 | 1.1 U | 1.1 U | 1.1 U | 1.3 U | 2700 |
| BENZO(A)PYRENE | 1.6 U | 2100 | 570 | 35 | 1.6 U | 1.5 U | 1.5 U | 2.2 U | 2800 |
| BENZO(B)FLUORANTHENE | 1.5 U | 2500 | 660 | 48 | 1.4 U | 1.4 U | 1.4 U | 1.6 U | 4300 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 1300 | 320 | 19 | 2 U | 1.9 U | 2 U | 1.6 U | 60 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-723 | SB-724 | SB-724 | SB-724 | SB-724 | SB-725 | SB-725 | SB-726 | SB-726 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-723-4 | G-SB-724-3 | G-SB-724-4 | G-SB-724-6 | G-SB-724-7 | G-SB-725-3 | G-SB-725-4 | G-SB-726-10 | G-SB-726-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 | 20090923 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 6 | 7 | 3 | 4 | 10 | 3 |
| BOTTOM DEPTH | 4 | 3 | 4 | 6 | 7 | 3 | 4 | 10 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1800 | 590 | 39 | 1.1 U | 1 U | 1.1 U | 1.4 U | 2700 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 420 | 110 | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 550 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1300 | 370 | 24 | 1.8 U | 1.7 U | 1.8 U | 0.43 U | 2100 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 11520 | 3190 | 197 | 0 U | 0 U | 0 U | 0 U | 15150 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-723 | SB-724 | SB-724 | SB-724 | SB-724 | SB-725 | SB-725 | SB-726 | SB-726 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-723-4 | G-SB-724-3 | G-SB-724-4 | G-SB-724-6 | G-SB-724-7 | G-SB-725-3 | G-SB-725-4 | G-SB-726-10 | G-SB-726-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 | 20090923 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 6 | 7 | 3 | 4 | 10 | 3 |
| BOTTOM DEPTH | 4 | 3 | 4 | 6 | 7 | 3 | 4 | 10 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 550 | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-727 | SB-727 | SB-727 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-726-4 | G-SB-726-5 | G-SB-726-6 | G-SB-726-7 | G-SB-726-8 | G-SB-726-9 | G-SB-727-3 | G-SB-727-4 | G-SB-727-5 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-727 | SB-727 | SB-727 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-726-4 | G-SB-726-5 | G-SB-726-6 | G-SB-726-7 | G-SB-726-8 | G-SB-726-9 | G-SB-727-3 | G-SB-727-4 | G-SB-727-5 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1041 | 2.4 | 2.2 U | 2.4 U | 2.2 U | 4.6 | 578 | 29 | 1.6 U |
| BAP EQUIVALENT-POS | 1041 | 0.30 | 2.2 U | 2.4 U | 2.2 U | 3.7 | 578 | 28 | 1.6 U |
| BENZO(A)ANTHRACENE | 650 | 1.4 J | 1.2 U | 1.4 U | 1.3 U | 2.7 J | 360 | 18 | 1.1 U |
| BENZO(A)PYRENE | 700 | 2.3 U | 2.2 U | 2.4 U | 2.2 U | 2.7 J | 400 | 22 | 1.6 U |
| BENZO(B)FLUORANTHENE | 1000 | 1.6 U | 1.6 U | 1.8 U | 1.6 U | 4.4 J | 450 | 28 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 15 U | 1.7 U | 1.6 U | 1.8 U | 1.6 U | 1.7 U | 230 | 9 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-727 | SB-727 | SB-727 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-726-4 | G-SB-726-5 | G-SB-726-6 | G-SB-726-7 | G-SB-726-8 | G-SB-726-9 | G-SB-727-3 | G-SB-727-4 | G-SB-727-5 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 700 | 1.4 J | 1.4 U | 1.5 U | 1.4 U | 2.8 J | 400 | 23 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 120 | 1.8 U | 1.7 U | 1.9 U | 1.7 U | 1.8 U | 73 | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 550 | 1.6 J | 0.43 U | 0.48 U | 0.43 U | 2.4 J | 210 | 17 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 3720 | 4.4 | 0 U | 0 U | 0 U | 15 | 2123 | 117 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-727 | SB-727 | SB-727 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-726-4 | G-SB-726-5 | G-SB-726-6 | G-SB-726-7 | G-SB-726-8 | G-SB-726-9 | G-SB-727-3 | G-SB-727-4 | G-SB-727-5 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-727 | SB-727 | SB-728 | SB-728 | SB-728 | SB-728 | SB-728 | SB-729 | SB-729 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-727-6 | G-SB-727-7 | G-SB-728-3 | G-SB-728-4 | G-SB-728-5 | G-SB-728-6 | G-SB-728-7 | G-SB-729-3 | G-SB-729-4 |
| SAMPLE DATE | 20090924 | 20090924 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| BOTTOM DEPTH | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-727 | SB-727 | SB-728 | SB-728 | SB-728 | SB-728 | SB-728 | SB-729 | SB-729 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-727-6 | G-SB-727-7 | G-SB-728-3 | G-SB-728-4 | G-SB-728-5 | G-SB-728-6 | G-SB-728-7 | G-SB-729-3 | G-SB-729-4 |
| SAMPLE DATE | 20090924 | 20090924 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| BOTTOM DEPTH | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.6 U | 1.5 U | 1.5 U | NA | NA | NA | 963 | 60 |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 U | 1.5 U | 1.5 U | NA | NA | NA | 963 | 59 |
| BENZO(A)ANTHRACENE | 1.2 U | 1.1 U | 1.1 U | 1.1 U | NA | NA | NA | 670 | 28 |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1.5 U | 1.5 U | NA | NA | NA | 650 | 46 |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.4 U | 1.4 U | 1.4 U | NA | NA | NA | 850 | 65 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2 U | 2 U | 2 U | NA | NA | NA | 370 | 20 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-727 | SB-727 | SB-728 | SB-728 | SB-728 | SB-728 | SB-728 | SB-729 | SB-729 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-727-6 | G-SB-727-7 | G-SB-728-3 | G-SB-728-4 | G-SB-728-5 | G-SB-728-6 | G-SB-728-7 | G-SB-729-3 | G-SB-729-4 |
| SAMPLE DATE | 20090924 | 20090924 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| BOTTOM DEPTH | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | NA | NA | NA | 690 | 45 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.5 U | 1.5 U | NA | NA | NA | 120 | 1.4 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 1.8 U | 1.8 U | NA | NA | NA | 370 | 37 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | NA | NA | NA | 3720 | 241 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-727 | SB-727 | SB-728 | SB-728 | SB-728 | SB-728 | SB-728 | SB-729 | SB-729 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-727-6 | G-SB-727-7 | G-SB-728-3 | G-SB-728-4 | G-SB-728-5 | G-SB-728-6 | G-SB-728-7 | G-SB-729-3 | G-SB-729-4 |
| SAMPLE DATE | 20090924 | 20090924 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| BOTTOM DEPTH | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | 180000 | 980000 | 780000 | 440000 | 82000 | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-729 | SB-729 | SB-729 | SB-730 | SB-730 | SB-731 | SB-731 | SB-732 | SB-732 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-729-5 | G-SB-729-6 | G-SB-729-7 | G-SB-730-4 | G-SB-730-5 | G-SB-731-3 | G-SB-731-4 | G-SB-732-3 | G-SB-732-4 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 | 20090923 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 4 | 5 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 5 | 6 | 7 | 4 | 5 | 3 | 4 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-729 | SB-729 | SB-729 | SB-730 | SB-730 | SB-731 | SB-731 | SB-732 | SB-732 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-729-5 | G-SB-729-6 | G-SB-729-7 | G-SB-730-4 | G-SB-730-5 | G-SB-731-3 | G-SB-731-4 | G-SB-732-3 | G-SB-732-4 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 | 20090923 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 4 | 5 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 5 | 6 | 7 | 4 | 5 | 3 | 4 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 3.4 | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U | 1.6 U | 761 | 66 |
| BAP EQUIVALENT-POS | 1.7 | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U | 1.6 U | 761 | 66 |
| BENZO(A)ANTHRACENE | 8.5 | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.2 U | 400 | 22 |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U | 1.6 U | 490 | 43 |
| BENZO(B)FLUORANTHENE | 8.9 | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.3 U | 1.5 U | 680 | 57 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2 U | 2 U | 2.1 U | 1.9 U | 1.9 U | 2.1 U | 30 U | 1.4 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-729 | SB-729 | SB-729 | SB-730 | SB-730 | SB-731 | SB-731 | SB-732 | SB-732 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-729-5 | G-SB-729-6 | G-SB-729-7 | G-SB-730-4 | G-SB-730-5 | G-SB-731-3 | G-SB-731-4 | G-SB-732-3 | G-SB-732-4 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 | 20090923 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 4 | 5 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 5 | 6 | 7 | 4 | 5 | 3 | 4 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1 U | 1.1 U | 500 | 25 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U | 1.6 U | 120 J | 10 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.9 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U | 1.9 U | 420 | 49 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 17.4 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 2610 | 206 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-729 | SB-729 | SB-729 | SB-730 | SB-730 | SB-731 | SB-731 | SB-732 | SB-732 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-729-5 | G-SB-729-6 | G-SB-729-7 | G-SB-730-4 | G-SB-730-5 | G-SB-731-3 | G-SB-731-4 | G-SB-732-3 | G-SB-732-4 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 | 20090923 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 4 | 5 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 5 | 6 | 7 | 4 | 5 | 3 | 4 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | 110000 | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-732 | SB-732 | SB-732 | SB-733 | SB-733 | SB-734 | SB-734 | SB-735 | SB-735 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-732-5 | G-SB-732-6 | G-SB-732-7 | G-SB-733-3 | G-SB-733-4 | G-SB-734-6 | G-SB-734-7 | G-SB-735-3 | G-SB-735-5 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20090924 | 20090924 | 20090923 | 20090923 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 3 | 4 | 6 | 7 | 3 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 3 | 4 | 6 | 7 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-732 | SB-732 | SB-732 | SB-733 | SB-733 | SB-734 | SB-734 | SB-735 | SB-735 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-732-5 | G-SB-732-6 | G-SB-732-7 | G-SB-733-3 | G-SB-733-4 | G-SB-734-6 | G-SB-734-7 | G-SB-735-3 | G-SB-735-5 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20090924 | 20090924 | 20090923 | 20090923 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 3 | 4 | 6 | 7 | 3 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 3 | 4 | 6 | 7 | 3 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2.2 U | 5.0 | 2.2 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 211 | 3808 |
| BAP EQUIVALENT-POS | 2.2 U | 4.1 | 2.2 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 211 | 3808 |
| BENZO(A)ANTHRACENE | 1.3 U | 3.8 J | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 170 | 3000 J |
| BENZO(A)PYRENE | 2.2 U | 3.2 J | 2.2 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 140 | 2600 J |
| BENZO(B)FLUORANTHENE | 1.6 U | 3.5 J | 1.6 U | 1.5 U | 1.5 U | 1.4 U | 1.5 U | 170 | 3400 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.6 U | 1.6 U | 1.6 U | 2.1 U | 2.1 U | 2 U | 2.1 U | 99 | 1500 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-732 | SB-732 | SB-732 | SB-733 | SB-733 | SB-734 | SB-734 | SB-735 | SB-735 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-732-5 | G-SB-732-6 | G-SB-732-7 | G-SB-733-3 | G-SB-733-4 | G-SB-734-6 | G-SB-734-7 | G-SB-735-3 | G-SB-735-5 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20090924 | 20090924 | 20090923 | 20090923 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 3 | 4 | 6 | 7 | 3 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 3 | 4 | 6 | 7 | 3 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.4 U | 2.9 J | 1.4 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 150 | 2800 J |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.7 U | 1.7 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 28 | 410 J |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 0.43 U | 1.9 J | 0.43 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 82 | 1400 J |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 15.3 | 0 U | 0 U | 0 U | 0 U | 0 U | 839 | 15110 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-732 | SB-732 | SB-732 | SB-733 | SB-733 | SB-734 | SB-734 | SB-735 | SB-735 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-732-5 | G-SB-732-6 | G-SB-732-7 | G-SB-733-3 | G-SB-733-4 | G-SB-734-6 | G-SB-734-7 | G-SB-735-3 | G-SB-735-5 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20090924 | 20090924 | 20090923 | 20090923 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 3 | 4 | 6 | 7 | 3 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 3 | 4 | 6 | 7 | 3 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | 150000 | 920 | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-735 | SB-735 | SB-735 | SB-735 | SB-735A | SB-735A | SB-735A | SB-735B | SB-735B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735-5-AVG | G-SB-735-5-D | G-SB-735-7 | G-SB-735-9 | G-SB-735A-3 | G-SB-735A-5 | G-SB-735A-9 | G-SB-735B-3 | G-SB-735B-5 |
| SAMPLE DATE | 20091021 | 20091021 | 20091021 | 20091103 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 7 | 9 | 3 | 5 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 5 | 7 | 9 | 3 | 5 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-735 | SB-735 | SB-735 | SB-735 | SB-735A | SB-735A | SB-735A | SB-735B | SB-735B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735-5-AVG | G-SB-735-5-D | G-SB-735-7 | G-SB-735-9 | G-SB-735A-3 | G-SB-735A-5 | G-SB-735A-9 | G-SB-735B-3 | G-SB-735B-5 |
| SAMPLE DATE | 20091021 | 20091021 | 20091021 | 20091103 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 7 | 9 | 3 | 5 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 5 | 7 | 9 | 3 | 5 | 9 | 3 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 8463 | 13119 | 3534 | 265 | 2795 | 57089 | 131 | 30 | 19 |
| BAP EQUIVALENT-POS | 8463 | 13119 | 3534 | 265 | 2792 | 57089 | 130 | 29 | 18 |
| BENZO(A)ANTHRACENE | 7000 | 11000 J | 2700 | 200 | 3000 | 44000 | 110 | 26 | 1.1 U |
| BENZO(A)PYRENE | 5850 | 9100 J | 2400 | 180 | 2100 | 37000 | 99 | 22 | 15 |
| BENZO(B)FLUORANTHENE | 6700 | 10000 J | 3500 | 240 | 2800 | 55000 | 140 | 28 | 20 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2750 | 4000 J | 1100 | 100 | 1300 | 25000 | 49 | 12 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-735 | SB-735 | SB-735 | SB-735 | SB-735A | SB-735A | SB-735A | SB-735B | SB-735B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735-5-AVG | G-SB-735-5-D | G-SB-735-7 | G-SB-735-9 | G-SB-735A-3 | G-SB-735A-5 | G-SB-735A-9 | G-SB-735B-3 | G-SB-735B-5 |
| SAMPLE DATE | 20091021 | 20091021 | 20091021 | 20091103 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 7 | 9 | 3 | 5 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 5 | 7 | 9 | 3 | 5 | 9 | 3 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 5800 | 8800 J | 2600 | 200 | 2600 | 39000 | 130 | 24 | 13 |
| DIBENZO(A,H)ANTHRACENE | 905 | 1400 J | 370 | 30 | 7.7 U | 7800 | 1.5 U | 1.4 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 3050 | 4700 J | 1300 | 100 | 960 | 21000 | 54 | 14 | 9.8 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 32055 | 49000 | 13970 | 1050 | 12760 | 228800 | 582 | 126 | 57.8 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-735 | SB-735 | SB-735 | SB-735 | SB-735A | SB-735A | SB-735A | SB-735B | SB-735B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735-5-AVG | G-SB-735-5-D | G-SB-735-7 | G-SB-735-9 | G-SB-735A-3 | G-SB-735A-5 | G-SB-735A-9 | G-SB-735B-3 | G-SB-735B-5 |
| SAMPLE DATE | 20091021 | 20091021 | 20091021 | 20091103 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 7 | 9 | 3 | 5 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 5 | 7 | 9 | 3 | 5 | 9 | 3 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-735B | SB-735B | SB-735B | SB-735B | SB-735C | SB-735C | SB-735C | SB-736 | SB-736B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735B-7 | G-SB-735B-7-AVG | G-SB-735B-7-D | G-SB-735B-9 | G-SB-735C-3 | G-SB-735C-5 | G-SB-735C-7 | G-SB-736-3 | G-SB-736B-3 |
| SAMPLE DATE | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091021 | 20091112 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 3 | 3 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-735B | SB-735B | SB-735B | SB-735B | SB-735C | SB-735C | SB-735C | SB-736 | SB-736B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735B-7 | G-SB-735B-7-AVG | G-SB-735B-7-D | G-SB-735B-9 | G-SB-735C-3 | G-SB-735C-5 | G-SB-735C-7 | G-SB-736-3 | G-SB-736B-3 |
| SAMPLE DATE | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091021 | 20091112 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 3 | 3 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 3 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 9.4 | 12 | 15 | 16 | 19 | 74 | 71 | 8497 | 1319 |
| BAP EQUIVALENT-POS | 8.4 | 11 | 14 | 15 | 18 | 67 | 70 | 8497 | 1319 |
| BENZO(A)ANTHRACENE | 1.2 U | 1.2 U | 1.2 U | 13 | 17 | 8 U | 45 | 10000 | 1100 |
| BENZO(A)PYRENE | 8.4 | 10.2 | 12 | 12 | 14 | 58 | 54 | 5600 | 910 |
| BENZO(B)FLUORANTHENE | 1.5 UJ | 9.875 | 19 J | 15 | 19 | 90 | 67 | 8800 | 1200 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 14 U | 32 | 2900 | 480 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-735B | SB-735B | SB-735B | SB-735B | SB-735C | SB-735C | SB-735C | SB-736 | SB-736B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735B-7 | G-SB-735B-7-AVG | G-SB-735B-7-D | G-SB-735B-9 | G-SB-735C-3 | G-SB-735C-5 | G-SB-735C-7 | G-SB-736-3 | G-SB-736B-3 |
| SAMPLE DATE | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091021 | 20091112 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 3 | 3 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 3 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 9.1 | 4.825 | 1.1 U | 16 | 19 | 71 | 49 | 7800 | 1000 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 11 U | 1.6 U | 730 | 130 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.9 U | 1.85 U | 1.8 U | 1.8 U | 1.8 U | 13 U | 42 | 2500 | 430 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 17.5 | 24.25 | 31 | 56 | 69 | 219 | 289 | 38330 | 5250 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-735B | SB-735B | SB-735B | SB-735B | SB-735C | SB-735C | SB-735C | SB-736 | SB-736B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735B-7 | G-SB-735B-7-AVG | G-SB-735B-7-D | G-SB-735B-9 | G-SB-735C-3 | G-SB-735C-5 | G-SB-735C-7 | G-SB-736-3 | G-SB-736B-3 |
| SAMPLE DATE | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091021 | 20091112 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 3 | 3 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 3 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-736B | SB-736B | SB-736B | SB-736C | SB-736C | SB-736C | SB-736C | SB-737 | SB-737 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-736B-5 | G-SB-736B-7 | G-SB-736B-9 | G-SB-736C-3 | G-SB-736C-5 | G-SB-736C-7 | G-SB-736C-9 | G-SB-737-3 | G-SB-737-5 |
| SAMPLE DATE | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-736B | SB-736B | SB-736B | SB-736C | SB-736C | SB-736C | SB-736C | SB-737 | SB-737 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-736B-5 | G-SB-736B-7 | G-SB-736B-9 | G-SB-736C-3 | G-SB-736C-5 | G-SB-736C-7 | G-SB-736C-9 | G-SB-737-3 | G-SB-737-5 |
| SAMPLE DATE | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 319 | 9.4 | 1.6 U | 68 | 192 | 1.5 U | 27 | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 318 | 8.4 | 1.6 U | 68 | 191 | 1.5 U | 27 | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 310 | 1.1 U | 1.2 U | 44 | 140 | 1.1 U | 20 | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 240 | 8.4 | 1.6 U | 53 | 150 | 1.5 U | 21 | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 340 | 1.4 U | 1.5 U | 65 | 180 | 1.4 U | 21 | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 150 | 2 U | 2.1 U | 27 | 81 | 2 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-736B | SB-736B | SB-736B | SB-736C | SB-736C | SB-736C | SB-736C | SB-737 | SB-737 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-736B-5 | G-SB-736B-7 | G-SB-736B-9 | G-SB-736C-3 | G-SB-736C-5 | G-SB-736C-7 | G-SB-736C-9 | G-SB-737-3 | G-SB-737-5 |
| SAMPLE DATE | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 300 | 1.1 U | 1.1 U | 60 | 170 | 1.1 U | 19 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 110 | 1.8 U | 1.9 U | 34 | 82 | 1.8 U | 15 | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1450 | 8.4 | 0 U | 283 | 803 | 0 U | 96 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-736B | SB-736B | SB-736B | SB-736C | SB-736C | SB-736C | SB-736C | SB-737 | SB-737 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-736B-5 | G-SB-736B-7 | G-SB-736B-9 | G-SB-736C-3 | G-SB-736C-5 | G-SB-736C-7 | G-SB-736C-9 | G-SB-737-3 | G-SB-737-5 |
| SAMPLE DATE | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-737 | SB-738 | SB-738 | SB-738 | SB-739 | SB-739 | SB-739 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-737-7 | G-SB-738-4 | G-SB-738-6 | G-SB-738-8 | G-SB-739-4 | G-SB-739-6 | G-SB-739-8 |
| SAMPLE DATE | 20091021 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 7 | 4 | 6 | 8 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-737 | SB-738 | SB-738 | SB-738 | SB-739 | SB-739 | SB-739 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-737-7 | G-SB-738-4 | G-SB-738-6 | G-SB-738-8 | G-SB-739-4 | G-SB-739-6 | G-SB-739-8 |
| SAMPLE DATE | 20091021 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 7 | 4 | 6 | 8 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 2.1 U | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.3 U |
| BAP EQUIVALENT-POS | 1.5 U | 2.1 U | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.3 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.2 U | 1.3 U | 1.3 U | 1.2 U | 1.3 U | 1.3 U |
| BENZO(A)PYRENE | 1.5 U | 2.1 U | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.3 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 1.6 U | 1.7 U | 1.7 U | 1.6 U | 1.6 U | 1.7 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-737 | SB-738 | SB-738 | SB-738 | SB-739 | SB-739 | SB-739 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-737-7 | G-SB-738-4 | G-SB-738-6 | G-SB-738-8 | G-SB-739-4 | G-SB-739-6 | G-SB-739-8 |
| SAMPLE DATE | 20091021 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 7 | 4 | 6 | 8 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.3 U | 1.4 U | 1.4 U | 1.3 U | 1.4 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 0.41 U | 0.45 U | 0.44 U | 0.42 U | 0.44 U | 0.44 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-737 | SB-738 | SB-738 | SB-738 | SB-739 | SB-739 | SB-739 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-737-7 | G-SB-738-4 | G-SB-738-6 | G-SB-738-8 | G-SB-739-4 | G-SB-739-6 | G-SB-739-8 |
| SAMPLE DATE | 20091021 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 7 | 4 | 6 | 8 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-740 | SB-740 | SB-740 | SB-741 | SB-741 | SB-741 | SB-742 | SB-742 | SB-742 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-740-4 | G-SB-740-6 | G-SB-740-8 | G-SB-741-4 | G-SB-741-6 | G-SB-741-8 | G-SB-742-4 | G-SB-742-6 | G-SB-742-8 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-740 | SB-740 | SB-740 | SB-741 | SB-741 | SB-741 | SB-742 | SB-742 | SB-742 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-740-4 | G-SB-740-6 | G-SB-740-8 | G-SB-741-4 | G-SB-741-6 | G-SB-741-8 | G-SB-742-4 | G-SB-742-6 | G-SB-742-8 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2.2 U | 2.2 U | 2.1 U | 2.2 U | 2.9 | 2.2 U | 11 | 4.4 | 2.2 U |
| BAP EQUIVALENT-POS | 2.2 U | 2.2 U | 2.1 U | 2.2 U | 0.87 | 2.2 U | 11 | 3.5 | 2.2 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 2.2 J | 1.3 U | 6.3 J | 2.5 J | 1.3 U |
| BENZO(A)PYRENE | 2.2 U | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.2 U | 8.5 | 2.8 J | 2.2 U |
| BENZO(B)FLUORANTHENE | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 5 J | 1.6 U | 6.9 J | 4.4 J | 1.6 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 6 J | 1.6 U | 1.6 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-740 | SB-740 | SB-740 | SB-741 | SB-741 | SB-741 | SB-742 | SB-742 | SB-742 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-740-4 | G-SB-740-6 | G-SB-740-8 | G-SB-741-4 | G-SB-741-6 | G-SB-741-8 | G-SB-742-4 | G-SB-742-6 | G-SB-742-8 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.4 U | 1.3 U | 1.3 U | 1.3 U | 3.1 J | 1.4 U | 7.8 J | 2.8 J | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 0.43 U | 0.42 U | 0.42 U | 0.42 U | 1.5 J | 0.44 U | 6.7 J | 0.43 U | 0.44 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 11.8 | 0 U | 42.2 | 12.5 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-740 | SB-740 | SB-740 | SB-741 | SB-741 | SB-741 | SB-742 | SB-742 | SB-742 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-740-4 | G-SB-740-6 | G-SB-740-8 | G-SB-741-4 | G-SB-741-6 | G-SB-741-8 | G-SB-742-4 | G-SB-742-6 | G-SB-742-8 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-743 | SB-743 | SB-743 | SB-744 | SB-744 | SB-744 | SB-745 | SB-745 | SB-745 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-743-4 | G-SB-743-6 | G-SB-743-8 | G-SB-744-4 | G-SB-744-6 | G-SB-744-8 | G-SB-745-4 | G-SB-745-4-AVG | G-SB-745-4-D |
| SAMPLE DATE | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-743 | SB-743 | SB-743 | SB-744 | SB-744 | SB-744 | SB-745 | SB-745 | SB-745 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-743-4 | G-SB-743-6 | G-SB-743-8 | G-SB-744-4 | G-SB-744-6 | G-SB-744-8 | G-SB-745-4 | G-SB-745-4-AVG | G-SB-745-4-D |
| SAMPLE DATE | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2.2 U | 2.2 U | 2.2 U | 2.3 U | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.2 U |
| BAP EQUIVALENT-POS | 2.2 U | 2.2 U | 2.2 U | 2.3 U | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.2 U |
| BENZO(A)ANTHRACENE | 1.3 U | 1.2 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.25 U | 1.2 U |
| BENZO(A)PYRENE | 2.2 U | 2.2 U | 2.2 U | 2.3 U | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.2 U |
| BENZO(B)FLUORANTHENE | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.65 U | 1.6 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-743 | SB-743 | SB-743 | SB-744 | SB-744 | SB-744 | SB-745 | SB-745 | SB-745 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-743-4 | G-SB-743-6 | G-SB-743-8 | G-SB-744-4 | G-SB-744-6 | G-SB-744-8 | G-SB-745-4 | G-SB-745-4-AVG | G-SB-745-4-D |
| SAMPLE DATE | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.7 U | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.75 U | 1.7 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 0.43 U | 0.43 U | 0.43 U | 0.45 U | 0.46 U | 0.44 U | 0.44 U | 0.435 U | 0.43 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-743 | SB-743 | SB-743 | SB-744 | SB-744 | SB-744 | SB-745 | SB-745 | SB-745 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-743-4 | G-SB-743-6 | G-SB-743-8 | G-SB-744-4 | G-SB-744-6 | G-SB-744-8 | G-SB-745-4 | G-SB-745-4-AVG | G-SB-745-4-D |
| SAMPLE DATE | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-745 | SB-745 | SB-745A | SB-745B | SB-745C | SB-746 | SB-746 | SB-746 | SB-747 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-745-6 | G-SB-745-8 | G-SB-745A-4 | G-SB-745B-4 | G-SB-745C-4 | G-SB-746-4 | G-SB-746-6 | G-SB-746-8 | G-SB-747-4 |
| SAMPLE DATE | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 4 | 4 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 8 | 4 | 4 | 4 | 4 | 6 | 8 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-745 | SB-745 | SB-745A | SB-745B | SB-745C | SB-746 | SB-746 | SB-746 | SB-747 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-745-6 | G-SB-745-8 | G-SB-745A-4 | G-SB-745B-4 | G-SB-745C-4 | G-SB-746-4 | G-SB-746-6 | G-SB-746-8 | G-SB-747-4 |
| SAMPLE DATE | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 4 | 4 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 8 | 4 | 4 | 4 | 4 | 6 | 8 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 56 | 2.2 U | 1.5 U | 1.7 U | 1.7 U | 2.2 U | 2.2 U | 2.2 U | 2.1 U |
| BAP EQUIVALENT-POS | 56 | 2.2 U | 1.5 U | 1.7 U | 1.7 U | 2.2 U | 2.2 U | 2.2 U | 2.1 U |
| BENZO(A)ANTHRACENE | 38 | 1.2 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.3 U | 1.2 U |
| BENZO(A)PYRENE | 37 | 2.2 U | 1.5 U | 1.7 U | 1.7 U | 2.2 U | 2.2 U | 2.2 U | 2.1 U |
| BENZO(B)FLUORANTHENE | 60 | 1.6 U | 1.4 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.7 U | 1.6 U | 2 U | 2.2 U | 2.2 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-745 | SB-745 | SB-745A | SB-745B | SB-745C | SB-746 | SB-746 | SB-746 | SB-747 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-745-6 | G-SB-745-8 | G-SB-745A-4 | G-SB-745B-4 | G-SB-745C-4 | G-SB-746-4 | G-SB-746-6 | G-SB-746-8 | G-SB-747-4 |
| SAMPLE DATE | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 4 | 4 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 8 | 4 | 4 | 4 | 4 | 6 | 8 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 39 | 1.4 U | 1.1 U | 1.1 U | 1.1 U | 1.3 U | 1.4 U | 1.4 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 6.8 J | 1.7 U | 1.5 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 21 | 0.43 U | 1.8 U | 1.9 U | 1.9 U | 0.42 U | 0.43 U | 0.43 U | 0.41 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 201.8 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-745 | SB-745 | SB-745A | SB-745B | SB-745C | SB-746 | SB-746 | SB-746 | SB-747 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-745-6 | G-SB-745-8 | G-SB-745A-4 | G-SB-745B-4 | G-SB-745C-4 | G-SB-746-4 | G-SB-746-6 | G-SB-746-8 | G-SB-747-4 |
| SAMPLE DATE | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 4 | 4 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 6 | 8 | 4 | 4 | 4 | 4 | 6 | 8 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-747 | SB-747 | SB-748 | SB-748 | SB-748 | SB-749 | SB-749 | SB-750 | SB-750 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-747-6 | G-SB-747-8 | G-SB-748-4 | G-SB-748-6 | G-SB-748-8 | G-SB-749-4 | G-SB-749-6 | G-SB-750-4 | G-SB-750-6 |
| SAMPLE DATE | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 4 | 6 |
| BOTTOM DEPTH | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-747 | SB-747 | SB-748 | SB-748 | SB-748 | SB-749 | SB-749 | SB-750 | SB-750 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-747-6 | G-SB-747-8 | G-SB-748-4 | G-SB-748-6 | G-SB-748-8 | G-SB-749-4 | G-SB-749-6 | G-SB-750-4 | G-SB-750-6 |
| SAMPLE DATE | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 4 | 6 |
| BOTTOM DEPTH | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 4 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2.2 U | 2.2 U | 2.5 | 2.2 U | 2.2 U | 1.4 U | 1.5 U | 39 | 1.6 U |
| BAP EQUIVALENT-POS | 2.2 U | 2.2 U | 0.48 | 2.2 U | 2.2 U | 1.4 U | 1.5 U | 38 | 1.6 U |
| BENZO(A)ANTHRACENE | 1.3 U | 1.3 U | 3.1 J | 1.3 U | 1.3 U | 1 U | 1.1 U | 34 | 1.1 U |
| BENZO(A)PYRENE | 2.2 U | 2.2 U | 2.2 U | 2.2 U | 2.2 U | 1.4 U | 1.5 U | 29 | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.6 U | 1.6 U | 1.6 J | 1.6 U | 1.6 U | 1.3 U | 1.4 U | 38 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.6 U | 1.7 U | 1.6 U | 1.7 U | 1.7 U | 1.9 U | 2 U | 16 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-747 | SB-747 | SB-748 | SB-748 | SB-748 | SB-749 | SB-749 | SB-750 | SB-750 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-747-6 | G-SB-747-8 | G-SB-748-4 | G-SB-748-6 | G-SB-748-8 | G-SB-749-4 | G-SB-749-6 | G-SB-750-4 | G-SB-750-6 |
| SAMPLE DATE | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 4 | 6 |
| BOTTOM DEPTH | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 4 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.4 U | 1.4 U | 8.5 | 1.4 U | 1.4 U | 0.99 U | 1.1 U | 34 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.7 U | 1.7 U | 1.8 U | 1.8 U | 1.4 U | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 0.43 U | 0.44 U | 0.43 U | 0.44 U | 0.44 U | 1.7 U | 1.8 U | 17 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 13.2 | 0 U | 0 U | 0 U | 0 U | 168 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-747 | SB-747 | SB-748 | SB-748 | SB-748 | SB-749 | SB-749 | SB-750 | SB-750 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-747-6 | G-SB-747-8 | G-SB-748-4 | G-SB-748-6 | G-SB-748-8 | G-SB-749-4 | G-SB-749-6 | G-SB-750-4 | G-SB-750-6 |
| SAMPLE DATE | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 4 | 6 |
| BOTTOM DEPTH | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 4 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-751 | SB-751 | SB-752 | SB-752 | SB-752 | SB-752 | SB-753 | SB-753 | SB-754 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-751-4 | G-SB-751-6 | G-SB-752-4 | G-SB-752-6 | G-SB-752-6-AVG | G-SB-752-6-D | G-SB-753-4 | G-SB-753-6 | G-SB-754-4 |
| SAMPLE DATE | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 |
| BOTTOM DEPTH | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-751 | SB-751 | SB-752 | SB-752 | SB-752 | SB-752 | SB-753 | SB-753 | SB-754 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-751-4 | G-SB-751-6 | G-SB-752-4 | G-SB-752-6 | G-SB-752-6-AVG | G-SB-752-6-D | G-SB-753-4 | G-SB-753-6 | G-SB-754-4 |
| SAMPLE DATE | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 |
| BOTTOM DEPTH | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-751 | SB-751 | SB-752 | SB-752 | SB-752 | SB-752 | SB-753 | SB-753 | SB-754 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-751-4 | G-SB-751-6 | G-SB-752-4 | G-SB-752-6 | G-SB-752-6-AVG | G-SB-752-6-D | G-SB-753-4 | G-SB-753-6 | G-SB-754-4 |
| SAMPLE DATE | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 |
| BOTTOM DEPTH | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-751 | SB-751 | SB-752 | SB-752 | SB-752 | SB-752 | SB-753 | SB-753 | SB-754 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-751-4 | G-SB-751-6 | G-SB-752-4 | G-SB-752-6 | G-SB-752-6-AVG | G-SB-752-6-D | G-SB-753-4 | G-SB-753-6 | G-SB-754-4 |
| SAMPLE DATE | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 |
| BOTTOM DEPTH | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 36 J | 39 J | 41 J | 41 J | 42.5 | 44 J | 46 J | 34 J | 5000 |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-754 | SB-755 | SB-755 | SB-755 | SB-755 | SB-756 | SB-756 | SB-757 | SB-757 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-754-6 | G-SB-755-4 | G-SB-755-6 | G-SB-755-6-AVG | G-SB-755-6-D | G-SB-756-4 | G-SB-756-6 | G-SB-757-4 | G-SB-757-6 |
| SAMPLE DATE | 20091021 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 | 6 |
| BOTTOM DEPTH | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-754 | SB-755 | SB-755 | SB-755 | SB-755 | SB-756 | SB-756 | SB-757 | SB-757 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-754-6 | G-SB-755-4 | G-SB-755-6 | G-SB-755-6-AVG | G-SB-755-6-D | G-SB-756-4 | G-SB-756-6 | G-SB-757-4 | G-SB-757-6 |
| SAMPLE DATE | 20091021 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 | 6 |
| BOTTOM DEPTH | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.5 U | 15 | 15 | 16 U | 1.5 U | 1.5 U | 3674 | 1.6 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.5 U | 14 | 14 | 16 U | 1.5 U | 1.5 U | 3674 | 1.6 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.1 U | 1.2 U | 6.1 U | 11 U | 1.1 U | 1.1 U | 2400 | 1.2 U |
| BENZO(A)PYRENE | 1.6 U | 1.5 U | 11 | 11 | 16 U | 1.5 U | 1.5 U | 2500 | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.4 U | 21 | 14 | 14 U | 1.4 U | 1.4 U | 3500 | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2 U | 8.7 | 8.7 | 20 U | 2 U | 1.9 U | 1100 | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-754 | SB-755 | SB-755 | SB-755 | SB-755 | SB-756 | SB-756 | SB-757 | SB-757 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-754-6 | G-SB-755-4 | G-SB-755-6 | G-SB-755-6-AVG | G-SB-755-6-D | G-SB-756-4 | G-SB-756-6 | G-SB-757-4 | G-SB-757-6 |
| SAMPLE DATE | 20091021 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 | 6 |
| BOTTOM DEPTH | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 6.05 U | 11 U | 1 U | 1 U | 2500 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.5 U | 1.7 U | 8.85 U | 16 U | 1.5 U | 1.5 U | 430 | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 9.4 | 9.4 | 18 U | 1.7 U | 1.7 U | 1400 | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 50.1 | 25.05 | 0 U | 0 U | 0 U | 13830 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-754 | SB-755 | SB-755 | SB-755 | SB-755 | SB-756 | SB-756 | SB-757 | SB-757 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-754-6 | G-SB-755-4 | G-SB-755-6 | G-SB-755-6-AVG | G-SB-755-6-D | G-SB-756-4 | G-SB-756-6 | G-SB-757-4 | G-SB-757-6 |
| SAMPLE DATE | 20091021 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 | 6 |
| BOTTOM DEPTH | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 62 J | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-758 | SB-758 | SB-759 | SB-759 | SB-759 | SB-760 | SB-760 | SB-760 | SB-761 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-758-4 | G-SB-758-6 | G-SB-759-3 | G-SB-759-5 | G-SB-759-7 | G-SB-760-3 | G-SB-760-5 | G-SB-760-7 | G-SB-761-3 |
| SAMPLE DATE | 20091103 | 20091103 | 20091113 | 20091113 | 20091113 | 20091113 | 20091113 | 20091113 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 4 | 6 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-758 | SB-758 | SB-759 | SB-759 | SB-759 | SB-760 | SB-760 | SB-760 | SB-761 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-758-4 | G-SB-758-6 | G-SB-759-3 | G-SB-759-5 | G-SB-759-7 | G-SB-760-3 | G-SB-760-5 | G-SB-760-7 | G-SB-761-3 |
| SAMPLE DATE | 20091103 | 20091103 | 20091113 | 20091113 | 20091113 | 20091113 | 20091113 | 20091113 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 4 | 6 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.6 U | 1915 | 1.7 U | 13 | 1212 | 444 | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.6 U | 1915 | 1.7 U | 12 | 1212 | 444 | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1100 | 1.3 U | 10 | 890 | 270 | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.6 U | 1100 | 1.7 U | 11 | 790 | 300 | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1500 | 1.6 U | 1.5 U | 910 | 410 | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 510 | 2.2 U | 2.1 U | 300 | 110 | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-758 | SB-758 | SB-759 | SB-759 | SB-759 | SB-760 | SB-760 | SB-760 | SB-761 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-758-4 | G-SB-758-6 | G-SB-759-3 | G-SB-759-5 | G-SB-759-7 | G-SB-760-3 | G-SB-760-5 | G-SB-760-7 | G-SB-761-3 |
| SAMPLE DATE | 20091103 | 20091103 | 20091113 | 20091113 | 20091113 | 20091113 | 20091113 | 20091113 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 4 | 6 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1000 | 1.2 U | 9.5 | 920 | 300 | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 460 | 1.7 U | 1.6 U | 190 | 59 | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 890 | 2 U | 1.8 U | 480 | 160 | 1.8 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 6560 | 0 U | 30.5 | 4480 | 1609 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-758 | SB-758 | SB-759 | SB-759 | SB-759 | SB-760 | SB-760 | SB-760 | SB-761 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-758-4 | G-SB-758-6 | G-SB-759-3 | G-SB-759-5 | G-SB-759-7 | G-SB-760-3 | G-SB-760-5 | G-SB-760-7 | G-SB-761-3 |
| SAMPLE DATE | 20091103 | 20091103 | 20091113 | 20091113 | 20091113 | 20091113 | 20091113 | 20091113 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 4 | 6 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761 | SB-761 | SB-761 | SB-761A | SB-761A | SB-761A | SB-761A | SB-761B | SB-761B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761-5 | G-SB-761-7 | G-SB-761-9 | G-SB-761A-3 | G-SB-761A-5 | G-SB-761A-7 | G-SB-761A-9 | G-SB-761B-3 | G-SB-761B-3-AVG |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761 | SB-761 | SB-761 | SB-761A | SB-761A | SB-761A | SB-761A | SB-761B | SB-761B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761-5 | G-SB-761-7 | G-SB-761-9 | G-SB-761A-3 | G-SB-761A-5 | G-SB-761A-7 | G-SB-761A-9 | G-SB-761B-3 | G-SB-761B-3-AVG |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 30 | 1.6 U | 6993 | 23 | 3432 | 15 | 2640 | 78 | 102 |
| BAP EQUIVALENT-POS | 29 | 1.6 U | 6993 | 22 | 3432 | 14 | 2640 | 78 | 102 |
| BENZO(A)ANTHRACENE | 31 | 1.1 U | 5000 | 14 | 1800 | 9.9 | 1300 | 66 J | 93 |
| BENZO(A)PYRENE | 21 | 1.6 U | 4900 | 18 | 2500 | 12 | 1900 | 53 J | 75.5 |
| BENZO(B)FLUORANTHENE | 26 | 1.4 U | 6000 | 18 | 2000 | 12 | 1900 | 55 J | 75 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 11 | 2 U | 1700 | 7.9 | 1000 | 2.1 U | 810 | 28 J | 43 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761 | SB-761 | SB-761 | SB-761A | SB-761A | SB-761A | SB-761A | SB-761B | SB-761B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761-5 | G-SB-761-7 | G-SB-761-9 | G-SB-761A-3 | G-SB-761A-5 | G-SB-761A-7 | G-SB-761A-9 | G-SB-761B-3 | G-SB-761B-3-AVG |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 26 | 1.1 U | 5700 | 18 | 2200 | 11 | 1700 | 73 J | 101.5 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 700 | 1.5 U | 420 | 1.6 U | 290 | 9.7 | 5.225 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 26 | 1.8 U | 2700 | 12 | 1200 | 1.8 U | 1200 | 31 J | 43.5 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 141 | 0 U | 26700 | 87.9 | 11120 | 44.9 | 9100 | 315.7 | 436.35 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-761 | SB-761 | SB-761 | SB-761A | SB-761A | SB-761A | SB-761A | SB-761B | SB-761B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761-5 | G-SB-761-7 | G-SB-761-9 | G-SB-761A-3 | G-SB-761A-5 | G-SB-761A-7 | G-SB-761A-9 | G-SB-761B-3 | G-SB-761B-3-AVG |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761B | SB-761B | SB-761B | SB-761B | SB-761C | SB-761C | SB-761C | SB-761C | SB-761D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761B-3-D | G-SB-761B-5 | G-SB-761B-7 | G-SB-761B-9 | G-SB-761C-3 | G-SB-761C-5 | G-SB-761C-7 | G-SB-761C-9 | G-SB-761D-3 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761B | SB-761B | SB-761B | SB-761B | SB-761C | SB-761C | SB-761C | SB-761C | SB-761D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761B-3-D | G-SB-761B-5 | G-SB-761B-7 | G-SB-761B-9 | G-SB-761C-3 | G-SB-761C-5 | G-SB-761C-7 | G-SB-761C-9 | G-SB-761D-3 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 127 | 59 | 27 | 1392 | 16 | 279 | 2.7 | 63 | 17 |
| BAP EQUIVALENT-POS | 126 | 59 | 26 | 1392 | 15 | 279 | 0.89 | 63 | 17 |
| BENZO(A)ANTHRACENE | 120 J | 47 | 24 | 1200 | 16 | 240 | 8.8 | 55 | 14 |
| BENZO(A)PYRENE | 98 J | 39 | 20 | 970 | 12 | 190 | 1.6 U | 42 | 13 |
| BENZO(B)FLUORANTHENE | 95 J | 37 | 22 | 1000 | 12 | 210 | 1.5 U | 46 | 13 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 58 J | 22 | 8.3 | 490 | 2 U | 96 | 2.1 U | 22 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761B | SB-761B | SB-761B | SB-761B | SB-761C | SB-761C | SB-761C | SB-761C | SB-761D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761B-3-D | G-SB-761B-5 | G-SB-761B-7 | G-SB-761B-9 | G-SB-761C-3 | G-SB-761C-5 | G-SB-761C-7 | G-SB-761C-9 | G-SB-761D-3 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 130 J | 55 | 27 | 1500 | 18 | 250 | 9.1 | 61 | 15 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 8.7 | 1.6 U | 140 | 1.5 U | 30 | 1.6 U | 8.3 | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 56 J | 23 | 11 | 560 | 1.7 U | 130 | 1.8 U | 26 | 8.6 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 557 | 231.7 | 112.3 | 5860 | 58 | 1146 | 17.9 | 260.3 | 63.6 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-761B | SB-761B | SB-761B | SB-761B | SB-761C | SB-761C | SB-761C | SB-761C | SB-761D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761B-3-D | G-SB-761B-5 | G-SB-761B-7 | G-SB-761B-9 | G-SB-761C-3 | G-SB-761C-5 | G-SB-761C-7 | G-SB-761C-9 | G-SB-761D-3 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761D | SB-761D | SB-761D | SB-761D | SB-761D | SB-762 | SB-762 | SB-762 | SB-762 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761D-5 | G-SB-761D-7 | G-SB-761D-7-AVG | G-SB-761D-7-D | G-SB-761D-9 | G-SB-762-3 | G-SB-762-5 | G-SB-762-7 | G-SB-762-9 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761D | SB-761D | SB-761D | SB-761D | SB-761D | SB-762 | SB-762 | SB-762 | SB-762 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761D-5 | G-SB-761D-7 | G-SB-761D-7-AVG | G-SB-761D-7-D | G-SB-761D-9 | G-SB-762-3 | G-SB-762-5 | G-SB-762-7 | G-SB-762-9 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 390 | 1.6 U | 1.55 U | 1.5 U | 28127 | 1.5 U | 355 | 19 | 364 |
| BAP EQUIVALENT-POS | 390 | 1.6 U | 1.55 U | 1.5 U | 28127 | 1.5 U | 355 | 18 | 364 |
| BENZO(A)ANTHRACENE | 320 | 1.1 U | 1.1 U | 1.1 U | 23000 | 1.1 U | 250 | 14 | 230 |
| BENZO(A)PYRENE | 260 | 1.6 U | 1.55 U | 1.5 U | 20000 | 1.5 U | 240 | 14 | 250 |
| BENZO(B)FLUORANTHENE | 270 | 1.4 U | 1.4 U | 1.4 U | 19000 | 1.4 U | 270 | 15 | 250 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 140 | 2 U | 2 U | 2 U | 9800 | 2 U | 110 | 2.1 U | 120 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-761D | SB-761D | SB-761D | SB-761D | SB-761D | SB-762 | SB-762 | SB-762 | SB-762 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761D-5 | G-SB-761D-7 | G-SB-761D-7-AVG | G-SB-761D-7-D | G-SB-761D-9 | G-SB-762-3 | G-SB-762-5 | G-SB-762-7 | G-SB-762-9 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 370 | 1.1 U | 1.1 U | 1.1 U | 29000 | 1 U | 280 | 16 | 260 |
| DIBENZO(A,H)ANTHRACENE | 54 | 1.6 U | 1.55 U | 1.5 U | 2800 | 1.5 U | 47 | 1.6 U | 49 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 150 | 1.8 U | 1.8 U | 1.8 U | 10000 | 1.7 U | 150 | 9.3 | 160 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1564 | 0 U | 0 U | 0 U | 113600 | 0 U | 1347 | 68.3 | 1319 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-761D | SB-761D | SB-761D | SB-761D | SB-761D | SB-762 | SB-762 | SB-762 | SB-762 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761D-5 | G-SB-761D-7 | G-SB-761D-7-AVG | G-SB-761D-7-D | G-SB-761D-9 | G-SB-762-3 | G-SB-762-5 | G-SB-762-7 | G-SB-762-9 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-762A | SB-762A | SB-762A | SB-762A | SB-762B | SB-762B | SB-762B | SB-762B | SB-762C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762A-3 | G-SB-762A-5 | G-SB-762A-7 | G-SB-762A-9 | G-SB-762B-3 | G-SB-762B-5 | G-SB-762B-7 | G-SB-762B-9 | G-SB-762C-3 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091023 | 20091023 | 20091023 | 20091023 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-762A | SB-762A | SB-762A | SB-762A | SB-762B | SB-762B | SB-762B | SB-762B | SB-762C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762A-3 | G-SB-762A-5 | G-SB-762A-7 | G-SB-762A-9 | G-SB-762B-3 | G-SB-762B-5 | G-SB-762B-7 | G-SB-762B-9 | G-SB-762C-3 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091023 | 20091023 | 20091023 | 20091023 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.7 | 14 | 11 | 13512 | 1.5 U | 1.6 U | 1.6 U | 129 | 1.5 U |
| BAP EQUIVALENT-POS | 0.0085 | 13 | 10 | 13512 | 1.5 U | 1.6 U | 1.6 U | 129 | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 11 | 9.3 | 9900 | 1.1 U | 1.2 U | 1.2 U | 78 | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 11 | 8.6 | 9100 | 1.5 U | 1.6 U | 1.6 U | 91 | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 10 | 8.3 | 9900 | 1.4 U | 1.5 U | 1.5 U | 100 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 2.1 U | 4200 | 2 U | 2.1 U | 2.1 U | 47 | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-762A | SB-762A | SB-762A | SB-762A | SB-762B | SB-762B | SB-762B | SB-762B | SB-762C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762A-3 | G-SB-762A-5 | G-SB-762A-7 | G-SB-762A-9 | G-SB-762B-3 | G-SB-762B-5 | G-SB-762B-7 | G-SB-762B-9 | G-SB-762C-3 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091023 | 20091023 | 20091023 | 20091023 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 8.5 | 11 | 9.6 | 10000 | 1.1 U | 1.1 U | 1.1 U | 100 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.6 U | 1900 | 1.5 U | 1.6 U | 1.6 U | 14 | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.8 U | 1.9 U | 4800 | 1.8 U | 1.8 U | 1.8 U | 61 | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 8.5 | 43 | 35.8 | 49800 | 0 U | 0 U | 0 U | 491 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-762A | SB-762A | SB-762A | SB-762A | SB-762B | SB-762B | SB-762B | SB-762B | SB-762C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762A-3 | G-SB-762A-5 | G-SB-762A-7 | G-SB-762A-9 | G-SB-762B-3 | G-SB-762B-5 | G-SB-762B-7 | G-SB-762B-9 | G-SB-762C-3 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091023 | 20091023 | 20091023 | 20091023 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-762C | SB-762C | SB-762D | SB-762D | SB-762D | SB-762D | SB-762D | SB-762D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762C-5 | G-SB-762C-7 | G-SB-762D-3 | G-SB-762D-5 | G-SB-762D-7 | G-SB-762D-7-AVG | G-SB-762D-7-D | G-SB-762D-9 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-762C | SB-762C | SB-762D | SB-762D | SB-762D | SB-762D | SB-762D | SB-762D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762C-5 | G-SB-762C-7 | G-SB-762D-3 | G-SB-762D-5 | G-SB-762D-7 | G-SB-762D-7-AVG | G-SB-762D-7-D | G-SB-762D-9 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 626 | 44 | 1.5 U | 240 | 1.6 U | 1.6 U | 1.6 U | 5047 |
| BAP EQUIVALENT-POS | 626 | 43 | 1.5 U | 239 | 1.6 U | 1.6 U | 1.6 U | 5047 |
| BENZO(A)ANTHRACENE | 520 | 41 | 1.1 U | 150 | 1.2 U | 1.2 U | 1.2 U | 2700 |
| BENZO(A)PYRENE | 440 | 33 | 1.5 U | 190 | 1.6 U | 1.6 U | 1.6 U | 3500 |
| BENZO(B)FLUORANTHENE | 460 | 38 | 1.4 U | 220 | 1.5 U | 1.5 U | 1.5 U | 3900 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 190 | 15 | 2 U | 97 | 2.1 U | 2.1 U | 2.1 U | 1400 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-762C | SB-762C | SB-762D | SB-762D | SB-762D | SB-762D | SB-762D | SB-762D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762C-5 | G-SB-762C-7 | G-SB-762D-3 | G-SB-762D-5 | G-SB-762D-7 | G-SB-762D-7-AVG | G-SB-762D-7-D | G-SB-762D-9 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 520 | 44 | 1 U | 190 | 1.1 U | 1.1 U | 1.1 U | 3400 |
| DIBENZO(A,H)ANTHRACENE | 65 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 670 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 210 | 19 | 1.7 U | 110 | 1.8 U | 1.8 U | 1.8 U | 2000 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 2405 | 190 | 0 U | 957 | 0 U | 0 U | 0 U | 17570 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |

| LOCATION | SB-762C | SB-762C | SB-762D | SB-762D | SB-762D | SB-762D | SB-762D | SB-762D |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762C-5 | G-SB-762C-7 | G-SB-762D-3 | G-SB-762D-5 | G-SB-762D-7 | G-SB-762D-7-AVG | G-SB-762D-7-D | G-SB-762D-9 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-763 | SB-763 | SB-763 | SB-763 | SB-763 | SB-763 | SB-763A | SB-763A | SB-763A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763-3 | G-SB-763-3-AVG | G-SB-763-3-D | G-SB-763-5 | G-SB-763-7 | G-SB-763-9 | G-SB-763A-3 | G-SB-763A-5 | G-SB-763A-7 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-763 | SB-763 | SB-763 | SB-763 | SB-763 | SB-763 | SB-763A | SB-763A | SB-763A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763-3 | G-SB-763-3-AVG | G-SB-763-3-D | G-SB-763-5 | G-SB-763-7 | G-SB-763-9 | G-SB-763A-3 | G-SB-763A-5 | G-SB-763A-7 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 16 | 10 | 3.3 | 97 | 22 | 4.2 | 1.7 | 12 | 1.6 U |
| BAP EQUIVALENT-POS | 15 | 8.5 | 1.6 | 97 | 22 | 2.6 | 0.008 | 11 | 1.6 U |
| BENZO(A)ANTHRACENE | 11 | 5.8 | 1.2 U | 63 | 16 | 8.5 | 1.1 U | 9.6 | 1.2 U |
| BENZO(A)PYRENE | 11 | 5.9 | 1.6 U | 58 | 16 | 1.6 U | 1.5 U | 9.1 | 1.6 U |
| BENZO(B)FLUORANTHENE | 13 | 6.875 | 1.5 U | 65 | 18 | 1.5 U | 1.4 U | 9.3 | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2.05 U | 2.1 U | 27 | 2.1 U | 2.1 U | 2 U | 2 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-763 | SB-763 | SB-763 | SB-763 | SB-763 | SB-763 | SB-763A | SB-763A | SB-763A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763-3 | G-SB-763-3-AVG | G-SB-763-3-D | G-SB-763-5 | G-SB-763-7 | G-SB-763-9 | G-SB-763A-3 | G-SB-763A-5 | G-SB-763A-7 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 13 | 6.775 | 1.1 U | 69 | 19 | 1.1 U | 7.9 | 8.9 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.55 U | 1.6 U | 21 | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 19 | 17.5 | 16 | 44 | 22 | 17 | 1.7 U | 1.7 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 67 | 41.5 | 16 | 347 | 91 | 25.5 | 7.9 | 36.9 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-763 | SB-763 | SB-763 | SB-763 | SB-763 | SB-763 | SB-763A | SB-763A | SB-763A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763-3 | G-SB-763-3-AVG | G-SB-763-3-D | G-SB-763-5 | G-SB-763-7 | G-SB-763-9 | G-SB-763A-3 | G-SB-763A-5 | G-SB-763A-7 |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-763A | SB-763B | SB-763B | SB-763B | SB-763B | SB-763C | SB-763C | SB-763C | SB-763C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763A-9 | G-SB-763B-3 | G-SB-763B-5 | G-SB-763B-7 | G-SB-763B-9 | G-SB-763C-3 | G-SB-763C-5 | G-SB-763C-7 | G-SB-763C-9 |
| SAMPLE DATE | 20091023 | 20091027 | 20091027 | 20091027 | 20091027 | 20091023 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-763A | SB-763B | SB-763B | SB-763B | SB-763B | SB-763C | SB-763C | SB-763C | SB-763C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763A-9 | G-SB-763B-3 | G-SB-763B-5 | G-SB-763B-7 | G-SB-763B-9 | G-SB-763C-3 | G-SB-763C-5 | G-SB-763C-7 | G-SB-763C-9 |
| SAMPLE DATE | 20091023 | 20091027 | 20091027 | 20091027 | 20091027 | 20091023 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1539 | 1.5 U | 15495 | 1.7 | 270 | 17 | 9096 | 24 | 4608 |
| BAP EQUIVALENT-POS | 1539 | 1.5 U | 15495 | 0.0078 | 270 | 16 | 9096 | 23 | 4599 |
| BENZO(A)ANTHRACENE | 950 | 1.1 U | 9500 | 1.1 U | 150 | 14 | 6500 | 21 | 4100 |
| BENZO(A)PYRENE | 1100 | 1.5 U | 11000 | 1.5 U | 200 | 13 | 6200 | 18 | 3600 |
| BENZO(B)FLUORANTHENE | 1100 | 1.4 U | 10000 | 1.4 U | 180 | 13 | 7500 | 20 | 3700 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 550 | 2 U | 5400 | 2 U | 130 | 2.1 U | 2800 | 1.9 U | 1500 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-763A | SB-763B | SB-763B | SB-763B | SB-763B | SB-763C | SB-763C | SB-763C | SB-763C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763A-9 | G-SB-763B-3 | G-SB-763B-5 | G-SB-763B-7 | G-SB-763B-9 | G-SB-763C-3 | G-SB-763C-5 | G-SB-763C-7 | G-SB-763C-9 |
| SAMPLE DATE | 20091023 | 20091027 | 20091027 | 20091027 | 20091027 | 20091023 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1200 | 1.1 U | 11000 | 7.8 | 190 | 16 | 8000 | 24 | 4300 |
| DIBENZO(A,H)ANTHRACENE | 170 | 1.5 U | 1900 | 1.5 U | 25 | 1.6 U | 1100 | 1.5 U | 17 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 570 | 1.8 U | 5800 | 1.7 U | 110 | 1.9 U | 3600 | 9.4 | 2000 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 5640 | 0 U | 54600 | 7.8 | 985 | 56 | 35700 | 92.4 | 19200 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-763A | SB-763B | SB-763B | SB-763B | SB-763B | SB-763C | SB-763C | SB-763C | SB-763C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763A-9 | G-SB-763B-3 | G-SB-763B-5 | G-SB-763B-7 | G-SB-763B-9 | G-SB-763C-3 | G-SB-763C-5 | G-SB-763C-7 | G-SB-763C-9 |
| SAMPLE DATE | 20091023 | 20091027 | 20091027 | 20091027 | 20091027 | 20091023 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-763D | SB-763D | SB-763D | SB-763D | SB-763D | SB-763D | SB-764 | SB-764 | SB-764 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763D-3 | G-SB-763D-5 | G-SB-763D-7 | G-SB-763D-7-AVG | G-SB-763D-7-D | G-SB-763D-9 | G-SB-764-3 | G-SB-764-5 | G-SB-764-5-AVG |
| SAMPLE DATE | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091002 | 20091002 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-763D | SB-763D | SB-763D | SB-763D | SB-763D | SB-763D | SB-764 | SB-764 | SB-764 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763D-3 | G-SB-763D-5 | G-SB-763D-7 | G-SB-763D-7-AVG | G-SB-763D-7-D | G-SB-763D-9 | G-SB-764-3 | G-SB-764-5 | G-SB-764-5-AVG |
| SAMPLE DATE | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091002 | 20091002 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 34 | 1.6 U | 1.6 U | 1.6 U | 2.8 | 124 | 1396 | 1857 |
| BAP EQUIVALENT-POS | 1.6 U | 33 | 1.6 U | 1.6 U | 1.6 U | 1.0 | 124 | 1394 | 1856 |
| BENZO(A)ANTHRACENE | 1.1 U | 29 | 1.2 U | 1.2 U | 1.2 U | 9.9 | 110 | 1100 J | 1550 |
| BENZO(A)PYRENE | 1.6 U | 24 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 94 | 1100 | 1450 |
| BENZO(B)FLUORANTHENE | 1.4 U | 41 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 130 | 1200 J | 1650 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 13 | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 50 | 510 J | 755 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-763D | SB-763D | SB-763D | SB-763D | SB-763D | SB-763D | SB-764 | SB-764 | SB-764 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763D-3 | G-SB-763D-5 | G-SB-763D-7 | G-SB-763D-7-AVG | G-SB-763D-7-D | G-SB-763D-9 | G-SB-764-3 | G-SB-764-5 | G-SB-764-5-AVG |
| SAMPLE DATE | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091002 | 20091002 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 29 | 1.1 U | 1.1 U | 1.1 U | 8.3 | 110 | 1200 J | 1650 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 3.1 U | 3.55 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 17 | 1.8 U | 1.8 U | 1.8 U | 1.9 U | 50 | 580 | 765 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 153 | 0 U | 0 U | 0 U | 18.2 | 544 | 5690 | 7820 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-763D | SB-763D | SB-763D | SB-763D | SB-763D | SB-763D | SB-764 | SB-764 | SB-764 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763D-3 | G-SB-763D-5 | G-SB-763D-7 | G-SB-763D-7-AVG | G-SB-763D-7-D | G-SB-763D-9 | G-SB-764-3 | G-SB-764-5 | G-SB-764-5-AVG |
| SAMPLE DATE | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091002 | 20091002 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-764 | SB-764 | SB-764 | SB-764A | SB-764A | SB-764A | SB-764A | SB-764B | SB-764B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764-5-D | G-SB-764-7 | G-SB-764-9 | G-SB-764A-3 | G-SB-764A-5 | G-SB-764A-7 | G-SB-764A-9 | G-SB-764B-3 | G-SB-764B-5 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091027 | 20091027 | 20091027 | 20091027 | 20091113 | 20091113 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-764 | SB-764 | SB-764 | SB-764A | SB-764A | SB-764A | SB-764A | SB-764B | SB-764B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764-5-D | G-SB-764-7 | G-SB-764-9 | G-SB-764A-3 | G-SB-764A-5 | G-SB-764A-7 | G-SB-764A-9 | G-SB-764B-3 | G-SB-764B-5 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091027 | 20091027 | 20091027 | 20091027 | 20091113 | 20091113 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2319 | 1.5 U | 1301 | 1.6 U | 44 | 1.5 U | 2117 | 95 | 76 |
| BAP EQUIVALENT-POS | 2317 | 1.5 U | 1300 | 1.6 U | 44 | 1.5 U | 2117 | 95 | 76 |
| BENZO(A)ANTHRACENE | 2000 J | 1.1 U | 1200 | 1.1 U | 27 | 1.1 U | 1700 | 48 | 34 |
| BENZO(A)PYRENE | 1800 | 1.5 U | 1000 | 1.6 U | 35 | 1.5 U | 1500 | 52 | 40 |
| BENZO(B)FLUORANTHENE | 2100 J | 1.4 U | 1200 | 1.4 U | 35 | 1.4 U | 1700 | 75 | 54 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1000 J | 1.9 U | 630 | 2 U | 19 | 1.9 U | 740 | 24 | 20 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-764 | SB-764 | SB-764 | SB-764A | SB-764A | SB-764A | SB-764A | SB-764B | SB-764B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764-5-D | G-SB-764-7 | G-SB-764-9 | G-SB-764A-3 | G-SB-764A-5 | G-SB-764A-7 | G-SB-764A-9 | G-SB-764B-3 | G-SB-764B-5 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091027 | 20091027 | 20091027 | 20091027 | 20091113 | 20091113 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 2100 J | 1 U | 1300 | 1.1 U | 38 | 1 U | 1800 | 54 | 41 |
| DIBENZO(A,H)ANTHRACENE | 4 U | 1.5 U | 3.2 U | 1.6 U | 1.5 U | 1.5 U | 200 | 26 | 23 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 950 | 1.7 U | 520 | 1.8 U | 22 | 1.7 U | 680 | 48 | 39 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 9950 | 0 U | 5850 | 0 U | 176 | 0 U | 8320 | 327 | 251 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-764 | SB-764 | SB-764 | SB-764A | SB-764A | SB-764A | SB-764A | SB-764B | SB-764B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764-5-D | G-SB-764-7 | G-SB-764-9 | G-SB-764A-3 | G-SB-764A-5 | G-SB-764A-7 | G-SB-764A-9 | G-SB-764B-3 | G-SB-764B-5 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091027 | 20091027 | 20091027 | 20091027 | 20091113 | 20091113 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-764B | SB-764B | SB-764C | SB-764C | SB-764C | SB-764C | SB-764D | SB-764D | SB-764D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764B-5-AVG | G-SB-764B-5-D | G-SB-764C-3 | G-SB-764C-5 | G-SB-764C-7 | G-SB-764C-9 | G-SB-764D-3 | G-SB-764D-3-AVG | G-SB-764D-3-D |
| SAMPLE DATE | 20091113 | 20091113 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 3 | 5 | 7 | 9 | 3 | 3 | 3 |
| BOTTOM DEPTH | 5 | 5 | 3 | 5 | 7 | 9 | 3 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-764B | SB-764B | SB-764C | SB-764C | SB-764C | SB-764C | SB-764D | SB-764D | SB-764D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764B-5-AVG | G-SB-764B-5-D | G-SB-764C-3 | G-SB-764C-5 | G-SB-764C-7 | G-SB-764C-9 | G-SB-764D-3 | G-SB-764D-3-AVG | G-SB-764D-3-D |
| SAMPLE DATE | 20091113 | 20091113 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 3 | 5 | 7 | 9 | 3 | 3 | 3 |
| BOTTOM DEPTH | 5 | 5 | 3 | 5 | 7 | 9 | 3 | 3 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 91 | 106 | 15 | 7060 | 225 | 16912 | 11 | 12 | 13 |
| BAP EQUIVALENT-POS | 91 | 106 | 14 | 7060 | 225 | 16912 | 10 | 11 | 12 |
| BENZO(A)ANTHRACENE | 44.5 | 55 | 12 | 5100 | 150 | 15000 | 9.4 | 9.4 | 9.4 |
| BENZO(A)PYRENE | 51 | 62 | 12 | 4600 | 150 | 12000 | 9.3 | 9.65 | 10 |
| BENZO(B)FLUORANTHENE | 62.5 | 71 | 11 | 4800 | 170 | 14000 | 1.6 U | 4.7 | 8.6 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 26.5 | 33 | 2 U | 2400 | 56 | 4600 | 2.2 U | 2.15 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-764B | SB-764B | SB-764C | SB-764C | SB-764C | SB-764C | SB-764D | SB-764D | SB-764D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764B-5-AVG | G-SB-764B-5-D | G-SB-764C-3 | G-SB-764C-5 | G-SB-764C-7 | G-SB-764C-9 | G-SB-764D-3 | G-SB-764D-3-AVG | G-SB-764D-3-D |
| SAMPLE DATE | 20091113 | 20091113 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 3 | 5 | 7 | 9 | 3 | 3 | 3 |
| BOTTOM DEPTH | 5 | 5 | 3 | 5 | 7 | 9 | 3 | 3 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 54.5 | 68 | 14 | 6100 | 170 | 16000 | 13 | 12.5 | 12 |
| DIBENZO(A,H)ANTHRACENE | 24.5 | 26 | 1.5 U | 1200 | 34 | 1300 | 1.7 U | 1.65 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 44 | 49 | 1.7 U | 2400 | 82 | 6500 | 2 U | 1.95 U | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 307.5 | 364 | 49 | 26600 | 812 | 69400 | 31.7 | 35.85 | 40 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-764B | SB-764B | SB-764C | SB-764C | SB-764C | SB-764C | SB-764D | SB-764D | SB-764D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764B-5-AVG | G-SB-764B-5-D | G-SB-764C-3 | G-SB-764C-5 | G-SB-764C-7 | G-SB-764C-9 | G-SB-764D-3 | G-SB-764D-3-AVG | G-SB-764D-3-D |
| SAMPLE DATE | 20091113 | 20091113 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 3 | 5 | 7 | 9 | 3 | 3 | 3 |
| BOTTOM DEPTH | 5 | 5 | 3 | 5 | 7 | 9 | 3 | 3 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-764D | SB-764D | SB-764D | SB-765 | SB-765 | SB-765 | SB-765 | SB-765A | SB-765A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764D-5 | G-SB-764D-7 | G-SB-764D-9 | G-SB-765-3 | G-SB-765-5 | G-SB-765-7 | G-SB-765-9 | G-SB-765A-3 | G-SB-765A-5 |
| SAMPLE DATE | 20091027 | 20091027 | 20091027 | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-764D | SB-764D | SB-764D | SB-765 | SB-765 | SB-765 | SB-765 | SB-765A | SB-765A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764D-5 | G-SB-764D-7 | G-SB-764D-9 | G-SB-765-3 | G-SB-765-5 | G-SB-765-7 | G-SB-765-9 | G-SB-765A-3 | G-SB-765A-5 |
| SAMPLE DATE | 20091027 | 20091027 | 20091027 | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 21710 | 504 | 11763 | 1.6 U | 406 | 1.5 U | 67 | 105 | 327 |
| BAP EQUIVALENT-POS | 21710 | 504 | 11763 | 1.6 U | 406 | 1.5 U | 66 | 105 | 327 |
| BENZO(A)ANTHRACENE | 20000 | 410 | 9700 | 1.1 U | 360 | 1.1 U | 57 | 69 | 240 |
| BENZO(A)PYRENE | 15000 | 340 | 8100 | 1.6 U | 270 | 1.5 U | 52 | 83 | 210 |
| BENZO(B)FLUORANTHENE | 17000 | 370 | 9800 | 1.4 U | 300 | 1.4 U | 57 | 92 | 230 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 6800 | 180 | 3200 | 2 U | 130 | 2 U | 31 | 25 | 110 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-764D | SB-764D | SB-764D | SB-765 | SB-765 | SB-765 | SB-765 | SB-765A | SB-765A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764D-5 | G-SB-764D-7 | G-SB-764D-9 | G-SB-765-3 | G-SB-765-5 | G-SB-765-7 | G-SB-765-9 | G-SB-765A-3 | G-SB-765A-5 |
| SAMPLE DATE | 20091027 | 20091027 | 20091027 | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 480 | 11000 | 1.1 U | 330 | 1.1 U | 57 | 82 | 260 |
| DIBENZO(A,H)ANTHRACENE | 2100 | 65 | 1200 | 1.6 U | 53 | 1.5 U | 1.6 U | 1.5 U | 56 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 8200 | 190 | 4700 | 1.8 U | 150 | 1.8 U | 25 | 52 | 130 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 91100 | 2035 | 47700 | 0 U | 1593 | 0 U | 279 | 403 | 1236 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-764D | SB-764D | SB-764D | SB-765 | SB-765 | SB-765 | SB-765 | SB-765A | SB-765A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764D-5 | G-SB-764D-7 | G-SB-764D-9 | G-SB-765-3 | G-SB-765-5 | G-SB-765-7 | G-SB-765-9 | G-SB-765A-3 | G-SB-765A-5 |
| SAMPLE DATE | 20091027 | 20091027 | 20091027 | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-765A | SB-765B | SB-765B | SB-765B | SB-765C | SB-765C | SB-765C | SB-765D | SB-765D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765A-7 | G-SB-765B-3 | G-SB-765B-5 | G-SB-765B-7 | G-SB-765C-3 | G-SB-765C-5 | G-SB-765C-7 | G-SB-765D-3 | G-SB-765D-5 |
| SAMPLE DATE | 20091028 | 20091113 | 20091113 | 20091113 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| BOTTOM DEPTH | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-765A | SB-765B | SB-765B | SB-765B | SB-765C | SB-765C | SB-765C | SB-765D | SB-765D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765A-7 | G-SB-765B-3 | G-SB-765B-5 | G-SB-765B-7 | G-SB-765C-3 | G-SB-765C-5 | G-SB-765C-7 | G-SB-765D-3 | G-SB-765D-5 |
| SAMPLE DATE | 20091028 | 20091113 | 20091113 | 20091113 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| BOTTOM DEPTH | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2.5 | 78 | 28 | 80 | 39 | 9950 | 39 | 30 | 3834 |
| BAP EQUIVALENT-POS | 0.8 | 78 | 27 | 79 | 38 | 9950 | 38 | 29 | 3834 |
| BENZO(A)ANTHRACENE | 8 | 42 | 17 | 54 | 12 | 7200 | 12 | 8 | 2400 |
| BENZO(A)PYRENE | 1.5 U | 42 | 21 | 60 | 31 | 6500 | 31 | 28 | 2600 |
| BENZO(B)FLUORANTHENE | 1.4 U | 50 | 14 | 82 | 34 | 7200 | 31 | 1.4 U | 3000 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 19 | 23 | 23 | 2.1 U | 3300 | 8.1 | 2 U | 1100 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-765A | SB-765B | SB-765B | SB-765B | SB-765C | SB-765C | SB-765C | SB-765D | SB-765D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765A-7 | G-SB-765B-3 | G-SB-765B-5 | G-SB-765B-7 | G-SB-765C-3 | G-SB-765C-5 | G-SB-765C-7 | G-SB-765D-3 | G-SB-765D-5 |
| SAMPLE DATE | 20091028 | 20091113 | 20091113 | 20091113 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| BOTTOM DEPTH | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 49 | 25 | 67 | 12 | 6800 | 18 | 1.1 U | 2800 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 23 | 1.6 U | 1.6 U | 1.6 U | 1600 | 1.5 U | 1.5 U | 530 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 37 | 28 | 51 | 24 | 3700 | 25 | 1.8 U | 1500 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 8 | 262 | 128 | 337 | 113 | 36300 | 125.1 | 36 | 13930 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-765A | SB-765B | SB-765B | SB-765B | SB-765C | SB-765C | SB-765C | SB-765D | SB-765D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765A-7 | G-SB-765B-3 | G-SB-765B-5 | G-SB-765B-7 | G-SB-765C-3 | G-SB-765C-5 | G-SB-765C-7 | G-SB-765D-3 | G-SB-765D-5 |
| SAMPLE DATE | 20091028 | 20091113 | 20091113 | 20091113 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| BOTTOM DEPTH | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-765D | SB-803 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 | SB-804 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765D-7 | G-SB-803-03 | G-SB-803-05 | G-SB-803-07 | G-SB-803-09 | G-SB-804-03 | G-SB-804-05 | G-SB-804-07 | G-SB-804-09 |
| SAMPLE DATE | 20091028 | 20100826 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-765D | SB-803 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 | SB-804 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765D-7 | G-SB-803-03 | G-SB-803-05 | G-SB-803-07 | G-SB-803-09 | G-SB-804-03 | G-SB-804-05 | G-SB-804-07 | G-SB-804-09 |
| SAMPLE DATE | 20091028 | 20100826 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | 3.9 U | 3.9 U | 3.6 U | 4.2 U | 3.8 U | 4.1 U | 3.8 U | 16 U |
| 2-METHYLNAPHTHALENE | NA | 3.9 U | 3.9 U | 3.6 U | 4.2 U | 3.8 U | 4.1 U | 3.8 U | 16 U |
| ACENAPHTHENE | NA | 3.9 U | 3.9 U | 3.6 U | 4.2 U | 3.8 U | 4.1 U | 3.8 U | 37 |
| ACENAPHTHYLENE | NA | 3.9 U | 3.9 U | 3.6 U | 14 | 3.8 U | 4.1 U | 3.8 U | 82 |
| ANTHRACENE | NA | 3.9 U | 3.9 U | 3.6 U | 38 J | 3.8 U | 4.1 U | 3.8 U | 270 |
| BAP EQUIVALENT-HALFND | 513 | 3.9 U | 34 | 3.6 U | 144 | 3.8 U | 29 | 3.8 U | 1432 |
| BAP EQUIVALENT-POS | 513 | 3.9 U | 31 | 3.6 U | 142 | 3.8 U | 26 | 3.8 U | 1424 |
| BENZO(A)ANTHRACENE | 300 | 3.9 U | 3.9 U | 3.6 U | 83 | 3.8 U | 29 | 3.8 U | 1300 |
| BENZO(A)PYRENE | 340 | 3.9 U | 31 J | 3.6 UJ | 110 J | 3.8 U | 20 | 3.8 U | 1100 |
| BENZO(B)FLUORANTHENE | 420 | 3.9 U | 3.9 U | 3.6 UJ | 150 J | 3.8 U | 22 | 3.8 U | 1200 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | 3.9 U | 3.9 U | 21 J | 100 J | 3.8 U | 17 | 3.8 U | 860 |
| BENZO(K)FLUORANTHENE | 130 | 3.9 U | 3.9 U | 3.6 UJ | 59 J | 3.8 U | 13 | 3.8 U | 620 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-765D | SB-803 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 | SB-804 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765D-7 | G-SB-803-03 | G-SB-803-05 | G-SB-803-07 | G-SB-803-09 | G-SB-804-03 | G-SB-804-05 | G-SB-804-07 | G-SB-804-09 |
| SAMPLE DATE | 20091028 | 20100826 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 360 | 1.3 U | 16 | 1.2 U | 110 | 1.3 U | 31 | 1.3 U | 1600 |
| DIBENZO(A,H)ANTHRACENE | 76 | 3.9 U | 3.9 U | 3.6 UJ | 4.2 U | 3.8 U | 4.1 U | 3.8 U | 16 U |
| FLUORANTHENE | NA | 3.9 U | 31 J | 20 J | 150 J | 3.8 U | 46 | 3.8 U | 2500 |
| FLUORENE | NA | 3.9 U | 3.9 U | 3.6 U | 4.2 U | 3.8 U | 4.1 U | 3.8 U | 16 U |
| INDENO(1,2,3-CD)PYRENE | 230 | 3.9 U | 3.9 U | 3.6 UJ | 80 J | 3.8 U | 12 | 3.8 U | 660 |
| NAPHTHALENE | NA | 3.9 U | 3.9 U | 3.6 U | 4.2 U | 3.8 U | 4.1 U | 3.8 U | 16 U |
| PHENANTHRENE | NA | 3.9 U | 19 J | 3.6 U | 66 J | 3.8 U | 32 | 3.8 U | 1500 |
| PYRENE | NA | 3.9 U | 28 | 3.6 U | 230 | 3.8 U | 68 | 3.8 U | 4100 |
| TOTAL PAHS | 1856 | 0 U | 125 | 41 | 1190 | 0 U | 290 | 0 U | 15829 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-765D | SB-803 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 | SB-804 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765D-7 | G-SB-803-03 | G-SB-803-05 | G-SB-803-07 | G-SB-803-09 | G-SB-804-03 | G-SB-804-05 | G-SB-804-07 | G-SB-804-09 |
| SAMPLE DATE | 20091028 | 20100826 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-805 | SB-805 | SB-806 | SB-806 | SB-806 | SB-806 | SB-806 | SB-806 | SB-807 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-805-07 | G-SB-805-09 | G-SB-806-03 | G-SB-806-05 | G-SB-806-07 | G-SB-806-07-AVG | G-SB-806-07-D | G-SB-806-09 | G-SB-807-03 |
| SAMPLE DATE | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100825 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-805 | SB-805 | SB-806 | SB-806 | SB-806 | SB-806 | SB-806 | SB-806 | SB-807 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-805-07 | G-SB-805-09 | G-SB-806-03 | G-SB-806-05 | G-SB-806-07 | G-SB-806-07-AVG | G-SB-806-07-D | G-SB-806-09 | G-SB-807-03 |
| SAMPLE DATE | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100825 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 76 U | 3.7 U |
| 2-METHYLNAPHTHALENE | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 480 | 3.7 U |
| ACENAPHTHENE | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 660 J | 3.7 U |
| ACENAPHTHYLENE | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 520 | 3.7 U |
| ANTHRACENE | 4 U | 9.8 | 4.2 U | 9.1 | 3.8 U | 3.95 U | 4.1 U | 1700 J | 3.7 U |
| BAP EQUIVALENT-HALFND | 4 U | 60 | 4.2 U | 67 | 3.8 U | 3.95 U | 4.1 U | 15215 | 3.7 U |
| BAP EQUIVALENT-POS | 4 U | 58 | 4.2 U | 65 | 3.8 U | 3.95 U | 4.1 U | 15215 | 3.7 U |
| BENZO(A)ANTHRACENE | 4 U | 46 | 4.2 U | 58 | 3.8 U | 3.95 U | 4.1 U | 10000 | 3.7 U |
| BENZO(A)PYRENE | 4 U | 45 | 4.2 U | 48 | 3.8 U | 3.95 U | 4.1 U | 10000 J | 3.7 U |
| BENZO(B)FLUORANTHENE | 4 U | 50 | 4.2 U | 68 | 3.8 U | 3.95 U | 4.1 U | 14000 J | 3.7 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4 U | 41 | 4.2 U | 56 | 3.8 U | 3.95 U | 4.1 U | 9200 J | 3.7 U |
| BENZO(K)FLUORANTHENE | 4 U | 27 | 4.2 U | 30 | 3.8 U | 3.95 U | 4.1 U | 5300 J | 3.7 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-805 | SB-805 | SB-806 | SB-806 | SB-806 | SB-806 | SB-806 | SB-806 | SB-807 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-805-07 | G-SB-805-09 | G-SB-806-03 | G-SB-806-05 | G-SB-806-07 | G-SB-806-07-AVG | G-SB-806-07-D | G-SB-806-09 | G-SB-807-03 |
| SAMPLE DATE | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100825 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 58 | 1.4 U | 76 | 1.3 U | 1.35 U | 1.4 U | 12000 | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 2100 J | 3.7 U |
| FLUORANTHENE | 4 U | 76 | 4.2 U | 88 | 3.8 U | 3.95 U | 4.1 U | 16000 J | 3.7 U |
| FLUORENE | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 76 U | 3.7 U |
| INDENO(1,2,3-CD)PYRENE | 4 U | 30 | 4.2 U | 40 | 3.8 U | 3.95 U | 4.1 U | 6500 J | 3.7 U |
| NAPHTHALENE | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 510 | 3.7 U |
| PHENANTHRENE | 4 U | 40 | 4.2 U | 38 | 3.8 U | 3.95 U | 4.1 U | 7600 J | 3.7 U |
| PYRENE | 4 U | 120 | 4.2 U | 140 | 3.8 U | 3.95 U | 4.1 U | 30000 | 3.7 U |
| TOTAL PAHS | 0 U | 542.8 | 0 U | 651.1 | 0 U | 0 U | 0 U | 126570 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-805 | SB-805 | SB-806 | SB-806 | SB-806 | SB-806 | SB-806 | SB-806 | SB-807 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-805-07 | G-SB-805-09 | G-SB-806-03 | G-SB-806-05 | G-SB-806-07 | G-SB-806-07-AVG | G-SB-806-07-D | G-SB-806-09 | G-SB-807-03 |
| SAMPLE DATE | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100825 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-807 | SB-807 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 | SB-808 | SB-808 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-807-03-AVG | G-SB-807-03-D | G-SB-807-05 | G-SB-807-07 | G-SB-807-09 | G-SB-808-03 | G-SB-808-05 | G-SB-808-07 | G-SB-808-09 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-807 | SB-807 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 | SB-808 | SB-808 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-807-03-AVG | G-SB-807-03-D | G-SB-807-05 | G-SB-807-07 | G-SB-807-09 | G-SB-808-03 | G-SB-808-05 | G-SB-808-07 | G-SB-808-09 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 7.6 U | 3.7 U | 37 U |
| 2-METHYLNAPHTHALENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 20 | 3.7 U | 37 U |
| ACENAPHTHENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 18 | 3.7 U | 37 U |
| ACENAPHTHYLENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 22 | 3.7 U | 77 | 3.7 U | 80 |
| ANTHRACENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 180 | 3.7 U | 380 |
| BAP EQUIVALENT-HALFND | 3.65 U | 3.6 U | 3.8 U | 3.9 U | 51 | 3.7 U | 2009 | 3.7 U | 8573 |
| BAP EQUIVALENT-POS | 3.65 U | 3.6 U | 3.8 U | 3.9 U | 49 | 3.7 U | 2009 | 3.7 U | 8573 |
| BENZO(A)ANTHRACENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 35 | 3.7 U | 1200 | 3.7 U | 4500 |
| BENZO(A)PYRENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 38 | 3.7 U | 1300 | 3.7 U | 6000 |
| BENZO(B)FLUORANTHENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 43 | 3.7 U | 1200 | 3.7 U | 5900 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 33 | 3.7 U | 1300 | 3.7 U | 5900 |
| BENZO(K)FLUORANTHENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 16 | 3.7 U | 710 | 3.7 U | 2600 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-807 | SB-807 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 | SB-808 | SB-808 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-807-03-AVG | G-SB-807-03-D | G-SB-807-05 | G-SB-807-07 | G-SB-807-09 | G-SB-808-03 | G-SB-808-05 | G-SB-808-07 | G-SB-808-09 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| CHRYSENE | 1.2 U | 1.2 U | 1.3 UL | 1.3 U | 41 | 1.2 U | 1200 | 1.2 U | 7000 J |
| DIBENZO(A,H)ANTHRACENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 370 | 3.7 U | 1100 |
| FLUORANTHENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 50 | 3.7 U | 1200 | 3.7 U | 5700 |
| FLUORENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 25 | 3.7 U | 37 U |
| INDENO(1,2,3-CD)PYRENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 25 | 3.7 U | 910 | 3.7 U | 4000 |
| NAPHTHALENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 22 | 3.7 U | 37 U |
| PHENANTHRENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 19 | 3.7 U | 240 | 3.7 U | 980 |
| PYRENE | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 81 | 3.7 U | 2500 | 3.7 U | 11000 |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 403 | 0 U | 12472 | 0 U | 55140 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-807 | SB-807 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 | SB-808 | SB-808 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-807-03-AVG | G-SB-807-03-D | G-SB-807-05 | G-SB-807-07 | G-SB-807-09 | G-SB-808-03 | G-SB-808-05 | G-SB-808-07 | G-SB-808-09 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-809 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 | SB-810 | SB-811 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-809-03 | G-SB-809-05 | G-SB-809-07 | G-SB-809-09 | G-SB-810-03 | G-SB-810-05 | G-SB-810-07 | G-SB-810-09 | G-SB-811-05 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-809 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 | SB-810 | SB-811 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-809-03 | G-SB-809-05 | G-SB-809-07 | G-SB-809-09 | G-SB-810-03 | G-SB-810-05 | G-SB-810-07 | G-SB-810-09 | G-SB-811-05 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 3.9 U | 3.9 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 3.6 U | 4.2 U | 16 U |
| 2-METHYLNAPHTHALENE | 3.9 U | 3.9 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 3.6 U | 4.2 U | 16 U |
| ACENAPHTHENE | 3.9 U | 3.9 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 3.6 U | 4.2 U | 36 |
| ACENAPHTHYLENE | 3.9 U | 3.9 U | 3.9 U | 7.9 | 4 U | 18 | 3.6 U | 4.2 U | 96 |
| ANTHRACENE | 3.9 U | 21 J | 3.9 U | 36 J | 4 U | 31 | 3.6 U | 4.2 U | 240 |
| BAP EQUIVALENT-HALFND | 3.9 U | 71 | 3.9 U | 179 | 5.4 | 248 | 11 | 18 | 1927 |
| BAP EQUIVALENT-POS | 3.9 U | 69 | 3.9 U | 177 | 1 | 246 | 8.4 | 15 | 1919 |
| BENZO(A)ANTHRACENE | 3.9 U | 43 J | 3.9 U | 110 | 4 U | 140 | 3.6 U | 4.2 UJ | 1500 |
| BENZO(A)PYRENE | 3.9 U | 59 J | 3.9 U | 140 J | 4 U | 200 | 8.4 | 14 | 1500 |
| BENZO(B)FLUORANTHENE | 3.9 U | 52 J | 3.9 U | 170 J | 10 | 200 | 3.6 U | 13 | 1700 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.9 U | 3.9 UJ | 3.9 U | 100 J | 4 U | 160 | 3.6 U | 4.2 U | 1200 |
| BENZO(K)FLUORANTHENE | 3.9 UJ | 29 J | 3.9 U | 89 J | 4 U | 100 | 3.6 U | 4.2 U | 670 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-809 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 | SB-810 | SB-811 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-809-03 | G-SB-809-05 | G-SB-809-07 | G-SB-809-09 | G-SB-810-03 | G-SB-810-05 | G-SB-810-07 | G-SB-810-09 | G-SB-811-05 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C1-FLUORENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C2-FLUORENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C2-NAPHTHALENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C3-FLUORENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C3-NAPHTHALENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C4-NAPHTHALENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| CHRYSENE | 1.3 U | 47 J | 1.3 U | 150 | 1.3 U | 190 | 8.5 | 1.4 UJ | 1700 |
| DIBENZO(A,H)ANTHRACENE | 3.9 U | 3.9 UJ | 3.9 U | 3.9 U | 4 U | 4.1 U | 3.6 U | 4.2 U | 16 U |
| FLUORANTHENE | 3.9 U | 71 J | 3.9 U | 170 J | 8.4 | 220 | 9.7 | 4.2 U | 2500 |
| FLUORENE | 3.9 U | 3.9 UJ | 3.9 U | 3.9 U | 4 U | 4.1 U | 3.6 U | 4.2 U | 16 U |
| INDENO(1,2,3-CD)PYRENE | 3.9 U | 3.9 UJ | 3.9 U | 82 J | 4 U | 110 | 3.6 U | 4.2 U | 910 |
| NAPHTHALENE | 3.9 U | 3.9 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 3.6 U | 4.2 U | 16 U |
| PHENANTHRENE | 3.9 U | 39 J | 3.9 UJ | 77 J | 4 U | 42 | 3.6 U | 4.2 U | 1100 |
| PYRENE | 3.9 U | 110 J | 3.9 U | 270 | 9.6 | 400 | 16 | 26 J | 4200 |
| TOTAL PAHS | 0 U | 471 | 0 U | 1401.9 | 28 | 1811 | 42.6 | 53 | 17352 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-809 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 | SB-810 | SB-811 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-809-03 | G-SB-809-05 | G-SB-809-07 | G-SB-809-09 | G-SB-810-03 | G-SB-810-05 | G-SB-810-07 | G-SB-810-09 | G-SB-811-05 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-811 | SB-811 | SB-811 | SB-811 | SB-812 | SB-812 | SB-812 | SB-812 | SB-813 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-811-07 | G-SB-811-07-AVG | G-SB-811-07-D | G-SB-811-09 | G-SB-812-03 | G-SB-812-05 | G-SB-812-07 | G-SB-812-09 | G-SB-813-03 |
| SAMPLE DATE | 20100823 | 20100823 | 20100823 | 20100823 | 20100824 | 20100824 | 20100824 | 20100824 | 20100826 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-811 | SB-811 | SB-811 | SB-811 | SB-812 | SB-812 | SB-812 | SB-812 | SB-813 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-811-07 | G-SB-811-07-AVG | G-SB-811-07-D | G-SB-811-09 | G-SB-812-03 | G-SB-812-05 | G-SB-812-07 | G-SB-812-09 | G-SB-813-03 |
| SAMPLE DATE | 20100823 | 20100823 | 20100823 | 20100823 | 20100824 | 20100824 | 20100824 | 20100824 | 20100826 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 18 | 3.9 U |
| 2-METHYLNAPHTHALENE | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 31 | 3.9 U |
| ACENAPHTHENE | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 8 U | 3.9 U |
| ACENAPHTHYLENE | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 72 | 3.9 U |
| ANTHRACENE | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 24 J | 3.9 U | 130 | 3.9 U |
| BAP EQUIVALENT-HALFND | 4 U | 3.95 U | 3.9 U | 57 | 3.8 U | 66 | 3.9 U | 780 | 3.9 U |
| BAP EQUIVALENT-POS | 4 U | 3.95 U | 3.9 U | 55 | 3.8 U | 64 | 3.9 U | 776 | 3.9 U |
| BENZO(A)ANTHRACENE | 4 U | 3.95 U | 3.9 U | 44 | 3.8 U | 35 | 3.9 U | 540 | 3.9 U |
| BENZO(A)PYRENE | 4 U | 3.95 U | 3.9 U | 43 | 3.8 U | 55 J | 3.9 U | 610 J | 3.9 U |
| BENZO(B)FLUORANTHENE | 4 U | 3.95 U | 3.9 U | 43 | 3.8 U | 48 J | 3.9 U | 700 J | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4 U | 3.95 U | 3.9 U | 41 | 3.8 U | 4.1 U | 3.9 U | 570 | 3.9 U |
| BENZO(K)FLUORANTHENE | 4 U | 3.95 U | 3.9 U | 21 | 3.8 U | 29 J | 3.9 U | 270 | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-811 | SB-811 | SB-811 | SB-811 | SB-812 | SB-812 | SB-812 | SB-812 | SB-813 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-811-07 | G-SB-811-07-AVG | G-SB-811-07-D | G-SB-811-09 | G-SB-812-03 | G-SB-812-05 | G-SB-812-07 | G-SB-812-09 | G-SB-813-03 |
| SAMPLE DATE | 20100823 | 20100823 | 20100823 | 20100823 | 20100824 | 20100824 | 20100824 | 20100824 | 20100826 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 1.3 U | 49 | 1.3 U | 42 | 1.3 U | 610 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 8 U | 3.9 U |
| FLUORANTHENE | 4 U | 3.95 U | 3.9 U | 63 | 3.8 U | 56 J | 3.9 U | 700 J | 3.9 U |
| FLUORENE | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 8 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 4 U | 3.95 U | 3.9 U | 26 | 3.8 U | 4.1 U | 3.9 U | 390 J | 3.9 U |
| NAPHTHALENE | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 40 | 3.9 U |
| PHENANTHRENE | 4 U | 3.95 U | 3.9 U | 25 | 3.8 U | 24 J | 3.9 U | 240 | 3.9 U |
| PYRENE | 4 U | 3.95 U | 3.9 U | 100 | 3.8 U | 82 | 8.9 J | 1200 J | 3.9 U |
| TOTAL PAHS | 0 U | 0 U | 0 U | 455 | 0 U | 395 | 8.9 | 6103 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-811 | SB-811 | SB-811 | SB-811 | SB-812 | SB-812 | SB-812 | SB-812 | SB-813 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-811-07 | G-SB-811-07-AVG | G-SB-811-07-D | G-SB-811-09 | G-SB-812-03 | G-SB-812-05 | G-SB-812-07 | G-SB-812-09 | G-SB-813-03 |
| SAMPLE DATE | 20100823 | 20100823 | 20100823 | 20100823 | 20100824 | 20100824 | 20100824 | 20100824 | 20100826 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-813 | SB-813 | SB-813 |
|---|---|---|---|
| SAMPLE ID | G-SB-813-05 | G-SB-813-07 | G-SB-813-09 |
| SAMPLE DATE | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA |
| ACETONE | NA | NA | NA |
| BENZENE | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA |
| BROMOFORM | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA |
| CHLOROFORM | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA |
| O-XYLENE | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA |
| STYRENE | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA |
| TOLUENE | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-813 | SB-813 | SB-813 |
|---|---|---|---|
| SAMPLE ID | G-SB-813-05 | G-SB-813-07 | G-SB-813-09 |
| SAMPLE DATE | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | |
| 1,1-BIPHENYL | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA |
| ANILINE | NA | NA | NA |
| ATRAZINE | NA | NA | NA |
| AZOBENZENE | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA |
| BENZIDINE | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA |
| CARBAZOLE | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA |
| ISOPHORONE | NA | NA | NA |
| NITROBENZENE | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA |
| PHENOL | NA | NA | NA |
| PYRIDINE | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | |
| 1-METHYLNAPHTHALENE | 4 U | 3.9 U | 900 |
| 2-METHYLNAPHTHALENE | 4 U | 3.9 U | 650 |
| ACENAPHTHENE | 4 U | 3.9 U | 1200 J |
| ACENAPHTHYLENE | 4 U | 3.9 U | 1000 |
| ANTHRACENE | 4 U | 3.9 U | 3500 J |
| BAP EQUIVALENT-HALFND | 4 U | 3.9 U | 10566 |
| BAP EQUIVALENT-POS | 4 U | 3.9 U | 10524 |
| BENZO(A)ANTHRACENE | 4 U | 3.9 U | 10000 |
| BENZO(A)PYRENE | 4 U | 3.9 U | 8100 J |
| BENZO(B)FLUORANTHENE | 4 U | 3.9 U | 9400 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4 U | 3.9 U | 5700 J |
| BENZO(K)FLUORANTHENE | 4 U | 3.9 U | 4300 J |
| C1-CHRYSENES | NA | NA | NA |

| LOCATION | SB-813 | SB-813 | SB-813 |
|---|---|---|---|
| SAMPLE ID | G-SB-813-05 | G-SB-813-07 | G-SB-813-09 |
| SAMPLE DATE | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | 79 U | NA |
| C1-FLUORANTHENES/PYRENES | NA | 79 U | NA |
| C1-FLUORENES | NA | 79 U | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | 79 U | NA |
| C2-CHRYSENES | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | 79 U | NA |
| C2-FLUORENES | NA | 79 U | NA |
| C2-NAPHTHALENES | NA | 79 U | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | 79 U | NA |
| C3-CHRYSENES | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | 79 U | NA |
| C3-FLUORENES | NA | 79 U | NA |
| C3-NAPHTHALENES | NA | 79 U | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | 79 U | NA |
| C4-CHRYSENES | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | 79 U | NA |
| C4-NAPHTHALENES | NA | 79 U | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | 79 U | NA |
| CHRYSENE | 1.3 U | 1.3 U | 11000 |
| DIBENZO(A,H)ANTHRACENE | 4 U | 3.9 U | 84 U |
| FLUORANTHENE | 21 J | 3.9 U | 17000 J |
| FLUORENE | 4 U | 3.9 U | 1800 J |
| INDENO(1,2,3-CD)PYRENE | 4 U | 3.9 U | 4300 J |
| NAPHTHALENE | 4 U | 3.9 U | 220 |
| PHENANTHRENE | 4 U | 3.9 U | 18000 J |
| PYRENE | 11 | 3.9 U | 31000 |
| TOTAL PAHS | 32 | 0 U | 127170 |
| **PESTICIDES/PCBS (UG/KG)** | | | |
| 4,4'-DDD | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA |
| ALDRIN | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA |
| BETA-BHC | NA | NA | NA |
| DELTA-BHC | NA | NA | NA |
| DIELDRIN | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA |
| ENDRIN | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA |
| TOXAPHENE | NA | NA | NA |
| **METALS (MG/KG)** | | | |
| ANTIMONY | NA | NA | NA |
| ARSENIC | NA | NA | NA |
| BARIUM | NA | NA | NA |
| BERYLLIUM | NA | NA | NA |
| CADMIUM | NA | NA | NA |
| CHROMIUM | NA | NA | NA |
| COBALT | NA | NA | NA |
| COPPER | NA | NA | NA |
| IRON | NA | NA | NA |
| LEAD | NA | NA | NA |
| MANGANESE | NA | NA | NA |
| MERCURY | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA |
| NICKEL | NA | NA | NA |
| SELENIUM | NA | NA | NA |
| SILVER | NA | NA | NA |
| THALLIUM | NA | NA | NA |
| VANADIUM | NA | NA | NA |
| ZINC | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-813 | SB-813 | SB-813 |
|---|---|---|---|
| SAMPLE ID | G-SB-813-05 | G-SB-813-07 | G-SB-813-09 |
| SAMPLE DATE | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 9 |
| DIESEL RANGE ORGANICS | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | |
| PERCENT SOLIDS | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | |
| PH | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | |
| MERCURY (METHYL) | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | |
| ACTINIUM-228 | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA |
| CERIUM-139 | NA | NA | NA |
| CERIUM-144 | NA | NA | NA |
| CESIUM-134 | NA | NA | NA |
| CESIUM-137 | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA |
| COBALT-56 | NA | NA | NA |
| COBALT-57 | NA | NA | NA |
| COBALT-58 | NA | NA | NA |
| COBALT-60 | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA |
| IODINE-131 | NA | NA | NA |
| IRON-59 | NA | NA | NA |
| LEAD-212 | NA | NA | NA |
| LEAD-214 | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA |
| RADIUM-226 | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA |
| SILVER-110 | NA | NA | NA |
| SODIUM-22 | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA |
| THORIUM-227 | NA | NA | NA |
| THORIUM-234 | NA | NA | NA |
| URANIUM-235 | NA | NA | NA |
| ZINC-65 | NA | NA | NA |

| LOCATION | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-2 | G-TP-2 | G-TP-2 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-1-1-7-8 | G-TP-1-2-7-8 | G-TP-1-5-2-3 | G-TP-1-6-2-3 | G-TP-1-7-5-7 | G-TP-1-8-5-7 | G-TP-2-3-6-7 | G-TP-2-8-5-6 | G-TP-2-9-5-6 |
| SAMPLE DATE | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 2 | 2 | 5 | 5 | 6 | 5 | 5 |
| BOTTOM DEPTH | 8 | 8 | 3 | 3 | 7 | 7 | 7 | 6 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-2 | G-TP-2 | G-TP-2 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-1-1-7-8 | G-TP-1-2-7-8 | G-TP-1-5-2-3 | G-TP-1-6-2-3 | G-TP-1-7-5-7 | G-TP-1-8-5-7 | G-TP-2-3-6-7 | G-TP-2-8-5-6 | G-TP-2-9-5-6 |
| SAMPLE DATE | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 2 | 2 | 5 | 5 | 6 | 5 | 5 |
| BOTTOM DEPTH | 8 | 8 | 3 | 3 | 7 | 7 | 7 | 6 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4.1 U | NA | 3.8 U | NA | 4 U | NA | 39 | 3.9 U | NA |
| 2-METHYLNAPHTHALENE | 4.1 U | NA | 3.8 U | NA | 4 U | NA | 64 | 3.9 U | NA |
| ACENAPHTHENE | 4.1 U | NA | 3.8 U | NA | 4 U | NA | 29 | 3.9 U | NA |
| ACENAPHTHYLENE | 8.6 | NA | 3.8 U | NA | 4 U | NA | 170 | 19 | NA |
| ANTHRACENE | 12 | NA | 3.8 U | NA | 4 U | NA | 320 | 34 | NA |
| BAP EQUIVALENT-HALFND | 64 | NA | 3.8 U | NA | 37 | NA | 1610 | 155 | NA |
| BAP EQUIVALENT-POS | 62 | NA | 3.8 U | NA | 35 | NA | 1610 | 153 | NA |
| BENZO(A)ANTHRACENE | 40 | NA | 3.8 U | NA | 22 | NA | 1000 | 110 | NA |
| BENZO(A)PYRENE | 50 J | NA | 3.8 U | NA | 28 J | NA | 1100 J | 120 J | NA |
| BENZO(B)FLUORANTHENE | 41 | NA | 3.8 U | NA | 17 | NA | 1200 | 130 | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 31 | NA | 3.8 U | NA | 13 | NA | 880 | 100 | NA |
| BENZO(K)FLUORANTHENE | 18 | NA | 3.8 U | NA | 10 | NA | 540 | 53 | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-2 | G-TP-2 | G-TP-2 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-1-1-7-8 | G-TP-1-2-7-8 | G-TP-1-5-2-3 | G-TP-1-6-2-3 | G-TP-1-7-5-7 | G-TP-1-8-5-7 | G-TP-2-3-6-7 | G-TP-2-8-5-6 | G-TP-2-9-5-6 |
| SAMPLE DATE | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 2 | 2 | 5 | 5 | 6 | 5 | 5 |
| BOTTOM DEPTH | 8 | 8 | 3 | 3 | 7 | 7 | 7 | 6 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | 89 J | NA | 78 U | NA | 80 U | NA | NA | 83 J |
| C1-FLUORANTHENES/PYRENES | NA | 96 J | NA | 78 U | NA | 80 U | NA | NA | 84 J |
| C1-FLUORENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| C1-PHENANTHRENES/ANTHRACENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| C2-FLUORENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| C2-NAPHTHALENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| C2-PHENANTHRENES/ANTHRACENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| C3-FLUORENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| C3-NAPHTHALENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| C3-PHENANTHRENES/ANTHRACENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| C4-NAPHTHALENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| C4-PHENANTHRENES/ANTHRACENES | NA | 81 U | NA | 78 U | NA | 80 U | NA | NA | 80 U |
| CHRYSENE | 47 | NA | 1.3 U | NA | 25 | NA | 1200 | 130 | NA |
| DIBENZO(A,H)ANTHRACENE | 4.1 U | NA | 3.8 U | NA | 4 U | NA | 220 J | 3.9 U | NA |
| FLUORANTHENE | 62 | NA | 3.8 U | NA | 37 | NA | 1700 | 170 | NA |
| FLUORENE | 4.1 U | NA | 3.8 U | NA | 4 U | NA | 56 | 3.9 U | NA |
| INDENO(1,2,3-CD)PYRENE | 35 J | NA | 3.8 U | NA | 25 J | NA | 630 J | 80 J | NA |
| NAPHTHALENE | 4.1 U | NA | 3.8 U | NA | 4 U | NA | 87 | 8.4 | NA |
| PHENANTHRENE | 30 | NA | 3.8 U | NA | 4 U | NA | 800 | 82 | NA |
| PYRENE | 92 | NA | 3.8 U | NA | 55 | NA | 2500 | 260 | NA |
| TOTAL PAHS | 466.6 | NA | 0 U | NA | 232 | NA | 12496 | 1296.4 | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-2 | G-TP-2 | G-TP-2 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-1-1-7-8 | G-TP-1-2-7-8 | G-TP-1-5-2-3 | G-TP-1-6-2-3 | G-TP-1-7-5-7 | G-TP-1-8-5-7 | G-TP-2-3-6-7 | G-TP-2-8-5-6 | G-TP-2-9-5-6 |
| SAMPLE DATE | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 2 | 2 | 5 | 5 | 6 | 5 | 5 |
| BOTTOM DEPTH | 8 | 8 | 3 | 3 | 7 | 7 | 7 | 6 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | OW-5 | OW-5 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | OW-5-4 | OW-5-6 | G-SB-91RE-10 | G-SB-91RE-3 | G-SB-91RE-5 | G-SB-91RE-6 | G-SB-91RE-7 | G-SB-91RE-8 | G-SB-91RE-8-AVG |
| SAMPLE DATE | 20071128 | 20071128 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 10 | 3 | 5 | 6 | 7 | 8 | 8 |
| BOTTOM DEPTH | 4 | 6 | 10 | 3 | 5 | 6 | 7 | 8 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 11 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 11 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 11 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | 11 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 11 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 8.7 J | 14 J | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | 11 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 11 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 11 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 15 B | 14 B | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | 110 UR | 120 UR | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 11 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | 11 U | 12 U | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | OW-5 | OW-5 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | OW-5-4 | OW-5-6 | G-SB-91RE-10 | G-SB-91RE-3 | G-SB-91RE-5 | G-SB-91RE-6 | G-SB-91RE-7 | G-SB-91RE-8 | G-SB-91RE-8-AVG |
| SAMPLE DATE | 20071128 | 20071128 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 10 | 3 | 5 | 6 | 7 | 8 | 8 |
| BOTTOM DEPTH | 4 | 6 | 10 | 3 | 5 | 6 | 7 | 8 | 8 |
| VINYL CHLORIDE | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | 137 | 232 | 95 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | NA | NA | 137 | 232 | 95 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | 56 | 85 | 35 | 1.2 U | 1.2 U | 1.1 U | 1.15 U |
| BENZO(A)PYRENE | NA | NA | 89 | 150 | 58 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | 91 | 160 | 60 | 1.5 U | 1.5 U | 1.4 U | 1.45 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | 28 | 45 | 26 | 2.1 U | 2.1 U | 2 U | 2.05 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | OW-5 | OW-5 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | OW-5-4 | OW-5-6 | G-SB-91RE-10 | G-SB-91RE-3 | G-SB-91RE-5 | G-SB-91RE-6 | G-SB-91RE-7 | G-SB-91RE-8 | G-SB-91RE-8-AVG |
| SAMPLE DATE | 20071128 | 20071128 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 10 | 3 | 5 | 6 | 7 | 8 | 8 |
| BOTTOM DEPTH | 4 | 6 | 10 | 3 | 5 | 6 | 7 | 8 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | 70 | 92 | 49 | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | NA | NA | 26 | 46 | 22 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | 70 | 110 | 49 | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | 430 | 688 | 299 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 38 U | 39 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 38 U | 39 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 38 U | 39 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 38 U | 39 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 38 U | 39 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 38 U | 39 U | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 38 U | 39 U | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.34 J | 0.17 B | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 2.1 L | 1.8 L | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 24.2 | 14.4 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 0.44 | 0.33 | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 0.22 | 0.085 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 11.4 J | 8 J | NA | NA | NA | NA | NA | NA | NA |
| COBALT | 5.4 J | 2.6 J | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 6.4 J | 6 J | NA | NA | NA | NA | NA | NA | NA |
| IRON | 17200 J | 15700 J | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 10.4 J | 5.9 J | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 123 J | 67.3 J | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.019 UL | 0.02 UL | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | 0.25 B | 0.22 B | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 4.9 J | 3.2 J | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 0.18 UL | 0.19 UL | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 0.21 | 0.12 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.073 | 0.053 | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 15.7 J | 13.3 J | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 20.2 K | 13.1 K | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | OW-5 | OW-5 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | OW-5-4 | OW-5-6 | G-SB-91RE-10 | G-SB-91RE-3 | G-SB-91RE-5 | G-SB-91RE-6 | G-SB-91RE-7 | G-SB-91RE-8 | G-SB-91RE-8-AVG |
| SAMPLE DATE | 20071128 | 20071128 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 10 | 3 | 5 | 6 | 7 | 8 | 8 |
| BOTTOM DEPTH | 4 | 6 | 10 | 3 | 5 | 6 | 7 | 8 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 87.2 | 85.4 | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-091 | SB-091 | SB-091A | SB-091A | SB-091A | SB-091A | SB-091A | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91RE-8-D | G-SB-91RE-9 | G-SB-91REA-3 | G-SB-91REA-5 | G-SB-91REA-7 | G-SB-91REA-7-AVG | G-SB-91REA-7-D | G-SB-91REA-9 | G-SB-91REB-3 |
| SAMPLE DATE | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091102 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 8 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-091 | SB-091 | SB-091A | SB-091A | SB-091A | SB-091A | SB-091A | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91RE-8-D | G-SB-91RE-9 | G-SB-91REA-3 | G-SB-91REA-5 | G-SB-91REA-7 | G-SB-91REA-7-AVG | G-SB-91REA-7-D | G-SB-91REA-9 | G-SB-91REB-3 |
| SAMPLE DATE | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091102 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 8 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 288 | 1.4 U | 1727 | 24 | 27 | 30 | 3684 | 37 |
| BAP EQUIVALENT-POS | 1.6 U | 288 | 1.4 U | 1727 | 23 | 26 | 29 | 3684 | 36 |
| BENZO(A)ANTHRACENE | 1.2 U | 170 | 1 U | 670 | 1.1 U | 1.1 U | 1.1 U | 2800 | 22 |
| BENZO(A)PYRENE | 1.6 U | 190 | 1.4 U | 1200 | 23 | 23.5 | 24 | 2500 | 29 |
| BENZO(B)FLUORANTHENE | 1.5 U | 210 | 1.3 U | 1200 | 1.4 UJ | 13.35 | 26 J | 2600 | 46 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 87 | 1.9 U | 440 | 2 U | 2.25 | 3.5 J | 1100 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-091 | SB-091 | SB-091A | SB-091A | SB-091A | SB-091A | SB-091A | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91RE-8-D | G-SB-91RE-9 | G-SB-91REA-3 | G-SB-91REA-5 | G-SB-91REA-7 | G-SB-91REA-7-AVG | G-SB-91REA-7-D | G-SB-91REA-9 | G-SB-91REB-3 |
| SAMPLE DATE | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091102 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 8 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 200 | 0.98 U | 900 | 1.1 U | 1.1 U | 1.1 U | 2800 | 21 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 46 | 1.4 U | 250 | 1.6 U | 1.55 U | 1.5 U | 480 | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 130 | 1.6 U | 850 | 1.8 UJ | 11.95 | 23 J | 1500 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 1033 | 0 U | 5510 | 23 | 49.75 | 76.5 | 13780 | 118 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-091 | SB-091 | SB-091A | SB-091A | SB-091A | SB-091A | SB-091A | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91RE-8-D | G-SB-91RE-9 | G-SB-91REA-3 | G-SB-91REA-5 | G-SB-91REA-7 | G-SB-91REA-7-AVG | G-SB-91REA-7-D | G-SB-91REA-9 | G-SB-91REB-3 |
| SAMPLE DATE | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091102 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 8 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-091B | SB-091B | SB-091B | SB-091C | SB-091C | SB-091C | SB-091C | SB-092 | SB-092 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REB-5 | G-SB-91REB-7 | G-SB-91REB-9 | G-SB-91REC-3 | G-SB-91REC-5 | G-SB-91REC-7 | G-SB-91REC-9 | G-SB-92RE-10 | G-SB-92RE-3 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 10 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 10 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-091B | SB-091B | SB-091B | SB-091C | SB-091C | SB-091C | SB-091C | SB-092 | SB-092 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REB-5 | G-SB-91REB-7 | G-SB-91REB-9 | G-SB-91REC-3 | G-SB-91REC-5 | G-SB-91REC-7 | G-SB-91REC-9 | G-SB-92RE-10 | G-SB-92RE-3 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 10 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 10 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 359 | 1.5 U | 1.5 U | 1.6 U | 443 | 73 | 217 |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 359 | 1.5 U | 1.5 U | 1.6 U | 443 | 73 | 217 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 140 | 1.1 U | 1.1 U | 1.1 U | 150 | 36 | 130 |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 290 | 1.5 U | 1.5 U | 1.6 U | 320 | 39 | 140 |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 310 | 1.4 U | 1.4 U | 1.4 U | 330 | 42 | 140 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 130 | 2 U | 2 U | 2 U | 150 | 17 | 73 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-091B | SB-091B | SB-091B | SB-091C | SB-091C | SB-091C | SB-091C | SB-092 | SB-092 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REB-5 | G-SB-91REB-7 | G-SB-91REB-9 | G-SB-91REC-3 | G-SB-91REC-5 | G-SB-91REC-7 | G-SB-91REC-9 | G-SB-92RE-10 | G-SB-92RE-3 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 10 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 10 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 200 | 1.1 U | 1.1 U | 1.1 U | 190 | 41 | 120 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.9 U | 1.5 U | 1.5 U | 1.6 U | 53 | 22 | 40 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 220 | 1.8 U | 1.8 U | 1.8 U | 200 | 35 | 89 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 1290 | 0 U | 0 U | 0 U | 1393 | 232 | 732 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | 3.2 | 2.1 |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-091B | SB-091B | SB-091B | SB-091C | SB-091C | SB-091C | SB-091C | SB-092 | SB-092 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REB-5 | G-SB-91REB-7 | G-SB-91REB-9 | G-SB-91REC-3 | G-SB-91REC-5 | G-SB-91REC-7 | G-SB-91REC-9 | G-SB-92RE-10 | G-SB-92RE-3 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 10 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 10 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RE-4 | G-SB-92RE-5 | G-SB-92RE-6 | G-SB-92RE-7 | G-SB-92RE-7-AVG | G-SB-92RE-7-D | G-SB-92RE-8 | G-SB-92RE-9 | G-SB-92REC-3 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RE-4 | G-SB-92RE-5 | G-SB-92RE-6 | G-SB-92RE-7 | G-SB-92RE-7-AVG | G-SB-92RE-7-D | G-SB-92RE-8 | G-SB-92RE-9 | G-SB-92REC-3 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 28 | 9028 | 988 | 70 | 66 | 62 | 1.5 U | 23492 | 11 |
| BAP EQUIVALENT-POS | 28 | 9028 | 988 | 70 | 66 | 62 | 1.5 U | 23492 | 10 |
| BENZO(A)ANTHRACENE | 11 | 5400 | 690 | 36 | 33.5 | 31 | 1.1 U | 18000 | 8.8 |
| BENZO(A)PYRENE | 9.3 | 6100 | 680 | 41 | 37.5 | 34 | 1.5 U | 16000 | 8.4 |
| BENZO(B)FLUORANTHENE | 12 | 7200 | 700 | 44 | 41 | 38 | 1.4 U | 21000 | 10 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2200 | 330 | 20 | 18 | 16 | 2 U | 3600 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RE-4 | G-SB-92RE-5 | G-SB-92RE-6 | G-SB-92RE-7 | G-SB-92RE-7-AVG | G-SB-92RE-7-D | G-SB-92RE-8 | G-SB-92RE-9 | G-SB-92REC-3 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 12 | 5700 | 690 | 45 | 41.5 | 38 | 1.1 U | 16000 | 9.1 |
| DIBENZO(A,H)ANTHRACENE | 14 | 1300 | 130 | 17 | 17.5 | 18 | 1.5 U | 2700 | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 19 | 3400 | 350 | 35 | 33 | 31 | 1.8 U | 8400 | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 77.3 | 31300 | 3570 | 238 | 222 | 206 | 0 U | 85700 | 36.3 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 4.1 | 3.2 | 6.9 | 8.5 | 6.9 | 5.3 | 1.6 | 8.3 | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RE-4 | G-SB-92RE-5 | G-SB-92RE-6 | G-SB-92RE-7 | G-SB-92RE-7-AVG | G-SB-92RE-7-D | G-SB-92RE-8 | G-SB-92RE-9 | G-SB-92REC-3 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-092C | SB-092C | SB-092C | SB-092D | SB-092D | SB-092D | SB-092D | SB-181 | SB-182 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92REC-5 | G-SB-92REC-7 | G-SB-92REC-9 | G-SB-92RED-3 | G-SB-92RED-5 | G-SB-92RED-7 | G-SB-92RED-9 | SB-181-05 | SB-182-05 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20041102 | 20041102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | 1 U | 1 U |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | 1 U | 1 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | 1 U | 1 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | 1 U | 1 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | 1 U | 1 U |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-092C | SB-092C | SB-092C | SB-092D | SB-092D | SB-092D | SB-092D | SB-181 | SB-182 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92REC-5 | G-SB-92REC-7 | G-SB-92REC-9 | G-SB-92RED-3 | G-SB-92RED-5 | G-SB-92RED-7 | G-SB-92RED-9 | SB-181-05 | SB-182-05 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20041102 | 20041102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 386 | 1.5 U | 31 | 23 | 1364 | 1.6 U | 4718 | NA | NA |
| BAP EQUIVALENT-POS | 385 | 1.5 U | 30 | 22 | 1364 | 1.6 U | 4718 | NA | NA |
| BENZO(A)ANTHRACENE | 210 | 1.1 U | 18 | 1.1 U | 700 | 1.1 U | 2800 | NA | NA |
| BENZO(A)PYRENE | 320 | 1.5 U | 24 | 18 | 980 | 1.6 U | 3200 | NA | NA |
| BENZO(B)FLUORANTHENE | 300 | 1.4 U | 24 | 21 | 990 | 1.4 U | 3400 | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 83 | 2 U | 13 | 2 U | 480 | 2 U | 1500 | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-092C | SB-092C | SB-092C | SB-092D | SB-092D | SB-092D | SB-092D | SB-181 | SB-182 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92REC-5 | G-SB-92REC-7 | G-SB-92REC-9 | G-SB-92RED-3 | G-SB-92RED-5 | G-SB-92RED-7 | G-SB-92RED-9 | SB-181-05 | SB-182-05 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20041102 | 20041102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 240 | 1.1 U | 25 | 1.1 U | 840 | 1.1 U | 3300 | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 140 | 1.6 U | 690 | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 130 | 1.8 U | 16 | 20 | 690 | 1.8 U | 1900 | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1283 | 0 U | 120 | 59 | 4820 | 0 U | 16790 | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-092C | SB-092C | SB-092C | SB-092D | SB-092D | SB-092D | SB-092D | SB-181 | SB-182 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92REC-5 | G-SB-92REC-7 | G-SB-92REC-9 | G-SB-92RED-3 | G-SB-92RED-5 | G-SB-92RED-7 | G-SB-92RED-9 | SB-181-05 | SB-182-05 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20041102 | 20041102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | 12000 U | 12000 U |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-184 | SB-185 | SB-186 | SB-187 | SB-188 | SB-189 | SB-190 | SB-191 | SB-192 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-184-05 | SB-185-05 | SB-186-05 | SB-187-05 | SB-188-05 | SB-189-05 | SB-190-05 | SB-191-05 | SB-192-05 |
| SAMPLE DATE | 20041103 | 20041103 | 20041103 | 20041105 | 20041105 | 20041105 | 20041109 | 20041109 | 20041109 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 3 | 1 U | 1 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 1 U | 1 U | 1 U | 2 | 1 U | 1 U | 140 | 1 U | 2 |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1 U | 1 U | 1 U | 3 | 1 U | 1 U | 19 | 1 U | 1 U |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-184 | SB-185 | SB-186 | SB-187 | SB-188 | SB-189 | SB-190 | SB-191 | SB-192 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-184-05 | SB-185-05 | SB-186-05 | SB-187-05 | SB-188-05 | SB-189-05 | SB-190-05 | SB-191-05 | SB-192-05 |
| SAMPLE DATE | 20041103 | 20041103 | 20041103 | 20041105 | 20041105 | 20041105 | 20041109 | 20041109 | 20041109 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-184 | SB-185 | SB-186 | SB-187 | SB-188 | SB-189 | SB-190 | SB-191 | SB-192 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-184-05 | SB-185-05 | SB-186-05 | SB-187-05 | SB-188-05 | SB-189-05 | SB-190-05 | SB-191-05 | SB-192-05 |
| SAMPLE DATE | 20041103 | 20041103 | 20041103 | 20041105 | 20041105 | 20041105 | 20041109 | 20041109 | 20041109 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-184 | SB-185 | SB-186 | SB-187 | SB-188 | SB-189 | SB-190 | SB-191 | SB-192 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-184-05 | SB-185-05 | SB-186-05 | SB-187-05 | SB-188-05 | SB-189-05 | SB-190-05 | SB-191-05 | SB-192-05 |
| SAMPLE DATE | 20041103 | 20041103 | 20041103 | 20041105 | 20041105 | 20041105 | 20041109 | 20041109 | 20041109 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| DIESEL RANGE ORGANICS | 12000 U | 12000 U | 12000 U | 12000 U | 12000 U | 13000 U | 12000 U | 11000 U | 32000 |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-194 | SB-194 | SB-195 | SB-195 | SB-196 | SB-196 | SB-197 | SB-197 | SB-198 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-194-05 | SB-194-10 | SB-195-05 | SB-195-10 | SB-196-05 | SB-196-10 | SB-197-05 | SB-197-10 | SB-198-05 |
| SAMPLE DATE | 20050511 | 20050511 | 20050510 | 20050510 | 20050511 | 20050511 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,1,1-TRICHLOROETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,1,2,2-TETRACHLOROETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,1,2-TRICHLOROETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,1-DICHLOROETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,1-DICHLOROETHENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 0.54 J | 2.5 U |
| 1,1-DICHLOROPROPENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,2,3-TRICHLOROBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,2,3-TRICHLOROPROPANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,2,4-TRIMETHYLBENZENE | 2.2 U | 2.1 U | 1.1 J | 0.82 J | 2.1 U | 2.5 U | 2.2 U | 0.69 J | 2.5 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 4.5 U | 4.1 U | 4.4 U | 4.6 U | 4.2 U | 5 U | 4.5 U | 4.5 U | 4.9 U |
| 1,2-DIBROMOETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,2-DICHLOROBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,2-DICHLOROETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,2-DICHLOROPROPANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,3,5-TRIMETHYLBENZENE | 2.24 U | 2.07 U | 2.18 U | 2.3 U | 2.12 U | 2.5 U | 2.24 U | 2.26 U | 2.46 U |
| 1,3-DICHLOROBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,3-DICHLOROPROPANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,3-DICHLOROPROPENE | 4.48 U | 4.13 U | 4.36 U | 4.6 U | 4.25 U | 5 U | 4.48 U | 4.51 U | 4.92 U |
| 1,4-DICHLOROBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 1,4-DIOXANE | 112 U | 103 U | 109 U | 115 U | 106 U | 125 U | 112 U | 113 U | 123 U |
| 2,2-DICHLOROPROPANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 2-BUTANONE | 8.96 U | 8.26 U | 8.73 U | 9.2 U | 3.58 J | 3.64 J | 3.85 J | 9.03 U | 8.17 J |
| 2-CHLOROETHYL VINYL ETHER | 2.2 UR | 2.1 UR | 2.2 UR | 2.3 UR | 2.1 UR | 2.5 UR | 2.2 UR | 2.3 UR | 2.5 UR |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | 8.96 U | 8.26 U | 8.73 U | 9.2 U | 8.5 U | 9.99 U | 8.96 U | 9.03 U | 9.83 U |
| 4-CHLOROTOLUENE | 2.24 U | 2.07 U | 2.18 U | 2.3 U | 2.12 U | 2.5 U | 2.24 U | 2.26 U | 2.46 U |
| 4-ISOPROPYLTOLUENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| 4-METHYL-2-PENTANONE | 9 U | 8.3 U | 8.7 U | 9.2 U | 8.5 U | 10 U | 9 U | 9 U | 9.8 U |
| ACETONE | 8.8 J | 13 J | 6.8 J | 3.6 J | 39.5 J | 38.5 J | 51 J | 7.6 J | 89.6 J |
| BENZENE | 2.24 U | 2.07 U | 2.18 U | 2.3 U | 2.12 U | 2.5 U | 2.24 U | 2.26 U | 2.46 U |
| BROMOBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| BROMOCHLOROMETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| BROMODICHLOROMETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| BROMOFORM | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| BROMOMETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| CARBON DISULFIDE | 2.2 U | 2.1 U | 1.2 J | 2.3 U | 2.1 U | 2.1 J | 0.83 J | 0.68 J | 0.76 J |
| CARBON TETRACHLORIDE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| CHLOROBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| CHLORODIBROMOMETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| CHLOROETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| CHLOROFORM | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| CHLOROMETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| CIS-1,2-DICHLOROETHENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| CIS-1,3-DICHLOROPROPENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| DIBROMOMETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| DICHLORODIFLUOROMETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| DIISOPROPYL ETHER | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| ETHYL TERT-BUTYL ETHER | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| ETHYLBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| FLUORODICHLOROMETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| HEXACHLOROBUTADIENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| ISOPROPYLBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| M+P-XYLENES | 4.5 U | 4.1 U | 4.4 U | 4.6 U | 4.2 U | 5 U | 4.5 U | 4.5 U | 4.9 U |
| METHYL TERT-BUTYL ETHER | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| METHYLENE CHLORIDE | 4.5 U | 4.1 U | 4.4 U | 4.6 U | 4.2 U | 5 U | 4.5 U | 4.5 U | 4.9 U |
| NAPHTHALENE | 2.2 U | 2.1 U | 0.62 J | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| N-BUTYLBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| N-PROPYLBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| O-XYLENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| SEC-BUTYLBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| STYRENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| TERT-AMYL METHYL ETHER | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| TERT-BUTYLBENZENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| TERTIARY-BUTYL ALCOHOL | 9 U | 8 U | 9 U | 9 U | 8 U | 10 U | 9 U | 7 J | 10 U |
| TETRACHLOROETHENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| TOLUENE | 3.8 | 1.4 J | 2.8 | 2 J | 2.1 U | 3.9 | 1.6 J | 1.2 J | 2.5 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 6.7 U | 6.2 U | 6.5 U | 6.9 U | 6.4 U | 7.5 U | 6.7 U | 6.8 U | 7.4 U |
| TRANS-1,2-DICHLOROETHENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| TRANS-1,3-DICHLOROPROPENE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| TRICHLOROETHENE | 2.2 U | 2.1 U | 0.98 J | 0.92 J | 2.1 U | 1.1 J | 0.62 J | 1.3 J | 2.5 U |
| TRICHLOROFLUOROMETHANE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| VINYL ACETATE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |

| LOCATION | SB-194 | SB-194 | SB-195 | SB-195 | SB-196 | SB-196 | SB-197 | SB-197 | SB-198 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-194-05 | SB-194-10 | SB-195-05 | SB-195-10 | SB-196-05 | SB-196-10 | SB-197-05 | SB-197-10 | SB-198-05 |
| SAMPLE DATE | 20050511 | 20050511 | 20050510 | 20050510 | 20050511 | 20050511 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| VINYL CHLORIDE | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| 1,2-DICHLOROBENZENE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| 1,3-DICHLOROBENZENE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| 1,4-DICHLOROBENZENE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| 1,4-DIOXANE | 387 U | 364 U | 375 U | 378 U | 375 U | 414 U | 368 U | 387 U | 424 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 117 U | 110 U | 114 U | 114 U | 113 U | 125 U | 111 U | 117 U | 128 U |
| 2,4,5-TRICHLOROPHENOL | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| 2,4,6-TRICHLOROPHENOL | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| 2,4-DICHLOROPHENOL | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| 2,4-DIMETHYLPHENOL | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| 2,4-DINITROPHENOL | 587 U | 551 U | 568 U | 572 U | 567 U | 627 U | 557 U | 587 U | 642 U |
| 2,4-DINITROTOLUENE | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| 2,6-DINITROTOLUENE | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| 2-CHLORONAPHTHALENE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| 2-CHLOROPHENOL | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| 2-METHYLPHENOL | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| 2-NITROANILINE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| 2-NITROPHENOL | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| 3&4-METHYLPHENOL | 787 U | 738 U | 761 U | 767 U | 760 U | 840 U | 747 U | 786 U | 860 U |
| 3,3'-DICHLOROBENZIDINE | 200 U | 187 U | 193 UR | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| 3-NITROANILINE | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| 4,6-DINITRO-2-METHYLPHENOL | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| 4-BROMOPHENYL PHENYL ETHER | 117 U | 110 U | 114 U | 114 U | 113 U | 125 U | 111 U | 117 U | 128 U |
| 4-CHLORO-3-METHYLPHENOL | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| 4-CHLOROANILINE | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| 4-CHLOROPHENYL PHENYL ETHER | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 117 U | 110 U | 114 U | 114 U | 113 U | 125 U | 111 U | 117 U | 128 U |
| 4-NITROPHENOL | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | 399 U | 375 U | 386 UR | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | 787 U | 738 U | 761 UR | 767 U | 760 U | 840 U | 747 U | 786 U | 860 U |
| BENZOIC ACID | 42.3 B | 52.3 B | 136 J | 134 J | 50.8 B | 56.1 B | 55.7 B | 67.3 B | 69.8 B |
| BENZYL ALCOHOL | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| BIS(2-CHLOROETHOXY)METHANE | 117 U | 110 U | 114 U | 114 U | 113 U | 125 U | 111 U | 117 U | 128 U |
| BIS(2-CHLOROETHYL)ETHER | 117 U | 110 U | 114 U | 114 U | 113 U | 125 U | 111 U | 117 U | 128 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| BUTYL BENZYL PHTHALATE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| DIBENZOFURAN | 117 U | 110 U | 114 U | 114 U | 113 U | 125 U | 111 U | 117 U | 128 U |
| DIETHYL PHTHALATE | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| DIMETHYL PHTHALATE | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| DI-N-BUTYL PHTHALATE | 47 B | 51 B | 193 U | 195 U | 36 B | 39 B | 189 U | 200 U | 34 B |
| DI-N-OCTYL PHTHALATE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| HEXACHLOROBENZENE | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| HEXACHLOROBUTADIENE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| HEXACHLOROCYCLOPENTADIENE | 399 U | 375 U | 386 UR | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| HEXACHLOROETHANE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| ISOPHORONE | 117 U | 110 U | 114 U | 114 U | 113 U | 125 U | 111 U | 117 U | 128 U |
| NITROBENZENE | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| N-NITROSODIMETHYLAMINE | 117 U | 110 U | 114 U | 114 U | 113 U | 125 U | 111 U | 117 U | 128 U |
| N-NITROSO-DI-N-PROPYLAMINE | 117 U | 110 U | 114 U | 114 U | 113 U | 125 U | 111 U | 117 U | 128 U |
| N-NITROSODIPHENYLAMINE | 117 U | 110 U | 114 U | 114 U | 113 U | 125 U | 111 U | 117 U | 128 U |
| PENTACHLOROPHENOL | 986 U | 926 U | 955 U | 961 U | 953 U | 1050 U | 936 U | 986 U | 1080 U |
| PHENOL | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| PYRIDINE | 399 U | 375 U | 386 UR | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 82.2 U | 77.1 U | 79.6 U | 80.1 U | 79.4 U | 87.7 U | 78 U | 82.2 U | 89.9 U |
| 2-METHYLNAPHTHALENE | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| ACENAPHTHENE | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| ACENAPHTHYLENE | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| ANTHRACENE | 82 U | 77 U | 130 | 80 U | 38 J | 88 U | 38 J | 82 U | 90 U |
| BAP EQUIVALENT-HALFND | 82 U | 77 U | 1814 | 296 | 500 | 144 | 355 | 82 U | 109 |
| BAP EQUIVALENT-POS | 82 U | 77 U | 1814 | 256 | 500 | 100 | 355 | 82 U | 55 |
| BENZO(A)ANTHRACENE | 82 U | 77 U | 1130 | 165 | 297 | 69 J | 245 | 82 U | 38 J |
| BENZO(A)PYRENE | 82 U | 77 U | 1410 | 211 | 370 | 82 J | 249 | 82 U | 51 J |
| BENZO(B)FLUORANTHENE | 82 U | 77 U | 1270 J | 191 | 275 | 56 J | 169 | 82 U | 90 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 82 U | 77 U | 372 | 66 J | 182 | 69 J | 148 | 82 U | 48 J |
| BENZO(K)FLUORANTHENE | 82 U | 77 U | 1610 | 221 | 330 | 67 J | 235 | 82 U | 50 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-194 | SB-194 | SB-195 | SB-195 | SB-196 | SB-196 | SB-197 | SB-197 | SB-198 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-194-05 | SB-194-10 | SB-195-05 | SB-195-10 | SB-196-05 | SB-196-10 | SB-197-05 | SB-197-10 | SB-198-05 |
| SAMPLE DATE | 20050511 | 20050511 | 20050510 | 20050510 | 20050511 | 20050511 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 82 U | 77 U | 1390 | 197 | 384 | 85 J | 306 | 82 U | 48 J |
| DIBENZO(A,H)ANTHRACENE | 82 U | 77 U | 108 | 80 U | 53 J | 88 U | 49 J | 82 U | 90 U |
| FLUORANTHENE | 82 U | 77 U | 1470 | 205 | 486 | 105 | 424 | 82 U | 49 J |
| FLUORENE | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| INDENO(1,2,3-CD)PYRENE | 82 U | 77 U | 387 | 69 J | 162 | 50 J | 134 | 82 U | 90 U |
| NAPHTHALENE | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| PHENANTHRENE | 82 U | 77 U | 433 | 51 J | 111 | 88 U | 191 | 82 U | 90 U |
| PYRENE | 82 U | 77 U | 1900 | 319 | 639 | 121 | 521 | 82 U | 55 J |
| TOTAL PAHS | 0 U | 0 U | 11610 | 1695 | 3327 | 704 | 2709 | 0 U | 339 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 38 U | 37 U | 32 U | 33 U | 37 U | 43 U | 36 U | 39 U | 43 U |
| AROCLOR-1221 | 38 U | 37 U | 32 U | 33 U | 37 U | 43 U | 36 U | 39 U | 43 U |
| AROCLOR-1232 | 38 U | 37 U | 32 U | 33 U | 37 U | 43 U | 36 U | 39 U | 43 U |
| AROCLOR-1242 | 38 U | 37 U | 32 U | 33 U | 37 U | 43 U | 36 U | 39 U | 43 U |
| AROCLOR-1248 | 38 U | 37 U | 32 U | 33 U | 37 U | 43 U | 36 U | 39 U | 43 U |
| AROCLOR-1254 | 38 U | 37 U | 32 U | 33 U | 37 U | 43 U | 36 U | 39 U | 43 U |
| AROCLOR-1260 | 38 U | 37 U | 8.1 J | 14 J | 37 U | 43 U | 36 U | 39 U | 43 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 8.1 | 14 | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.2 UL | 0.4 L | 0.3 U | 0.3 U | 0.3 UL | 0.3 L | 0.3 UL | 0.3 UL | 0.3 UL |
| ARSENIC | 5 | 1 B | 4 | 5 | 2 B | 1 B | 5 | 5 | 5 B |
| BARIUM | 3 | 3 | 21 | 25 | 18 | 21 | 29 | 33 | 35 |
| BERYLLIUM | 0.5 | 0.2 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 1.8 | 3.9 |
| CADMIUM | 0.1 B | 0.08 B | 0.2 B | 0.2 B | 0.2 B | 0.1 B | 0.2 B | 0.3 B | 0.7 B |
| CHROMIUM | 8.9 | 6.9 | 27.9 | 29.1 | 16.2 | 12.5 | 12.2 | 32.1 | 40 |
| COBALT | 5.3 | 2.8 | 9.3 | 13.4 | 4 | 2.9 | 68.1 | 14 | 11 B |
| COPPER | 8 | 4 | 25 | 18 | 10 | 9 | 11 | 13 | 25 |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 2 | 1 B | 9 | 11 | 5 | 4 | 8 | 12 | 18 |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.01 | 0.02 | 0.009 | 0.008 | 0.008 | 0.009 | 0.007 | 0.007 | 0.03 |
| MOLYBDENUM | 0.3 U | 0.4 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U | 0.5 U |
| NICKEL | 5 | 3 | 17 | 13 | 8 | 5 | 9 | 25 | 49 |
| SELENIUM | 1 | 1 U | 2 U | 2 U | 3 | 2 U | 2 U | 2 U | 11 U |
| SILVER | 0.03 U | 0.04 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.3 U |
| THALLIUM | 0.6 U | 0.7 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| VANADIUM | 18.7 | 13.9 | 68.1 | 72.7 | 32.5 | 20.1 | 25.1 | 46.3 | 52.6 |
| ZINC | 21 | 8 | 16 | 12 | 16 | 9 | 21 | 43 | 145 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-194 | SB-194 | SB-195 | SB-195 | SB-196 | SB-196 | SB-197 | SB-197 | SB-198 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-194-05 | SB-194-10 | SB-195-05 | SB-195-10 | SB-196-05 | SB-196-10 | SB-197-05 | SB-197-10 | SB-198-05 |
| SAMPLE DATE | 20050511 | 20050511 | 20050510 | 20050510 | 20050511 | 20050511 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| DIESEL RANGE ORGANICS | 5100 J | 1900 J | 92300 | 37700 | 55700 | 33800 | 50200 | 840 J | 12300 |
| GASOLINE RANGE ORGANICS | 10300 U | 8200 U | 11200 U | 10700 U | 10600 U | 12600 U | 10800 U | 11800 U | 12800 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | 0.35 U | 0.35 U | NA | NA | NA | 0.4 U | 0.4 U |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | 5.7 | 7 | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-198 | SB-199 | SB-199 | SB-262 | SB-262 | SB-263 | SB-263 | SB-264 | SB-264 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-198-10 | SB-199-05 | SB-199-10 | SB-262-05 | SB-262-10 | SB-263-05 | SB-263-10 | SB-264-05 | SB-264-10 |
| SAMPLE DATE | 20050511 | 20050511 | 20050511 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 3.9 U | 4.3 U | 4.6 U | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | 1.93 U | 2.17 U | 2.32 U | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | 3.86 U | 4.34 U | 4.64 U | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 96.6 U | 109 U | 116 U | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 7.73 U | 8.68 U | 8.24 J | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 1.9 UR | 2.2 UR | 2.3 UR | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | 7.73 U | 8.68 U | 9.28 U | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 1.93 U | 2.17 U | 2.32 U | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 7.7 U | 8.7 U | 9.3 U | NA | NA | NA | NA | NA | NA |
| ACETONE | 12 J | 8.9 J | 38.4 J | NA | NA | NA | NA | NA | NA |
| BENZENE | 1.93 U | 2.17 U | 2.32 U | 121 U | 101 U | 113 U | 114 U | 108 U | 119 U |
| BROMOBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| BROMOFORM | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 1.9 U | 1.2 J | 2 J | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 1.9 U | 2.2 U | 2.3 U | 121 U | 101 U | 113 U | 114 U | 108 U | 119 U |
| FLUORODICHLOROMETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 3.9 U | 4.3 U | 4.6 U | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 3.9 U | 4.3 U | 4.6 U | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 1.9 U | 10.3 | 2.3 U | 362 U | 303 U | 339 U | 342 U | 323 U | 357 U |
| N-BUTYLBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| STYRENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | 8 U | 6 J | 9 U | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| TOLUENE | 1.2 J | 4.2 | 1.1 J | 121 U | 101 U | 113 U | 114 U | 108 U | 119 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 5.8 U | 6.5 U | 7 U | 362 U | 303 U | 339 U | 342 U | 323 U | 357 U |
| TRANS-1,2-DICHLOROETHENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1.9 U | 1.5 J | 0.82 J | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-198 | SB-199 | SB-199 | SB-262 | SB-262 | SB-263 | SB-263 | SB-264 | SB-264 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-198-10 | SB-199-05 | SB-199-10 | SB-262-05 | SB-262-10 | SB-263-05 | SB-263-10 | SB-264-05 | SB-264-10 |
| SAMPLE DATE | 20050511 | 20050511 | 20050511 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| VINYL CHLORIDE | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 398 U | 383 U | 402 U | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 120 U | 116 U | 122 U | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 602 U | 580 U | 609 U | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 84 U | 81 U | 85 U | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 84 U | 81 U | 85 U | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 807 U | 778 U | 816 U | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 120 U | 116 U | 122 U | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 120 U | 116 U | 122 U | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | 807 U | 778 U | 816 U | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | 54.7 B | 64.8 B | 70.8 B | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 120 U | 116 U | 122 U | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 120 U | 116 U | 122 U | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 84 U | 81 U | 85 U | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 205 U | 51 J | 207 U | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 120 U | 34 J | 122 U | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 205 U | 197 U | 36 B | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 84 U | 81 U | 85 U | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | 120 U | 116 U | 122 U | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | 205 U | 197 U | 207 U | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | 120 U | 116 U | 122 U | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 120 U | 116 U | 122 U | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 120 U | 116 U | 122 U | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 1010 U | 975 U | 1020 U | NA | NA | NA | NA | NA | NA |
| PHENOL | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| PYRIDINE | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 84.3 U | 75.7 J | 85.2 U | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 84 U | 48 J | 85 U | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 84 U | 75 J | 85 U | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 84 U | 45 J | 85 U | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 84 U | 315 | 85 U | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 84 U | 918 | 98 | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 84 U | 918 | 0.021 | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 84 U | 838 | 85 U | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 84 U | 671 | 85 U | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 84 U | 610 | 85 U | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 84 U | 191 | 85 U | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 84 U | 682 | 85 U | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-198 | SB-199 | SB-199 | SB-262 | SB-262 | SB-263 | SB-263 | SB-264 | SB-264 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-198-10 | SB-199-05 | SB-199-10 | SB-262-05 | SB-262-10 | SB-263-05 | SB-263-10 | SB-264-05 | SB-264-10 |
| SAMPLE DATE | 20050511 | 20050511 | 20050511 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 84 U | 965 | 21 J | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 84 U | 75 J | 85 U | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 84 U | 1640 | 37 J | NA | NA | NA | NA | NA | NA |
| FLUORENE | 84 U | 200 | 85 U | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 84 U | 198 | 85 U | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 84 U | 81 U | 85 U | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 84 U | 2310 | 23 J | NA | NA | NA | NA | NA | NA |
| PYRENE | 84 U | 1950 | 85 U | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 10813 | 81 | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 40 U | 38 U | 40 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 40 U | 38 U | 40 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 40 U | 38 U | 40 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 40 U | 38 U | 40 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 40 U | 38 U | 40 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 40 U | 38 U | 40 U | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 40 U | 38 U | 40 U | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.3 UL | 0.3 UL | 0.7 L | NA | NA | NA | NA | NA | NA |
| ARSENIC | 6 | 3 B | 2 B | NA | NA | NA | NA | NA | NA |
| BARIUM | 24 | 16 | 20 | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 3.5 | 0.6 | 1.5 | NA | NA | NA | NA | NA | NA |
| CADMIUM | 0.4 | 0.2 B | 0.1 B | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 35.7 | 16.3 | 21.7 | NA | NA | NA | NA | NA | NA |
| COBALT | 7.6 | 5.6 | 12.1 | NA | NA | NA | NA | NA | NA |
| COPPER | 47 | 11 | 13 | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 11 | 5 | 4 | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.009 | 0.01 | 0.01 | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | 0.6 U | 0.5 U | 0.5 U | NA | NA | NA | NA | NA | NA |
| NICKEL | 35 | 7 | 22 | NA | NA | NA | NA | NA | NA |
| SELENIUM | 2 U | 2 U | 2 U | NA | NA | NA | NA | NA | NA |
| SILVER | 0.06 U | 0.05 U | 0.05 U | NA | NA | NA | NA | NA | NA |
| THALLIUM | 1 U | 1 U | 0.9 U | NA | NA | NA | NA | NA | NA |
| VANADIUM | 59 | 36.7 | 38.1 | NA | NA | NA | NA | NA | NA |
| ZINC | 86 | 15 | 20 | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-198 | SB-199 | SB-199 | SB-262 | SB-262 | SB-263 | SB-263 | SB-264 | SB-264 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-198-10 | SB-199-05 | SB-199-10 | SB-262-05 | SB-262-10 | SB-263-05 | SB-263-10 | SB-264-05 | SB-264-10 |
| SAMPLE DATE | 20050511 | 20050511 | 20050511 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| DIESEL RANGE ORGANICS | 5300 J | 105000 | 17500 | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 11900 U | 11200 U | 11400 U | 12100 U | 10100 U | 11300 U | 11400 U | 176000 | 11900 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | 0.4 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-410 | SB-410 | SB-410 | SB-410 | SB-411 | SB-411 | SB-411 | SB-411 | SB-412 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-410-0203 | SB-410-0304 | SB-410-0506 | SB-410-0708 | SB-411-0203 | SB-411-0304 | SB-411-0506 | SB-411-0708 | SB-412-0203 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-410 | SB-410 | SB-410 | SB-410 | SB-411 | SB-411 | SB-411 | SB-411 | SB-412 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-410-0203 | SB-410-0304 | SB-410-0506 | SB-410-0708 | SB-411-0203 | SB-411-0304 | SB-411-0506 | SB-411-0708 | SB-412-0203 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 10 | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 820 | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 10 | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 820 | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 10 J | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 820 | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-410 | SB-410 | SB-410 | SB-410 | SB-411 | SB-411 | SB-411 | SB-411 | SB-412 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-410-0203 | SB-410-0304 | SB-410-0506 | SB-410-0708 | SB-411-0203 | SB-411-0304 | SB-411-0506 | SB-411-0708 | SB-412-0203 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 10 | 0 U | 0 U | 0 U | 0 U | 0 U | 820 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-410 | SB-410 | SB-410 | SB-410 | SB-411 | SB-411 | SB-411 | SB-411 | SB-412 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-410-0203 | SB-410-0304 | SB-410-0506 | SB-410-0708 | SB-411-0203 | SB-411-0304 | SB-411-0506 | SB-411-0708 | SB-412-0203 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 91.2 | 90.2 | 84.5 | 83.9 | 84.5 | 84.7 | 82 | 84.2 | 83.7 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-412 | SB-412 | SB-412 | SB-413 | SB-413 | SB-413 | SB-413 | SB-414 | SB-414 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-412-0304 | SB-412-0506 | SB-412-0708 | SB-413-0203 | SB-413-0304 | SB-413-0506 | SB-413-0708 | SB-414-0203 | SB-414-0304 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-412 | SB-412 | SB-412 | SB-413 | SB-413 | SB-413 | SB-413 | SB-414 | SB-414 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-412-0304 | SB-412-0506 | SB-412-0708 | SB-413-0203 | SB-413-0304 | SB-413-0506 | SB-413-0708 | SB-414-0203 | SB-414-0304 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 16 | 1.6 U | 27 | 43 | 1.6 U | 1.6 U | 160 | 15 U |
| BAP EQUIVALENT-POS | 1.6 U | 16 | 1.6 U | 27 | 43 | 1.6 U | 1.6 U | 160 | 15 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 16 J | 1.6 U | 27 J | 43 J | 1.6 U | 1.6 U | 160 J | 15 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-412 | SB-412 | SB-412 | SB-413 | SB-413 | SB-413 | SB-413 | SB-414 | SB-414 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-412-0304 | SB-412-0506 | SB-412-0708 | SB-413-0203 | SB-413-0304 | SB-413-0506 | SB-413-0708 | SB-414-0203 | SB-414-0304 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 16 | 0 U | 27 | 43 | 0 U | 0 U | 160 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-412 | SB-412 | SB-412 | SB-413 | SB-413 | SB-413 | SB-413 | SB-414 | SB-414 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-412-0304 | SB-412-0506 | SB-412-0708 | SB-413-0203 | SB-413-0304 | SB-413-0506 | SB-413-0708 | SB-414-0203 | SB-414-0304 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 83.6 | 68.6 | 81.7 | 83.7 | 85.5 | 82 | 81.3 | 88.2 | 86.3 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-414 | SB-414 | SB-415 | SB-415 | SB-415 | SB-415 | SB-416 | SB-416 | SB-416 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-414-0506 | SB-414-0708 | SB-415-0203 | SB-415-0304 | SB-415-0506 | SB-415-0708 | SB-416-0203 | SB-416-0304 | SB-416-0506 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-414 | SB-414 | SB-415 | SB-415 | SB-415 | SB-415 | SB-416 | SB-416 | SB-416 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-414-0506 | SB-414-0708 | SB-415-0203 | SB-415-0304 | SB-415-0506 | SB-415-0708 | SB-416-0203 | SB-416-0304 | SB-416-0506 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.6 U | 9.5 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 U | 9.5 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 9.5 J | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-414 | SB-414 | SB-415 | SB-415 | SB-415 | SB-415 | SB-416 | SB-416 | SB-416 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-414-0506 | SB-414-0708 | SB-415-0203 | SB-415-0304 | SB-415-0506 | SB-415-0708 | SB-416-0203 | SB-416-0304 | SB-416-0506 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 9.5 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-414 | SB-414 | SB-415 | SB-415 | SB-415 | SB-415 | SB-416 | SB-416 | SB-416 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-414-0506 | SB-414-0708 | SB-415-0203 | SB-415-0304 | SB-415-0506 | SB-415-0708 | SB-416-0203 | SB-416-0304 | SB-416-0506 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 79.3 | 82.1 | 87.8 | 85.4 | 84.5 | 81.9 | 80.5 | 79.6 | 85 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-416 | SB-417 | SB-417 | SB-417 | SB-417 | SB-418 | SB-418 | SB-418 | SB-418 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-416-0708 | SB-417-0203 | SB-417-0304 | SB-417-0506 | SB-417-0708 | SB-418-0203 | SB-418-0304 | SB-418-0506 | SB-418-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-416 | SB-417 | SB-417 | SB-417 | SB-417 | SB-418 | SB-418 | SB-418 | SB-418 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-416-0708 | SB-417-0203 | SB-417-0304 | SB-417-0506 | SB-417-0708 | SB-418-0203 | SB-418-0304 | SB-418-0506 | SB-418-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 32 | 1.4 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 32 | 1.4 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 32 J | 1.4 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-416 | SB-417 | SB-417 | SB-417 | SB-417 | SB-418 | SB-418 | SB-418 | SB-418 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-416-0708 | SB-417-0203 | SB-417-0304 | SB-417-0506 | SB-417-0708 | SB-418-0203 | SB-418-0304 | SB-418-0506 | SB-418-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 32 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-416 | SB-417 | SB-417 | SB-417 | SB-417 | SB-418 | SB-418 | SB-418 | SB-418 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-416-0708 | SB-417-0203 | SB-417-0304 | SB-417-0506 | SB-417-0708 | SB-418-0203 | SB-418-0304 | SB-418-0506 | SB-418-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 82.5 | 87.8 | 85.7 | 83.4 | 80.5 | 91.3 | 91.4 | 86.3 | 85.5 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-419 | SB-419 | SB-419 | SB-419 |
|---|---|---|---|---|
| SAMPLE ID | SB-419-0203 | SB-419-0304 | SB-419-0506 | SB-419-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA |

| LOCATION | SB-419 | SB-419 | SB-419 | SB-419 |
|---|---|---|---|---|
| SAMPLE ID | SB-419-0203 | SB-419-0304 | SB-419-0506 | SB-419-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-419 | SB-419 | SB-419 | SB-419 |
|---|---|---|---|---|
| SAMPLE ID | SB-419-0203 | SB-419-0304 | SB-419-0506 | SB-419-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | |
| 4,4'-DDD | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | |
| ANTIMONY | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | |

| LOCATION | SB-419 | SB-419 | SB-419 | SB-419 |
|---|---|---|---|---|
| SAMPLE ID | SB-419-0203 | SB-419-0304 | SB-419-0506 | SB-419-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | |
| PERCENT SOLIDS | 84.4 | 89.4 | 85.7 | 89.1 |
| TOTAL SOLIDS | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | |
| PH | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | |
| ACTINIUM-228 | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-420 | SB-420 | SB-420 | SB-420 | SB-421 | SB-421 | SB-421 | SB-421 | SB-422 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-420-0203 | SB-420-0304 | SB-420-0506 | SB-420-0708 | SB-421-0203 | SB-421-0304 | SB-421-0506 | SB-421-0708 | SB-422-0203 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-420 | SB-420 | SB-420 | SB-420 | SB-421 | SB-421 | SB-421 | SB-421 | SB-422 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-420-0203 | SB-420-0304 | SB-420-0506 | SB-420-0708 | SB-421-0203 | SB-421-0304 | SB-421-0506 | SB-421-0708 | SB-422-0203 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.4 U | 1.4 U | 1.5 U | 1.6 U | 10 | 1.6 U | 1.5 U | 1.6 U | 1.4 U |
| BAP EQUIVALENT-POS | 1.4 U | 1.4 U | 1.5 U | 1.6 U | 10 | 1.6 U | 1.5 U | 1.6 U | 1.4 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.4 U | 1.4 U | 1.5 U | 1.6 U | 10 J | 1.6 U | 1.5 U | 1.6 U | 1.4 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-420 | SB-420 | SB-420 | SB-420 | SB-421 | SB-421 | SB-421 | SB-421 | SB-422 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-420-0203 | SB-420-0304 | SB-420-0506 | SB-420-0708 | SB-421-0203 | SB-421-0304 | SB-421-0506 | SB-421-0708 | SB-422-0203 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 10 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-420 | SB-420 | SB-420 | SB-420 | SB-421 | SB-421 | SB-421 | SB-421 | SB-422 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-420-0203 | SB-420-0304 | SB-420-0506 | SB-420-0708 | SB-421-0203 | SB-421-0304 | SB-421-0506 | SB-421-0708 | SB-422-0203 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 91.7 | 92.8 | 88.3 | 83.6 | 84.4 | 83.3 | 84.6 | 83 | 91.4 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-422 | SB-422 | SB-422 | SB-423 | SB-423 | SB-423 | SB-423 | SB-424 | SB-424 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-422-0304 | SB-422-0506 | SB-422-0708 | SB-423-0203 | SB-423-0304 | SB-423-0506 | SB-423-0708 | SB-424-0203 | SB-424-0304 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-422 | SB-422 | SB-422 | SB-423 | SB-423 | SB-423 | SB-423 | SB-424 | SB-424 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-422-0304 | SB-422-0506 | SB-422-0708 | SB-423-0203 | SB-423-0304 | SB-423-0506 | SB-423-0708 | SB-424-0203 | SB-424-0304 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.4 U | 61 | 1.5 U | 18 | 1.5 U | 1.4 U | 1.6 U | 4000 | 1600 |
| BAP EQUIVALENT-POS | 1.4 U | 61 | 1.5 U | 18 | 1.5 U | 1.4 U | 1.6 U | 4000 | 1600 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.4 U | 61 J | 1.5 U | 18 J | 1.5 U | 1.4 U | 1.6 U | 4000 | 1600 |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-422 | SB-422 | SB-422 | SB-423 | SB-423 | SB-423 | SB-423 | SB-424 | SB-424 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-422-0304 | SB-422-0506 | SB-422-0708 | SB-423-0203 | SB-423-0304 | SB-423-0506 | SB-423-0708 | SB-424-0203 | SB-424-0304 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 61 | 0 U | 18 | 0 U | 0 U | 0 U | 4000 | 1600 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-422 | SB-422 | SB-422 | SB-423 | SB-423 | SB-423 | SB-423 | SB-424 | SB-424 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-422-0304 | SB-422-0506 | SB-422-0708 | SB-423-0203 | SB-423-0304 | SB-423-0506 | SB-423-0708 | SB-424-0203 | SB-424-0304 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 90.2 | 86.7 | 86.7 | 87.9 | 85.8 | 91.3 | 82.6 | 90.6 | 91 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-424 | SB-424 | SB-425 | SB-425 | SB-425 | SB-425 | SB-426 | SB-426 | SB-426 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-424-0506 | SB-424-0708 | SB-425-0203 | SB-425-0304 | SB-425-0506 | SB-425-0708 | SB-426-0203 | SB-426-0304 | SB-426-0506 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-424 | SB-424 | SB-425 | SB-425 | SB-425 | SB-425 | SB-426 | SB-426 | SB-426 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-424-0506 | SB-424-0708 | SB-425-0203 | SB-425-0304 | SB-425-0506 | SB-425-0708 | SB-426-0203 | SB-426-0304 | SB-426-0506 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 19 | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.6 U |
| BAP EQUIVALENT-POS | 19 | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 19 J | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-424 | SB-424 | SB-425 | SB-425 | SB-425 | SB-425 | SB-426 | SB-426 | SB-426 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-424-0506 | SB-424-0708 | SB-425-0203 | SB-425-0304 | SB-425-0506 | SB-425-0708 | SB-426-0203 | SB-426-0304 | SB-426-0506 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 19 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-424 | SB-424 | SB-425 | SB-425 | SB-425 | SB-425 | SB-426 | SB-426 | SB-426 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-424-0506 | SB-424-0708 | SB-425-0203 | SB-425-0304 | SB-425-0506 | SB-425-0708 | SB-426-0203 | SB-426-0304 | SB-426-0506 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 84.5 | 84.1 | 92.1 | 89.6 | 86.3 | 84.1 | 84.1 | 90.1 | 83.5 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-426 | SB-427 | SB-427 | SB-427 | SB-427 | SB-428 | SB-428 | SB-428 | SB-428 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-426-0708 | SB-427-0203 | SB-427-0304 | SB-427-0506 | SB-427-0708 | SB-428-0203 | SB-428-0304 | SB-428-0506 | SB-428-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-426 | SB-427 | SB-427 | SB-427 | SB-427 | SB-428 | SB-428 | SB-428 | SB-428 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-426-0708 | SB-427-0203 | SB-427-0304 | SB-427-0506 | SB-427-0708 | SB-428-0203 | SB-428-0304 | SB-428-0506 | SB-428-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.7 U | 960 | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 35 | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.7 U | 960 | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 35 | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.7 U | 960 | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 35 J | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-426 | SB-427 | SB-427 | SB-427 | SB-427 | SB-428 | SB-428 | SB-428 | SB-428 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-426-0708 | SB-427-0203 | SB-427-0304 | SB-427-0506 | SB-427-0708 | SB-428-0203 | SB-428-0304 | SB-428-0506 | SB-428-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 960 | 0 U | 0 U | 0 U | 0 U | 35 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-426 | SB-427 | SB-427 | SB-427 | SB-427 | SB-428 | SB-428 | SB-428 | SB-428 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-426-0708 | SB-427-0203 | SB-427-0304 | SB-427-0506 | SB-427-0708 | SB-428-0203 | SB-428-0304 | SB-428-0506 | SB-428-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 78.5 | 93.3 | 81.7 | 85.8 | 83.6 | 88 | 87.6 | 87.6 | 86.5 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-429 | SB-429 | SB-429 | SB-429 | SB-430 | SB-430 | SB-430 | SB-430 | SB-431 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-429-0203 | SB-429-0304 | SB-429-0506 | SB-429-0708 | SB-430-0203 | SB-430-0304 | SB-430-0506 | SB-430-0708 | SB-431-0203 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-429 | SB-429 | SB-429 | SB-429 | SB-430 | SB-430 | SB-430 | SB-430 | SB-431 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-429-0203 | SB-429-0304 | SB-429-0506 | SB-429-0708 | SB-430-0203 | SB-430-0304 | SB-430-0506 | SB-430-0708 | SB-431-0203 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 17 | 1.4 U | 8.9 | 14 | 93 |
| BAP EQUIVALENT-POS | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 17 | 1.4 U | 8.9 | 14 | 93 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 17 J | 1.4 U | 8.9 J | 14 J | 93 J |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-429 | SB-429 | SB-429 | SB-429 | SB-430 | SB-430 | SB-430 | SB-430 | SB-431 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-429-0203 | SB-429-0304 | SB-429-0506 | SB-429-0708 | SB-430-0203 | SB-430-0304 | SB-430-0506 | SB-430-0708 | SB-431-0203 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 17 | 0 U | 8.9 | 14 | 93 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-429 | SB-429 | SB-429 | SB-429 | SB-430 | SB-430 | SB-430 | SB-430 | SB-431 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-429-0203 | SB-429-0304 | SB-429-0506 | SB-429-0708 | SB-430-0203 | SB-430-0304 | SB-430-0506 | SB-430-0708 | SB-431-0203 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 94.5 | 92.1 | 90.2 | 86.9 | 92.1 | 93 | 85.3 | 83.1 | 90.5 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-431 | SB-431 | SB-431 | SB-432 | SB-432 | SB-432 | SB-432 | SB-433 | SB-433 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-431-0304 | SB-431-0506 | SB-431-0708 | SB-432-0203 | SB-432-0304 | SB-432-0506 | SB-432-0708 | SB-433-0203 | SB-433-0304 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-431 | SB-431 | SB-431 | SB-432 | SB-432 | SB-432 | SB-432 | SB-433 | SB-433 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-431-0304 | SB-431-0506 | SB-431-0708 | SB-432-0203 | SB-432-0304 | SB-432-0506 | SB-432-0708 | SB-433-0203 | SB-433-0304 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 8.3 | 1.5 U | 1.8 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 17 | 1.4 U |
| BAP EQUIVALENT-POS | 8.3 | 1.5 U | 1.8 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 17 | 1.4 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 8.3 J | 1.5 U | 1.8 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 17 J | 1.4 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-431 | SB-431 | SB-431 | SB-432 | SB-432 | SB-432 | SB-432 | SB-433 | SB-433 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-431-0304 | SB-431-0506 | SB-431-0708 | SB-432-0203 | SB-432-0304 | SB-432-0506 | SB-432-0708 | SB-433-0203 | SB-433-0304 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 8.3 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 17 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-431 | SB-431 | SB-431 | SB-432 | SB-432 | SB-432 | SB-432 | SB-433 | SB-433 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-431-0304 | SB-431-0506 | SB-431-0708 | SB-432-0203 | SB-432-0304 | SB-432-0506 | SB-432-0708 | SB-433-0203 | SB-433-0304 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 87.2 | 86.1 | 73 | 89.2 | 92.5 | 85.6 | 85.6 | 94.7 | 94.4 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-433 | SB-433 | SB-434 | SB-434 | SB-434 | SB-434 | SB-435 | SB-435 | SB-435 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-433-0506 | SB-433-0708 | SB-434-0203 | SB-434-0304 | SB-434-0506 | SB-434-0708 | SB-435-0203 | SB-435-0304 | SB-435-0506 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-433 | SB-433 | SB-434 | SB-434 | SB-434 | SB-434 | SB-435 | SB-435 | SB-435 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-433-0506 | SB-433-0708 | SB-434-0203 | SB-434-0304 | SB-434-0506 | SB-434-0708 | SB-435-0203 | SB-435-0304 | SB-435-0506 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 13 | 1.6 U |
| BAP EQUIVALENT-POS | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 13 | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 13 J | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-433 | SB-433 | SB-434 | SB-434 | SB-434 | SB-434 | SB-435 | SB-435 | SB-435 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-433-0506 | SB-433-0708 | SB-434-0203 | SB-434-0304 | SB-434-0506 | SB-434-0708 | SB-435-0203 | SB-435-0304 | SB-435-0506 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 13 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-433 | SB-433 | SB-434 | SB-434 | SB-434 | SB-434 | SB-435 | SB-435 | SB-435 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-433-0506 | SB-433-0708 | SB-434-0203 | SB-434-0304 | SB-434-0506 | SB-434-0708 | SB-435-0203 | SB-435-0304 | SB-435-0506 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 93.7 | 87.4 | 86.5 | 86.5 | 82.6 | 83 | 86.9 | 85 | 82 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-435 | SB-436 | SB-436 | SB-436 | SB-436 | SB-437 | SB-437 | SB-437 | SB-437 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-435-0708 | SB-436-0203 | SB-436-0304 | SB-436-0506 | SB-436-0708 | SB-437-0203 | SB-437-0304 | SB-437-0506 | SB-437-0708 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-435 | SB-436 | SB-436 | SB-436 | SB-436 | SB-437 | SB-437 | SB-437 | SB-437 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-435-0708 | SB-436-0203 | SB-436-0304 | SB-436-0506 | SB-436-0708 | SB-437-0203 | SB-437-0304 | SB-437-0506 | SB-437-0708 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 17 | 9.2 | 18 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.6 U | 17 | 9.2 | 18 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 17 J | 9.2 J | 18 J | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-435 | SB-436 | SB-436 | SB-436 | SB-436 | SB-437 | SB-437 | SB-437 | SB-437 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-435-0708 | SB-436-0203 | SB-436-0304 | SB-436-0506 | SB-436-0708 | SB-437-0203 | SB-437-0304 | SB-437-0506 | SB-437-0708 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 17 | 9.2 | 18 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-435 | SB-436 | SB-436 | SB-436 | SB-436 | SB-437 | SB-437 | SB-437 | SB-437 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-435-0708 | SB-436-0203 | SB-436-0304 | SB-436-0506 | SB-436-0708 | SB-437-0203 | SB-437-0304 | SB-437-0506 | SB-437-0708 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 82.9 | 87.5 | 90.6 | 88 | 86.2 | 88.6 | 84.8 | 83.6 | 80.5 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-438 | SB-438 | SB-438 | SB-438 | SB-439 | SB-439 | SB-439 | SB-439 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-438-0203 | SB-438-0304 | SB-438-0506 | SB-438-0708 | SB-439-0203 | SB-439-0304 | SB-439-0506 | SB-439-0708 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-438 | SB-438 | SB-438 | SB-438 | SB-439 | SB-439 | SB-439 | SB-439 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-438-0203 | SB-438-0304 | SB-438-0506 | SB-438-0708 | SB-439-0203 | SB-439-0304 | SB-439-0506 | SB-439-0708 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 1.4 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 1.4 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.4 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-438 | SB-438 | SB-438 | SB-438 | SB-439 | SB-439 | SB-439 | SB-439 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-438-0203 | SB-438-0304 | SB-438-0506 | SB-438-0708 | SB-439-0203 | SB-439-0304 | SB-439-0506 | SB-439-0708 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |

| LOCATION | SB-438 | SB-438 | SB-438 | SB-438 | SB-439 | SB-439 | SB-439 | SB-439 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-438-0203 | SB-438-0304 | SB-438-0506 | SB-438-0708 | SB-439-0203 | SB-439-0304 | SB-439-0506 | SB-439-0708 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | 87.7 | 84.9 | 89.9 | 83.3 | 86.2 | 77.9 | 81.2 | 79.6 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-085 | SB-086 | SB-086 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-81-05 | SB-82-05 | SB-83-05 | SB-84-05 | SB-85-05 | SB-85-10 | SB-86-05 | SB-86-10 |
| SAMPLE DATE | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20041115 | 20041115 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,1,1-TRICHLOROETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,1,2,2-TETRACHLOROETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,1,2-TRICHLOROETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,1-DICHLOROETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,1-DICHLOROETHENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,1-DICHLOROPROPENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,2,3-TRICHLOROBENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,2,3-TRICHLOROPROPANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,2,4-TRIMETHYLBENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,2-DIBROMOETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,2-DICHLOROBENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,2-DICHLOROETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,2-DICHLOROPROPANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,3,5-TRIMETHYLBENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,3-DICHLOROBENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,3-DICHLOROPROPANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 2-BUTANONE | 57 UJ | 60 U | 60 UJ | 530 UJ | 610 UJ | 57 UL | 57 UL | 56 UL |
| 2-CHLOROETHYL VINYL ETHER | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 2-CHLOROTOLUENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 2-HEXANONE | 57 UJ | 60 U | 60 UJ | 530 UJ | 610 UJ | 57 UL | 57 UL | 56 UL |
| 4-CHLOROTOLUENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 4-ISOPROPYLTOLUENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| 4-METHYL-2-PENTANONE | 57 UJ | 60 U | 60 UJ | 530 UJ | 610 UJ | 57 UL | 57 UL | 56 UL |
| ACETONE | 57 UJ | 60 U | 60 UJ | 530 UJ | 610 UJ | 57 UL | 57 UL | 56 UL |
| BENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| BROMOBENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| BROMOCHLOROMETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| BROMODICHLOROMETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| BROMOFORM | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| BROMOMETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| CARBON DISULFIDE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| CARBON TETRACHLORIDE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| CHLOROBENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| CHLORODIBROMOMETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| CHLOROETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| CHLOROFORM | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| CHLOROMETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| CIS-1,2-DICHLOROETHENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| CIS-1,3-DICHLOROPROPENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| DIBROMOMETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| DICHLORODIFLUOROMETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 UJ | 6 U | 6 UJ | 990 J | 61 UJ | 6 UL | 6 UL | 6 UL |
| M+P-XYLENES | 11 UJ | 12 U | 12 UJ | 110 UJ | 120 UJ | 11 UL | 11 UL | 11 UL |
| METHYL TERT-BUTYL ETHER | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| METHYLENE CHLORIDE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 8 J | 10 J | 10 J |
| NAPHTHALENE | 6 UJ | 6 U | 6 UJ | 620 J | 160 J | 6 UL | 6 UL | 6 UL |
| N-BUTYLBENZENE | 6 UJ | 6 U | 6 UJ | 850 J | 61 UJ | 6 UL | 6 UL | 6 UL |
| N-PROPYLBENZENE | 6 UJ | 6 U | 6 UJ | 2200 J | 61 UJ | 6 UL | 6 UL | 6 UL |
| O-XYLENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| SEC-BUTYLBENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| STYRENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| TOLUENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| TRANS-1,3-DICHLOROPROPENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| TRICHLOROETHENE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| TRICHLOROFLUOROMETHANE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| VINYL ACETATE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-085 | SB-086 | SB-086 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-81-05 | SB-82-05 | SB-83-05 | SB-84-05 | SB-85-05 | SB-85-10 | SB-86-05 | SB-86-10 |
| SAMPLE DATE | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20041115 | 20041115 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 |
| VINYL CHLORIDE | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 2,4,5-TRICHLOROPHENOL | 970 U | 1000 U | 1000 U | 1000 U | 1000 U | 960 UJ | 970 UJ | 960 UJ |
| 2,4,6-TRICHLOROPHENOL | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 2,4-DICHLOROPHENOL | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 2,4-DIMETHYLPHENOL | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 2,4-DINITROPHENOL | 970 U | 1000 U | 1000 U | 1000 U | 1000 U | 960 UJ | 970 UJ | 960 UJ |
| 2,4-DINITROTOLUENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 2,6-DINITROTOLUENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 2-CHLORONAPHTHALENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 2-CHLOROPHENOL | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 2-METHYLPHENOL | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 2-NITROANILINE | 970 U | 1000 U | 1000 U | 1000 U | 1000 U | 960 UJ | 970 UJ | 960 UJ |
| 2-NITROPHENOL | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 3&4-METHYLPHENOL | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 3,3'-DICHLOROBENZIDINE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 3-NITROANILINE | 970 U | 1000 U | 1000 U | 1000 U | 1000 U | 960 UJ | 970 UJ | 960 UJ |
| 4,6-DINITRO-2-METHYLPHENOL | 890 U | 920 U | 920 U | 940 U | 950 U | 880 UJ | 890 UJ | 880 UJ |
| 4-BROMOPHENYL PHENYL ETHER | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 4-CHLORO-3-METHYLPHENOL | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 4-CHLOROANILINE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 4-CHLOROPHENYL PHENYL ETHER | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 970 U | 1000 U | 1000 U | 1000 U | 1000 U | 960 UJ | 970 UJ | 960 UJ |
| 4-NITROPHENOL | 970 U | 1000 U | 1000 U | 1000 U | 1000 U | 960 UJ | 970 UJ | 960 UJ |
| ACETOPHENONE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| BIS(2-CHLOROETHYL)ETHER | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| BIS(2-ETHYLHEXYL)PHTHALATE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| BUTYL BENZYL PHTHALATE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| CAPROLACTAM | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| CARBAZOLE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| DIBENZOFURAN | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| DIETHYL PHTHALATE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| DIMETHYL PHTHALATE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| DI-N-BUTYL PHTHALATE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| DI-N-OCTYL PHTHALATE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| HEXACHLOROBENZENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| HEXACHLOROBUTADIENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| HEXACHLOROCYCLOPENTADIENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| HEXACHLOROETHANE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| ISOPHORONE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| NITROBENZENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| N-NITROSODIPHENYLAMINE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| PENTACHLOROPHENOL | 970 U | 1000 U | 1000 U | 1000 U | 1000 U | 960 UJ | 970 UJ | 960 UJ |
| PHENOL | 1900 | 1300 | 400 U | 410 U | 410 U | 1000 J | 1100 J | 1600 J |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| ACENAPHTHENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| ACENAPHTHYLENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| ANTHRACENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| BAP EQUIVALENT-HALFND | 390 U | 400 U | 400 U | 410 U | 410 U | 380 U | 390 U | 380 U |
| BAP EQUIVALENT-POS | 390 U | 400 U | 400 U | 410 U | 410 U | 380 U | 390 U | 380 U |
| BENZO(A)ANTHRACENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| BENZO(A)PYRENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| BENZO(G,H,I)PERYLENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-085 | SB-086 | SB-086 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-81-05 | SB-82-05 | SB-83-05 | SB-84-05 | SB-85-05 | SB-85-10 | SB-86-05 | SB-86-10 |
| SAMPLE DATE | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20041115 | 20041115 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| DIBENZO(A,H)ANTHRACENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| FLUORANTHENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| FLUORENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| INDENO(1,2,3-CD)PYRENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| NAPHTHALENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| PHENANTHRENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| PYRENE | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| 4,4'-DDE | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| 4,4'-DDT | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| ALDRIN | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| ALPHA-BHC | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| ALPHA-CHLORDANE | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| AROCLOR-1016 | 290 U | 300 U | 290 U | 300 U | 300 U | 280 UJ | 290 UJ | 280 UJ |
| AROCLOR-1221 | 290 U | 300 U | 290 U | 300 U | 300 U | 280 UJ | 290 UJ | 280 UJ |
| AROCLOR-1232 | 290 U | 300 U | 290 U | 300 U | 300 U | 280 UJ | 290 UJ | 280 UJ |
| AROCLOR-1242 | 290 U | 300 U | 290 U | 300 U | 300 U | 280 UJ | 290 UJ | 280 UJ |
| AROCLOR-1248 | 290 U | 300 U | 290 U | 300 U | 300 U | 280 UJ | 290 UJ | 280 UJ |
| AROCLOR-1254 | 290 U | 300 U | 290 U | 300 U | 300 U | 280 UJ | 290 UJ | 280 UJ |
| AROCLOR-1260 | 290 U | 300 U | 290 U | 300 U | 300 U | 280 UJ | 290 UJ | 280 UJ |
| BETA-BHC | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| DELTA-BHC | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| DIELDRIN | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| ENDOSULFAN I | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| ENDOSULFAN II | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| ENDRIN | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| ENDRIN KETONE | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| GAMMA-CHLORDANE | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| HEPTACHLOR | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| METHOXYCHLOR | NA | NA | NA | NA | 24 U | 23 UJ | 46 UJ | 22 UJ |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | 610 U | 570 UJ | 1100 UJ | 560 UJ |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 2.7 UL | 2.6 UL | 2.6 U | 2.9 U | 2.8 UL | 2.6 UL | 2.6 UL | 2.8 UL |
| ARSENIC | 2.5 | 1.2 | 1.9 | 3.4 | 2.2 | 0.53 U | 0.7 | 0.61 |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 2.7 U | 2.6 U | 2.6 U | 2.9 U | 2.8 U | 3.2 | 2.6 U | 2.8 U |
| CADMIUM | 2.7 UL | 2.6 UL | 2.6 U | 2.9 U | 2.8 UL | 2.6 U | 2.6 U | 2.8 U |
| CHROMIUM | 9.9 | 7.6 | 7.6 | 19 | 28 | 9.3 | 18 | 31 |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 13 | 7 | 5.7 | 13 | 19 | 13 | 30 | 9.1 |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 4.7 | 4.6 | 9.9 | 4.5 | 11 | 4.1 J | 9.5 J | 5.8 J |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.11 U | 0.1 U | 0.1 U | 0.12 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 7.3 | 3.4 L | 9.8 | 2.9 U | 23 | 46 J | 20 J | 15 J |
| SELENIUM | 2.7 U | 2.6 U | 2.6 U | 2.9 U | 2.8 U | 2.6 UL | 2.6 UL | 2.8 UL |
| SILVER | 2.7 UL | 2.6 UL | 2.6 UL | 2.9 UL | 2.8 UL | 2.6 UR | 2.6 UR | 2.8 UR |
| THALLIUM | 2.2 U | 2.1 U | 2.1 UL | 2.3 UL | 2.3 U | 2.1 U | 2.1 U | 2.2 U |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 27 UL | 26 UL | 27 K | 29 U | 61 | 93 | 62 | 34 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |

| LOCATION | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-085 | SB-086 | SB-086 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-81-05 | SB-82-05 | SB-83-05 | SB-84-05 | SB-85-05 | SB-85-10 | SB-86-05 | SB-86-10 |
| SAMPLE DATE | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20041115 | 20041115 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 |
| DIESEL RANGE ORGANICS | 12000 U | 12000 U | 12000 U | 12000 U | 12000 U | 12000 UJ | 12000 UJ | 11000 UJ |
| GASOLINE RANGE ORGANICS | 120 U | 120 U | 120 U | 520000 | 240000 | 120 UJ | 120 UJ | 110 UJ |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-087 | SB-088 | SB-089 | SB-090 | SB-091 | SB-092 | SB-440 | SB-440 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-87-05 | SB-88-05 | SB-89-05 | SB-90-05 | SB-91-05 | SB-92-04 | SB-440-0203 | SB-440-0304 |
| SAMPLE DATE | 20041105 | 20041105 | 20041105 | 20041103 | 20040927 | 20040927 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 4 | 2 | 3 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | 58 UL | 58 UL | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | 58 UL | 58 UL | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | 58 UL | 58 UL | NA | NA |
| ACETONE | NA | NA | NA | NA | 58 UL | 58 UL | NA | NA |
| BENZENE | 1 U | 1 U | 7 | 1 U | 6 UL | 6 UL | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| BROMOFORM | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 1 U | 1 U | 100 | 1 U | 6 UL | 6 UL | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | 12 UL | 12 UL | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| NAPHTHALENE | 1 U | 270 | 170 | 1 U | 6 UL | 6 UL | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| O-XYLENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| STYRENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| TOLUENE | 1 U | 4 | 1 U | 1 U | 6 UL | 6 UL | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1 U | 600 | 160 | 1 U | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |

| LOCATION | SB-087 | SB-088 | SB-089 | SB-090 | SB-091 | SB-092 | SB-440 | SB-440 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-87-05 | SB-88-05 | SB-89-05 | SB-90-05 | SB-91-05 | SB-92-04 | SB-440-0203 | SB-440-0304 |
| SAMPLE DATE | 20041105 | 20041105 | 20041105 | 20041103 | 20040927 | 20040927 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 4 | 2 | 3 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | 6 UL | 6 UL | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | 970 U | 990 U | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | 970 U | 990 U | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | 970 U | 990 U | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | 970 U | 990 U | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | 890 U | 910 U | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | 970 U | 990 U | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | 970 U | 990 U | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | 970 U | 990 U | NA | NA |
| PHENOL | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| BAP EQUIVALENT-HALFND | NA | NA | NA | NA | 390 U | 462 | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | NA | NA | NA | NA | 390 U | 0.06 | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| BENZO(A)PYRENE | NA | NA | NA | NA | 390 U | 400 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-087 | SB-088 | SB-089 | SB-090 | SB-091 | SB-092 | SB-440 | SB-440 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-87-05 | SB-88-05 | SB-89-05 | SB-90-05 | SB-91-05 | SB-92-04 | SB-440-0203 | SB-440-0304 |
| SAMPLE DATE | 20041105 | 20041105 | 20041105 | 20041103 | 20040927 | 20040927 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 4 | 2 | 3 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | 390 U | 60 J | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | 390 U | 48 J | NA | NA |
| FLUORENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | 390 U | 400 U | NA | NA |
| PYRENE | NA | NA | NA | NA | 390 U | 78 J | NA | NA |
| TOTAL PAHS | NA | NA | NA | NA | 0 U | 186 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| ALDRIN | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | 290 U | 290 U | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | 290 U | 290 U | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | 290 U | 290 U | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | 290 U | 290 U | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | 290 U | 290 U | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | 290 U | 290 U | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | 290 U | 290 U | NA | NA |
| BETA-BHC | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| DIELDRIN | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| ENDRIN | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | 23 U | 23 U | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | 0 U | 0 U | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | 570 U | 580 U | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | 2.8 UL | 3 UL | NA | NA |
| ARSENIC | NA | NA | NA | NA | 2.4 | 1.4 | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | 2.8 U | 3 U | NA | NA |
| CADMIUM | NA | NA | NA | NA | 2.8 U | 3 U | NA | NA |
| CHROMIUM | NA | NA | NA | NA | 20 J | 26 J | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | 17 J | 12 J | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | 3.3 K | 5.7 K | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | 0.11 U | 0.12 U | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | 5.9 K | 10 K | NA | NA |
| SELENIUM | NA | NA | NA | NA | 2.8 U | 3 U | NA | NA |
| SILVER | NA | NA | NA | NA | 2.8 UR | 3 UR | NA | NA |
| THALLIUM | NA | NA | NA | NA | 2.2 U | 2.4 U | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | 28 UL | 30 UL | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |

| LOCATION | SB-087 | SB-088 | SB-089 | SB-090 | SB-091 | SB-092 | SB-440 | SB-440 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-87-05 | SB-88-05 | SB-89-05 | SB-90-05 | SB-91-05 | SB-92-04 | SB-440-0203 | SB-440-0304 |
| SAMPLE DATE | 20041105 | 20041105 | 20041105 | 20041103 | 20040927 | 20040927 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 4 | 2 | 3 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 4 |
| DIESEL RANGE ORGANICS | 12000 U | 13000 | 12000 U | 12000 U | 12000 U | 12000 U | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | 120 U | 120 U | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | 83.1 | 82.1 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-440 | SB-441 | SB-441 | SB-441 | SB-441 | SB-442 | SB-442 | SB-442 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-440-0506 | SB-441-0203 | SB-441-0304 | SB-441-0506 | SB-441-0708 | SB-442-0203 | SB-442-0304 | SB-442-0506 |
| SAMPLE DATE | 20071018 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-440 | SB-441 | SB-441 | SB-441 | SB-441 | SB-442 | SB-442 | SB-442 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-440-0506 | SB-441-0203 | SB-441-0304 | SB-441-0506 | SB-441-0708 | SB-442-0203 | SB-442-0304 | SB-442-0506 |
| SAMPLE DATE | 20071018 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.7 U | 72 | 31 | 900 | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.7 U | 72 | 31 | 900 | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.7 U | 72 J | 31 J | 900 J | 1.5 UJ | 1.5 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-440 | SB-441 | SB-441 | SB-441 | SB-441 | SB-442 | SB-442 | SB-442 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-440-0506 | SB-441-0203 | SB-441-0304 | SB-441-0506 | SB-441-0708 | SB-442-0203 | SB-442-0304 | SB-442-0506 |
| SAMPLE DATE | 20071018 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 72 | 31 | 900 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |

| LOCATION | SB-440 | SB-441 | SB-441 | SB-441 | SB-441 | SB-442 | SB-442 | SB-442 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-440-0506 | SB-441-0203 | SB-441-0304 | SB-441-0506 | SB-441-0708 | SB-442-0203 | SB-442-0304 | SB-442-0506 |
| SAMPLE DATE | 20071018 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | 75.8 | 87.8 | 88.6 | 77.8 | 85.2 | 84.9 | 86.4 | 83.6 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-442 | SB-443 | SB-443 | SB-443 | SB-443 | SB-444 | SB-444 | SB-444 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-442-0708 | SB-443-0203 | SB-443-0304 | SB-443-0506 | SB-443-0708 | SB-444-0203 | SB-444-0304 | SB-444-0506 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-442 | SB-443 | SB-443 | SB-443 | SB-443 | SB-444 | SB-444 | SB-444 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-442-0708 | SB-443-0203 | SB-443-0304 | SB-443-0506 | SB-443-0708 | SB-444-0203 | SB-444-0304 | SB-444-0506 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.6 U | 32 | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.6 U | 32 | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.6 U | 32 J | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-442 | SB-443 | SB-443 | SB-443 | SB-443 | SB-444 | SB-444 | SB-444 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-442-0708 | SB-443-0203 | SB-443-0304 | SB-443-0506 | SB-443-0708 | SB-444-0203 | SB-444-0304 | SB-444-0506 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 32 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |

| LOCATION | SB-442 | SB-443 | SB-443 | SB-443 | SB-443 | SB-444 | SB-444 | SB-444 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-442-0708 | SB-443-0203 | SB-443-0304 | SB-443-0506 | SB-443-0708 | SB-444-0203 | SB-444-0304 | SB-444-0506 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | 85.6 | 91.5 | 89.2 | 85.3 | 83 | 85.9 | 87 | 79.4 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-444 | SB-445 | SB-445 | SB-445 | SB-445 | SB-446 | SB-446 | SB-446 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-444-0708 | SB-445-0203 | SB-445-0304 | SB-445-0506 | SB-445-0708 | SB-446-0203 | SB-446-0304 | SB-446-0506 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-444 | SB-445 | SB-445 | SB-445 | SB-445 | SB-446 | SB-446 | SB-446 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-444-0708 | SB-445-0203 | SB-445-0304 | SB-445-0506 | SB-445-0708 | SB-446-0203 | SB-446-0304 | SB-446-0506 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-444 | SB-445 | SB-445 | SB-445 | SB-445 | SB-446 | SB-446 | SB-446 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-444-0708 | SB-445-0203 | SB-445-0304 | SB-445-0506 | SB-445-0708 | SB-446-0203 | SB-446-0304 | SB-446-0506 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |

| LOCATION | SB-444 | SB-445 | SB-445 | SB-445 | SB-445 | SB-446 | SB-446 | SB-446 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-444-0708 | SB-445-0203 | SB-445-0304 | SB-445-0506 | SB-445-0708 | SB-446-0203 | SB-446-0304 | SB-446-0506 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | 79 | 89.2 | 86.6 | 83.1 | 81.1 | 89.3 | 88.6 | 89.6 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-446 | SB-447 | SB-448 | SB-448 | SB-448 | SB-448 | SB-449 | SB-449 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-446-0708 | SB-447-0203 | SB-448-0203 | SB-448-0304 | SB-448-0506 | SB-448-0708 | SB-449-0203 | SB-449-0304 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 8 | 3 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-446 | SB-447 | SB-448 | SB-448 | SB-448 | SB-448 | SB-449 | SB-449 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-446-0708 | SB-447-0203 | SB-448-0203 | SB-448-0304 | SB-448-0506 | SB-448-0708 | SB-449-0203 | SB-449-0304 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 8 | 3 | 3 | 4 | 6 | 8 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 28 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 21 | 1.4 U |
| BAP EQUIVALENT-POS | 1.6 U | 28 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 21 | 1.4 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 28 J | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 21 J | 1.4 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-446 | SB-447 | SB-448 | SB-448 | SB-448 | SB-448 | SB-449 | SB-449 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-446-0708 | SB-447-0203 | SB-448-0203 | SB-448-0304 | SB-448-0506 | SB-448-0708 | SB-449-0203 | SB-449-0304 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 8 | 3 | 3 | 4 | 6 | 8 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 28 | 0 U | 0 U | 0 U | 0 U | 21 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |

| LOCATION | SB-446 | SB-447 | SB-448 | SB-448 | SB-448 | SB-448 | SB-449 | SB-449 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-446-0708 | SB-447-0203 | SB-448-0203 | SB-448-0304 | SB-448-0506 | SB-448-0708 | SB-449-0203 | SB-449-0304 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 8 | 3 | 3 | 4 | 6 | 8 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | 83.4 | 87.6 | 87.5 | 85.3 | 85.2 | 87.5 | 90 | 89.7 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-449 | SB-449 | SB-450 | SB-450 | SB-450 | SB-450 | SB-451 | SB-451 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-449-0506 | SB-449-0708 | SB-450-0203 | SB-450-0304 | SB-450-0506 | SB-450-0708 | SB-451-0203 | SB-451-0304 |
| SAMPLE DATE | 20071019 | 20071019 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-449 | SB-449 | SB-450 | SB-450 | SB-450 | SB-450 | SB-451 | SB-451 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-449-0506 | SB-449-0708 | SB-450-0203 | SB-450-0304 | SB-450-0506 | SB-450-0708 | SB-451-0203 | SB-451-0304 |
| SAMPLE DATE | 20071019 | 20071019 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-449 | SB-449 | SB-450 | SB-450 | SB-450 | SB-450 | SB-451 | SB-451 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-449-0506 | SB-449-0708 | SB-450-0203 | SB-450-0304 | SB-450-0506 | SB-450-0708 | SB-451-0203 | SB-451-0304 |
| SAMPLE DATE | 20071019 | 20071019 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |

| LOCATION | SB-449 | SB-449 | SB-450 | SB-450 | SB-450 | SB-450 | SB-451 | SB-451 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-449-0506 | SB-449-0708 | SB-450-0203 | SB-450-0304 | SB-450-0506 | SB-450-0708 | SB-451-0203 | SB-451-0304 |
| SAMPLE DATE | 20071019 | 20071019 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | 85 | 82.1 | 86.5 | 83.4 | 84 | 78.6 | 87.2 | 82.4 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-451 | SB-451 | SB-452 | SB-452 | SB-452 | SB-452 | SB-453 | SB-453 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-451-0506 | SB-451-0708 | SB-452-0203 | SB-452-0304 | SB-452-0506 | SB-452-0708 | SB-453-0203 | SB-453-0304 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-451 | SB-451 | SB-452 | SB-452 | SB-452 | SB-452 | SB-453 | SB-453 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-451-0506 | SB-451-0708 | SB-452-0203 | SB-452-0304 | SB-452-0506 | SB-452-0708 | SB-453-0203 | SB-453-0304 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.5 U | 22 | 38 | 1.5 U | 1.5 U | 28 | 640 |
| BAP EQUIVALENT-POS | 1.6 U | 1.5 U | 22 | 38 | 1.5 U | 1.5 U | 28 | 640 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 1.5 U | 22 J | 38 J | 1.5 U | 1.5 U | 28 J | 640 |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-451 | SB-451 | SB-452 | SB-452 | SB-452 | SB-452 | SB-453 | SB-453 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-451-0506 | SB-451-0708 | SB-452-0203 | SB-452-0304 | SB-452-0506 | SB-452-0708 | SB-453-0203 | SB-453-0304 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 22 | 38 | 0 U | 0 U | 28 | 640 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-451 | SB-451 | SB-452 | SB-452 | SB-452 | SB-452 | SB-453 | SB-453 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-451-0506 | SB-451-0708 | SB-452-0203 | SB-452-0304 | SB-452-0506 | SB-452-0708 | SB-453-0203 | SB-453-0304 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | 79.5 | 84.4 | 91.8 | 87.2 | 86.4 | 84.9 | 84.7 | 72.2 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-453 | SB-453 | SB-454 | SB-454 | SB-454 | SB-454 | SB-455 | SB-455 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-453-0506 | SB-453-0708 | SB-454-0203 | SB-454-0304 | SB-454-0506 | SB-454-0708 | SB-455-0203 | SB-455-0304 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-453 | SB-453 | SB-454 | SB-454 | SB-454 | SB-454 | SB-455 | SB-455 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-453-0506 | SB-453-0708 | SB-454-0203 | SB-454-0304 | SB-454-0506 | SB-454-0708 | SB-455-0203 | SB-455-0304 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-453 | SB-453 | SB-454 | SB-454 | SB-454 | SB-454 | SB-455 | SB-455 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-453-0506 | SB-453-0708 | SB-454-0203 | SB-454-0304 | SB-454-0506 | SB-454-0708 | SB-455-0203 | SB-455-0304 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |

| LOCATION | SB-453 | SB-453 | SB-454 | SB-454 | SB-454 | SB-454 | SB-455 | SB-455 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-453-0506 | SB-453-0708 | SB-454-0203 | SB-454-0304 | SB-454-0506 | SB-454-0708 | SB-455-0203 | SB-455-0304 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | 83.8 | 81.5 | 79.9 | 82 | 81.4 | 80.1 | 86.5 | 85.2 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-455 | SB-455 | SB-456 | SB-456 | SB-456 | SB-456 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-455-0506 | SB-455-0708 | SB-456-0203 | SB-456-0304 | SB-456-0506 | SB-456-0708 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-455 | SB-455 | SB-456 | SB-456 | SB-456 | SB-456 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-455-0506 | SB-455-0708 | SB-456-0203 | SB-456-0304 | SB-456-0506 | SB-456-0708 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 310 |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 310 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 310 J |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-455 | SB-455 | SB-456 | SB-456 | SB-456 | SB-456 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-455-0506 | SB-455-0708 | SB-456-0203 | SB-456-0304 | SB-456-0506 | SB-456-0708 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 310 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |

**Table A-21**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-455 | SB-455 | SB-456 | SB-456 | SB-456 | SB-456 |
|---|---|---|---|---|---|---|
| SAMPLE ID | SB-455-0506 | SB-455-0708 | SB-456-0203 | SB-456-0304 | SB-456-0506 | SB-456-0708 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | 81.5 | 83.2 | 85 | 79.1 | 89.4 | 90.8 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | |
| PH | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA |

**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-194<br>G-SB-194RE-3<br>20090930<br>NORMAL<br>SO<br>NORMAL<br>SB<br>3<br>3 | SB-194<br>G-SB-194RE-4<br>20090930<br>NORMAL<br>SO<br>NORMAL<br>SB<br>4<br>4 | SB-194<br>G-SB-194RE-5<br>20090930<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-196<br>G-SB-196RE-10<br>20091001<br>NORMAL<br>SO<br>NORMAL<br>SB<br>10<br>10 | SB-196<br>G-SB-196RE-6<br>20091001<br>NORMAL<br>SO<br>NORMAL<br>SB<br>6<br>6 | SB-196<br>G-SB-196RE-7<br>20091001<br>ORIG<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-196<br>G-SB-196RE-7-AVG<br>20091001<br>AVG<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-196<br>G-SB-196RE-7-D<br>20091001<br>DUP<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-196<br>G-SB-196RE-8<br>20091001<br>NORMAL<br>SO<br>NORMAL<br>SB<br>8<br>8 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 10 | 1.5 U | 51 | 21 | 424 | 57 | 45 | 33 | 1.6 U | |
| BAP EQUIVALENT-POS | 22 | 15 | C | 9.1 | 1.5 U | 50 | 20 | 424 | 56 | 44 | 33 | 1.6 U | |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 31 | 14 | 250 | 37 J | 29 | 21 J | 1.2 U | |
| BENZO(A)PYRENE | 22 | 15 | C | 9.1 | 1.5 U | 40 | 16 | 280 | 45 J | 35.5 | 26 J | 1.6 U | |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.3 U | 1.4 U | 38 | 15 | 340 | 45 J | 36 | 27 J | 1.5 U | |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 2 U | 24 | 13 | 110 | 20 J | 16 | 12 J | 2.1 U | |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| CHRYSENE | 22000 | 15000 | C | 7.6 | 1.1 U | 42 | 18 | 260 | 42 | 34.5 | 27 | 1.1 U | |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 66 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.8 U | 26 | 9.8 | 180 | 26 | 21.5 | 17 | 1.9 U | |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| TOTAL PAHS | NC | NC | | 16.7 | 0 U | 201 | 85.8 | 1486 | 215 | 172.5 | 130 | 0 U | |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-196 | SB-197 | SB-197 | SB-197 | SB-197 | SB-198 | SB-198 | SB-198 | SB-198 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-196RE-9 | G-SB-197RE-6 | G-SB-197RE-6-AVG | G-SB-197RE-6-D | G-SB-197RE-7 | G-SB-198RE-3 | G-SB-198RE-4 | G-SB-198RE-5 | G-SB-198RE-6 |
| SAMPLE DATE | | | | 20091001 | 20091002 | 20091002 | 20091002 | 20091002 | 20090929 | 20090929 | 20090929 | 20091019 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 6 | 6 | 6 | 7 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | | | | 9 | 6 | 6 | 6 | 7 | 3 | 4 | 5 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 319 | 24 | 36 | 49 | 1.6 U | 34 | 635 | 88 | 471 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 319 | 23 | 36 | 48 | 1.6 U | 33 | 635 | 88 | 471 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 190 | 17 J | 24.5 | 32 J | 1.1 U | 24 | 340 | 46 | 310 |
| BENZO(A)PYRENE | 22 | 15 | C | 230 | 18 J | 28.5 | 39 J | 1.6 U | 26 | 410 | 60 | 330 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 240 | 19 J | 27.5 | 36 J | 1.4 U | 28 | 490 | 66 | 350 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 110 | 7.8 J | 13.4 | 19 J | 2 U | 12 | 180 | 23 | 180 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 230 | 19 J | 27.5 | 36 J | 1.1 U | 27 | 400 | 51 | 290 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 33 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 110 | 12 | 53 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 120 | 12 J | 17.5 | 23 J | 1.8 U | 19 | 300 | 43 | 200 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 1153 | 92.8 | 138.9 | 185 | 0 U | 136 | 2230 | 301 | 1713 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-198 | SB-198 | SB-198 | SB-199 | SB-199 | SB-255 | SB-255 | SB-255 | SB-424 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-198RE-7 | G-SB-198RE-8 | G-SB-198RE-9 | G-SB-199RE-6 | G-SB-199RE-7 | G-SB-255RE-3 | G-SB-255RE-4 | G-SB-255RE-5 | G-SB-424RE-5 |
| SAMPLE DATE | | | | 20091019 | 20091019 | 20091019 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20090924 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 8 | 9 | 6 | 7 | 3 | 4 | 5 | 5 |
| BOTTOM DEPTH | | | | 7 | 8 | 9 | 6 | 7 | 3 | 4 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 1.6 U | 14 | 13 | 42 | 1.5 U | 106 | 1.7 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 13 | 12 | 41 | 1.5 U | 106 | 0.0092 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.2 U | 1.2 U | 12 | 10 | 25 | 1.1 U | 49 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 9.1 | 8.4 | 33 | 1.5 U | 76 | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.5 U | 1.5 U | 11 | 8.2 | 38 | 1.4 U | 76 | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 2.1 U | 2.1 U | 2 U | 2 U | 16 | 2 U | 35 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1.1 U | 1.1 U | 11 | 11 | 28 | 1 U | 65 | 9.2 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 13 | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.8 U | 1.8 U | 18 | 17 | 20 | 1.7 U | 43 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 61.1 | 54.6 | 160 | 0 U | 357 | 9.2 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-424 | SB-424 | SB-424 | SB-437 | SB-437 | SB-441 | SB-441 | SB-453 | SB-453 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-424RE-5-AVG | G-SB-424RE-5-D | G-SB-424RE-6 | G-SB-437RE-3 | G-SB-437RE-4 | G-SB-441RE-7 | G-SB-441RE-8 | G-SB-453RE-5 | G-SB-453RE-6 |
| SAMPLE DATE | | | | 20090924 | 20090924 | 20090924 | 20090930 | 20090930 | 20090929 | 20090929 | 20091001 | 20091001 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 5 | 6 | 3 | 4 | 7 | 8 | 5 | 6 |
| BOTTOM DEPTH | | | | 5 | 5 | 6 | 3 | 4 | 7 | 8 | 5 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.2 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 80 | 11 | 24 | 23 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 0.0092 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 80 | 9 | 23 | 23 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 51 | 1.1 U | 16 | 15 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 47 | 1.5 U | 17 | 17 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 54 | 58 | 18 | 17 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2 U | 2 U | 2 U | 29 | 15 | 2.1 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 4.875 | 1.1 U | 1.1 U | 1 U | 1.1 U | 61 | 23 | 16 | 15 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 19 | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 34 | 34 | 24 | 23 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 4.6 | 0 U | 0 U | 0 U | 0 U | 295 | 130 | 91 | 87 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-456 | SB-456 | SB-457 | SB-457 | SB-653 | SB-653 | SB-653 | SB-653 | SB-653 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-456RE-10 | G-SB-456RE-9 | G-SB-457RE-3 | G-SB-457RE-4 | G-SB-653-3 | G-SB-653-5 | G-SB-653-6 | G-SB-653-7 | G-SB-653-8 |
| SAMPLE DATE | | | | 20090930 | 20090930 | 20090929 | 20090929 | 20090930 | 20090930 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 9 | 3 | 4 | 3 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | | | | 10 | 9 | 3 | 4 | 3 | 5 | 6 | 7 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 78 | 142 | 34 | 13 | 18 | 5209 | 3.9 | 1.7 U | 1.4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 78 | 142 | 33 | 12 | 17 | 5209 | 2.1 | 1.7 U | 1.4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 33 | 61 | 18 | 10 | 14 | 3400 | 21 | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 45 | 88 | 27 | 10 | 14 | 3500 | 1.6 U | 1.7 U | 1.4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 46 | 93 | 27 | 14 | 15 | 4200 | 1.5 U | 1.5 U | 1.3 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 14 | 36 | 12 | 2 U | 2 U | 1500 | 2.2 U | 2.2 U | 1.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 41 | 71 | 20 | 9.3 | 17 | 4000 | 23 | 1.2 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 21 | 32 | 1.5 U | 1.5 U | 1.5 U | 700 | 1.6 U | 1.7 U | 1.4 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 40 | 64 | 17 | 1.7 U | 1.8 U | 2300 | 1.9 U | 1.9 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 240 | 445 | 121 | 43.3 | 60 | 19600 | 44 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-653 | SB-653 | SB-653 | SB-653A | SB-653A | SB-653A | SB-653B | SB-653B | SB-653B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-653-9 | G-SB-653-9-AVG | G-SB-653-9-D | G-SB-653A-3 | G-SB-653A-5 | G-SB-653A-7 | G-SB-653B-3 | G-SB-653B-5 | G-SB-653B-7 |
| SAMPLE DATE | | | | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 9 | 9 | 3 | 5 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 9 | 9 | 9 | 3 | 5 | 7 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.4 U | 1.45 U | 1.5 U | 1.4 U | 3663 | 1.4 U | 30 | 98 | 34 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.4 U | 1.45 U | 1.5 U | 1.4 U | 3663 | 1.4 U | 29 | 98 | 33 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1 U | 1.05 U | 1.1 U | 1 U | 1900 | 1 U | 1.1 U | 54 | 11 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.4 U | 1.45 U | 1.5 U | 1.4 U | 2400 | 1.4 U | 24 | 78 | 29 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.3 U | 1.35 U | 1.4 U | 1.3 U | 2900 | 1.3 U | 29 | 85 | 31 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 1.95 U | 2 U | 1.8 U | 1000 | 1.8 U | 1.9 U | 27 | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 0.99 U | 0.995 U | 1 U | 0.97 U | 2600 | 0.98 U | 1 U | 66 | 11 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.4 U | 1.45 U | 1.5 U | 1.4 U | 600 | 1.4 U | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.7 U | 1.7 U | 1.6 U | 1700 | 1.6 U | 22 | 55 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 13100 | 0 U | 75 | 365 | 82 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-653D | SB-653D | SB-653D | SB-654 | SB-654 | SB-654B | SB-654B | SB-654C | SB-654C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-653D-3 | G-SB-653D-5 | G-SB-653D-7 | G-SB-654-3 | G-SB-654-5 | G-SB-654B-3 | G-SB-654B-5 | G-SB-654C-3 | G-SB-654C-5 |
| SAMPLE DATE | | | | 20091029 | 20091029 | 20091029 | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 3 | 5 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 49 | 1.5 U | 68 | 67 | 7.8 | 10059 | 2.8 | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 48 | 1.5 U | 67 | 66 | 6.2 | 10059 | 1.1 | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 17 | 1.1 U | 62 | 49 | 19 | 8000 | 11 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 39 | 1.5 U | 51 | 53 | 1.5 U | 6800 | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 44 | 1.4 U | 66 | 51 | 43 | 7500 | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 10 | 2 U | 28 | 23 | 1.9 U | 3100 | 1.9 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1 U | 20 | 1.1 U | 74 | 57 | 19 | 8000 | 9.2 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1300 | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 31 | 1.8 U | 30 | 28 | 1.7 U | 3700 | 1.7 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 161 | 0 U | 311 | 261 | 81 | 38400 | 20.2 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-656 | SB-656 | SB-656 | SB-656 | SB-656 | SB-656 | SB-656C | SB-656C | SB-656C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-656-3 | G-SB-656-5 | G-SB-656-6 | G-SB-656-7 | G-SB-656-8 | G-SB-656-9 | G-SB-656C-4 | G-SB-656C-6 | G-SB-656C-8 |
| SAMPLE DATE | | | 20090930 | 20090930 | 20091020 | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 5 | 6 | 7 | 8 | 9 | 4 | 6 | 8 |
| BOTTOM DEPTH | | | 3 | 5 | 6 | 7 | 8 | 9 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 9.8 | 437 | 175 | 2.6 | 1.6 U | 1.5 U | 32 | 66 | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 8.9 | 437 | 174 | 0.85 | 1.6 U | 1.5 U | 31 | 65 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.1 U | 200 | 100 | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 29 | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 C | 8 | 310 | 140 | 1.6 U | 1.6 U | 1.5 U | 26 | 53 | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 9.1 | 330 | 150 | 8.5 | 1.4 U | 1.4 U | 28 | 55 | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2 U | 130 | 75 | 2.1 U | 2 U | 2 U | 2 U | 13 | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.1 U | 260 | 110 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 34 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | 51 | 1.7 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.8 U | 210 | 86 | 1.9 U | 1.8 U | 1.8 U | 23 | 38 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 17.1 | 1491 | 661 | 8.5 | 0 U | 0 U | 77 | 222 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-656C | SB-656C | SB-656D | SB-656D | SB-656D | SB-657A | SB-657A | SB-657A | SB-657A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-656C-8-AVG | G-SB-656C-8-D | G-SB-656D-4 | G-SB-656D-6 | G-SB-656D-8 | G-SB-657A-3 | G-SB-657A-5 | G-SB-657A-5-AVG | G-SB-657A-5-D |
| SAMPLE DATE | | | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 8 | 8 | 4 | 6 | 8 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | | | 8 | 8 | 4 | 6 | 8 | 3 | 5 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.55 U | 1.5 U | 22 | 22 | 17 | 35 | 1207 | 1073 | 940 |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.55 U | 1.5 U | 21 | 21 | 16 | 35 | 1207 | 1073 | 939 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.15 U | 1.1 U | 19 | 19 | 18 | 12 | 900 | 835 | 770 |
| BENZO(A)PYRENE | 22 | 15 C | 1.55 U | 1.5 U | 16 | 15 | 11 | 28 | 810 | 775 | 740 |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.45 U | 1.4 U | 34 | 34 | 29 | 32 | 850 | 815 | 780 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2.05 U | 2 U | 2 U | 2 U | 1.9 U | 2 U | 390 | 340 | 290 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.05 U | 1 U | 17 | 18 | 15 | 11 | 850 | 765 | 680 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.55 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 170 J | 85.775 | 3.1 UJ |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.75 U | 1.7 U | 1.8 U | 9.4 | 1.7 U | 22 | 470 | 435 | 400 |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 86 | 95.4 | 73 | 105 | 4440 | 4050 | 3660 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-657A | SB-657A | SB-657B | SB-657B | SB-657B | SB-657B | SB-657B | SB-657B | SB-657D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-657A-7 | G-SB-657A-9 | G-SB-657B-3 | G-SB-657B-5 | G-SB-657B-5-AVG | G-SB-657B-5-D | G-SB-657B-7 | G-SB-657B-9 | G-SB-657D-3 |
| SAMPLE DATE | | | | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 9 | 3 | 5 | 5 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | | 7 | 9 | 3 | 5 | 5 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 214 | 5922 | 21 | 1434 | 818 | 203 | 14 | 655 | 44 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 214 | 5922 | 20 | 1431 | 817 | 203 | 14 | 655 | 43 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 110 | 4000 | 18 | 1400 J | 770 | 140 J | 12 | 440 | 32 |
| BENZO(A)PYRENE | 22 | 15 | C | 140 | 4000 | 14 | 1100 J | 620 | 140 J | 10 | 460 | 32 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 140 | 4100 | 33 | 1200 J | 675 | 150 J | 23 | 480 | 54 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 59 | 1800 | 1.9 U | 860 J | 469 | 78 J | 2 U | 220 | 13 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 130 | 4300 | 18 | 1200 J | 675 | 150 J | 11 | 520 | 37 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 39 | 840 | 1.5 U | 5.9 U | 13.975 | 25 | 1.5 U | 72 | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 97 | 2500 | 8.1 | 610 J | 346 | 82 J | 1.8 U | 280 | 21 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 715 | 21540 | 91.1 | 6370 | 3567.5 | 765 | 56 | 2472 | 189 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-657D | SB-657D | SB-657D | SB-658B | SB-658B | SB-658B | SB-658B | SB-658C | SB-658C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-657D-5 | G-SB-657D-7 | G-SB-657D-9 | G-SB-658B-3 | G-SB-658B-5 | G-SB-658B-7 | G-SB-658B-9 | G-SB-658C-3 | G-SB-658C-5 |
| SAMPLE DATE | | | | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 558 | 1.5 U | 64 | 32 | 692 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 558 | 1.5 U | 64 | 31 | 692 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 320 | 1.1 U | 46 | 20 | 430 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 370 | 1.5 U | 50 | 23 | 480 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 410 | 1.4 U | 55 | 43 | 500 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 1.9 U | 1.9 U | 170 | 2 U | 21 | 16 | 280 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1 U | 1 U | 1 U | 430 | 1 U | 50 | 26 | 550 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 89 | 1.5 U | 1.6 U | 1.5 U | 86 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 240 | 1.7 U | 32 | 14 | 300 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 2029 | 0 U | 254 | 142 | 2626 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-658C | SB-658C | SB-659C | SB-659C | SB-659C | SB-659C | SB-659D | SB-659D | SB-659D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-658C-7 | G-SB-658C-9 | G-SB-659C-3 | G-SB-659C-5 | G-SB-659C-7 | G-SB-659C-9 | G-SB-659D-3 | G-SB-659D-5 | G-SB-659D-7 |
| SAMPLE DATE | | | | 20091028 | 20091028 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **22** | **415** | 8.6 | 4.1 | 1.5 U | **1657** | 1.5 U | 1.5 U | **24** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **21** | **415** | 7.0 | 2.4 | 1.5 U | **1655** | 1.5 U | 1.5 U | **23** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 14 | **200** | 31 | 1.1 U | 1.1 U | **1300** | 1.1 U | 1.1 U | 19 |
| BENZO(A)PYRENE | 22 | 15 | C | **17** | **280** | 1.5 U | 1.5 U | 1.5 U | **1300** | 1.5 U | 1.5 U | **18** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 15 | **300** | 39 | 24 | 1.4 U | **1400** | 1.4 U | 1.4 U | 31 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 9.8 | 110 | 2 U | 2 U | 2 U | 750 | 2 U | 1.9 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 19 | 270 | 23 | 1.1 U | 1 U | 1600 | 1 U | 1 U | 18 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | **71** | 1.5 U | 1.5 U | 1.5 U | 3.3 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 11 | 130 | 1.7 U | 1.8 U | 1.7 U | **760** | 1.7 U | 1.7 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 85.8 | 1361 | 93 | 24 | 0 U | 7110 | 0 U | 0 U | 86 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-659D | SB-659D | SB-659D |
|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-659D-7-AVG | G-SB-659D-7-D | G-SB-659D-9 |
| SAMPLE DATE | | | | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB |
| TOP DEPTH | | | | 7 | 7 | 9 |
| BOTTOM DEPTH | | | | 7 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **20** | **17** | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **19** | **16** | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 18 | 17 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | **16** | 14 | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 15.85 | 1.4 UJ | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 16 | 14 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.7 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 65.5 | 45 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | |
| PH | NC | NC | | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-661 | SB-661 | SB-662 | SB-662 | SB-662 | SB-662 | SB-662 | SB-662A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-661-6 | G-SB-661-7 | G-SB-662-10 | G-SB-662-6 | G-SB-662-7 | G-SB-662-8 | G-SB-662-9 | G-SB-662A-3 |
| SAMPLE DATE | | | | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091029 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 6 | 7 | 10 | 6 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | | | | 6 | 7 | 10 | 6 | 7 | 8 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.5 U | 139 | 855 | 233 | 2.9 | 4214 | 60 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | 139 | 855 | 233 | 1.1 | 4214 | 59 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 93 | 570 | 160 | 1.2 U | 2900 | 39 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | 97 | 590 | 160 | 1.6 U | 3000 | 45 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 110 | 630 | 170 | 11 | 3200 | 70 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 42 | 260 | 68 | 2.1 U | 1100 | 25 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 100 | 640 | 180 | 11 | 3400 | 47 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 16 | 110 | 30 | 1.6 U | 440 | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 52 | 320 | 91 | 1.8 U | 1500 | 28 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 510 | 3120 | 859 | 22 | 15540 | 254 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-662A | SB-662A | SB-662A | SB-662B | SB-662B | SB-662B | SB-662B | SB-662B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-662A-5 | G-SB-662A-7 | G-SB-662A-9 | G-SB-662B-3 | G-SB-662B-5 | G-SB-662B-7 | G-SB-662B-7-AVG | G-SB-662B-7-D |
| SAMPLE DATE | | | | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| BOTTOM DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 51 | 22 | 702 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 50 | 21 | 702 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 37 | 14 | 360 | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 38 | 16 | 490 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 59 | 36 | 560 | 1.4 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 15 | 2 U | 210 | 2 U | 2 U | 2.1 U | 2.1 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 38 | 16 | 430 | 1 U | 1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 84 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 25 | 1.8 U | 330 | 1.7 U | 1.7 U | 1.9 U | 1.9 U | 1.9 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 212 | 82 | 2464 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-662B | SB-662C | SB-662C | SB-662C | SB-662C | SB-663 | SB-663 | SB-663 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-662B-9 | G-SB-662C-3 | G-SB-662C-5 | G-SB-662C-7 | G-SB-662C-9 | G-SB-663-6 | G-SB-663-6-AVG | G-SB-663-6-D |
| SAMPLE DATE | | | | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 3 | 5 | 7 | 9 | 6 | 6 | 6 |
| BOTTOM DEPTH | | | | 9 | 3 | 5 | 7 | 9 | 6 | 6 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 3172 | 6069 | 19 | 1.7 | 2268 | 1.6 U | 1.55 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3172 | 6069 | 19 | 0.0085 | 2268 | 1.6 U | 1.55 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 2000 | 4400 | 1.1 U | 1.1 U | 1700 | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 2200 | 4100 | 14 | 1.5 U | 1500 | 1.6 U | 1.55 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 2500 | 5000 | 37 | 1.4 U | 1800 | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 970 | 2400 | 2 U | 2 U | 670 | 2 U | 2 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 2200 | 4500 | 16 | 8.5 | 1900 | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 380 | 740 | 1.5 U | 1.5 U | 310 | 1.6 U | 1.55 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1300 | 2600 | 9.5 | 1.8 U | 990 | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 11550 | 23740 | 76.5 | 8.5 | 8870 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-663 | SB-664 | SB-664 | SB-665 | SB-665 | SB-666 | SB-666 | SB-667 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-663-7 | G-SB-664-6 | G-SB-664-7 | G-SB-665-6 | G-SB-665-7 | G-SB-666-6 | G-SB-666-7 | G-SB-667-6 |
| SAMPLE DATE | | | | 20091001 | 20091001 | 20091001 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 |
| BOTTOM DEPTH | | | | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.2 U | 1.1 U | 1.3 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2.1 U | 2.1 U | 2.3 U | 2.2 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 1.1 U | 1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.9 U | 1.8 U | 2 U | 1.9 U | 1.8 U | 1.7 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-667 | SB-668 | SB-668 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-667-7 | G-SB-668-6 | G-SB-668-7 | G-SB-671-3 | G-SB-671-4 | G-SB-671-5 | G-SB-671-6 | G-SB-671-7 |
| SAMPLE DATE | | | | 20091002 | 20091002 | 20091002 | 20090929 | 20090929 | 20090929 | 20091019 | 20091019 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | | | | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.7 U | 1.6 U | 1.7 U | **246** | **121** | **15223** | **439** | **859** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.7 U | 1.6 U | 1.7 U | **246** | **121** | **15223** | **439** | **859** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.2 U | 1.2 U | **180** | 71 | **6600** | **220** | **390 J** |
| BENZO(A)PYRENE | 22 | 15 | C | 1.7 U | 1.6 U | 1.7 U | **170** | **79** | **10000** | **310** | **620 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | 1.5 U | **210** | 94 | **11000** | **280** | **500 J** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.2 U | 2.1 U | 2.2 U | 76 | 39 | **4600** | 140 | 290 J |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1.1 U | 160 | 72 | 6700 | 300 | 470 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.7 U | 1.6 U | 1.7 U | **27** | **20** | **2700** | **59** | **110 J** |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 1.8 U | 1.9 U | 92 | 51 | **7100** | **180** | **370 J** |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 915 | 426 | 48700 | 1489 | 2750 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671B | SB-671B | SB-671B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-671-7-AVG | G-SB-671-7-D | G-SB-671-8 | G-SB-671-9 | G-SB-671RE-10 | G-SB-671B-3 | G-SB-671B-5 | G-SB-671B-7 |
| SAMPLE DATE | | | | 20091019 | 20091019 | 20091019 | 20091019 | 20091029 | 20091111 | 20091111 | 20091111 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 7 | 8 | 9 | 10 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 7 | 7 | 8 | 9 | 10 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **430** | 1.6 U | **127** | **1986** | 1.6 U | **190** | **18** | 1.7 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **430** | 1.6 U | **127** | **1986** | 1.6 U | **190** | **17** | 1.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **195.3** | 1.2 UJ | 71 | **1100** | 1.2 U | 120 | 12 | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | **310.4** | 1.6 UJ | **92** | **1400** | 1.6 U | **120** | 12 | 1.7 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **250.375** | 1.5 UJ | 78 | **1300** | 1.5 U | **160** | 14 | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 145.525 | 2.1 UJ | 42 | 770 | 2.1 U | 62 | 2.1 U | 2.2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 235.275 | 1.1 UJ | 75 | 1300 | 1.1 U | 130 | 11 | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **55.4** | 1.6 UJ | 14 | **250** | 1.6 U | **34** | 1.6 U | 1.7 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **185.475** | 1.9 UJ | 52 | **870** | 1.9 U | 69 | 23 | 1.9 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 1375 | 0 U | 424 | 6990 | 0 U | 695 | 72 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-671B | SB-671C | SB-671C | SB-671C | SB-671C | SB-671C | SB-671C | SB-671D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-671B-9 | G-SB-671C-3 | G-SB-671C-5 | G-SB-671C-7 | G-SB-671C-7-AVG | G-SB-671C-7-D | G-SB-671C-9 | G-SB-671D-3 |
| SAMPLE DATE | | | | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.7 U | 24 | 36 | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 114 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.7 U | 23 | 35 | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 114 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 10 | 25 | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 96 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.7 U | 18 | 25 | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 67 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.6 U | 17 | 44 | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 88 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.2 U | 8.8 | 12 | 2 U | 2 U | 2 U | 2.1 U | 39 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.2 U | 12 | 36 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 83 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 23 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 2 U | 26 | 30 | 1.8 U | 1.8 U | 1.8 U | 1.9 U | 47 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 91.8 | 172 | 0 U | 0 U | 0 U | 0 U | 443 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-671D | SB-671D | SB-671D | SB-673 | SB-673 | SB-674 | SB-674 | SB-675 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-671D-5 | G-SB-671D-7 | G-SB-671D-9 | G-SB-673-6 | G-SB-673-7 | G-SB-674-6 | G-SB-674-7 | G-SB-675-6 |
| SAMPLE DATE | | | 20091111 | 20091111 | 20091111 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 7 | 9 | 6 | 7 | 6 | 7 | 6 |
| BOTTOM DEPTH | | | 5 | 7 | 9 | 6 | 7 | 6 | 7 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.6 U | 4.8 | **16** | 1.5 U | 1.5 U | 4.0 | **27** | **127** |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.6 U | 3.0 | **15** | 1.5 U | 1.5 U | 2.3 | **26** | **127** |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.2 U | 1.2 U | 8.7 | 1.1 U | 1.1 U | 12 | 23 | 100 |
| BENZO(A)PYRENE | 22 | 15 C | 1.6 U | 1.7 U | 11 | 1.5 U | 1.5 U | 1.6 U | **19** | **73** |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.5 U | 8.8 | 12 | 1.4 U | 1.4 U | 11 | 21 | 93 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2.1 U | 2.2 U | 2.1 U | 2 U | 2 U | 2.1 U | 9.7 | 32 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.1 U | 1.1 U | 8.7 | 1.1 U | 1.1 U | 11 | 25 | 100 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.6 U | 1.7 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | **28** |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.8 U | 21 | 23 | 1.8 U | 1.8 U | 1.9 U | 23 | 58 |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 29.8 | 63.4 | 0 U | 0 U | 34 | 120.7 | 484 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-675 | SB-676 | SB-676 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-675-7 | G-SB-676-6 | G-SB-676-7 | G-SB-677-3 | G-SB-677-4 | G-SB-677-5 | G-SB-677-6 | G-SB-677-7 |
| SAMPLE DATE | | | | 20090930 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | | | | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **16** | 1.5 U | 1.6 U | **46** | **40** | **1811** | **21** | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **15** | 1.5 U | 1.6 U | **45** | **40** | **1811** | **20** | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 16 | 1.1 U | 1.2 U | 34 | 36 | **1500** | 13 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 12 | 1.5 U | 1.6 U | **35** | **30** | **1300** | **16** | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 16 | 1.4 U | 1.5 U | 42 | 41 | **1300** | 15 | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2.1 U | 22 | 17 | 540 | 12 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 14 | 1.1 U | 1.1 U | 36 | 40 | 1500 | 17 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | **160** | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 1.8 U | 19 | 18 | **640** | 11 | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 58 | 0 U | 0 U | 188 | 182 | 6940 | 84 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-677 | SB-677 | SB-677A | SB-677A | SB-677A | SB-677A | SB-677B | SB-677B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-677-8 | G-SB-677-9 | G-SB-677A-3 | G-SB-677A-5 | G-SB-677A-7 | G-SB-677A-9 | G-SB-677B-3 | G-SB-677B-5 |
| SAMPLE DATE | | | | 20091020 | 20091020 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | | | | 8 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 40 | 269 | 4.2 | 21 | 44 | 119 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 39 | 269 | 2.5 | 20 | 43 | 119 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 26 | 190 | 1.1 U | 16 | 28 | 78 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 31 | 180 | 1.5 U | 15 | 32 | 94 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 54 | 210 | 25 | 37 | 54 | 100 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 17 | 84 | 1.9 U | 2 U | 24 | 60 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 32 | 230 | 1 U | 19 | 34 | 87 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 38 | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 1.7 U | 100 | 1.7 U | 1.8 U | 23 | 62 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 160 | 1032 | 25 | 87 | 195 | 481 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-677B | SB-677B | SB-677B | SB-677B | SB-677D | SB-677D | SB-677D | SB-677D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-677B-7 | G-SB-677B-9 | G-SB-677B-9-AVG | G-SB-677B-9-D | G-SB-677D-3 | G-SB-677D-5 | G-SB-677D-7 | G-SB-677D-9 |
| SAMPLE DATE | | | | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 7 | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 203 | 327 | 452 | 12 | 4746 | 78 | 38 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 202 | 327 | 452 | 12 | 4746 | 78 | 37 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 140 J | 205 | 270 J | 8.6 | 3100 | 25 | 14 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 160 J | 235 | 310 J | 8 | 3200 | 44 | 30 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 180 J | 255 | 330 J | 27 | 3700 | 46 | 31 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 74 J | 107 | 140 J | 1.9 U | 1300 | 16 | 7.7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1 U | 160 J | 235 | 310 J | 8.7 | 3200 | 25 | 17 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 UJ | 31.4 | 62 J | 1.5 U | 650 | 23 | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 91 J | 135.5 | 180 J | 1.7 U | 2000 | 38 | 25 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 805 | 1203.5 | 1602 | 52.3 | 17150 | 217 | 124.7 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-678-3 | G-SB-678-4 | G-SB-678-5 | G-SB-678-6 | G-SB-678-7 | G-SB-678-8 | G-SB-678-8-AVG | G-SB-678-8-D |
| SAMPLE DATE | | | | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 8 |
| BOTTOM DEPTH | | | | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **36** | **103** | **1905** | **106** | **379** | 1.5 U | **17** | **34** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **36** | **103** | **1905** | **105** | **379** | 1.5 U | **17** | **33** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 24 | 63 | **1100** | 52 | **200** | 1.1 UJ | 11.275 | 22 J |
| BENZO(A)PYRENE | 22 | 15 | C | **28** | **72** | **1300** | **86** | **260** | 1.5 UJ | 13.875 | **27 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 33 | 83 | **1600** | 86 | **270** | 1.4 UJ | 10.85 | 21 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 12 | 37 | 470 | 47 | 110 | 2 UJ | 8.5 | 16 J |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 31 | 79 | 1200 | 65 | 240 | 1.1 UJ | 13.275 | 26 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 12 | **250** | 1.5 U | **53** | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 18 | 44 | **790** | 51 | **180** | 1.8 UJ | 8.95 | 17 J |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 146 | 390 | 6710 | 387 | 1313 | 0 U | 64.5 | 129 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-678 | SB-678B | SB-678B | SB-678B | SB-678B | SB-678B | SB-678B | SB-678C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-678-9 | G-SB-678B-3 | G-SB-678B-3-AVG | G-SB-678B-3-D | G-SB-678B-5 | G-SB-678B-7 | G-SB-678B-9 | G-SB-678C-3 |
| SAMPLE DATE | | | | 20091020 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091030 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 2.5 | 22 | 18 | 14 | 140 | 1.5 U | 946 | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 0.84 | 22 | 17 | 13 | 140 | 1.5 U | 946 | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 12 | 6.275 | 1.1 U | 59 | 1.1 U | 580 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 16 | 12.85 | 9.7 | 88 | 1.5 U | 640 | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 8.4 | 21 | 16 | 11 | 100 | 1.4 U | 870 | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 1.9 U | 1.95 U | 2 U | 28 | 2 U | 230 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 13 | 6.75 | 1 U | 73 | 1 U | 700 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 29 | 1.5 U | 120 | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 24 | 22 | 20 | 64 | 1.7 U | 380 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 8.4 | 86 | 63.35 | 40.7 | 441 | 0 U | 3520 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-678C | SB-678C | SB-678C | SB-679 | SB-679 | SB-679 | SB-679 | SB-679 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-678C-5 | G-SB-678C-7 | G-SB-678C-9 | G-SB-679-3 | G-SB-679-4 | G-SB-679-5 | G-SB-679-6 | G-SB-679-7 |
| SAMPLE DATE | | | | 20091030 | 20091030 | 20091030 | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 9 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | | | | 5 | 7 | 9 | 3 | 4 | 5 | 6 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 28 | 71 | 12 | 222 | 36 | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 27 | 71 | 11 | 222 | 35 | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.2 U | 10 | 44 | 1.1 U | 94 | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 21 | 58 | 9.8 | 160 | 30 | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.5 U | 26 | 40 | 8.1 | 160 | 31 | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2.1 U | 2.1 U | 65 | 1.9 U | 66 | 13 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 11 | 53 | 7.9 | 110 | 14 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 27 | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.9 U | 23 | 35 | 1.7 U | 89 | 21 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 91 | 295 | 25.8 | 706 | 109 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-679 | SB-679 | SB-679C | SB-679C | SB-679C | SB-679C | SB-679C | SB-679C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-679-8 | G-SB-679-9 | G-SB-679C-3 | G-SB-679C-5 | G-SB-679C-7 | G-SB-679C-9 | G-SB-679C-9-AVG | G-SB-679C-9-D |
| SAMPLE DATE | | | | 20091020 | 20091020 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 9 | 3 | 5 | 7 | 9 | 9 | 9 |
| BOTTOM DEPTH | | | | 8 | 9 | 3 | 5 | 7 | 9 | 9 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 111 | 56 | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 111 | 56 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 23 J | 11.775 | 1.1 UJ |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 68 J | 34.4 | 1.6 UJ |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 77 J | 38.85 | 1.4 UJ |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2 U | 1.9 U | 2 U | 13 | 7 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1 U | 1 U | 1.1 U | 33 J | 16.775 | 1.1 UJ |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 28 J | 14.4 | 1.6 UJ |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 52 J | 26.45 | 1.8 UJ |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 294 | 147 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-679D | SB-679D | SB-679D | SB-679D |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-679D-3 | G-SB-679D-5 | G-SB-679D-7 | G-SB-679D-9 |
| SAMPLE DATE | | | | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | **17** | 1.5 U | **20** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | **16** | 1.5 U | **20** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | **16** | 1.5 U | **16** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | 17 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.8 U | 1.8 U | 19 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 16 | 0 U | 52 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680D | SB-680D | SB-680D | SB-681 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-680-3 | G-SB-680-4 | G-SB-680-5 | G-SB-680-6 | G-SB-680-7 | G-SB-680-8 | G-SB-680-9 | G-SB-680D-3 | G-SB-680D-7 | G-SB-680D-9 | G-SB-681-5 |
| SAMPLE DATE | | | | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091102 | 20091102 | 20091102 | 20090924 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 7 | 9 | 5 |
| BOTTOM DEPTH | | | | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 7 | 9 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 24 | 799 | 1112 | 24698 | 604 | 1.5 U | 1.5 U | 76 | 2081 | 10 | 83 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 23 | 799 | 1112 | 24698 | 604 | 1.5 U | 1.5 U | 76 | 2080 | 9.4 | 82 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 18 | 530 | 740 | 15000 | 420 | 1.1 U | 1.1 U | 47 | 950 | 1.1 U | 99 |
| BENZO(A)PYRENE | 22 | 15 | C | 18 | 550 | 760 | 17000 | 430 | 1.5 U | 1.5 U | 48 | 1700 | 8.4 | 60 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 18 | 690 | 900 | 18000 | 450 | 1.4 U | 1.4 U | 67 | 1800 | 10 | 83 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 11 | 330 | 400 | 8100 | 210 | 2 U | 2 U | 26 | 620 | 2 U | 42 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 21 | 590 | 840 | 17000 | 390 | 1 U | 1.1 U | 57 | 1300 | 1 U | 80 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 93 | 140 | 3300 | 61 | 1.5 U | 1.5 U | 13 | 3.3 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 11 | 300 | 430 | 10000 | 240 | 1.7 U | 1.8 U | 35 | 970 | 1.7 U | 35 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 97 | 3083 | 4210 | 88400 | 2201 | 0 U | 0 U | 293 | 7340 | 18.4 | 399 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-681 | SB-682 | SB-682 | SB-683 | SB-683 | SB-684 | SB-684 | SB-684 | SB-684 | SB-685 | SB-685 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-681-6 | G-SB-682-5 | G-SB-682-6 | G-SB-683-5 | G-SB-683-6 | G-SB-684-5 | G-SB-684-5-AVG | G-SB-684-5-D | G-SB-684-6 | G-SB-685-3 | G-SB-685-4 |
| SAMPLE DATE | | | 20090924 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20091001 | 20091001 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG |
| MATRIX | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 6 | 5 | 6 | 5 | 6 | 5 | 5 | 5 | 6 | 3 | 4 |
| BOTTOM DEPTH | | | 6 | 5 | 6 | 5 | 6 | 5 | 5 | 5 | 6 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.5 U | 1.5 U | 24 | 149 | 1.6 U | 2.8 | 58 | 114 | 1.5 U | 11 | 48 |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.5 U | 1.5 U | 23 | 149 | 1.6 U | 1.1 | 57 | 114 | 1.5 U | 10 | 47 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.1 U | 1.1 U | 21 | 76 | 1.1 U | 11 J | 50 | 89 J | 1.1 U | 1.1 U | 40 |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 1.5 U | 16 | 92 | 1.6 U | 1.5 UJ | 32.375 | 64 J | 1.5 U | 9.1 | 36 |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.4 U | 1.3 U | 26 | 120 | 1.4 U | 1.4 UJ | 55.35 | 110 J | 1.4 U | 9.5 | 43 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 1.9 U | 1.9 U | 9 | 50 | 2 U | 2 UJ | 16 | 31 J | 2 U | 1.9 U | 18 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1 U | 1 U | 20 | 100 | 1.1 U | 1 UJ | 39.75 | 79 J | 1.1 U | 11 | 41 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | 1.5 U | 1.5 U | 31 | 1.6 U | 1.5 UJ | 12.875 | 25 J | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.7 U | 1.7 U | 20 | 59 | 1.8 U | 1.7 UJ | 22.925 | 45 J | 1.8 U | 1.7 U | 23 |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 112 | 528 | 0 U | 11 | 227 | 443 | 0 U | 29.6 | 201 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-685 | SB-685 | SB-686 | SB-686 | SB-687 | SB-687 | SB-688 | SB-688 | SB-689 | SB-689 | SB-690 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-685-4-AVG | G-SB-685-4-D | G-SB-686-3 | G-SB-686-4 | G-SB-687-3 | G-SB-687-4 | G-SB-688-3 | G-SB-688-4 | G-SB-689-7 | G-SB-689-8 | G-SB-690-7 |
| SAMPLE DATE | | | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 7 | 8 | 7 |
| BOTTOM DEPTH | | | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 7 | 8 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 44 | 40 | 1.4 U | 1.5 U | 10 | 16 | 13 | 1.6 U | 1.5 U | 1.5 U | 1.7 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 43 | 39 | 1.4 U | 1.5 U | 9.2 | 15 | 12 | 1.6 U | 1.5 U | 1.5 U | 1.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 36 | 32 | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 C | 33 | 30 | 1.4 U | 1.5 U | 7.9 | 13 | 11 | 1.6 U | 1.5 U | 1.5 U | 1.7 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 39 | 35 | 1.3 U | 1.4 U | 13 | 13 | 1.4 U | 1.5 U | 1.4 U | 1.4 U | 1.6 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 19.5 | 21 | 1.9 U | 1.9 U | 2 U | 2 U | 1.9 U | 2.1 U | 2 U | 2 U | 2.2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 42.5 | 44 | 0.99 U | 1 U | 9.2 | 13 | 8.7 | 1.1 U | 1.1 U | 1.1 U | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 21 | 19 | 1.7 U | 1.7 U | 1.8 U | 7.8 | 8.5 | 1.8 U | 1.8 U | 1.8 U | 2 UJ |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 191 | 181 | 0 U | 0 U | 30.1 | 46.8 | 28.2 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (7) | 220 C(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (9) | 12000 N(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (10) | 2.3 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-690 | SB-690 | SB-690 | SB-691 | SB-691 | SB-692 | SB-692 | SB-693 | SB-693 | SB-693 | SB-693 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-690-7-AVG | G-SB-690-7-D | G-SB-690-8 | G-SB-691-7 | G-SB-691-8 | G-SB-692-7 | G-SB-692-8 | G-SB-693-5 | G-SB-693-6 | G-SB-693-7 | G-SB-693-8 |
| SAMPLE DATE | | | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090929 | 20090929 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 7 | 7 | 8 | 7 | 8 | 7 | 8 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | | | 7 | 7 | 8 | 7 | 8 | 7 | 8 | 5 | 6 | 7 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 6.4 | 12 | 1.5 U | 3.43555 | 1.6 U | 1.5 U | 1.5 U | 4469 | 21 | 2.7 | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 6.0 | 11 | 1.5 U | 1.7 | 1.6 U | 1.5 U | 1.5 U | 4469 | 20 | 0.93 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 4.4 | 8.2 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 3000 | 16 | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 C | 4.325 | 7.8 | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 3100 | 16 | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 4.6 | 8.4 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 3400 | 17 | 9.2 | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2.05 U | 1.9 U | 1.9 U | 2 U | 2 U | 1.9 U | 2 U | 1600 | 2.1 U | 2.1 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.1 U | 1 U | 1 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 3300 | 14 | 9.4 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 540 | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 9 | 17 J | 1.7 U | 17 | 1.8 U | 1.7 U | 1.8 U | 1700 | 8.2 | 1.9 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 20.7 | 41.4 | 0 U | 17 | 0 U | 0 U | 0 U | 16640 | 71.2 | 18.6 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (7) | 220 C(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (9) | 12000 N(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (10) | 2.3 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-693 | SB-693A | SB-693A | SB-693A | SB-693B | SB-693B | SB-693B | SB-693D | SB-693D | SB-693D | SB-693D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-693-9 | G-SB-693A-4 | G-SB-693A-6 | G-SB-693A-8 | G-SB-693B-4 | G-SB-693B-6 | G-SB-693B-8 | G-SB-693D-4 | G-SB-693D-6 | G-SB-693D-8 | G-SB-693D-8-AVG |
| SAMPLE DATE | | | 20091001 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 9 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 8 |
| BOTTOM DEPTH | | | 9 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 2.7 | 55 | 386 | 242 | 77 | 23 | 14 | 15 | 780 | 65 | 354 |
| BAP EQUIVALENT-POS | 22 | 15 C | 0.91 | 54 | 386 | 242 | 77 | 23 | 13 | 15 | 780 | 65 | 354 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 9 | 42 | 250 | 160 | 48 | 14 | 9.5 | 13 | 570 | 44 J | 247 |
| BENZO(A)PYRENE | 22 | 15 C | 1.6 U | 42 | 270 | 170 | 52 | 18 | 11 | 12 | 550 | 44 J | 242 |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.5 U | 49 | 280 | 170 | 61 | 18 | 12 | 12 | 610 | 49 J | 254.5 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2.1 U | 18 | 150 | 100 | 25 | 10 | 2.1 U | 2 U | 270 | 20 J | 120 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 11 | 57 | 290 | 190 | 64 | 21 | 13 | 16 | 640 | 51 J | 305.5 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.6 U | 1.5 U | 45 | 28 | 10 | 1.6 U | 1.6 U | 1.5 U | 78 | 8.5 J | 45.75 |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.8 U | 27 | 160 | 97 | 36 | 13 | 1.9 U | 1.7 U | 310 | 28 J | 149 |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 20 | 235 | 1445 | 915 | 296 | 94 | 45.5 | 53 | 3028 | 244.5 | 1363.75 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (7) | 220 C(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (9) | 12000 N(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (10) | 2.3 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-693D | SB-694 | SB-694 | SB-695 | SB-695 | SB-695 | SB-695 | SB-696 | SB-696 | SB-696 | SB-697 | SB-697 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-693D-8-D | G-SB-694-5 | G-SB-694-6 | G-SB-695-5 | G-SB-695-5-AVG | G-SB-695-5-D | G-SB-695-6 | G-SB-696-5 | G-SB-696-6 | | G-SB-697-10 | G-SB-697-9 |
| SAMPLE DATE | | | 20091027 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | | 20090930 | 20090930 |
| SAMPLE CODE | | | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | | NORMAL | NORMAL |
| MATRIX | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | SO | SO | SO | SO | SO | SO | SO | SO | SO | | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | | SB | SB |
| TOP DEPTH | | | 8 | 5 | 6 | 5 | 5 | 5 | 6 | 5 | 6 | | 10 | 9 |
| BOTTOM DEPTH | | | 8 | 5 | 6 | 5 | 5 | 5 | 6 | 5 | 6 | | 10 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 644 | 20 | 1.6 U | 50 | 44 | 39 | 25 | 43 | 126 | | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 644 | 19 | 1.6 U | 49 | 43 | 38 | 24 | 42 | 126 | | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 450 J | 11 | 1.1 U | 41 | 35 | 29 | 18 | 24 | 55 | | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 C | 440 J | 14 | 1.6 U | 38 | 33.5 | 29 | 19 | 34 | 89 | | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 460 J | 15 | 1.4 U | 41 | 35 | 29 | 20 | 35 | 94 | | 1.5 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 220 J | 2.1 U | 2 U | 17 | 14.5 | 12 | 9.5 | 15 | 38 | | 2.1 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| CHRYSENE | 22000 | 15000 C | 560 J | 16 | 1.1 U | 43 | 36.5 | 30 | 20 | 28 | 77 | | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 83 J | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 16 | | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 270 J | 21 | 1.8 U | 25 | 27.5 | 30 | 11 | 22 | 57 | | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| TOTAL PAHS | NC | NC | 2483 | 77 | 0 U | 205 | 182 | 159 | 97.5 | 158 | 426 | | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| TOTAL AROCLOR | 320 (7) | 220 C(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| CHROMIUM | 12000 (9) | 12000 N(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| MERCURY | 2.3 (10) | 2.3 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| VANADIUM | 7.8 | 39 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA |

| LOCATION | | | SB-698 | SB-698 | SB-699 | SB-699 | SB-700 | SB-700 | SB-701 | SB-701 | SB-702 | SB-702 | SB-703 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-698-10 | G-SB-698-9 | G-SB-699-3 | G-SB-699-4 | G-SB-700-3 | G-SB-700-4 | G-SB-701-3 | G-SB-701-4 | G-SB-702-3 | G-SB-702-4 | G-SB-703-7 |
| SAMPLE DATE | | | 20090930 | 20090930 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091007 | 20091007 | 20090923 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 10 | 9 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 7 |
| BOTTOM DEPTH | | | 10 | 9 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | **18** | 2.5 | **136** | 14 | **17** | **33** | **67** | **65** | 1.5 U | 3.1 | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 C | **17** | 0.84 | **136** | 13 | **16** | **32** | **67** | **65** | 1.5 U | 1.3 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 12 | 1.1 U | 92 | 12 | 7.9 | 13 | 25 | 27 | 1.1 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 C | 12 | 1.5 U | **96** | 11 | 14 | **26** | **48** | **45** | 1.5 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 18 | 8.4 | 100 | 12 | 13 | 31 | 45 | 47 | 1.4 U | 13 | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 1.9 U | 1.9 U | 44 | 2 U | 1.9 U | 8.1 | 21 | 21 | 2 U | 2.1 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 14 | 1 U | 99 | 9.9 | 1 U | 18 | 35 | 35 | 1.1 U | 8.7 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | 1.5 U | 14 | 1.5 U | 1.5 U | 1.5 U | 8.9 | 9.1 | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 20 | 1.7 U | 59 | 1.8 U | 1.7 U | 18 | 31 | 30 | 1.8 U | 1.9 U | 1.9 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 76 | 8.4 | 504 | 44.9 | 34.9 | 114.1 | 213.9 | 214.1 | 0 U | 21.7 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (7) | 220 C(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (9) | 12000 N(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (10) | 2.3 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-703 | SB-704 | SB-704 | SB-704 | SB-704 | SB-704 | SB-704 | SB-704 | SB-704 | SB-705 | SB-705 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-703-8 | G-SB-704-10 | G-SB-704-3 | G-SB-704-4 | G-SB-704-5 | G-SB-704-6 | G-SB-704-7 | G-SB-704-8 | G-SB-704-9 | G-SB-705-3 | G-SB-705-4 |
| SAMPLE DATE | | | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 8 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 |
| BOTTOM DEPTH | | | 8 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2.1 U | 2 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.1 U | 1.1 U | 1 U | 1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.8 U | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-707 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-706-10 | G-SB-706-3 | G-SB-706-4 | G-SB-706-5 | G-SB-706-6 | G-SB-706-6-AVG | G-SB-706-6-D | G-SB-706-7 | G-SB-706-8 | G-SB-706-9 | G-SB-706-9 | G-SB-707-3 |
| SAMPLE DATE | | | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 10 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 9 | 3 |
| BOTTOM DEPTH | | | 10 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.6 U | 20 | 1.5 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.6 U | 19 | 1.5 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.2 U | 14 | 1.1 U | 1.1 U | 1.1 U | 1.15 U | 1.2 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 C | 1.6 U | 14 | 1.5 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.5 U | 17 | 1.4 U | 1.4 U | 1.4 U | 1.45 U | 1.5 U | 1.4 U | 1.5 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2.1 U | 7.9 | 1.9 U | 2 U | 1.9 U | 2 U | 2.1 U | 2 U | 2.1 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.1 U | 16 | 1 U | 1 U | 1 U | 1.05 U | 1.1 U | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.8 U | 20 | 1.7 U | 1.7 U | 1.7 U | 1.75 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 88.9 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (7) | 220 C(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (9) | 12000 N(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (10) | 2.3 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-707 | SB-708 | SB-708 | SB-708 | SB-708 | SB-708 | SB-709 | SB-709 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-707-4 | G-SB-708-3 | G-SB-708-4 | G-SB-708-5 | G-SB-708-6 | G-SB-708-7 | G-SB-709-3 | G-SB-709-4 |
| SAMPLE DATE | | | 20090922 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20090923 | 20090923 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| BOTTOM DEPTH | | | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.5 U | 548 | 2823 | 91 | 1.6 U | 1.5 U | 51 | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.5 U | 548 | 2823 | 90 | 1.6 U | 1.5 U | 50 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.1 U | 420 | 1900 | 56 | 1.2 U | 1.1 U | 44 | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 370 | 2000 | 70 | 1.6 U | 1.5 U | 38 | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.4 U | 490 | 2500 | 95 | 1.5 U | 1.4 U | 47 | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2 U | 190 | 1100 | 40 | 2.1 U | 2 U | 23 | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1 U | 410 | 2100 | 58 | 1.1 U | 1.1 U | 42 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | 64 | 270 | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.7 U | 210 | 1000 | 44 | 1.9 U | 1.8 U | 25 | 1.9 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 2154 | 10870 | 363 | 0 U | 0 U | 219 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (7) | 220 C(8) | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (9) | 12000 N(9) | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (10) | 2.3 N(11) | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(12) | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-710 | SB-710 | SB-710 | SB-710 | SB-712 | SB-712 | SB-713 | SB-713 | SB-714 | SB-714 | SB-714 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-710-3 | G-SB-710-4 | G-SB-710-4-AVG | G-SB-710-4-D | G-SB-712-3 | G-SB-712-4 | G-SB-713-3 | G-SB-713-4 | G-SB-714-3 | G-SB-714-4 | G-SB-714-5 |
| SAMPLE DATE | | | | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 5 |
| BOTTOM DEPTH | | | | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 24 | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 820 | 2492 | 4583 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 23 | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 820 | 2492 | 4583 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 19 | 1.2 U | 1.2 U | 1.2 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 460 | 1600 | 3300 |
| BENZO(A)PYRENE | 22 | 15 | C | 18 | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 540 | 1600 | 3000 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 23 | 1.5 U | 1.5 U | 1.5 U | 1.3 U | 1.4 U | 1.4 U | 1.4 U | 740 | 2600 | 4300 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 10 | 2.1 U | 2.1 U | 2.1 U | 1.9 U | 2 U | 2 U | 2 U | 7.6 U | 39 U | 61 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 20 | 1.1 U | 1.1 U | 1.1 U | 0.99 U | 1 U | 1.1 U | 1 U | 540 | 1800 | 3100 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 120 | 360 | 630 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 9.8 | 1.8 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 390 | 1100 | 1900 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 99.8 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 2790 | 9060 | 16230 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-714 | SB-714 | SB-714 | SB-714 | SB-715 | SB-715 | SB-716 | SB-716 | SB-716 | SB-716 | SB-716 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-714-6 | G-SB-714-6-AVG | G-SB-714-6-D | G-SB-714-7 | G-SB-715-3 | G-SB-715-4 | G-SB-716-10 | G-SB-716-3 | G-SB-716-5 | G-SB-716-6 | G-SB-716-7 |
| SAMPLE DATE | | | 20091008 | 20091008 | 20091008 | 20091008 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 6 | 6 | 6 | 7 | 3 | 4 | 10 | 3 | 5 | 6 | 7 |
| BOTTOM DEPTH | | | 6 | 6 | 6 | 7 | 3 | 4 | 10 | 3 | 5 | 6 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 53040 | 27129 | 1218 | 2404 | 48 | 23 | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 53040 | 27129 | 1218 | 2404 | 48 | 22 | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 43000 J | 21855 | 710 J | 2100 | 46 | 22 | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 C | 35000 J | 17895 | 790 J | 1600 | 35 | 16 | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 51000 J | 26100 | 1200 J | 2400 | 55 | 27 | 1.4 U | 1.5 U | 1.4 U | 1.4 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 71 U | 36.4 U | 1.8 U | 4.2 U | 22 | 14 | 2 U | 2.1 U | 2 U | 2 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 40000 J | 20355 | 710 J | 2000 | 46 | 22 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 6500 J | 3340 | 180 J | 260 | 1.4 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 21000 J | 10780 | 560 J | 920 | 22 | 9.2 | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 196500 | 100325 | 4150 | 9280 | 226 | 110.2 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-716 | SB-716 | SB-717 | SB-717 | SB-718 | SB-718 | SB-719 | SB-719 | SB-720 | SB-720 | SB-720 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-716-8 | G-SB-716-9 | G-SB-717-3 | G-SB-717-4 | G-SB-718-3 | G-SB-718-4 | G-SB-719-3 | G-SB-719-4 | G-SB-720-3 | G-SB-720-4 | G-SB-720-5 |
| SAMPLE DATE | | | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 5 |
| BOTTOM DEPTH | | | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.5 U | 1.7 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 2381 | 177 | 10 |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.5 U | 1.7 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 2381 | 177 | 9.3 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.1 U | 1.2 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1000 | 80 | 7 J |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 1.7 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1600 | 120 | 6.9 J |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.4 U | 1.6 U | 1.4 U | 1.5 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 2100 | 160 | 11 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2 U | 2.2 U | 2 U | 2.1 U | 2 U | 1.9 U | 2 U | 2 U | 15 U | 3.4 U | 1.6 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1 U | 1.2 U | 1.1 U | 1.1 U | 1 U | 1 U | 1.1 U | 1 U | 1100 | 82 | 5.9 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | 1.7 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 350 | 25 | 1.7 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.7 U | 1.9 U | 1.8 U | 1.8 U | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1200 | 84 | 5.8 J |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 7350 | 551 | 36.6 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-720 | SB-720 | SB-721 | SB-721 | SB-721 | SB-721 | SB-721 | SB-722 | SB-722 | SB-723 | SB-723 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-720-6 | G-SB-720-7 | G-SB-721-3 | G-SB-721-4 | G-SB-721-5 | G-SB-721-6 | G-SB-721-7 | G-SB-722-3 | G-SB-722-4 | G-SB-723-3 | G-SB-723-3-AVG |
| SAMPLE DATE | | | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090923 | 20090923 | 20090924 | 20090924 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 | 3 | 3 |
| BOTTOM DEPTH | | | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 2.3 U | 2.6 | 4.9 | 637 | 2.2 U | 2.2 U | 2.3 U | 8.2 | 142 | 1.6 U | 1.7 |
| BAP EQUIVALENT-POS | 22 | 15 C | 2.3 U | 0.45 | 4.0 | 637 | 2.2 U | 2.2 U | 2.3 U | 6.7 | 142 | 1.6 U | 0.94 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.3 U | 2 J | 3.5 J | 360 | 1.3 U | 1.2 U | 1.3 U | 28 | 99 | 1.2 U | 1.15 U |
| BENZO(A)PYRENE | 22 | 15 C | 2.3 U | 2.4 U | 2.6 J | 410 | 2.2 U | 2.2 U | 2.3 U | 1.4 U | 110 | 1.6 U | 1.55 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.7 U | 2.5 J | 7 J | 640 | 1.6 U | 1.6 U | 1.7 U | 39 | 140 | 1.5 U | 5.075 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 1.7 U | 1.8 U | 1.7 U | 6.3 U | 1.7 U | 1.6 U | 1.7 U | 1.9 U | 60 | 2.1 U | 2.05 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.5 U | 1.8 J | 7.7 J | 400 | 1.4 U | 1.4 U | 1.4 U | 28 | 91 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.8 U | 1.9 U | 1.8 U | 95 | 1.7 U | 1.7 U | 1.8 U | 1.4 U | 1.5 U | 1.6 U | 1.55 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 0.46 U | 0.46 U | 3.2 J | 320 | 0.44 U | 0.43 U | 0.45 U | 1.7 U | 70 | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 6.3 | 24 | 2225 | 0 U | 0 U | 0 U | 95 | 570 | 0 U | 4.7 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1200 | 1090 |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-723 | SB-723 | SB-724 | SB-724 | SB-724 | SB-724 | SB-725 | SB-725 | SB-726 | SB-726 | SB-726 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-723-3-D | G-SB-723-4 | G-SB-724-3 | G-SB-724-4 | G-SB-724-6 | G-SB-724-7 | G-SB-725-3 | G-SB-725-4 | G-SB-726-10 | G-SB-726-3 | G-SB-726-4 |
| SAMPLE DATE | | | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 | 20090923 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | | | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 4 | 3 | 4 | 6 | 7 | 3 | 4 | 10 | 3 | 4 |
| BOTTOM DEPTH | | | 3 | 4 | 3 | 4 | 6 | 7 | 3 | 4 | 10 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 2.6 | 1.6 U | 3125 | 844 | 46 | 1.6 U | 1.5 U | 1.5 U | 2.2 U | 4263 | 1041 |
| BAP EQUIVALENT-POS | 22 | 15 C | 0.94 | 1.6 U | 3125 | 844 | 46 | 1.6 U | 1.5 U | 1.5 U | 2.2 U | 4263 | 1041 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.1 U | 1.2 U | 2100 | 570 | 32 | 1.1 U | 1.1 U | 1.1 U | 1.3 U | 2700 | 650 |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 1.6 U | 2100 | 570 | 35 | 1.6 U | 1.5 U | 1.5 U | 2.2 U | 2800 | 700 |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 9.4 | 1.5 U | 2500 | 660 | 48 | 1.4 U | 1.4 U | 1.4 U | 1.6 U | 4300 | 1000 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2 U | 2.1 U | 1300 | 320 | 19 | 2 U | 1.9 U | 2 U | 1.6 U | 60 U | 15 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.1 U | 1.1 U | 1800 | 590 | 39 | 1.1 U | 1 U | 1.1 U | 1.4 U | 2700 | 700 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | 1.6 U | 420 | 110 | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 550 | 120 |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.8 U | 1.8 U | 1300 | 370 | 24 | 1.8 U | 1.7 U | 1.8 U | 0.43 U | 2100 | 550 |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 9.4 | 0 U | 11520 | 3190 | 197 | 0 U | 0 U | 0 U | 0 U | 15150 | 3720 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | 980 | 550 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-727 | SB-727 | SB-727 | SB-727 | SB-727 | SB-728 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-726-5 | G-SB-726-6 | G-SB-726-7 | G-SB-726-8 | G-SB-726-9 | G-SB-727-3 | G-SB-727-4 | G-SB-727-5 | G-SB-727-6 | G-SB-727-7 | G-SB-728-3 |
| SAMPLE DATE | | | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 | 6 | 7 | 3 |
| BOTTOM DEPTH | | | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 | 6 | 7 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 2.4 | 2.2 U | 2.4 U | 2.2 U | 4.6 | 578 | 29 | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 0.30 | 2.2 U | 2.4 U | 2.2 U | 3.7 | 578 | 28 | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.4 J | 1.2 U | 1.4 U | 1.3 U | 2.7 J | 360 | 18 | 1.1 U | 1.2 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 C | 2.3 U | 2.2 U | 2.4 U | 2.2 U | 2.7 J | 400 | 22 | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.6 U | 1.6 U | 1.8 U | 1.6 U | 4.4 J | 450 | 28 | 1.4 U | 1.5 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 1.7 U | 1.6 U | 1.8 U | 1.6 U | 1.7 U | 230 | 9 | 2 U | 2.1 U | 2 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.4 J | 1.4 U | 1.5 U | 1.4 U | 2.8 J | 400 | 23 | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.8 U | 1.7 U | 1.9 U | 1.7 U | 1.8 U | 73 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.6 J | 0.43 U | 0.48 U | 0.43 U | 2.4 J | 210 | 17 | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 4.4 | 0 U | 0 U | 0 U | 15 | 2123 | 117 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | 180000 |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-728 | SB-728 | SB-728 | SB-728 | SB-729 | SB-729 | SB-729 | SB-729 | SB-729 | SB-730 | SB-730 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-728-4 | G-SB-728-5 | G-SB-728-6 | G-SB-728-7 | G-SB-729-3 | G-SB-729-4 | G-SB-729-5 | G-SB-729-6 | G-SB-729-7 | G-SB-730-4 | G-SB-730-5 |
| SAMPLE DATE | | | 20090923 | 20090923 | 20090923 | 20090923 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 4 | 5 | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 4 | 5 |
| BOTTOM DEPTH | | | 4 | 5 | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 4 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.5 U | NA | NA | NA | 963 | 60 | 3.4 | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.5 U | NA | NA | NA | 963 | 59 | 1.7 | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.1 U | NA | NA | NA | 670 | 28 | 8.5 | 1.1 U | 1.1 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | NA | NA | NA | 650 | 46 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.4 U | NA | NA | NA | 850 | 65 | 8.9 | 1.4 U | 1.4 U | 1.5 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2 U | NA | NA | NA | 370 | 20 | 2.1 U | 2 U | 2 U | 2.1 U | 1.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.1 U | NA | NA | NA | 690 | 45 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | NA | NA | NA | 120 | 1.4 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.8 U | NA | NA | NA | 370 | 37 | 1.9 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | NA | NA | NA | 3720 | 241 | 17.4 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | 980000 | 780000 | 440000 | 82000 | NA | NA | NA | NA | NA | NA | 110000 |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-731 | SB-731 | SB-732 | SB-732 | SB-732 | SB-732 | SB-732 | SB-733 | SB-733 | SB-734 | SB-734 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-731-3 | G-SB-731-4 | G-SB-732-3 | G-SB-732-4 | G-SB-732-5 | G-SB-732-6 | G-SB-732-7 | G-SB-733-3 | G-SB-733-4 | G-SB-734-6 | G-SB-734-7 |
| SAMPLE DATE | | | 20090923 | 20090923 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090924 | 20090924 | 20090923 | 20090923 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 4 | 6 | 7 |
| BOTTOM DEPTH | | | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 4 | 6 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.4 U | 1.6 U | 761 | 66 | 2.2 U | 5.0 | 2.2 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.4 U | 1.6 U | 761 | 66 | 2.2 U | 4.1 | 2.2 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.1 U | 1.2 U | 400 | 22 | 1.3 U | 3.8 J | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 C | 1.4 U | 1.6 U | 490 | 43 | 2.2 U | 3.2 J | 2.2 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.3 U | 1.5 U | 680 | 57 | 1.6 U | 3.5 J | 1.6 U | 1.5 U | 1.5 U | 1.4 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 1.9 U | 2.1 U | 30 U | 1.4 U | 1.6 U | 1.6 U | 1.6 U | 2.1 U | 2.1 U | 2 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1 U | 1.1 U | 500 | 25 | 1.4 U | 2.9 J | 1.4 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.4 U | 1.6 U | 120 J | 10 | 1.7 U | 1.7 U | 1.7 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.7 U | 1.9 U | 420 | 49 | 0.43 U | 1.9 J | 0.43 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 2610 | 206 | 0 U | 15.3 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | 150000 | 920 |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-735 | SB-735 | SB-735 | SB-735 | SB-735 | SB-735 | SB-735A | SB-735A | SB-735A | SB-735B | SB-735B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-735-3 | G-SB-735-5 | G-SB-735-5-AVG | G-SB-735-5-D | G-SB-735-7 | G-SB-735-9 | G-SB-735A-3 | G-SB-735A-5 | G-SB-735A-9 | G-SB-735B-3 | G-SB-735B-5 |
| SAMPLE DATE | | | | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091103 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 9 | 3 | 5 |
| BOTTOM DEPTH | | | | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 211 | 3808 | 8463 | 13119 | 3534 | 265 | 2795 | 57089 | 131 | 30 | 19 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 211 | 3808 | 8463 | 13119 | 3534 | 265 | 2792 | 57089 | 130 | 29 | 18 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 170 | 3000 J | 7000 | 11000 J | 2700 | 200 | 3000 | 44000 | 110 | 26 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 140 | 2600 J | 5850 | 9100 J | 2400 | 180 | 2100 | 37000 | 99 | 22 | 15 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 170 | 3400 J | 6700 | 10000 J | 3500 | 240 | 2800 | 55000 | 140 | 28 | 20 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 99 | 1500 J | 2750 | 4000 J | 1100 | 100 | 1300 | 25000 | 49 | 12 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 150 | 2800 J | 5800 | 8800 J | 2600 | 200 | 2600 | 39000 | 130 | 24 | 13 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 28 | 410 J | 905 | 1400 J | 370 | 30 | 7.7 U | 7800 | 1.5 U | 1.4 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 82 | 1400 J | 3050 | 4700 J | 1300 | 100 | 960 | 21000 | 54 | 14 | 9.8 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 839 | 15110 | 32055 | 49000 | 13970 | 1050 | 12760 | 228800 | 582 | 126 | 57.8 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-735B | SB-735B | SB-735B | SB-735B | SB-735C | SB-735C | SB-735C | SB-736 | SB-736B | SB-736B | SB-736B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-735B-7 | G-SB-735B-7-AVG | G-SB-735B-7-D | G-SB-735B-9 | G-SB-735C-3 | G-SB-735C-5 | G-SB-735C-7 | G-SB-736-3 | G-SB-736B-3 | G-SB-736B-5 | G-SB-736B-7 |
| SAMPLE DATE | | | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091021 | 20091112 | 20091112 | 20091112 |
| SAMPLE CODE | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 3 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 3 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 9.4 | 12 | 15 | 16 | 19 | 74 | 71 | 8497 | 1319 | 319 | 9.4 |
| BAP EQUIVALENT-POS | 22 | 15 C | 8.4 | 11 | 14 | 15 | 18 | 67 | 70 | 8497 | 1319 | 318 | 8.4 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.2 U | 1.2 U | 1.2 U | 13 | 17 | 8 U | 45 | 10000 | 1100 | 310 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 C | 8.4 | 10.2 | 12 | 12 | 14 | 58 | 54 | 5600 | 910 | 240 | 8.4 |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.5 UJ | 9.875 | 19 J | 15 | 19 | 90 | 67 | 8800 | 1200 | 340 | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 14 U | 32 | 2900 | 480 | 150 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 9.1 | 4.825 | 1.1 U | 16 | 19 | 71 | 49 | 7800 | 1000 | 300 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 11 U | 1.6 U | 730 | 130 | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.9 U | 1.85 U | 1.8 U | 1.8 U | 1.8 U | 13 U | 42 | 2500 | 430 | 110 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 17.5 | 24.25 | 31 | 56 | 69 | 219 | 289 | 38330 | 5250 | 1450 | 8.4 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-736B | SB-736C | SB-736C | SB-736C | SB-736C | SB-737 | SB-737 | SB-737 | SB-738 | SB-738 | SB-738 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-736B-9 | G-SB-736C-3 | G-SB-736C-5 | G-SB-736C-7 | G-SB-736C-9 | G-SB-737-3 | G-SB-737-5 | G-SB-737-7 | G-SB-738-4 | G-SB-738-6 | G-SB-738-8 |
| SAMPLE DATE | | | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091021 | 20091021 | 20091021 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 4 | 6 | 8 |
| BOTTOM DEPTH | | | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.6 U | 68 | 192 | 1.5 U | 27 | 1.6 U | 1.5 U | 1.5 U | 2.1 U | 2.3 U | 2.2 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.6 U | 68 | 191 | 1.5 U | 27 | 1.6 U | 1.5 U | 1.5 U | 2.1 U | 2.3 U | 2.2 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.2 U | 44 | 140 | 1.1 U | 20 | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.3 U | 1.3 U |
| BENZO(A)PYRENE | 22 | 15 C | 1.6 U | 53 | 150 | 1.5 U | 21 | 1.6 U | 1.5 U | 1.5 U | 2.1 U | 2.3 U | 2.2 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.5 U | 65 | 180 | 1.4 U | 21 | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2.1 U | 27 | 81 | 2 U | 2 U | 2 U | 2 U | 2 U | 1.6 U | 1.7 U | 1.7 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.1 U | 60 | 170 | 1.1 U | 19 | 1.1 U | 1.1 U | 1.1 U | 1.3 U | 1.4 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.8 U | 1.7 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.9 U | 34 | 82 | 1.8 U | 15 | 1.8 U | 1.8 U | 1.8 U | 0.41 U | 0.45 U | 0.44 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 283 | 803 | 0 U | 96 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-739 | SB-739 | SB-739 |
|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-739-4 | G-SB-739-6 | G-SB-739-8 |
| SAMPLE DATE | | | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB |
| TOP DEPTH | | | 4 | 6 | 8 |
| BOTTOM DEPTH | | | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 2.2 U | 2.2 U | 2.3 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 2.2 U | 2.2 U | 2.3 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.2 U | 1.3 U | 1.3 U |
| BENZO(A)PYRENE | 22 | 15 C | 2.2 U | 2.2 U | 2.3 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.6 U | 1.6 U | 1.6 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 1.6 U | 1.6 U | 1.7 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.3 U | 1.4 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.7 U | 1.7 U | 1.8 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 0.42 U | 0.44 U | 0.44 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA |
| **METALS (MG/KG)** | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | |
| PH | NC | NC | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-740 | SB-740 | SB-740 | SB-741 | SB-741 | SB-741 | SB-742 | SB-742 | SB-742 | SB-743 | SB-743 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-740-4 | G-SB-740-6 | G-SB-740-8 | G-SB-741-4 | G-SB-741-6 | G-SB-741-8 | G-SB-742-4 | G-SB-742-6 | G-SB-742-8 | G-SB-743-4 | G-SB-743-6 |
| SAMPLE DATE | | | 20091008 | 20091008 | 20091008 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 |
| BOTTOM DEPTH | | | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 2.2 U | 2.2 U | 2.1 U | 2.2 U | 2.9 | 2.2 U | 11 | 4.4 | 2.2 U | 2.2 U | 2.2 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 2.2 U | 2.2 U | 2.1 U | 2.2 U | 0.87 | 2.2 U | 11 | 3.5 | 2.2 U | 2.2 U | 2.2 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 2.2 J | 1.3 U | 6.3 J | 2.5 J | 1.3 U | 1.3 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 C | 2.2 U | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.2 U | 8.5 | 2.8 J | 2.2 U | 2.2 U | 2.2 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 5 J | 1.6 U | 6.9 J | 4.4 J | 1.6 U | 1.6 U | 1.6 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 6 J | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.4 U | 1.3 U | 1.3 U | 1.3 U | 3.1 J | 1.4 U | 7.8 J | 2.8 J | 1.4 U | 1.4 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 0.43 U | 0.42 U | 0.42 U | 0.42 U | 1.5 J | 0.44 U | 6.7 J | 0.43 U | 0.44 U | 0.43 U | 0.43 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 11.8 | 0 U | 42.2 | 12.5 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-743 | SB-744 | SB-744 | SB-744 | SB-745 | SB-745 | SB-745 | SB-745 | SB-745 | SB-745A | SB-745B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-743-8 | G-SB-744-4 | G-SB-744-6 | G-SB-744-8 | G-SB-745-4 | G-SB-745-4-AVG | G-SB-745-4-D | G-SB-745-6 | G-SB-745-8 | G-SB-745A-4 | G-SB-745B-4 |
| SAMPLE DATE | | | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 8 | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 | 4 |
| BOTTOM DEPTH | | | 8 | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 | 4 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 2.2 U | 2.3 U | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.2 U | 56 | 2.2 U | 1.5 U | 1.7 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 2.2 U | 2.3 U | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.2 U | 56 | 2.2 U | 1.5 U | 1.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.3 U | 1.25 U | 1.2 U | 38 | 1.2 U | 1.1 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 C | 2.2 U | 2.3 U | 2.3 U | 2.2 U | 2.2 U | 2.2 U | 2.2 U | 37 | 2.2 U | 1.5 U | 1.7 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.6 U | 1.7 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 60 | 1.6 U | 1.4 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 1.6 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.65 U | 1.6 U | 1.7 U | 1.6 U | 2 U | 2.2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 39 | 1.4 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.7 U | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.75 U | 1.7 U | 6.8 J | 1.7 U | 1.5 U | 1.7 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 0.43 U | 0.45 U | 0.46 U | 0.44 U | 0.44 U | 0.435 U | 0.43 U | 21 | 0.43 U | 1.8 U | 1.9 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 201.8 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (7) | 220 C(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (9) | 12000 N(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (10) | 2.3 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-745C | SB-746 | SB-746 | SB-746 | SB-747 | SB-747 | SB-747 | SB-748 | SB-748 | SB-748 | SB-749 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-745C-4 | G-SB-746-4 | G-SB-746-6 | G-SB-746-8 | G-SB-747-4 | G-SB-747-6 | G-SB-747-8 | G-SB-748-4 | G-SB-748-6 | G-SB-748-8 | G-SB-749-4 |
| SAMPLE DATE | | | 20091021 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 4 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | | | 4 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.7 U | 2.2 U | 2.2 U | 2.2 U | 2.1 U | 2.2 U | 2.2 U | 2.5 | 2.2 U | 2.2 U | 1.4 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.7 U | 2.2 U | 2.2 U | 2.2 U | 2.1 U | 2.2 U | 2.2 U | 0.48 | 2.2 U | 2.2 U | 1.4 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.2 U | 1.2 U | 1.2 U | 1.3 U | 1.2 U | 1.3 U | 1.3 U | 3.1 J | 1.3 U | 1.3 U | 1 U |
| BENZO(A)PYRENE | 22 | 15 C | 1.7 U | 2.2 U | 2.2 U | 2.2 U | 2.1 U | 2.2 U | 2.2 U | 2.2 U | 2.2 U | 2.2 U | 1.4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.6 J | 1.6 U | 1.6 U | 1.3 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2.2 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.6 U | 1.7 U | 1.7 U | 1.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.1 U | 1.3 U | 1.4 U | 1.4 U | 1.3 U | 1.4 U | 1.4 U | 8.5 | 1.4 U | 1.4 U | 0.99 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.8 U | 1.8 U | 1.4 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.9 U | 0.42 U | 0.43 U | 0.43 U | 0.41 U | 0.43 U | 0.44 U | 0.43 U | 0.44 U | 0.44 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 13.2 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-749 | SB-750 | SB-750 | SB-751 | SB-751 | SB-752 | SB-752 | SB-752 | SB-752 | SB-753 | SB-753 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-749-6 | G-SB-750-4 | G-SB-750-6 | G-SB-751-4 | G-SB-751-6 | G-SB-752-4 | G-SB-752-6 | G-SB-752-6-AVG | G-SB-752-6-D | G-SB-753-4 | G-SB-753-6 |
| SAMPLE DATE | | | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 6 | 4 | 6 | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 |
| BOTTOM DEPTH | | | 6 | 4 | 6 | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.5 U | 39 | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.5 U | 38 | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.1 U | 34 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 29 | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.4 U | 38 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2 U | 16 | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.1 U | 34 | 1.1 U | 1.1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.8 U | 17 | 1.8 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.7 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 168 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | 36 J | 39 J | 41 J | 41 J | 42.5 | 44 J | 46 J | 34 J |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-754 | SB-754 | SB-755 | SB-755 | SB-755 | SB-755 | SB-756 | SB-756 | SB-757 | SB-757 | SB-758 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-754-4 | G-SB-754-6 | G-SB-755-4 | G-SB-755-6 | G-SB-755-6-AVG | G-SB-755-6-D | G-SB-756-4 | G-SB-756-6 | G-SB-757-4 | G-SB-757-6 | G-SB-758-4 |
| SAMPLE DATE | | | | 20091021 | 20091021 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 | 6 | 4 |
| BOTTOM DEPTH | | | | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 | 6 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.6 U | 1.5 U | 15 | 15 | 16 U | 1.5 U | 1.5 U | 3674 | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 14 | 14 | 16 U | 1.5 U | 1.5 U | 3674 | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 6.1 U | 11 U | 1.1 U | 1.1 U | 2400 | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 11 | 11 | 16 U | 1.5 U | 1.5 U | 2500 | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | 1.4 U | 21 | 14 | 14 U | 1.4 U | 1.4 U | 3500 | 1.5 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2.1 U | 2 U | 8.7 | 8.7 | 20 U | 2 U | 1.9 U | 1100 | 2.1 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 6.05 U | 11 U | 1 U | 1 U | 2500 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 1.7 U | 8.85 U | 16 U | 1.5 U | 1.5 U | 430 | 1.6 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 1.8 U | 9.4 | 9.4 | 18 U | 1.7 U | 1.7 U | 1400 | 1.9 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 50.1 | 25.05 | 0 U | 0 U | 0 U | 13830 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 5000 | 62 J | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-758 | SB-759 | SB-759 | SB-759 | SB-760 | SB-760 | SB-760 | SB-761 | SB-761 | SB-761 | SB-761 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-758-6 | G-SB-759-3 | G-SB-759-5 | G-SB-759-7 | G-SB-760-3 | G-SB-760-5 | G-SB-760-7 | G-SB-761-3 | G-SB-761-5 | G-SB-761-7 | G-SB-761-9 |
| SAMPLE DATE | | | 20091103 | 20091113 | 20091113 | 20091113 | 20091113 | 20091113 | 20091113 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 6 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | 6 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.6 U | 1915 | 1.7 U | 13 | 1212 | 444 | 1.6 U | 1.5 U | 30 | 1.6 U | 6993 |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.6 U | 1915 | 1.7 U | 12 | 1212 | 444 | 1.6 U | 1.5 U | 29 | 1.6 U | 6993 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.1 U | 1100 | 1.3 U | 10 | 890 | 270 | 1.1 U | 1.1 U | 31 | 1.1 U | 5000 |
| BENZO(A)PYRENE | 22 | 15 C | 1.6 U | 1100 | 1.7 U | 11 | 790 | 300 | 1.6 U | 1.5 U | 21 | 1.6 U | 4900 |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.4 U | 1500 | 1.6 U | 1.5 U | 910 | 410 | 1.4 U | 1.4 U | 26 | 1.4 U | 6000 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2 U | 510 | 2.2 U | 2.1 U | 300 | 110 | 2 U | 2 U | 11 | 2 U | 1700 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.1 U | 1000 | 1.2 U | 9.5 | 920 | 300 | 1.1 U | 1 U | 26 | 1.1 U | 5700 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.6 U | 460 | 1.7 U | 1.6 U | 190 | 59 | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 700 |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.8 U | 890 | 2 U | 1.8 U | 480 | 160 | 1.8 U | 1.7 U | 26 | 1.8 U | 2700 |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 6560 | 0 U | 30.5 | 4480 | 1609 | 0 U | 0 U | 141 | 0 U | 26700 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (7) | 220 C(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (9) | 12000 N(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (10) | 2.3 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-761A | SB-761A | SB-761A | SB-761A | SB-761B | SB-761B | SB-761B | SB-761B | SB-761B | SB-761B | SB-761B | SB-761C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-761A-3 | G-SB-761A-5 | G-SB-761A-7 | G-SB-761A-9 | G-SB-761B-3 | G-SB-761B-3-AVG | G-SB-761B-3-D | G-SB-761B-5 | G-SB-761B-7 | G-SB-761B-9 | G-SB-761C-3 |
| SAMPLE DATE | | | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 5 | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | 3 | 5 | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 23 | 3432 | 15 | 2640 | 78 | 102 | 127 | 59 | 27 | 1392 | 16 |
| BAP EQUIVALENT-POS | 22 | 15 C | 22 | 3432 | 14 | 2640 | 78 | 102 | 126 | 59 | 26 | 1392 | 15 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 14 | 1800 | 9.9 | 1300 | 66 J | 93 | 120 J | 47 | 24 | 1200 | 16 |
| BENZO(A)PYRENE | 22 | 15 C | 18 | 2500 | 12 | 1900 | 53 J | 75.5 | 98 J | 39 | 20 | 970 | 12 |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 18 | 2000 | 12 | 1900 | 55 J | 75 | 95 J | 37 | 22 | 1000 | 12 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 7.9 | 1000 | 2.1 U | 810 | 28 J | 43 | 58 J | 22 | 8.3 | 490 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 18 | 2200 | 11 | 1700 | 73 J | 101.5 | 130 J | 55 | 27 | 1500 | 18 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | 420 | 1.6 U | 290 | 9.7 | 5.225 | 1.5 U | 8.7 | 1.6 U | 140 | 1.5 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 12 | 1200 | 1.8 U | 1200 | 31 J | 43.5 | 56 J | 23 | 11 | 560 | 1.7 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 87.9 | 11120 | 44.9 | 9100 | 315.7 | 436.35 | 557 | 231.7 | 112.3 | 5860 | 58 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-761C | SB-761C | SB-761C | SB-761D | SB-761D | SB-761D | SB-761D | SB-761D | SB-761D | SB-762 | SB-762 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-761C-5 | G-SB-761C-7 | G-SB-761C-9 | G-SB-761D-3 | G-SB-761D-5 | G-SB-761D-7 | G-SB-761D-7-AVG | G-SB-761D-7-D | G-SB-761D-9 | G-SB-762-3 | G-SB-762-5 |
| SAMPLE DATE | | | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091001 | 20091001 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | | | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 279 | 2.7 | 63 | 17 | 390 | 1.6 U | 1.55 U | 1.5 U | 28127 | 1.5 U | 355 |
| BAP EQUIVALENT-POS | 22 | 15 C | 279 | 0.89 | 63 | 17 | 390 | 1.6 U | 1.55 U | 1.5 U | 28127 | 1.5 U | 355 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 240 | 8.8 | 55 | 14 | 320 | 1.1 U | 1.1 U | 1.1 U | 23000 | 1.1 U | 250 |
| BENZO(A)PYRENE | 22 | 15 C | 190 | 1.6 U | 42 | 13 | 260 | 1.6 U | 1.55 U | 1.5 U | 20000 | 1.5 U | 240 |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 210 | 1.5 U | 46 | 13 | 270 | 1.4 U | 1.4 U | 1.4 U | 19000 | 1.4 U | 270 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 96 | 2.1 U | 22 | 2 U | 140 | 2 U | 2 U | 2 U | 9800 | 2 U | 110 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 250 | 9.1 | 61 | 15 | 370 | 1.1 U | 1.1 U | 1.1 U | 29000 | 1 U | 280 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 30 | 1.6 U | 8.3 | 1.5 U | 54 | 1.6 U | 1.55 U | 1.5 U | 2800 | 1.5 U | 47 |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 130 | 1.8 U | 26 | 8.6 | 150 | 1.8 U | 1.8 U | 1.8 U | 10000 | 1.7 U | 150 |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 1146 | 17.9 | 260.3 | 63.6 | 1564 | 0 U | 0 U | 0 U | 113600 | 0 U | 1347 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (7) | 220 C(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (9) | 12000 N(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (10) | 2.3 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-762 | SB-762 | SB-762A | SB-762A | SB-762A | SB-762A | SB-762B | SB-762B | SB-762B | SB-762B | SB-762C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-762-7 | G-SB-762-9 | G-SB-762A-3 | G-SB-762A-5 | G-SB-762A-7 | G-SB-762A-9 | G-SB-762B-3 | G-SB-762B-5 | G-SB-762B-7 | G-SB-762B-9 | G-SB-762C-3 |
| SAMPLE DATE | | | | 20091001 | 20091001 | 20091022 | 20091022 | 20091022 | 20091022 | 20091023 | 20091023 | 20091023 | 20091023 | 20091022 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 19 | 364 | 1.7 | 14 | 11 | 13512 | 1.5 U | 1.6 U | 1.6 U | 129 | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 18 | 364 | 0.0085 | 13 | 10 | 13512 | 1.5 U | 1.6 U | 1.6 U | 129 | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 14 | 230 | 1.1 U | 11 | 9.3 | 9900 | 1.1 U | 1.2 U | 1.2 U | 78 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 14 | 250 | 1.5 U | 11 | 8.6 | 9100 | 1.5 U | 1.6 U | 1.6 U | 91 | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 15 | 250 | 1.4 U | 10 | 8.3 | 9900 | 1.4 U | 1.5 U | 1.5 U | 100 | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 120 | 2 U | 2 U | 2.1 U | 4200 | 2 U | 2.1 U | 2.1 U | 47 | 1.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 16 | 260 | 8.5 | 11 | 9.6 | 10000 | 1.1 U | 1.1 U | 1.1 U | 100 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 49 | 1.5 U | 1.6 U | 1.6 U | 1900 | 1.5 U | 1.6 U | 1.6 U | 14 | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 9.3 | 160 | 1.7 U | 1.8 U | 1.9 U | 4800 | 1.8 U | 1.8 U | 1.8 U | 61 | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 68.3 | 1319 | 8.5 | 43 | 35.8 | 49800 | 0 U | 0 U | 0 U | 491 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-762C | SB-762C | SB-762D | SB-762D | SB-762D | SB-762D | SB-762D | SB-762D |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-762C-5 | G-SB-762C-7 | G-SB-762D-3 | G-SB-762D-5 | G-SB-762D-7 | G-SB-762D-7-AVG | G-SB-762D-7-D | G-SB-762D-9 |
| SAMPLE DATE | | | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | | | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 626 | 44 | 1.5 U | 240 | 1.6 U | 1.6 U | 1.6 U | 5047 |
| BAP EQUIVALENT-POS | 22 | 15 C | 626 | 43 | 1.5 U | 239 | 1.6 U | 1.6 U | 1.6 U | 5047 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 520 | 41 | 1.1 U | 150 | 1.2 U | 1.2 U | 1.2 U | 2700 |
| BENZO(A)PYRENE | 22 | 15 C | 440 | 33 | 1.5 U | 190 | 1.6 U | 1.6 U | 1.6 U | 3500 |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 460 | 38 | 1.4 U | 220 | 1.5 U | 1.5 U | 1.5 U | 3900 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 190 | 15 | 2 U | 97 | 2.1 U | 2.1 U | 2.1 U | 1400 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 520 | 44 | 1 U | 190 | 1.1 U | 1.1 U | 1.1 U | 3400 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 65 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 670 |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 210 | 19 | 1.7 U | 110 | 1.8 U | 1.8 U | 1.8 U | 2000 |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 2405 | 190 | 0 U | 957 | 0 U | 0 U | 0 U | 17570 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-763 | SB-763 | SB-763 | SB-763 | SB-763 | SB-763 | SB-763A | SB-763A | SB-763A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-763-3 | G-SB-763-3-AVG | G-SB-763-3-D | G-SB-763-5 | G-SB-763-7 | G-SB-763-9 | G-SB-763A-3 | G-SB-763A-5 | G-SB-763A-7 |
| SAMPLE DATE | | | | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **16** | 9.7 | 3.3 | **97** | **22** | 4.2 | 1.7 | 12 | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **15** | 8.5 | 1.6 | **97** | **22** | 2.6 | 0.0079 | 11 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 11 | 5.8 | 1.2 U | 63 | 16 | 8.5 | 1.1 U | 9.6 | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 11 | 5.9 | 1.6 U | **58** | **16** | 1.6 U | 1.5 U | 9.1 | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 13 | 6.875 | 1.5 U | 65 | 18 | 1.5 U | 1.4 U | 9.3 | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2.05 U | 2.1 U | 27 | 2.1 U | 2.1 U | 2 U | 2 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 13 | 6.775 | 1.1 U | 69 | 19 | 1.1 U | 7.9 | 8.9 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.55 U | 1.6 U | **21** | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 19 | 17.5 | 16 | 44 | 22 | 17 | 1.7 U | 1.7 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 67 | 41.5 | 16 | 347 | 91 | 25.5 | 7.9 | 36.9 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-763A | SB-763B | SB-763B | SB-763B | SB-763B | SB-763C | SB-763C | SB-763C | SB-763C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-763A-9 | G-SB-763B-3 | G-SB-763B-5 | G-SB-763B-7 | G-SB-763B-9 | G-SB-763C-3 | G-SB-763C-5 | G-SB-763C-7 | G-SB-763C-9 |
| SAMPLE DATE | | | | 20091023 | 20091027 | 20091027 | 20091027 | 20091027 | 20091023 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1539 | 1.5 U | 15495 | 1.7 | 270 | 17 | 9096 | 24 | 4608 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1539 | 1.5 U | 15495 | 0.0078 | 270 | 16 | 9096 | 23 | 4599 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 950 | 1.1 U | 9500 | 1.1 U | 150 | 14 | 6500 | 21 | 4100 |
| BENZO(A)PYRENE | 22 | 15 | C | 1100 | 1.5 U | 11000 | 1.5 U | 200 | 13 | 6200 | 18 | 3600 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1100 | 1.4 U | 10000 | 1.4 U | 180 | 13 | 7500 | 20 | 3700 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 550 | 2 U | 5400 | 2 U | 130 | 2.1 U | 2800 | 1.9 U | 1500 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1200 | 1.1 U | 11000 | 7.8 | 190 | 16 | 8000 | 24 | 4300 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 170 | 1.5 U | 1900 | 1.5 U | 25 | 1.6 U | 1100 | 1.5 U | 17 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 570 | 1.8 U | 5800 | 1.7 U | 110 | 1.9 U | 3600 | 9.4 | 2000 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 5640 | 0 U | 54600 | 7.8 | 985 | 56 | 35700 | 92.4 | 19200 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-763D | SB-763D | SB-763D | SB-763D | SB-763D | SB-763D | SB-764 | SB-764 | SB-764 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-763D-3 | G-SB-763D-5 | G-SB-763D-7 | G-SB-763D-7-AVG | G-SB-763D-7-D | G-SB-763D-9 | G-SB-764-3 | G-SB-764-5 | G-SB-764-5-AVG |
| SAMPLE DATE | | | | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091002 | 20091002 | 20091002 |
| SAMPLE CODE | | | | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 5 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 34 | 1.6 U | 1.6 U | 1.6 U | 2.8 | 124 | 1396 | 1857 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 33 | 1.6 U | 1.6 U | 1.6 U | 1.0 | 124 | 1394 | 1856 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 29 | 1.2 U | 1.2 U | 1.2 U | 9.9 | 110 | 1100 J | 1550 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 24 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 94 | 1100 | 1450 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 41 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 130 | 1200 J | 1650 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 13 | 2.1 U | 2.1 U | 2.1 U | 2.1 U | 50 | 510 J | 755 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 29 | 1.1 U | 1.1 U | 1.1 U | 8.3 | 110 | 1200 J | 1650 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 3.1 U | 3.55 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 17 | 1.8 U | 1.8 U | 1.8 U | 1.9 U | 50 | 580 | 765 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 153 | 0 U | 0 U | 0 U | 18.2 | 544 | 5690 | 7820 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-764 | SB-764 | SB-764 | SB-764A | SB-764A | SB-764A | SB-764A | SB-764B | SB-764B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-764-5-D | G-SB-764-7 | G-SB-764-9 | G-SB-764A-3 | G-SB-764A-5 | G-SB-764A-7 | G-SB-764A-9 | G-SB-764B-3 | G-SB-764B-5 |
| SAMPLE DATE | | | | 20091002 | 20091002 | 20091002 | 20091027 | 20091027 | 20091027 | 20091027 | 20091113 | 20091113 |
| SAMPLE CODE | | | | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 2319 | 1.5 U | 1301 | 1.6 U | 44 | 1.5 U | 2117 | 95 | 76 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 2317 | 1.5 U | 1300 | 1.6 U | 44 | 1.5 U | 2117 | 95 | 76 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 2000 J | 1.1 U | 1200 | 1.1 U | 27 | 1.1 U | 1700 | 48 | 34 |
| BENZO(A)PYRENE | 22 | 15 | C | 1800 | 1.5 U | 1000 | 1.6 U | 35 | 1.5 U | 1500 | 52 | 40 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 2100 J | 1.4 U | 1200 | 1.4 U | 35 | 1.4 U | 1700 | 75 | 54 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1000 J | 1.9 U | 630 | 2 U | 19 | 1.9 U | 740 | 24 | 20 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 2100 J | 1 U | 1300 | 1.1 U | 38 | 1 U | 1800 | 54 | 41 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4 U | 1.5 U | 3.2 U | 1.6 U | 1.5 U | 1.5 U | 200 | 26 | 23 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 950 | 1.7 U | 520 | 1.8 U | 22 | 1.7 U | 680 | 48 | 39 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 9950 | 0 U | 5850 | 0 U | 176 | 0 U | 8320 | 327 | 251 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-764B | SB-764B | SB-764C | SB-764C | SB-764C | SB-764C | SB-764D | SB-764D | SB-764D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-764B-5-AVG | G-SB-764B-5-D | G-SB-764C-3 | G-SB-764C-5 | G-SB-764C-7 | G-SB-764C-9 | G-SB-764D-3 | G-SB-764D-3-AVG | G-SB-764D-3-D |
| SAMPLE DATE | | | | 20091113 | 20091113 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 5 | 3 | 5 | 7 | 9 | 3 | 3 | 3 |
| BOTTOM DEPTH | | | | 5 | 5 | 3 | 5 | 7 | 9 | 3 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 91 | 106 | 15 | 7060 | 225 | 16912 | 11 | 12 | 13 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 91 | 106 | 14 | 7060 | 225 | 16912 | 10 | 11 | 12 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 44.5 | 55 | 12 | 5100 | 150 | 15000 | 9.4 | 9.4 | 9.4 |
| BENZO(A)PYRENE | 22 | 15 | C | 51 | 62 | 12 | 4600 | 150 | 12000 | 9.3 | 9.65 | 10 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 62.5 | 71 | 11 | 4800 | 170 | 14000 | 1.6 U | 4.7 | 8.6 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 26.5 | 33 | 2 U | 2400 | 56 | 4600 | 2.2 U | 2.15 U | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 54.5 | 68 | 14 | 6100 | 170 | 16000 | 13 | 12.5 | 12 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 24.5 | 26 | 1.5 U | 1200 | 34 | 1300 | 1.7 U | 1.65 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 44 | 49 | 1.7 U | 2400 | 82 | 6500 | 2 U | 1.95 U | 1.9 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 307.5 | 364 | 49 | 26600 | 812 | 69400 | 31.7 | 35.85 | 40 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-764D | SB-764D | SB-764D | SB-765 | SB-765 | SB-765 | SB-765 | SB-765A | SB-765A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-764D-5 | G-SB-764D-7 | G-SB-764D-9 | G-SB-765-3 | G-SB-765-5 | G-SB-765-7 | G-SB-765-9 | G-SB-765A-3 | G-SB-765A-5 |
| SAMPLE DATE | | | | 20091027 | 20091027 | 20091027 | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 21710 | 504 | 11763 | 1.6 U | 406 | 1.5 U | 67 | 105 | 327 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 21710 | 504 | 11763 | 1.6 U | 406 | 1.5 U | 66 | 105 | 327 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 20000 | 410 | 9700 | 1.1 U | 360 | 1.1 U | 57 | 69 | 240 |
| BENZO(A)PYRENE | 22 | 15 | C | 15000 | 340 | 8100 | 1.6 U | 270 | 1.5 U | 52 | 83 | 210 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 17000 | 370 | 9800 | 1.4 U | 300 | 1.4 U | 57 | 92 | 230 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 6800 | 180 | 3200 | 2 U | 130 | 2 U | 31 | 25 | 110 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 22000 | 480 | 11000 | 1.1 U | 330 | 1.1 U | 57 | 82 | 260 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 2100 | 65 | 1200 | 1.6 U | 53 | 1.5 U | 1.6 U | 1.5 U | 56 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 8200 | 190 | 4700 | 1.8 U | 150 | 1.8 U | 25 | 52 | 130 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 91100 | 2035 | 47700 | 0 U | 1593 | 0 U | 279 | 403 | 1236 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-765A | SB-765B | SB-765B | SB-765B | SB-765C | SB-765C | SB-765C | SB-765D | SB-765D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-765A-7 | G-SB-765B-3 | G-SB-765B-5 | G-SB-765B-7 | G-SB-765C-3 | G-SB-765C-5 | G-SB-765C-7 | G-SB-765D-3 | G-SB-765D-5 |
| SAMPLE DATE | | | | 20091028 | 20091113 | 20091113 | 20091113 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| BOTTOM DEPTH | | | | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 2.5 | **78** | **28** | **80** | **39** | **9950** | **39** | **30** | **3834** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 0.8 | **78** | **27** | **79** | **38** | **9950** | **38** | **29** | **3834** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 8 | 42 | 17 | 54 | 12 | **7200** | 12 | 8 | **2400** |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | **42** | **21** | **60** | **31** | **6500** | **31** | **28** | **2600** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 50 | 14 | 82 | 34 | **7200** | 31 | 1.4 U | **3000** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 19 | 23 | 23 | 2.1 U | **3300** | 8.1 | 2 U | 1100 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1 U | 49 | 25 | 67 | 12 | 6800 | 18 | 1.1 U | 2800 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | **23** | 1.6 U | 1.6 U | 1.6 U | **1600** | 1.5 U | 1.5 U | **530** |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 37 | 28 | 51 | 24 | **3700** | 25 | 1.8 U | **1500** |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N [6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 8 | 262 | 128 | 337 | 113 | 36300 | 125.1 | 36 | 13930 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-765D | SB-803 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 | SB-804 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-765D-7 | G-SB-803-03 | G-SB-803-05 | G-SB-803-07 | G-SB-803-09 | G-SB-804-03 | G-SB-804-05 | G-SB-804-07 | G-SB-804-09 |
| SAMPLE DATE | | | | 20091028 | 20100826 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 7 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | 3.9 U | 3.9 U | 3.6 U | 4.2 U | 3.8 U | 4.1 U | 3.8 U | 16 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | 3.9 U | 3.9 U | 3.6 U | 4.2 U | 3.8 U | 4.1 U | 3.8 U | 16 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | 3.9 U | 3.9 U | 3.6 U | 4.2 U | 3.8 U | 4.1 U | 3.8 U | 37 |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | 3.9 U | 3.9 U | 3.6 U | 14 | 3.8 U | 4.1 U | 3.8 U | 82 |
| ANTHRACENE | 2300000 | 1700000 | N | NA | 3.9 U | 3.9 U | 3.6 U | 38 J | 3.8 U | 4.1 U | 3.8 U | 270 |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 513 | 3.9 U | 34 | 3.6 U | 144 | 3.8 U | 29 | 3.8 U | 1432 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 513 | 3.9 U | 31 | 3.6 U | 142 | 3.8 U | 26 | 3.8 U | 1424 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 300 | 3.9 U | 3.9 U | 3.6 U | 83 | 3.8 U | 29 | 3.8 U | 1300 |
| BENZO(A)PYRENE | 22 | 15 | C | 340 | 3.9 U | 31 J | 3.6 UJ | 110 J | 3.8 U | 20 | 3.8 U | 1100 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 420 | 3.9 U | 3.9 U | 3.6 UJ | 150 J | 3.8 U | 22 | 3.8 U | 1200 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | 3.9 U | 3.9 U | 21 J | 100 J | 3.8 U | 17 | 3.8 U | 860 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 130 | 3.9 U | 3.9 U | 3.6 UJ | 59 J | 3.8 U | 13 | 3.8 U | 620 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 360 | 1.3 U | 16 | 1.2 U | 110 | 1.3 U | 31 | 1.3 U | 1600 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 76 | 3.9 U | 3.9 U | 3.6 UJ | 4.2 U | 3.8 U | 4.1 U | 3.8 U | 16 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | 3.9 U | 31 J | 20 J | 150 J | 3.8 U | 46 | 3.8 U | 2500 |
| FLUORENE | 310000 | 230000 | N | NA | 3.9 U | 3.9 U | 3.6 U | 4.2 U | 3.8 U | 4.1 U | 3.8 U | 16 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 230 | 3.9 U | 3.9 U | 3.6 UJ | 80 J | 3.8 U | 12 | 3.8 U | 660 |
| NAPHTHALENE | 160000 | 3600 | C | NA | 3.9 U | 3.9 U | 3.6 U | 4.2 U | 3.8 U | 4.1 U | 3.8 U | 16 U |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | 3.9 U | 19 J | 3.6 U | 66 J | 3.8 U | 32 | 3.8 U | 1500 |
| PYRENE | 230000 | 170000 | N | NA | 3.9 U | 28 | 3.6 U | 230 | 3.8 U | 68 | 3.8 U | 4100 |
| TOTAL PAHS | NC | NC | | 1856 | 0 U | 125 | 41 | 1190 | 0 U | 290 | 0 U | 15829 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-805 G-SB-805-07 20100824 NORMAL SO NORMAL SB 7 7 | SB-805 G-SB-805-09 20100824 NORMAL SO NORMAL SB 9 9 | SB-806 G-SB-806-03 20100824 NORMAL SO NORMAL SB 3 3 | SB-806 G-SB-806-05 20100824 NORMAL SO NORMAL SB 5 5 | SB-806 G-SB-806-07 20100824 ORIG SO NORMAL SB 7 7 | SB-806 G-SB-806-07-AVG 20100824 AVG SO NORMAL SB 7 7 | SB-806 G-SB-806-07-D 20100824 DUP SO NORMAL SB 7 7 | SB-806 G-SB-806-09 20100824 NORMAL SO NORMAL SB 9 9 | SB-807 G-SB-807-03 20100825 ORIG SO NORMAL SB 3 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 76 U | 3.7 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 480 | 3.7 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 660 J | 3.7 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 520 | 3.7 U |
| ANTHRACENE | 2300000 | 1700000 | N | 4 U | 9.8 | 4.2 U | 9.1 | 3.8 U | 3.95 U | 4.1 U | 1700 J | 3.7 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 4 U | 60 | 4.2 U | 67 | 3.8 U | 3.95 U | 4.1 U | 15215 | 3.7 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 4 U | 58 | 4.2 U | 65 | 3.8 U | 3.95 U | 4.1 U | 15215 | 3.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4 U | 46 | 4.2 U | 58 | 3.8 U | 3.95 U | 4.1 U | 10000 | 3.7 U |
| BENZO(A)PYRENE | 22 | 15 | C | 4 U | 45 | 4.2 U | 48 | 3.8 U | 3.95 U | 4.1 U | 10000 J | 3.7 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4 U | 50 | 4.2 U | 68 | 3.8 U | 3.95 U | 4.1 U | 14000 J | 3.7 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | 4 U | 41 | 4.2 U | 56 | 3.8 U | 3.95 U | 4.1 U | 9200 J | 3.7 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4 U | 27 | 4.2 U | 30 | 3.8 U | 3.95 U | 4.1 U | 5300 J | 3.7 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | 81 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 58 | 1.4 U | 76 | 1.3 U | 1.35 U | 1.4 U | 12000 | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 2100 J | 3.7 U |
| FLUORANTHENE | 310000 | 230000 | N | 4 U | 76 | 4.2 U | 88 | 3.8 U | 3.95 U | 4.1 U | 16000 J | 3.7 U |
| FLUORENE | 310000 | 230000 | N | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 76 U | 3.7 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4 U | 30 | 4.2 U | 40 | 3.8 U | 3.95 U | 4.1 U | 6500 J | 3.7 U |
| NAPHTHALENE | 160000 | 3600 | C | 4 U | 4.4 U | 4.2 U | 3.8 U | 3.8 U | 3.95 U | 4.1 U | 510 | 3.7 U |
| PHENANTHRENE | 2300000 | 170000 | N[6] | 4 U | 40 | 4.2 U | 38 | 3.8 U | 3.95 U | 4.1 U | 7600 J | 3.7 U |
| PYRENE | 230000 | 170000 | N | 4 U | 120 | 4.2 U | 140 | 3.8 U | 3.95 U | 4.1 U | 30000 | 3.7 U |
| TOTAL PAHS | NC | NC | | 0 U | 542.8 | 0 U | 651.1 | 0 U | 0 U | 0 U | 126570 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-807 | SB-807 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 | SB-808 | SB-808 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-SB-807-03-AVG | G-SB-807-03-D | G-SB-807-05 | G-SB-807-07 | G-SB-807-09 | G-SB-808-03 | G-SB-808-05 | G-SB-808-07 | G-SB-808-09 |
| SAMPLE DATE | | | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 7.6 U | 3.7 U | 37 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 20 | 3.7 U | 37 U |
| ACENAPHTHENE | 470000 | 340000 N | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 18 | 3.7 U | 37 U |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 22 | 3.7 U | 77 | 3.7 U | 80 |
| ANTHRACENE | 2300000 | 1700000 N | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 180 | 3.7 U | 380 |
| BAP EQUIVALENT-HALFND | 22 | 15 | 3.65 U | 3.6 U | 3.8 U | 3.9 U | 51 | 3.7 U | 2009 | 3.7 U | 8573 |
| BAP EQUIVALENT-POS | 22 | 15 C | 3.65 U | 3.6 U | 3.8 U | 3.9 U | 49 | 3.7 U | 2009 | 3.7 U | 8573 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 35 | 3.7 U | 1200 | 3.7 U | 4500 |
| BENZO(A)PYRENE | 22 | 15 C | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 38 | 3.7 U | 1300 | 3.7 U | 6000 |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 43 | 3.7 U | 1200 | 3.7 U | 5900 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 33 | 3.7 U | 1300 | 3.7 U | 5900 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 16 | 3.7 U | 710 | 3.7 U | 2600 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | 80 U | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 1.2 U | 1.2 U | 1.3 UL | 1.3 U | 41 | 1.2 U | 1200 | 1.2 U | 7000 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 370 | 3.7 U | 1100 |
| FLUORANTHENE | 310000 | 230000 N | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 50 | 3.7 U | 1200 | 3.7 U | 5700 |
| FLUORENE | 310000 | 230000 N | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 25 | 3.7 U | 37 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 25 | 3.7 U | 910 | 3.7 U | 4000 |
| NAPHTHALENE | 160000 | 3600 C | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 4.3 U | 3.7 U | 22 | 3.7 U | 37 U |
| PHENANTHRENE | 2300000 | 170000 N[6] | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 19 | 3.7 U | 240 | 3.7 U | 980 |
| PYRENE | 230000 | 170000 N | 3.65 U | 3.6 U | 3.8 UL | 3.9 U | 81 | 3.7 U | 2500 | 3.7 U | 11000 |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 403 | 0 U | 12472 | 0 U | 55140 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-809 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 | SB-810 | SB-811 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-809-03 | G-SB-809-05 | G-SB-809-07 | G-SB-809-09 | G-SB-810-03 | G-SB-810-05 | G-SB-810-07 | G-SB-810-09 | G-SB-811-05 |
| SAMPLE DATE | | | | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 3.9 U | 3.9 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 3.6 U | 4.2 U | 16 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.9 U | 3.9 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 3.6 U | 4.2 U | 16 U |
| ACENAPHTHENE | 470000 | 340000 | N | 3.9 U | 3.9 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 3.6 U | 4.2 U | 36 |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | 3.9 U | 3.9 U | 3.9 U | 7.9 | 4 U | 18 | 3.6 U | 4.2 U | 96 |
| ANTHRACENE | 2300000 | 1700000 | N | 3.9 U | 21 J | 3.9 U | 36 J | 4 U | 31 | 3.6 U | 4.2 U | 240 |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 3.9 U | 71 | 3.9 U | 179 | 5.4 | 248 | 11 | 18 | 1927 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3.9 U | 69 | 3.9 U | 177 | 1 | 246 | 8.4 | 15 | 1919 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.9 U | 43 J | 3.9 U | 110 | 4 U | 140 | 3.6 U | 4.2 UJ | 1500 |
| BENZO(A)PYRENE | 22 | 15 | C | 3.9 U | 59 J | 3.9 U | 140 J | 4 U | 200 | 8.4 | 14 | 1500 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3.9 U | 52 J | 3.9 U | 170 J | 10 | 200 | 3.6 U | 13 | 1700 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | 3.9 U | 3.9 UJ | 3.9 U | 100 J | 4 U | 160 | 3.6 U | 4.2 U | 1200 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.9 UJ | 29 J | 3.9 U | 89 J | 4 U | 100 | 3.6 U | 4.2 U | 670 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | 79 U | NA | NA | NA | 74 U | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 47 J | 1.3 U | 150 | 1.3 U | 190 | 8.5 | 1.4 UJ | 1700 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.9 U | 3.9 UJ | 3.9 U | 3.9 U | 4 U | 4.1 U | 3.6 U | 4.2 U | 16 U |
| FLUORANTHENE | 310000 | 230000 | N | 3.9 U | 71 J | 3.9 U | 170 J | 8.4 | 220 | 9.7 | 4.2 U | 2500 |
| FLUORENE | 310000 | 230000 | N | 3.9 U | 3.9 UJ | 3.9 U | 3.9 U | 4 U | 4.1 U | 3.6 U | 4.2 U | 16 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.9 U | 3.9 UJ | 3.9 U | 82 J | 4 U | 110 | 3.6 U | 4.2 U | 910 |
| NAPHTHALENE | 160000 | 3600 | C | 3.9 U | 3.9 U | 3.9 U | 3.9 U | 4 U | 4.1 U | 3.6 U | 4.2 U | 16 U |
| PHENANTHRENE | 2300000 | 170000 | N[6] | 3.9 U | 39 J | 3.9 UJ | 77 J | 4 U | 42 | 3.6 U | 4.2 U | 1100 |
| PYRENE | 230000 | 170000 | N | 3.9 U | 110 J | 3.9 U | 270 | 9.6 | 400 | 16 | 26 J | 4200 |
| TOTAL PAHS | NC | NC | | 0 U | 471 | 0 U | 1401.9 | 28 | 1811 | 42.6 | 53 | 17352 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-811 | SB-811 | SB-811 | SB-811 | SB-812 | SB-812 | SB-812 | SB-812 | SB-813 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-811-07 | G-SB-811-07-AVG | G-SB-811-07-D | G-SB-811-09 | G-SB-812-03 | G-SB-812-05 | G-SB-812-07 | G-SB-812-09 | G-SB-813-03 |
| SAMPLE DATE | | | | 20100823 | 20100823 | 20100823 | 20100823 | 20100824 | 20100824 | 20100824 | 20100824 | 20100826 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 18 | 3.9 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 31 | 3.9 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 8 U | 3.9 U |
| ACENAPHTHYLENE | 470000 | 340000 | N [5] | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 72 | 3.9 U |
| ANTHRACENE | 2300000 | 1700000 | N | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 24 J | 3.9 U | 130 | 3.9 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 4 U | 3.95 U | 3.9 U | 57 | 3.8 U | 66 | 3.9 U | 780 | 3.9 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 4 U | 3.95 U | 3.9 U | 55 | 3.8 U | 64 | 3.9 U | 776 | 3.9 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4 U | 3.95 U | 3.9 U | 44 | 3.8 U | 35 | 3.9 U | 540 | 3.9 U |
| BENZO(A)PYRENE | 22 | 15 | C | 4 U | 3.95 U | 3.9 U | 43 | 3.8 U | 55 J | 3.9 U | 610 J | 3.9 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4 U | 3.95 U | 3.9 U | 43 | 3.8 U | 48 J | 3.9 U | 700 J | 3.9 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N [6] | 4 U | 3.95 U | 3.9 U | 41 | 3.8 U | 4.1 U | 3.9 U | 570 | 3.9 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4 U | 3.95 U | 3.9 U | 21 | 3.8 U | 29 J | 3.9 U | 270 | 3.9 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | 79 U | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 1.3 U | 1.3 U | 49 | 1.3 U | 42 | 1.3 U | 610 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 8 U | 3.9 U |
| FLUORANTHENE | 310000 | 230000 | N | 4 U | 3.95 U | 3.9 U | 63 | 3.8 U | 56 J | 3.9 U | 700 J | 3.9 U |
| FLUORENE | 310000 | 230000 | N | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 8 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4 U | 3.95 U | 3.9 U | 26 | 3.8 U | 4.1 U | 3.9 U | 390 J | 3.9 U |
| NAPHTHALENE | 160000 | 3600 | C | 4 U | 3.95 U | 3.9 U | 4.4 U | 3.8 U | 4.1 U | 3.9 U | 40 | 3.9 U |
| PHENANTHRENE | 2300000 | 170000 | N [6] | 4 U | 3.95 U | 3.9 U | 25 | 3.8 U | 24 J | 3.9 U | 240 | 3.9 U |
| PYRENE | 230000 | 170000 | N | 4 U | 3.95 U | 3.9 U | 100 | 3.8 U | 82 | 8.9 J | 1200 J | 3.9 U |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 455 | 0 U | 395 | 8.9 | 6103 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C [8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N [9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N [11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N [12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-813<br>G-SB-813-05<br>20100826<br>NORMAL<br>SO<br>NORMAL<br>SB<br>5<br>5 | SB-813<br>G-SB-813-07<br>20100826<br>NORMAL<br>SO<br>NORMAL<br>SB<br>7<br>7 | SB-813<br>G-SB-813-09<br>20100826<br>NORMAL<br>SO<br>NORMAL<br>SB<br>9<br>9 |
|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 4 U | 3.9 U | 900 |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4 U | 3.9 U | 650 |
| ACENAPHTHENE | 470000 | 340000 | N | 4 U | 3.9 U | 1200 J |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | 4 U | 3.9 U | 1000 |
| ANTHRACENE | 2300000 | 1700000 | N | 4 U | 3.9 U | 3500 J |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 4 U | 3.9 U | **10566** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 4 U | 3.9 U | **10524** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4 U | 3.9 U | **10000** |
| BENZO(A)PYRENE | 22 | 15 | C | 4 U | 3.9 U | **8100 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4 U | 3.9 U | **9400 J** |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | 4 U | 3.9 U | 5700 J |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4 U | 3.9 U | **4300 J** |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 79 U | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | 79 U | NA |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 1.3 U | 11000 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4 U | 3.9 U | 84 U |
| FLUORANTHENE | 310000 | 230000 | N | 21 J | 3.9 U | 17000 J |
| FLUORENE | 310000 | 230000 | N | 4 U | 3.9 U | 1800 J |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4 U | 3.9 U | **4300 J** |
| NAPHTHALENE | 160000 | 3600 | C | 4 U | 3.9 U | 220 |
| PHENANTHRENE | 2300000 | 170000 | N[6] | 4 U | 3.9 U | 18000 J |
| PYRENE | 230000 | 170000 | N | 11 | 3.9 U | 31000 |
| TOTAL PAHS | NC | NC | | 32 | 0 U | 127170 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | |
| PH | NC | NC | | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-2 | G-TP-2 | G-TP-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-TP-1-1-7-8 | G-TP-1-2-7-8 | G-TP-1-5-2-3 | G-TP-1-6-2-3 | G-TP-1-7-5-7 | G-TP-1-8-5-7 | G-TP-2-3-6-7 | G-TP-2-8-5-6 | G-TP-2-9-5-6 |
| SAMPLE DATE | | | | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 7 | 2 | 2 | 5 | 5 | 6 | 5 | 5 |
| BOTTOM DEPTH | | | | 8 | 8 | 3 | 3 | 7 | 7 | 7 | 6 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 4.1 U | NA | 3.8 U | NA | 4 U | NA | 39 | 3.9 U | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4.1 U | NA | 3.8 U | NA | 4 U | NA | 64 | 3.9 U | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 4.1 U | NA | 3.8 U | NA | 4 U | NA | 29 | 3.9 U | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | 8.6 | NA | 3.8 U | NA | 4 U | NA | 170 | 19 | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 12 | NA | 3.8 U | NA | 4 U | NA | 320 | 34 | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 64 | NA | 3.8 U | NA | 37 | NA | 1610 | 155 | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | 62 | NA | 3.8 U | NA | 35 | NA | 1610 | 153 | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 40 | NA | 3.8 U | NA | 22 | NA | 1000 | 110 | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 50 J | NA | 3.8 U | NA | 28 J | NA | 1100 J | 120 J | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 41 | NA | 3.8 U | NA | 17 | NA | 1200 | 130 | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | 31 | NA | 3.8 U | NA | 13 | NA | 880 | 100 | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 18 | NA | 3.8 U | NA | 10 | NA | 540 | 53 | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 89 J | NA | 78 U | NA | 80 U | NA | NA | 83 J |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | 96 J | NA | 78 U | NA | 80 U | NA | NA | 84 J |
| CHRYSENE | 22000 | 15000 | C | 47 | NA | 1.3 U | NA | 25 | NA | 1200 | 130 | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4.1 U | NA | 3.8 U | NA | 4 U | NA | 220 J | 3.9 U | NA |
| FLUORANTHENE | 310000 | 230000 | N | 62 | NA | 3.8 U | NA | 37 | NA | 1700 | 170 | NA |
| FLUORENE | 310000 | 230000 | N | 4.1 U | NA | 3.8 U | NA | 4 U | NA | 56 | 3.9 U | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 35 J | NA | 3.8 U | NA | 25 J | NA | 630 J | 80 J | NA |
| NAPHTHALENE | 160000 | 3600 | C | 4.1 U | NA | 3.8 U | NA | 4 U | NA | 87 | 8.4 | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | 30 | NA | 3.8 U | NA | 4 U | NA | 800 | 82 | NA |
| PYRENE | 230000 | 170000 | N | 92 | NA | 3.8 U | NA | 55 | NA | 2500 | 260 | NA |
| TOTAL PAHS | NC | NC | | 466.6 | NA | 0 U | NA | 232 | NA | 12496 | 1296.4 | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | OW-5 | OW-5 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | OW-5-4 | OW-5-6 | G-SB-91RE-10 | G-SB-91RE-3 | G-SB-91RE-5 | G-SB-91RE-6 | G-SB-91RE-7 | G-SB-91RE-8 | G-SB-91RE-8-AVG |
| SAMPLE DATE | | | | 20071128 | 20071128 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 6 | 10 | 3 | 5 | 6 | 7 | 8 | 8 |
| BOTTOM DEPTH | | | | 4 | 6 | 10 | 3 | 5 | 6 | 7 | 8 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 11 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 8.7 J | 14 J | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 15 B | 14 B | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 110 UR | 120 UR | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | 11 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | 5.7 U | 5.9 U | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | 137 | 232 | 95 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | 137 | 232 | 95 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | 56 | 85 | 35 | 1.2 U | 1.2 U | 1.1 U | 1.15 U |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | 89 | 150 | 58 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | 91 | 160 | 60 | 1.5 U | 1.5 U | 1.4 U | 1.45 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | 28 | 45 | 26 | 2.1 U | 2.1 U | 2 U | 2.05 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | 70 | 92 | 49 | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | 26 | 46 | 22 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | 70 | 110 | 49 | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | 430 | 688 | 299 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 38 U | 39 U | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | 0 U | 0 U | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.34 J | 0.17 B | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 2.1 L | 1.8 L | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | 24.2 | 14.4 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 0.44 | 0.33 | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 0.22 | 0.085 | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | 11.4 J | 8 J | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | 5.4 J | 2.6 J | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 6.4 J | 6 J | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | 17200 J | 15700 J | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 10.4 J | 5.9 J | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | 123 J | 67.3 J | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | 0.019 UL | 0.02 UL | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 4.9 J | 3.2 J | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 0.18 UL | 0.19 UL | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | 0.21 | 0.12 | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 0.073 | 0.053 | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | 15.7 J | 13.3 J | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 20.2 K | 13.1 K | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 87.2 | 85.4 | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-091 | SB-091 | SB-091A | SB-091A | SB-091A | SB-091A | SB-091A | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-91RE-8-D | G-SB-91RE-9 | G-SB-91REA-3 | G-SB-91REA-5 | G-SB-91REA-7 | G-SB-91REA-7-AVG | G-SB-91REA-7-D | G-SB-91REA-9 | G-SB-91REB-3 |
| SAMPLE DATE | | | | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091102 |
| SAMPLE CODE | | | | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | | 8 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 288 | 1.4 U | 1727 | 24 | 27 | 30 | 3684 | 37 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 288 | 1.4 U | 1727 | 23 | 26 | 29 | 3684 | 36 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 170 | 1 U | 670 | 1.1 U | 1.1 U | 1.1 U | 2800 | 22 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 190 | 1.4 U | 1200 | 23 | 23.5 | 24 | 2500 | 29 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 210 | 1.3 U | 1200 | 1.4 UJ | 13.35 | 26 J | 2600 | 46 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 87 | 1.9 U | 440 | 2 U | 2.25 | 3.5 J | 1100 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 200 | 0.98 U | 900 | 1.1 U | 1.1 U | 1.1 U | 2800 | 21 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 46 | 1.4 U | 250 | 1.6 U | 1.55 U | 1.5 U | 480 | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 130 | 1.6 U | 850 | 1.8 UJ | 11.95 | 23 J | 1500 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 1033 | 0 U | 5510 | 23 | 49.75 | 76.5 | 13780 | 118 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-091B | SB-091B | SB-091B | SB-091C | SB-091C | SB-091C | SB-091C | SB-092 | SB-092 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-91REB-5 | G-SB-91REB-7 | G-SB-91REB-9 | G-SB-91REC-3 | G-SB-91REC-5 | G-SB-91REC-7 | G-SB-91REC-9 | G-SB-92RE-10 | G-SB-92RE-3 |
| SAMPLE DATE | | | | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20090929 | 20090929 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 10 | 3 |
| BOTTOM DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 10 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 359 | 1.5 U | 1.5 U | 1.6 U | 443 | 73 | 217 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 359 | 1.5 U | 1.5 U | 1.6 U | 443 | 73 | 217 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 140 | 1.1 U | 1.1 U | 1.1 U | 150 | 36 | 130 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 290 | 1.5 U | 1.5 U | 1.6 U | 320 | 39 | 140 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 310 | 1.4 U | 1.4 U | 1.4 U | 330 | 42 | 140 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 130 | 2 U | 2 U | 2 U | 150 | 17 | 73 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 200 | 1.1 U | 1.1 U | 1.1 U | 190 | 41 | 120 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.9 U | 1.5 U | 1.5 U | 1.6 U | 53 | 22 | 40 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 220 | 1.8 U | 1.8 U | 1.8 U | 200 | 35 | 89 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 1290 | 0 U | 0 U | 0 U | 1393 | 232 | 732 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | 3.2 | 2.1 |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-92RE-4 | G-SB-92RE-5 | G-SB-92RE-6 | G-SB-92RE-7 | G-SB-92RE-7-AVG | G-SB-92RE-7-D | G-SB-92RE-8 | G-SB-92RE-9 | G-SB-92REC-3 |
| SAMPLE DATE | | | | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091102 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| BOTTOM DEPTH | | | | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 28 | 9028 | 988 | 70 | 66 | 62 | 1.5 U | 23492 | 11.1341 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 28 | 9028 | 988 | 70 | 66 | 62 | 1.5 U | 23492 | 10.2891 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 11 | 5400 | 690 | 36 | 33.5 | 31 | 1.1 U | 18000 | 8.8 |
| BENZO(A)PYRENE | 22 | 15 | C | 9.3 | 6100 | 680 | 41 | 37.5 | 34 | 1.5 U | 16000 | 8.4 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 12 | 7200 | 700 | 44 | 41 | 38 | 1.4 U | 21000 | 10 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2200 | 330 | 20 | 18 | 16 | 2 U | 3600 | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 12 | 5700 | 690 | 45 | 41.5 | 38 | 1.1 U | 16000 | 9.1 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 14 | 1300 | 130 | 17 | 17.5 | 18 | 1.5 U | 2700 | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 19 | 3400 | 350 | 35 | 33 | 31 | 1.8 U | 8400 | 1.7 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 77.3 | 31300 | 3570 | 238 | 222 | 206 | 0 U | 85700 | 36.3 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 4.1 | 3.2 | 6.9 | 8.5 | 6.9 | 5.3 | 1.6 | 8.3 | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-092C | SB-092C | SB-092C | SB-092D | SB-092D | SB-092D | SB-092D | SB-181 | SB-182 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-92REC-5 | G-SB-92REC-7 | G-SB-92REC-9 | G-SB-92RED-3 | G-SB-92RED-5 | G-SB-92RED-7 | G-SB-92RED-9 | SB-181-05 | SB-182-05 |
| SAMPLE DATE | | | | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20041102 | 20041102 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 5 |
| BOTTOM DEPTH | | | | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | 1 U | 1 U |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | 1 U | 1 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | 1 U | 1 U |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | 1 U | 1 U |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | 1 U | 1 U |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 386 | 1.5 U | 31 | 23 | 1364 | 1.6 U | 4718 | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | 385 | 1.5 U | 30 | 22 | 1364 | 1.6 U | 4718 | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 210 | 1.1 U | 18 | 1.1 U | 700 | 1.1 U | 2800 | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 320 | 1.5 U | 24 | 18 | 980 | 1.6 U | 3200 | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 300 | 1.4 U | 24 | 21 | 990 | 1.4 U | 3400 | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 83 | 2 U | 13 | 2 U | 480 | 2 U | 1500 | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 240 | 1.1 U | 25 | 1.1 U | 840 | 1.1 U | 3300 | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 140 | 1.6 U | 690 | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 130 | 1.8 U | 16 | 20 | 690 | 1.8 U | 1900 | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 1283 | 0 U | 120 | 59 | 4820 | 0 U | 16790 | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | 12000 U | 12000 U |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-184 | SB-185 | SB-186 | SB-187 | SB-188 | SB-189 | SB-190 | SB-191 | SB-192 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-184-05 | SB-185-05 | SB-186-05 | SB-187-05 | SB-188-05 | SB-189-05 | SB-190-05 | SB-191-05 | SB-192-05 |
| SAMPLE DATE | | | | 20041103 | 20041103 | 20041103 | 20041105 | 20041105 | 20041105 | 20041109 | 20041109 | 20041109 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| BOTTOM DEPTH | | | | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 3 | 1 U | 1 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 1 U | 1 U | 1 U | 2 | 1 U | 1 U | 140 | 1 U | 2 |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | 1 U | 1 U | 1 U | 3 | 1 U | 1 U | 19 | 1 U | 1 U |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 12000 U | 12000 U | 12000 U | 12000 U | 12000 U | 13000 U | 12000 U | 11000 U | 32000 |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-194 | SB-194 | SB-195 | SB-195 | SB-196 | SB-196 | SB-197 | SB-197 | SB-198 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-194-05 | SB-194-10 | SB-195-05 | SB-195-10 | SB-196-05 | SB-196-10 | SB-197-05 | SB-197-10 | SB-198-05 |
| SAMPLE DATE | | | | 20050511 | 20050511 | 20050510 | 20050510 | 20050511 | 20050511 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | | | | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 0.54 J | 2.5 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 2.2 U | 2.1 U | 1.1 J | 0.82 J | 2.1 U | 2.5 U | 2.2 U | 0.69 J | 2.5 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 8.96 U | 8.26 U | 8.73 U | 9.2 U | 3.58 J | 3.64 J | 3.85 J | 9.03 U | 8.17 J |
| ACETONE | 7000000 | 6100000 | N | 8.8 J | 13 J | 6.8 J | 3.6 J | 39.5 J | 38.5 J | 51 J | 7.6 J | 89.6 J |
| BENZENE | 12000 | 1100 | C | 2.24 U | 2.07 U | 2.18 U | 2.3 U | 2.12 U | 2.5 U | 2.24 U | 2.26 U | 2.46 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 2.2 U | 2.1 U | 1.2 J | 2.3 U | 2.1 U | 2.1 J | 0.83 J | 0.68 J | 0.76 J |
| ETHYLBENZENE | 780000 | 5400 | C | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 4.5 U | 4.1 U | 4.4 U | 4.6 U | 4.2 U | 5 U | 4.5 U | 4.5 U | 4.9 U |
| NAPHTHALENE | 160000 | 3600 | C | 2.2 U | 2.1 U | 0.62 J | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| N-BUTYLBENZENE | NC | NC | | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| N-PROPYLBENZENE | NC | 340000 | N | 2.2 U | 2.1 U | 2.2 U | 2.3 U | 2.1 U | 2.5 U | 2.2 U | 2.3 U | 2.5 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 9 U | 8 U | 9 U | 9 U | 8 U | 10 U | 9 U | 7 J | 10 U |
| TOLUENE | 630000 | 500000 | N | 3.8 | 1.4 J | 2.8 | 2 J | 2.1 U | 3.9 | 1.6 J | 1.2 J | 2.5 U |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | 6.7 U | 6.2 U | 6.5 U | 6.9 U | 6.4 U | 7.5 U | 6.7 U | 6.8 U | 7.4 U |
| TRICHLOROETHENE | 1600 | 2800 | C | 2.2 U | 2.1 U | 0.98 J | 0.92 J | 2.1 U | 1.1 J | 0.62 J | 1.3 J | 2.5 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | 42.3 B | 52.3 B | 136 J | 134 J | 50.8 B | 56.1 B | 55.7 B | 67.3 B | 69.8 B |
| CARBAZOLE | 32000 | NC | | 200 U | 187 U | 193 U | 195 U | 193 U | 213 U | 189 U | 200 U | 218 U |
| DIBENZOFURAN | 7800 | 7800 | N | 117 U | 110 U | 114 U | 114 U | 113 U | 125 U | 111 U | 117 U | 128 U |
| PHENOL | 2300000 | 1800000 | N | 399 U | 375 U | 386 U | 389 U | 386 U | 426 U | 379 U | 399 U | 436 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 82.2 U | 77.1 U | 79.6 U | 80.1 U | 79.4 U | 87.7 U | 78 U | 82.2 U | 89.9 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| ACENAPHTHENE | 470000 | 340000 | N | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| ANTHRACENE | 2300000 | 1700000 | N | 82 U | 77 U | 130 | 80 U | 38 J | 88 U | 38 J | 82 U | 90 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 82 U | 77 U | 1814 | 296 | 500 | 144 | 355 | 82 U | 109 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 82 U | 77 U | 1814 | 256 | 500 | 100 | 355 | 82 U | 55 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 82 U | 77 U | 1130 | 165 | 297 | 69 J | 245 | 82 U | 38 J |
| BENZO(A)PYRENE | 22 | 15 | C | 82 U | 77 U | 1410 | 211 | 370 | 82 J | 249 | 82 U | 51 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 82 U | 77 U | 1270 J | 191 | 275 | 56 J | 169 | 82 U | 90 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | 82 U | 77 U | 372 | 66 J | 182 | 69 J | 148 | 82 U | 48 J |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 82 U | 77 U | 1610 | 221 | 330 | 67 J | 235 | 82 U | 50 J |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 82 U | 77 U | 1390 | 197 | 384 | 85 J | 306 | 82 U | 48 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 82 U | 77 U | 108 | 80 U | 53 J | 88 U | 49 J | 82 U | 90 U |
| FLUORANTHENE | 310000 | 230000 | N | 82 U | 77 U | 1470 | 205 | 486 | 105 | 424 | 82 U | 49 J |
| FLUORENE | 310000 | 230000 | N | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 82 U | 77 U | 387 | 69 J | 162 | 50 J | 134 | 82 U | 90 U |
| NAPHTHALENE | 160000 | 3600 | C | 82 U | 77 U | 80 U | 80 U | 79 U | 88 U | 78 U | 82 U | 90 U |
| PHENANTHRENE | 2300000 | 170000 | N[6] | 82 U | 77 U | 433 | 51 J | 111 | 88 U | 191 | 82 U | 90 U |
| PYRENE | 230000 | 170000 | N | 82 U | 77 U | 1900 | 319 | 639 | 121 | 521 | 82 U | 55 J |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 11610 | 1695 | 3327 | 704 | 2709 | 0 U | 339 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 38 U | 37 U | 8.1 J | 14 J | 37 U | 43 U | 36 U | 39 U | 43 U |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | 0 U | 0 U | 8.1 | 14 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.2 UL | 0.4 L | 0.3 U | 0.3 U | 0.3 UL | 0.3 L | 0.3 UL | 0.3 UL | 0.3 UL |
| ARSENIC | 0.43 | 0.39 | C | 5 | 1 B | 4 | 5 | 2 B | 1 B | 5 | 5 | 5 B |
| BARIUM | 1600 | 1500 | N | 3 | 3 | 21 | 25 | 18 | 21 | 29 | 33 | 35 |
| BERYLLIUM | 16 | 16 | N | 0.5 | 0.2 | 0.8 | 0.7 | 0.6 | 0.6 | 0.6 | 1.8 | 3.9 |
| CADMIUM | 3.9 | 7 | N | 0.1 B | 0.08 B | 0.2 B | 0.2 B | 0.2 B | 0.1 B | 0.2 B | 0.3 B | 0.7 B |
| CHROMIUM | 12000 [9] | 12000 | N[9] | 8.9 | 6.9 | 27.9 | 29.1 | 16.2 | 12.5 | 12.2 | 32.1 | 40 |
| COBALT | NC | 2.3 | N | 5.3 | 2.8 | 9.3 | 13.4 | 4 | 2.9 | 68.1 | 14 | 11 B |
| COPPER | 310 | 310 | N | 8 | 4 | 25 | 18 | 10 | 9 | 11 | 13 | 25 |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 2 | 1 B | 9 | 11 | 5 | 4 | 8 | 12 | 18 |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | 0.01 | 0.02 | 0.009 | 0.008 | 0.008 | 0.009 | 0.007 | 0.007 | 0.03 |
| NICKEL | 160 | 150 | N | 5 | 3 | 17 | 13 | 8 | 5 | 9 | 25 | 49 |
| SELENIUM | 39 | 39 | N | 1 | 1 U | 2 U | 2 U | 3 | 2 U | 2 U | 2 U | 11 U |
| SILVER | 39 | 39 | N | 0.03 U | 0.04 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.05 U | 0.3 U |
| THALLIUM | 0.55 | NC | | 0.6 U | 0.7 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 5 U |
| VANADIUM | 7.8 | 39 | N[12] | 18.7 | 13.9 | 68.1 | 72.7 | 32.5 | 20.1 | 25.1 | 46.3 | 52.6 |
| ZINC | 2300 | 2300 | N | 21 | 8 | 16 | 12 | 16 | 9 | 21 | 43 | 145 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 5100 J | 1900 J | 92300 | 37700 | 55700 | 33800 | 50200 | 840 J | 12300 |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 10300 U | 8200 U | 11200 U | 10700 U | 10600 U | 12600 U | 10800 U | 11800 U | 12800 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | 5.7 | 7 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-198 | SB-199 | SB-199 | SB-262 | SB-262 | SB-263 | SB-263 | SB-264 | SB-264 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-198-10 | SB-199-05 | SB-199-10 | SB-262-05 | SB-262-10 | SB-263-05 | SB-263-10 | SB-264-05 | SB-264-10 |
| SAMPLE DATE | | | | 20050511 | 20050511 | 20050511 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | | | | 5 | | 10 | | 5 | | 10 | | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 7.73 U | 8.68 U | 8.24 J | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 12 J | 8.9 J | 38.4 J | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | 1.93 U | 2.17 U | 2.32 U | 121 U | 101 U | 113 U | 114 U | 108 U | 119 U |
| CARBON DISULFIDE | 780000 | 82000 | N | 1.9 U | 1.2 J | 2 J | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 1.9 U | 2.2 U | 2.3 U | 121 U | 101 U | 113 U | 114 U | 108 U | 119 U |
| ISOPROPYLBENZENE | 780000 | 210000 | N | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 3.9 U | 4.3 U | 4.6 U | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 1.9 U | 10.3 | 2.3 U | 362 U | 303 U | 339 U | 342 U | 323 U | 357 U |
| N-BUTYLBENZENE | NC | NC | | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | 1.9 U | 2.2 U | 2.3 U | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 8 U | 6 J | 9 U | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 1.2 J | 4.2 | 1.1 J | 121 U | 101 U | 113 U | 114 U | 108 U | 119 U |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | 5.8 U | 6.5 U | 7 U | 362 U | 303 U | 339 U | 342 U | 323 U | 357 U |
| TRICHLOROETHENE | 1600 | 2800 | C | 1.9 U | 1.5 J | 0.82 J | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | 54.7 B | 64.8 B | 70.8 B | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | 205 U | 51 J | 207 U | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 120 U | 34 J | 122 U | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | 410 U | 395 U | 414 U | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 84.3 U | 75.7 J | 85.2 U | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 84 U | 48 J | 85 U | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 84 U | 75 J | 85 U | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | 84 U | 45 J | 85 U | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 84 U | 315 | 85 U | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 84 U | 918 | 98 | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | 84 U | 918 | 0.021 | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 84 U | 838 | 85 U | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 84 U | 671 | 85 U | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 84 U | 610 | 85 U | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | 84 U | 191 | 85 U | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 84 U | 682 | 85 U | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 84 U | 965 | 21 J | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 84 U | 75 J | 85 U | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | 84 U | 1640 | 37 J | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 84 U | 200 | 85 U | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 84 U | 198 | 85 U | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 84 U | 81 U | 85 U | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | 84 U | 2310 | 23 J | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 84 U | 1950 | 85 U | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 10813 | 81 | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | 40 U | 38 U | 40 U | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | 0 U | 0 U | 0 U | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.3 UL | 0.3 UL | 0.7 L | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 6 | 3 B | 2 B | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | 24 | 16 | 20 | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 3.5 | 0.6 | 1.5 | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 0.4 | 0.2 B | 0.1 B | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | 35.7 | 16.3 | 21.7 | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | 7.6 | 5.6 | 12.1 | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 47 | 11 | 13 | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 11 | 5 | 4 | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | 0.009 | 0.01 | 0.01 | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 35 | 7 | 22 | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 2 U | 2 U | 2 U | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | 0.06 U | 0.05 U | 0.05 U | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | 1 U | 1 U | 0.9 U | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | 59 | 36.7 | 38.1 | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 86 | 15 | 20 | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 5300 J | 105000 | 17500 | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 11900 U | 11200 U | 11400 U | 12100 U | 10100 U | 11300 U | 11400 U | 176000 | 11900 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-410 | SB-410 | SB-410 | SB-410 | SB-411 | SB-411 | SB-411 | SB-411 | SB-412 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-410-0203 | SB-410-0304 | SB-410-0506 | SB-410-0708 | SB-411-0203 | SB-411-0304 | SB-411-0506 | SB-411-0708 | SB-412-0203 |
| SAMPLE DATE | | | | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 10 | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 820 | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 10 | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 820 | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 10 J | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 820 | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 10 | 0 U | 0 U | 0 U | 0 U | 0 U | 820 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 91.2 | 90.2 | 84.5 | 83.9 | 84.5 | 84.7 | 82 | 84.2 | 83.7 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-412 | SB-412 | SB-412 | SB-413 | SB-413 | SB-413 | SB-413 | SB-414 | SB-414 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-412-0304 | SB-412-0506 | SB-412-0708 | SB-413-0203 | SB-413-0304 | SB-413-0506 | SB-413-0708 | SB-414-0203 | SB-414-0304 |
| SAMPLE DATE | | | | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 16 | 1.6 U | 27 | 43 | 1.6 U | 1.6 U | 160 | 15 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 16 | 1.6 U | 27 | 43 | 1.6 U | 1.6 U | 160 | 15 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 16 J | 1.6 U | 27 J | 43 J | 1.6 U | 1.6 U | 160 J | 15 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 16 | 0 U | 27 | 43 | 0 U | 0 U | 160 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 83.6 | 68.6 | 81.7 | 83.7 | 85.5 | 82 | 81.3 | 88.2 | 86.3 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-414 | SB-414 | SB-415 | SB-415 | SB-415 | SB-415 | SB-416 | SB-416 | SB-416 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-414-0506 | SB-414-0708 | SB-415-0203 | SB-415-0304 | SB-415-0506 | SB-415-0708 | SB-416-0203 | SB-416-0304 | SB-416-0506 |
| SAMPLE DATE | | | | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | | | | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.6 U | 9.5 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.6 U | 9.5 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | 9.5 J | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 9.5 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 79.3 | 82.1 | 87.8 | 85.4 | 84.5 | 81.9 | 80.5 | 79.6 | 85 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-416 | SB-417 | SB-417 | SB-417 | SB-417 | SB-418 | SB-418 | SB-418 | SB-418 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-416-0708 | SB-417-0203 | SB-417-0304 | SB-417-0506 | SB-417-0708 | SB-418-0203 | SB-418-0304 | SB-418-0506 | SB-418-0708 |
| SAMPLE DATE | | | | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 32 | 1.4 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 32 | 1.4 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 32 J | 1.4 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 32 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 82.5 | 87.8 | 85.7 | 83.4 | 80.5 | 91.3 | 91.4 | 86.3 | 85.5 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-419 | SB-419 | SB-419 | SB-419 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-419-0203 | SB-419-0304 | SB-419-0506 | SB-419-0708 |
| SAMPLE DATE | | | | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.4 | 89.4 | 85.7 | 89.1 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-420 | SB-420 | SB-420 | SB-420 | SB-421 | SB-421 | SB-421 | SB-421 | SB-422 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-420-0203 | SB-420-0304 | SB-420-0506 | SB-420-0708 | SB-421-0203 | SB-421-0304 | SB-421-0506 | SB-421-0708 | SB-422-0203 |
| SAMPLE DATE | | | | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.4 U | 1.4 U | 1.5 U | 1.6 U | 10 | 1.6 U | 1.5 U | 1.6 U | 1.4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.4 U | 1.4 U | 1.5 U | 1.6 U | 10 | 1.6 U | 1.5 U | 1.6 U | 1.4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.4 U | 1.4 U | 1.5 U | 1.6 U | 10 J | 1.6 U | 1.5 U | 1.6 U | 1.4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 10 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 91.7 | 92.8 | 88.3 | 83.6 | 84.4 | 83.3 | 84.6 | 83 | 91.4 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-422 | SB-422 | SB-422 | SB-423 | SB-423 | SB-423 | SB-423 | SB-424 | SB-424 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-422-0304 | SB-422-0506 | SB-422-0708 | SB-423-0203 | SB-423-0304 | SB-423-0506 | SB-423-0708 | SB-424-0203 | SB-424-0304 |
| SAMPLE DATE | | | | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.4 U | 61 | 1.5 U | 18 | 1.5 U | 1.4 U | 1.6 U | 4000 | 1600 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.4 U | 61 | 1.5 U | 18 | 1.5 U | 1.4 U | 1.6 U | 4000 | 1600 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.4 U | 61 J | 1.5 U | 18 J | 1.5 U | 1.4 U | 1.6 U | 4000 | 1600 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 61 | 0 U | 18 | 0 U | 0 U | 0 U | 4000 | 1600 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 90.2 | 86.7 | 86.7 | 87.9 | 85.8 | 91.3 | 82.6 | 90.6 | 91 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-424 | SB-424 | SB-425 | SB-425 | SB-425 | SB-425 | SB-426 | SB-426 | SB-426 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-424-0506 | SB-424-0708 | SB-425-0203 | SB-425-0304 | SB-425-0506 | SB-425-0708 | SB-426-0203 | SB-426-0304 | SB-426-0506 |
| SAMPLE DATE | | | | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | | | | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **19** | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **19** | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | **19 J** | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 19 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.5 | 84.1 | 92.1 | 89.6 | 86.3 | 84.1 | 84.1 | 90.1 | 83.5 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-426 | SB-427 | SB-427 | SB-427 | SB-427 | SB-428 | SB-428 | SB-428 | SB-428 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-426-0708 | SB-427-0203 | SB-427-0304 | SB-427-0506 | SB-427-0708 | SB-428-0203 | SB-428-0304 | SB-428-0506 | SB-428-0708 |
| SAMPLE DATE | | | | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.7 U | 960 | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 35 | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.7 U | 960 | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 35 | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.7 U | 960 | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 35 J | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 960 | 0 U | 0 U | 0 U | 0 U | 35 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 78.5 | 93.3 | 81.7 | 85.8 | 83.6 | 88 | 87.6 | 87.6 | 86.5 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-429 | SB-429 | SB-429 | SB-429 | SB-430 | SB-430 | SB-430 | SB-430 | SB-431 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-429-0203 | SB-429-0304 | SB-429-0506 | SB-429-0708 | SB-430-0203 | SB-430-0304 | SB-430-0506 | SB-430-0708 | SB-431-0203 |
| SAMPLE DATE | | | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.4 U | 1.4 U | 1.4 U | 1.5 U | **17** | 1.4 U | 8.9 | 14 | **93** |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.4 U | 1.4 U | 1.4 U | 1.5 U | **17** | 1.4 U | 8.9 | 14 | **93** |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 1.4 U | 1.4 U | 1.4 U | 1.5 U | **17 J** | 1.4 U | 8.9 J | 14 J | **93 J** |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 17 | 0 U | 8.9 | 14 | 93 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 94.5 | 92.1 | 90.2 | 86.9 | 92.1 | 93 | 85.3 | 83.1 | 90.5 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-431 | SB-431 | SB-431 | SB-432 | SB-432 | SB-432 | SB-432 | SB-433 | SB-433 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-431-0304 | SB-431-0506 | SB-431-0708 | SB-432-0203 | SB-432-0304 | SB-432-0506 | SB-432-0708 | SB-433-0203 | SB-433-0304 |
| SAMPLE DATE | | | | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 8.3 | 1.5 U | 1.8 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | **17** | 1.4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 8.3 | 1.5 U | 1.8 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | **17** | 1.4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 8.3 J | 1.5 U | 1.8 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | **17 J** | 1.4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 8.3 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 17 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 87.2 | 86.1 | 73 | 89.2 | 92.5 | 85.6 | 85.6 | 94.7 | 94.4 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-433 | SB-433 | SB-434 | SB-434 | SB-434 | SB-434 | SB-435 | SB-435 | SB-435 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-433-0506 | SB-433-0708 | SB-434-0203 | SB-434-0304 | SB-434-0506 | SB-434-0708 | SB-435-0203 | SB-435-0304 | SB-435-0506 |
| SAMPLE DATE | | | | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | | | | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 13 | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 13 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 13 J | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 13 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 93.7 | 87.4 | 86.5 | 86.5 | 82.6 | 83 | 86.9 | 85 | 82 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-435 | SB-436 | SB-436 | SB-436 | SB-436 | SB-437 | SB-437 | SB-437 | SB-437 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-435-0708 | SB-436-0203 | SB-436-0304 | SB-436-0506 | SB-436-0708 | SB-437-0203 | SB-437-0304 | SB-437-0506 | SB-437-0708 |
| SAMPLE DATE | | | | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | **17** | 9.2 | **18** | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | **17** | 9.2 | **18** | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | **17 J** | 9.2 J | **18 J** | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 17 | 9.2 | 18 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 82.9 | 87.5 | 90.6 | 88 | 86.2 | 88.6 | 84.8 | 83.6 | 80.5 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-438 | SB-438 | SB-438 | SB-438 | SB-439 | SB-439 | SB-439 | SB-439 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-438-0203 | SB-438-0304 | SB-438-0506 | SB-438-0708 | SB-439-0203 | SB-439-0304 | SB-439-0506 | SB-439-0708 |
| SAMPLE DATE | | | | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.4 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.4 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.4 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 87.7 | 84.9 | 89.9 | 83.3 | 86.2 | 77.9 | 81.2 | 79.6 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-085 | SB-086 | SB-086 | SB-087 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-81-05 | SB-82-05 | SB-83-05 | SB-84-05 | SB-85-05 | SB-85-10 | SB-86-05 | SB-86-10 | SB-87-05 |
| SAMPLE DATE | | | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20041115 | 20041115 | 20041105 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | | | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL | NA |
| 2-BUTANONE | 4700000 | 2800000 N | 57 UJ | 60 U | 60 UJ | 530 UJ | 610 UJ | 57 UL | 57 UL | 56 UL | NA |
| ACETONE | 7000000 | 6100000 N | 57 UJ | 60 U | 60 UJ | 530 UJ | 610 UJ | 57 UL | 57 UL | 56 UL | NA |
| BENZENE | 12000 | 1100 C | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL | 1 U |
| CARBON DISULFIDE | 780000 | 82000 N | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL | NA |
| ETHYLBENZENE | 780000 | 5400 C | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL | 1 U |
| ISOPROPYLBENZENE | 780000 | 210000 N | 6 UJ | 6 U | 6 UJ | 990 J | 61 UJ | 6 UL | 6 UL | 6 UL | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 8 J | 10 J | 10 J | NA |
| NAPHTHALENE | 160000 | 3600 C | 6 UJ | 6 U | 6 UJ | 620 J | 160 J | 6 UL | 6 UL | 6 UL | 1 U |
| N-BUTYLBENZENE | NC | NC | 6 UJ | 6 U | 6 UJ | 850 J | 61 UJ | 6 UL | 6 UL | 6 UL | NA |
| N-PROPYLBENZENE | NC | 340000 N | 6 UJ | 6 U | 6 UJ | 2200 J | 61 UJ | 6 UL | 6 UL | 6 UL | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL | 1 U |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | 1 U |
| TRICHLOROETHENE | 1600 | 2800 C | 6 UJ | 6 U | 6 UJ | 53 UJ | 61 UJ | 6 UL | 6 UL | 6 UL | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| DIBENZOFURAN | 7800 | 7800 N | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| PHENOL | 2300000 | 1800000 N | 1900 | 1300 | 400 U | 410 U | 410 U | 1000 J | 1100 J | 1600 J | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| ACENAPHTHENE | 470000 | 340000 N | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| ANTHRACENE | 2300000 | 1700000 N | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 390 U | 400 U | 400 U | 410 U | 410 U | 380 U | 390 U | 380 U | NA |
| BAP EQUIVALENT-POS | 22 | 15 C | 390 U | 400 U | 400 U | 410 U | 410 U | 380 U | 390 U | 380 U | NA |
| BENZO(A)ANTHRACENE | 220 | 150 C | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| BENZO(A)PYRENE | 22 | 15 C | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(6) | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| FLUORANTHENE | 310000 | 230000 N | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| FLUORENE | 310000 | 230000 N | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| NAPHTHALENE | 160000 | 3600 C | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| PHENANTHRENE | 2300000 | 170000 N(6) | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| PYRENE | 230000 | 170000 N | 390 U | 400 U | 400 U | 410 U | 410 U | 380 UJ | 390 UJ | 380 UJ | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | 290 U | 300 U | 290 U | 300 U | 300 U | 280 UJ | 290 UJ | 280 UJ | NA |
| TOTAL AROCLOR | 320 (7) | 220 C(8) | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | 2.7 UL | 2.6 UL | 2.6 U | 2.9 U | 2.8 UL | 2.6 UL | 2.6 UL | 2.8 UL | NA |
| ARSENIC | 0.43 | 0.39 C | 2.5 | 1.2 | 1.9 | 3.4 | 2.2 | 0.53 U | 0.7 | 0.61 | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | 2.7 U | 2.6 U | 2.6 U | 2.9 U | 2.8 U | 3.2 | 2.6 U | 2.8 U | NA |
| CADMIUM | 3.9 | 7 N | 2.7 UL | 2.6 UL | 2.6 U | 2.9 U | 2.8 UL | 2.6 U | 2.6 U | 2.8 U | NA |
| CHROMIUM | 12000 (9) | 12000 N(9) | 9.9 | 7.6 | 7.6 | 19 | 28 | 9.3 | 18 | 31 | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | 13 | 7 | 5.7 | 13 | 19 | 13 | 30 | 9.1 | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | 4.7 | 4.6 | 9.9 | 4.5 | 11 | 4.1 J | 9.5 J | 5.8 J | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (10) | 2.3 N(11) | 0.11 U | 0.1 U | 0.1 U | 0.12 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U | NA |
| NICKEL | 160 | 150 N | 7.3 | 3.4 L | 9.8 | 2.9 U | 23 | 46 J | 20 J | 15 J | NA |
| SELENIUM | 39 | 39 N | 2.7 U | 2.6 U | 2.6 U | 2.9 U | 2.8 U | 2.6 UL | 2.6 UL | 2.8 UL | NA |
| SILVER | 39 | 39 N | 2.7 UL | 2.6 UL | 2.6 UL | 2.9 UL | 2.8 UL | 2.6 UR | 2.6 UR | 2.8 UR | NA |
| THALLIUM | 0.55 | NC | 2.2 U | 2.1 U | 2.1 UL | 2.3 UL | 2.3 U | 2.1 U | 2.1 U | 2.2 U | NA |
| VANADIUM | 7.8 | 39 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | 27 UL | 26 UL | 27 K | 29 U | 61 | 93 | 62 | 34 | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | 12000 U | 12000 U | 12000 U | 12000 U | 12000 U | 12000 UJ | 12000 UJ | 11000 UJ | 12000 U |
| GASOLINE RANGE ORGANICS | 230000 | NC | 120 U | 120 U | 120 U | 520000 | 240000 | 120 UJ | 120 UJ | 110 UJ | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-088 | SB-089 | SB-090 | SB-091 | SB-092 | SB-440 | SB-440 | SB-440 | SB-441 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-88-05 | SB-89-05 | SB-90-05 | SB-91-05 | SB-92-04 | SB-440-0203 | SB-440-0304 | SB-440-0506 | SB-441-0203 |
| SAMPLE DATE | | | 20041105 | 20041105 | 20041103 | 20040927 | 20040927 | 20071018 | 20071018 | 20071018 | 20071019 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 5 | 5 | 5 | 4 | 2 | 3 | 5 | 2 |
| BOTTOM DEPTH | | | 5 | 5 | 5 | 5 | 4 | 3 | 4 | 6 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | 6 UL | 6 UL | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | 6 UL | 6 UL | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | 58 UL | 58 UL | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | 58 UL | 58 UL | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | 1 U | 7 | 1 U | 6 UL | 6 UL | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | 6 UL | 6 UL | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | 1 U | 100 | 1 U | 6 UL | 6 UL | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | 6 UL | 6 UL | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | 6 UL | 6 UL | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | 270 | 170 | 1 U | 6 UL | 6 UL | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | 6 UL | 6 UL | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | 6 UL | 6 UL | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | 4 | 1 U | 1 U | 6 UL | 6 UL | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | 600 | 160 | 1 U | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | 6 UL | 6 UL | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | NA | NA | NA | 390 U | 462 | 1.6 U | 1.6 U | 1.7 U | 72 |
| BAP EQUIVALENT-POS | 22 | 15 C | NA | NA | NA | 390 U | 0.06 | 1.6 U | 1.6 U | 1.7 U | 72 |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | NA | NA | NA | 390 U | 400 U | 1.6 U | 1.6 U | 1.7 U | 72 J |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | 390 U | 60 J | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | 390 U | 48 J | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | 390 U | 400 U | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | 390 U | 78 J | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | NA | NA | NA | 0 U | 186 | 0 U | 0 U | 0 U | 72 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | 290 U | 290 U | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | 0 U | 0 U | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | 2.8 UL | 3 UL | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | 2.4 | 1.4 | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | 2.8 U | 3 U | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | 2.8 U | 3 U | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | 20 J | 26 J | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | 17 J | 12 J | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | 3.3 K | 5.7 K | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | 0.11 U | 0.12 U | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | 5.9 K | 10 K | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | 2.8 U | 3 U | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | 2.8 UR | 3 UR | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | 2.2 U | 2.4 U | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | 28 UL | 30 UL | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | 13000 | 12000 U | 12000 U | 12000 U | 12000 U | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | 120 U | 120 U | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | 83.1 | 82.1 | 75.8 | 87.8 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-441 | SB-441 | SB-441 | SB-442 | SB-442 | SB-442 | SB-442 | SB-443 | SB-443 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-441-0304 | SB-441-0506 | SB-441-0708 | SB-442-0203 | SB-442-0304 | SB-442-0506 | SB-442-0708 | SB-443-0203 | SB-443-0304 |
| SAMPLE DATE | | | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | MDE Cleanup Standards (1)(3) | USEPA Regional Screening Levels (RSLs) (2)(3) | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 (4) | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 31 | 900 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.4 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 31 | 900 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.4 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 31 J | 900 J | 1.5 UJ | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.4 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 31 | 900 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 (7) | 220 C(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (9) | 12000 N(9) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (10) | 2.3 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(12) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 88.6 | 77.8 | 85.2 | 84.9 | 86.4 | 83.6 | 85.6 | 91.5 | 89.2 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-443 | SB-443 | SB-444 | SB-444 | SB-444 | SB-444 | SB-445 | SB-445 | SB-445 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-443-0506 | SB-443-0708 | SB-444-0203 | SB-444-0304 | SB-444-0506 | SB-444-0708 | SB-445-0203 | SB-445-0304 | SB-445-0506 |
| SAMPLE DATE | | | | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | | | | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 32 | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 32 | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 32 J | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 32 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 85.3 | 83 | 85.9 | 87 | 79.4 | 79 | 89.2 | 86.6 | 83.1 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-445 | SB-446 | SB-446 | SB-446 | SB-446 | SB-447 | SB-448 | SB-448 | SB-448 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-445-0708 | SB-446-0203 | SB-446-0304 | SB-446-0506 | SB-446-0708 | SB-447-0203 | SB-448-0203 | SB-448-0304 | SB-448-0506 |
| SAMPLE DATE | | | | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 2 | 3 | 5 | 7 | 2 | 2 | 3 | 5 |
| BOTTOM DEPTH | | | | 8 | 3 | 4 | 6 | 8 | 3 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 28 | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 28 | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 28 J | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 28 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 81.1 | 89.3 | 88.6 | 89.6 | 83.4 | 87.6 | 87.5 | 85.3 | 85.2 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-448 | SB-449 | SB-449 | SB-449 | SB-449 | SB-450 | SB-450 | SB-450 | SB-450 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-448-0708 | SB-449-0203 | SB-449-0304 | SB-449-0506 | SB-449-0708 | SB-450-0203 | SB-450-0304 | SB-450-0506 | SB-450-0708 |
| SAMPLE DATE | | | | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | **21** | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | **21** | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | **21 J** | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 21 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 87.5 | 90 | 89.7 | 85 | 82.1 | 86.5 | 83.4 | 84 | 78.6 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-451 | SB-451 | SB-451 | SB-451 | SB-452 | SB-452 | SB-452 | SB-452 | SB-453 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-451-0203 | SB-451-0304 | SB-451-0506 | SB-451-0708 | SB-452-0203 | SB-452-0304 | SB-452-0506 | SB-452-0708 | SB-453-0203 |
| SAMPLE DATE | | | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 22 | 38 | 1.5 U | 1.5 U | 28 |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 22 | 38 | 1.5 U | 1.5 U | 28 |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 22 J | 38 J | 1.5 U | 1.5 U | 28 J |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 22 | 38 | 0 U | 0 U | 28 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 87.2 | 82.4 | 79.5 | 84.4 | 91.8 | 87.2 | 86.4 | 84.9 | 84.7 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-453 | SB-453 | SB-453 | SB-454 | SB-454 | SB-454 | SB-454 | SB-455 | SB-455 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-453-0304 | SB-453-0506 | SB-453-0708 | SB-454-0203 | SB-454-0304 | SB-454-0506 | SB-454-0708 | SB-455-0203 | SB-455-0304 |
| SAMPLE DATE | | | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 640 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 640 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 640 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 640 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 C[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[12] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 72.2 | 83.8 | 81.5 | 79.9 | 82 | 81.4 | 80.1 | 86.5 | 85.2 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-455 | SB-455 | SB-456 | SB-456 | SB-456 | SB-456 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-455-0506 | SB-455-0708 | SB-456-0203 | SB-456-0304 | SB-456-0506 | SB-456-0708 |
| SAMPLE DATE | | | | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 780000 | 210000 | N | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NC | 340000 | N | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 32000 | NC | | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 310 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 310 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 310 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[6] | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 310 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| AROCLOR-1260 | 320 | 220 | C | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 320 [7] | 220 | C[8] | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [9] | 12000 | N[9] | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [10] | 2.3 | N[11] | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[12] | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 81.5 | 83.2 | 85 | 79.1 | 89.4 | 90.8 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA |

**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - The value is for xylenes.
5 - The value for acenaphthene is used as a surrogate for acenaphthylene.
6 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
7 - The value is for PCB (total).
8 - The value is for polychlorinated biphenyls (high risk).
9 - The value is for trivalent chromium.
10 - The value is for mercury (inorganic/mercuric dichloride).
11 - The value is for mercuric chloride.
12 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-195 | SB-195 | SB-195 | SB-195 | SB-195 | SB-196 | SB-196 | SB-196 | SB-657 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-195RE-11 | G-SB-195RE-12 | G-SB-195RE-13 | G-SB-195RE-14 | G-SB-195RE-15 | G-SB-196RE-11 | G-SB-196RE-12 | G-SB-196RE-13 | G-SB-657-11 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091020 | 20091020 | 20091020 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-195 | SB-195 | SB-195 | SB-195 | SB-195 | SB-196 | SB-196 | SB-196 | SB-657 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-195RE-11 | G-SB-195RE-12 | G-SB-195RE-13 | G-SB-195RE-14 | G-SB-195RE-15 | G-SB-196RE-11 | G-SB-196RE-12 | G-SB-196RE-13 | G-SB-657-11 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091020 | 20091020 | 20091020 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 229 | 284 | 13891 | 24163 | 277 | 1.6 U | 9.8 | 1.6 U | 843 |
| BAP EQUIVALENT-POS | 229 | 284 | 13891 | 24163 | 277 | 1.6 U | 8.9 | 1.6 U | 843 |
| BENZO(A)ANTHRACENE | 130 | 160 | 7900 | 15000 | 180 | 1.2 U | 1.1 U | 1.1 U | 470 J |
| BENZO(A)PYRENE | 160 | 200 | 9800 | 17000 | 190 | 1.6 U | 8 | 1.6 U | 600 J |
| BENZO(B)FLUORANTHENE | 170 | 220 | 12000 | 18000 | 240 | 1.5 U | 9.1 | 1.4 U | 580 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 68 | 80 | 5200 | 8600 | 85 | 2.1 U | 2 U | 2 U | 320 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-195 | SB-195 | SB-195 | SB-195 | SB-195 | SB-196 | SB-196 | SB-196 | SB-657 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-195RE-11 | G-SB-195RE-12 | G-SB-195RE-13 | G-SB-195RE-14 | G-SB-195RE-15 | G-SB-196RE-11 | G-SB-196RE-12 | G-SB-196RE-13 | G-SB-657-11 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091020 | 20091020 | 20091020 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 150 | 180 | 9300 | 17000 | 230 | 1.1 U | 1 U | 1.1 U | 500 J |
| DIBENZO(A,H)ANTHRACENE | 29 | 34 | 1500 | 2900 | 33 | 1.6 U | 1.5 U | 1.6 U | 100 J |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 95 | 110 | 5400 | 8600 | 110 | 1.8 U | 1.7 U | 1.8 U | 340 J |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 802 | 984 | 51100 | 87100 | 1068 | 0 U | 17.1 | 0 U | 2910 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-195 | SB-195 | SB-195 | SB-195 | SB-195 | SB-196 | SB-196 | SB-196 | SB-657 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-195RE-11 | G-SB-195RE-12 | G-SB-195RE-13 | G-SB-195RE-14 | G-SB-195RE-15 | G-SB-196RE-11 | G-SB-196RE-12 | G-SB-196RE-13 | G-SB-657-11 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091020 | 20091020 | 20091020 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-657 | SB-657 | SB-657 | SB-657 | SB-657 | SB-657 | SB-657A | SB-657A | SB-657A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657-11-AVG | G-SB-657-11-D | G-SB-657-12 | G-SB-657-13 | G-SB-657-14 | G-SB-657-15 | G-SB-657A-11 | G-SB-657A-13 | G-SB-657A-15 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-657 | SB-657 | SB-657 | SB-657 | SB-657 | SB-657 | SB-657A | SB-657A | SB-657A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657-11-AVG | G-SB-657-11-D | G-SB-657-12 | G-SB-657-13 | G-SB-657-14 | G-SB-657-15 | G-SB-657A-11 | G-SB-657A-13 | G-SB-657A-15 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 518 | 194 | 259 | 3231 | 24 | 4.3 | 8303 | 1482 | 66 |
| BAP EQUIVALENT-POS | 518 | 194 | 259 | 3231 | 23 | 2.8 | 8303 | 1482 | 65 |
| BENZO(A)ANTHRACENE | 284.5 | 99 J | 120 | 1500 | 14 | 9.4 | 6600 | 940 | 37 |
| BENZO(A)PYRENE | 370 | 140 J | 180 | 2300 | 19 | 1.5 U | 5700 | 1000 | 52 |
| BENZO(B)FLUORANTHENE | 360 | 140 J | 190 | 2600 | 17 | 10 | 6100 | 1100 | 57 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 190.5 | 61 J | 90 | 950 | 11 | 6.8 J | 2600 | 470 | 20 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-657 | SB-657 | SB-657 | SB-657 | SB-657 | SB-657 | SB-657A | SB-657A | SB-657A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657-11-AVG | G-SB-657-11-D | G-SB-657-12 | G-SB-657-13 | G-SB-657-14 | G-SB-657-15 | G-SB-657A-11 | G-SB-657A-13 | G-SB-657A-15 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 310 | 120 J | 150 | 1800 | 16 | 1 U | 7200 | 1000 | 44 |
| DIBENZO(A,H)ANTHRACENE | 61 | 22 J | 37 | 390 | 1.5 U | 1.5 U | 1000 | 210 | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 208 | 76 J | 100 | 1200 | 12 | 8.1 | 3000 | 620 | 38 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1784 | 658 | 867 | 10740 | 89 | 34.3 | 32200 | 5340 | 248 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-657 | SB-657 | SB-657 | SB-657 | SB-657 | SB-657 | SB-657A | SB-657A | SB-657A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657-11-AVG | G-SB-657-11-D | G-SB-657-12 | G-SB-657-13 | G-SB-657-14 | G-SB-657-15 | G-SB-657A-11 | G-SB-657A-13 | G-SB-657A-15 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-657B | SB-657B | SB-657B | SB-657D | SB-657D | SB-657D | SB-658 | SB-658 | SB-658 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657B-11 | G-SB-657B-13 | G-SB-657B-15 | G-SB-657D-11 | G-SB-657D-13 | G-SB-657D-15 | G-SB-658-11 | G-SB-658-11-AVG | G-SB-658-11-D |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091002 | 20091002 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-657B | SB-657B | SB-657B | SB-657D | SB-657D | SB-657D | SB-658 | SB-658 | SB-658 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657B-11 | G-SB-657B-13 | G-SB-657B-15 | G-SB-657D-11 | G-SB-657D-13 | G-SB-657D-15 | G-SB-658-11 | G-SB-658-11-AVG | G-SB-658-11-D |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091002 | 20091002 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 28 | 2150 | 319 | 1.5 U | 144 | 85 | 244 | 158 | 73 |
| BAP EQUIVALENT-POS | 27 | 2146 | 318 | 1.5 U | 143 | 85 | 243 | 158 | 73 |
| BENZO(A)ANTHRACENE | 23 | 1600 | 250 | 1.1 U | 120 | 72 | 210 J | 131.5 | 53 J |
| BENZO(A)PYRENE | 21 | 1700 | 250 | 1.5 U | 110 | 64 | 190 J | 120 | 50 J |
| BENZO(B)FLUORANTHENE | 38 | 1800 | 280 | 1.4 U | 140 | 88 | 200 J | 129.5 | 59 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 9.8 | 760 | 110 | 2 U | 40 | 30 | 98 J | 58.5 | 19 J |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-657B | SB-657B | SB-657B | SB-657D | SB-657D | SB-657D | SB-658 | SB-658 | SB-658 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657B-11 | G-SB-657B-13 | G-SB-657B-15 | G-SB-657D-11 | G-SB-657D-13 | G-SB-657D-15 | G-SB-658-11 | G-SB-658-11-AVG | G-SB-658-11-D |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091002 | 20091002 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 20 | 1700 | 240 | 1 U | 110 | 67 | 220 J | 140 | 60 J |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 6.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 4.725 | 8.7 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 970 | 140 | 1.7 U | 68 | 42 | 110 J | 69 | 28 J |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 111.8 | 8530 | 1270 | 0 U | 588 | 363 | 1028 | 652.85 | 277.7 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-657B | SB-657B | SB-657B | SB-657D | SB-657D | SB-657D | SB-658 | SB-658 | SB-658 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657B-11 | G-SB-657B-13 | G-SB-657B-15 | G-SB-657D-11 | G-SB-657D-13 | G-SB-657D-15 | G-SB-658-11 | G-SB-658-11-AVG | G-SB-658-11-D |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091002 | 20091002 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-658 | SB-658 | SB-658 | SB-658 | SB-658B | SB-658B | SB-658C | SB-658C | SB-658C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658-12 | G-SB-658-13 | G-SB-658-14 | G-SB-658-15 | G-SB-658B-11 | G-SB-658B-15 | G-SB-658C-11 | G-SB-658C-13 | G-SB-658C-13-AVG |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 13 | 14 | 15 | 11 | 15 | 11 | 13 | 13 |
| BOTTOM DEPTH | 12 | 13 | 14 | 15 | 11 | 15 | 11 | 13 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-658 | SB-658 | SB-658 | SB-658 | SB-658B | SB-658B | SB-658C | SB-658C | SB-658C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658-12 | G-SB-658-13 | G-SB-658-14 | G-SB-658-15 | G-SB-658B-11 | G-SB-658B-15 | G-SB-658C-11 | G-SB-658C-13 | G-SB-658C-13-AVG |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 13 | 14 | 15 | 11 | 15 | 11 | 13 | 13 |
| BOTTOM DEPTH | 12 | 13 | 14 | 15 | 11 | 15 | 11 | 13 | 13 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 348 | 232 | 201 | 55 | 1.5 U | 347 | 1.5 U | 10484 | 7626 |
| BAP EQUIVALENT-POS | 347 | 232 | 201 | 54 | 1.5 U | 347 | 1.5 U | 10484 | 7626 |
| BENZO(A)ANTHRACENE | 280 | 190 | 140 | 47 | 1.1 U | 240 | 1.1 U | 5800 J | 4150 |
| BENZO(A)PYRENE | 270 | 160 | 140 | 42 | 1.5 U | 240 | 1.5 U | 6900 J | 5050 |
| BENZO(B)FLUORANTHENE | 320 | 180 | 160 | 48 | 1.4 U | 270 | 1.4 U | 7900 J | 5600 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 150 | 72 | 61 | 19 | 2 U | 130 | 2 U | 2800 J | 2150 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-658 | SB-658 | SB-658 | SB-658 | SB-658B | SB-658B | SB-658C | SB-658C | SB-658C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658-12 | G-SB-658-13 | G-SB-658-14 | G-SB-658-15 | G-SB-658B-11 | G-SB-658B-15 | G-SB-658C-11 | G-SB-658C-13 | G-SB-658C-13-AVG |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 13 | 14 | 15 | 11 | 15 | 11 | 13 | 13 |
| BOTTOM DEPTH | 12 | 13 | 14 | 15 | 11 | 15 | 11 | 13 | 13 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 320 | 190 | 170 | 50 | 1.1 U | 320 | 1.1 U | 6200 J | 4400 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 26 | 23 | 1.6 U | 1.5 U | 40 | 1.5 U | 1800 J | 1305 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 150 | 82 | 76 | 23 | 1.8 U | 140 | 1.8 U | 3800 J | 2700 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1490 | 900 | 770 | 229 | 0 U | 1380 | 0 U | 35200 | 25355 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-658 | SB-658 | SB-658 | SB-658 | SB-658B | SB-658B | SB-658C | SB-658C | SB-658C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658-12 | G-SB-658-13 | G-SB-658-14 | G-SB-658-15 | G-SB-658B-11 | G-SB-658B-15 | G-SB-658C-11 | G-SB-658C-13 | G-SB-658C-13-AVG |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 13 | 14 | 15 | 11 | 15 | 11 | 13 | 13 |
| BOTTOM DEPTH | 12 | 13 | 14 | 15 | 11 | 15 | 11 | 13 | 13 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-658C | SB-658C | SB-659 | SB-659 | SB-659 | SB-659 | SB-659 | SB-659C | SB-659C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658C-13-D | G-SB-658C-15 | G-SB-659-11 | G-SB-659-12 | G-SB-659-13 | G-SB-659-14 | G-SB-659-15 | G-SB-659C-11 | G-SB-659C-13 |
| SAMPLE DATE | 20091028 | 20091028 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091029 | 20091029 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-658C | SB-658C | SB-659 | SB-659 | SB-659 | SB-659 | SB-659 | SB-659C | SB-659C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658C-13-D | G-SB-658C-15 | G-SB-659-11 | G-SB-659-12 | G-SB-659-13 | G-SB-659-14 | G-SB-659-15 | G-SB-659C-11 | G-SB-659C-13 |
| SAMPLE DATE | 20091028 | 20091028 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091029 | 20091029 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 13 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 4768 | 80 | 265 | 595 | 2324 | 744 | 19 | 268 | 4677 |
| BAP EQUIVALENT-POS | 4768 | 79 | 265 | 595 | 2324 | 744 | 18 | 267 | 4673 |
| BENZO(A)ANTHRACENE | 2500 J | 49 | 170 | 350 | 1400 | 450 | 14 | 230 | 4000 |
| BENZO(A)PYRENE | 3200 J | 64 | 180 | 400 | 1600 | 530 | 14 | 210 | 3800 |
| BENZO(B)FLUORANTHENE | 3300 J | 59 | 210 | 430 | 1800 | 600 | 16 | 200 | 4000 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1500 J | 46 | 77 | 190 | 710 | 200 | 2 U | 160 | 3000 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-658C | SB-658C | SB-659 | SB-659 | SB-659 | SB-659 | SB-659 | SB-659C | SB-659C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658C-13-D | G-SB-658C-15 | G-SB-659-11 | G-SB-659-12 | G-SB-659-13 | G-SB-659-14 | G-SB-659-15 | G-SB-659C-11 | G-SB-659C-13 |
| SAMPLE DATE | 20091028 | 20091028 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091029 | 20091029 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 13 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 2600 J | 59 | 190 | 390 | 1500 | 470 | 13 | 260 | 5200 |
| DIBENZO(A,H)ANTHRACENE | 810 J | 1.5 U | 35 | 91 | 310 | 79 | 1.5 U | 1.5 U | 8.3 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1600 J | 41 | 110 | 240 | 850 | 280 | 9.3 | 120 | 380 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 15510 | 318 | 972 | 2091 | 8170 | 2609 | 66.3 | 1180 | 20380 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-658C | SB-658C | SB-659 | SB-659 | SB-659 | SB-659 | SB-659 | SB-659C | SB-659C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658C-13-D | G-SB-658C-15 | G-SB-659-11 | G-SB-659-12 | G-SB-659-13 | G-SB-659-14 | G-SB-659-15 | G-SB-659C-11 | G-SB-659C-13 |
| SAMPLE DATE | 20091028 | 20091028 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091029 | 20091029 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 13 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-659C | SB-659D | SB-659D | SB-659D | SB-660 | SB-660 | SB-662 | SB-662 | SB-662 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-659C-15 | G-SB-659D-11 | G-SB-659D-13 | G-SB-659D-15 | G-SB-660-11 | G-SB-660-12 | G-SB-662-11 | G-SB-662-12 | G-SB-662-13 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091002 | 20091002 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-659C | SB-659D | SB-659D | SB-659D | SB-660 | SB-660 | SB-662 | SB-662 | SB-662 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-659C-15 | G-SB-659D-11 | G-SB-659D-13 | G-SB-659D-15 | G-SB-660-11 | G-SB-660-12 | G-SB-662-11 | G-SB-662-12 | G-SB-662-13 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091002 | 20091002 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 13 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 182 | 1.5 U | 447 | 1.5 U | 41 | 15 | 1.6 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 181 | 1.5 U | 446 | 1.5 U | 40 | 15 | 1.6 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 160 | 1.1 U | 320 | 1.1 U | 29 | 12 | 1.1 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 140 | 1.5 U | 350 | 1.5 U | 32 | 12 | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 160 | 1.4 U | 430 | 1.4 U | 30 | 14 | 1.4 U | 1.5 U | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 110 | 1.9 U | 200 | 2 U | 18 | 2 U | 2 U | 2.1 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-659C | SB-659D | SB-659D | SB-659D | SB-660 | SB-660 | SB-662 | SB-662 | SB-662 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-659C-15 | G-SB-659D-11 | G-SB-659D-13 | G-SB-659D-15 | G-SB-660-11 | G-SB-660-12 | G-SB-662-11 | G-SB-662-12 | G-SB-662-13 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091002 | 20091002 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 13 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 170 | 1 U | 350 | 1 U | 31 | 12 | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 79 | 1.7 U | 190 | 1.7 U | 18 | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 819 | 0 U | 1840 | 0 U | 158 | 50 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-659C | SB-659D | SB-659D | SB-659D | SB-660 | SB-660 | SB-662 | SB-662 | SB-662 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-659C-15 | G-SB-659D-11 | G-SB-659D-13 | G-SB-659D-15 | G-SB-660-11 | G-SB-660-12 | G-SB-662-11 | G-SB-662-12 | G-SB-662-13 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091002 | 20091002 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 13 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-662A | SB-662B | SB-662C | SB-671 | SB-671 | SB-671 | SB-671B | SB-671C | SB-671D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662A-11 | G-SB-662B-11 | G-SB-662C-11 | G-SB-671RE-11 | G-SB-671RE-12 | G-SB-671RE-13 | G-SB-671B-11 | G-SB-671C-11 | G-SB-671D-11 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091111 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 11 | 11 | 12 | 13 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 11 | 11 | 11 | 12 | 13 | 11 | 11 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-662A | SB-662B | SB-662C | SB-671 | SB-671 | SB-671 | SB-671B | SB-671C | SB-671D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662A-11 | G-SB-662B-11 | G-SB-662C-11 | G-SB-671RE-11 | G-SB-671RE-12 | G-SB-671RE-13 | G-SB-671B-11 | G-SB-671C-11 | G-SB-671D-11 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091111 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 11 | 11 | 12 | 13 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 11 | 11 | 11 | 12 | 13 | 11 | 11 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 2472 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 12 |
| BAP EQUIVALENT-POS | 1.6 U | 2472 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 11 |
| BENZO(A)ANTHRACENE | 1.2 U | 1700 | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 1.6 U | 1700 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 9.8 |
| BENZO(B)FLUORANTHENE | 1.5 U | 2000 | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 9.5 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 960 | 2.1 U | 2.1 U | 2.1 U | 2 U | 2.1 U | 2.1 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-662A | SB-662B | SB-662C | SB-671 | SB-671 | SB-671 | SB-671B | SB-671C | SB-671D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662A-11 | G-SB-662B-11 | G-SB-662C-11 | G-SB-671RE-11 | G-SB-671RE-12 | G-SB-671RE-13 | G-SB-671B-11 | G-SB-671C-11 | G-SB-671D-11 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091111 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 11 | 11 | 12 | 13 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 11 | 11 | 11 | 12 | 13 | 11 | 11 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 2100 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 280 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1100 | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.9 U | 1.9 U | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 9840 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 19.3 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-662A | SB-662B | SB-662C | SB-671 | SB-671 | SB-671 | SB-671B | SB-671C | SB-671D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662A-11 | G-SB-662B-11 | G-SB-662C-11 | G-SB-671RE-11 | G-SB-671RE-12 | G-SB-671RE-13 | G-SB-671B-11 | G-SB-671C-11 | G-SB-671D-11 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091111 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 11 | 11 | 12 | 13 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 11 | 11 | 11 | 12 | 13 | 11 | 11 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-704 | SB-704 | SB-704 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-716 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-704-11 | G-SB-704-12 | G-SB-704-15 | G-SB-706-11 | G-SB-706-12 | G-SB-706-13 | G-SB-706-14 | G-SB-706-15 | G-SB-716-11 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-704 | SB-704 | SB-704 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-716 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-704-11 | G-SB-704-12 | G-SB-704-15 | G-SB-706-11 | G-SB-706-12 | G-SB-706-13 | G-SB-706-14 | G-SB-706-15 | G-SB-716-11 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.7 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.7 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 1.7 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.5 U | 1.4 U | 1.6 U | 1.5 U | 1.4 U | 1.4 U | 1.5 U | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.2 U | 2.1 U | 2 U | 2.2 U | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-704 | SB-704 | SB-704 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-716 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-704-11 | G-SB-704-12 | G-SB-704-15 | G-SB-706-11 | G-SB-706-12 | G-SB-706-13 | G-SB-706-14 | G-SB-706-15 | G-SB-716-11 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.2 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.9 U | 1.8 U | 1.8 U | 2 U | 1.9 U | 1.8 U | 1.8 U | 1.9 U | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-704 | SB-704 | SB-704 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-716 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-704-11 | G-SB-704-12 | G-SB-704-15 | G-SB-706-11 | G-SB-706-12 | G-SB-706-13 | G-SB-706-14 | G-SB-706-15 | G-SB-716-11 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-716 | SB-716 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-716-12 | G-SB-716-15 | G-SB-726-11 | G-SB-726-12 | G-SB-726-13 | G-SB-726-14 | G-SB-726-15 | G-SB-726-15-AVG | G-SB-726-15-D |
| SAMPLE DATE | 20090923 | 20090923 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 15 | 15 |
| BOTTOM DEPTH | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 15 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-716 | SB-716 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-716-12 | G-SB-716-15 | G-SB-726-11 | G-SB-726-12 | G-SB-726-13 | G-SB-726-14 | G-SB-726-15 | G-SB-726-15-AVG | G-SB-726-15-D |
| SAMPLE DATE | 20090923 | 20090923 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 15 | 15 |
| BOTTOM DEPTH | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 15 | 15 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 2.2 U | 2.2 U | 2.6 | 9.1 | 2.3 U | 2.25 U | 2.2 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 2.2 U | 2.2 U | 0.54 | 8.2 | 2.3 U | 2.25 U | 2.2 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 1.2 U | 1.3 U | 1.9 J | 6 J | 1.3 U | 1.3 U | 1.3 U |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 2.2 U | 2.2 U | 2.2 U | 6.2 J | 2.3 U | 2.25 U | 2.2 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.6 U | 1.6 U | 2.1 J | 9.3 | 1.7 U | 1.65 U | 1.6 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 1.6 U | 1.6 U | 1.7 U | 1.6 U | 1.7 U | 1.7 U | 1.7 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-716 | SB-716 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-716-12 | G-SB-716-15 | G-SB-726-11 | G-SB-726-12 | G-SB-726-13 | G-SB-726-14 | G-SB-726-15 | G-SB-726-15-AVG | G-SB-726-15-D |
| SAMPLE DATE | 20090923 | 20090923 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 15 | 15 |
| BOTTOM DEPTH | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 15 | 15 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.4 U | 1.4 U | 2 J | 6.8 J | 1.4 U | 1.4 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U | 1.8 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 0.43 U | 0.43 U | 1.4 J | 5.1 J | 0.45 U | 0.445 U | 0.44 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 7.4 | 33.4 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-716 | SB-716 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-716-12 | G-SB-716-15 | G-SB-726-11 | G-SB-726-12 | G-SB-726-13 | G-SB-726-14 | G-SB-726-15 | G-SB-726-15-AVG | G-SB-726-15-D |
| SAMPLE DATE | 20090923 | 20090923 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 15 | 15 |
| BOTTOM DEPTH | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 15 | 15 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-735 | SB-735B | SB-735C | SB-736B | SB-736C | SB-736C | SB-736C | SB-761 | SB-761 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735-11 | G-SB-735B-11 | G-SB-735C-11 | G-SB-736B-11 | G-SB-736C-11 | G-SB-736C-11-AVG | G-SB-736C-11-D | G-SB-761-11 | G-SB-761-13 |
| SAMPLE DATE | 20091103 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 13 |
| BOTTOM DEPTH | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-735 | SB-735B | SB-735C | SB-736B | SB-736C | SB-736C | SB-736C | SB-761 | SB-761 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735-11 | G-SB-735B-11 | G-SB-735C-11 | G-SB-736B-11 | G-SB-736C-11 | G-SB-736C-11-AVG | G-SB-736C-11-D | G-SB-761-11 | G-SB-761-13 |
| SAMPLE DATE | 20091103 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 13 |
| BOTTOM DEPTH | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 13 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 14 | 17 | 4.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 35343 | 795 |
| BAP EQUIVALENT-POS | 13 | 16 | 4.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 35343 | 795 |
| BENZO(A)ANTHRACENE | 13 | 1.2 U | 3.3 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 30000 | 630 |
| BENZO(A)PYRENE | 10 | 14 | 4.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 24000 | 540 |
| BENZO(B)FLUORANTHENE | 15 | 23 | 4.1 U | 1.4 U | 1.3 U | 1.35 U | 1.4 U | 27000 | 610 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2.1 U | 5.8 U | 2 U | 1.9 U | 1.95 U | 2 U | 11000 | 250 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-735 | SB-735B | SB-735C | SB-736B | SB-736C | SB-736C | SB-736C | SB-761 | SB-761 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735-11 | G-SB-735B-11 | G-SB-735C-11 | G-SB-736B-11 | G-SB-736C-11 | G-SB-736C-11-AVG | G-SB-736C-11-D | G-SB-761-11 | G-SB-761-13 |
| SAMPLE DATE | 20091103 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 13 |
| BOTTOM DEPTH | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 13 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 13 | 20 | 3.1 U | 1.1 U | 1 U | 1 U | 1 U | 33000 | 690 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 4.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 4300 | 98 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.9 U | 5.2 U | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 12000 | 300 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 51 | 57 | 0 U | 0 U | 0 U | 0 U | 0 U | 141300 | 3118 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-735 | SB-735B | SB-735C | SB-736B | SB-736C | SB-736C | SB-736C | SB-761 | SB-761 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735-11 | G-SB-735B-11 | G-SB-735C-11 | G-SB-736B-11 | G-SB-736C-11 | G-SB-736C-11-AVG | G-SB-736C-11-D | G-SB-761-11 | G-SB-761-13 |
| SAMPLE DATE | 20091103 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 13 |
| BOTTOM DEPTH | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 13 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-761 | SB-761 | SB-761 | SB-761A | SB-761A | SB-761A | SB-761B | SB-761B | SB-761C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761-15 | G-SB-761-15-AVG | G-SB-761-15-D | G-SB-761A-11 | G-SB-761A-13 | G-SB-761A-15 | G-SB-761B-11 | G-SB-761B-15 | G-SB-761C-11 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 15 | 11 |
| BOTTOM DEPTH | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-761 | SB-761 | SB-761 | SB-761A | SB-761A | SB-761A | SB-761B | SB-761B | SB-761C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761-15 | G-SB-761-15-AVG | G-SB-761-15-D | G-SB-761A-11 | G-SB-761A-13 | G-SB-761A-15 | G-SB-761B-11 | G-SB-761B-15 | G-SB-761C-11 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 15 | 11 |
| BOTTOM DEPTH | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 15 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 817 | 575 | 333 | 95 | 2231 | 552 | 28 | 547 | 45 |
| BAP EQUIVALENT-POS | 817 | 575 | 333 | 95 | 2231 | 552 | 27 | 547 | 44 |
| BENZO(A)ANTHRACENE | 630 J | 465 | 300 J | 48 | 970 | 220 | 25 | 500 | 42 |
| BENZO(A)PYRENE | 530 J | 375 | 220 J | 67 | 1500 | 410 | 21 | 380 | 34 |
| BENZO(B)FLUORANTHENE | 600 J | 425 | 250 J | 64 | 1500 | 350 | 22 | 440 | 40 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 250 J | 180 | 110 J | 29 | 550 | 170 | 8.3 | 210 | 14 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-761 | SB-761 | SB-761 | SB-761A | SB-761A | SB-761A | SB-761B | SB-761B | SB-761C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761-15 | G-SB-761-15-AVG | G-SB-761-15-D | G-SB-761A-11 | G-SB-761A-13 | G-SB-761A-15 | G-SB-761B-11 | G-SB-761B-15 | G-SB-761C-11 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 15 | 11 |
| BOTTOM DEPTH | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 15 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 680 J | 480 | 280 J | 60 | 1100 | 270 | 27 | 560 | 49 |
| DIBENZO(A,H)ANTHRACENE | 130 J | 87 | 44 J | 12 | 400 | 56 | 1.6 U | 49 | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 310 J | 220 | 130 J | 42 | 770 | 270 | 13 | 210 | 19 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 3130 | 2232 | 1334 | 322 | 6790 | 1746 | 116.3 | 2349 | 198 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-761 | SB-761 | SB-761 | SB-761A | SB-761A | SB-761A | SB-761B | SB-761B | SB-761C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761-15 | G-SB-761-15-AVG | G-SB-761-15-D | G-SB-761A-11 | G-SB-761A-13 | G-SB-761A-15 | G-SB-761B-11 | G-SB-761B-15 | G-SB-761C-11 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 15 | 11 |
| BOTTOM DEPTH | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 15 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-761C | SB-761D | SB-761D | SB-761D |
|---|---|---|---|---|
| SAMPLE ID | G-SB-761C-15 | G-SB-761D-11 | G-SB-761D-13 | G-SB-761D-15 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-761C | SB-761D | SB-761D | SB-761D |
|---|---|---|---|---|
| SAMPLE ID | G-SB-761C-15 | G-SB-761D-11 | G-SB-761D-13 | G-SB-761D-15 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 |
| VINYL CHLORIDE | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1035 | 234 | 1125 | 6375 |
| BAP EQUIVALENT-POS | 1035 | 234 | 1125 | 6375 |
| BENZO(A)ANTHRACENE | 770 | 180 | 820 | 4700 |
| BENZO(A)PYRENE | 650 | 150 | 780 | 4400 |
| BENZO(B)FLUORANTHENE | 820 | 160 | 890 | 3900 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 400 | 62 | 320 | 1900 |
| C1-CHRYSENES | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-761C | SB-761D | SB-761D | SB-761D |
|---|---|---|---|---|
| SAMPLE ID | G-SB-761C-15 | G-SB-761D-11 | G-SB-761D-13 | G-SB-761D-15 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| CHRYSENE | 970 | 200 | 1000 | 5800 |
| DIBENZO(A,H)ANTHRACENE | 180 | 40 | 120 | 880 |
| FLUORANTHENE | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 410 | 93 | 500 | 2100 |
| NAPHTHALENE | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA |
| TOTAL PAHS | 4200 | 885 | 4430 | 23680 |
| **PESTICIDES/PCBS (UG/KG)** | | | | |
| 4,4'-DDD | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | |
| ANTIMONY | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-761C | SB-761D | SB-761D | SB-761D |
|---|---|---|---|---|
| SAMPLE ID | G-SB-761C-15 | G-SB-761D-11 | G-SB-761D-13 | G-SB-761D-15 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | |
| PH | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | |
| ACTINIUM-228 | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | G-TP-2 | MRC-MW12A | MRC-MW95D | OW-4 | OW-4 | OW-6 | OW-6 | SB-085 | SB-086 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-2-5-13-14 | MRC-MW12[1213] | MRC-MW95D-SO-214 | OW-4-26 | OW-4-30 | OW-6-20 | OW-6-30 | SB-85-12 | SB-86-12 |
| SAMPLE DATE | 20100921 | 20050517 | 20100513 | 20071127 | 20071127 | 20071129 | 20071129 | 20041115 | 20041115 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 12 | 214 | 26 | 30 | 20 | 30 | 12 | 12 |
| BOTTOM DEPTH | 14 | 13 | 214 | 26 | 30 | 20 | 30 | 12 | 12 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | 0.72 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,1,1-TRICHLOROETHANE | NA | NA | 0.65 U | 6 U | 5.9 U | 6.2 U | 1.3 J | 6 UL | 6 UL |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | 0.39 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | 6 UL | 6 UL |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | 1.5 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,1-DICHLOROETHANE | NA | NA | 0.42 U | 6 U | 5.9 U | 1.6 J | 1.3 J | 6 UL | 6 UL |
| 1,1-DICHLOROETHENE | NA | NA | 0.6 U | 6 U | 5.9 U | 5 J | 7.4 | 6 UL | 6 UL |
| 1,1-DICHLOROPROPENE | NA | NA | 0.35 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,2,3-TRICHLOROBENZENE | NA | NA | 0.44 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,2,3-TRICHLOROPROPANE | NA | NA | 1 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | 0.2 U | 6 U | 5.9 U | 6.2 U | 6 U | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | 0.31 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | 0.75 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | 1.5 U | 12 U | 12 U | 12 U | 12 U | 6 UL | 6 UL |
| 1,2-DIBROMOETHANE | NA | NA | 0.58 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,2-DICHLOROBENZENE | NA | NA | 0.42 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,2-DICHLOROETHANE | NA | NA | 0.39 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,2-DICHLOROPROPANE | NA | NA | 0.8 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | 6 UL | 6 UL |
| 1,3-DICHLOROBENZENE | NA | NA | 0.41 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,3-DICHLOROPROPANE | NA | NA | 0.39 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | 0.77 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | 1.1 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 2-BUTANONE | NA | NA | 27 | 12 U | 12 U | 12 U | 12 U | 57 UL | 57 UL |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | 1.6 U | 12 U | 12 U | 12 U | 12 U | 6 UL | 6 UL |
| 2-CHLOROTOLUENE | NA | NA | 0.46 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 2-HEXANONE | NA | NA | 7.7 B | 12 U | 12 U | 12 U | 12 U | 57 UL | 57 UL |
| 4-CHLOROTOLUENE | NA | NA | 0.48 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 4-ISOPROPYLTOLUENE | NA | NA | 0.24 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| 4-METHYL-2-PENTANONE | NA | NA | 0.63 U | 12 U | 12 U | 12 U | 12 U | 57 UL | 57 UL |
| ACETONE | NA | NA | 64 B | 12 U | 8 J | 7.8 J | 9.7 J | 57 UL | 57 UL |
| BENZENE | NA | NA | 0.52 J | 6 U | 5.9 U | 6.2 U | 0.29 J | 6 UL | 6 UL |
| BROMOBENZENE | NA | NA | 0.82 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| BROMOCHLOROMETHANE | NA | NA | 0.82 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| BROMODICHLOROMETHANE | NA | NA | 0.33 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| BROMOFORM | NA | NA | 0.38 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| BROMOMETHANE | NA | NA | 0.63 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| CARBON DISULFIDE | NA | NA | 0.51 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| CARBON TETRACHLORIDE | NA | NA | 0.43 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| CHLOROBENZENE | NA | NA | 0.38 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| CHLORODIBROMOMETHANE | NA | NA | 0.64 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| CHLOROETHANE | NA | NA | 1 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| CHLOROFORM | NA | NA | 0.34 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| CHLOROMETHANE | NA | NA | 0.48 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| CIS-1,2-DICHLOROETHENE | NA | NA | 0.42 U | 6 U | 0.87 J | 4.1 J | 3.5 J | 6 UL | 6 UL |
| CIS-1,3-DICHLOROPROPENE | NA | NA | 0.39 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| DIBROMOMETHANE | NA | NA | 0.73 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| DICHLORODIFLUOROMETHANE | NA | NA | 0.58 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| DIISOPROPYL ETHER | NA | NA | 1.7 U | 12 U | 12 U | 12 U | 12 U | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | 0.26 U | 6 U | 5.9 U | 6.2 U | 6 U | NA | NA |
| ETHYLBENZENE | NA | NA | 0.41 J | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | 1.4 U | 6 U | 5.9 U | 6.2 U | 6 U | NA | NA |
| ISOPROPYLBENZENE | NA | NA | 0.19 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| M+P-XYLENES | NA | NA | 1.4 U | 12 U | 12 U | 12 U | 12 U | 11 UL | 11 UL |
| METHYL TERT-BUTYL ETHER | NA | NA | 0.5 U | 12 U | 12 U | 12 U | 12 U | 6 UL | 6 UL |
| METHYLENE CHLORIDE | NA | NA | 0.99 B | 16 B | 14 B | 4.7 B | 4.6 B | 9 J | 11 J |
| NAPHTHALENE | NA | NA | 0.37 B | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| N-BUTYLBENZENE | NA | NA | 0.35 J | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| N-PROPYLBENZENE | NA | NA | 0.46 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| O-XYLENE | NA | NA | 0.59 J | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| SEC-BUTYLBENZENE | NA | NA | 0.21 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| STYRENE | NA | NA | 0.17 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| TERT-AMYL METHYL ETHER | NA | NA | 0.43 U | 6 U | 5.9 U | 6.2 U | 6 U | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | 0.34 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| TERTIARY-BUTYL ALCOHOL | NA | NA | 8.8 UR | 120 UR | 120 UR | 120 UR | 120 UR | NA | NA |
| TETRACHLOROETHENE | NA | NA | 0.6 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| TOLUENE | NA | NA | 1.6 B | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | 1.5 J | 12 U | 12 U | 12 U | 12 U | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | 0.48 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | 0.63 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| TRICHLOROETHENE | NA | NA | 0.49 U | 6 U | 4 J | 17 | 64 | 6 UL | 7 L |
| TRICHLOROFLUOROMETHANE | NA | NA | 0.39 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| VINYL ACETATE | NA | NA | 0.29 U | 12 U | 12 U | 12 UJ | 12 UJ | 6 UL | 6 UL |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | G-TP-2 | MRC-MW12A | MRC-MW95D | OW-4 | OW-4 | OW-6 | OW-6 | SB-085 | SB-086 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-2-5-13-14 | MRC-MW12[1213] | MRC-MW95D-SO-214 | OW-4-26 | OW-4-30 | OW-6-20 | OW-6-30 | SB-85-12 | SB-86-12 |
| SAMPLE DATE | 20100921 | 20050517 | 20100513 | 20071127 | 20071127 | 20071129 | 20071129 | 20041115 | 20041115 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 12 | 214 | 26 | 30 | 20 | 30 | 12 | 12 |
| BOTTOM DEPTH | 14 | 13 | 214 | 26 | 30 | 20 | 30 | 12 | 12 |
| VINYL CHLORIDE | NA | NA | 0.45 U | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | 970 UJ | 960 UJ |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | 970 UJ | 960 UJ |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | 970 UJ | 960 UJ |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | 970 UJ | 960 UJ |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | 890 UJ | 890 UJ |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | 970 UJ | 960 UJ |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | 970 UJ | 960 UJ |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | 970 UJ | 960 UJ |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | 960 J | 980 J |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 3.9 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| ACENAPHTHENE | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| ACENAPHTHYLENE | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| ANTHRACENE | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| BAP EQUIVALENT-HALFND | 32 | NA | NA | NA | NA | NA | NA | 390 U | 411 |
| BAP EQUIVALENT-POS | 30 | NA | NA | NA | NA | NA | NA | 390 U | 12 |
| BENZO(A)ANTHRACENE | 8.4 | NA | NA | NA | NA | NA | NA | 390 UJ | 47 J |
| BENZO(A)PYRENE | 26 J | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| BENZO(B)FLUORANTHENE | 9.9 | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 74 J |
| BENZO(G,H,I)PERYLENE | 10 | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| BENZO(K)FLUORANTHENE | 3.9 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | G-TP-2 | MRC-MW12A | MRC-MW95D | OW-4 | OW-4 | OW-6 | OW-6 | SB-085 | SB-086 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-2-5-13-14 | MRC-MW12[1213] | MRC-MW95D-SO-214 | OW-4-26 | OW-4-30 | OW-6-20 | OW-6-30 | SB-85-12 | SB-86-12 |
| SAMPLE DATE | 20100921 | 20050517 | 20100513 | 20071127 | 20071127 | 20071129 | 20071129 | 20041115 | 20041115 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 12 | 214 | 26 | 30 | 20 | 30 | 12 | 12 |
| BOTTOM DEPTH | 14 | 13 | 214 | 26 | 30 | 20 | 30 | 12 | 12 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 10 | NA | NA | NA | NA | NA | NA | 390 UJ | 51 J |
| DIBENZO(A,H)ANTHRACENE | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| FLUORANTHENE | 8.5 | NA | NA | NA | NA | NA | NA | 390 UJ | 110 J |
| FLUORENE | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| INDENO(1,2,3-CD)PYRENE | 22 J | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| NAPHTHALENE | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ |
| PHENANTHRENE | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 89 J |
| PYRENE | 16 | NA | NA | NA | NA | NA | NA | 390 UJ | 89 J |
| TOTAL PAHS | 110.8 | NA | NA | NA | NA | NA | NA | 0 U | 460 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| AROCLOR-1016 | NA | NA | NA | 40 U | 39 U | NA | NA | 280 UJ | 280 UJ |
| AROCLOR-1221 | NA | NA | NA | 40 U | 39 U | NA | NA | 280 UJ | 280 UJ |
| AROCLOR-1232 | NA | NA | NA | 40 U | 39 U | NA | NA | 280 UJ | 280 UJ |
| AROCLOR-1242 | NA | NA | NA | 40 U | 39 U | NA | NA | 280 UJ | 280 UJ |
| AROCLOR-1248 | NA | NA | NA | 40 U | 39 U | NA | NA | 280 UJ | 280 UJ |
| AROCLOR-1254 | NA | NA | NA | 40 U | 39 U | NA | NA | 280 UJ | 280 UJ |
| AROCLOR-1260 | NA | NA | NA | 40 U | 39 U | NA | NA | 280 UJ | 280 UJ |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | 46 UJ | 23 UJ |
| TOTAL AROCLOR | NA | NA | NA | 0 U | 0 U | NA | NA | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | 1100 UJ | 560 UJ |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | 0.28 J | 0.096 B | 0.12 B | 0.095 B | 2.6 UL | 2.6 UL |
| ARSENIC | NA | NA | NA | 0.32 L | 0.19 L | 1.1 L | 0.24 L | 0.98 | 0.51 U |
| BARIUM | NA | NA | NA | 9.7 | 6.6 | 11.8 | 6 | NA | NA |
| BERYLLIUM | NA | NA | NA | 0.7 | 0.63 | 0.8 | 0.48 | 2.6 U | 2.6 U |
| CADMIUM | NA | NA | NA | 0.012 B | 0.0085 B | 0.12 | 0.0081 B | 2.6 U | 2.6 U |
| CHROMIUM | NA | NA | NA | 8.9 J | 9.1 J | 10.6 J | 9.1 J | 14 | 11 |
| COBALT | NA | NA | NA | 3.1 J | 2.9 J | 8.1 J | 2.1 J | NA | NA |
| COPPER | NA | NA | NA | 5.7 J | 4.8 J | 8.1 J | 4.6 J | 12 | 12 |
| IRON | NA | NA | NA | 21600 J | 8400 J | 10300 J | 6100 J | NA | NA |
| LEAD | NA | NA | NA | 4 J | 2.5 J | 4.5 J | 2.8 J | 15 J | 16 J |
| MANGANESE | NA | NA | NA | 156 J | 76.1 J | 137 J | 30.6 J | NA | NA |
| MERCURY | NA | NA | NA | 0.02 UL | 0.02 UL | 0.021 UL | 0.02 UL | 0.11 U | 0.1 U |
| MOLYBDENUM | NA | NA | NA | 0.19 B | 0.081 B | 0.17 B | 0.079 UL | NA | NA |
| NICKEL | NA | NA | NA | 6.6 J | 5.2 J | 17 J | 4.5 J | 26 J | 13 J |
| SELENIUM | NA | NA | NA | 0.24 L | 0.19 UL | 0.22 L | 0.19 UL | 2.6 UL | 2.6 UL |
| SILVER | NA | NA | NA | 0.089 | 0.047 | 0.056 | 0.03 B | 2.6 UR | 2.6 UR |
| THALLIUM | NA | NA | NA | 0.05 | 0.034 | 0.043 | 0.031 | 2.1 U | 2 U |
| VANADIUM | NA | NA | NA | 10.1 J | 11.8 J | 18.8 J | 19.2 J | NA | NA |
| ZINC | NA | NA | NA | 13.8 K | 11.8 K | 26.4 K | 10.5 K | 110 | 39 |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | G-TP-2 | MRC-MW12A | MRC-MW95D | OW-4 | OW-4 | OW-6 | OW-6 | SB-085 | SB-086 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-2-5-13-14 | MRC-MW12[1213] | MRC-MW95D-SO-214 | OW-4-26 | OW-4-30 | OW-6-20 | OW-6-30 | SB-85-12 | SB-86-12 |
| SAMPLE DATE | 20100921 | 20050517 | 20100513 | 20071127 | 20071127 | 20071129 | 20071129 | 20041115 | 20041115 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 12 | 214 | 26 | 30 | 20 | 30 | 12 | 12 |
| BOTTOM DEPTH | 14 | 13 | 214 | 26 | 30 | 20 | 30 | 12 | 12 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | 13000 J | 11000 UJ |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | 120 UJ | 110 UJ |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | 82.9 | 84.2 | 80.5 | 83.9 | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | 1320 | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091A | SB-091A | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91RE-11 | G-SB-91RE-12 | G-SB-91RE-13 | G-SB-91RE-14 | G-SB-91RE-15 | G-SB-91REA-11 | G-SB-91REA-13 | G-SB-91REA-15 | G-SB-91REB-11 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091A | SB-091A | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91RE-11 | G-SB-91RE-12 | G-SB-91RE-13 | G-SB-91RE-14 | G-SB-91RE-15 | G-SB-91REA-11 | G-SB-91REA-13 | G-SB-91REA-15 | G-SB-91REB-11 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 19 | 1458 | 110 | 1.6 U | 1.5 U | 84 | 1.6 U | 19 |
| BAP EQUIVALENT-POS | 1.5 U | 19 | 1458 | 110 | 1.6 U | 1.5 U | 83 | 1.6 U | 18 |
| BENZO(A)ANTHRACENE | 1.1 U | 10 | 620 | 44 | 1.2 U | 1.1 U | 58 | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 14 | 950 | 66 | 1.6 U | 1.5 U | 65 | 1.6 U | 18 |
| BENZO(B)FLUORANTHENE | 1.4 U | 16 | 940 | 74 | 1.5 U | 1.4 U | 73 | 1.5 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2 U | 450 | 24 | 2.1 U | 2 U | 24 | 2.1 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091A | SB-091A | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91RE-11 | G-SB-91RE-12 | G-SB-91RE-13 | G-SB-91RE-14 | G-SB-91RE-15 | G-SB-91REA-11 | G-SB-91REA-13 | G-SB-91REA-15 | G-SB-91REB-11 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 11 | 770 | 53 | 1.1 U | 1 U | 62 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 290 | 26 | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 21 | 570 | 57 | 1.8 U | 1.7 U | 48 | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 72 | 4590 | 344 | 0 U | 0 U | 330 | 0 U | 18 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091A | SB-091A | SB-091A | SB-091B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91RE-11 | G-SB-91RE-12 | G-SB-91RE-13 | G-SB-91RE-14 | G-SB-91RE-15 | G-SB-91REA-11 | G-SB-91REA-13 | G-SB-91REA-15 | G-SB-91REB-11 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-091B | SB-091B | SB-091C | SB-091C | SB-091C | SB-091C | SB-091C | SB-092 | SB-092 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REB-13 | G-SB-91REB-15 | G-SB-91REC-11 | G-SB-91REC-13 | G-SB-91REC-15 | G-SB-91REC-15-AVG | G-SB-91REC-15-D | G-SB-92RE-11 | G-SB-92RE-12 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 12 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 12 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-091B | SB-091B | SB-091C | SB-091C | SB-091C | SB-091C | SB-091C | SB-092 | SB-092 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REB-13 | G-SB-91REB-15 | G-SB-91REC-11 | G-SB-91REC-13 | G-SB-91REC-15 | G-SB-91REC-15-AVG | G-SB-91REC-15-D | G-SB-92RE-11 | G-SB-92RE-12 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 12 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 12 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 621 | 1.6 U | 69 | 1.6 U | 205 | 189 | 173 | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 620 | 1.6 U | 69 | 1.6 U | 205 | 189 | 173 | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 340 | 1.1 U | 32 | 1.1 U | 67 | 63 | 59 | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 490 | 1.6 U | 54 | 1.6 U | 140 | 130 | 120 | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 540 | 1.4 U | 75 | 1.5 U | 180 | 160 | 140 | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 280 | 2.1 U | 31 | 2.1 U | 64 | 69 | 74 | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-091B | SB-091B | SB-091C | SB-091C | SB-091C | SB-091C | SB-091C | SB-092 | SB-092 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REB-13 | G-SB-91REB-15 | G-SB-91REC-11 | G-SB-91REC-13 | G-SB-91REC-15 | G-SB-91REC-15-AVG | G-SB-91REC-15-D | G-SB-92RE-11 | G-SB-92RE-12 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 12 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 12 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 420 | 1.1 U | 35 | 1.1 U | 85 | 76 | 67 | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.6 U | 1.5 U | 1.6 U | 29 | 26.5 | 24 | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 390 | 1.8 U | 36 | 1.8 U | 110 | 98 | 86 | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 2460 | 0 U | 263 | 0 U | 675 | 622.5 | 570 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | 3.4 | 2.1 |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-091B | SB-091B | SB-091C | SB-091C | SB-091C | SB-091C | SB-091C | SB-092 | SB-092 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REB-13 | G-SB-91REB-15 | G-SB-91REC-11 | G-SB-91REC-13 | G-SB-91REC-15 | G-SB-91REC-15-AVG | G-SB-91REC-15-D | G-SB-92RE-11 | G-SB-92RE-12 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 12 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 | 12 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-092 | SB-092 | SB-092 | SB-092C | SB-092C | SB-092C | SB-092D | SB-092D | SB-092D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RE-13 | G-SB-92RE-14 | G-SB-92RE-15 | G-SB-92REC-11 | G-SB-92REC-13 | G-SB-92REC-15 | G-SB-92RED-11 | G-SB-92RED-13 | G-SB-92RED-15 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-092 | SB-092 | SB-092 | SB-092C | SB-092C | SB-092C | SB-092D | SB-092D | SB-092D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RE-13 | G-SB-92RE-14 | G-SB-92RE-15 | G-SB-92REC-11 | G-SB-92REC-13 | G-SB-92REC-15 | G-SB-92RED-11 | G-SB-92RED-13 | G-SB-92RED-15 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 308 | 951 | 649 | 1.6 U | 104 | 1.5 U | 42 | 1450 | 201 |
| BAP EQUIVALENT-POS | 308 | 951 | 649 | 1.6 U | 104 | 1.5 U | 41 | 1449 | 200 |
| BENZO(A)ANTHRACENE | 210 | 550 | 320 | 1.1 U | 59 | 1.1 U | 30 | 870 | 130 |
| BENZO(A)PYRENE | 200 | 650 | 430 | 1.6 U | 76 | 1.5 U | 33 | 1200 | 160 |
| BENZO(B)FLUORANTHENE | 230 | 660 | 480 | 1.4 U | 66 | 1.4 U | 31 | 1000 | 170 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 62 | 330 | 180 | 2 U | 38 | 1.9 U | 16 | 360 | 62 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-092 | SB-092 | SB-092 | SB-092C | SB-092C | SB-092C | SB-092D | SB-092D | SB-092D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RE-13 | G-SB-92RE-14 | G-SB-92RE-15 | G-SB-92REC-11 | G-SB-92REC-13 | G-SB-92REC-15 | G-SB-92RED-11 | G-SB-92RED-13 | G-SB-92RED-15 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 210 | 530 | 390 | 1.1 U | 67 | 1 U | 34 | 1100 | 150 |
| DIBENZO(A,H)ANTHRACENE | 51 | 140 | 110 | 1.6 U | 10 | 1.5 U | 1.5 U | 1.6 U | 1.7 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 120 | 360 | 270 | 1.8 U | 48 | 1.7 U | 19 | 570 | 95 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1083 | 3220 | 2180 | 0 U | 364 | 0 U | 163 | 5100 | 767 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 3.7 | 4.1 | 5.6 | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-092 | SB-092 | SB-092 | SB-092C | SB-092C | SB-092C | SB-092D | SB-092D | SB-092D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RE-13 | G-SB-92RE-14 | G-SB-92RE-15 | G-SB-92REC-11 | G-SB-92REC-13 | G-SB-92REC-15 | G-SB-92RED-11 | G-SB-92RED-13 | G-SB-92RED-15 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-762 | SB-762 | SB-762 | SB-762A | SB-762A | SB-762A | SB-762B | SB-762B | SB-762B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762-11 | G-SB-762-13 | G-SB-762-15 | G-SB-762A-11 | G-SB-762A-13 | G-SB-762A-15 | G-SB-762B-11 | G-SB-762B-11-AVG | G-SB-762B-11-D |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091022 | 20091022 | 20091022 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-762 | SB-762 | SB-762 | SB-762A | SB-762A | SB-762A | SB-762B | SB-762B | SB-762B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762-11 | G-SB-762-13 | G-SB-762-15 | G-SB-762A-11 | G-SB-762A-13 | G-SB-762A-15 | G-SB-762B-11 | G-SB-762B-11-AVG | G-SB-762B-11-D |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091022 | 20091022 | 20091022 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 398 | 4782 | 67 | 125 | 88 | 13293 | 219 | 211 | 203 |
| BAP EQUIVALENT-POS | 398 | 4782 | 66 | 124 | 87 | 13293 | 219 | 211 | 203 |
| BENZO(A)ANTHRACENE | 230 | 3100 | 50 | 110 | 68 | 9500 | 120 | 125 | 130 |
| BENZO(A)PYRENE | 270 | 3200 | 51 | 98 | 69 | 8900 | 150 | 145 | 140 |
| BENZO(B)FLUORANTHENE | 310 | 3900 | 61 | 95 | 68 | 10000 | 180 | 165 | 150 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 110 | 1900 | 24 | 38 | 36 | 4200 | 69 | 76.5 | 84 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-762 | SB-762 | SB-762 | SB-762A | SB-762A | SB-762A | SB-762B | SB-762B | SB-762B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762-11 | G-SB-762-13 | G-SB-762-15 | G-SB-762A-11 | G-SB-762A-13 | G-SB-762A-15 | G-SB-762B-11 | G-SB-762B-11-AVG | G-SB-762B-11-D |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091022 | 20091022 | 20091022 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 280 | 3100 | 54 | 100 | 83 | 11000 | 180 | 175 | 170 |
| DIBENZO(A,H)ANTHRACENE | 55 | 670 | 1.6 U | 1.6 U | 1.6 U | 1900 | 28 | 27 | 26 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 180 | 1900 | 34 | 55 | 43 | 4900 | 100 | 89.5 | 79 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1435 | 17770 | 274 | 496 | 367 | 50400 | 827 | 803 | 779 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-762 | SB-762 | SB-762 | SB-762A | SB-762A | SB-762A | SB-762B | SB-762B | SB-762B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762-11 | G-SB-762-13 | G-SB-762-15 | G-SB-762A-11 | G-SB-762A-13 | G-SB-762A-15 | G-SB-762B-11 | G-SB-762B-11-AVG | G-SB-762B-11-D |
| SAMPLE DATE | 20091001 | 20091001 | 20091001 | 20091022 | 20091022 | 20091022 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-762B | SB-762B | SB-762D | SB-762D | SB-762D | SB-763 | SB-763 | SB-763 | SB-763A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762B-13 | G-SB-762B-15 | G-SB-762D-11 | G-SB-762D-13 | G-SB-762D-15 | G-SB-763-11 | G-SB-763-13 | G-SB-763-15 | G-SB-763A-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091022 | 20091022 | 20091022 | 20091001 | 20091002 | 20091002 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-762B | SB-762B | SB-762D | SB-762D | SB-762D | SB-763 | SB-763 | SB-763 | SB-763A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762B-13 | G-SB-762B-15 | G-SB-762D-11 | G-SB-762D-13 | G-SB-762D-15 | G-SB-763-11 | G-SB-763-13 | G-SB-763-15 | G-SB-763A-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091022 | 20091022 | 20091022 | 20091001 | 20091002 | 20091002 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 319 | 2188 | 11506 | 2713 | 59 | 84 | 992 | 2863 | 3334 |
| BAP EQUIVALENT-POS | 319 | 2188 | 11506 | 2713 | 59 | 84 | 992 | 2863 | 3334 |
| BENZO(A)ANTHRACENE | 200 | 1700 | 6900 | 1600 | 36 | 49 | 700 | 1400 | 1900 |
| BENZO(A)PYRENE | 220 | 1500 | 7900 | 1900 | 47 | 47 | 700 | 2000 | 2300 |
| BENZO(B)FLUORANTHENE | 270 | 1700 | 8300 | 2100 | 47 | 58 | 730 | 1800 | 2300 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 110 | 720 | 3800 | 1100 | 25 | 21 | 310 | 1100 | 1200 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-762B | SB-762B | SB-762D | SB-762D | SB-762D | SB-763 | SB-763 | SB-763 | SB-763A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762B-13 | G-SB-762B-15 | G-SB-762D-11 | G-SB-762D-13 | G-SB-762D-15 | G-SB-763-11 | G-SB-763-13 | G-SB-763-15 | G-SB-763A-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091022 | 20091022 | 20091022 | 20091001 | 20091002 | 20091002 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 260 | 1900 | 7700 | 1900 | 50 | 53 | 750 | 1600 | 2300 |
| DIBENZO(A,H)ANTHRACENE | 38 | 260 | 1600 | 330 | 1.6 U | 22 | 110 | 410 | 480 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 130 | 790 | 4400 | 1000 | 29 | 38 | 350 | 1200 | 1200 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1228 | 8570 | 40600 | 9930 | 234 | 288 | 3650 | 9510 | 11680 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-762B | SB-762B | SB-762D | SB-762D | SB-762D | SB-763 | SB-763 | SB-763 | SB-763A |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762B-13 | G-SB-762B-15 | G-SB-762D-11 | G-SB-762D-13 | G-SB-762D-15 | G-SB-763-11 | G-SB-763-13 | G-SB-763-15 | G-SB-763A-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091022 | 20091022 | 20091022 | 20091001 | 20091002 | 20091002 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-763A | SB-763A | SB-763B | SB-763B | SB-763B | SB-763C | SB-763C | SB-763C | SB-763D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763A-13 | G-SB-763A-15 | G-SB-763B-11 | G-SB-763B-13 | G-SB-763B-15 | G-SB-763C-11 | G-SB-763C-13 | G-SB-763C-15 | G-SB-763D-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091027 | 20091027 | 20091027 | 20091023 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-763A | SB-763A | SB-763B | SB-763B | SB-763B | SB-763C | SB-763C | SB-763C | SB-763D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763A-13 | G-SB-763A-15 | G-SB-763B-11 | G-SB-763B-13 | G-SB-763B-15 | G-SB-763C-11 | G-SB-763C-13 | G-SB-763C-15 | G-SB-763D-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091027 | 20091027 | 20091027 | 20091023 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 19 | 29 | 49 | 184 | 3345 | 12086 | 8745 | 1.6 U |
| BAP EQUIVALENT-POS | 1.5 U | 18 | 28 | 48 | 183 | 3338 | 12045 | 8745 | 1.6 U |
| BENZO(A)ANTHRACENE | 1.1 U | 15 | 19 | 38 | 110 | 3100 | 12000 | 6800 | 1.2 U |
| BENZO(A)PYRENE | 1.5 U | 14 | 23 | 38 | 150 | 2600 | 9200 | 6100 | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 14 | 18 | 39 | 130 | 2700 | 11000 | 6900 | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2.1 U | 14 | 20 | 83 | 1400 | 5300 | 2700 | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-763A | SB-763A | SB-763B | SB-763B | SB-763B | SB-763C | SB-763C | SB-763C | SB-763D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763A-13 | G-SB-763A-15 | G-SB-763B-11 | G-SB-763B-13 | G-SB-763B-15 | G-SB-763C-11 | G-SB-763C-13 | G-SB-763C-15 | G-SB-763D-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091027 | 20091027 | 20091027 | 20091023 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 17 | 24 | 41 | 120 | 3600 | 12000 | 8000 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 15 U | 81 U | 950 | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 8.3 | 13 | 22 | 81 | 1400 | 4800 | 2900 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 68.3 | 111 | 198 | 674 | 14800 | 54300 | 34350 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-763A | SB-763A | SB-763B | SB-763B | SB-763B | SB-763C | SB-763C | SB-763C | SB-763D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763A-13 | G-SB-763A-15 | G-SB-763B-11 | G-SB-763B-13 | G-SB-763B-15 | G-SB-763C-11 | G-SB-763C-13 | G-SB-763C-15 | G-SB-763D-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091027 | 20091027 | 20091027 | 20091023 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-763D | SB-763D | SB-764 | SB-764 | SB-764 | SB-764A | SB-764C | SB-764D | SB-765 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763D-13 | G-SB-763D-15 | G-SB-764-11 | G-SB-764-13 | G-SB-764-15 | G-SB-764A-11 | G-SB-764C-11 | G-SB-764D-11 | G-SB-765-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091002 | 20091002 | 20091002 | 20091027 | 20091027 | 20091027 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-763D | SB-763D | SB-764 | SB-764 | SB-764 | SB-764A | SB-764C | SB-764D | SB-765 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763D-13 | G-SB-763D-15 | G-SB-764-11 | G-SB-764-13 | G-SB-764-15 | G-SB-764A-11 | G-SB-764C-11 | G-SB-764D-11 | G-SB-765-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091002 | 20091002 | 20091002 | 20091027 | 20091027 | 20091027 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.8 U | 67 | 27 | 1.6 U | 2470 | 44 | 57 | 1.5 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.8 U | 66 | 26 | 1.6 U | 2470 | 43 | 56 | 1.5 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.3 U | 48 | 16 | 1.1 U | 1800 | 34 | 53 | 1.1 U |
| BENZO(A)PYRENE | 1.6 U | 1.8 U | 53 | 21 | 1.6 U | 1700 | 34 | 44 | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.7 U | 52 | 21 | 1.4 U | 1700 | 36 | 39 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2.3 U | 26 | 12 | 2 U | 850 | 14 | 32 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-763D | SB-763D | SB-764 | SB-764 | SB-764 | SB-764A | SB-764C | SB-764D | SB-765 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763D-13 | G-SB-763D-15 | G-SB-764-11 | G-SB-764-13 | G-SB-764-15 | G-SB-764A-11 | G-SB-764C-11 | G-SB-764D-11 | G-SB-765-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091002 | 20091002 | 20091002 | 20091027 | 20091027 | 20091027 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.2 U | 57 | 16 | 1.1 U | 1900 | 40 | 64 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.8 U | 1.5 U | 1.6 U | 1.6 U | 320 | 1.6 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 2.1 U | 30 | 12 | 1.8 U | 900 | 19 | 26 | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 266 | 98 | 0 U | 9170 | 177 | 258 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-763D | SB-763D | SB-764 | SB-764 | SB-764 | SB-764A | SB-764C | SB-764D | SB-765 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763D-13 | G-SB-763D-15 | G-SB-764-11 | G-SB-764-13 | G-SB-764-15 | G-SB-764A-11 | G-SB-764C-11 | G-SB-764D-11 | G-SB-765-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091002 | 20091002 | 20091002 | 20091027 | 20091027 | 20091027 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-765 | SB-765 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 | SB-805 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765-13 | G-SB-765-15 | G-SB-803-11 | G-SB-803-13 | G-SB-803-15 | G-SB-804-11 | G-SB-804-13 | G-SB-804-15 | G-SB-805-11 |
| SAMPLE DATE | 20091002 | 20091002 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 | 20100824 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-765 | SB-765 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 | SB-805 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765-13 | G-SB-765-15 | G-SB-803-11 | G-SB-803-13 | G-SB-803-15 | G-SB-804-11 | G-SB-804-13 | G-SB-804-15 | G-SB-805-11 |
| SAMPLE DATE | 20091002 | 20091002 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 | 20100824 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | 3.8 U | 4.4 U | 3.9 U | 4.2 U | 7.8 U | 31 | 4 U |
| 2-METHYLNAPHTHALENE | NA | NA | 3.8 U | 4.4 U | 3.9 U | 4.2 U | 7.8 U | 10 U | 4 U |
| ACENAPHTHENE | NA | NA | 3.8 U | 4.4 U | 3.9 U | 4.2 U | 14 J | 51 | 4 U |
| ACENAPHTHYLENE | NA | NA | 3.8 U | 44 | 23 | 4.2 U | 37 | 49 | 4 U |
| ANTHRACENE | NA | NA | 3.8 U | 88 J | 55 J | 33 | 130 | 240 | 4 U |
| BAP EQUIVALENT-HALFND | 17 | 1.7 U | 3.8 U | 352 | 219 | 187 | 662 | 1237 | 4 U |
| BAP EQUIVALENT-POS | 16 | 1.7 U | 3.8 U | 350 | 217 | 185 | 658 | 1237 | 4 U |
| BENZO(A)ANTHRACENE | 15 | 1.3 U | 3.8 U | 260 | 160 | 200 | 630 | 1100 | 4 U |
| BENZO(A)PYRENE | 13 | 1.7 U | 3.8 U | 270 J | 170 J | 140 | 500 | 840 | 4 U |
| BENZO(B)FLUORANTHENE | 15 | 1.6 U | 3.8 U | 350 J | 190 J | 150 | 620 | 930 | 4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | 3.8 U | 240 J | 140 J | 120 | 410 | 660 | 4 U |
| BENZO(K)FLUORANTHENE | 2.2 U | 2.2 U | 3.8 U | 140 J | 96 J | 86 | 310 | 500 | 4 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-765 | SB-765 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 | SB-805 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765-13 | G-SB-765-15 | G-SB-803-11 | G-SB-803-13 | G-SB-803-15 | G-SB-804-11 | G-SB-804-13 | G-SB-804-15 | G-SB-805-11 |
| SAMPLE DATE | 20091002 | 20091002 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 | 20100824 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 16 | 1.2 U | 1.3 U | 320 | 170 | 220 | 730 | 1200 | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.7 U | 3.8 U | 4.4 U | 3.9 U | 4.2 U | 7.8 U | 140 | 4 U |
| FLUORANTHENE | NA | NA | 3.8 U | 380 J | 210 J | 340 | 1100 | 2100 | 19 |
| FLUORENE | NA | NA | 3.8 U | 4.4 U | 3.9 U | 4.2 U | 24 | 70 | 4 U |
| INDENO(1,2,3-CD)PYRENE | 2 U | 2 U | 3.8 U | 170 J | 110 J | 89 | 290 | 480 | 4 U |
| NAPHTHALENE | NA | NA | 3.8 U | 4.4 U | 3.9 U | 4.2 U | 7.8 U | 10 U | 4 U |
| PHENANTHRENE | NA | NA | 3.8 U | 150 J | 90 J | 250 | 630 | 1500 | 12 |
| PYRENE | NA | NA | 3.8 U | 690 | 400 | 530 | 1900 | 3400 | 32 |
| TOTAL PAHS | 59 | 0 U | 0 U | 3102 | 1814 | 2158 | 7325 | 13260 | 63 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-765 | SB-765 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 | SB-805 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765-13 | G-SB-765-15 | G-SB-803-11 | G-SB-803-13 | G-SB-803-15 | G-SB-804-11 | G-SB-804-13 | G-SB-804-15 | G-SB-805-11 |
| SAMPLE DATE | 20091002 | 20091002 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 | 20100824 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-805 | SB-805 | SB-806 | SB-806 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-805-13 | G-SB-805-15 | G-SB-806-11 | G-SB-806-15 | G-SB-807-11 | G-SB-807-13 | G-SB-807-15 | G-SB-808-11 | G-SB-808-13 |
| SAMPLE DATE | 20100824 | 20100824 | 20100824 | 20100824 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 15 | 11 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-805 | SB-805 | SB-806 | SB-806 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-805-13 | G-SB-805-15 | G-SB-806-11 | G-SB-806-15 | G-SB-807-11 | G-SB-807-13 | G-SB-807-15 | G-SB-808-11 | G-SB-808-13 |
| SAMPLE DATE | 20100824 | 20100824 | 20100824 | 20100824 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 15 | 11 | 13 | 15 | 11 | 13 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4.1 U | 4.1 U | 4 U | 20 | 4 U | 4.1 U | 4.2 U | 3.7 U | 7.5 U |
| 2-METHYLNAPHTHALENE | 4.1 U | 4.1 U | 4 U | 30 | 4 U | 4.1 U | 4.2 U | 3.7 U | 7.5 U |
| ACENAPHTHENE | 4.1 U | 4.1 U | 4 U | 36 J | 4 U | 4.1 U | 4.2 U | 3.7 U | 18 |
| ACENAPHTHYLENE | 4.1 U | 4.1 U | 9.1 | 84 | 4 U | 4.1 U | 4.2 U | 3.7 U | 66 |
| ANTHRACENE | 4.1 U | 4.1 U | 30 J | 170 J | 4 U | 4.1 U | 4.2 U | 9.1 | 140 |
| BAP EQUIVALENT-HALFND | 4.1 U | 4.1 U | 92 | 780 | 4 U | 74 | 4.2 U | 127 | 1457 |
| BAP EQUIVALENT-POS | 4.1 U | 4.1 U | 90 | 778 | 4 U | 72 | 4.2 U | 127 | 1457 |
| BENZO(A)ANTHRACENE | 4.1 U | 4.1 U | 59 | 580 | 4 U | 46 | 4.2 U | 73 | 780 |
| BENZO(A)PYRENE | 4.1 U | 4.1 U | 71 J | 610 J | 4 U | 58 | 4.2 U | 85 | 950 |
| BENZO(B)FLUORANTHENE | 4.1 U | 4.1 U | 76 J | 730 J | 4 U | 57 | 4.2 U | 95 | 1000 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4.1 U | 4.1 U | 61 J | 390 J | 4 U | 55 | 4.2 U | 82 | 950 |
| BENZO(K)FLUORANTHENE | 4.1 U | 4.1 U | 40 J | 300 J | 4 U | 32 | 4.2 U | 36 | 420 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-805 | SB-805 | SB-806 | SB-806 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-805-13 | G-SB-805-15 | G-SB-806-11 | G-SB-806-15 | G-SB-807-11 | G-SB-807-13 | G-SB-807-15 | G-SB-808-11 | G-SB-808-13 |
| SAMPLE DATE | 20100824 | 20100824 | 20100824 | 20100824 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 15 | 11 | 13 | 15 | 11 | 13 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C1-FLUORENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C2-FLUORENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C2-NAPHTHALENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C3-FLUORENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C3-NAPHTHALENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C4-NAPHTHALENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| CHRYSENE | 1.4 U | 1.4 U | 67 | 690 | 1.3 U | 67 | 1.4 U | 85 | 1000 |
| DIBENZO(A,H)ANTHRACENE | 4.1 U | 4.1 U | 4 U | 4.2 U | 4 U | 4.1 U | 4.2 U | 19 | 260 |
| FLUORANTHENE | 4.1 U | 8.4 | 100 J | 850 J | 4 U | 78 | 4.2 U | 87 | 970 |
| FLUORENE | 4.1 U | 4.1 U | 4 U | 4.2 U | 4 U | 4.1 U | 4.2 U | 3.7 U | 22 |
| INDENO(1,2,3-CD)PYRENE | 4.1 U | 4.1 U | 51 J | 330 J | 4 U | 34 | 4.2 U | 56 | 640 |
| NAPHTHALENE | 4.1 U | 4.1 U | 4 U | 37 | 4 U | 4.1 U | 4.2 U | 3.7 U | 7.5 U |
| PHENANTHRENE | 4.1 U | 4.1 U | 57 J | 380 J | 4 U | 25 | 4.2 U | 21 | 250 |
| PYRENE | 4.1 U | 13 | 150 | 1600 | 4 U | 120 | 4.2 U | 160 | 1800 |
| TOTAL PAHS | 0 U | 21.4 | 771.1 | 6817 | 0 U | 572 | 0 U | 808.1 | 9266 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-805 | SB-805 | SB-806 | SB-806 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-805-13 | G-SB-805-15 | G-SB-806-11 | G-SB-806-15 | G-SB-807-11 | G-SB-807-13 | G-SB-807-15 | G-SB-808-11 | G-SB-808-13 |
| SAMPLE DATE | 20100824 | 20100824 | 20100824 | 20100824 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 13 | 15 | 11 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 15 | 11 | 13 | 15 | 11 | 13 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-808 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 | SB-811 | SB-811 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-808-15 | G-SB-809-11 | G-SB-809-13 | G-SB-809-15 | G-SB-810-11 | G-SB-810-13 | G-SB-810-15 | G-SB-811-11 | G-SB-811-13 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-808 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 | SB-811 | SB-811 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-808-15 | G-SB-809-11 | G-SB-809-13 | G-SB-809-15 | G-SB-810-11 | G-SB-810-13 | G-SB-810-15 | G-SB-811-11 | G-SB-811-13 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4 U | 3.8 U | 8.3 U | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 4 U | 3.8 U | 8.3 U | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U |
| ACENAPHTHENE | 4 U | 3.8 U | 72 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U |
| ACENAPHTHYLENE | 4 U | 3.8 U | 51 | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U |
| ANTHRACENE | 4 U | 3.8 U | 190 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 4 U | 3.8 U | 1826 | 5.9 | 4.2 U | 16 | 21 | 4.3 U | 24 |
| BAP EQUIVALENT-POS | 4 U | 3.8 U | 1826 | 1.1 | 4.2 U | 13 | 19 | 4.3 U | 22 |
| BENZO(A)ANTHRACENE | 4 U | 3.8 U | 1200 | 11 | 4.2 U | 12 | 16 | 4.3 U | 18 |
| BENZO(A)PYRENE | 4 U | 3.8 U | 1300 J | 4.3 U | 4.2 U | 11 | 16 | 4.3 U | 18 |
| BENZO(B)FLUORANTHENE | 4 U | 3.8 U | 1400 J | 4.3 U | 4.2 U | 12 | 16 | 4.3 U | 17 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4 U | 3.8 U | 880 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U |
| BENZO(K)FLUORANTHENE | 4 U | 3.8 U | 610 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-808 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 | SB-811 | SB-811 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-808-15 | G-SB-809-11 | G-SB-809-13 | G-SB-809-15 | G-SB-810-11 | G-SB-810-13 | G-SB-810-15 | G-SB-811-11 | G-SB-811-13 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C1-FLUORENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C2-FLUORENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C3-FLUORENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 1500 | 13 | 1.4 U | 15 | 15 | 1.4 U | 23 |
| DIBENZO(A,H)ANTHRACENE | 4 U | 3.8 U | 200 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U |
| FLUORANTHENE | 4 U | 3.8 U | 1800 J | 31 J | 4.2 U | 16 | 15 | 4.3 U | 26 |
| FLUORENE | 4 U | 3.8 U | 75 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 4 U | 3.8 U | 580 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U |
| NAPHTHALENE | 4 U | 3.8 U | 25 | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U |
| PHENANTHRENE | 4 U | 3.8 U | 540 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 13 |
| PYRENE | 4 U | 3.8 U | 3500 | 25 | 4.2 U | 29 | 32 | 15 | 41 |
| TOTAL PAHS | 0 U | 0 U | 13923 | 80 | 0 U | 95 | 110 | 15 | 156 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-808 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 | SB-811 | SB-811 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-808-15 | G-SB-809-11 | G-SB-809-13 | G-SB-809-15 | G-SB-810-11 | G-SB-810-13 | G-SB-810-15 | G-SB-811-11 | G-SB-811-13 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-811 | SB-812 | SB-812 | SB-813 | SB-813 | SB-813 | SB-813 | SB-813 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-811-15 | G-SB-812-11 | G-SB-812-15 | G-SB-813-11 | G-SB-813-13 | G-SB-813-15 | G-SB-813-15-AVG | G-SB-813-15-D |
| SAMPLE DATE | 20100823 | 20100824 | 20100824 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 15 | 11 | 15 | 11 | 13 | 15 | 15 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-811 | SB-812 | SB-812 | SB-813 | SB-813 | SB-813 | SB-813 | SB-813 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-811-15 | G-SB-812-11 | G-SB-812-15 | G-SB-813-11 | G-SB-813-13 | G-SB-813-15 | G-SB-813-15-AVG | G-SB-813-15-D |
| SAMPLE DATE | 20100823 | 20100824 | 20100824 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 15 | 11 | 15 | 11 | 13 | 15 | 15 | 15 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4.1 U | 4.1 U | 7.9 | 4 U | 31 | 120 | 120 | NA |
| 2-METHYLNAPHTHALENE | 4.1 U | 4.1 U | 14 | 4 U | 25 | 17 U | 17 U | NA |
| ACENAPHTHENE | 4.1 U | 4.1 U | 3.7 U | 4 U | 53 J | 210 J | 210 J | NA |
| ACENAPHTHYLENE | 4.1 U | 4.1 U | 33 | 4 U | 49 | 190 | 190 | NA |
| ANTHRACENE | 4.1 U | 4.1 U | 66 | 4 U | 170 J | 630 J | 630 J | NA |
| BAP EQUIVALENT-HALFND | 4.1 U | 4.1 U | 409 | 4 U | 607 | 1957 | 1957 | NA |
| BAP EQUIVALENT-POS | 4.1 U | 4.1 U | 408 | 4 U | 605 | 1948 | 1948 | NA |
| BENZO(A)ANTHRACENE | 4.1 U | 4.1 U | 280 | 4 U | 520 | 1700 | 1700 | NA |
| BENZO(A)PYRENE | 4.1 U | 4.1 U | 320 J | 4 U | 470 J | 1500 J | 1500 J | NA |
| BENZO(B)FLUORANTHENE | 4.1 U | 4.1 U | 370 J | 4 U | 530 J | 1900 J | 1900 J | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 4.1 U | 4.1 U | 320 | 4 U | 370 J | 1000 J | 1000 J | NA |
| BENZO(K)FLUORANTHENE | 4.1 U | 4.1 U | 130 | 4 U | 200 J | 720 J | 720 J | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-811 | SB-812 | SB-812 | SB-813 | SB-813 | SB-813 | SB-813 | SB-813 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-811-15 | G-SB-812-11 | G-SB-812-15 | G-SB-813-11 | G-SB-813-13 | G-SB-813-15 | G-SB-813-15-AVG | G-SB-813-15-D |
| SAMPLE DATE | 20100823 | 20100824 | 20100824 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 15 | 11 | 15 | 11 | 13 | 15 | 15 | 15 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 1300 J | NA | NA | 560 J | 510 | 460 J |
| C1-FLUORANTHENES/PYRENES | NA | NA | 1400 J | NA | NA | 620 J | 565 | 510 J |
| C1-FLUORENES | NA | NA | 75 U | NA | NA | 88 U | 87 U | 86 U |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | 740 J | NA | NA | 590 J | 545 | 500 J |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 720 J | NA | NA | 270 J | 260 | 250 J |
| C2-FLUORENES | NA | NA | 75 U | NA | NA | 88 U | 87 U | 86 U |
| C2-NAPHTHALENES | NA | NA | 75 U | NA | NA | 90 J | 66.5 | 86 U |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | 820 J | NA | NA | 450 J | 430 | 410 J |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 240 J | NA | NA | 89 J | 88.5 | 88 J |
| C3-FLUORENES | NA | NA | 130 J | NA | NA | 88 U | 87 U | 86 U |
| C3-NAPHTHALENES | NA | NA | 75 U | NA | NA | 110 J | 76.5 | 86 U |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | 510 J | NA | NA | 240 J | 220 | 200 J |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | 110 J | NA | NA | 88 U | 87 U | 86 U |
| C4-NAPHTHALENES | NA | NA | 90 J | NA | NA | 88 U | 87 U | 86 U |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | 170 J | NA | NA | 88 U | 87 U | 86 U |
| CHRYSENE | 1.4 U | 1.4 U | 330 | 1.3 U | 590 | 1800 | 1800 | NA |
| DIBENZO(A,H)ANTHRACENE | 4.1 U | 4.1 U | 3.7 U | 4 U | 4.2 U | 17 U | 17 U | NA |
| FLUORANTHENE | 4.1 U | 4.1 U | 390 J | 24 J | 870 J | 2900 J | 2900 J | NA |
| FLUORENE | 4.1 U | 4.1 U | 3.7 U | 4 U | 73 J | 280 J | 280 J | NA |
| INDENO(1,2,3-CD)PYRENE | 4.1 U | 4.1 U | 210 J | 4 U | 270 J | 790 J | 790 J | NA |
| NAPHTHALENE | 4.1 U | 4.1 U | 19 | 4 U | 13 | 17 U | 17 U | NA |
| PHENANTHRENE | 4.1 U | 4.1 U | 130 | 20 J | 800 J | 2900 J | 2900 J | NA |
| PYRENE | 4.1 U | 4.1 U | 650 J | 13 | 1500 | 5200 | 5200 | NA |
| TOTAL PAHS | 0 U | 0 U | 3262 | 57 | 6503 | 21720 | 21720 | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-23**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-811 | SB-812 | SB-812 | SB-813 | SB-813 | SB-813 | SB-813 | SB-813 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-811-15 | G-SB-812-11 | G-SB-812-15 | G-SB-813-11 | G-SB-813-13 | G-SB-813-15 | G-SB-813-15-AVG | G-SB-813-15-D |
| SAMPLE DATE | 20100823 | 20100824 | 20100824 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 15 | 11 | 15 | 11 | 13 | 15 | 15 | 15 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-195 | SB-195 | SB-195 | SB-195 | SB-195 | SB-196 | SB-196 | SB-196 | SB-657 | SB-657 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-195RE-11 | G-SB-195RE-12 | G-SB-195RE-13 | G-SB-195RE-14 | G-SB-195RE-15 | G-SB-196RE-11 | G-SB-196RE-12 | G-SB-196RE-13 | G-SB-657-11 | G-SB-657-11-AVG |
| SAMPLE DATE | | | | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091020 | 20091020 | 20091020 | 20091002 | 20091002 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 11 | 11 |
| BOTTOM DEPTH | | | | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 11 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 229 | 284 | 13891 | 24163 | 277 | 1.6 U | 9.8 | 1.6 U | 843 | 518 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 229 | 284 | 13891 | 24163 | 277 | 1.6 U | 8.9 | 1.6 U | 843 | 518 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 130 | 160 | 7900 | 15000 | 180 | 1.2 U | 1.1 U | 1.1 U | 470 J | 284.5 |
| BENZO(A)PYRENE | 22 | 15 | C | 160 | 200 | 9800 | 17000 | 190 | 1.6 U | 8 | 1.6 U | 600 J | 370 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 170 | 220 | 12000 | 18000 | 240 | 1.5 U | 9.1 | 1.4 U | 580 J | 360 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 68 | 80 | 5200 | 8600 | 85 | 2.1 U | 2 U | 2 U | 320 J | 190.5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 150 | 180 | 9300 | 17000 | 230 | 1.1 U | 1 U | 1.1 U | 500 J | 310 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 29 | 34 | 1500 | 2900 | 33 | 1.6 U | 1.5 U | 1.6 U | 100 J | 61 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 95 | 110 | 5400 | 8600 | 110 | 1.8 U | 1.7 U | 1.8 U | 340 J | 208 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 802 | 984 | 51100 | 87100 | 1068 | 0 U | 17.1 | 0 U | 2910 | 1784 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-657 G-SB-657-11-D | SB-657 G-SB-657-12 | SB-657 G-SB-657-13 | SB-657 G-SB-657-14 | SB-657 G-SB-657-15 | SB-657A G-SB-657A-11 | SB-657A G-SB-657A-13 | SB-657A G-SB-657A-15 | SB-657B G-SB-657B-11 | SB-657B G-SB-657B-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE DATE | | | | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE CODE | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| MATRIX | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| SUBMATRIX | | | | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 |
| TOP DEPTH | | | | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | | | | | | | | | | | | | |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 194 | 259 | 3231 | 24 | 4.3 | 8303 | 1482 | 66 | 28 | 2150 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 194 | 259 | 3231 | 23 | 2.8 | 8303 | 1482 | 65 | 27 | 2146 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 99 J | 120 | 1500 | 14 | 9.4 | 6600 | 940 | 37 | 23 | 1600 |
| BENZO(A)PYRENE | 22 | 15 | C | 140 J | 180 | 2300 | 19 | 1.5 U | 5700 | 1000 | 52 | 21 | 1700 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 140 J | 190 | 2600 | 17 | 10 | 6100 | 1100 | 57 | 38 | 1800 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 61 J | 90 | 950 | 11 | 6.8 J | 2600 | 470 | 20 | 9.8 | 760 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 120 J | 150 | 1800 | 16 | 1 U | 7200 | 1000 | 44 | 20 | 1700 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 22 J | 37 | 390 | 1.5 U | 1.5 U | 1000 | 210 | 1.5 U | 1.5 U | 6.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 76 J | 100 | 1200 | 12 | 8.1 | 3000 | 620 | 38 | 1.7 U | 970 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 658 | 867 | 10740 | 89 | 34.3 | 32200 | 5340 | 248 | 111.8 | 8530 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-657B | SB-657D | SB-657D | SB-657D | SB-658 | SB-658 | SB-658 | SB-658 | SB-658 | SB-658 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-657B-15 | G-SB-657D-11 | G-SB-657D-13 | G-SB-657D-15 | G-SB-658-11 | G-SB-658-11-AVG | G-SB-658-11-D | G-SB-658-12 | G-SB-658-13 | G-SB-658-14 |
| SAMPLE DATE | | | | 20091028 | 20091028 | 20091028 | 20091028 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 12 | 13 | 14 |
| BOTTOM DEPTH | | | | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 12 | 13 | 14 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 319 | 1.5 U | 144 | 85 | 244 | 158 | 73 | 348 | 232 | 201 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 318 | 1.5 U | 143 | 85 | 243 | 158 | 73 | 347 | 232 | 201 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 250 | 1.1 U | 120 | 72 | 210 J | 131.5 | 53 J | 280 | 190 | 140 |
| BENZO(A)PYRENE | 22 | 15 | C | 250 | 1.5 U | 110 | 64 | 190 J | 120 | 50 J | 270 | 160 | 140 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 280 | 1.4 U | 140 | 88 | 200 J | 129.5 | 59 J | 320 | 180 | 160 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 110 | 2 U | 40 | 30 | 98 J | 58.5 | 19 J | 150 | 72 | 61 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 240 | 1 U | 110 | 67 | 220 J | 140 | 60 J | 320 | 190 | 170 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 4.725 | 8.7 | 1.5 U | 26 | 23 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 140 | 1.7 U | 68 | 42 | 110 J | 69 | 28 J | 150 | 82 | 76 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 1270 | 0 U | 588 | 363 | 1028 | 652.85 | 277.7 | 1490 | 900 | 770 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-658 | SB-658B | SB-658B | SB-658C | SB-658C | SB-658C | SB-658C | SB-658C | SB-659 | SB-659 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-658-15 | G-SB-658B-11 | G-SB-658B-15 | G-SB-658C-11 | G-SB-658C-13 | G-SB-658C-13-AVG | G-SB-658C-13-D | G-SB-658C-15 | G-SB-659-11 | G-SB-659-12 |
| SAMPLE DATE | | | | 20091002 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091002 | 20091002 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 15 | 11 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 12 |
| BOTTOM DEPTH | | | | 15 | 11 | 15 | 11 | 13 | 13 | 13 | 15 | 11 | 12 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 55 | 1.5 U | 347 | 1.5 U | 10484 | 7626 | 4768 | 80 | 265 | 595 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 54 | 1.5 U | 347 | 1.5 U | 10484 | 7626 | 4768 | 79 | 265 | 595 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 47 | 1.1 U | 240 | 1.1 U | 5800 J | 4150 | 2500 J | 49 | 170 | 350 |
| BENZO(A)PYRENE | 22 | 15 | C | 42 | 1.5 U | 240 | 1.5 U | 6900 J | 5050 | 3200 J | 64 | 180 | 400 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 48 | 1.4 U | 270 | 1.4 U | 7900 J | 5600 | 3300 J | 59 | 210 | 430 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 19 | 2 U | 130 | 2 U | 2800 J | 2150 | 1500 J | 46 | 77 | 190 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 50 | 1.1 U | 320 | 1.1 U | 6200 J | 4400 | 2600 J | 59 | 190 | 390 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 40 | 1.5 U | 1800 J | 1305 | 810 J | 1.5 U | 35 | 91 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 23 | 1.8 U | 140 | 1.8 U | 3800 J | 2700 | 1600 J | 41 | 110 | 240 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 229 | 0 U | 1380 | 0 U | 35200 | 25355 | 15510 | 318 | 972 | 2091 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-659 | SB-659 | SB-659 | SB-659C | SB-659C | SB-659C | SB-659D | SB-659D | SB-659D | SB-660 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-659-13 | G-SB-659-14 | G-SB-659-15 | G-SB-659C-11 | G-SB-659C-13 | G-SB-659C-15 | G-SB-659D-11 | G-SB-659D-13 | G-SB-659D-15 | G-SB-660-11 |
| SAMPLE DATE | | | | 20091002 | 20091002 | 20091002 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091002 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | | | | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 2324 | 744 | 19 | 268 | 4677 | 182 | 1.5 U | 447 | 1.5 U | 41 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 2324 | 744 | 18 | 267 | 4673 | 181 | 1.5 U | 446 | 1.5 U | 40 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1400 | 450 | 14 | 230 | 4000 | 160 | 1.1 U | 320 | 1.1 U | 29 |
| BENZO(A)PYRENE | 22 | 15 | C | 1600 | 530 | 14 | 210 | 3800 | 140 | 1.5 U | 350 | 1.5 U | 32 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1800 | 600 | 16 | 200 | 4000 | 160 | 1.4 U | 430 | 1.4 U | 30 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 710 | 200 | 2 U | 160 | 3000 | 110 | 1.9 U | 200 | 2 U | 18 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1500 | 470 | 13 | 260 | 5200 | 170 | 1 U | 350 | 1 U | 31 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 310 | 79 | 1.5 U | 1.5 U | 8.3 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 850 | 280 | 9.3 | 120 | 380 | 79 | 1.7 U | 190 | 1.7 U | 18 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 8170 | 2609 | 66.3 | 1180 | 20380 | 819 | 0 U | 1840 | 0 U | 158 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-660 | SB-662 | SB-662 | SB-662 | SB-662A | SB-662B | SB-662C | SB-671 | SB-671 | SB-671 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-660-12 | G-SB-662-11 | G-SB-662-12 | G-SB-662-13 | G-SB-662A-11 | G-SB-662B-11 | G-SB-662C-11 | G-SB-671RE-11 | G-SB-671RE-12 | G-SB-671RE-13 |
| SAMPLE DATE | | | | 20091002 | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 12 | 11 | 12 | 13 | 11 | 11 | 11 | 11 | 12 | 13 |
| BOTTOM DEPTH | | | | 12 | 11 | 12 | 13 | 11 | 11 | 11 | 11 | 12 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 15 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 2472 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 15 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 2472 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 12 | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 1700 | 1.2 U | 1.2 U | 1.2 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 12 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1700 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 14 | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 2000 | 1.5 U | 1.5 U | 1.5 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2.1 U | 2.1 U | 2.1 U | 960 | 2.1 U | 2.1 U | 2.1 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 12 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 2100 | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 280 | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1100 | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 50 | 0 U | 0 U | 0 U | 0 U | 9840 | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | | | | SB-671B | SB-671C | SB-671D | SB-704 | SB-704 | SB-704 | SB-706 | SB-706 | SB-706 | SB-706 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-671B-11 | G-SB-671C-11 | G-SB-671D-11 | G-SB-704-11 | G-SB-704-12 | G-SB-704-15 | G-SB-706-11 | G-SB-706-12 | G-SB-706-13 | G-SB-706-14 |
| SAMPLE DATE | | | | 20091111 | 20091111 | 20091111 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 11 | 11 | 11 | 12 | 15 | 11 | 12 | 13 | 14 |
| BOTTOM DEPTH | | | | 11 | 11 | 11 | 11 | 12 | 15 | 11 | 12 | 13 | 14 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.6 U | 12 | 1.7 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.6 U | 11 | 1.7 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 1.2 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | 9.8 | 1.7 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | 9.5 | 1.5 U | 1.5 U | 1.4 U | 1.6 U | 1.5 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2.1 U | 2.1 U | 2.2 U | 2.1 U | 2 U | 2.2 U | 2.2 U | 2 U | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.2 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.8 U | 1.8 U | 2 U | 1.9 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 19.3 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | | | | SB-706 | SB-716 | SB-716 | SB-716 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-706-15 | G-SB-716-11 | G-SB-716-12 | G-SB-716-15 | G-SB-726-11 | G-SB-726-12 | G-SB-726-13 | G-SB-726-14 | G-SB-726-15 | G-SB-726-15-AVG |
| SAMPLE DATE | | | | 20090922 | 20090923 | 20090923 | 20090923 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 15 | 11 | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 15 |
| BOTTOM DEPTH | | | | 15 | 11 | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 2.2 U | 2.2 U | 2.6 | 9.1 | 2.3 U | 2.25 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 2.2 U | 2.2 U | 0.54 | 8.2 | 2.3 U | 2.25 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.2 U | 1.1 U | 1.1 U | 1.2 U | 1.3 U | 1.9 J | 6 J | 1.3 U | 1.3 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 2.2 U | 2.2 U | 2.2 U | 6.2 J | 2.3 U | 2.25 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | 1.4 U | 1.4 U | 1.6 U | 1.6 U | 2.1 J | 9.3 | 1.7 U | 1.65 U |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2.1 U | 2 U | 2 U | 1.6 U | 1.6 U | 1.7 U | 1.6 U | 1.7 U | 1.7 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.4 U | 1.4 U | 2 J | 6.8 J | 1.4 U | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 1.7 U | 1.8 U | 1.7 U | 1.8 U | 1.8 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 1.9 U | 1.8 U | 1.8 U | 0.43 U | 0.43 U | 1.4 J | 5.1 J | 0.45 U | 0.445 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 7.4 | 33.4 | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-726 | SB-735 | SB-735B | SB-735C | SB-736B | SB-736C | SB-736C | SB-736C | SB-761 | SB-761 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-726-15-D | G-SB-735-11 | G-SB-735B-11 | G-SB-735C-11 | G-SB-736B-11 | G-SB-736C-11 | G-SB-736C-11-AVG | G-SB-736C-11-D | G-SB-761-11 | G-SB-761-13 |
| SAMPLE DATE | | | | 20091008 | 20091103 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20090930 | 20090930 |
| SAMPLE CODE | | | | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 15 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 13 |
| BOTTOM DEPTH | | | | 15 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 2.2 U | 14 | **17** | 4.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | **35343** | **795** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 2.2 U | 13 | **16** | 4.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | **35343** | **795** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.3 U | 13 | 1.2 U | 3.3 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | **30000** | **630** |
| BENZO(A)PYRENE | 22 | 15 | C | 2.2 U | 10 | 14 | 4.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | **24000** | **540** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.6 U | 15 | 23 | 4.1 U | 1.4 U | 1.3 U | 1.35 U | 1.4 U | **27000** | **610** |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.7 U | 2.1 U | 2.1 U | 5.8 U | 2 U | 1.9 U | 1.95 U | 2 U | **11000** | 250 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.4 U | 13 | 20 | 3.1 U | 1.1 U | 1 U | 1 U | 1 U | **33000** | 690 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.8 U | 1.6 U | 1.6 U | 4.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | **4300** | **98** |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 0.44 U | 1.8 U | 1.9 U | 5.2 U | 1.8 U | 1.7 U | 1.7 U | 1.7 U | **12000** | **300** |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 51 | 57 | 0 U | 0 U | 0 U | 0 U | 0 U | 141300 | 3118 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-761 | SB-761 | SB-761 | SB-761A | SB-761A | SB-761A | SB-761B | SB-761B | SB-761C | SB-761C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-761-15 | G-SB-761-15-AVG | G-SB-761-15-D | G-SB-761A-11 | G-SB-761A-13 | G-SB-761A-15 | G-SB-761B-11 | G-SB-761B-15 | G-SB-761C-11 | G-SB-761C-15 |
| SAMPLE DATE | | | | 20090930 | 20090930 | 20090930 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 15 | 11 | 15 |
| BOTTOM DEPTH | | | | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 15 | 11 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 817 | 575 | 333 | 95 | 2231 | 552 | 28 | 547 | 45 | 1035 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 817 | 575 | 333 | 95 | 2231 | 552 | 27 | 547 | 44 | 1035 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 630 J | 465 | 300 J | 48 | 970 | 220 | 25 | 500 | 42 | 770 |
| BENZO(A)PYRENE | 22 | 15 | C | 530 J | 375 | 220 J | 67 | 1500 | 410 | 21 | 380 | 34 | 650 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 600 J | 425 | 250 J | 64 | 1500 | 350 | 22 | 440 | 40 | 820 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 250 J | 180 | 110 J | 29 | 550 | 170 | 8.3 | 210 | 14 | 400 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 680 J | 480 | 280 J | 60 | 1100 | 270 | 27 | 560 | 49 | 970 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 130 J | 87 | 44 J | 12 | 400 | 56 | 1.6 U | 49 | 1.6 U | 180 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 310 J | 220 | 130 J | 42 | 770 | 270 | 13 | 210 | 19 | 410 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 3130 | 2232 | 1334 | 322 | 6790 | 1746 | 116.3 | 2349 | 198 | 4200 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-761D | SB-761D | SB-761D |
|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-761D-11 | G-SB-761D-13 | G-SB-761D-15 |
| SAMPLE DATE | | | | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 234 | 1125 | 6375 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 234 | 1125 | 6375 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 180 | 820 | 4700 |
| BENZO(A)PYRENE | 22 | 15 | C | 150 | 780 | 4400 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 160 | 890 | 3900 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 62 | 320 | 1900 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 200 | 1000 | 5800 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 40 | 120 | 880 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 93 | 500 | 2100 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 885 | 4430 | 23680 |
| **METALS (MG/KG)** | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | G-TP-2 | MRC-MW12A | MRC-MW95D | OW-4 | OW-4 | OW-6 | OW-6 | SB-085 | SB-086 | SB-091 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | G-TP-2-5-13-14 | MRC-MW12[1213] | MRC-MW95D-SO-214 | OW-4-26 | OW-4-30 | OW-6-20 | OW-6-30 | SB-85-12 | SB-86-12 | G-SB-91RE-11 |
| SAMPLE DATE | | | 20100921 | 20050517 | 20100513 | 20071127 | 20071127 | 20071129 | 20071129 | 20041115 | 20041115 | 20090930 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 13 | 12 | 214 | 26 | 30 | 20 | 30 | 12 | 12 | 11 |
| BOTTOM DEPTH | | | 14 | 13 | 214 | 26 | 30 | 20 | 30 | 12 | 12 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 N | NA | NA | 0.65 U | 6 U | 5.9 U | 6.2 U | 1.3 J | 6 UL | 6 UL | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 C | NA | NA | 0.42 U | 6 U | 5.9 U | 1.6 J | 1.3 J | 6 UL | 6 UL | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 N | NA | NA | 0.6 U | 6 U | 5.9 U | 5 J | 7.4 | 6 UL | 6 UL | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | 27 | 12 U | 12 U | 12 U | 12 U | 57 UL | 57 UL | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | 64 B | 12 U | 8 J | 7.8 J | 9.7 J | 57 UL | 57 UL | NA |
| BENZENE | 12000 | 1100 C | NA | NA | 0.52 J | 6 U | 5.9 U | 6.2 U | 0.29 J | 6 UL | 6 UL | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 N | NA | NA | 0.42 U | 6 U | 0.87 J | 4.1 J | 3.5 J | 6 UL | 6 UL | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | 0.41 J | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | 0.99 B | 16 B | 14 B | 4.7 B | 4.6 B | 9 J | 11 J | NA |
| N-BUTYLBENZENE | NC | NC | NA | NA | 0.35 J | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL | NA |
| O-XYLENE | 1600000 [4] | 380000 N | NA | NA | 0.59 J | 6 U | 5.9 U | 6.2 U | 6 U | 6 UL | 6 UL | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 N | NA | NA | 1.5 J | 12 U | 12 U | 12 U | 12 U | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | 0.49 U | 6 U | 4 J | 17 | 64 | 6 UL | 7 L | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 N | NA | NA | NA | NA | NA | NA | NA | 960 J | 980 J | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | 3.9 U | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ | NA |
| ACENAPHTHENE | 470000 | 340000 N | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[5] | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ | NA |
| ANTHRACENE | 2300000 | 1700000 N | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 32 | NA | NA | NA | NA | NA | NA | 390 U | 411 | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 30 | NA | NA | NA | NA | NA | NA | 390 U | 12 | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 8.4 | NA | NA | NA | NA | NA | NA | 390 UJ | 47 J | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 C | 26 J | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 9.9 | NA | NA | NA | NA | NA | NA | NA | NA | 1.4 U |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 C[6] | NA | NA | NA | NA | NA | NA | NA | 390 UJ | 74 J | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[7] | 10 | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 3.9 U | NA | NA | NA | NA | NA | NA | NA | NA | 2 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 10 | NA | NA | NA | NA | NA | NA | 390 UJ | 51 J | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ | 1.5 U |
| FLUORANTHENE | 310000 | 230000 N | 8.5 | NA | NA | NA | NA | NA | NA | 390 UJ | 110 J | NA |
| FLUORENE | 310000 | 230000 N | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 22 J | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ | 1.8 U |
| NAPHTHALENE | 160000 | 3600 C | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 380 UJ | NA |
| PHENANTHRENE | 2300000 | 170000 N[7] | 3.9 U | NA | NA | NA | NA | NA | NA | 390 UJ | 89 J | NA |
| PYRENE | 230000 | 170000 N | 16 | NA | NA | NA | NA | NA | NA | 390 UJ | 89 J | NA |
| TOTAL PAHS | NC | NC | 110.8 | NA | NA | NA | NA | NA | NA | 0 U | 460 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | 0.28 J | 0.096 B | 0.12 B | 0.095 B | 2.6 UL | 2.6 UL | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | 0.32 L | 0.19 L | 1.1 L | 0.24 L | 0.98 | 0.51 U | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | 9.7 | 6.6 | 11.8 | 6 | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | 0.7 | 0.63 | 0.8 | 0.48 | 2.6 U | 2.6 U | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | 0.012 B | 0.0085 B | 0.12 | 0.0081 B | 2.6 U | 2.6 U | NA |
| CHROMIUM | 12000 [8] | 12000 N[8] | NA | NA | NA | 8.9 J | 9.1 J | 10.6 J | 9.1 J | 14 | 11 | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | 3.1 J | 2.9 J | 8.1 J | 2.1 J | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | 5.7 J | 4.8 J | 8.1 J | 4.6 J | 12 | 12 | NA |
| IRON | 5500 | 5500 N | NA | NA | NA | 21600 J | 8400 J | 10300 J | 6100 J | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | 4 J | 2.5 J | 4.5 J | 2.8 J | 15 J | 16 J | NA |
| MANGANESE | 160 | 180 N | NA | NA | NA | 156 J | 76.1 J | 137 J | 30.6 J | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | 6.6 J | 5.2 J | 17 J | 4.5 J | 26 J | 13 J | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | 0.24 L | 0.19 UL | 0.22 L | 0.19 UL | 2.6 UL | 2.6 UL | NA |
| SILVER | 39 | 39 N | NA | NA | NA | 0.089 | 0.047 | 0.056 | 0.03 B | 2.6 UR | 2.6 UR | NA |
| THALLIUM | 0.55 | NC | NA | NA | NA | 0.05 | 0.034 | 0.043 | 0.031 | 2.1 U | 2 U | NA |
| VANADIUM | 7.8 | 39 N[9] | NA | NA | NA | 10.1 J | 11.8 J | 18.8 J | 19.2 J | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | 13.8 K | 11.8 K | 26.4 K | 10.5 K | 110 | 39 | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | 13000 J | 11000 UJ | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | 82.9 | 84.2 | 80.5 | 83.9 | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | NA | 1320 | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-091<br>G-SB-91RE-12<br>20090930<br>NORMAL<br>SO<br>NORMAL<br>SB<br>12<br>12 | SB-091<br>G-SB-91RE-13<br>20090930<br>NORMAL<br>SO<br>NORMAL<br>SB<br>13<br>13 | SB-091<br>G-SB-91RE-14<br>20090930<br>NORMAL<br>SO<br>NORMAL<br>SB<br>14<br>14 | SB-091<br>G-SB-91RE-15<br>20090930<br>NORMAL<br>SO<br>NORMAL<br>SB<br>15<br>15 | SB-091A<br>G-SB-91REA-11<br>20091030<br>NORMAL<br>SO<br>NORMAL<br>SB<br>11<br>11 | SB-091A<br>G-SB-91REA-13<br>20091030<br>NORMAL<br>SO<br>NORMAL<br>SB<br>13<br>13 | SB-091A<br>G-SB-91REA-15<br>20091030<br>NORMAL<br>SO<br>NORMAL<br>SB<br>15<br>15 | SB-091B<br>G-SB-91REB-11<br>20091102<br>NORMAL<br>SO<br>NORMAL<br>SB<br>11<br>11 | SB-091B<br>G-SB-91REB-13<br>20091102<br>NORMAL<br>SO<br>NORMAL<br>SB<br>13<br>13 | SB-091B<br>G-SB-91REB-15<br>20091102<br>NORMAL<br>SO<br>NORMAL<br>SB<br>15<br>15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **19** | **1458** | **110** | 1.6 U | 1.5 U | **84** | 1.6 U | **19** | **621** | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **19** | **1458** | **110** | 1.6 U | 1.5 U | **83** | 1.6 U | **18** | **620** | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 10 | **620** | 44 | 1.2 U | 1.1 U | 58 | 1.2 U | 1.1 U | **340** | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 14 | **950** | **66** | 1.6 U | 1.5 U | **65** | 1.6 U | **18** | **490** | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 16 | **940** | 74 | 1.5 U | 1.4 U | 73 | 1.5 U | 1.4 U | **540** | 1.4 U |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 450 | 24 | 2.1 U | 2 U | 24 | 2.1 U | 2 U | 280 | 2.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 11 | 770 | 53 | 1.1 U | 1 U | 62 | 1.1 U | 1.1 U | 420 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | **290** | **26** | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.7 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 21 | **570** | 57 | 1.8 U | 1.7 U | 48 | 1.8 U | 1.8 U | **390** | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 72 | 4590 | 344 | 0 U | 0 U | 330 | 0 U | 18 | 2460 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-091C | SB-091C | SB-091C | SB-091C | SB-091C | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-91REC-11 | G-SB-91REC-13 | G-SB-91REC-15 | G-SB-91REC-15-AVG | G-SB-91REC-15-D | G-SB-92RE-11 | G-SB-92RE-12 | G-SB-92RE-13 | G-SB-92RE-14 | G-SB-92RE-15 |
| SAMPLE DATE | | | | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | | | | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 | 15 | 15 | 11 | 12 | 13 | 14 | 15 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 | 15 | 15 | 11 | 12 | 13 | 14 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 69 | 1.6 U | 205 | 189 | 173 | 1.6 U | 1.5 U | 308 | 951 | 649 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 69 | 1.6 U | 205 | 189 | 173 | 1.6 U | 1.5 U | 308 | 951 | 649 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 32 | 1.1 U | 67 | 63 | 59 | 1.1 U | 1.1 U | 210 | 550 | 320 |
| BENZO(A)PYRENE | 22 | 15 | C | 54 | 1.6 U | 140 | 130 | 120 | 1.6 U | 1.5 U | 200 | 650 | 430 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 75 | 1.5 U | 180 | 160 | 140 | 1.4 U | 1.4 U | 230 | 660 | 480 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 31 | 2.1 U | 64 | 69 | 74 | 2 U | 2 U | 62 | 330 | 180 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 35 | 1.1 U | 85 | 76 | 67 | 1.1 U | 1.1 U | 210 | 530 | 390 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 29 | 26.5 | 24 | 1.6 U | 1.5 U | 51 | 140 | 110 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 36 | 1.8 U | 110 | 98 | 86 | 1.8 U | 1.8 U | 120 | 360 | 270 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 263 | 0 U | 675 | 622.5 | 570 | 0 U | 0 U | 1083 | 3220 | 2180 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | 3.4 | 2.1 | 3.7 | 4.1 | 5.6 |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-092C | SB-092C | SB-092C | SB-092D | SB-092D | SB-092D | SB-762 | SB-762 | SB-762 | SB-762A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-92REC-11 | G-SB-92REC-13 | G-SB-92REC-15 | G-SB-92RED-11 | G-SB-92RED-13 | G-SB-92RED-15 | G-SB-762-11 | G-SB-762-13 | G-SB-762-15 | G-SB-762A-11 |
| SAMPLE DATE | | | | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091001 | 20091001 | 20091001 | 20091022 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 104 | 1.5 U | 42 | 1450 | 201 | 398 | 4782 | 67 | 125 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 104 | 1.5 U | 41 | 1449 | 200 | 398 | 4782 | 66 | 124 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 59 | 1.1 U | 30 | 870 | 130 | 230 | 3100 | 50 | 110 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 76 | 1.5 U | 33 | 1200 | 160 | 270 | 3200 | 51 | 98 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 66 | 1.4 U | 31 | 1000 | 170 | 310 | 3900 | 61 | 95 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 38 | 1.9 U | 16 | 360 | 62 | 110 | 1900 | 24 | 38 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 67 | 1 U | 34 | 1100 | 150 | 280 | 3100 | 54 | 100 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 10 | 1.5 U | 1.5 U | 1.6 U | 1.7 U | 55 | 670 | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 48 | 1.7 U | 19 | 570 | 95 | 180 | 1900 | 34 | 55 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 364 | 0 U | 163 | 5100 | 767 | 1435 | 17770 | 274 | 496 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-762A | SB-762A | SB-762B | SB-762B | SB-762B | SB-762B | SB-762B | SB-762D | SB-762D | SB-762D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-762A-13 | G-SB-762A-15 | G-SB-762B-11 | G-SB-762B-11-AVG | G-SB-762B-11-D | G-SB-762B-13 | G-SB-762B-15 | G-SB-762D-11 | G-SB-762D-13 | G-SB-762D-15 |
| SAMPLE DATE | | | | 20091022 | 20091022 | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | | | | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **88** | **13293** | **219** | **211** | **203** | **319** | **2188** | **11506** | **2713** | **59** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **87** | **13293** | **219** | **211** | **203** | **319** | **2188** | **11506** | **2713** | **59** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 68 | **9500** | 120 | 125 | 130 | **200** | **1700** | **6900** | **1600** | 36 |
| BENZO(A)PYRENE | 22 | 15 | C | **69** | **8900** | **150** | **145** | **140** | **220** | **1500** | **7900** | **1900** | **47** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 68 | **10000** | **180** | **165** | 150 | **270** | **1700** | **8300** | **2100** | 47 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 36 | **4200** | 69 | 76.5 | 84 | 110 | 720 | **3800** | 1100 | 25 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 83 | 11000 | 180 | 175 | 170 | 260 | 1900 | 7700 | 1900 | 50 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | **1900** | **28** | **27** | **26** | **38** | **260** | **1600** | **330** | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 43 | **4900** | 100 | 89.5 | 79 | 130 | **790** | **4400** | **1000** | 29 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 367 | 50400 | 827 | 803 | 779 | 1228 | 8570 | 40600 | 9930 | 234 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-763 | SB-763 | SB-763 | SB-763A | SB-763A | SB-763A | SB-763B | SB-763B | SB-763B | SB-763C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-763-11 | G-SB-763-13 | G-SB-763-15 | G-SB-763A-11 | G-SB-763A-13 | G-SB-763A-15 | G-SB-763B-11 | G-SB-763B-13 | G-SB-763B-15 | G-SB-763C-11 |
| SAMPLE DATE | | | | 20091001 | 20091002 | 20091002 | 20091023 | 20091023 | 20091023 | 20091027 | 20091027 | 20091027 | 20091023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 84 | 992 | 2863 | 3334 | 1.5 U | 19 | 29 | 49 | 184 | 3345 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 84 | 992 | 2863 | 3334 | 1.5 U | 18 | 28 | 48 | 183 | 3338 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 49 | 700 | 1400 | 1900 | 1.1 U | 15 | 19 | 38 | 110 | 3100 |
| BENZO(A)PYRENE | 22 | 15 | C | 47 | 700 | 2000 | 2300 | 1.5 U | 14 | 23 | 38 | 150 | 2600 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 58 | 730 | 1800 | 2300 | 1.4 U | 14 | 18 | 39 | 130 | 2700 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 21 | 310 | 1100 | 1200 | 2 U | 2.1 U | 14 | 20 | 83 | 1400 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 53 | 750 | 1600 | 2300 | 1.1 U | 17 | 24 | 41 | 120 | 3600 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 22 | 110 | 410 | 480 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 15 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 38 | 350 | 1200 | 1200 | 1.8 U | 8.3 | 13 | 22 | 81 | 1400 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 288 | 3650 | 9510 | 11680 | 0 U | 68.3 | 111 | 198 | 674 | 14800 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-763C<br>G-SB-763C-13<br>20091023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>13<br>13 | SB-763C<br>G-SB-763C-15<br>20091023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>15<br>15 | SB-763D<br>G-SB-763D-11<br>20091023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>11<br>11 | SB-763D<br>G-SB-763D-13<br>20091023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>13<br>13 | SB-763D<br>G-SB-763D-15<br>20091023<br>NORMAL<br>SO<br>NORMAL<br>SB<br>15<br>15 | SB-764<br>G-SB-764-11<br>20091002<br>NORMAL<br>SO<br>NORMAL<br>SB<br>11<br>11 | SB-764<br>G-SB-764-13<br>20091002<br>NORMAL<br>SO<br>NORMAL<br>SB<br>13<br>13 | SB-764<br>G-SB-764-15<br>20091002<br>NORMAL<br>SO<br>NORMAL<br>SB<br>15<br>15 | SB-764A<br>G-SB-764A-11<br>20091027<br>NORMAL<br>SO<br>NORMAL<br>SB<br>11<br>11 | SB-764C<br>G-SB-764C-11<br>20091027<br>NORMAL<br>SO<br>NORMAL<br>SB<br>11<br>11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 12086 | 8745 | 1.6 U | 1.6 U | 1.8 U | 67 | 27 | 1.6 U | 2470 | 44 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 12045 | 8745 | 1.6 U | 1.6 U | 1.8 U | 66 | 26 | 1.6 U | 2470 | 43 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 12000 | 6800 | 1.2 U | 1.2 U | 1.3 U | 48 | 16 | 1.1 U | 1800 | 34 |
| BENZO(A)PYRENE | 22 | 15 | C | 9200 | 6100 | 1.6 U | 1.6 U | 1.8 U | 53 | 21 | 1.6 U | 1700 | 34 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 11000 | 6900 | 1.5 U | 1.5 U | 1.7 U | 52 | 21 | 1.4 U | 1700 | 36 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 5300 | 2700 | 2.1 U | 2.1 U | 2.3 U | 26 | 12 | 2 U | 850 | 14 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 12000 | 8000 | 1.1 U | 1.1 U | 1.2 U | 57 | 16 | 1.1 U | 1900 | 40 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 81 U | 950 | 1.6 U | 1.6 U | 1.8 U | 1.5 U | 1.6 U | 1.6 U | 320 | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4800 | 2900 | 1.8 U | 1.8 U | 2.1 U | 30 | 12 | 1.8 U | 900 | 19 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 54300 | 34350 | 0 U | 0 U | 0 U | 266 | 98 | 0 U | 9170 | 177 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-764D | SB-765 | SB-765 | SB-765 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-764D-11 | G-SB-765-11 | G-SB-765-13 | G-SB-765-15 | G-SB-803-11 | G-SB-803-13 | G-SB-803-15 | G-SB-804-11 | G-SB-804-13 | G-SB-804-15 |
| SAMPLE DATE | | | | 20091027 | 20091002 | 20091002 | 20091002 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | 3.8 U | 4.4 U | 3.9 U | 4.2 U | 7.8 U | 31 |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | 3.8 U | 4.4 U | 3.9 U | 4.2 U | 7.8 U | 10 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | 3.8 U | 4.4 U | 3.9 U | 4.2 U | 14 J | 51 |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | 3.8 U | 44 | 23 | 4.2 U | 37 | 49 |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | 3.8 U | 88 J | 55 J | 33 | 130 | 240 |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 57 | 1.5 U | 17 | 1.7 U | 3.8 U | 352 | 219 | 187 | 662 | 1237 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 56 | 1.5 U | 16 | 1.7 U | 3.8 U | 350 | 217 | 185 | 658 | 1237 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 53 | 1.1 U | 15 | 1.3 U | 3.8 U | 260 | 160 | 200 | 630 | 1100 |
| BENZO(A)PYRENE | 22 | 15 | C | 44 | 1.5 U | 13 | 1.7 U | 3.8 U | 270 J | 170 J | 140 | 500 | 840 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 39 | 1.4 U | 15 | 1.6 U | 3.8 U | 350 J | 190 J | 150 | 620 | 930 |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | 3.8 U | 240 J | 140 J | 120 | 410 | 660 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 32 | 2 U | 2.2 U | 2.2 U | 3.8 U | 140 J | 96 J | 86 | 310 | 500 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 64 | 1.1 U | 16 | 1.2 U | 1.3 U | 320 | 170 | 220 | 730 | 1200 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.7 U | 1.7 U | 3.8 U | 4.4 U | 3.9 U | 4.2 U | 7.8 U | 140 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | 3.8 U | 380 J | 210 J | 340 | 1100 | 2100 |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | 3.8 U | 4.4 U | 3.9 U | 4.2 U | 24 | 70 |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 26 | 1.8 U | 2 U | 2 U | 3.8 U | 170 J | 110 J | 89 | 290 | 480 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | 3.8 U | 4.4 U | 3.9 U | 4.2 U | 7.8 U | 10 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | 3.8 U | 150 J | 90 J | 250 | 630 | 1500 |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | 3.8 U | 690 | 400 | 530 | 1900 | 3400 |
| TOTAL PAHS | NC | NC | | 258 | 0 U | 59 | 0 U | 0 U | 3102 | 1814 | 2158 | 7325 | 13260 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-805 | SB-805 | SB-805 | SB-806 | SB-806 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-805-11 | G-SB-805-13 | G-SB-805-15 | G-SB-806-11 | G-SB-806-15 | G-SB-807-11 | G-SB-807-13 | G-SB-807-15 | G-SB-808-11 | G-SB-808-13 |
| SAMPLE DATE | | | | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 | 11 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 | 11 | 15 | 11 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 4 U | 4.1 U | 4.1 U | 4 U | 20 | 4 U | 4.1 U | 4.2 U | 3.7 U | 7.5 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4 U | 4.1 U | 4.1 U | 4 U | 30 | 4 U | 4.1 U | 4.2 U | 3.7 U | 7.5 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4 U | 4.1 U | 4.1 U | 4 U | 36 J | 4 U | 4.1 U | 4.2 U | 3.7 U | 18 |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | 4 U | 4.1 U | 4.1 U | 9.1 | 84 | 4 U | 4.1 U | 4.2 U | 3.7 U | 66 |
| ANTHRACENE | 2300000 | 1700000 | N | 4 U | 4.1 U | 4.1 U | 30 J | 170 J | 4 U | 4.1 U | 4.2 U | 9.1 | 140 |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 4 U | 4.1 U | 4.1 U | **92** | **780** | 4 U | **74** | 4.2 U | **127** | **1457** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 4 U | 4.1 U | 4.1 U | **90** | **778** | 4 U | **72** | 4.2 U | **127** | **1457** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4 U | 4.1 U | 4.1 U | 59 | **580** | 4 U | 46 | 4.2 U | 73 | **780** |
| BENZO(A)PYRENE | 22 | 15 | C | 4 U | 4.1 U | 4.1 U | **71 J** | **610 J** | 4 U | **58** | 4.2 U | **85** | **950** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4 U | 4.1 U | 4.1 U | 76 J | **730 J** | 4 U | 57 | 4.2 U | 95 | **1000** |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4 U | 4.1 U | 4.1 U | 61 J | 390 J | 4 U | 55 | 4.2 U | 82 | 950 |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4 U | 4.1 U | 4.1 U | 40 J | 300 J | 4 U | 32 | 4.2 U | 36 | 420 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | 83 U | NA | NA | NA | NA | 85 U | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 1.4 U | 1.4 U | 67 | 690 | 1.3 U | 67 | 1.4 U | 85 | 1000 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4 U | 4.1 U | 4.1 U | 4 U | 4.2 U | 4 U | 4.1 U | 4.2 U | **19** | **260** |
| FLUORANTHENE | 310000 | 230000 | N | 19 | 4.1 U | 8.4 | 100 J | 850 J | 4 U | 78 | 4.2 U | 87 | 970 |
| FLUORENE | 310000 | 230000 | N | 4 U | 4.1 U | 4.1 U | 4 U | 4.2 U | 4 U | 4.1 U | 4.2 U | 3.7 U | 22 |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4 U | 4.1 U | 4.1 U | 51 J | **330 J** | 4 U | 34 | 4.2 U | 56 | **640** |
| NAPHTHALENE | 160000 | 3600 | C | 4 U | 4.1 U | 4.1 U | 4 U | 37 | 4 U | 4.1 U | 4.2 U | 3.7 U | 7.5 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 12 | 4.1 U | 4.1 U | 57 J | 380 J | 4 U | 25 | 4.2 U | 21 | 250 |
| PYRENE | 230000 | 170000 | N | 32 | 4.1 U | 13 | 150 | 1600 | 4 U | 120 | 4.2 U | 160 | 1800 |
| TOTAL PAHS | NC | NC | | 63 | 0 U | 21.4 | 771.1 | 6817 | 0 U | 572 | 0 U | 808.1 | 9266 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-808 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 | SB-811 | SB-811 | SB-811 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-808-15 | G-SB-809-11 | G-SB-809-13 | G-SB-809-15 | G-SB-810-11 | G-SB-810-13 | G-SB-810-15 | G-SB-811-11 | G-SB-811-13 | G-SB-811-15 |
| SAMPLE DATE | | | | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 4 U | 3.8 U | 8.3 U | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U | 4.1 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4 U | 3.8 U | 8.3 U | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U | 4.1 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4 U | 3.8 U | 72 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U | 4.1 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | 4 U | 3.8 U | 51 | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U | 4.1 U |
| ANTHRACENE | 2300000 | 1700000 | N | 4 U | 3.8 U | 190 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U | 4.1 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 4 U | 3.8 U | 1826 | 5.9 | 4.2 U | 16 | 21 | 4.3 U | 24 | 4.1 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 4 U | 3.8 U | 1826 | 1.1 | 4.2 U | 13 | 19 | 4.3 U | 22 | 4.1 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4 U | 3.8 U | 1200 | 11 | 4.2 U | 12 | 16 | 4.3 U | 18 | 4.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 4 U | 3.8 U | 1300 J | 4.3 U | 4.2 U | 11 | 16 | 4.3 U | 18 | 4.1 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4 U | 3.8 U | 1400 J | 4.3 U | 4.2 U | 12 | 16 | 4.3 U | 17 | 4.1 U |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4 U | 3.8 U | 880 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U | 4.1 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4 U | 3.8 U | 610 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U | 4.1 U |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C2-NAPHTHALENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C3-FLUORENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C3-NAPHTHALENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C4-NAPHTHALENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | 86 U | NA | NA | 84 U | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 1.3 U | 1500 | 13 | 1.4 U | 15 | 15 | 1.4 U | 23 | 1.4 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4 U | 3.8 U | 200 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U | 4.1 U |
| FLUORANTHENE | 310000 | 230000 | N | 4 U | 3.8 U | 1800 J | 31 J | 4.2 U | 16 | 15 | 4.3 U | 26 | 4.1 U |
| FLUORENE | 310000 | 230000 | N | 4 U | 3.8 U | 75 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U | 4.1 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4 U | 3.8 U | 580 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U | 4.1 U |
| NAPHTHALENE | 160000 | 3600 | C | 4 U | 3.8 U | 25 | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 3.9 U | 4.1 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 4 U | 3.8 U | 540 J | 4.3 U | 4.2 U | 4 U | 4.1 U | 4.3 U | 13 | 4.1 U |
| PYRENE | 230000 | 170000 | N | 4 U | 3.8 U | 3500 | 25 | 4.2 U | 29 | 32 | 15 | 41 | 4.1 U |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 13923 | 80 | 0 U | 95 | 110 | 15 | 156 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-812 | SB-812 | SB-813 | SB-813 | SB-813 | SB-813 | SB-813 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | G-SB-812-11 | G-SB-812-15 | G-SB-813-11 | G-SB-813-13 | G-SB-813-15 | G-SB-813-15-AVG | G-SB-813-15-D |
| SAMPLE DATE | | | | 20100824 | 20100824 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | | | | 11 | 15 | 11 | 13 | 15 | 15 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | | |
| 1,1,1-TRICHLOROETHANE | 16000000 | 870000 | N | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 1600000 | 3300 | C | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 390000 | 24000 | N | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 12000 | 1100 | C | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 78000 | 16000 | N | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 1600000 [4] | 63000 | N | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | |
| PHENOL | 2300000 | 1800000 | N | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 4.1 U | 7.9 | 4 U | 31 | 120 | 120 | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4.1 U | 14 | 4 U | 25 | 17 U | 17 U | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 4.1 U | 3.7 U | 4 U | 53 J | 210 J | 210 J | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | 4.1 U | 33 | 4 U | 49 | 190 | 190 | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 4.1 U | 66 | 4 U | 170 J | 630 J | 630 J | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 4.1 U | **409** | 4 U | **607** | **1957** | **1957** | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | 4.1 U | **408** | 4 U | **605** | **1948** | **1948** | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4.1 U | **280** | 4 U | **520** | **1700** | **1700** | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 4.1 U | **320 J** | 4 U | **470 J** | **1500 J** | **1500 J** | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 4.1 U | **370 J** | 4 U | **530 J** | **1900 J** | **1900 J** | NA |
| BENZO(B+K)FLUORANTHENE | 220 [6] | 150 | C[6] | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4.1 U | 320 | 4 U | 370 J | 1000 J | 1000 J | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4.1 U | 130 | 4 U | 200 J | 720 J | 720 J | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 1300 J | NA | NA | 560 J | 510 | 460 J |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | 1400 J | NA | NA | 620 J | 565 | 510 J |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 740 J | NA | NA | 590 J | 545 | 500 J |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 720 J | NA | NA | 270 J | 260 | 250 J |
| C2-NAPHTHALENES | NC | NC | | NA | 75 U | NA | NA | 90 J | 66.5 | 86 U |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 820 J | NA | NA | 450 J | 430 | 410 J |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 240 J | NA | NA | 89 J | 88.5 | 88 J |
| C3-FLUORENES | NC | NC | | NA | 130 J | NA | NA | 88 U | 87 U | 86 U |
| C3-NAPHTHALENES | NC | NC | | NA | 75 U | NA | NA | 110 J | 76.5 | 86 U |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 510 J | NA | NA | 240 J | 220 | 200 J |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NC | NC | | NA | 110 J | NA | NA | 88 U | 87 U | 86 U |
| C4-NAPHTHALENES | NC | NC | | NA | 90 J | NA | NA | 88 U | 87 U | 86 U |
| C4-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | 170 J | NA | NA | 88 U | 87 U | 86 U |
| CHRYSENE | 22000 | 15000 | C | 1.4 U | 330 | 1.3 U | 590 | 1800 | 1800 | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4.1 U | 3.7 U | 4 U | 4.2 U | 17 U | 17 U | NA |
| FLUORANTHENE | 310000 | 230000 | N | 4.1 U | 390 J | 24 J | 870 J | 2900 J | 2900 J | NA |
| FLUORENE | 310000 | 230000 | N | 4.1 U | 3.7 U | 4 U | 73 J | 280 J | 280 J | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4.1 U | **210 J** | 4 U | **270 J** | **790 J** | **790 J** | NA |
| NAPHTHALENE | 160000 | 3600 | C | 4.1 U | 19 | 4 U | 13 | 17 U | 17 U | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 4.1 U | 130 | 20 J | 800 J | 2900 J | 2900 J | NA |
| PYRENE | 230000 | 170000 | N | 4.1 U | 650 J | 13 | 1500 | 5200 | 5200 | NA |
| TOTAL PAHS | NC | NC | | 0 U | 3262 | 57 | 6503 | 21720 | 21720 | NA |
| **METALS (MG/KG)** | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA |
| IRON | 5500 | 5500 | N | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | 160 | 180 | N | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.55 | NC | | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[9] | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA |

**Table A-24**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block G**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - The value is for xylenes.
5 - The value for acenaphthene is used as a surrogate for acenaphthylene.
6 - The value is for benzo(b)fluoranthene.
7 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
8 - The value is for trivalent chromium.
9 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-200 | SB-201 | SB-201RE | SB-201RE | SB-202 | SB-203 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-200-SS | SB-201-SS | H-SB-201RE-1 | H-SB-201RE-2 | SB-202-SS | SB-203-SS | H-SB-282RE-1 | H-SB-282RE-2 | SB-282-0102 |
| SAMPLE DATE | 20050513 | 20050513 | 20090924 | 20090924 | 20050513 | 20050513 | 20090929 | 20090929 | 20051026 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SB | SS | SS | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,1,1-TRICHLOROETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,1,2,2-TETRACHLOROETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,1,2-TRICHLOROETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,1-DICHLOROETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,1-DICHLOROETHENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,1-DICHLOROPROPENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,2,3-TRICHLOROBENZENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,2,3-TRICHLOROPROPANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,2,4-TRICHLOROBENZENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,2,4-TRIMETHYLBENZENE | 1.9 U | 1.3 B | NA | NA | 2 B | 1.3 B | NA | NA | 6 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 3.8 U | 4.5 U | NA | NA | 5.5 U | 3.9 U | NA | NA | 6 U |
| 1,2-DIBROMOETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,2-DICHLOROBENZENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,2-DICHLOROETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,2-DICHLOROPROPANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,3,5-TRIMETHYLBENZENE | 1.92 U | 2.25 U | NA | NA | 2.73 U | 1.95 U | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,3-DICHLOROPROPANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,3-DICHLOROPROPENE | 3.84 U | 4.5 U | NA | NA | 5.46 U | 3.91 U | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 1,4-DIOXANE | 95.9 U | 113 U | NA | NA | 136 U | 97.7 U | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 2-BUTANONE | 9.19 | 29.4 | NA | NA | 13.2 | 13 | NA | NA | 29 UR |
| 2-CHLOROETHYL VINYL ETHER | 1.9 UR | 2.3 UR | NA | NA | 2.7 UR | 2 UR | NA | NA | 6 U |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 2-HEXANONE | 7.67 U | 9 U | NA | NA | 10.9 U | 7.82 U | NA | NA | 29 U |
| 4-CHLOROTOLUENE | 1.92 U | 2.25 U | NA | NA | 2.73 U | 1.95 U | NA | NA | 6 U |
| 4-ISOPROPYLTOLUENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| 4-METHYL-2-PENTANONE | 7.7 U | 9 U | NA | NA | 10.9 U | 7.8 U | NA | NA | 29 U |
| ACETONE | 107 J | 210 J | NA | NA | 138 J | 157 J | NA | NA | 27 B |
| BENZENE | 1.92 U | 2.25 U | NA | NA | 2.73 U | 1.95 U | NA | NA | 6 U |
| BROMOBENZENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| BROMOCHLOROMETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| BROMODICHLOROMETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| BROMOFORM | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| BROMOMETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 11 U |
| CARBON DISULFIDE | 1.7 J | 2.3 U | NA | NA | 3 | 2 | NA | NA | 3 J |
| CARBON TETRACHLORIDE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| CHLOROBENZENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| CHLORODIBROMOMETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| CHLOROETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 11 U |
| CHLOROFORM | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| CHLOROMETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 11 UJ |
| CIS-1,2-DICHLOROETHENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| CIS-1,3-DICHLOROPROPENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| DIBROMOMETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| DICHLORODIFLUOROMETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 11 U |
| DIISOPROPYL ETHER | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| ETHYL TERT-BUTYL ETHER | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| ETHYLBENZENE | 1.9 U | 1.5 J | NA | NA | 2.7 U | 0.31 J | NA | NA | 6 U |
| FLUORODICHLOROMETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | NA |
| HEXACHLOROBUTADIENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| ISOPROPYLBENZENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| M+P-XYLENES | 3.8 U | 4.5 U | NA | NA | 5.5 U | 3.9 U | NA | NA | 11 U |
| METHYL TERT-BUTYL ETHER | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 11 U |
| METHYLENE CHLORIDE | 3.8 U | 2.9 J | NA | NA | 4.9 J | 3 J | NA | NA | 13 B |
| NAPHTHALENE | 35.4 | 0.94 B | NA | NA | 2.7 U | 2 B | NA | NA | 6 U |
| N-BUTYLBENZENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| N-PROPYLBENZENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| O-XYLENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| SEC-BUTYLBENZENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| STYRENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| TERT-AMYL METHYL ETHER | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| TERT-BUTYLBENZENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| TERTIARY-BUTYL ALCOHOL | 5 J | 7 J | NA | NA | 11 U | 8 U | NA | NA | 11 UR |
| TETRACHLOROETHENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| TOLUENE | 1.9 U | 7.8 | NA | NA | 13.3 | 8 | NA | NA | 6 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | 11 U |
| TOTAL XYLENES | 5.8 U | 6.8 U | NA | NA | 8.2 U | 5.9 U | NA | NA | 17 U |
| TRANS-1,2-DICHLOROETHENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| TRANS-1,3-DICHLOROPROPENE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |
| TRICHLOROETHENE | 1.9 U | 2.9 | NA | NA | 4.8 | 3.4 | NA | NA | 6 U |
| TRICHLOROFLUOROMETHANE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 11 U |
| VINYL ACETATE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 6 U |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-200 | SB-201 | SB-201RE | SB-201RE | SB-202 | SB-203 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-200-SS | SB-201-SS | H-SB-201RE-1 | H-SB-201RE-2 | SB-202-SS | SB-203-SS | H-SB-282RE-1 | H-SB-282RE-2 | SB-282-0102 |
| SAMPLE DATE | 20050513 | 20050513 | 20090924 | 20090924 | 20050513 | 20050513 | 20090929 | 20090929 | 20051026 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SB | SS | SS | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 |
| VINYL CHLORIDE | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA | 11 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| 1,2-DICHLOROBENZENE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| 1,3-DICHLOROBENZENE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| 1,4-DICHLOROBENZENE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| 1,4-DIOXANE | 373 U | 440 U | NA | NA | 378 U | 364 U | NA | NA | 380 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 113 U | 133 U | NA | NA | 114 U | 110 U | NA | NA | 380 U |
| 2,4,5-TRICHLOROPHENOL | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 940 U |
| 2,4,6-TRICHLOROPHENOL | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| 2,4-DICHLOROPHENOL | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| 2,4-DIMETHYLPHENOL | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| 2,4-DINITROPHENOL | 565 U | 666 U | NA | NA | 572 U | 552 U | NA | NA | 940 U |
| 2,4-DINITROTOLUENE | 79 U | 93 U | NA | NA | 80 U | 77 U | NA | NA | 380 U |
| 2,6-DINITROTOLUENE | 79 U | 93 U | NA | NA | 80 U | 77 U | NA | NA | 380 U |
| 2-CHLORONAPHTHALENE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| 2-CHLOROPHENOL | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| 2-METHYLPHENOL | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| 2-NITROANILINE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 940 U |
| 2-NITROPHENOL | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| 3&4-METHYLPHENOL | 757 U | 893 U | NA | NA | 767 U | 739 U | NA | NA | 380 U |
| 3,3'-DICHLOROBENZIDINE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| 3-NITROANILINE | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 940 U |
| 4,6-DINITRO-2-METHYLPHENOL | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 940 U |
| 4-BROMOPHENYL PHENYL ETHER | 113 U | 133 U | NA | NA | 114 U | 110 U | NA | NA | 380 U |
| 4-CHLORO-3-METHYLPHENOL | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| 4-CHLOROANILINE | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| 4-CHLOROPHENYL PHENYL ETHER | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 113 U | 133 U | NA | NA | 114 U | 110 U | NA | NA | 940 U |
| 4-NITROPHENOL | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 940 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | 757 U | 893 U | NA | NA | 767 U | 739 U | NA | NA | 940 U |
| BENZOIC ACID | 100 J | 723 J | NA | NA | 767 U | 67.4 J | NA | NA | 940 UJ |
| BENZYL ALCOHOL | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 UJ |
| BIS(2-CHLOROETHOXY)METHANE | 113 U | 133 U | NA | NA | 114 U | 110 U | NA | NA | 380 U |
| BIS(2-CHLOROETHYL)ETHER | 113 U | 133 U | NA | NA | 114 U | 110 U | NA | NA | 380 UJ |
| BIS(2-ETHYLHEXYL)PHTHALATE | 79 U | 93 U | NA | NA | 80 U | 77 U | NA | NA | 380 U |
| BUTYL BENZYL PHTHALATE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| DIBENZOFURAN | 27 J | 133 U | NA | NA | 114 U | 110 U | NA | NA | 380 U |
| DIETHYL PHTHALATE | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| DIMETHYL PHTHALATE | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| DI-N-BUTYL PHTHALATE | 192 U | 227 U | NA | NA | 195 U | 31 J | NA | NA | 380 U |
| DI-N-OCTYL PHTHALATE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| HEXACHLOROBENZENE | 79 U | 93 U | NA | NA | 80 U | 77 U | NA | NA | 380 U |
| HEXACHLOROBUTADIENE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| HEXACHLOROCYCLOPENTADIENE | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| HEXACHLOROETHANE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| ISOPHORONE | 113 U | 133 U | NA | NA | 114 U | 110 U | NA | NA | 380 U |
| NITROBENZENE | 192 U | 227 U | NA | NA | 195 U | 188 U | NA | NA | 380 U |
| N-NITROSODIMETHYLAMINE | 113 U | 133 U | NA | NA | 114 U | 110 U | NA | NA | 380 U |
| N-NITROSO-DI-N-PROPYLAMINE | 113 U | 133 U | NA | NA | 114 U | 110 U | NA | NA | 380 U |
| N-NITROSODIPHENYLAMINE | 113 U | 133 U | NA | NA | 114 U | 110 U | NA | NA | 380 U |
| PENTACHLOROPHENOL | 950 U | 1120 U | NA | NA | 961 U | 927 U | NA | NA | 940 U |
| PHENOL | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| PYRIDINE | 384 U | 453 U | NA | NA | 389 U | 375 U | NA | NA | 380 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 183 | 93.3 U | NA | NA | 80.1 U | 77.2 U | NA | NA | 380 U |
| 2-METHYLNAPHTHALENE | 161 | 93 U | NA | NA | 80 U | 77 U | NA | NA | 380 U |
| ACENAPHTHENE | 125 | 93 U | NA | NA | 80 U | 77 U | NA | NA | 380 U |
| ACENAPHTHYLENE | 79 U | 93 U | NA | NA | 80 U | 77 U | NA | NA | 380 U |
| ANTHRACENE | 283 | 93 U | NA | NA | 80 U | 40 J | NA | NA | 380 U |
| BAP EQUIVALENT-HALFND | 499 | 100 | NA | NA | 80 U | 108 | 165 | 145 | 380 U |
| BAP EQUIVALENT-POS | 499 | 49 | NA | NA | 80 U | 70 | 165 | 145 | 380 U |
| BENZO(A)ANTHRACENE | 372 | 35 J | NA | NA | 80 U | 60 J | 120 | 110 | 380 U |
| BENZO(A)PYRENE | 367 | 40 J | NA | NA | 80 U | 57 J | 98 | 84 | 380 U |
| BENZO(B)FLUORANTHENE | 205 | 46 J | NA | NA | 80 U | 30 J | 130 | 100 | 380 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 159 | 93 U | NA | NA | 80 U | 37 J | NA | NA | 380 U |
| BENZO(K)FLUORANTHENE | 284 | 42 J | NA | NA | 80 U | 48 J | 41 | 45 | 380 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-200 | SB-201 | SB-201RE | SB-201RE | SB-202 | SB-203 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-200-SS | SB-201-SS | H-SB-201RE-1 | H-SB-201RE-2 | SB-202-SS | SB-203-SS | H-SB-282RE-1 | H-SB-282RE-2 | SB-282-0102 |
| SAMPLE DATE | 20050513 | 20050513 | 20090924 | 20090924 | 20050513 | 20050513 | 20090929 | 20090929 | 20051026 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SB | SS | SS | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 407 | 49 J | NA | NA | 80 U | 69 J | 140 | 120 | 380 U |
| DIBENZO(A,H)ANTHRACENE | 56 J | 93 U | NA | NA | 80 U | 77 U | 35 | 33 | 380 U |
| FLUORANTHENE | 840 | 80 J | NA | NA | 80 U | 132 | NA | NA | 380 U |
| FLUORENE | 159 | 93 U | NA | NA | 80 U | 28 J | NA | NA | 380 U |
| INDENO(1,2,3-CD)PYRENE | 147 | 93 U | NA | NA | 80 U | 34 J | 67 | 63 | 380 U |
| NAPHTHALENE | 239 | 93 U | NA | NA | 80 U | 77 U | NA | NA | 380 U |
| PHENANTHRENE | 1020 | 46 J | NA | NA | 80 U | 130 | NA | NA | 380 U |
| PYRENE | 869 | 66 J | NA | NA | 32 J | 131 | NA | NA | 380 U |
| TOTAL PAHS | 5693 | 404 | NA | NA | 32 | 796 | 631 | 555 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 37 U | 44 U | NA | NA | 38 U | 36 U | NA | NA | 19 U |
| AROCLOR-1221 | 37 U | 44 U | NA | NA | 38 U | 36 U | NA | NA | 19 U |
| AROCLOR-1232 | 37 U | 44 U | NA | NA | 38 U | 36 U | NA | NA | 19 U |
| AROCLOR-1242 | 37 U | 44 U | NA | NA | 38 U | 36 U | NA | NA | 19 U |
| AROCLOR-1248 | 37 U | 44 U | NA | NA | 38 U | 36 U | NA | NA | 19 U |
| AROCLOR-1254 | 37 U | 44 U | NA | NA | 38 U | 36 U | NA | NA | 19 U |
| AROCLOR-1260 | 37 U | 44 U | NA | NA | 38 U | 36 U | NA | NA | 19 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | NA | NA | 0 U | 0 U | NA | NA | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.9 | 1 | NA | NA | 0.6 | 1 | NA | NA | 0.4 UR |
| ARSENIC | 0.7 U | 6 | NA | NA | 0.7 | 1 | NA | NA | 6.1 |
| BARIUM | 25 | 74 | NA | NA | 23 | 38 | NA | NA | 29.2 |
| BERYLLIUM | 0.5 | 1.4 | NA | NA | 0.3 | 0.6 | NA | NA | 1.2 |
| CADMIUM | 0.09 | 0.5 | NA | NA | 0.2 | 0.06 | NA | NA | 0.04 U |
| CHROMIUM | 8.8 | 24.8 | NA | NA | 7.8 | 12.1 | NA | NA | 23.9 K |
| COBALT | 2.8 | 19.7 | NA | NA | 3.3 | 8.5 | NA | NA | 6 |
| COPPER | 6 | 9 | NA | NA | 6 | 5 | NA | NA | 7.3 K |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 7 | 18 | NA | NA | 6 | 6 | NA | NA | 7.5 |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.4 L | 1.14 L | 0.15 | 0.019 U | 0.06 L | 0.04 L | NA | NA | 0.01 |
| MOLYBDENUM | 0.6 U | 0.9 B | NA | NA | 0.4 B | 0.5 U | NA | NA | 0.6 B |
| NICKEL | 7 | 11 | NA | NA | 7 | 13 | NA | NA | 11.6 |
| SELENIUM | 2 U | 2 U | NA | NA | 2 | 2 U | NA | NA | 0.35 UL |
| SILVER | 0.06 U | 0.06 U | NA | NA | 0.04 U | 0.1 B | NA | NA | 0.1 U |
| THALLIUM | 1 U | 1 U | NA | NA | 0.8 U | 0.9 U | NA | NA | 0.59 U |
| VANADIUM | 14.5 | 34.7 | NA | NA | 13.1 | 20.4 | NA | NA | 32.8 K |
| ZINC | 20 | 45 | NA | NA | 18 | 35 | NA | NA | 38.8 K |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-200 | SB-201 | SB-201RE | SB-201RE | SB-202 | SB-203 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-200-SS | SB-201-SS | H-SB-201RE-1 | H-SB-201RE-2 | SB-202-SS | SB-203-SS | H-SB-282RE-1 | H-SB-282RE-2 | SB-282-0102 |
| SAMPLE DATE | 20050513 | 20050513 | 20090924 | 20090924 | 20050513 | 20050513 | 20090929 | 20090929 | 20051026 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SB | SS | SS | SB | SB | SB |
| TOP DEPTH | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 2 |
| DIESEL RANGE ORGANICS | 168000 | 242000 | NA | NA | 223000 | 37300 | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 6130 B | 13300 U | NA | NA | 11500 U | 6480 B | NA | NA | 12000 |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | 3300 J |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | 87 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | 0.4 U | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | 6 | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | 0.219 J | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282A | SB-282B | SB-282C | SB-282D | SB-283 | SB-284 | SB-285 | SB-286 | SB-293 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REA-1 | H-SB-282REB-1 | H-SB-282REC-1 | H-SB-282RED-1 | SB-283-0102 | SB-284-0102 | SB-285-0102 | SB-286-0102 | SB-293-0102 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20051027 | 20051027 | 20051027 | 20051027 | 20051028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | 6 UJ | 6 UJ | 6 UJ | 6 UJ | 5 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | 6 U | 0.4 J | 6 U | 6 U | 5 U |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 2-BUTANONE | NA | NA | NA | NA | 29 UR | 4 J | 30 UR | 8 J | 27 UR |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 2-HEXANONE | NA | NA | NA | NA | 29 U | 28 UJ | 30 U | 28 U | 27 U |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | 29 U | 28 UJ | 30 U | 28 U | 27 U |
| ACETONE | NA | NA | NA | NA | 59 L | 69 J | 39 L | 75 L | 27 UR |
| BENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| BROMOBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| BROMOFORM | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| BROMOMETHANE | NA | NA | NA | NA | 12 U | 11 UJ | 12 U | 11 U | 11 U |
| CARBON DISULFIDE | NA | NA | NA | NA | 2 J | 6 UJ | 2 J | 3 J | 5 U |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| CHLOROBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| CHLOROETHANE | NA | NA | NA | NA | 12 U | 11 UJ | 12 U | 11 U | 11 U |
| CHLOROFORM | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| CHLOROMETHANE | NA | NA | NA | NA | 12 U | 3 J | 12 U | 11 UJ | 11 U |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| DIBROMOMETHANE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | 12 U | 11 UJ | 12 U | 11 U | 11 U |
| DIISOPROPYL ETHER | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| ETHYLBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| ISOPROPYLBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| M+P-XYLENES | NA | NA | NA | NA | 12 U | 11 UJ | 12 U | 11 U | 11 U |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | 12 U | 11 UJ | 12 U | 11 U | 11 U |
| METHYLENE CHLORIDE | NA | NA | NA | NA | 6 U | 4 B | 3 B | 8 B | 16 B |
| NAPHTHALENE | NA | NA | NA | NA | 6 U | 180 J | 5 J | 2 J | 5 U |
| N-BUTYLBENZENE | NA | NA | NA | NA | 6 U | 0.9 J | 6 U | 6 U | 5 U |
| N-PROPYLBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| O-XYLENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| STYRENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | 12 UR | 11 UR | 12 UR | 11 UR | 11 UR |
| TETRACHLOROETHENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| TOLUENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | 12 U | 11 UJ | 12 U | 11 U | 11 U |
| TOTAL XYLENES | NA | NA | NA | NA | 18 U | 17 UJ | 18 U | 17 U | 16 U |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| TRICHLOROETHENE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | 12 U | 11 UJ | 12 U | 11 U | 11 U |
| VINYL ACETATE | NA | NA | NA | NA | 6 U | 6 UJ | 6 U | 6 U | 5 U |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282A | SB-282B | SB-282C | SB-282D | SB-283 | SB-284 | SB-285 | SB-286 | SB-293 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REA-1 | H-SB-282REB-1 | H-SB-282REC-1 | H-SB-282RED-1 | SB-283-0102 | SB-284-0102 | SB-285-0102 | SB-286-0102 | SB-293-0102 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20051027 | 20051027 | 20051027 | 20051027 | 20051028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| VINYL CHLORIDE | NA | NA | NA | NA | 12 U | 11 UJ | 12 U | 11 U | 11 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 1,4-DIOXANE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | 960 U | 930 U | 990 U | 920 U | 890 U |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | 960 U | 930 U | 990 U | 920 U | 890 U |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 2-CHLOROPHENOL | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 2-METHYLPHENOL | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 2-NITROANILINE | NA | NA | NA | NA | 960 U | 930 U | 990 U | 920 U | 890 U |
| 2-NITROPHENOL | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 3-NITROANILINE | NA | NA | NA | NA | 960 U | 930 UJ | 990 U | 920 U | 890 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | 960 U | 930 U | 990 U | 920 U | 890 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 4-CHLOROANILINE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | 960 U | 930 UJ | 990 U | 920 U | 890 U |
| 4-NITROPHENOL | NA | NA | NA | NA | 960 U | 930 U | 990 U | 920 U | 890 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | 960 U | 930 U | 990 U | 920 U | 890 U |
| BENZOIC ACID | NA | NA | NA | NA | 960 U | 930 UJ | 990 UJ | 920 UJ | 890 U |
| BENZYL ALCOHOL | NA | NA | NA | NA | 390 UR | 380 UJ | 400 UJ | 370 UJ | 360 UR |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| DIBENZOFURAN | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| DIETHYL PHTHALATE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| HEXACHLOROBENZENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 UJ |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| HEXACHLOROETHANE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| ISOPHORONE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| NITROBENZENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | 390 U | 380 UJ | 400 U | 370 U | 360 U |
| PENTACHLOROPHENOL | NA | NA | NA | NA | 960 U | 930 U | 990 U | 920 U | 890 U |
| PHENOL | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| PYRIDINE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | 390 U | 210 J | 400 U | 370 U | 360 U |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | 390 U | 180 J | 400 U | 370 U | 360 U |
| ACENAPHTHENE | NA | NA | NA | NA | 130 J | 110 J | 400 U | 370 U | 360 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | 390 U | 380 U | 400 U | 370 U | 360 U |
| ANTHRACENE | NA | NA | NA | NA | 210 J | 170 J | 400 U | 370 U | 360 U |
| BAP EQUIVALENT-HALFND | 23981 | 31 | 68 | 21482 | 564 | 415 | 400 U | 370 U | 360 U |
| BAP EQUIVALENT-POS | 23981 | 31 | 68 | 21468 | 367 | 206 | 400 U | 370 U | 360 U |
| BENZO(A)ANTHRACENE | 16000 | 32 | 54 | 20000 | 350 J | 200 J | 400 U | 370 U | 360 U |
| BENZO(A)PYRENE | 17000 | 23 | 54 | 17000 | 290 J | 170 J | 400 U | 370 U | 360 U |
| BENZO(B)FLUORANTHENE | 19000 | 26 | 51 | 16000 | 250 J | 150 J | 400 U | 370 U | 360 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | 180 J | 380 U | 400 U | 370 U | 360 U |
| BENZO(K)FLUORANTHENE | 6500 | 13 | 25 | 7700 | 390 U | 75 J | 400 U | 370 U | 360 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282A | SB-282B | SB-282C | SB-282D | SB-283 | SB-284 | SB-285 | SB-286 | SB-293 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REA-1 | H-SB-282REB-1 | H-SB-282REC-1 | H-SB-282RED-1 | SB-283-0102 | SB-284-0102 | SB-285-0102 | SB-286-0102 | SB-293-0102 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20051027 | 20051027 | 20051027 | 20051027 | 20051028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 16000 | 36 | 66 | 21000 | 420 | 220 J | 400 U | 370 U | 360 U |
| DIBENZO(A,H)ANTHRACENE | 2600 | 1.5 U | 1.5 U | 27 U | 390 U | 380 U | 400 U | 370 U | 360 U |
| FLUORANTHENE | NA | NA | NA | NA | 590 | 450 | 400 U | 370 U | 360 U |
| FLUORENE | NA | NA | NA | NA | 180 J | 170 J | 400 U | 370 U | 360 U |
| INDENO(1,2,3-CD)PYRENE | 8000 | 16 | 28 | 7700 | 170 J | 380 U | 400 U | 370 U | 360 U |
| NAPHTHALENE | NA | NA | NA | NA | 390 U | 200 J | 400 U | 370 U | 360 U |
| PHENANTHRENE | NA | NA | NA | NA | 1000 | 840 | 400 U | 370 U | 360 U |
| PYRENE | NA | NA | NA | NA | 970 | 590 | 400 U | 370 U | 360 U |
| TOTAL PAHS | 85100 | 146 | 278 | 89400 | 4740 | 3525 | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | 20 U | 19 U | 21 U | 19 U | 18 U |
| AROCLOR-1221 | NA | NA | NA | NA | 20 U | 19 U | 21 U | 19 U | 18 U |
| AROCLOR-1232 | NA | NA | NA | NA | 20 U | 19 U | 21 U | 19 U | 18 U |
| AROCLOR-1242 | NA | NA | NA | NA | 20 U | 19 U | 21 U | 19 U | 18 U |
| AROCLOR-1248 | NA | NA | NA | NA | 20 U | 19 U | 21 U | 19 U | 18 U |
| AROCLOR-1254 | NA | NA | NA | NA | 20 U | 19 U | 21 U | 19 U | 18 U |
| AROCLOR-1260 | NA | NA | NA | NA | 20 U | 19 U | 21 U | 19 U | 18 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | 0.4 UL | 0.38 UL | 0.71 UL | 0.35 UL | 0.34 U |
| ARSENIC | NA | NA | NA | NA | 2 B | 1.2 B | 4.8 B | 2.8 B | 1.7 |
| BARIUM | NA | NA | NA | NA | 39.8 | 16.3 | 19.9 | 38.4 | 20.9 |
| BERYLLIUM | NA | NA | NA | NA | 0.23 | 0.46 | 1.3 | 0.56 | 0.43 |
| CADMIUM | NA | NA | NA | NA | 0.04 U | 0.04 U | 0.07 U | 0.03 U | 0.36 U |
| CHROMIUM | NA | NA | NA | NA | 11.2 | 8.9 | 22.4 | 30.7 | 11.7 |
| COBALT | NA | NA | NA | NA | 4.5 | 5.4 | 6.6 | 7.4 | 4.4 |
| COPPER | NA | NA | NA | NA | 8.2 | 5.4 | 13.6 | 4.5 | 5.8 |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | 4 | 3.4 | 5.9 | 7.3 | 5 |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | 0.01 U | 0.02 | 0.01 U | 0.01 | 0.03 |
| MOLYBDENUM | NA | NA | NA | NA | 0.3 | 0.2 | 0.38 | 0.54 | 0.34 |
| NICKEL | NA | NA | NA | NA | 6 | 8.1 | 15 | 5.1 | 9.3 |
| SELENIUM | NA | NA | NA | NA | 0.35 U | 0.33 U | 0.62 U | 0.3 U | 0.29 UL |
| SILVER | NA | NA | NA | NA | 0.1 UL | 0.1 UL | 0.09 UL | 0.09 UL | 0.41 L |
| THALLIUM | NA | NA | NA | NA | 0.6 U | 0.57 U | 1.4 B | 0.52 U | 0.5 U |
| VANADIUM | NA | NA | NA | NA | 19.3 | 14.2 | 37.9 | 18.7 | 17.4 |
| ZINC | NA | NA | NA | NA | 18.6 | 18.2 | 33.4 | 16.3 | 20 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-282A | SB-282B | SB-282C | SB-282D | SB-283 | SB-284 | SB-285 | SB-286 | SB-293 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REA-1 | H-SB-282REB-1 | H-SB-282REC-1 | H-SB-282RED-1 | SB-283-0102 | SB-284-0102 | SB-285-0102 | SB-286-0102 | SB-293-0102 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20051027 | 20051027 | 20051027 | 20051027 | 20051028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | 3200 | 2800 U | 2900 U | 2800 U | 2600 U |
| TPH (C09-C36) | NA | NA | NA | NA | 22000 | 34000 | 6100 U | 30000 | 12000 |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | 85 | 88 | 82 | 89 | 92 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-294 | SB-462 | SB-463 | SB-464 | SB-465 | SB-466 | SB-467 | SB-468 | SB-469 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-294-0001 | SB-462-0102 | SB-463-0102 | SB-464-0102 | SB-465-0102 | SB-466-0102 | SB-467-0102 | SB-468-0102 | SB-469-0102 |
| SAMPLE DATE | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 28 UR | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | 28 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 28 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 28 UR | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | 11 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | 11 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | 11 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 11 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 11 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 11 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 14 B | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | 11 UR | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | 11 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | 16 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 11 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | 6 UJ | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-294 | SB-462 | SB-463 | SB-464 | SB-465 | SB-466 | SB-467 | SB-468 | SB-469 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-294-0001 | SB-462-0102 | SB-463-0102 | SB-464-0102 | SB-465-0102 | SB-466-0102 | SB-467-0102 | SB-468-0102 | SB-469-0102 |
| SAMPLE DATE | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| VINYL CHLORIDE | 11 UJ | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 900 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 900 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | 900 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | 900 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 900 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 900 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | 900 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | 900 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | 900 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 900 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 360 U | 26 | 69 | 1.4 U | 1.5 U | 11 | 1.5 U | 1.5 U | 15 |
| BAP EQUIVALENT-POS | 360 U | 26 | 69 | 1.4 U | 1.5 U | 11 | 1.5 U | 1.5 U | 15 |
| BENZO(A)ANTHRACENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 360 U | 26 J | 69 J | 1.4 U | 1.5 U | 11 J | 1.5 U | 1.5 U | 15 J |
| BENZO(B)FLUORANTHENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-294 | SB-462 | SB-463 | SB-464 | SB-465 | SB-466 | SB-467 | SB-468 | SB-469 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-294-0001 | SB-462-0102 | SB-463-0102 | SB-464-0102 | SB-465-0102 | SB-466-0102 | SB-467-0102 | SB-468-0102 | SB-469-0102 |
| SAMPLE DATE | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 360 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 26 | 69 | 0 U | 0 U | 11 | 0 U | 0 U | 15 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 19 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | 19 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | 19 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | 19 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | 19 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | 19 U | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | 19 U | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.39 U | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 2 | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 20.1 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 0.37 B | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 0.42 U | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 11.1 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | 2.9 | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 4.7 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 4.8 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.01 | 0.091 | 0.036 | 0.019 U | 0.04 | 0.02 U | 0.019 U | 0.019 U | 0.019 U |
| MOLYBDENUM | 0.55 K | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 7.5 | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 0.34 U | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 0.42 UL | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | 0.59 U | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 15.7 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 15.9 | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-294 | SB-462 | SB-463 | SB-464 | SB-465 | SB-466 | SB-467 | SB-468 | SB-469 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-294-0001 | SB-462-0102 | SB-463-0102 | SB-464-0102 | SB-465-0102 | SB-466-0102 | SB-467-0102 | SB-468-0102 | SB-469-0102 |
| SAMPLE DATE | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 2700 U | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | 14000 | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | 89.1 | 86.3 | 89.9 | 88.4 | 85 | 89.5 | 88.8 | 89.1 |
| TOTAL SOLIDS | 91 | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-470 | SB-471 | SB-472 | SB-473 | SB-474 | SB-475 | SB-476 | SB-477 | SB-478 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-470-0102 | SB-471-0102 | SB-472-0102 | SB-473-0102 | SB-474-0102 | SB-475-0102 | SB-476-0102 | SB-477-0102 | SB-478-0102 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071024 | 20071024 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-470 | SB-471 | SB-472 | SB-473 | SB-474 | SB-475 | SB-476 | SB-477 | SB-478 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-470-0102 | SB-471-0102 | SB-472-0102 | SB-473-0102 | SB-474-0102 | SB-475-0102 | SB-476-0102 | SB-477-0102 | SB-478-0102 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071024 | 20071024 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 52 | 1.6 U | 1.5 U | 1.5 U | 24 | 1.5 U | 1.5 U | 1.5 U | 1.4 U |
| BAP EQUIVALENT-POS | 52 | 1.6 U | 1.5 U | 1.5 U | 24 | 1.5 U | 1.5 U | 1.5 U | 1.4 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 52 J | 1.6 U | 1.5 U | 1.5 U | 24 J | 1.5 U | 1.5 U | 1.5 U | 1.4 UJ |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-470 | SB-471 | SB-472 | SB-473 | SB-474 | SB-475 | SB-476 | SB-477 | SB-478 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-470-0102 | SB-471-0102 | SB-472-0102 | SB-473-0102 | SB-474-0102 | SB-475-0102 | SB-476-0102 | SB-477-0102 | SB-478-0102 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071024 | 20071024 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 52 | 0 U | 0 U | 0 U | 24 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.48 | 0.021 UL | 0.019 UL | 0.019 UL | 0.02 U | 0.019 U | 0.019 U | 0.019 U | 0.018 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-470 | SB-471 | SB-472 | SB-473 | SB-474 | SB-475 | SB-476 | SB-477 | SB-478 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-470-0102 | SB-471-0102 | SB-472-0102 | SB-473-0102 | SB-474-0102 | SB-475-0102 | SB-476-0102 | SB-477-0102 | SB-478-0102 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071024 | 20071024 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 88.9 | 80.5 | 86.3 | 89.3 | 85.1 | 88.4 | 87.7 | 88.6 | 90.3 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-479 | SB-480 | SB-481 | SB-482 | SB-483 | SB-484 | SB-485 | SB-486 | SB-487 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-479-0102 | SB-480-0102 | SB-481-0102 | SB-482-0102 | SB-483-0102 | SB-484-0102 | SB-485-0102 | SB-486-0102 | SB-487-0102 |
| SAMPLE DATE | 20071025 | 20071025 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-479 | SB-480 | SB-481 | SB-482 | SB-483 | SB-484 | SB-485 | SB-486 | SB-487 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-479-0102 | SB-480-0102 | SB-481-0102 | SB-482-0102 | SB-483-0102 | SB-484-0102 | SB-485-0102 | SB-486-0102 | SB-487-0102 |
| SAMPLE DATE | 20071025 | 20071025 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 15 | 1.5 U | 31 | 13 | 32 | 21 | 10 | 370 U | 370 U |
| BAP EQUIVALENT-POS | 15 | 1.5 U | 31 | 13 | 32 | 21 | 10 | 370 U | 370 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 15 J | 1.5 U | 31 J | 13 J | 32 J | 21 J | 10 J | 370 U | 370 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-479 | SB-480 | SB-481 | SB-482 | SB-483 | SB-484 | SB-485 | SB-486 | SB-487 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-479-0102 | SB-480-0102 | SB-481-0102 | SB-482-0102 | SB-483-0102 | SB-484-0102 | SB-485-0102 | SB-486-0102 | SB-487-0102 |
| SAMPLE DATE | 20071025 | 20071025 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 15 | 0 U | 31 | 13 | 32 | 21 | 10 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.019 U | 0.019 U | 0.036 | 0.063 | 0.054 | 0.028 | 0.019 U | 0.019 U | 0.019 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-479 | SB-480 | SB-481 | SB-482 | SB-483 | SB-484 | SB-485 | SB-486 | SB-487 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-479-0102 | SB-480-0102 | SB-481-0102 | SB-482-0102 | SB-483-0102 | SB-484-0102 | SB-485-0102 | SB-486-0102 | SB-487-0102 |
| SAMPLE DATE | 20071025 | 20071025 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 88 | 88.9 | 85 | 78.1 | 86.2 | 82.9 | 88 | 89.4 | 89.6 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-488 | SB-600 | SB-600 | SB-601 | SB-601 | SB-602 | SB-602 | SB-603 | SB-603 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-488-0102 | H-SB-600-1 | H-SB-600-2 | H-SB-601-1 | H-SB-601-2 | H-SB-602-1 | H-SB-602-2 | H-SB-603-1 | H-SB-603-2 |
| SAMPLE DATE | 20071029 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-488 | SB-600 | SB-600 | SB-601 | SB-601 | SB-602 | SB-602 | SB-603 | SB-603 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-488-0102 | H-SB-600-1 | H-SB-600-2 | H-SB-601-1 | H-SB-601-2 | H-SB-602-1 | H-SB-602-2 | H-SB-603-1 | H-SB-603-2 |
| SAMPLE DATE | 20071029 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 9 | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-POS | 9 | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 9 J | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-488 | SB-600 | SB-600 | SB-601 | SB-601 | SB-602 | SB-602 | SB-603 | SB-603 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-488-0102 | H-SB-600-1 | H-SB-600-2 | H-SB-601-1 | H-SB-601-2 | H-SB-602-1 | H-SB-602-2 | H-SB-603-1 | H-SB-603-2 |
| SAMPLE DATE | 20071029 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 9 | NA | NA | NA | NA | NA | NA | NA | NA |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.019 U | 0.034 | 0.019 U | 0.039 | 0.023 | 0.034 | 0.029 | 0.31 | 0.025 |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-488 | SB-600 | SB-600 | SB-601 | SB-601 | SB-602 | SB-602 | SB-603 | SB-603 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-488-0102 | H-SB-600-1 | H-SB-600-2 | H-SB-601-1 | H-SB-601-2 | H-SB-602-1 | H-SB-602-2 | H-SB-603-1 | H-SB-603-2 |
| SAMPLE DATE | 20071029 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 88.9 | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-604A | SB-604B | SB-604D | SB-610B | SB-610C | SB-610D | SB-611A | SB-611D | SB-814 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604A-1 | H-SB-604B-1 | H-SB-604D-1 | H-SB-610B-1 | H-SB-610C-1 | H-SB-610D-1 | H-SB-611A-1 | H-SB-611D-1 | H-SB-814-SS |
| SAMPLE DATE | 20091109 | 20091110 | 20091110 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-604A | SB-604B | SB-604D | SB-610B | SB-610C | SB-610D | SB-611A | SB-611D | SB-814 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604A-1 | H-SB-604B-1 | H-SB-604D-1 | H-SB-610B-1 | H-SB-610C-1 | H-SB-610D-1 | H-SB-611A-1 | H-SB-611D-1 | H-SB-814-SS |
| SAMPLE DATE | 20091109 | 20091110 | 20091110 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| BAP EQUIVALENT-HALFND | 17 | 163 | 45883 | 15 | 31 | 25 | 53 | 616 | 3.9 U |
| BAP EQUIVALENT-POS | 16 | 163 | 45883 | 14 | 30 | 24 | 53 | 616 | 3.9 U |
| BENZO(A)ANTHRACENE | 1.1 U | 120 | 38000 | 1 U | 19 | 11 | 45 | 320 | 3.9 U |
| BENZO(A)PYRENE | 16 | 110 | 33000 | 14 | 25 | 20 | 41 | 440 | 3.9 U |
| BENZO(B)FLUORANTHENE | 1.3 U | 90 | 31000 | 1.3 U | 14 | 11 | 40 | 390 | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| BENZO(K)FLUORANTHENE | 1.9 U | 48 | 15000 | 1.9 U | 12 | 8.6 | 17 | 200 | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |

| LOCATION | SB-604A | SB-604B | SB-604D | SB-610B | SB-610C | SB-610D | SB-611A | SB-611D | SB-814 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604A-1 | H-SB-604B-1 | H-SB-604D-1 | H-SB-610B-1 | H-SB-610C-1 | H-SB-610D-1 | H-SB-611A-1 | H-SB-611D-1 | H-SB-814-SS |
| SAMPLE DATE | 20091109 | 20091110 | 20091110 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | 80 U |
| CHRYSENE | 1 U | 120 | 33000 | 0.99 U | 20 | 9.7 | 46 | 360 | 1.3 UJ |
| DIBENZO(A,H)ANTHRACENE | 1.4 U | 26 | 4500 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 81 | 3.9 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 57 | 13000 | 1.6 U | 19 | 17 | 28 | 220 | 3.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | 3.9 U |
| TOTAL PAHS | 16 | 571 | 167500 | 14 | 109 | 77.3 | 217 | 2011 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-604A | SB-604B | SB-604D | SB-610B | SB-610C | SB-610D | SB-611A | SB-611D | SB-814 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604A-1 | H-SB-604B-1 | H-SB-604D-1 | H-SB-610B-1 | H-SB-610C-1 | H-SB-610D-1 | H-SB-611A-1 | H-SB-611D-1 | H-SB-814-SS |
| SAMPLE DATE | 20091109 | 20091110 | 20091110 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-815 | SB-816 | SB-816 | SB-816 | SB-817 |
|---|---|---|---|---|---|
| SAMPLE ID | H-SB-815-SS | H-SB-816-SS | H-SB-816-SS-AVG | H-SB-816-SS-D | H-SB-817-SS |
| SAMPLE DATE | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA |

| LOCATION | SB-815 | SB-816 | SB-816 | SB-816 | SB-817 |
|---|---|---|---|---|---|
| SAMPLE ID | H-SB-815-SS | H-SB-816-SS | H-SB-816-SS-AVG | H-SB-816-SS-D | H-SB-817-SS |
| SAMPLE DATE | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | |
| 1-METHYLNAPHTHALENE | 3.8 U | 10 | 10 | NA | 3.7 U |
| 2-METHYLNAPHTHALENE | 3.8 U | 11 | 11 | NA | 3.7 U |
| ACENAPHTHENE | 3.8 U | 43 J | 43 J | NA | 3.7 UJ |
| ACENAPHTHYLENE | 3.8 U | 3.8 U | 3.8 U | NA | 3.7 U |
| ANTHRACENE | 3.8 U | 31 J | 31 J | NA | 3.7 UJ |
| BAP EQUIVALENT-HALFND | 3.8 U | 58 | 58 | NA | 3.7 U |
| BAP EQUIVALENT-POS | 3.8 U | 56 | 56 | NA | 3.7 U |
| BENZO(A)ANTHRACENE | 3.8 U | 29 | 29 | NA | 3.7 U |
| BENZO(A)PYRENE | 3.8 U | 45 J | 45 J | NA | 3.7 UJ |
| BENZO(B)FLUORANTHENE | 3.8 U | 42 J | 42 J | NA | 3.7 UJ |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.8 U | 38 J | 38 J | NA | 3.7 UJ |
| BENZO(K)FLUORANTHENE | 3.8 U | 3.8 UJ | 3.8 UJ | NA | 3.7 UJ |
| C1-CHRYSENES | NA | 77 U | 76.5 U | 76 U | NA |

| LOCATION | SB-815 | SB-816 | SB-816 | SB-816 | SB-817 |
|---|---|---|---|---|---|
| SAMPLE ID | H-SB-815-SS | H-SB-816-SS | H-SB-816-SS-AVG | H-SB-816-SS-D | H-SB-817-SS |
| SAMPLE DATE | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | 77 U | 76.5 U | 76 U | NA |
| C1-FLUORENES | NA | 77 U | 76.5 U | 76 U | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | 77 U | 76.5 U | 76 U | NA |
| C2-CHRYSENES | NA | 77 U | 76.5 U | 76 U | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | 77 U | 76.5 U | 76 U | NA |
| C2-NAPHTHALENES | NA | 77 U | 76.5 U | 76 U | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | 77 U | 76.5 U | 76 U | NA |
| C3-CHRYSENES | NA | 77 U | 76.5 U | 76 U | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | 77 U | 76.5 U | 76 U | NA |
| C3-NAPHTHALENES | NA | 77 U | 76.5 U | 76 U | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | 77 U | 76.5 U | 76 U | NA |
| C4-CHRYSENES | NA | 77 U | 76.5 U | 76 U | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | 77 U | 76.5 U | 76 U | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | 77 U | 76.5 U | 76 U | NA |
| CHRYSENE | 1.3 UJ | 31 | 31 | NA | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 3.8 U | 3.8 UJ | 3.8 UJ | NA | 3.7 UJ |
| FLUORANTHENE | 3.8 U | 55 J | 55 J | NA | 3.7 UJ |
| FLUORENE | 3.8 U | 31 J | 31 J | NA | 3.7 UJ |
| INDENO(1,2,3-CD)PYRENE | 3.8 U | 35 J | 35 J | NA | 3.7 UJ |
| NAPHTHALENE | 3.8 U | 42 | 42 | NA | 3.7 U |
| PHENANTHRENE | 3.8 U | 42 J | 42 J | NA | 3.7 UJ |
| PYRENE | 8.5 | 65 | 65 | NA | 9.2 |
| TOTAL PAHS | 8.5 | 540 | 540 | NA | 9.2 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | |

**Table A-25**
**Summary of Analytical Results for Surface Soils, 0-2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-815 | SB-816 | SB-816 | SB-816 | SB-817 |
|---|---|---|---|---|---|
| SAMPLE ID | H-SB-815-SS | H-SB-816-SS | H-SB-816-SS-AVG | H-SB-816-SS-D | H-SB-817-SS |
| SAMPLE DATE | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | |
| PH | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA |

**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

**Table A-26**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-200 | SB-201 | SB-201RE | SB-201RE | SB-202 | SB-203 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-200-SS | SB-201-SS | H-SB-201RE-1 | H-SB-201RE-2 | SB-202-SS | SB-203-SS | H-SB-282RE-1 | H-SB-282RE-2 |
| SAMPLE DATE | | | | 20050513 | 20050513 | 20090924 | 20090924 | 20050513 | 20050513 | 20090929 | 20090929 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SS | SS | SB | SB | SS | SS | SB | SB |
| TOP DEPTH | | | | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 2 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 9.19 | 29.4 | NA | NA | 13.2 | 13 | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 107 J | 210 J | NA | NA | 138 J | 157 J | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 1.7 J | 2.3 U | NA | NA | 3 | 2 | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 1.9 U | 1.5 J | NA | NA | 2.7 U | 0.31 J | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 3.8 U | 2.9 J | NA | NA | 4.9 J | 3 J | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 35.4 | 0.94 B | NA | NA | 2.7 U | 2 B | NA | NA |
| N-BUTYLBENZENE | NC | NC | | 1.9 U | 2.3 U | NA | NA | 2.7 U | 2 U | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 5 J | 7 J | NA | NA | 11 U | 8 U | NA | NA |
| TOLUENE | 630000 | 500000 | N | 1.9 U | 7.8 | NA | NA | 13.3 | 8 | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | 1.9 U | 2.9 | NA | NA | 4.8 | 3.4 | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | 100 J | 723 J | NA | NA | 767 U | 67.4 J | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 27 J | 133 U | NA | NA | 114 U | 110 U | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 192 U | 227 U | NA | NA | 195 U | 31 J | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 183 | 93.3 U | NA | NA | 80.1 U | 77.2 U | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 161 | 93 U | NA | NA | 80 U | 77 U | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 125 | 93 U | NA | NA | 80 U | 77 U | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 283 | 93 U | NA | NA | 80 U | 40 J | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **499** | **100** | NA | NA | 80 U | **108** | **165** | **145** |
| BAP EQUIVALENT-POS | 22 | 15 | C | **499** | **49** | NA | NA | 80 U | **70** | **165** | **145** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **372** | 35 J | NA | NA | 80 U | 60 J | 120 | 110 |
| BENZO(A)PYRENE | 22 | 15 | C | **367** | **40 J** | NA | NA | 80 U | **57 J** | **98** | **84** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **205** | 46 J | NA | NA | 80 U | 30 J | 130 | 100 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[4] | 159 | 93 U | NA | NA | 80 U | 37 J | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 284 | 42 J | NA | NA | 80 U | 48 J | 41 | 45 |
| CHRYSENE | 22000 | 15000 | C | 407 | 49 J | NA | NA | 80 U | 69 J | 140 | 120 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **56 J** | 93 U | NA | NA | 80 U | 77 U | **35** | **33** |
| FLUORANTHENE | 310000 | 230000 | N | 840 | 80 J | NA | NA | 80 U | 132 | NA | NA |
| FLUORENE | 310000 | 230000 | N | 159 | 93 U | NA | NA | 80 U | 28 J | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 147 | 93 U | NA | NA | 80 U | 34 J | 67 | 63 |
| NAPHTHALENE | 160000 | 3600 | C | 239 | 93 U | NA | NA | 80 U | 77 U | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[4] | 1020 | 46 J | NA | NA | 80 U | 130 | NA | NA |
| PYRENE | 230000 | 170000 | N | 869 | 66 J | NA | NA | 32 J | 131 | NA | NA |
| TOTAL PAHS | NC | NC | | 5693 | 404 | NA | NA | 32 | 796 | 631 | 555 |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.9 | 1 | NA | NA | 0.6 | 1 | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 0.7 U | **6** | NA | NA | **0.7** | **1** | NA | NA |
| BARIUM | 1600 | 1500 | N | 25 | 74 | NA | NA | 23 | 38 | NA | NA |
| BERYLLIUM | 16 | 16 | N | 0.5 | 1.4 | NA | NA | 0.3 | 0.6 | NA | NA |
| CADMIUM | 3.9 | 7 | N | 0.09 | 0.5 | NA | NA | 0.2 | 0.06 | NA | NA |
| CHROMIUM | 12000 [5] | 12000 | N[5] | 8.8 | 24.8 | NA | NA | 7.8 | 12.1 | NA | NA |
| COBALT | NC | 2.3 | N | **2.8** | **19.7** | NA | NA | **3.3** | **8.5** | NA | NA |
| COPPER | 310 | 310 | N | 6 | 9 | NA | NA | 6 | 5 | NA | NA |
| LEAD | 400 | 400 | | 7 | 18 | NA | NA | 6 | 6 | NA | NA |
| MERCURY | 2.3 [6] | 2.3 | N[7] | 0.4 L | 1.14 L | 0.15 | 0.019 U | 0.06 L | 0.04 L | NA | NA |
| MOLYBDENUM | NC | 39 | N | 0.6 U | 0.9 B | NA | NA | 0.4 B | 0.5 U | NA | NA |
| NICKEL | 160 | 150 | N | 7 | 11 | NA | NA | 7 | 13 | NA | NA |
| SELENIUM | 39 | 39 | N | 2 U | 2 U | NA | NA | 2 | 2 U | NA | NA |
| SILVER | 39 | 39 | N | 0.06 U | 0.06 U | NA | NA | 0.04 U | 0.1 B | NA | NA |
| VANADIUM | 7.8 | 39 | N[8] | **14.5** | **34.7** | NA | NA | **13.1** | **20.4** | NA | NA |
| ZINC | 2300 | 2300 | N | 20 | 45 | NA | NA | 18 | 35 | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | 168000 | **242000** | NA | NA | 223000 | 37300 | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 6130 B | 13300 U | NA | NA | 11500 U | 6480 B | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | 6 | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | 0.219 J | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-282 | SB-282A | SB-282B | SB-282C | SB-282D | SB-283 | SB-284 | SB-285 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-282-0102 | H-SB-282REA-1 | H-SB-282REB-1 | H-SB-282REC-1 | H-SB-282RED-1 | SB-283-0102 | SB-284-0102 | SB-285-0102 |
| SAMPLE DATE | | | | 20051026 | 20091110 | 20091110 | 20091110 | 20091110 | 20051027 | 20051027 | 20051027 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 2 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 6 U | NA | NA | NA | NA | 6 U | 0.4 J | 6 U |
| 2-BUTANONE | 4700000 | 2800000 | N | 29 UR | NA | NA | NA | NA | 29 UR | 4 J | 30 UR |
| ACETONE | 7000000 | 6100000 | N | 27 B | NA | NA | NA | NA | 59 L | 69 J | 39 L |
| CARBON DISULFIDE | 780000 | 82000 | N | 3 J | NA | NA | NA | NA | 2 J | 6 UJ | 2 J |
| CHLOROMETHANE | NC | 12000 | N | 11 UJ | NA | NA | NA | NA | 12 U | 3 J | 12 U |
| ETHYLBENZENE | 780000 | 5400 | C | 6 U | NA | NA | NA | NA | 6 U | 6 UJ | 6 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 13 B | NA | NA | NA | NA | 6 U | 4 B | 3 B |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | NA | NA | NA | NA | 6 U | 180 J | 5 J |
| N-BUTYLBENZENE | NC | NC | | 6 U | NA | NA | NA | NA | 6 U | 0.9 J | 6 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 11 UR | NA | NA | NA | NA | 12 UR | 11 UR | 12 UR |
| TOLUENE | 630000 | 500000 | N | 6 U | NA | NA | NA | NA | 6 U | 6 UJ | 6 U |
| TRICHLOROETHENE | 1600 | 2800 | C | 6 U | NA | NA | NA | NA | 6 U | 6 UJ | 6 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | 940 UJ | NA | NA | NA | NA | 960 U | 930 UJ | 990 UJ |
| DIBENZOFURAN | 7800 | 7800 | N | 380 U | NA | NA | NA | NA | 390 U | 380 U | 400 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 380 U | NA | NA | NA | NA | 390 U | 380 U | 400 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 380 U | NA | NA | NA | NA | 390 U | 210 J | 400 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 380 U | NA | NA | NA | NA | 390 U | 180 J | 400 U |
| ACENAPHTHENE | 470000 | 340000 | N | 380 U | NA | NA | NA | NA | 130 J | 110 J | 400 U |
| ANTHRACENE | 2300000 | 1700000 | N | 380 U | NA | NA | NA | NA | 210 J | 170 J | 400 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 380 U | **23981** | **31** | **68** | **21482** | **564** | **415** | 400 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 380 U | **23981** | **31** | **68** | **21468** | **367** | **206** | 400 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 380 U | **16000** | 32 | 54 | **20000** | **350 J** | **200 J** | 400 U |
| BENZO(A)PYRENE | 22 | 15 | C | 380 U | **17000** | **23** | **54** | **17000** | **290 J** | **170 J** | 400 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 380 U | **19000** | 26 | 51 | **16000** | **250 J** | 150 J | 400 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[4] | 380 U | NA | NA | NA | NA | 180 J | 380 U | 400 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 380 U | **6500** | 13 | 25 | **7700** | 390 U | 75 J | 400 U |
| CHRYSENE | 22000 | 15000 | C | 380 U | **16000** | 36 | 66 | **21000** | 420 | 220 J | 400 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 380 U | **2600** | 1.5 U | 1.5 U | 27 U | 390 U | 380 U | 400 U |
| FLUORANTHENE | 310000 | 230000 | N | 380 U | NA | NA | NA | NA | 590 | 450 | 400 U |
| FLUORENE | 310000 | 230000 | N | 380 U | NA | NA | NA | NA | 180 J | 170 J | 400 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 380 U | **8000** | 16 | 28 | **7700** | **170 J** | 380 U | 400 U |
| NAPHTHALENE | 160000 | 3600 | C | 380 U | NA | NA | NA | NA | 390 U | 200 J | 400 U |
| PHENANTHRENE | 2300000 | 170000 | N[4] | 380 U | NA | NA | NA | NA | 1000 | 840 | 400 U |
| PYRENE | 230000 | 170000 | N | 380 U | NA | NA | NA | NA | 970 | 590 | 400 U |
| TOTAL PAHS | NC | NC | | 0 U | 85100 | 146 | 278 | 89400 | 4740 | 3525 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.4 UR | NA | NA | NA | NA | 0.4 UL | 0.38 UL | 0.71 UL |
| ARSENIC | 0.43 | 0.39 | C | **6.1** | NA | NA | NA | NA | 2 B | 1.2 B | 4.8 B |
| BARIUM | 1600 | 1500 | N | 29.2 | NA | NA | NA | NA | 39.8 | 16.3 | 19.9 |
| BERYLLIUM | 16 | 16 | N | 1.2 | NA | NA | NA | NA | 0.23 | 0.46 | 1.3 |
| CADMIUM | 3.9 | 7 | N | 0.04 U | NA | NA | NA | NA | 0.04 U | 0.04 U | 0.07 U |
| CHROMIUM | 12000 [5] | 12000 | N[5] | 23.9 K | NA | NA | NA | NA | 11.2 | 8.9 | 22.4 |
| COBALT | NC | 2.3 | N | **6** | NA | NA | NA | NA | **4.5** | **5.4** | **6.6** |
| COPPER | 310 | 310 | N | 7.3 K | NA | NA | NA | NA | 8.2 | 5.4 | 13.6 |
| LEAD | 400 | 400 | | 7.5 | NA | NA | NA | NA | 4 | 3.4 | 5.9 |
| MERCURY | 2.3 [6] | 2.3 | N[7] | 0.01 | NA | NA | NA | NA | 0.01 U | 0.02 | 0.01 U |
| MOLYBDENUM | NC | 39 | N | 0.6 B | NA | NA | NA | NA | 0.3 | 0.2 | 0.38 |
| NICKEL | 160 | 150 | N | 11.6 | NA | NA | NA | NA | 6 | 8.1 | 15 |
| SELENIUM | 39 | 39 | N | 0.35 UL | NA | NA | NA | NA | 0.35 U | 0.33 U | 0.62 U |
| SILVER | 39 | 39 | N | 0.1 U | NA | NA | NA | NA | 0.1 UL | 0.1 UL | 0.09 UL |
| VANADIUM | 7.8 | 39 | N[8] | **32.8 K** | NA | NA | NA | NA | **19.3** | **14.2** | **37.9** |
| ZINC | 2300 | 2300 | N | 38.8 K | NA | NA | NA | NA | 18.6 | 18.2 | 33.4 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 12000 | NA | NA | NA | NA | 3200 | 2800 U | 2900 U |
| TPH (C09-C36) | NC | NC | | 3300 J | NA | NA | NA | NA | 22000 | 34000 | 6100 U |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | 87 | NA | NA | NA | NA | 85 | 88 | 82 |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-286 | SB-293 | SB-294 | SB-462 | SB-463 | SB-464 | SB-465 | SB-466 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-286-0102 | SB-293-0102 | SB-294-0001 | SB-462-0102 | SB-463-0102 | SB-464-0102 | SB-465-0102 | SB-466-0102 |
| SAMPLE DATE | | | | 20051027 | 20051028 | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SS | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 6 U | 5 U | 6 UJ | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 8 J | 27 UR | 28 UR | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 75 L | 27 UR | 28 UR | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 3 J | 5 U | 6 UJ | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | 11 UJ | 11 U | 11 UJ | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 U | 5 U | 6 UJ | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 8 B | 16 B | 14 B | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 2 J | 5 U | 6 UJ | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | 6 U | 5 U | 6 UJ | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 11 UR | 11 UR | 11 UR | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 U | 5 U | 6 UJ | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | 6 U | 5 U | 6 UJ | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | 920 UJ | 890 U | 900 U | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 370 U | 360 U | 360 U | 26 | 69 | 1.4 U | 1.5 U | 11 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 370 U | 360 U | 360 U | 26 | 69 | 1.4 U | 1.5 U | 11 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 370 U | 360 U | 360 U | 26 J | 69 J | 1.4 U | 1.5 U | 11 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[4] | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[4] | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 370 U | 360 U | 360 U | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 26 | 69 | 0 U | 0 U | 11 |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.35 UL | 0.34 U | 0.39 U | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 2.8 B | 1.7 | 2 | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | 38.4 | 20.9 | 20.1 | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 0.56 | 0.43 | 0.37 B | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 0.03 U | 0.36 U | 0.42 U | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [5] | 12000 | N[5] | 30.7 | 11.7 | 11.1 | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | 7.4 | 4.4 | 2.9 | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 4.5 | 5.8 | 4.7 | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 7.3 | 5 | 4.8 | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [6] | 2.3 | N[7] | 0.01 | 0.03 | 0.01 | 0.091 | 0.036 | 0.019 U | 0.04 | 0.02 U |
| MOLYBDENUM | NC | 39 | N | 0.54 | 0.34 | 0.55 K | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 5.1 | 9.3 | 7.5 | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 0.3 U | 0.29 UL | 0.34 U | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | 0.09 UL | 0.41 L | 0.42 UL | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[8] | 18.7 | 17.4 | 15.7 | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 16.3 | 20 | 15.9 | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 2800 U | 2600 U | 2700 U | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | 30000 | 12000 | 14000 | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | 89.1 | 86.3 | 89.9 | 88.4 | 85 |
| TOTAL SOLIDS | NC | NC | | 89 | 92 | 91 | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-467 | SB-468 | SB-469 | SB-470 | SB-471 | SB-472 | SB-473 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-467-0102 | SB-468-0102 | SB-469-0102 | SB-470-0102 | SB-471-0102 | SB-472-0102 | SB-473-0102 | SB-474-0102 |
| SAMPLE DATE | | | | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071024 | 20071024 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 15 | 52 | 1.6 U | 1.5 U | 1.5 U | 24 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 15 | 52 | 1.6 U | 1.5 U | 1.5 U | 24 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 15 J | 52 J | 1.6 U | 1.5 U | 1.5 U | 24 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 15 | 52 | 0 U | 0 U | 0 U | 24 |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [5] | 12000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [6] | 2.3 | N[7] | 0.019 U | 0.019 U | 0.019 U | 0.48 | 0.021 UL | 0.019 UL | 0.019 UL | 0.02 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 89.5 | 88.8 | 89.1 | 88.9 | 80.5 | 86.3 | 89.3 | 85.1 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-475 | SB-476 | SB-477 | SB-478 | SB-479 | SB-480 | SB-481 | SB-482 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-475-0102 | SB-476-0102 | SB-477-0102 | SB-478-0102 | SB-479-0102 | SB-480-0102 | SB-481-0102 | SB-482-0102 |
| SAMPLE DATE | | | | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071029 | 20071029 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 15 | 1.5 U | 31 | 13 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.4 U | 15 | 1.5 U | 31 | 13 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.4 UJ | 15 J | 1.5 U | 31 J | 13 J |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 15 | 0 U | 31 | 13 |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [5] | 12000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [6] | 2.3 | N[7] | 0.019 U | 0.019 U | 0.019 U | 0.018 U | 0.019 U | 0.019 U | 0.036 | 0.063 |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 88.4 | 87.7 | 88.6 | 90.3 | 88 | 88.9 | 85 | 78.1 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-26**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-483 | SB-484 | SB-485 | SB-486 | SB-487 | SB-488 | SB-600 | SB-600 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-483-0102 | SB-484-0102 | SB-485-0102 | SB-486-0102 | SB-487-0102 | SB-488-0102 | H-SB-600-1 | H-SB-600-2 |
| SAMPLE DATE | | | | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20090924 | 20090924 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 |
| BOTTOM DEPTH | | | | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 2 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 32 | 21 | 10 | 370 U | 370 U | 9 | NA | NA |
| BAP EQUIVALENT-POS | 22 | 15 | C | 32 | 21 | 10 | 370 U | 370 U | 9 | NA | NA |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 32 J | 21 J | 10 J | 370 U | 370 U | 9 J | NA | NA |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 32 | 21 | 10 | 0 U | 0 U | 9 | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [5] | 12000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [6] | 2.3 | N[7] | 0.054 | 0.028 | 0.019 U | 0.019 U | 0.019 U | 0.019 U | 0.034 | 0.019 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 86.2 | 82.9 | 88 | 89.4 | 89.6 | 88.9 | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-601 | SB-601 | SB-602 | SB-602 | SB-603 | SB-603 | SB-604A | SB-604B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-601-1 | H-SB-601-2 | H-SB-602-1 | H-SB-602-2 | H-SB-603-1 | H-SB-603-2 | H-SB-604A-1 | H-SB-604B-1 |
| SAMPLE DATE | | | | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20091109 | 20091110 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | | | | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | NA | NA | NA | NA | NA | **17** | **163** |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | NA | NA | NA | NA | NA | **16** | **163** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | 1.1 U | 120 |
| BENZO(A)PYRENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | **16** | **110** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | 1.3 U | 90 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | 1.9 U | 48 |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | 1 U | 120 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | 1.4 U | **26** |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | 1.7 U | 57 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | NA | NA | NA | NA | NA | NA | 16 | 571 |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [5] | 12000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [6] | 2.3 | N[7] | 0.039 | 0.023 | 0.034 | 0.029 | 0.31 | 0.025 | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-26**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-604D | SB-610B | SB-610C | SB-610D | SB-611A | SB-611D | SB-814 | SB-815 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-604D-1 | H-SB-610B-1 | H-SB-610C-1 | H-SB-610D-1 | H-SB-611A-1 | H-SB-611D-1 | H-SB-814-SS | H-SB-815-SS |
| SAMPLE DATE | | | | 20091110 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20100826 | 20100826 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SS | SS |
| TOP DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | 3.9 U | 3.8 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | 3.9 U | 3.8 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | 3.9 U | 3.8 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | 3.9 U | 3.8 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **45883** | 15 | **31** | **25** | **53** | **616** | 3.9 U | 3.8 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **45883** | 14 | **30** | **24** | **53** | **616** | 3.9 U | 3.8 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | **38000** | 1 U | 19 | 11 | 45 | **320** | 3.9 U | 3.8 U |
| BENZO(A)PYRENE | 22 | 15 | C | **33000** | 14 | **25** | **20** | **41** | **440** | 3.9 U | 3.8 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | **31000** | 1.3 U | 14 | 11 | 40 | **390** | 3.9 U | 3.8 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[4] | NA | NA | NA | NA | NA | NA | 3.9 U | 3.8 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | **15000** | 1.9 U | 12 | 8.6 | 17 | 200 | 3.9 U | 3.8 U |
| CHRYSENE | 22000 | 15000 | C | **33000** | 0.99 U | 20 | 9.7 | 46 | 360 | 1.3 UJ | 1.3 UJ |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | **4500** | 1.4 U | 1.4 U | 1.4 U | 1.4 U | **81** | 3.9 U | 3.8 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | 3.9 U | 3.8 U |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | 3.9 U | 3.8 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | **13000** | 1.6 U | 19 | 17 | 28 | **220** | 3.9 U | 3.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | 3.9 U | 3.8 U |
| PHENANTHRENE | 2300000 | 170000 | N[4] | NA | NA | NA | NA | NA | NA | 3.9 U | 3.8 U |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | 3.9 U | 8.5 |
| TOTAL PAHS | NC | NC | | 167500 | 14 | 109 | 77.3 | 217 | 2011 | 0 U | 8.5 |
| **METALS (MG/KG)** | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [5] | 12000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [6] | 2.3 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION<br>SAMPLE ID<br>SAMPLE DATE<br>SAMPLE CODE<br>MATRIX<br>SAMPLE TYPE<br>SUBMATRIX<br>TOP DEPTH<br>BOTTOM DEPTH | **MDE Cleanup Standards** [1][3] | **USEPA Regional Screening Levels (RSLs)** [2][3] | | **SB-816<br>H-SB-816-SS<br>20100827<br>ORIG<br>SO<br>NORMAL<br>SS<br>1<br>1** | **SB-816<br>H-SB-816-SS-AVG<br>20100827<br>AVG<br>SO<br>NORMAL<br>SS<br>1<br>1** | **SB-816<br>H-SB-816-SS-D<br>20100827<br>DUP<br>SO<br>NORMAL<br>SS<br>1<br>1** | **SB-817<br>H-SB-817-SS<br>20100827<br>NORMAL<br>SO<br>NORMAL<br>SS<br>1<br>1** |
|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA |
| CHLOROMETHANE | NC | 12000 | N | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA |
| N-BUTYLBENZENE | NC | NC | | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 10 | 10 | NA | 3.7 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 11 | 11 | NA | 3.7 U |
| ACENAPHTHENE | 470000 | 340000 | N | 43 J | 43 J | NA | 3.7 UJ |
| ANTHRACENE | 2300000 | 1700000 | N | 31 J | 31 J | NA | 3.7 UJ |
| BAP EQUIVALENT-HALFND | 22 | 15 | | **58** | **58** | NA | 3.7 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | **56** | **56** | NA | 3.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 29 | 29 | NA | 3.7 U |
| BENZO(A)PYRENE | 22 | 15 | C | **45 J** | **45 J** | NA | 3.7 UJ |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 42 J | 42 J | NA | 3.7 UJ |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[4] | 38 J | 38 J | NA | 3.7 UJ |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.8 UJ | 3.8 UJ | NA | 3.7 UJ |
| CHRYSENE | 22000 | 15000 | C | 31 | 31 | NA | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.8 UJ | 3.8 UJ | NA | 3.7 UJ |
| FLUORANTHENE | 310000 | 230000 | N | 55 J | 55 J | NA | 3.7 UJ |
| FLUORENE | 310000 | 230000 | N | 31 J | 31 J | NA | 3.7 UJ |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 35 J | 35 J | NA | 3.7 UJ |
| NAPHTHALENE | 160000 | 3600 | C | 42 | 42 | NA | 3.7 U |
| PHENANTHRENE | 2300000 | 170000 | N[4] | 42 J | 42 J | NA | 3.7 UJ |
| PYRENE | 230000 | 170000 | N | 65 | 65 | NA | 9.2 |
| TOTAL PAHS | NC | NC | | 540 | 540 | NA | 9.2 |
| **METALS (MG/KG)** | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA |
| CHROMIUM | 12000 [5] | 12000 | N[5] | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA |
| MERCURY | 2.3 [6] | 2.3 | N[7] | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[8] | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | |
| MERCURY (METHYL) | 780 | 780 | N | NA | NA | NA | NA |

**Table A-26**
**Detected Concentrations Table for Surface Soil, 0 - 2 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
5 - The value is for trivalent chromium.
6 - The value is for mercury (inorganic/mercuric dichloride).
7 - The value is for mercuric chloride.
8 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-10 | H-SB-282RE-3 | H-SB-282RE-4 | H-SB-282RE-5 | H-SB-282RE-6 | H-SB-282RE-7 | H-SB-282RE-7-AVG | H-SB-282RE-7-D | H-SB-282RE-8 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-10 | H-SB-282RE-3 | H-SB-282RE-4 | H-SB-282RE-5 | H-SB-282RE-6 | H-SB-282RE-7 | H-SB-282RE-7-AVG | H-SB-282RE-7-D | H-SB-282RE-8 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-10 | H-SB-282RE-3 | H-SB-282RE-4 | H-SB-282RE-5 | H-SB-282RE-6 | H-SB-282RE-7 | H-SB-282RE-7-AVG | H-SB-282RE-7-D | H-SB-282RE-8 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1080 | 149 | 182 | 1063 | 539 | 180 | 105 | 30 | 71 |
| BAP EQUIVALENT-POS | 1080 | 149 | 182 | 1063 | 539 | 180 | 105 | 30 | 71 |
| BENZO(A)ANTHRACENE | 810 | 110 | 140 | 910 | 470 | 160 J | 95.5 | 31 J | 58 |
| BENZO(A)PYRENE | 700 | 88 | 110 | 670 | 330 | 100 J | 60.5 | 21 J | 38 |
| BENZO(B)FLUORANTHENE | 920 | 110 | 120 | 840 | 470 | 160 J | 94 | 28 J | 62 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 300 | 41 | 68 | 270 | 150 | 60 J | 35.5 | 11 J | 12 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 960 | 110 | 160 | 1000 | 520 | 170 J | 102.5 | 35 J | 70 |
| DIBENZO(A,H)ANTHRACENE | 160 | 32 | 37 | 170 | 91 | 39 J | 19.875 | 1.5 UJ | 18 |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 430 | 64 | 82 | 440 | 220 | 84 J | 54.5 | 25 J | 31 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 4280 | 555 | 717 | 4300 | 2251 | 773 | 462 | 151 | 289 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-10 | H-SB-282RE-3 | H-SB-282RE-4 | H-SB-282RE-5 | H-SB-282RE-6 | H-SB-282RE-7 | H-SB-282RE-7-AVG | H-SB-282RE-7-D | H-SB-282RE-8 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-10 | H-SB-282RE-3 | H-SB-282RE-4 | H-SB-282RE-5 | H-SB-282RE-6 | H-SB-282RE-7 | H-SB-282RE-7-AVG | H-SB-282RE-7-D | H-SB-282RE-8 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-9 | H-SB-282REA-3 | H-SB-282REA-5 | H-SB-282REA-7 | H-SB-282REA-9 | H-SB-282REA-9-AVG | H-SB-282REA-9-D | H-SB-282REB-3 | H-SB-282REB-5 |
| SAMPLE DATE | 20090929 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-9 | H-SB-282REA-3 | H-SB-282REA-5 | H-SB-282REA-7 | H-SB-282REA-9 | H-SB-282REA-9-AVG | H-SB-282REA-9-D | H-SB-282REB-3 | H-SB-282REB-5 |
| SAMPLE DATE | 20090929 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-9 | H-SB-282REA-3 | H-SB-282REA-5 | H-SB-282REA-7 | H-SB-282REA-9 | H-SB-282REA-9-AVG | H-SB-282REA-9-D | H-SB-282REB-3 | H-SB-282REB-5 |
| SAMPLE DATE | 20090929 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 3534 | 1.5 U | 24 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 3.5 | 1.6 U |
| BAP EQUIVALENT-POS | 3534 | 1.5 U | 24 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.9 | 1.6 U |
| BENZO(A)ANTHRACENE | 3300 | 1.1 U | 15 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 11 | 1.2 U |
| BENZO(A)PYRENE | 2300 | 1.5 U | 18 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 3200 | 1.4 U | 18 | 1.4 U | 1.4 U | 1.35 U | 1.3 U | 7.9 | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 980 | 2 U | 2 U | 2 U | 1.9 U | 1.9 U | 1.9 U | 2 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 3900 | 1 U | 13 | 1.1 U | 1 U | 1 U | 1 U | 10 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 430 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1400 | 1.7 U | 24 | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 15510 | 0 U | 88 | 0 U | 0 U | 0 U | 0 U | 28.9 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-9 | H-SB-282REA-3 | H-SB-282REA-5 | H-SB-282REA-7 | H-SB-282REA-9 | H-SB-282REA-9-AVG | H-SB-282REA-9-D | H-SB-282REB-3 | H-SB-282REB-5 |
| SAMPLE DATE | 20090929 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-9 | H-SB-282REA-3 | H-SB-282REA-5 | H-SB-282REA-7 | H-SB-282REA-9 | H-SB-282REA-9-AVG | H-SB-282REA-9-D | H-SB-282REB-3 | H-SB-282REB-5 |
| SAMPLE DATE | 20090929 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282B | SB-282B | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REB-7 | H-SB-282REB-9 | H-SB-282REC-3 | H-SB-282REC-5 | H-SB-282REC-7 | H-SB-282REC-9 | H-SB-282REC-9-AVG | H-SB-282REC-9-D | H-SB-282RED-3 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282B | SB-282B | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REB-7 | H-SB-282REB-9 | H-SB-282REC-3 | H-SB-282REC-5 | H-SB-282REC-7 | H-SB-282REC-9 | H-SB-282REC-9-AVG | H-SB-282REC-9-D | H-SB-282RED-3 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282B | SB-282B | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REB-7 | H-SB-282REB-9 | H-SB-282REC-3 | H-SB-282REC-5 | H-SB-282REC-7 | H-SB-282REC-9 | H-SB-282REC-9-AVG | H-SB-282REC-9-D | H-SB-282RED-3 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1658 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1657 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 2000 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1200 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1700 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 740 | 2 U | 1.9 U | 2 U | 1.9 U | 1.95 U | 2 U | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 2300 | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 3.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 770 | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 8710 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282B | SB-282B | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REB-7 | H-SB-282REB-9 | H-SB-282REC-3 | H-SB-282REC-5 | H-SB-282REC-7 | H-SB-282REC-9 | H-SB-282REC-9-AVG | H-SB-282REC-9-D | H-SB-282RED-3 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282B | SB-282B | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REB-7 | H-SB-282REB-9 | H-SB-282REC-3 | H-SB-282REC-5 | H-SB-282REC-7 | H-SB-282REC-9 | H-SB-282REC-9-AVG | H-SB-282REC-9-D | H-SB-282RED-3 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282D | SB-282D | SB-282D | SB-283 | SB-283 | SB-284 | SB-284 | SB-474 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RED-5 | H-SB-282RED-7 | H-SB-282RED-9 | H-SB-283RE-3 | H-SB-283RE-4 | H-SB-284RE-3 | H-SB-284RE-4 | H-SB-474RE-5 | H-SB-474RE-6 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20090924 | 20090924 | 20090925 | 20090925 | 20090928 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 4 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 4 | 3 | 4 | 5 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282D | SB-282D | SB-282D | SB-283 | SB-283 | SB-284 | SB-284 | SB-474 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RED-5 | H-SB-282RED-7 | H-SB-282RED-9 | H-SB-283RE-3 | H-SB-283RE-4 | H-SB-284RE-3 | H-SB-284RE-4 | H-SB-474RE-5 | H-SB-474RE-6 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20090924 | 20090924 | 20090925 | 20090925 | 20090928 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 4 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 4 | 3 | 4 | 5 | 6 |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282D | SB-282D | SB-282D | SB-283 | SB-283 | SB-284 | SB-284 | SB-474 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RED-5 | H-SB-282RED-7 | H-SB-282RED-9 | H-SB-283RE-3 | H-SB-283RE-4 | H-SB-284RE-3 | H-SB-284RE-4 | H-SB-474RE-5 | H-SB-474RE-6 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20090924 | 20090924 | 20090925 | 20090925 | 20090928 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 4 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 4 | 3 | 4 | 5 | 6 |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.6 U | 307 | 1.5 U | 1.5 U | 1.6 U | 13 | 16 | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.6 U | 307 | 1.5 U | 1.5 U | 1.6 U | 12 | 15 | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 1.2 U | 220 | 1.1 U | 1.1 U | 1.2 U | 12 | 13 | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 1.6 U | 210 | 1.5 U | 1.5 U | 1.6 U | 10 | 11 | 1.5 U |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.5 U | 210 | 1.4 U | 1.4 U | 1.5 U | 11 | 8.6 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 2.1 U | 90 | 1.9 U | 2 U | 2.1 U | 2.1 U | 7.8 | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1.1 U | 230 | 1 U | 1.1 U | 1.1 U | 12 | 11 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 42 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.9 U | 110 | 1.7 U | 1.8 U | 1.9 U | 1.8 U | 18 | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 1112 | 0 U | 0 U | 0 U | 45 | 69.4 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282D | SB-282D | SB-282D | SB-283 | SB-283 | SB-284 | SB-284 | SB-474 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RED-5 | H-SB-282RED-7 | H-SB-282RED-9 | H-SB-283RE-3 | H-SB-283RE-4 | H-SB-284RE-3 | H-SB-284RE-4 | H-SB-474RE-5 | H-SB-474RE-6 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20090924 | 20090924 | 20090925 | 20090925 | 20090928 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 4 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 4 | 3 | 4 | 5 | 6 |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282D | SB-282D | SB-282D | SB-283 | SB-283 | SB-284 | SB-284 | SB-474 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RED-5 | H-SB-282RED-7 | H-SB-282RED-9 | H-SB-283RE-3 | H-SB-283RE-4 | H-SB-284RE-3 | H-SB-284RE-4 | H-SB-474RE-5 | H-SB-474RE-6 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20090924 | 20090924 | 20090925 | 20090925 | 20090928 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 4 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 4 | 3 | 4 | 5 | 6 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-604 | SB-604 | SB-604 | SB-604 | SB-604 | SB-604A | SB-604A | SB-604A | SB-604B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604-3 | H-SB-604-4 | H-SB-604-5 | H-SB-604-6 | H-SB-604-7 | H-SB-604A-3 | H-SB-604A-5 | H-SB-604A-7 | H-SB-604B-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20091109 | 20091109 | 20091109 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 7 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-604 | SB-604 | SB-604 | SB-604 | SB-604 | SB-604A | SB-604A | SB-604A | SB-604B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604-3 | H-SB-604-4 | H-SB-604-5 | H-SB-604-6 | H-SB-604-7 | H-SB-604A-3 | H-SB-604A-5 | H-SB-604A-7 | H-SB-604B-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20091109 | 20091109 | 20091109 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 7 | 3 |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-604 | SB-604 | SB-604 | SB-604 | SB-604 | SB-604A | SB-604A | SB-604A | SB-604B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604-3 | H-SB-604-4 | H-SB-604-5 | H-SB-604-6 | H-SB-604-7 | H-SB-604A-3 | H-SB-604A-5 | H-SB-604A-7 | H-SB-604B-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20091109 | 20091109 | 20091109 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 7 | 3 |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 195 | 1.6 U | 364 | 125 | 1.5 U | 1.6 U | 34 | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 195 | 1.6 U | 364 | 124 | 1.5 U | 1.6 U | 34 | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 130 | 1.2 U | 270 | 110 | 1.1 U | 1.2 U | 19 | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 130 | 1.6 U | 260 | 98 | 1.5 U | 1.6 U | 28 | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 110 | 1.5 U | 260 | 100 | 1.4 U | 1.5 U | 16 | 1.4 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 64 | 2.1 U | 91 | 36 | 2 U | 2.1 U | 11 | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 150 | 1.1 U | 270 | 110 | 1.1 U | 1.1 U | 21 | 1.1 U | 1 U |
| DIBENZO(A,H)ANTHRACENE | 33 | 1.6 U | 37 | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 68 | 1.8 U | 130 | 49 | 1.8 U | 1.9 U | 19 | 1.8 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 685 | 0 U | 1318 | 503 | 0 U | 0 U | 114 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-604 | SB-604 | SB-604 | SB-604 | SB-604 | SB-604A | SB-604A | SB-604A | SB-604B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604-3 | H-SB-604-4 | H-SB-604-5 | H-SB-604-6 | H-SB-604-7 | H-SB-604A-3 | H-SB-604A-5 | H-SB-604A-7 | H-SB-604B-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20091109 | 20091109 | 20091109 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 7 | 3 |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-604 | SB-604 | SB-604 | SB-604 | SB-604 | SB-604A | SB-604A | SB-604A | SB-604B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604-3 | H-SB-604-4 | H-SB-604-5 | H-SB-604-6 | H-SB-604-7 | H-SB-604A-3 | H-SB-604A-5 | H-SB-604A-7 | H-SB-604B-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20091109 | 20091109 | 20091109 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 7 | 3 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-604B | SB-604B | SB-604D | SB-604D | SB-604D | SB-604D | SB-604D | SB-605 | SB-605 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604B-5 | H-SB-604B-7 | H-SB-604D-3 | H-SB-604D-3-AVG | H-SB-604D-3-D | H-SB-604D-5 | H-SB-604D-7 | H-SB-605-3 | H-SB-605-4 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 3 | 3 | 5 | 7 | 3 | 4 |
| BOTTOM DEPTH | 5 | 7 | 3 | 3 | 3 | 5 | 7 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-604B | SB-604B | SB-604D | SB-604D | SB-604D | SB-604D | SB-604D | SB-605 | SB-605 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604B-5 | H-SB-604B-7 | H-SB-604D-3 | H-SB-604D-3-AVG | H-SB-604D-3-D | H-SB-604D-5 | H-SB-604D-7 | H-SB-605-3 | H-SB-605-4 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 3 | 3 | 5 | 7 | 3 | 4 |
| BOTTOM DEPTH | 5 | 7 | 3 | 3 | 3 | 5 | 7 | 3 | 4 |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-604B | SB-604B | SB-604D | SB-604D | SB-604D | SB-604D | SB-604D | SB-605 | SB-605 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604B-5 | H-SB-604B-7 | H-SB-604D-3 | H-SB-604D-3-AVG | H-SB-604D-3-D | H-SB-604D-5 | H-SB-604D-7 | H-SB-605-3 | H-SB-605-4 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 3 | 3 | 5 | 7 | 3 | 4 |
| BOTTOM DEPTH | 5 | 7 | 3 | 3 | 3 | 5 | 7 | 3 | 4 |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1728 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 23 | 1.5 U |
| BAP EQUIVALENT-POS | 1728 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 23 | 1.5 U |
| BENZO(A)ANTHRACENE | 1400 | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 1.2 U | 1.3 U | 21 | 1.1 U |
| BENZO(A)PYRENE | 1200 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 17 | 1.5 U |
| BENZO(B)FLUORANTHENE | 1200 | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 15 | 1.3 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 530 | 2 U | 2.1 U | 2.1 U | 2.1 U | 2.2 U | 2.3 U | 8.3 | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1300 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 1.2 U | 21 | 1 U |
| DIBENZO(A,H)ANTHRACENE | 210 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.7 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 510 | 1.8 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 2 U | 19 | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 6350 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 101.3 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-604B | SB-604B | SB-604D | SB-604D | SB-604D | SB-604D | SB-604D | SB-605 | SB-605 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604B-5 | H-SB-604B-7 | H-SB-604D-3 | H-SB-604D-3-AVG | H-SB-604D-3-D | H-SB-604D-5 | H-SB-604D-7 | H-SB-605-3 | H-SB-605-4 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 3 | 3 | 5 | 7 | 3 | 4 |
| BOTTOM DEPTH | 5 | 7 | 3 | 3 | 3 | 5 | 7 | 3 | 4 |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-604B | SB-604B | SB-604D | SB-604D | SB-604D | SB-604D | SB-604D | SB-605 | SB-605 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604B-5 | H-SB-604B-7 | H-SB-604D-3 | H-SB-604D-3-AVG | H-SB-604D-3-D | H-SB-604D-5 | H-SB-604D-7 | H-SB-605-3 | H-SB-605-4 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 3 | 3 | 5 | 7 | 3 | 4 |
| BOTTOM DEPTH | 5 | 7 | 3 | 3 | 3 | 5 | 7 | 3 | 4 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-606 | SB-606 | SB-607 | SB-607 | SB-608 | SB-608 | SB-608 | SB-608 | SB-609 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-606-3 | H-SB-606-4 | H-SB-607-3 | H-SB-607-4 | H-SB-608-3 | H-SB-608-4 | H-SB-608-4-AVG | H-SB-608-4-D | H-SB-609-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 |
| BOTTOM DEPTH | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-606 | SB-606 | SB-607 | SB-607 | SB-608 | SB-608 | SB-608 | SB-608 | SB-609 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-606-3 | H-SB-606-4 | H-SB-607-3 | H-SB-607-4 | H-SB-608-3 | H-SB-608-4 | H-SB-608-4-AVG | H-SB-608-4-D | H-SB-609-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 |
| BOTTOM DEPTH | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-606 | SB-606 | SB-607 | SB-607 | SB-608 | SB-608 | SB-608 | SB-608 | SB-609 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-606-3 | H-SB-606-4 | H-SB-607-3 | H-SB-607-4 | H-SB-608-3 | H-SB-608-4 | H-SB-608-4-AVG | H-SB-608-4-D | H-SB-609-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 |
| BOTTOM DEPTH | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2.6 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 2.7 | 1.8 | 1.7 U | 20 |
| BAP EQUIVALENT-POS | 0.9 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 0.9 | 0.9 | 1.7 U | 20 |
| BENZO(A)ANTHRACENE | 9 | 1.1 U | 1.2 U | 1.1 U | 1.2 U | 9 | 4.8 | 1.2 U | 19 |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.65 U | 1.7 U | 16 |
| BENZO(B)FLUORANTHENE | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 16 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 1.9 U | 2 U | 2.1 U | 2 U | 2.1 U | 2.1 U | 2.15 U | 2.2 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 20 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.65 U | 1.7 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.7 U | 1.7 U | 1.9 U | 1.8 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 9 | 0 U | 0 U | 0 U | 0 U | 9 | 4.5 | 0 U | 71 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-606 | SB-606 | SB-607 | SB-607 | SB-608 | SB-608 | SB-608 | SB-608 | SB-609 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-606-3 | H-SB-606-4 | H-SB-607-3 | H-SB-607-4 | H-SB-608-3 | H-SB-608-4 | H-SB-608-4-AVG | H-SB-608-4-D | H-SB-609-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 |
| BOTTOM DEPTH | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-606 | SB-606 | SB-607 | SB-607 | SB-608 | SB-608 | SB-608 | SB-608 | SB-609 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-606-3 | H-SB-606-4 | H-SB-607-3 | H-SB-607-4 | H-SB-608-3 | H-SB-608-4 | H-SB-608-4-AVG | H-SB-608-4-D | H-SB-609-3 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 |
| BOTTOM DEPTH | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 3 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-609 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610B | SB-610B | SB-610B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-609-4 | H-SB-610-3 | H-SB-610-4 | H-SB-610-5 | H-SB-610-6 | H-SB-610-7 | H-SB-610B-3 | H-SB-610B-5 | H-SB-610B-5-AVG |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20091109 | 20091109 | 20091109 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 5 |
| BOTTOM DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-609 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610B | SB-610B | SB-610B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-609-4 | H-SB-610-3 | H-SB-610-4 | H-SB-610-5 | H-SB-610-6 | H-SB-610-7 | H-SB-610B-3 | H-SB-610B-5 | H-SB-610B-5-AVG |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20091109 | 20091109 | 20091109 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 5 |
| BOTTOM DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 5 |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-609 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610B | SB-610B | SB-610B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-609-4 | H-SB-610-3 | H-SB-610-4 | H-SB-610-5 | H-SB-610-6 | H-SB-610-7 | H-SB-610B-3 | H-SB-610B-5 | H-SB-610B-5-AVG |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20091109 | 20091109 | 20091109 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 5 |
| BOTTOM DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 5 |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 47 | 477 | 62 | 20 | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.55 U |
| BAP EQUIVALENT-POS | 46 | 477 | 61 | 19 | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.55 U |
| BENZO(A)ANTHRACENE | 44 | 410 | 54 | 22 J | 1.1 UJ | 1.1 UJ | 1.2 U | 1.1 U | 1.15 U |
| BENZO(A)PYRENE | 36 | 320 | 47 | 15 J | 1.6 UJ | 1.5 UJ | 1.6 U | 1.5 U | 1.55 U |
| BENZO(B)FLUORANTHENE | 37 | 320 | 50 | 15 J | 1.4 UJ | 1.4 UJ | 1.5 U | 1.4 U | 1.45 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 20 | 140 | 17 | 8.7 J | 2 UJ | 2 UJ | 2.1 U | 2 U | 2.05 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 46 | 400 | 59 | 23 J | 1.1 UJ | 1.1 UJ | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 66 | 1.6 U | 1.5 UJ | 1.6 UJ | 1.5 UJ | 1.6 U | 1.5 U | 1.55 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 16 | 160 | 37 | 1.8 UJ | 1.8 UJ | 1.8 UJ | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 199 | 1816 | 264 | 83.7 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-609 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610B | SB-610B | SB-610B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-609-4 | H-SB-610-3 | H-SB-610-4 | H-SB-610-5 | H-SB-610-6 | H-SB-610-7 | H-SB-610B-3 | H-SB-610B-5 | H-SB-610B-5-AVG |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20091109 | 20091109 | 20091109 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 5 |
| BOTTOM DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 5 |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-609 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610B | SB-610B | SB-610B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-609-4 | H-SB-610-3 | H-SB-610-4 | H-SB-610-5 | H-SB-610-6 | H-SB-610-7 | H-SB-610B-3 | H-SB-610B-5 | H-SB-610B-5-AVG |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20091109 | 20091109 | 20091109 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 5 |
| BOTTOM DEPTH | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 5 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | 36 J | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-610B | SB-610C | SB-610C | SB-610D | SB-610D | SB-611 | SB-611 | SB-611 | SB-611 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-610B-5-D | H-SB-610C-3 | H-SB-610C-5 | H-SB-610D-3 | H-SB-610D-5 | H-SB-611-3 | H-SB-611-4 | H-SB-611-5 | H-SB-611-6 |
| SAMPLE DATE | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-610B | SB-610C | SB-610C | SB-610D | SB-610D | SB-611 | SB-611 | SB-611 | SB-611 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-610B-5-D | H-SB-610C-3 | H-SB-610C-5 | H-SB-610D-3 | H-SB-610D-5 | H-SB-611-3 | H-SB-611-4 | H-SB-611-5 | H-SB-611-6 |
| SAMPLE DATE | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 | 6 |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-610B | SB-610C | SB-610C | SB-610D | SB-610D | SB-611 | SB-611 | SB-611 | SB-611 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-610B-5-D | H-SB-610C-3 | H-SB-610C-5 | H-SB-610D-3 | H-SB-610D-5 | H-SB-611-3 | H-SB-611-4 | H-SB-611-5 | H-SB-611-6 |
| SAMPLE DATE | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 | 6 |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 736 | 1.6 U | 10 | 1.6 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 736 | 1.6 U | 9.3 | 1.6 U |
| BENZO(A)ANTHRACENE | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 1.1 U | 570 | 1.2 U | 11 | 1.2 U |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 520 | 1.6 U | 8.2 | 1.6 U |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.5 U | 1.4 U | 1.5 U | 1.4 U | 520 | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2.1 U | 2 U | 2.1 U | 2 U | 190 | 2.1 U | 2.1 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 600 | 1.1 U | 11 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 80 | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.9 U | 1.8 U | 1.8 U | 1.8 U | 240 | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 2720 | 0 U | 30.2 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-610B | SB-610C | SB-610C | SB-610D | SB-610D | SB-611 | SB-611 | SB-611 | SB-611 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-610B-5-D | H-SB-610C-3 | H-SB-610C-5 | H-SB-610D-3 | H-SB-610D-5 | H-SB-611-3 | H-SB-611-4 | H-SB-611-5 | H-SB-611-6 |
| SAMPLE DATE | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 | 6 |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-610B | SB-610C | SB-610C | SB-610D | SB-610D | SB-611 | SB-611 | SB-611 | SB-611 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-610B-5-D | H-SB-610C-3 | H-SB-610C-5 | H-SB-610D-3 | H-SB-610D-5 | H-SB-611-3 | H-SB-611-4 | H-SB-611-5 | H-SB-611-6 |
| SAMPLE DATE | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 | 6 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-611 | SB-611A | SB-611A | SB-611D | SB-611D | SB-611D | SB-611D | SB-614 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-611-7 | H-SB-611A-3 | H-SB-611A-5 | H-SB-611D-3 | H-SB-611D-5 | H-SB-611D-5-AVG | H-SB-611D-5-D | H-SB-614-10 |
| SAMPLE DATE | 20090925 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| BOTTOM DEPTH | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-611 | SB-611A | SB-611A | SB-611D | SB-611D | SB-611D | SB-611D | SB-614 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-611-7 | H-SB-611A-3 | H-SB-611A-5 | H-SB-611D-3 | H-SB-611D-5 | H-SB-611D-5-AVG | H-SB-611D-5-D | H-SB-614-10 |
| SAMPLE DATE | 20090925 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| BOTTOM DEPTH | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-611 | SB-611A | SB-611A | SB-611D | SB-611D | SB-611D | SB-611D | SB-614 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-611-7 | H-SB-611A-3 | H-SB-611A-5 | H-SB-611D-3 | H-SB-611D-5 | H-SB-611D-5-AVG | H-SB-611D-5-D | H-SB-614-10 |
| SAMPLE DATE | 20090925 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| BOTTOM DEPTH | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 30 | 323 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 5337 |
| BAP EQUIVALENT-POS | 1.5 U | 29 | 323 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 5330 |
| BENZO(A)ANTHRACENE | 1.1 U | 17 | 310 | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 3900 |
| BENZO(A)PYRENE | 1.5 U | 24 | 210 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 4300 |
| BENZO(B)FLUORANTHENE | 1.4 U | 14 | 270 | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 4100 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 11 | 90 | 2 U | 2.1 U | 2.1 U | 2.1 U | 1600 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 18 | 330 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 3600 |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.6 U | 43 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 15 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 18 | 110 | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 2100 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 102 | 1363 | 0 U | 0 U | 0 U | 0 U | 19600 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-611 | SB-611A | SB-611A | SB-611D | SB-611D | SB-611D | SB-611D | SB-614 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-611-7 | H-SB-611A-3 | H-SB-611A-5 | H-SB-611D-3 | H-SB-611D-5 | H-SB-611D-5-AVG | H-SB-611D-5-D | H-SB-614-10 |
| SAMPLE DATE | 20090925 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| BOTTOM DEPTH | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-611 | SB-611A | SB-611A | SB-611D | SB-611D | SB-611D | SB-611D | SB-614 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-611-7 | H-SB-611A-3 | H-SB-611A-5 | H-SB-611D-3 | H-SB-611D-5 | H-SB-611D-5-AVG | H-SB-611D-5-D | H-SB-614-10 |
| SAMPLE DATE | 20090925 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| BOTTOM DEPTH | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MRC-MW08A | SB-200 | SB-200 | SB-201 | SB-201 | SB-202 | SB-202 | SB-203 | SB-203 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW08[0809] | SB-200-05 | SB-200-10 | SB-201-05 | SB-201-10 | SB-202-05 | SB-202-10 | SB-203-05 | SB-203-10 |
| SAMPLE DATE | 20050524 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,1,1-TRICHLOROETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,1,2,2-TETRACHLOROETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,1,2-TRICHLOROETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,1-DICHLOROETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,1-DICHLOROETHENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,1-DICHLOROPROPENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,2,3-TRICHLOROBENZENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,2,3-TRICHLOROPROPANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,2,4-TRIMETHYLBENZENE | NA | 1.1 B | 3.3 | 0.62 B | 1.7 B | 0.81 B | 0.55 B | 0.8 B | 1.3 B |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | 4.4 U | 4.1 U | 4 U | 4.2 U | 4.2 U | 4 U | 4.7 U | 4 U |
| 1,2-DIBROMOETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,2-DICHLOROBENZENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,2-DICHLOROETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,2-DICHLOROPROPANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,3,5-TRIMETHYLBENZENE | NA | 2.18 U | 0.94 J | 1.98 U | 2.1 U | 2.09 U | 2.02 U | 2.35 U | 1.98 U |
| 1,3-DICHLOROBENZENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,3-DICHLOROPROPANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,3-DICHLOROPROPENE | NA | 4.36 U | 4.07 U | 3.96 U | 4.19 U | 4.18 U | 4.04 U | 4.7 U | 3.96 U |
| 1,4-DICHLOROBENZENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 1,4-DIOXANE | NA | 109 U | 102 U | 99.1 U | 105 U | 104 U | 101 U | 118 U | 99 U |
| 2,2-DICHLOROPROPANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 2-BUTANONE | NA | 8.72 U | 2.14 J | 7.39 J | 5.33 J | 4.17 J | 8.08 U | 9.41 U | 7.92 U |
| 2-CHLOROETHYL VINYL ETHER | NA | 2.2 UR | 2 UR | 2 UR | 2.1 UR | 2.1 UR | 2 UR | 2.4 UR | 2 UR |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | 8.72 U | 8.14 U | 7.92 U | 8.38 U | 8.35 U | 8.08 U | 9.41 U | 7.92 U |
| 4-CHLOROTOLUENE | NA | 2.18 U | 2.04 U | 1.98 U | 2.1 U | 2.09 U | 2.02 U | 2.35 U | 1.98 U |
| 4-ISOPROPYLTOLUENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| 4-METHYL-2-PENTANONE | NA | 8.7 U | 8.1 U | 7.9 U | 8.4 U | 8.4 U | 8.1 U | 9.4 U | 7.9 U |
| ACETONE | NA | 12.8 J | 12.7 J | 111 J | 63 J | 78 J | 4.4 J | 9.3 J | 30 J |
| BENZENE | NA | 2.18 U | 2.04 U | 1.98 U | 2.1 U | 2.09 U | 2.02 U | 2.35 U | 1.98 U |
| BROMOBENZENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| BROMOCHLOROMETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| BROMODICHLOROMETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| BROMOFORM | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| BROMOMETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| CARBON DISULFIDE | NA | 2.2 U | 0.68 J | 1.9 J | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| CARBON TETRACHLORIDE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| CHLOROBENZENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| CHLORODIBROMOMETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| CHLOROETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| CHLOROFORM | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| CHLOROMETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| CIS-1,2-DICHLOROETHENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| CIS-1,3-DICHLOROPROPENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| DIBROMOMETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| DICHLORODIFLUOROMETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| DIISOPROPYL ETHER | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| ETHYL TERT-BUTYL ETHER | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| ETHYLBENZENE | NA | 2.2 U | 1.2 J | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| FLUORODICHLOROMETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| HEXACHLOROBUTADIENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| ISOPROPYLBENZENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| M+P-XYLENES | NA | 4.4 U | 4.9 | 4 U | 4.2 U | 4.2 U | 4 U | 4.7 U | 4 U |
| METHYL TERT-BUTYL ETHER | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| METHYLENE CHLORIDE | NA | 4.4 U | 4.1 U | 4 U | 3.8 J | 4.2 U | 4 U | 4.7 U | 2.4 J |
| NAPHTHALENE | NA | 28.1 | 66.4 | 0.56 J | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| N-BUTYLBENZENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| N-PROPYLBENZENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| O-XYLENE | NA | 2.2 U | 1.2 J | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| SEC-BUTYLBENZENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| STYRENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| TERT-AMYL METHYL ETHER | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| TERT-BUTYLBENZENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| TERTIARY-BUTYL ALCOHOL | NA | 9 U | 5 J | 5 J | 6 J | 8 U | 8 U | 9 U | 6 J |
| TETRACHLOROETHENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| TOLUENE | NA | 2.2 U | 3.8 | 1.5 J | 7.6 | 6.4 | 5.7 | 5.4 | 5.3 |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | 6.5 U | 6.2 U | 5.9 U | 6.3 U | 6.3 U | 6.1 U | 7.1 U | 5.9 U |
| TRANS-1,2-DICHLOROETHENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| TRANS-1,3-DICHLOROPROPENE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| TRICHLOROETHENE | NA | 2.2 U | 1.1 J | 2 U | 2.7 | 2.7 | 2.5 | 2.5 | 2.4 |
| TRICHLOROFLUOROMETHANE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 0.74 J | 0.74 J | 2.4 U | 2 U |
| VINYL ACETATE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |

| LOCATION | MRC-MW08A | SB-200 | SB-200 | SB-201 | SB-201 | SB-202 | SB-202 | SB-203 | SB-203 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW08[0809] | SB-200-05 | SB-200-10 | SB-201-05 | SB-201-10 | SB-202-05 | SB-202-10 | SB-203-05 | SB-203-10 |
| SAMPLE DATE | 20050524 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| VINYL CHLORIDE | NA | 2.2 U | 2 U | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| 1,2-DICHLOROBENZENE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| 1,3-DICHLOROBENZENE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| 1,4-DICHLOROBENZENE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| 1,4-DIOXANE | NA | 390 U | 386 U | 387 U | 413 U | 391 U | 381 U | 390 U | 378 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | 118 U | 117 U | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U |
| 2,4,5-TRICHLOROPHENOL | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| 2,4,6-TRICHLOROPHENOL | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| 2,4-DICHLOROPHENOL | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| 2,4-DIMETHYLPHENOL | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| 2,4-DINITROPHENOL | NA | 590 U | 585 U | 586 U | 626 U | 593 U | 577 U | 591 U | 573 U |
| 2,4-DINITROTOLUENE | NA | 83 U | 82 U | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| 2,6-DINITROTOLUENE | NA | 83 U | 82 U | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| 2-CHLORONAPHTHALENE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| 2-CHLOROPHENOL | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| 2-METHYLPHENOL | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| 2-NITROANILINE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| 2-NITROPHENOL | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| 3&4-METHYLPHENOL | NA | 791 U | 785 U | 786 U | 839 U | 795 U | 773 U | 792 U | 768 U |
| 3,3'-DICHLOROBENZIDINE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| 3-NITROANILINE | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| 4,6-DINITRO-2-METHYLPHENOL | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| 4-BROMOPHENYL PHENYL ETHER | NA | 118 U | 117 U | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U |
| 4-CHLORO-3-METHYLPHENOL | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| 4-CHLOROANILINE | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| 4-CHLOROPHENYL PHENYL ETHER | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | 118 U | 117 U | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U |
| 4-NITROPHENOL | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | 791 U | 785 U | 786 U | 839 U | 795 UR | 773 U | 792 U | 768 U |
| BENZOIC ACID | NA | 791 U | 785 U | 48.7 J | 51 J | 795 U | 773 U | 43.1 J | 43 J |
| BENZYL ALCOHOL | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| BIS(2-CHLOROETHOXY)METHANE | NA | 118 U | 117 U | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U |
| BIS(2-CHLOROETHYL)ETHER | NA | 118 U | 117 U | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | 83 U | 82 U | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| BUTYL BENZYL PHTHALATE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| DIBENZOFURAN | NA | 118 U | 91 J | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U |
| DIETHYL PHTHALATE | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| DIMETHYL PHTHALATE | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| DI-N-BUTYL PHTHALATE | NA | 201 U | 199 U | 38 J | 213 U | 202 U | 196 U | 201 U | 195 U |
| DI-N-OCTYL PHTHALATE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| HEXACHLOROBENZENE | NA | 83 U | 82 U | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| HEXACHLOROBUTADIENE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| HEXACHLOROCYCLOPENTADIENE | NA | 401 U | 398 U | 399 U | 426 U | 403 UR | 392 U | 402 U | 390 U |
| HEXACHLOROETHANE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| ISOPHORONE | NA | 118 U | 117 U | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U |
| NITROBENZENE | NA | 201 U | 199 U | 199 U | 213 U | 202 U | 196 U | 201 U | 195 U |
| N-NITROSODIMETHYLAMINE | NA | 118 U | 117 U | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U |
| N-NITROSO-DI-N-PROPYLAMINE | NA | 118 U | 117 U | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U |
| N-NITROSODIPHENYLAMINE | NA | 118 U | 34 J | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U |
| PENTACHLOROPHENOL | NA | 991 U | 984 U | 985 U | 1050 U | 996 U | 969 U | 993 U | 963 U |
| PHENOL | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| PYRIDINE | NA | 401 U | 398 U | 399 U | 426 U | 403 U | 392 U | 402 U | 390 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | 41.7 J | 452 | 82.1 U | 87.7 U | 83 U | 80.8 U | 82.7 U | 80.3 U |
| 2-METHYLNAPHTHALENE | NA | 39 J | 412 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| ACENAPHTHENE | NA | 36 J | 381 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| ACENAPHTHYLENE | NA | 83 U | 82 U | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| ANTHRACENE | NA | 72 J | 595 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| BAP EQUIVALENT-HALFND | NA | 165 | 943 | 82 U | 100 | 83 U | 120 | 83 U | 80 U |
| BAP EQUIVALENT-POS | NA | 124 | 943 | 82 U | 2.3 | 83 U | 75 | 83 U | 80 U |
| BENZO(A)ANTHRACENE | NA | 111 | 752 | 82 U | 23 J | 83 U | 54 J | 83 U | 80 U |
| BENZO(A)PYRENE | NA | 100 | 671 | 82 U | 88 U | 83 U | 63 J | 83 U | 80 U |
| BENZO(B)FLUORANTHENE | NA | 61 J | 435 | 82 U | 88 U | 83 U | 61 J | 83 U | 80 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | 69 J | 337 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| BENZO(K)FLUORANTHENE | NA | 78 J | 536 | 82 U | 88 U | 83 U | 55 J | 83 U | 80 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MRC-MW08A | SB-200 | SB-200 | SB-201 | SB-201 | SB-202 | SB-202 | SB-203 | SB-203 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW08[0809] | SB-200-05 | SB-200-10 | SB-201-05 | SB-201-10 | SB-202-05 | SB-202-10 | SB-203-05 | SB-203-10 |
| SAMPLE DATE | 20050524 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | 118 | 819 | 82 U | 30 J | 83 U | 63 J | 83 U | 80 U |
| DIBENZO(A,H)ANTHRACENE | NA | 83 U | 116 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| FLUORANTHENE | NA | 253 | 1770 | 82 U | 42 J | 83 U | 86 | 83 U | 80 U |
| FLUORENE | NA | 52 J | 507 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| INDENO(1,2,3-CD)PYRENE | NA | 55 J | 311 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| NAPHTHALENE | NA | 83 U | 260 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U |
| PHENANTHRENE | NA | 329 | 2610 | 82 U | 88 U | 83 U | 48 J | 83 U | 80 U |
| PYRENE | NA | 269 | 1960 | 82 U | 34 J | 83 U | 128 | 83 U | 80 U |
| TOTAL PAHS | NA | 1642 | 12472 | 0 U | 129 | 0 U | 558 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | 39 U | 38 U | 38 U | 42 U | 39 U | 38 U | 39 U | 38 U |
| AROCLOR-1221 | NA | 39 U | 38 U | 38 U | 42 U | 39 U | 38 U | 39 U | 38 U |
| AROCLOR-1232 | NA | 39 U | 38 U | 38 U | 42 U | 39 U | 38 U | 39 U | 38 U |
| AROCLOR-1242 | NA | 39 U | 38 U | 38 U | 42 U | 39 U | 38 U | 39 U | 38 U |
| AROCLOR-1248 | NA | 39 U | 38 U | 38 U | 42 U | 39 U | 38 U | 39 U | 38 U |
| AROCLOR-1254 | NA | 39 U | 38 U | 38 U | 42 U | 39 U | 38 U | 39 U | 38 U |
| AROCLOR-1260 | NA | 39 U | 38 U | 38 U | 42 U | 39 U | 38 U | 39 U | 38 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | 0.3 U | 0.4 U | 0.9 | 0.2 U | 0.4 U | 0.3 U | 0.3 U | 0.8 |
| ARSENIC | NA | 5 | 4 | 3 | 1 | 4 | 2 | 3 | 4 |
| BARIUM | NA | 36 | 79 | 26 | 15 | 25 | 20 | 22 | 15 |
| BERYLLIUM | NA | 1.9 | 3.6 | 0.6 | 0.6 | 3.3 | 4.5 | 1.6 | 0.5 |
| CADMIUM | NA | 0.1 | 0.09 | 0.08 | 0.04 U | 0.2 | 0.2 | 0.08 | 0.09 |
| CHROMIUM | NA | 39.4 | 38.9 | 18 | 14.4 | 31.8 | 32.1 | 31.9 | 20.6 |
| COBALT | NA | 27.1 | 10.8 | 2.4 | 8.1 | 14.9 | 10.4 | 30.8 | 8.3 |
| COPPER | NA | 14 | 17 | 10 | 6 | 12 | 10 | 23 | 12 |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | 14 | 17 | 4 B | 5 | 17 | 11 | 13 | 5 |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | 0.02 L | 0.01 L | 0.24 L | 0.17 L | 0.002 UR | 0.002 UR | 0.02 L | 0.03 L |
| MOLYBDENUM | NA | 0.5 U | 0.6 U | 0.6 U | 0.5 B | 0.6 U | 0.5 U | 0.5 U | 0.5 U |
| NICKEL | NA | 22 | 27 | 5 | 10 | 35 | 33 | 44 | 19 |
| SELENIUM | NA | 2 U | 3 | 2 U | 3 | 2 U | 2 U | 2 U | 2 U |
| SILVER | NA | 0.2 B | 0.3 B | 0.06 U | 0.3 B | 0.06 U | 0.05 U | 0.3 B | 0.05 U |
| THALLIUM | NA | 0.9 U | 1 U | 1 U | 0.8 U | 1 U | 1 U | 1 U | 1 U |
| VANADIUM | NA | 45.9 | 52.9 | 33.9 | 25.7 | 52.2 | 39.7 | 49.2 | 39.2 |
| ZINC | NA | 44 | 62 | 25 | 30 | 51 | 68 | 55 | 26 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | MRC-MW08A | SB-200 | SB-200 | SB-201 | SB-201 | SB-202 | SB-202 | SB-203 | SB-203 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | MRC-MW08[0809] | SB-200-05 | SB-200-10 | SB-201-05 | SB-201-10 | SB-202-05 | SB-202-10 | SB-203-05 | SB-203-10 |
| SAMPLE DATE | 20050524 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 9 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| DIESEL RANGE ORGANICS | NA | 64400 | 173000 | 11100 | 30000 | 3800 B | 15900 | 13000 | 2400 B |
| GASOLINE RANGE ORGANICS | NA | 13100 U | 11800 U | 11200 U | 15200 U | 12300 U | 9550 U | 10500 U | 8550 U |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | 0.4 U | 0.4 U | NA | NA | 0.4 U | 0.3 U | 0.78 | NA |
| TOTAL ORGANIC CARBON | 1350 | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | 4.9 | 5 | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-282 | SB-282 | SB-283 | SB-283 | SB-284 | SB-284 | SB-285 | SB-285 | SB-286 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-282-0405 | SB-282-0910 | SB-283-0405 | SB-283-0910 | SB-284-0405 | SB-284-0910 | SB-285-0405 | SB-285-0910 | SB-286-0405 |
| SAMPLE DATE | 20051026 | 20051026 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,1,1-TRICHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,1-DICHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,1-DICHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,1-DICHLOROPROPENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,2,3-TRICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,2,3-TRICHLOROPROPANE | 6 U | 6 U | 6 UJ | 6 UJ | 7 UJ | 6 UJ | 6 UJ | 6 UJ | 7 UJ |
| 1,2,3-TRIMETHYLBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 0.8 J | 6 U | 7 U |
| 1,2,4-TRICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,2,4-TRIMETHYLBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,2-DIBROMOETHANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,2-DICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,2-DICHLOROETHANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,2-DICHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,3-DICHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 2-BUTANONE | 29 UR | 29 UR | 30 UR | 30 UR | 36 UR | 30 UR | 31 UR | 30 UR | 33 UR |
| 2-CHLOROETHYL VINYL ETHER | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 2-CHLOROTOLUENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 2-HEXANONE | 29 U | 29 U | 30 U | 30 U | 36 U | 30 U | 31 U | 30 U | 33 U |
| 4-CHLOROTOLUENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 4-ISOPROPYLTOLUENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| 4-METHYL-2-PENTANONE | 29 U | 29 U | 30 U | 30 U | 36 U | 30 U | 31 U | 30 U | 33 U |
| ACETONE | 15 B | 6 B | 14 J | 30 UR | 7 J | 30 UR | 13 J | 12 J | 70 J |
| BENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| BROMOBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| BROMOCHLOROMETHANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| BROMODICHLOROMETHANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| BROMOFORM | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| BROMOMETHANE | 12 U | 11 U | 12 U | 12 U | 14 U | 12 U | 12 U | 12 U | 13 U |
| CARBON DISULFIDE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| CARBON TETRACHLORIDE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| CHLOROBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| CHLORODIBROMOMETHANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| CHLOROETHANE | 12 U | 11 U | 12 U | 12 U | 14 U | 12 U | 12 U | 12 U | 13 U |
| CHLOROFORM | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| CHLOROMETHANE | 12 U | 11 U | 12 U | 12 U | 14 U | 12 UJ | 12 UJ | 12 UJ | 13 UJ |
| CIS-1,2-DICHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| CIS-1,3-DICHLOROPROPENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| DIBROMOMETHANE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| DICHLORODIFLUOROMETHANE | 12 U | 11 U | 12 U | 12 U | 14 U | 12 U | 12 U | 12 U | 13 U |
| DIISOPROPYL ETHER | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| ETHYL TERT-BUTYL ETHER | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| ETHYLBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| ISOPROPYLBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| M+P-XYLENES | 12 U | 11 U | 12 U | 12 U | 14 U | 12 U | 12 U | 12 U | 13 U |
| METHYL TERT-BUTYL ETHER | 12 U | 11 U | 12 U | 12 U | 14 U | 12 U | 12 U | 12 U | 13 U |
| METHYLENE CHLORIDE | 6 B | 9 B | 3 B | 6 U | 4 B | 4 B | 7 B | 6 B | 8 B |
| NAPHTHALENE | 6 U | 6 U | 6 U | 6 U | 3 J | 5 J | 130 | 34 | 12 |
| N-BUTYLBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| N-PROPYLBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| O-XYLENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| SEC-BUTYLBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| STYRENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| TERT-AMYL METHYL ETHER | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| TERT-BUTYLBENZENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| TERTIARY-BUTYL ALCOHOL | 12 UR | 11 UR | 12 UR | 12 UR | 14 UR | 12 UR | 12 UR | 12 UR | 13 UR |
| TETRACHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| TOLUENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| TOTAL 1,2-DICHLOROETHENE | 12 U | 11 U | 12 U | 12 U | 14 U | 12 U | 12 U | 12 U | 13 U |
| TOTAL XYLENES | 17 U | 17 U | 18 U | 18 U | 22 U | 18 U | 18 U | 18 U | 20 U |
| TRANS-1,2-DICHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| TRANS-1,3-DICHLOROPROPENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| TRICHLOROETHENE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |
| TRICHLOROFLUOROMETHANE | 12 U | 11 U | 12 U | 12 U | 14 U | 12 U | 12 U | 12 U | 13 U |
| VINYL ACETATE | 6 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U |

| LOCATION | SB-282 | SB-282 | SB-283 | SB-283 | SB-284 | SB-284 | SB-285 | SB-285 | SB-286 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-282-0405 | SB-282-0910 | SB-283-0405 | SB-283-0910 | SB-284-0405 | SB-284-0910 | SB-285-0405 | SB-285-0910 | SB-286-0405 |
| SAMPLE DATE | 20051026 | 20051026 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| VINYL CHLORIDE | 12 U | 11 U | 12 U | 12 U | 14 U | 12 U | 12 U | 12 U | 13 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 1,2-DICHLOROBENZENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 1,3-DICHLOROBENZENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 1,4-DICHLOROBENZENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 1,4-DIOXANE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 2,4,5-TRICHLOROPHENOL | 960 U | 940 U | 990 U | 970 U | 1200 U | 970 U | 1000 U | 980 U | 1100 U |
| 2,4,6-TRICHLOROPHENOL | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 2,4-DICHLOROPHENOL | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 2,4-DIMETHYLPHENOL | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 2,4-DINITROPHENOL | 960 U | 940 U | 990 U | 970 U | 1200 U | 970 U | 1000 U | 980 U | 1100 U |
| 2,4-DINITROTOLUENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 2,6-DINITROTOLUENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 2-CHLORONAPHTHALENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 2-CHLOROPHENOL | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 2-METHYLPHENOL | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 2-NITROANILINE | 960 U | 940 U | 990 U | 970 U | 1200 U | 970 U | 1000 U | 980 U | 1100 U |
| 2-NITROPHENOL | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 3&4-METHYLPHENOL | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 3,3'-DICHLOROBENZIDINE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 3-NITROANILINE | 960 U | 940 U | 990 U | 970 U | 1200 U | 970 U | 1000 U | 980 U | 1100 U |
| 4,6-DINITRO-2-METHYLPHENOL | 960 U | 940 U | 990 U | 970 U | 1200 U | 970 U | 1000 U | 980 U | 1100 U |
| 4-BROMOPHENYL PHENYL ETHER | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 4-CHLORO-3-METHYLPHENOL | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 4-CHLOROANILINE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 4-CHLOROPHENYL PHENYL ETHER | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 960 U | 940 U | 990 U | 970 U | 1200 U | 970 U | 1000 U | 980 U | 1100 U |
| 4-NITROPHENOL | 960 U | 940 U | 990 U | 970 U | 1200 U | 970 U | 1000 U | 980 U | 1100 U |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | 960 U | 940 U | 990 U | 970 U | 1200 U | 970 U | 1000 U | 980 U | 1100 U |
| BENZOIC ACID | 960 UJ | 940 UJ | 990 UJ | 970 UJ | 1200 UJ | 970 UJ | 1000 U | 980 U | 1100 U |
| BENZYL ALCOHOL | 380 UJ | 380 UJ | 400 UJ | 390 UJ | 470 UJ | 390 UJ | 410 UR | 390 UR | 440 U |
| BIS(2-CHLOROETHOXY)METHANE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| BIS(2-CHLOROETHYL)ETHER | 380 UJ | 380 UJ | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| BIS(2-ETHYLHEXYL)PHTHALATE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| BUTYL BENZYL PHTHALATE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| DIBENZOFURAN | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 110 J | 390 U | 440 U |
| DIETHYL PHTHALATE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| DIMETHYL PHTHALATE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| DI-N-BUTYL PHTHALATE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| DI-N-OCTYL PHTHALATE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| HEXACHLOROBENZENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| HEXACHLOROBUTADIENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| HEXACHLOROCYCLOPENTADIENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| HEXACHLOROETHANE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| ISOPHORONE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| NITROBENZENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| N-NITROSODIMETHYLAMINE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| N-NITROSO-DI-N-PROPYLAMINE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| N-NITROSODIPHENYLAMINE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| PENTACHLOROPHENOL | 960 U | 940 U | 990 U | 970 U | 1200 U | 970 U | 1000 U | 980 U | 1100 U |
| PHENOL | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| PYRIDINE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 380 U | 380 U | 400 U | 390 U | 340 J | 390 U | 700 | 340 J | 440 U |
| 2-METHYLNAPHTHALENE | 380 U | 380 U | 400 U | 390 U | 260 J | 390 U | 1100 | 410 | 440 U |
| ACENAPHTHENE | 380 U | 380 U | 400 U | 390 U | 140 J | 390 U | 430 | 240 J | 440 U |
| ACENAPHTHYLENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| ANTHRACENE | 380 U | 70 J | 400 U | 390 U | 120 J | 390 U | 580 | 310 J | 440 U |
| BAP EQUIVALENT-HALFND | 380 U | 397 | 400 U | 390 U | 470 U | 390 U | 1415 | 899 | 440 U |
| BAP EQUIVALENT-POS | 380 U | 188 | 400 U | 390 U | 470 U | 390 U | 1210 | 704 | 440 U |
| BENZO(A)ANTHRACENE | 380 U | 200 J | 400 U | 390 U | 470 U | 390 U | 900 | 520 | 440 U |
| BENZO(A)PYRENE | 380 U | 150 J | 400 U | 390 U | 470 U | 390 U | 960 | 560 | 440 U |
| BENZO(B)FLUORANTHENE | 380 U | 170 J | 400 U | 390 U | 470 U | 390 U | 960 | 570 | 440 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 650 | 340 J | 440 U |
| BENZO(K)FLUORANTHENE | 380 U | 97 J | 400 U | 390 U | 470 U | 390 U | 360 J | 86 J | 440 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-282 | SB-282 | SB-283 | SB-283 | SB-284 | SB-284 | SB-285 | SB-285 | SB-286 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-282-0405 | SB-282-0910 | SB-283-0405 | SB-283-0910 | SB-284-0405 | SB-284-0910 | SB-285-0405 | SB-285-0910 | SB-286-0405 |
| SAMPLE DATE | 20051026 | 20051026 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 380 U | 240 J | 400 U | 390 U | 470 U | 390 U | 1200 | 650 | 440 U |
| DIBENZO(A,H)ANTHRACENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U |
| FLUORANTHENE | 380 U | 430 | 110 J | 390 U | 140 J | 390 U | 1400 | 820 | 440 U |
| FLUORENE | 380 U | 380 U | 400 U | 390 U | 210 J | 390 U | 480 | 280 J | 440 U |
| INDENO(1,2,3-CD)PYRENE | 380 U | 380 U | 400 U | 390 U | 470 U | 390 U | 590 | 330 J | 440 U |
| NAPHTHALENE | 380 U | 380 U | 400 U | 390 U | 250 J | 390 U | 1200 | 460 | 440 U |
| PHENANTHRENE | 380 U | 530 | 120 J | 390 U | 570 | 390 U | 2200 | 1300 | 440 U |
| PYRENE | 380 U | 720 | 180 J | 390 U | 220 J | 390 U | 2900 | 1700 | 440 U |
| TOTAL PAHS | 0 U | 2607 | 410 | 0 U | 1910 | 0 U | 15910 | 8576 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 20 U | 8.6 U | 20 U | 20 U | 24 U | 20 U | 21 U | 20 U | 23 U |
| AROCLOR-1221 | 20 U | 10 U | 20 U | 20 U | 24 U | 20 U | 21 U | 20 U | 23 U |
| AROCLOR-1232 | 20 U | 6 U | 20 U | 20 U | 24 U | 20 U | 21 U | 20 U | 23 U |
| AROCLOR-1242 | 20 U | 7.7 U | 20 U | 20 U | 24 U | 20 U | 21 U | 20 U | 23 U |
| AROCLOR-1248 | 20 U | 6.6 U | 20 U | 20 U | 24 U | 20 U | 21 U | 20 U | 23 U |
| AROCLOR-1254 | 20 U | 15 U | 20 U | 20 U | 24 U | 20 U | 21 U | 20 U | 23 U |
| AROCLOR-1260 | 20 U | 4.8 U | 20 U | 20 U | 24 U | 20 U | 21 U | 20 U | 23 U |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.67 UR | 0.34 UR | 0.65 UL | 0.88 UL | 1.18 UL | 0.61 UL | 1.29 UL | 1.34 UL | 0.46 UL |
| ARSENIC | 3.5 | 5.2 | 1.6 B | 7.4 | 5.3 B | 1.9 B | 4.9 B | 5.2 B | 0.54 B |
| BARIUM | 11.6 | 2.8 | 22.7 | 19.7 | 20 | 46.6 | 13.8 | 41.2 | 28.9 |
| BERYLLIUM | 1.8 | 0.33 L | 0.9 | 2.1 | 2.6 | 2 | 1.7 | 2.2 | 0.51 |
| CADMIUM | 0.07 U | 0.03 U | 0.06 U | 0.09 U | 0.12 U | 0.06 U | 0.13 U | 0.13 U | 0.05 U |
| CHROMIUM | 18.5 K | 19.6 K | 39.2 | 27 | 28.9 | 24.5 | 31.4 | 27 | 90.4 |
| COBALT | 6.7 | 4 | 8.4 | 18.4 | 8.4 | 17.5 | 8.1 | 7.6 | 1.8 |
| COPPER | 23 K | 6.7 K | 5 K | 14.5 | 16.2 | 10.7 | 14.8 | 18.2 | 4.1 |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 5.7 | 3.6 | 5 | 9.4 | 9.3 | 7.1 | 6.6 | 8.9 | 5.9 |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U |
| MOLYBDENUM | 0.43 B | 0.53 B | 0.16 U | 0.34 | 0.19 U | 0.15 U | 0.33 | 0.74 | 0.23 U |
| NICKEL | 17.7 | 6.8 | 13.5 | 43.1 | 37.2 | 23.5 | 22.2 | 30.9 | 5.9 |
| SELENIUM | 0.59 UL | 0.3 UL | 0.57 U | 0.77 U | 1.03 U | 0.53 U | 1.12 U | 1.17 U | 0.41 U |
| SILVER | 0.08 U | 0.09 U | 0.08 UL | 0.07 UL | 0.1 UL | 0.08 UL | 0.07 UL | 0.07 UL | 0.12 UL |
| THALLIUM | 1 U | 0.51 U | 1.5 B | 2 B | 2.6 B | 1.6 B | 1.92 U | 1.99 U | 1.1 B |
| VANADIUM | 27.2 K | 34.4 K | 20.4 | 45.9 | 43.8 | 30.6 | 35.6 | 42.6 | 24.6 |
| ZINC | 28.1 K | 9.5 K | 40.2 | 83.1 | 65.5 | 47.3 | 45.1 | 79.2 | 11.8 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-282 | SB-282 | SB-283 | SB-283 | SB-284 | SB-284 | SB-285 | SB-285 | SB-286 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-282-0405 | SB-282-0910 | SB-283-0405 | SB-283-0910 | SB-284-0405 | SB-284-0910 | SB-285-0405 | SB-285-0910 | SB-286-0405 |
| SAMPLE DATE | 20051026 | 20051026 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 2900 U | 2900 U | 2700 U | 2700 U | 3600 | 2900 U | 2800 U | 2800 U | 2800 U |
| TPH (C09-C36) | 4600 J | 130000 | 19000 | 4900 B | 8700 B | 2200 B | 200000 | 54000 | 4500 B |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | 86 | 87 | 83 | 84 | 70 | 85 | 81 | 84 | 75 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-286 | SB-293 | SB-293 | SB-294 | SB-294 | SB-462 | SB-462 | SB-462 | SB-462 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-286-0910 | SB-293-0405 | SB-293-0910 | SB-294-0405 | SB-294-0910 | SB-462-0203 | SB-462-0304 | SB-462-0506 | SB-462-0708 |
| SAMPLE DATE | 20051027 | 20051028 | 20051028 | 20051028 | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 4 | 9 | 4 | 9 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | 6 UJ | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 2-BUTANONE | 30 UR | 30 UR | 30 UR | 30 UR | 31 UR | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 2-HEXANONE | 30 U | 30 UJ | 30 U | 30 U | 31 U | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | 30 U | 30 UJ | 30 U | 30 U | 31 U | NA | NA | NA | NA |
| ACETONE | 30 UR | 32 J | 17 J | 37 L | 16 J | NA | NA | NA | NA |
| BENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| BROMOBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| BROMOFORM | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| BROMOMETHANE | 12 U | 12 UJ | 12 U | 12 U | 12 U | NA | NA | NA | NA |
| CARBON DISULFIDE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| CHLOROBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| CHLOROETHANE | 12 U | 12 UJ | 12 U | 12 U | 12 U | NA | NA | NA | NA |
| CHLOROFORM | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| CHLOROMETHANE | 12 UJ | 12 UJ | 12 U | 12 U | 12 U | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| DIBROMOMETHANE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | 12 U | 12 UJ | 12 U | 12 U | 12 U | NA | NA | NA | NA |
| DIISOPROPYL ETHER | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| ETHYLBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| ISOPROPYLBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| M+P-XYLENES | 12 U | 12 UJ | 12 U | 12 U | 12 U | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | 12 U | 12 UJ | 12 U | 12 U | 12 U | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 6 B | 11 B | 9 B | 10 B | 5 B | NA | NA | NA | NA |
| NAPHTHALENE | 6 J | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| N-BUTYLBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| N-PROPYLBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| O-XYLENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| STYRENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | 12 UR | 12 UR | 12 UR | 12 UR | 12 UR | NA | NA | NA | NA |
| TETRACHLOROETHENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| TOLUENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | 12 U | 12 UJ | 12 U | 12 U | 12 U | NA | NA | NA | NA |
| TOTAL XYLENES | 18 U | 18 UJ | 18 U | 18 U | 18 U | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| TRICHLOROETHENE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | 12 U | 2 J | 12 U | 12 U | 12 U | NA | NA | NA | NA |
| VINYL ACETATE | 6 U | 6 UJ | 6 U | 6 U | 6 U | NA | NA | NA | NA |

| LOCATION | SB-286 | SB-293 | SB-293 | SB-294 | SB-294 | SB-462 | SB-462 | SB-462 | SB-462 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-286-0910 | SB-293-0405 | SB-293-0910 | SB-294-0405 | SB-294-0910 | SB-462-0203 | SB-462-0304 | SB-462-0506 | SB-462-0708 |
| SAMPLE DATE | 20051027 | 20051028 | 20051028 | 20051028 | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 4 | 9 | 4 | 9 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 3 | 4 | 6 | 8 |
| VINYL CHLORIDE | 12 U | 12 UJ | 12 U | 12 U | 12 U | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 1,4-DIOXANE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | 1000 U | 990 U | 980 U | 980 U | 1000 U | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | 1000 U | 990 U | 980 U | 980 U | 1000 U | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 2-CHLOROPHENOL | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 2-METHYLPHENOL | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 2-NITROANILINE | 1000 U | 990 U | 980 U | 980 U | 1000 U | NA | NA | NA | NA |
| 2-NITROPHENOL | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 3-NITROANILINE | 1000 U | 990 U | 980 U | 980 U | 1000 U | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | 1000 U | 990 U | 980 U | 980 U | 1000 U | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 4-CHLOROANILINE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | 1000 U | 990 U | 980 U | 980 U | 1000 U | NA | NA | NA | NA |
| 4-NITROPHENOL | 1000 U | 990 U | 980 U | 980 U | 1000 U | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | 1000 U | 990 U | 980 U | 980 U | 1000 U | NA | NA | NA | NA |
| BENZOIC ACID | 1000 U | 990 U | 980 U | 980 U | 1000 U | NA | NA | NA | NA |
| BENZYL ALCOHOL | 400 UR | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| DIBENZOFURAN | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| DIETHYL PHTHALATE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| HEXACHLOROBENZENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| HEXACHLOROETHANE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| ISOPHORONE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| NITROBENZENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| PENTACHLOROPHENOL | 1000 U | 990 U | 980 U | 980 U | 1000 U | NA | NA | NA | NA |
| PHENOL | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| PYRIDINE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 220 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 84 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| ACENAPHTHENE | 190 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| ACENAPHTHYLENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| ANTHRACENE | 290 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 635 | 400 U | 390 U | 390 U | 400 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 433 | 400 U | 390 U | 390 U | 400 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 400 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BENZO(A)PYRENE | 340 J | 400 U | 390 U | 390 U | 400 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 340 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 210 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-286 | SB-293 | SB-293 | SB-294 | SB-294 | SB-462 | SB-462 | SB-462 | SB-462 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-286-0910 | SB-293-0405 | SB-293-0910 | SB-294-0405 | SB-294-0910 | SB-462-0203 | SB-462-0304 | SB-462-0506 | SB-462-0708 |
| SAMPLE DATE | 20051027 | 20051028 | 20051028 | 20051028 | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 4 | 9 | 4 | 9 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 3 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 490 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 400 U | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| FLUORANTHENE | 620 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| FLUORENE | 250 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 190 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| NAPHTHALENE | 110 J | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| PHENANTHRENE | 1300 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| PYRENE | 1100 | 400 U | 390 U | 390 U | 400 U | NA | NA | NA | NA |
| TOTAL PAHS | 5914 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | 21 U | 20 U | 20 UJ | 20 U | 21 U | NA | NA | NA | NA |
| AROCLOR-1221 | 21 U | 20 U | 20 UJ | 20 U | 21 U | NA | NA | NA | NA |
| AROCLOR-1232 | 21 U | 20 U | 20 UJ | 20 U | 21 U | NA | NA | NA | NA |
| AROCLOR-1242 | 21 U | 20 U | 20 UJ | 20 U | 21 U | NA | NA | NA | NA |
| AROCLOR-1248 | 21 U | 20 U | 20 UJ | 20 U | 21 U | NA | NA | NA | NA |
| AROCLOR-1254 | 21 U | 20 U | 20 UJ | 20 U | 21 U | NA | NA | NA | NA |
| AROCLOR-1260 | 21 U | 20 U | 20 UJ | 20 U | 21 U | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | 0 U | 0 U | 0 U | 0 U | 0 U | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 0.37 UL | 0.36 U | 0.31 U | 0.44 U | 0.43 U | NA | NA | NA | NA |
| ARSENIC | 0.77 B | 2.7 | 1.7 | 2.4 | 3.4 | NA | NA | NA | NA |
| BARIUM | 17.5 | 11.7 | 2.9 | 8.7 | 11 | NA | NA | NA | NA |
| BERYLLIUM | 0.34 | 0.48 | 0.14 B | 0.31 B | 0.37 B | NA | NA | NA | NA |
| CADMIUM | 0.04 U | 0.38 U | 0.33 U | 0.46 U | 0.45 U | NA | NA | NA | NA |
| CHROMIUM | 54.1 | 12.6 | 7.5 | 9.4 | 16.6 | NA | NA | NA | NA |
| COBALT | 3 | 3.3 | 1.8 | 2.6 | 3 | NA | NA | NA | NA |
| COPPER | 2.3 B | 8.3 | 6.6 | 5.3 | 9.3 | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 1.8 | 3.7 | 1.6 | 2.6 | 3.5 | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.01 U | 0.02 | 0.01 U | 0.01 | 0.01 U | 0.21 | 0.019 U | 0.021 U | 0.02 U |
| MOLYBDENUM | 0.28 | 0.46 | 0.17 | 0.3 K | 1.2 | NA | NA | NA | NA |
| NICKEL | 2.7 | 5.2 | 3 | 3.4 | 5.1 | NA | NA | NA | NA |
| SELENIUM | 0.32 U | 0.31 UL | 0.27 UL | 0.38 U | 0.37 U | NA | NA | NA | NA |
| SILVER | 0.09 UL | 0.38 UL | 0.44 L | 0.47 UL | 0.46 UL | NA | NA | NA | NA |
| THALLIUM | 0.76 B | 0.53 U | 0.47 U | 0.65 U | 0.64 U | NA | NA | NA | NA |
| VANADIUM | 5.7 | 28.6 | 13.7 | 17.8 | 26.3 | NA | NA | NA | NA |
| ZINC | 21 | 11.9 | 4 | 9 | 10.5 | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-286 | SB-293 | SB-293 | SB-294 | SB-294 | SB-462 | SB-462 | SB-462 | SB-462 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-286-0910 | SB-293-0405 | SB-293-0910 | SB-294-0405 | SB-294-0910 | SB-462-0203 | SB-462-0304 | SB-462-0506 | SB-462-0708 |
| SAMPLE DATE | 20051027 | 20051028 | 20051028 | 20051028 | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 4 | 9 | 4 | 9 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 3 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 6100 | 9000 | 2800 U | 2800 U | 2900 U | NA | NA | NA | NA |
| TPH (C09-C36) | 110000 | 2900 J | 3800 J | 6000 U | 6100 U | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | 87.1 | 87.1 | 79.1 | 81.5 |
| TOTAL SOLIDS | 82 | 83 | 84 | 84 | 81 | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-463 | SB-463 | SB-463 | SB-463 | SB-464 | SB-464 | SB-464 | SB-464 | SB-465 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-463-0203 | SB-463-0304 | SB-463-0506 | SB-463-0708 | SB-464-0203 | SB-464-0304 | SB-464-0506 | SB-464-0708 | SB-465-0203 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-463 | SB-463 | SB-463 | SB-463 | SB-464 | SB-464 | SB-464 | SB-464 | SB-465 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-463-0203 | SB-463-0304 | SB-463-0506 | SB-463-0708 | SB-464-0203 | SB-464-0304 | SB-464-0506 | SB-464-0708 | SB-465-0203 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.8 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U |
| BAP EQUIVALENT-POS | 1.8 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.8 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-463 | SB-463 | SB-463 | SB-463 | SB-464 | SB-464 | SB-464 | SB-464 | SB-465 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-463-0203 | SB-463-0304 | SB-463-0506 | SB-463-0708 | SB-464-0203 | SB-464-0304 | SB-464-0506 | SB-464-0708 | SB-465-0203 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.063 | 0.021 U | 0.021 U | 0.021 U | 0.019 U | 0.021 U | 0.021 U | 0.02 U | 0.019 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-463 | SB-463 | SB-463 | SB-463 | SB-464 | SB-464 | SB-464 | SB-464 | SB-465 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-463-0203 | SB-463-0304 | SB-463-0506 | SB-463-0708 | SB-464-0203 | SB-464-0304 | SB-464-0506 | SB-464-0708 | SB-465-0203 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 73.9 | 78.8 | 81.1 | 80 | 89.4 | 81 | 79.3 | 84.7 | 89.9 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-465 | SB-465 | SB-465 | SB-466 | SB-466 | SB-466 | SB-466 | SB-467 | SB-467 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-465-0304 | SB-465-0506 | SB-465-0708 | SB-466-0203 | SB-466-0304 | SB-466-0506 | SB-466-0708 | SB-467-0203 | SB-467-0304 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-465 | SB-465 | SB-465 | SB-466 | SB-466 | SB-466 | SB-466 | SB-467 | SB-467 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-465-0304 | SB-465-0506 | SB-465-0708 | SB-466-0203 | SB-466-0304 | SB-466-0506 | SB-466-0708 | SB-467-0203 | SB-467-0304 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.6 U | 1.5 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.6 U | 1.5 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 1.6 UJ | 1.5 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-465 | SB-465 | SB-465 | SB-466 | SB-466 | SB-466 | SB-466 | SB-467 | SB-467 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-465-0304 | SB-465-0506 | SB-465-0708 | SB-466-0203 | SB-466-0304 | SB-466-0506 | SB-466-0708 | SB-467-0203 | SB-467-0304 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.02 U | 0.02 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U | 0.019 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-465 | SB-465 | SB-465 | SB-466 | SB-466 | SB-466 | SB-466 | SB-467 | SB-467 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-465-0304 | SB-465-0506 | SB-465-0708 | SB-466-0203 | SB-466-0304 | SB-466-0506 | SB-466-0708 | SB-467-0203 | SB-467-0304 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 84.7 | 83.9 | 84.2 | 89.8 | 88.6 | 82.9 | 84.4 | 88.6 | 88.5 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-467 | SB-467 | SB-468 | SB-468 | SB-468 | SB-468 | SB-469 | SB-469 | SB-469 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-467-0506 | SB-467-0708 | SB-468-0203 | SB-468-0304 | SB-468-0506 | SB-468-0708 | SB-469-0203 | SB-469-0304 | SB-469-0506 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-467 | SB-467 | SB-468 | SB-468 | SB-468 | SB-468 | SB-469 | SB-469 | SB-469 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-467-0506 | SB-467-0708 | SB-468-0203 | SB-468-0304 | SB-468-0506 | SB-468-0708 | SB-469-0203 | SB-469-0304 | SB-469-0506 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-467 | SB-467 | SB-468 | SB-468 | SB-468 | SB-468 | SB-469 | SB-469 | SB-469 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-467-0506 | SB-467-0708 | SB-468-0203 | SB-468-0304 | SB-468-0506 | SB-468-0708 | SB-469-0203 | SB-469-0304 | SB-469-0506 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 0.019 U | 0.02 U | 0.02 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-467 | SB-467 | SB-468 | SB-468 | SB-468 | SB-468 | SB-469 | SB-469 | SB-469 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-467-0506 | SB-467-0708 | SB-468-0203 | SB-468-0304 | SB-468-0506 | SB-468-0708 | SB-469-0203 | SB-469-0304 | SB-469-0506 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 83.6 | 86.4 | 85.5 | 85.1 | 83.9 | 84.6 | 87.4 | 82.2 | 83.6 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-469 | SB-620 | SB-620 | SB-620 | SB-620 | SB-621 | SB-621 | SB-622 | SB-622 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-469-0708 | H-SB-620-5 | H-SB-620-6 | H-SB-620-6-AVG | H-SB-620-6-D | H-SB-621-5 | H-SB-621-6 | H-SB-622-5 | H-SB-622-6 |
| SAMPLE DATE | 20071023 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 5 | 6 | 6 | 6 | 5 | 6 | 5 | 6 |
| BOTTOM DEPTH | 8 | 5 | 6 | 6 | 6 | 5 | 6 | 5 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-469 | SB-620 | SB-620 | SB-620 | SB-620 | SB-621 | SB-621 | SB-622 | SB-622 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-469-0708 | H-SB-620-5 | H-SB-620-6 | H-SB-620-6-AVG | H-SB-620-6-D | H-SB-621-5 | H-SB-621-6 | H-SB-622-5 | H-SB-622-6 |
| SAMPLE DATE | 20071023 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 5 | 6 | 6 | 6 | 5 | 6 | 5 | 6 |
| BOTTOM DEPTH | 8 | 5 | 6 | 6 | 6 | 5 | 6 | 5 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 23 | 1.5 U | 1.5 U | 1.5 U | 22 | 1.5 U | 3.5 | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 22 | 1.5 U | 1.5 U | 1.5 U | 21 | 1.5 U | 2.0 | 1.5 U |
| BENZO(A)ANTHRACENE | NA | 21 | 1.1 U | 1.1 U | 1.1 U | 17 | 1.1 U | 11 | 1.1 U |
| BENZO(A)PYRENE | 1.5 U | 17 | 1.5 U | 1.5 U | 1.5 U | 16 | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | 20 | 1.4 U | 1.4 U | 1.4 U | 14 | 1.4 U | 8.4 | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | 2 U | 2 U | 2 U | 2 U | 2 U | 1.9 U | 2 U | 1.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-469 | SB-620 | SB-620 | SB-620 | SB-620 | SB-621 | SB-621 | SB-622 | SB-622 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-469-0708 | H-SB-620-5 | H-SB-620-6 | H-SB-620-6-AVG | H-SB-620-6-D | H-SB-621-5 | H-SB-621-6 | H-SB-622-5 | H-SB-622-6 |
| SAMPLE DATE | 20071023 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 5 | 6 | 6 | 6 | 5 | 6 | 5 | 6 |
| BOTTOM DEPTH | 8 | 5 | 6 | 6 | 6 | 5 | 6 | 5 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | 24 | 1.1 U | 1.05 U | 1 U | 18 | 1 U | 11 | 1 U |
| DIBENZO(A,H)ANTHRACENE | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | 7.9 | 1.8 U | 1.75 U | 1.7 U | 18 | 1.7 U | 1.7 U | 1.7 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 89.9 | 0 U | 0 U | 0 U | 83 | 0 U | 30.4 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.02 U | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-469 | SB-620 | SB-620 | SB-620 | SB-620 | SB-621 | SB-621 | SB-622 | SB-622 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-469-0708 | H-SB-620-5 | H-SB-620-6 | H-SB-620-6-AVG | H-SB-620-6-D | H-SB-621-5 | H-SB-621-6 | H-SB-622-5 | H-SB-622-6 |
| SAMPLE DATE | 20071023 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 5 | 6 | 6 | 6 | 5 | 6 | 5 | 6 |
| BOTTOM DEPTH | 8 | 5 | 6 | 6 | 6 | 5 | 6 | 5 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 84.6 | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-623 | SB-623 | SB-814 | SB-814 | SB-814 | SB-814 | SB-815 | SB-815 | SB-815 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-623-5 | H-SB-623-6 | H-SB-814-03 | H-SB-814-05 | H-SB-814-07 | H-SB-814-09 | H-SB-815-03 | H-SB-815-05 | H-SB-815-07 |
| SAMPLE DATE | 20090928 | 20090928 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 6 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-623 | SB-623 | SB-814 | SB-814 | SB-814 | SB-814 | SB-815 | SB-815 | SB-815 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-623-5 | H-SB-623-6 | H-SB-814-03 | H-SB-814-05 | H-SB-814-07 | H-SB-814-09 | H-SB-815-03 | H-SB-815-05 | H-SB-815-07 |
| SAMPLE DATE | 20090928 | 20090928 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 6 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | 3.9 U | 3.7 U | 3.9 U | 40 | 3.5 U | 3.9 U | 3.9 U |
| 2-METHYLNAPHTHALENE | NA | NA | 3.9 U | 3.7 U | 3.9 U | 37 | 3.5 U | 3.9 U | 3.9 U |
| ACENAPHTHENE | NA | NA | 3.9 U | 3.7 U | 3.9 U | 34 | 3.5 U | 3.9 U | 3.9 U |
| ACENAPHTHYLENE | NA | NA | 3.9 U | 3.7 U | 3.9 U | 100 | 3.5 U | 3.9 U | 3.9 U |
| ANTHRACENE | NA | NA | 3.9 U | 3.7 U | 3.9 U | 170 | 3.5 U | 3.9 U | 3.9 U |
| BAP EQUIVALENT-HALFND | 34 | 44 | 3.9 U | 3.7 U | 3.9 U | 722 | 3.5 U | 11 | 3.9 U |
| BAP EQUIVALENT-POS | 33 | 43 | 3.9 U | 3.7 U | 3.9 U | 722 | 3.5 U | 8.7 | 3.9 U |
| BENZO(A)ANTHRACENE | 22 | 26 | 3.9 U | 3.7 U | 3.9 U | 470 | 3.5 U | 3.9 U | 3.9 U |
| BENZO(A)PYRENE | 27 | 35 | 3.9 U | 3.7 U | 3.9 U | 520 | 3.5 U | 8.7 | 3.9 U |
| BENZO(B)FLUORANTHENE | 25 | 34 | 3.9 U | 3.7 U | 3.9 U | 480 | 3.5 U | 3.9 U | 3.9 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | 3.9 U | 3.7 U | 3.9 U | 360 | 3.5 U | 3.9 U | 3.9 U |
| BENZO(K)FLUORANTHENE | 13 | 16 | 3.9 U | 3.7 U | 3.9 U | 250 | 3.5 U | 3.9 U | 3.9 U |
| C1-CHRYSENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |

| LOCATION | SB-623 | SB-623 | SB-814 | SB-814 | SB-814 | SB-814 | SB-815 | SB-815 | SB-815 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-623-5 | H-SB-623-6 | H-SB-814-03 | H-SB-814-05 | H-SB-814-07 | H-SB-814-09 | H-SB-815-03 | H-SB-815-05 | H-SB-815-07 |
| SAMPLE DATE | 20090928 | 20090928 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 6 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | 78 U | NA | NA | NA | NA |
| CHRYSENE | 26 | 34 | 1.3 UJ | 1.2 UJ | 1.3 UJ | 510 | 1.2 UJ | 1.3 UJ | 1.3 UJ |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 3.9 U | 3.7 U | 3.9 U | 76 | 3.5 U | 3.9 U | 3.9 U |
| FLUORANTHENE | NA | NA | 3.9 U | 3.7 U | 3.9 U | 720 | 3.5 U | 10 | 3.9 U |
| FLUORENE | NA | NA | 3.9 U | 3.7 U | 3.9 U | 63 | 3.5 U | 3.9 U | 3.9 U |
| INDENO(1,2,3-CD)PYRENE | 15 | 21 | 3.9 U | 3.7 U | 3.9 U | 280 | 3.5 U | 3.9 U | 3.9 U |
| NAPHTHALENE | NA | NA | 3.9 U | 3.7 U | 3.9 U | 28 | 3.5 U | 3.9 U | 3.9 U |
| PHENANTHRENE | NA | NA | 3.9 U | 3.7 U | 3.9 U | 460 | 3.5 U | 3.9 U | 3.9 U |
| PYRENE | NA | NA | 3.9 U | 3.7 U | 3.9 U | 1400 | 3.5 U | 16 | 3.9 U |
| TOTAL PAHS | 128 | 166 | 0 U | 0 U | 0 U | 5958 | 0 U | 34.7 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-623 | SB-623 | SB-814 | SB-814 | SB-814 | SB-814 | SB-815 | SB-815 | SB-815 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-623-5 | H-SB-623-6 | H-SB-814-03 | H-SB-814-05 | H-SB-814-07 | H-SB-814-09 | H-SB-815-03 | H-SB-815-05 | H-SB-815-07 |
| SAMPLE DATE | 20090928 | 20090928 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 6 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-815 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-817 | SB-817 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-815-09 | H-SB-816-03 | H-SB-816-03-AVG | H-SB-816-03-D | H-SB-816-05 | H-SB-816-07 | H-SB-816-09 | H-SB-817-03 | H-SB-817-05 |
| SAMPLE DATE | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-815 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-817 | SB-817 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-815-09 | H-SB-816-03 | H-SB-816-03-AVG | H-SB-816-03-D | H-SB-816-05 | H-SB-816-07 | H-SB-816-09 | H-SB-817-03 | H-SB-817-05 |
| SAMPLE DATE | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | 4.1 U | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 4.1 U | 3.7 U | 4 U |
| 2-METHYLNAPHTHALENE | 4.1 U | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 4.1 U | 3.7 U | 4 U |
| ACENAPHTHENE | 4.1 U | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 30 J | 3.7 UJ | 4 UJ |
| ACENAPHTHYLENE | 4.1 U | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 4.1 U | 3.7 U | 4 U |
| ANTHRACENE | 4.1 U | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 34 J | 3.7 UJ | 4 UJ |
| BAP EQUIVALENT-HALFND | 58 | 3.7 U | 3.75 U | 3.8 U | 25 | 3.8 U | 79 | 3.7 U | 38 |
| BAP EQUIVALENT-POS | 56 | 3.7 U | 3.75 U | 3.8 U | 23 | 3.8 U | 77 | 3.7 U | 36 |
| BENZO(A)ANTHRACENE | 38 | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 42 | 3.7 U | 16 |
| BENZO(A)PYRENE | 45 | 3.7 UJ | 3.75 U | 3.8 UJ | 23 J | 3.8 UJ | 62 J | 3.7 UJ | 32 J |
| BENZO(B)FLUORANTHENE | 45 | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 61 J | 3.7 UJ | 21 J |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 40 | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 56 J | 3.7 UJ | 4 UJ |
| BENZO(K)FLUORANTHENE | 23 | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 26 J | 3.7 UJ | 4 UJ |
| C1-CHRYSENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |

| LOCATION | SB-815 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-817 | SB-817 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-815-09 | H-SB-816-03 | H-SB-816-03-AVG | H-SB-816-03-D | H-SB-816-05 | H-SB-816-07 | H-SB-816-09 | H-SB-817-03 | H-SB-817-05 |
| SAMPLE DATE | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 77 U | NA | NA | NA |
| CHRYSENE | 43 J | 1.2 U | 1.25 U | 1.3 U | 1.3 U | 1.3 U | 48 | 1.2 U | 14 |
| DIBENZO(A,H)ANTHRACENE | 4.1 U | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 4.1 UJ | 3.7 UJ | 4 UJ |
| FLUORANTHENE | 54 | 3.7 UJ | 3.75 U | 3.8 UJ | 24 J | 3.8 UJ | 81 J | 3.7 UJ | 33 J |
| FLUORENE | 4.1 U | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 32 J | 3.7 UJ | 4 UJ |
| INDENO(1,2,3-CD)PYRENE | 27 | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 47 J | 3.7 UJ | 4 UJ |
| NAPHTHALENE | 4.1 U | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 4.1 U | 3.7 U | 4 U |
| PHENANTHRENE | 28 | 3.7 UJ | 3.75 U | 3.8 UJ | 16 J | 3.8 UJ | 77 J | 3.7 UJ | 4 UJ |
| PYRENE | 88 | 3.7 U | 3.75 U | 3.8 U | 15 | 3.8 U | 110 | 3.7 U | 36 |
| TOTAL PAHS | 431 | 0 U | 0 U | 0 U | 78 | 0 U | 706 | 0 U | 152 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-815 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-817 | SB-817 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-815-09 | H-SB-816-03 | H-SB-816-03-AVG | H-SB-816-03-D | H-SB-816-05 | H-SB-816-07 | H-SB-816-09 | H-SB-817-03 | H-SB-817-05 |
| SAMPLE DATE | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-817 | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|
| SAMPLE ID | H-SB-817-07 | H-SB-817-07-AVG | H-SB-817-07-D | H-SB-817-09 |
| SAMPLE DATE | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA |

| LOCATION | SB-817 | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|
| SAMPLE ID | H-SB-817-07 | H-SB-817-07-AVG | H-SB-817-07-D | H-SB-817-09 |
| SAMPLE DATE | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 |
| VINYL CHLORIDE | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | |
| 1-METHYLNAPHTHALENE | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| ACENAPHTHENE | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| ACENAPHTHYLENE | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| ANTHRACENE | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| BAP EQUIVALENT-HALFND | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| BAP EQUIVALENT-POS | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| BENZO(A)ANTHRACENE | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| BENZO(A)PYRENE | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| BENZO(B)FLUORANTHENE | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| BENZO(K)FLUORANTHENE | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| C1-CHRYSENES | NA | NA | NA | NA |

| LOCATION | SB-817 | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|
| SAMPLE ID | H-SB-817-07 | H-SB-817-07-AVG | H-SB-817-07-D | H-SB-817-09 |
| SAMPLE DATE | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| CHRYSENE | 1.3 U | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| FLUORANTHENE | 3.8 UJ | 3.8 U | 3.8 UJ | 21 J |
| FLUORENE | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| INDENO(1,2,3-CD)PYRENE | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| NAPHTHALENE | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| PHENANTHRENE | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| PYRENE | 3.8 U | 3.8 U | 3.8 U | 11 |
| TOTAL PAHS | 0 U | 0 U | 0 U | 32 |
| **PESTICIDES/PCBS (UG/KG)** | | | | |
| 4,4'-DDD | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | |
| ANTIMONY | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | |

| LOCATION | SB-817 | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|
| SAMPLE ID | H-SB-817-07 | H-SB-817-07-AVG | H-SB-817-07-D | H-SB-817-09 |
| SAMPLE DATE | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | |
| PH | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | |
| ACTINIUM-228 | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA |

| LOCATION | SB-470 | SB-470 | SB-470 | SB-470 | SB-471 | SB-471 | SB-471 | SB-471 | SB-472 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-470-0203 | SB-470-0304 | SB-470-0506 | SB-470-0708 | SB-471-0203 | SB-471-0304 | SB-471-0506 | SB-471-0708 | SB-472-0203 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-470 | SB-470 | SB-470 | SB-470 | SB-471 | SB-471 | SB-471 | SB-471 | SB-472 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-470-0203 | SB-470-0304 | SB-470-0506 | SB-470-0708 | SB-471-0203 | SB-471-0304 | SB-471-0506 | SB-471-0708 | SB-472-0203 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 21 | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 21 | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 21 J | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-470 | SB-470 | SB-470 | SB-470 | SB-471 | SB-471 | SB-471 | SB-471 | SB-472 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-470-0203 | SB-470-0304 | SB-470-0506 | SB-470-0708 | SB-471-0203 | SB-471-0304 | SB-471-0506 | SB-471-0708 | SB-472-0203 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 21 | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.023 L | 0.019 UL | 0.02 UL | 0.02 UL | 0.021 UL | 0.021 UL | 0.02 UL | 0.02 UL | 0.019 UL |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-470 | SB-470 | SB-470 | SB-470 | SB-471 | SB-471 | SB-471 | SB-471 | SB-472 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-470-0203 | SB-470-0304 | SB-470-0506 | SB-470-0708 | SB-471-0203 | SB-471-0304 | SB-471-0506 | SB-471-0708 | SB-472-0203 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 88.5 | 86.8 | 82.3 | 83.7 | 81.1 | 80.7 | 82.7 | 83.7 | 86.6 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-472 | SB-472 | SB-472 | SB-473 | SB-473 | SB-473 | SB-473 | SB-474 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-472-0304 | SB-472-0506 | SB-472-0708 | SB-473-0203 | SB-473-0304 | SB-473-0506 | SB-473-0708 | SB-474-0203 | SB-474-0304 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-472 | SB-472 | SB-472 | SB-473 | SB-473 | SB-473 | SB-473 | SB-474 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-472-0304 | SB-472-0506 | SB-472-0708 | SB-473-0203 | SB-473-0304 | SB-473-0506 | SB-473-0708 | SB-474-0203 | SB-474-0304 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 31 | 490 |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 31 | 490 |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 31 J | 490 |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-472 | SB-472 | SB-472 | SB-473 | SB-473 | SB-473 | SB-473 | SB-474 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-472-0304 | SB-472-0506 | SB-472-0708 | SB-473-0203 | SB-473-0304 | SB-473-0506 | SB-473-0708 | SB-474-0203 | SB-474-0304 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 31 | 490 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.02 UL | 0.02 UL | 0.02 UJ | 0.019 UL | 0.02 UL | 0.022 UL | 0.021 UL | 0.025 | 0.095 |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-472 | SB-472 | SB-472 | SB-473 | SB-473 | SB-473 | SB-473 | SB-474 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-472-0304 | SB-472-0506 | SB-472-0708 | SB-473-0203 | SB-473-0304 | SB-473-0506 | SB-473-0708 | SB-474-0203 | SB-474-0304 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 81.5 | 83.1 | 83.2 | 87.9 | 85.1 | 76.1 | 80.5 | 86 | 77.6 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-474 | SB-474 | SB-475 | SB-475 | SB-475 | SB-475 | SB-476 | SB-476 | SB-476 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-474-0506 | SB-474-0708 | SB-475-0203 | SB-475-0304 | SB-475-0506 | SB-475-0708 | SB-476-0203 | SB-476-0304 | SB-476-0506 |
| SAMPLE DATE | 20071024 | 20071024 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-474 | SB-474 | SB-475 | SB-475 | SB-475 | SB-475 | SB-476 | SB-476 | SB-476 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-474-0506 | SB-474-0708 | SB-475-0203 | SB-475-0304 | SB-475-0506 | SB-475-0708 | SB-476-0203 | SB-476-0304 | SB-476-0506 |
| SAMPLE DATE | 20071024 | 20071024 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.4 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.4 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.4 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-474 | SB-474 | SB-475 | SB-475 | SB-475 | SB-475 | SB-476 | SB-476 | SB-476 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-474-0506 | SB-474-0708 | SB-475-0203 | SB-475-0304 | SB-475-0506 | SB-475-0708 | SB-476-0203 | SB-476-0304 | SB-476-0506 |
| SAMPLE DATE | 20071024 | 20071024 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.018 U | 0.019 U | 0.019 U | 0.02 U | 0.02 U | 0.02 U | 0.019 U | 0.021 U | 0.02 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-474 | SB-474 | SB-475 | SB-475 | SB-475 | SB-475 | SB-476 | SB-476 | SB-476 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-474-0506 | SB-474-0708 | SB-475-0203 | SB-475-0304 | SB-475-0506 | SB-475-0708 | SB-476-0203 | SB-476-0304 | SB-476-0506 |
| SAMPLE DATE | 20071024 | 20071024 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 90.9 | 86.3 | 87 | 81.8 | 81.4 | 83.3 | 85.8 | 79.9 | 83.3 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-476 | SB-477 | SB-477 | SB-477 | SB-477 | SB-478 | SB-478 | SB-478 | SB-478 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-476-0708 | SB-477-0203 | SB-477-0304 | SB-477-0506 | SB-477-0708 | SB-478-0203 | SB-478-0304 | SB-478-0506 | SB-478-0708 |
| SAMPLE DATE | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-476 | SB-477 | SB-477 | SB-477 | SB-477 | SB-478 | SB-478 | SB-478 | SB-478 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-476-0708 | SB-477-0203 | SB-477-0304 | SB-477-0506 | SB-477-0708 | SB-478-0203 | SB-478-0304 | SB-478-0506 | SB-478-0708 |
| SAMPLE DATE | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.7 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.7 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 1.7 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-476 | SB-477 | SB-477 | SB-477 | SB-477 | SB-478 | SB-478 | SB-478 | SB-478 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-476-0708 | SB-477-0203 | SB-477-0304 | SB-477-0506 | SB-477-0708 | SB-478-0203 | SB-478-0304 | SB-478-0506 | SB-478-0708 |
| SAMPLE DATE | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.02 U | 0.021 U | 0.021 U | 0.02 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

| LOCATION | SB-476 | SB-477 | SB-477 | SB-477 | SB-477 | SB-478 | SB-478 | SB-478 | SB-478 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-476-0708 | SB-477-0203 | SB-477-0304 | SB-477-0506 | SB-477-0708 | SB-478-0203 | SB-478-0304 | SB-478-0506 | SB-478-0708 |
| SAMPLE DATE | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 83.6 | 78.2 | 79.8 | 84.6 | 84.9 | 87.7 | 85.1 | 86.7 | 83.8 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-479 | SB-479 | SB-479 | SB-479 | SB-480 | SB-480 | SB-480 | SB-480 | SB-481 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-479-0203 | SB-479-0304 | SB-479-0506 | SB-479-0708 | SB-480-0203 | SB-480-0304 | SB-480-0506 | SB-480-0708 | SB-481-0203 |
| SAMPLE DATE | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-479 | SB-479 | SB-479 | SB-479 | SB-480 | SB-480 | SB-480 | SB-480 | SB-481 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-479-0203 | SB-479-0304 | SB-479-0506 | SB-479-0708 | SB-480-0203 | SB-480-0304 | SB-480-0506 | SB-480-0708 | SB-481-0203 |
| SAMPLE DATE | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-479 | SB-479 | SB-479 | SB-479 | SB-480 | SB-480 | SB-480 | SB-480 | SB-481 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-479-0203 | SB-479-0304 | SB-479-0506 | SB-479-0708 | SB-480-0203 | SB-480-0304 | SB-480-0506 | SB-480-0708 | SB-481-0203 |
| SAMPLE DATE | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.019 U | 0.02 U | 0.02 U | 0.019 U | 0.019 U | 0.019 U | 0.02 U | 0.019 U | 0.21 |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-479 | SB-479 | SB-479 | SB-479 | SB-480 | SB-480 | SB-480 | SB-480 | SB-481 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-479-0203 | SB-479-0304 | SB-479-0506 | SB-479-0708 | SB-480-0203 | SB-480-0304 | SB-480-0506 | SB-480-0708 | SB-481-0203 |
| SAMPLE DATE | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 85.9 | 83.8 | 84.6 | 85.9 | 89.5 | 88.1 | 84.1 | 85.6 | 85.8 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-481 | SB-481 | SB-481 | SB-482 | SB-482 | SB-482 | SB-482 | SB-483 | SB-483 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-481-0304 | SB-481-0506 | SB-481-0708 | SB-482-0203 | SB-482-0304 | SB-482-0506 | SB-482-0708 | SB-483-0203 | SB-483-0304 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-481 | SB-481 | SB-481 | SB-482 | SB-482 | SB-482 | SB-482 | SB-483 | SB-483 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-481-0304 | SB-481-0506 | SB-481-0708 | SB-482-0203 | SB-482-0304 | SB-482-0506 | SB-482-0708 | SB-483-0203 | SB-483-0304 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 10 | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 28 | 1.6 U |
| BAP EQUIVALENT-POS | 10 | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 28 | 1.6 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 10 J | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.6 U | 28 J | 1.6 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-481 | SB-481 | SB-481 | SB-482 | SB-482 | SB-482 | SB-482 | SB-483 | SB-483 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-481-0304 | SB-481-0506 | SB-481-0708 | SB-482-0203 | SB-482-0304 | SB-482-0506 | SB-482-0708 | SB-483-0203 | SB-483-0304 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 10 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 28 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 0.035 | 0.02 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-481 | SB-481 | SB-481 | SB-482 | SB-482 | SB-482 | SB-482 | SB-483 | SB-483 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-481-0304 | SB-481-0506 | SB-481-0708 | SB-482-0203 | SB-482-0304 | SB-482-0506 | SB-482-0708 | SB-483-0203 | SB-483-0304 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 84.3 | 82.2 | 82.6 | 82.7 | 85.1 | 84 | 82.7 | 82.9 | 81.6 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-483 | SB-483 | SB-484 | SB-484 | SB-484 | SB-484 | SB-485 | SB-485 | SB-485 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-483-0506 | SB-483-0708 | SB-484-0203 | SB-484-0304 | SB-484-0506 | SB-484-0708 | SB-485-0203 | SB-485-0304 | SB-485-0506 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-483 | SB-483 | SB-484 | SB-484 | SB-484 | SB-484 | SB-485 | SB-485 | SB-485 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-483-0506 | SB-483-0708 | SB-484-0203 | SB-484-0304 | SB-484-0506 | SB-484-0708 | SB-485-0203 | SB-485-0304 | SB-485-0506 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 43 | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 43 | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 43 J | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-483 | SB-483 | SB-484 | SB-484 | SB-484 | SB-484 | SB-485 | SB-485 | SB-485 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-483-0506 | SB-483-0708 | SB-484-0203 | SB-484-0304 | SB-484-0506 | SB-484-0708 | SB-485-0203 | SB-485-0304 | SB-485-0506 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 43 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.02 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U | 0.02 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-483 | SB-483 | SB-484 | SB-484 | SB-484 | SB-484 | SB-485 | SB-485 | SB-485 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-483-0506 | SB-483-0708 | SB-484-0203 | SB-484-0304 | SB-484-0506 | SB-484-0708 | SB-485-0203 | SB-485-0304 | SB-485-0506 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 83.5 | 82.9 | 86.2 | 82.7 | 86.5 | 84.2 | 88.7 | 84.4 | 85 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-485 | SB-486 | SB-486 | SB-486 | SB-486 | SB-487 | SB-487 | SB-487 | SB-487 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-485-0708 | SB-486-0203 | SB-486-0304 | SB-486-0506 | SB-486-0708 | SB-487-0203 | SB-487-0304 | SB-487-0506 | SB-487-0708 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-485 | SB-486 | SB-486 | SB-486 | SB-486 | SB-487 | SB-487 | SB-487 | SB-487 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-485-0708 | SB-486-0203 | SB-486-0304 | SB-486-0506 | SB-486-0708 | SB-487-0203 | SB-487-0304 | SB-487-0506 | SB-487-0708 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.5 U | 380 U | 390 U | 410 U | 390 U | 400 U | 380 U | 390 U | 390 U |
| BAP EQUIVALENT-POS | 1.5 U | 380 U | 390 U | 410 U | 390 U | 400 U | 380 U | 390 U | 390 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 1.5 U | 380 U | 390 U | 410 U | 390 U | 400 U | 380 U | 390 U | 390 U |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-485 | SB-486 | SB-486 | SB-486 | SB-486 | SB-487 | SB-487 | SB-487 | SB-487 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-485-0708 | SB-486-0203 | SB-486-0304 | SB-486-0506 | SB-486-0708 | SB-487-0203 | SB-487-0304 | SB-487-0506 | SB-487-0708 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U | 0.02 U |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-485 | SB-486 | SB-486 | SB-486 | SB-486 | SB-487 | SB-487 | SB-487 | SB-487 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-485-0708 | SB-486-0203 | SB-486-0304 | SB-486-0506 | SB-486-0708 | SB-487-0203 | SB-487-0304 | SB-487-0506 | SB-487-0708 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | 84.8 | 86.3 | 84.9 | 81.3 | 85.6 | 82.4 | 88 | 83.8 | 85.3 |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-488 | SB-488 | SB-488 | SB-488 |
|---|---|---|---|---|
| SAMPLE ID | SB-488-0203 | SB-488-0304 | SB-488-0506 | SB-488-0708 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA |

| LOCATION | SB-488 | SB-488 | SB-488 | SB-488 |
|---|---|---|---|---|
| SAMPLE ID | SB-488-0203 | SB-488-0304 | SB-488-0506 | SB-488-0708 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 |
| VINYL CHLORIDE | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 370 U | 380 U | 400 U | 390 U |
| BAP EQUIVALENT-POS | 370 U | 380 U | 400 U | 390 U |
| BENZO(A)ANTHRACENE | NA | NA | NA | NA |
| BENZO(A)PYRENE | 370 U | 380 U | 400 U | 390 UR |
| BENZO(B)FLUORANTHENE | NA | NA | NA | NA |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | NA | NA | NA | NA |
| C1-CHRYSENES | NA | NA | NA | NA |

| LOCATION | SB-488 | SB-488 | SB-488 | SB-488 |
|---|---|---|---|---|
| SAMPLE ID | SB-488-0203 | SB-488-0304 | SB-488-0506 | SB-488-0708 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA |
| CHRYSENE | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | NA | NA | NA | NA |
| FLUORANTHENE | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | |
| 4,4'-DDD | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | |
| ANTIMONY | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA |
| MERCURY | 0.019 U | 0.019 U | 0.02 U | 0.02 U |
| MOLYBDENUM | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | |

| LOCATION | SB-488 | SB-488 | SB-488 | SB-488 |
|---|---|---|---|---|
| SAMPLE ID | SB-488-0203 | SB-488-0304 | SB-488-0506 | SB-488-0708 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | |
| PERCENT SOLIDS | 88.5 | 86.3 | 82.1 | 85.2 |
| TOTAL SOLIDS | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | |
| PH | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | |
| ACTINIUM-228 | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA |

**Table A-27**
**Summary of Analytical Results for Subsurface Soils, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-282RE-10 | H-SB-282RE-3 | H-SB-282RE-4 | H-SB-282RE-5 | H-SB-282RE-6 | H-SB-282RE-7 | H-SB-282RE-7-AVG | H-SB-282RE-7-D | H-SB-282RE-8 | H-SB-282RE-9 |
| SAMPLE DATE | | | | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 |
| BOTTOM DEPTH | | | | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1080 | 149 | 182 | 1063 | 539 | 180 | 105 | 30 | 71 | 3534 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1080 | 149 | 182 | 1063 | 539 | 180 | 105 | 30 | 71 | 3534 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 810 | 110 | 140 | 910 | 470 | 160 J | 95.5 | 31 J | 58 | 3300 |
| BENZO(A)PYRENE | 22 | 15 | C | 700 | 88 | 110 | 670 | 330 | 100 J | 60.5 | 21 J | 38 | 2300 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 920 | 110 | 120 | 840 | 470 | 160 J | 94 | 28 J | 62 | 3200 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 300 | 41 | 68 | 270 | 150 | 60 J | 35.5 | 11 J | 12 | 980 |
| CHRYSENE | 22000 | 15000 | C | 960 | 110 | 160 | 1000 | 520 | 170 J | 102.5 | 35 J | 70 | 3900 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 160 | 32 | 37 | 170 | 91 | 39 J | 19.875 | 1.5 UJ | 18 | 430 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 430 | 64 | 82 | 440 | 220 | 84 J | 54.5 | 25 J | 31 | 1400 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 4280 | 555 | 717 | 4300 | 2251 | 773 | 462 | 151 | 289 | 15510 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B | SB-282B | SB-282B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-282REA-3 | H-SB-282REA-5 | H-SB-282REA-7 | H-SB-282REA-9 | H-SB-282REA-9-AVG | H-SB-282REA-9-D | H-SB-282REB-3 | H-SB-282REB-5 | H-SB-282REB-7 | H-SB-282REB-9 |
| SAMPLE DATE | | | | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 24 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 3.5 | 1.6 U | 1.5 U | 1658 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 24 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.9 | 1.6 U | 1.5 U | 1657 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 15 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 11 | 1.2 U | 1.1 U | 2000 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 18 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1200 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 18 | 1.4 U | 1.4 U | 1.35 U | 1.3 U | 7.9 | 1.5 U | 1.4 U | 1700 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2 U | 1.9 U | 1.9 U | 1.9 U | 2 U | 2.1 U | 2 U | 740 |
| CHRYSENE | 22000 | 15000 | C | 1 U | 13 | 1.1 U | 1 U | 1 U | 1 U | 10 | 1.1 U | 1.1 U | 2300 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 3.4 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 24 | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 1.8 U | 770 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 88 | 0 U | 0 U | 0 U | 0 U | 28.9 | 0 U | 0 U | 8710 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282D | SB-282D | SB-282D | SB-282D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-282REC-3 | H-SB-282REC-5 | H-SB-282REC-7 | H-SB-282REC-9 | H-SB-282REC-9-AVG | H-SB-282REC-9-D | H-SB-282RED-3 | H-SB-282RED-5 | H-SB-282RED-7 | H-SB-282RED-9 |
| SAMPLE DATE | | | | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | | | | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 307 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 307 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 220 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 210 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 210 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 1.9 U | 2 U | 1.9 U | 1.95 U | 2 U | 1.9 U | 2 U | 2.1 U | 90 |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1.1 U | 230 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 42 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 110 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 1112 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-283 | SB-283 | SB-284 | SB-284 | SB-474 | SB-474 | SB-604 | SB-604 | SB-604 | SB-604 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-283RE-3 | H-SB-283RE-4 | H-SB-284RE-3 | H-SB-284RE-4 | H-SB-474RE-5 | H-SB-474RE-6 | H-SB-604-3 | H-SB-604-4 | H-SB-604-5 | H-SB-604-6 |
| SAMPLE DATE | | | | 20090924 | 20090924 | 20090925 | 20090925 | 20090928 | 20090928 | 20090924 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 4 | 3 | 4 | 5 | 6 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | | | | 3 | 4 | 3 | 4 | 5 | 6 | 3 | 4 | 5 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.6 U | 13 | 16 | 1.5 U | 195 | 1.6 U | 364 | 125 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 12 | 15 | 1.5 U | 195 | 1.6 U | 364 | 124 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.2 U | 12 | 13 | 1.1 U | 130 | 1.2 U | 270 | 110 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 10 | 11 | 1.5 U | 130 | 1.6 U | 260 | 98 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.5 U | 11 | 8.6 | 1.4 U | 110 | 1.5 U | 260 | 100 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 2 U | 2.1 U | 2.1 U | 7.8 | 1.9 U | 64 | 2.1 U | 91 | 36 |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1.1 U | 1.1 U | 12 | 11 | 1 U | 150 | 1.1 U | 270 | 110 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 33 | 1.6 U | 37 | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.8 U | 1.9 U | 1.8 U | 18 | 1.7 U | 68 | 1.8 U | 130 | 49 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 45 | 69.4 | 0 U | 685 | 0 U | 1318 | 503 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-604 | SB-604A | SB-604A | SB-604A | SB-604B | SB-604B | SB-604B | SB-604D | SB-604D | SB-604D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-604-7 | H-SB-604A-3 | H-SB-604A-5 | H-SB-604A-7 | H-SB-604B-3 | H-SB-604B-5 | H-SB-604B-7 | H-SB-604D-3 | H-SB-604D-3-AVG | H-SB-604D-3-D |
| SAMPLE DATE | | | | 20090924 | 20091109 | 20091109 | 20091109 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 3 | 3 |
| BOTTOM DEPTH | | | | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 3 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 34 | 1.6 U | 1.5 U | 1728 | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 34 | 1.6 U | 1.5 U | 1728 | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.2 U | 19 | 1.1 U | 1.1 U | 1400 | 1.1 U | 1.2 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 28 | 1.6 U | 1.5 U | 1200 | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.5 U | 16 | 1.4 U | 1.4 U | 1200 | 1.4 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2.1 U | 11 | 2 U | 2 U | 530 | 2 U | 2.1 U | 2.1 U | 2.1 U |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 21 | 1.1 U | 1 U | 1300 | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 210 | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.9 U | 19 | 1.8 U | 1.7 U | 510 | 1.8 U | 1.9 U | 1.9 U | 1.9 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 114 | 0 U | 0 U | 6350 | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-604D | SB-604D | SB-605 | SB-605 | SB-606 | SB-606 | SB-607 | SB-607 | SB-608 | SB-608 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | H-SB-604D-5 | H-SB-604D-7 | H-SB-605-3 | H-SB-605-4 | H-SB-606-3 | H-SB-606-4 | H-SB-607-3 | H-SB-607-4 | H-SB-608-3 | H-SB-608-4 |
| SAMPLE DATE | | | 20091110 | 20091110 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090925 | 20090925 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 7 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | | | 5 | 7 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 (4) | 63000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (4) | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.7 U | 1.7 U | 23 | 1.5 U | 2.6 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 2.7 |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.7 U | 1.7 U | 23 | 1.5 U | 0.9 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 0.9 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.2 U | 1.3 U | 21 | 1.1 U | 9 | 1.1 U | 1.2 U | 1.1 U | 1.2 U | 9 |
| BENZO(A)PYRENE | 22 | 15 C | 1.7 U | 1.7 U | 17 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.6 U | 1.6 U | 15 | 1.3 U | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2.2 U | 2.3 U | 8.3 | 1.9 U | 1.9 U | 2 U | 2.1 U | 2 U | 2.1 U | 2.1 U |
| CHRYSENE | 22000 | 15000 C | 1.2 U | 1.2 U | 21 | 1 U | 1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.9 U | 2 U | 19 | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 1.8 U | 1.9 U | 1.9 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 101.3 | 0 U | 9 | 0 U | 0 U | 0 U | 0 U | 9 |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (8) | 12000 N(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (9) | 2.3 N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-608 | SB-608 | SB-609 | SB-609 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-608-4-AVG | H-SB-608-4-D | H-SB-609-3 | H-SB-609-4 | H-SB-610-3 | H-SB-610-4 | H-SB-610-5 | H-SB-610-6 | H-SB-610-7 | H-SB-610B-3 |
| SAMPLE DATE | | | | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20091109 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 4 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 |
| BOTTOM DEPTH | | | | 4 | 4 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.8 | 1.7 U | 20 | 47 | 477 | 62 | 20 | 1.6 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 0.9 | 1.7 U | 20 | 46 | 477 | 61 | 19 | 1.6 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4.8 | 1.2 U | 19 | 44 | 410 | 54 | 22 J | 1.1 UJ | 1.1 UJ | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.65 U | 1.7 U | 16 | 36 | 320 | 47 | 15 J | 1.6 UJ | 1.5 UJ | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | 16 | 37 | 320 | 50 | 15 J | 1.4 UJ | 1.4 UJ | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.15 U | 2.2 U | 2.1 U | 20 | 140 | 17 | 8.7 J | 2 UJ | 2 UJ | 2.1 U |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 20 | 46 | 400 | 59 | 23 J | 1.1 UJ | 1.1 UJ | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.65 U | 1.7 U | 1.6 U | 1.6 U | 66 | 1.6 U | 1.5 UJ | 1.6 UJ | 1.5 UJ | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 1.9 U | 1.9 U | 16 | 160 | 37 | 1.8 UJ | 1.8 UJ | 1.8 UJ | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 4.5 | 0 U | 71 | 199 | 1816 | 264 | 83.7 | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | 36 J | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-610B | SB-610B | SB-610B | SB-610C | SB-610C | SB-610D | SB-610D | SB-611 | SB-611 | SB-611 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-610B-5 | H-SB-610B-5-AVG | H-SB-610B-5-D | H-SB-610C-3 | H-SB-610C-5 | H-SB-610D-3 | H-SB-610D-5 | H-SB-611-3 | H-SB-611-4 | H-SB-611-5 |
| SAMPLE DATE | | | | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 5 | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 |
| BOTTOM DEPTH | | | | 5 | 5 | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 736 | 1.6 U | 10 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 736 | 1.6 U | 9.3 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.15 U | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 1.1 U | 570 | 1.2 U | 11 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 520 | 1.6 U | 8.2 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.45 U | 1.5 U | 1.5 U | 1.4 U | 1.5 U | 1.4 U | 520 | 1.5 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2.05 U | 2.1 U | 2.1 U | 2 U | 2.1 U | 2 U | 190 | 2.1 U | 2.1 U |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 600 | 1.1 U | 11 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 80 | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 1.8 U | 1.9 U | 1.8 U | 1.8 U | 1.8 U | 240 | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 2720 | 0 U | 30.2 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-611 | SB-611 | SB-611A | SB-611A | SB-611D | SB-611D | SB-611D | SB-611D | SB-614 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-611-6 | H-SB-611-7 | H-SB-611A-3 | H-SB-611A-5 | H-SB-611D-3 | H-SB-611D-5 | H-SB-611D-5-AVG | H-SB-611D-5-D | H-SB-614-10 |
| SAMPLE DATE | | | | 20090925 | 20090925 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 6 | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| BOTTOM DEPTH | | | | 6 | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.5 U | 30 | 323 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 5337 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | 29 | 323 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 5330 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.1 U | 17 | 310 | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 3900 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | 24 | 210 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 4300 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.4 U | 14 | 270 | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 4100 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2 U | 11 | 90 | 2 U | 2.1 U | 2.1 U | 2.1 U | 1600 |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 18 | 330 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 3600 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.6 U | 43 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 15 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 18 | 110 | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 2100 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 102 | 1363 | 0 U | 0 U | 0 U | 0 U | 19600 |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | MRC-MW08A | SB-200 | SB-200 | SB-201 | SB-201 | SB-202 | SB-202 | SB-203 | SB-203 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | MRC-MW08[0809] | SB-200-05 | SB-200-10 | SB-201-05 | SB-201-10 | SB-202-05 | SB-202-10 | SB-203-05 | SB-203-10 | SB-282-0405 |
| SAMPLE DATE | | | | 20050524 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20051026 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 4 |
| BOTTOM DEPTH | | | | 9 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | 1.1 B | 3.3 | 0.62 B | 1.7 B | 0.81 B | 0.55 B | 0.8 B | 1.3 B | 6 U |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | 2.18 U | 0.94 J | 1.98 U | 2.1 U | 2.09 U | 2.02 U | 2.35 U | 1.98 U | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | 8.72 U | 2.14 J | 7.39 J | 5.33 J | 4.17 J | 8.08 U | 9.41 U | 7.92 U | 29 UR |
| ACETONE | 7000000 | 6100000 | N | NA | 12.8 J | 12.7 J | 111 J | 63 J | 78 J | 4.4 J | 9.3 J | 30 J | 15 B |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | 2.2 U | 0.68 J | 1.9 J | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U | 6 U |
| ETHYLBENZENE | 780000 | 5400 | C | NA | 2.2 U | 1.2 J | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U | 6 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | 4.4 U | 4.9 | 4 U | 4.2 U | 4.2 U | 4 U | 4.7 U | 4 U | 12 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | 4.4 U | 4.1 U | 4 U | 3.8 J | 4.2 U | 4 U | 4.7 U | 2.4 J | 6 B |
| NAPHTHALENE | 160000 | 3600 | C | NA | 28.1 | 66.4 | 0.56 J | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U | 6 U |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | 2.2 U | 1.2 J | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U | 6 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | 9 U | 5 J | 5 J | 6 J | 8 U | 8 U | 9 U | 6 J | 12 UR |
| TOLUENE | 630000 | 500000 | N | NA | 2.2 U | 3.8 | 1.5 J | 7.6 | 6.4 | 5.7 | 5.4 | 5.3 | 6 U |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | 2.2 U | 1.1 J | 2 U | 2.7 | 2.7 | 2.5 | 2.5 | 2.4 | 6 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | 2.2 U | 2 U | 2 U | 2.1 U | 0.74 J | 0.74 J | 2.4 U | 2 U | 12 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | 791 U | 785 U | 48.7 J | 51 J | 795 U | 773 U | 43.1 J | 43 J | 960 UJ |
| DIBENZOFURAN | 7800 | 7800 | N | NA | 118 U | 91 J | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U | 380 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | 201 U | 199 U | 38 J | 213 U | 202 U | 196 U | 201 U | 195 U | 380 U |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | 118 U | 34 J | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U | 380 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | 41.7 J | 452 | 82.1 U | 87.7 U | 83 U | 80.8 U | 82.7 U | 80.3 U | 380 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | 39 J | 412 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | 36 J | 381 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | 83 U | 82 U | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | 72 J | 595 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | 165 | 943 | 82 U | 100 | 83 U | 120 | 83 U | 80 U | 380 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | 124 | 943 | 82 U | 2.3 | 83 U | 75 | 83 U | 80 U | 380 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | 111 | 752 | 82 U | 23 J | 83 U | 54 J | 83 U | 80 U | 380 U |
| BENZO(A)PYRENE | 22 | 15 | C | NA | 100 | 671 | 82 U | 88 U | 83 U | 63 J | 83 U | 80 U | 380 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | 61 J | 435 | 82 U | 88 U | 83 U | 61 J | 83 U | 80 U | 380 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | 69 J | 337 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | 78 J | 536 | 82 U | 88 U | 83 U | 55 J | 83 U | 80 U | 380 U |
| CHRYSENE | 22000 | 15000 | C | NA | 118 | 819 | 82 U | 30 J | 83 U | 63 J | 83 U | 80 U | 380 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | 83 U | 116 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | 253 | 1770 | 82 U | 42 J | 83 U | 86 | 83 U | 80 U | 380 U |
| FLUORENE | 310000 | 230000 | N | NA | 52 J | 507 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | 55 J | 311 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | 83 U | 260 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | 329 | 2610 | 82 U | 88 U | 83 U | 48 J | 83 U | 80 U | 380 U |
| PYRENE | 230000 | 170000 | N | NA | 269 | 1960 | 82 U | 34 J | 83 U | 128 | 83 U | 80 U | 380 U |
| TOTAL PAHS | NC | NC | | NA | 1642 | 12472 | 0 U | 129 | 0 U | 558 | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | 0.3 U | 0.4 U | 0.9 | 0.2 U | 0.4 U | 0.3 U | 0.3 U | 0.8 | 0.67 UR |
| ARSENIC | 0.43 | 0.39 | C | NA | 5 | 4 | 3 | 1 | 4 | 2 | 3 | 4 | 3.5 |
| BARIUM | 1600 | 1500 | N | NA | 36 | 79 | 26 | 15 | 25 | 20 | 22 | 15 | 11.6 |
| BERYLLIUM | 16 | 16 | N | NA | 1.9 | 3.6 | 0.6 | 0.6 | 3.3 | 4.5 | 1.6 | 0.5 | 1.8 |
| CADMIUM | 3.9 | 7 | N | NA | 0.1 | 0.09 | 0.08 | 0.04 U | 0.2 | 0.2 | 0.08 | 0.09 | 0.07 U |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | 39.4 | 38.9 | 18 | 14.4 | 31.8 | 32.1 | 31.9 | 20.6 | 18.5 K |
| COBALT | NC | 2.3 | N | NA | 27.1 | 10.8 | 2.4 | 8.1 | 14.9 | 10.4 | 30.8 | 8.3 | 6.7 |
| COPPER | 310 | 310 | N | NA | 14 | 17 | 10 | 6 | 12 | 10 | 23 | 12 | 23 K |
| LEAD | 400 | 400 | | NA | 14 | 17 | 4 B | 5 | 17 | 11 | 13 | 5 | 5.7 |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | 0.02 L | 0.01 L | 0.24 L | 0.17 L | 0.002 UR | 0.002 UR | 0.02 L | 0.03 L | 0.01 U |
| MOLYBDENUM | NC | 39 | N | NA | 0.5 U | 0.6 U | 0.6 U | 0.5 B | 0.6 U | 0.5 U | 0.5 U | 0.5 U | 0.43 B |
| NICKEL | 160 | 150 | N | NA | 22 | 27 | 5 | 10 | 35 | 33 | 44 | 19 | 17.7 |
| SELENIUM | 39 | 39 | N | NA | 2 U | 3 | 2 U | 3 | 2 U | 2 U | 2 U | 2 U | 0.59 UL |
| SILVER | 39 | 39 | N | NA | 0.2 B | 0.3 B | 0.06 U | 0.3 B | 0.06 U | 0.05 U | 0.3 B | 0.05 U | 0.08 U |
| VANADIUM | 7.8 | 39 | N[11] | NA | 45.9 | 52.9 | 33.9 | 25.7 | 52.2 | 39.7 | 49.2 | 39.2 | 27.2 K |
| ZINC | 2300 | 2300 | N | NA | 44 | 62 | 25 | 30 | 51 | 68 | 55 | 26 | 28.1 K |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | 64400 | 173000 | 11100 | 30000 | 3800 B | 15900 | 13000 | 2400 B | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | 13100 U | 11800 U | 11200 U | 15200 U | 12300 U | 9550 U | 10500 U | 8550 U | 2900 U |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | 4600 J |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | 86 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | 0.4 U | 0.4 U | NA | NA | 0.4 U | 0.3 U | 0.78 | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | 1350 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | 4.9 | 5 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-282 | SB-283 | SB-283 | SB-284 | SB-284 | SB-285 | SB-285 | SB-286 | SB-286 | SB-293 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-282-0910 | SB-283-0405 | SB-283-0910 | SB-284-0405 | SB-284-0910 | SB-285-0405 | SB-285-0910 | SB-286-0405 | SB-286-0910 | SB-293-0405 |
| SAMPLE DATE | | | | 20051026 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051028 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 |
| BOTTOM DEPTH | | | | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 6 U | 6 U | 6 U | 7 U | 6 U | 0.8 J | 6 U | 7 U | 6 U | 6 UJ |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 UJ |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 29 UR | 30 UR | 30 UR | 36 UR | 30 UR | 31 UR | 30 UR | 33 UR | 30 UR | 30 UR |
| ACETONE | 7000000 | 6100000 | N | 6 B | 14 J | 30 UR | 7 J | 30 UR | 13 J | 12 J | 70 J | 30 UR | 32 J |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 UJ |
| ETHYLBENZENE | 780000 | 5400 | C | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 UJ |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 11 U | 12 U | 12 U | 14 U | 12 U | 12 U | 12 U | 13 U | 12 U | 12 UJ |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 9 B | 3 B | 6 U | 4 B | 4 B | 7 B | 6 B | 8 B | 6 B | 11 B |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | 6 U | 6 U | 3 J | 5 J | 130 | 34 | 12 | 6 J | 6 UJ |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 UJ |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 11 UR | 12 UR | 12 UR | 14 UR | 12 UR | 12 UR | 12 UR | 13 UR | 12 UR | 12 UR |
| TOLUENE | 630000 | 500000 | N | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 UJ |
| TRICHLOROETHENE | 1600 | 2800 | C | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 UJ |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 11 U | 12 U | 12 U | 14 U | 12 U | 12 U | 12 U | 13 U | 12 U | 2 J |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | 940 UJ | 990 UJ | 970 UJ | 1200 UJ | 970 UJ | 1000 U | 980 U | 1100 U | 1000 U | 990 U |
| DIBENZOFURAN | 7800 | 7800 | N | 380 U | 400 U | 390 U | 470 U | 390 U | 110 J | 390 U | 440 U | 400 U | 400 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U | 400 U | 400 U |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U | 400 U | 400 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 380 U | 400 U | 390 U | 340 J | 390 U | 700 | 340 J | 440 U | 220 J | 400 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 380 U | 400 U | 390 U | 260 J | 390 U | 1100 | 410 | 440 U | 84 J | 400 U |
| ACENAPHTHENE | 470000 | 340000 | N | 380 U | 400 U | 390 U | 140 J | 390 U | 430 | 240 J | 440 U | 190 J | 400 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U | 400 U | 400 U |
| ANTHRACENE | 2300000 | 1700000 | N | 70 J | 400 U | 390 U | 120 J | 390 U | 580 | 310 J | 440 U | 290 J | 400 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 397 | 400 U | 390 U | 470 U | 390 U | 1415 | 899 | 440 U | 635 | 400 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 188 | 400 U | 390 U | 470 U | 390 U | 1210 | 704 | 440 U | 433 | 400 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 200 J | 400 U | 390 U | 470 U | 390 U | 900 | 520 | 440 U | 400 J | 400 U |
| BENZO(A)PYRENE | 22 | 15 | C | 150 J | 400 U | 390 U | 470 U | 390 U | 960 | 560 | 440 U | 340 J | 400 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 170 J | 400 U | 390 U | 470 U | 390 U | 960 | 570 | 440 U | 340 J | 400 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 380 U | 400 U | 390 U | 470 U | 390 U | 650 | 340 J | 440 U | 210 J | 400 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 97 J | 400 U | 390 U | 470 U | 390 U | 360 J | 86 J | 440 U | 400 U | 400 U |
| CHRYSENE | 22000 | 15000 | C | 240 J | 400 U | 390 U | 470 U | 390 U | 1200 | 650 | 440 U | 490 | 400 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U | 400 U | 400 U |
| FLUORANTHENE | 310000 | 230000 | N | 430 | 110 J | 390 U | 140 J | 390 U | 1400 | 820 | 440 U | 620 | 400 U |
| FLUORENE | 310000 | 230000 | N | 380 U | 400 U | 390 U | 210 J | 390 U | 480 | 280 J | 440 U | 250 J | 400 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 380 U | 400 U | 390 U | 470 U | 390 U | 590 | 330 J | 440 U | 190 J | 400 U |
| NAPHTHALENE | 160000 | 3600 | C | 380 U | 400 U | 390 U | 250 J | 390 U | 1200 | 460 | 440 U | 110 J | 400 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 530 | 120 J | 390 U | 570 | 390 U | 2200 | 1300 | 440 U | 1300 | 400 U |
| PYRENE | 230000 | 170000 | N | 720 | 180 J | 390 U | 220 J | 390 U | 2900 | 1700 | 440 U | 1100 | 400 U |
| TOTAL PAHS | NC | NC | | 2607 | 410 | 0 U | 1910 | 0 U | 15910 | 8576 | 0 U | 5914 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.34 UR | 0.65 UL | 0.88 UL | 1.18 UL | 0.61 UL | 1.29 UL | 1.34 UL | 0.46 UL | 0.37 UL | 0.36 U |
| ARSENIC | 0.43 | 0.39 | C | 5.2 | 1.6 B | 7.4 | 5.3 B | 1.9 B | 4.9 B | 5.2 B | 0.54 B | 0.77 B | 2.7 |
| BARIUM | 1600 | 1500 | N | 2.8 | 22.7 | 19.7 | 20 | 46.6 | 13.8 | 41.2 | 28.9 | 17.5 | 11.7 |
| BERYLLIUM | 16 | 16 | N | 0.33 L | 0.9 | 2.1 | 2.6 | 2 | 1.7 | 2.2 | 0.51 | 0.34 | 0.48 |
| CADMIUM | 3.9 | 7 | N | 0.03 U | 0.06 U | 0.09 U | 0.12 U | 0.06 U | 0.13 U | 0.13 U | 0.05 U | 0.04 U | 0.38 U |
| CHROMIUM | 12000 [8] | 12000 | N[8] | 19.6 K | 39.2 | 27 | 28.9 | 24.5 | 31.4 | 27 | 90.4 | 54.1 | 12.6 |
| COBALT | NC | 2.3 | N | 4 | 8.4 | 18.4 | 8.4 | 17.5 | 8.1 | 7.6 | 1.8 | 3 | 3.3 |
| COPPER | 310 | 310 | N | 6.7 K | 5 K | 14.5 | 16.2 | 10.7 | 14.8 | 18.2 | 4.1 | 2.3 B | 8.3 |
| LEAD | 400 | 400 | | 3.6 | 5 | 9.4 | 9.3 | 7.1 | 6.6 | 8.9 | 5.9 | 1.8 | 3.7 |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.02 |
| MOLYBDENUM | NC | 39 | N | 0.53 B | 0.16 U | 0.34 | 0.19 U | 0.15 U | 0.33 | 0.74 | 0.23 U | 0.28 | 0.46 |
| NICKEL | 160 | 150 | N | 6.8 | 13.5 | 43.1 | 37.2 | 23.5 | 22.2 | 30.9 | 5.9 | 2.7 | 5.2 |
| SELENIUM | 39 | 39 | N | 0.3 UL | 0.57 U | 0.77 U | 1.03 U | 0.53 U | 1.12 U | 1.17 U | 0.41 U | 0.32 U | 0.31 UL |
| SILVER | 39 | 39 | N | 0.09 U | 0.08 UL | 0.07 UL | 0.1 UL | 0.08 UL | 0.07 UL | 0.07 UL | 0.12 UL | 0.09 UL | 0.38 UL |
| VANADIUM | 7.8 | 39 | N[11] | 34.4 K | 20.4 | 45.9 | 43.8 | 30.6 | 35.6 | 42.6 | 24.6 | 5.7 | 28.6 |
| ZINC | 2300 | 2300 | N | 9.5 K | 40.2 | 83.1 | 65.5 | 47.3 | 45.1 | 79.2 | 11.8 | 21 | 11.9 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 2900 U | 2700 U | 2700 U | 3600 | 2900 U | 2800 U | 2800 U | 2800 U | 6100 | 9000 |
| TPH (C09-C36) | NC | NC | | 130000 | 19000 | 4900 B | 8700 B | 2200 B | 200000 | 54000 | 4500 B | 110000 | 2900 J |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | 87 | 83 | 84 | 70 | 85 | 81 | 84 | 75 | 82 | 83 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-293 | SB-294 | SB-294 | SB-462 | SB-462 | SB-462 | SB-462 | SB-463 | SB-463 | SB-463 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-293-0910 | SB-294-0405 | SB-294-0910 | SB-462-0203 | SB-462-0304 | SB-462-0506 | SB-462-0708 | SB-463-0203 | SB-463-0304 | SB-463-0506 |
| SAMPLE DATE | | | | 20051028 | 20051028 | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 4 | 9 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | | | | 10 | 5 | 10 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 30 UR | 30 UR | 31 UR | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 17 J | 37 L | 16 J | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 12 U | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 9 B | 10 B | 5 B | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 12 UR | 12 UR | 12 UR | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 12 U | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | 980 U | 980 U | 1000 U | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 390 U | 390 U | 400 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.8 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 390 U | 390 U | 400 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.8 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 390 U | 390 U | 400 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.8 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.31 U | 0.44 U | 0.43 U | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 1.7 | 2.4 | 3.4 | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | 2.9 | 8.7 | 11 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 0.14 B | 0.31 B | 0.37 B | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 0.33 U | 0.46 U | 0.45 U | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | 7.5 | 9.4 | 16.6 | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | 1.8 | 2.6 | 3 | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 6.6 | 5.3 | 9.3 | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 1.6 | 2.6 | 3.5 | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.01 U | 0.01 | 0.01 U | 0.21 | 0.019 U | 0.021 U | 0.02 U | 0.063 | 0.021 U | 0.021 U |
| MOLYBDENUM | NC | 39 | N | 0.17 | 0.3 K | 1.2 | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 3 | 3.4 | 5.1 | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 0.27 UL | 0.38 U | 0.37 U | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | 0.44 L | 0.47 UL | 0.46 UL | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | 13.7 | 17.8 | 26.3 | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 4 | 9 | 10.5 | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 2800 U | 2800 U | 2900 U | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | 3800 J | 6000 U | 6100 U | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | 87.1 | 87.1 | 79.1 | 81.5 | 73.9 | 78.8 | 81.1 |
| TOTAL SOLIDS | NC | NC | | 84 | 84 | 81 | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-463 | SB-464 | SB-464 | SB-464 | SB-464 | SB-465 | SB-465 | SB-465 | SB-465 | SB-466 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-463-0708 | SB-464-0203 | SB-464-0304 | SB-464-0506 | SB-464-0708 | SB-465-0203 | SB-465-0304 | SB-465-0506 | SB-465-0708 | SB-466-0203 |
| SAMPLE DATE | | | | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | | | | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U | 1.5 U | 1.6 UJ | 1.5 U | 1.4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.021 U | 0.019 U | 0.021 U | 0.021 U | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.02 U | 0.019 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 80 | 89.4 | 81 | 79.3 | 84.7 | 89.9 | 84.7 | 83.9 | 84.2 | 89.8 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-466 | SB-466 | SB-466 | SB-467 | SB-467 | SB-467 | SB-467 | SB-468 | SB-468 | SB-468 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-466-0304 | SB-466-0506 | SB-466-0708 | SB-467-0203 | SB-467-0304 | SB-467-0506 | SB-467-0708 | SB-468-0203 | SB-468-0304 | SB-468-0506 |
| SAMPLE DATE | | | | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | | | | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.019 U | 0.02 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.02 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 88.6 | 82.9 | 84.4 | 88.6 | 88.5 | 83.6 | 86.4 | 85.5 | 85.1 | 83.9 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-468 | SB-469 | SB-469 | SB-469 | SB-469 | SB-620 | SB-620 | SB-620 | SB-620 | SB-621 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-468-0708 | SB-469-0203 | SB-469-0304 | SB-469-0506 | SB-469-0708 | H-SB-620-5 | H-SB-620-6 | H-SB-620-6-AVG | H-SB-620-6-D | H-SB-621-5 |
| SAMPLE DATE | | | | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 2 | 3 | 5 | 7 | 5 | 6 | 6 | 6 | 5 |
| BOTTOM DEPTH | | | | 8 | 3 | 4 | 6 | 8 | 5 | 6 | 6 | 6 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | **23** | 1.5 U | 1.5 U | 1.5 U | **22** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | **22** | 1.5 U | 1.5 U | 1.5 U | **21** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | 21 | 1.1 U | 1.1 U | 1.1 U | 17 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | **17** | 1.5 U | 1.5 U | 1.5 U | **16** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | 20 | 1.4 U | 1.4 U | 1.4 U | 14 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | 2 U | 2 U | 2 U | 2 U | 2 U |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | 24 | 1.1 U | 1.05 U | 1 U | 18 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | 7.9 | 1.8 U | 1.75 U | 1.7 U | 18 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 89.9 | 0 U | 0 U | 0 U | 83 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.02 U | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.6 | 87.4 | 82.2 | 83.6 | 84.6 | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-621 | SB-622 | SB-622 | SB-623 | SB-623 | SB-814 | SB-814 | SB-814 | SB-814 | SB-815 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-621-6 | H-SB-622-5 | H-SB-622-6 | H-SB-623-5 | H-SB-623-6 | H-SB-814-03 | H-SB-814-05 | H-SB-814-07 | H-SB-814-09 | H-SB-815-03 |
| SAMPLE DATE | | | | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 6 | 5 | 6 | 5 | 6 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | | 6 | 5 | 6 | 5 | 6 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 40 | 3.5 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 37 | 3.5 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 34 | 3.5 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 100 | 3.5 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 170 | 3.5 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 3.546 | 1.5 U | 34 | 44 | 3.9 U | 3.7 U | 3.9 U | 722 | 3.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.951 | 1.5 U | 33 | 43 | 3.9 U | 3.7 U | 3.9 U | 722 | 3.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 11 | 1.1 U | 22 | 26 | 3.9 U | 3.7 U | 3.9 U | 470 | 3.5 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 27 | 35 | 3.9 U | 3.7 U | 3.9 U | 520 | 3.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 8.4 | 1.4 U | 25 | 34 | 3.9 U | 3.7 U | 3.9 U | 480 | 3.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 360 | 3.5 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 2 U | 1.9 U | 13 | 16 | 3.9 U | 3.7 U | 3.9 U | 250 | 3.5 U |
| CHRYSENE | 22000 | 15000 | C | 1 U | 11 | 1 U | 26 | 34 | 1.3 UJ | 1.2 UJ | 1.3 UJ | 510 | 1.2 UJ |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 3.9 U | 3.7 U | 3.9 U | 76 | 3.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 720 | 3.5 U |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 63 | 3.5 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.7 U | 1.7 U | 15 | 21 | 3.9 U | 3.7 U | 3.9 U | 280 | 3.5 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 28 | 3.5 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 460 | 3.5 U |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 1400 | 3.5 U |
| TOTAL PAHS | NC | NC | | 0 U | 30.4 | 0 U | 128 | 166 | 0 U | 0 U | 0 U | 5958 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-815 | SB-815 | SB-815 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-817 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | H-SB-815-05 | H-SB-815-07 | H-SB-815-09 | H-SB-816-03 | H-SB-816-03-AVG | H-SB-816-03-D | H-SB-816-05 | H-SB-816-07 | H-SB-816-09 | H-SB-817-03 |
| SAMPLE DATE | | | 20100826 | 20100826 | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | 5 | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 (4) | 63000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (4) | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | 3.9 U | 3.9 U | 4.1 U | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 4.1 U | 3.7 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | 3.9 U | 3.9 U | 4.1 U | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 4.1 U | 3.7 U |
| ACENAPHTHENE | 470000 | 340000 N | 3.9 U | 3.9 U | 4.1 U | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 30 J | 3.7 UJ |
| ACENAPHTHYLENE | 470000 | 340000 N(9) | 3.9 U | 3.9 U | 4.1 U | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 4.1 U | 3.7 U |
| ANTHRACENE | 2300000 | 1700000 N | 3.9 U | 3.9 U | 4.1 U | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 34 J | 3.7 UJ |
| BAP EQUIVALENT-HALFND | 22 | 15 | 11 | 3.9 U | 58 | 3.7 U | 3.75 U | 3.8 U | 25 | 3.8 U | 79 | 3.7 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 8.7 | 3.9 U | 56 | 3.7 U | 3.75 U | 3.8 U | 23 | 3.8 U | 77 | 3.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 3.9 U | 3.9 U | 38 | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 42 | 3.7 U |
| BENZO(A)PYRENE | 22 | 15 C | 8.7 | 3.9 U | 45 | 3.7 UJ | 3.75 U | 3.8 UJ | 23 J | 3.8 UJ | 62 J | 3.7 UJ |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 3.9 U | 3.9 U | 45 | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 61 J | 3.7 UJ |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(7) | 3.9 U | 3.9 U | 40 | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 56 J | 3.7 UJ |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 3.9 U | 3.9 U | 23 | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 26 J | 3.7 UJ |
| CHRYSENE | 22000 | 15000 C | 1.3 UJ | 1.3 UJ | 43 J | 1.2 U | 1.25 U | 1.3 U | 1.3 U | 1.3 U | 48 | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 3.9 U | 3.9 U | 4.1 U | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 4.1 UJ | 3.7 UJ |
| FLUORANTHENE | 310000 | 230000 N | 10 | 3.9 U | 54 | 3.7 UJ | 3.75 U | 3.8 UJ | 24 J | 3.8 UJ | 81 J | 3.7 UJ |
| FLUORENE | 310000 | 230000 N | 3.9 U | 3.9 U | 4.1 U | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 32 J | 3.7 UJ |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 3.9 U | 3.9 U | 27 | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 47 J | 3.7 UJ |
| NAPHTHALENE | 160000 | 3600 C | 3.9 U | 3.9 U | 4.1 U | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 4.1 U | 3.7 U |
| PHENANTHRENE | 2300000 | 170000 N(7) | 3.9 U | 3.9 U | 28 | 3.7 UJ | 3.75 U | 3.8 UJ | 16 J | 3.8 UJ | 77 J | 3.7 UJ |
| PYRENE | 230000 | 170000 N | 16 | 3.9 U | 88 | 3.7 U | 3.75 U | 3.8 U | 15 | 3.8 U | 110 | 3.7 U |
| TOTAL PAHS | NC | NC | 34.7 | 0 U | 431 | 0 U | 0 U | 0 U | 78 | 0 U | 706 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (8) | 12000 N(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (9) | 2.3 N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-817 | SB-817 | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-817-05 | H-SB-817-07 | H-SB-817-07-AVG | H-SB-817-07-D | H-SB-817-09 |
| SAMPLE DATE | | | | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | | | | 5 | 7 | 7 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 4 U | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4 U | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 4 U | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| ANTHRACENE | 2300000 | 1700000 | N | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 38 | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 36 | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 16 | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| BENZO(A)PYRENE | 22 | 15 | C | 32 J | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 21 J | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| CHRYSENE | 22000 | 15000 | C | 14 | 1.3 U | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| FLUORANTHENE | 310000 | 230000 | N | 33 J | 3.8 UJ | 3.8 U | 3.8 UJ | 21 J |
| FLUORENE | 310000 | 230000 | N | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| NAPHTHALENE | 160000 | 3600 | C | 4 U | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| PYRENE | 230000 | 170000 | N | 36 | 3.8 U | 3.8 U | 3.8 U | 11 |
| TOTAL PAHS | NC | NC | | 152 | 0 U | 0 U | 0 U | 32 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-470 | SB-470 | SB-470 | SB-470 | SB-471 | SB-471 | SB-471 | SB-471 | SB-472 | SB-472 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-470-0203 | SB-470-0304 | SB-470-0506 | SB-470-0708 | SB-471-0203 | SB-471-0304 | SB-471-0506 | SB-471-0708 | SB-472-0203 | SB-472-0304 |
| SAMPLE DATE | | | | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.6 U | 1.6 U | **21** | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | **21** | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | **21 J** | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 21 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.023 L | 0.019 UL | 0.02 UL | 0.02 UL | 0.021 UL | 0.021 UL | 0.02 UL | 0.02 UL | 0.019 UL | 0.02 UL |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 88.5 | 86.8 | 82.3 | 83.7 | 81.1 | 80.7 | 82.7 | 83.7 | 86.6 | 81.5 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-472 | SB-472 | SB-473 | SB-473 | SB-473 | SB-473 | SB-474 | SB-474 | SB-474 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-472-0506 | SB-472-0708 | SB-473-0203 | SB-473-0304 | SB-473-0506 | SB-473-0708 | SB-474-0203 | SB-474-0304 | SB-474-0506 | SB-474-0708 |
| SAMPLE DATE | | | 20071023 | 20071023 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 (4) | 63000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (4) | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N(6) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 31 | 490 | 1.4 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 31 | 490 | 1.4 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 31 J | 490 | 1.4 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N(7) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 31 | 490 | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (8) | 12000 N(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (9) | 2.3 N(10) | 0.02 UL | 0.02 UJ | 0.019 UL | 0.02 UL | 0.022 UL | 0.021 UL | 0.025 | 0.095 | 0.018 U | 0.019 U |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 83.1 | 83.2 | 87.9 | 85.1 | 76.1 | 80.5 | 86 | 77.6 | 90.9 | 86.3 |
| TOTAL SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-475 | SB-475 | SB-475 | SB-475 | SB-476 | SB-476 | SB-476 | SB-476 | SB-477 | SB-477 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-475-0203 | SB-475-0304 | SB-475-0506 | SB-475-0708 | SB-476-0203 | SB-476-0304 | SB-476-0506 | SB-476-0708 | SB-477-0203 | SB-477-0304 |
| SAMPLE DATE | | | | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.019 U | 0.02 U | 0.02 U | 0.02 U | 0.019 U | 0.021 U | 0.02 U | 0.02 U | 0.021 U | 0.021 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 87 | 81.8 | 81.4 | 83.3 | 85.8 | 79.9 | 83.3 | 83.6 | 78.2 | 79.8 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-477 | SB-477 | SB-478 | SB-478 | SB-478 | SB-478 | SB-479 | SB-479 | SB-479 | SB-479 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-477-0506 | SB-477-0708 | SB-478-0203 | SB-478-0304 | SB-478-0506 | SB-478-0708 | SB-479-0203 | SB-479-0304 | SB-479-0506 | SB-479-0708 |
| SAMPLE DATE | | | | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.02 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.6 | 84.9 | 87.7 | 85.1 | 86.7 | 83.8 | 85.9 | 83.8 | 84.6 | 85.9 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-480 | SB-480 | SB-480 | SB-480 | SB-481 | SB-481 | SB-481 | SB-481 | SB-482 | SB-482 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | SB-480-0203 | SB-480-0304 | SB-480-0506 | SB-480-0708 | SB-481-0203 | SB-481-0304 | SB-481-0506 | SB-481-0708 | SB-482-0203 | SB-482-0304 |
| SAMPLE DATE | | | 20071025 | 20071025 | 20071025 | 20071025 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 10 | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 10 | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 10 J | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 0 U | 0 U | 0 U | 10 | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 N[10] | 0.019 U | 0.019 U | 0.02 U | 0.019 U | 0.21 | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 0.02 U |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | 89.5 | 88.1 | 84.1 | 85.6 | 85.8 | 84.3 | 82.2 | 82.6 | 82.7 | 85.1 |
| TOTAL SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-482 | SB-482 | SB-483 | SB-483 | SB-483 | SB-483 | SB-484 | SB-484 | SB-484 | SB-484 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-482-0506 | SB-482-0708 | SB-483-0203 | SB-483-0304 | SB-483-0506 | SB-483-0708 | SB-484-0203 | SB-484-0304 | SB-484-0506 | SB-484-0708 |
| SAMPLE DATE | | | | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 28 | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 28 | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 28 J | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 28 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.02 U | 0.02 U | 0.035 | 0.02 U | 0.02 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84 | 82.7 | 82.9 | 81.6 | 83.5 | 82.9 | 86.2 | 82.7 | 86.5 | 84.2 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-485 | SB-485 | SB-485 | SB-485 | SB-486 | SB-486 | SB-486 | SB-486 | SB-487 | SB-487 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-485-0203 | SB-485-0304 | SB-485-0506 | SB-485-0708 | SB-486-0203 | SB-486-0304 | SB-486-0506 | SB-486-0708 | SB-487-0203 | SB-487-0304 |
| SAMPLE DATE | | | | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 43 | 1.5 U | 1.5 U | 1.5 U | 380 U | 390 U | 410 U | 390 U | 400 U | 380 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 43 | 1.5 U | 1.5 U | 1.5 U | 380 U | 390 U | 410 U | 390 U | 400 U | 380 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 43 J | 1.5 U | 1.5 U | 1.5 U | 380 U | 390 U | 410 U | 390 U | 400 U | 380 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 43 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.019 U | 0.02 U | 0.02 U | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 88.7 | 84.4 | 85 | 84.8 | 86.3 | 84.9 | 81.3 | 85.6 | 82.4 | 88 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-487 | SB-487 | SB-488 | SB-488 | SB-488 | SB-488 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-487-0506 | SB-487-0708 | SB-488-0203 | SB-488-0304 | SB-488-0506 | SB-488-0708 |
| SAMPLE DATE | | | | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 390 U | 390 U | 370 U | 380 U | 400 U | 390 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 390 U | 390 U | 370 U | 380 U | 400 U | 390 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 390 U | 390 U | 370 U | 380 U | 400 U | 390 UR |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.02 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U | 0.02 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 83.8 | 85.3 | 88.5 | 86.3 | 82.1 | 85.2 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA |

**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - The value is for xylenes.
5 - The value is for xylene, mixture.
6 - The value for acenaphthene is used as a surrogate for acenaphthylene.
7 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
8 - The value is for trivalent chromium.
9 - The value is for mercury (inorganic/mercuric dichloride).
10 - The value is for mercuric chloride.
11 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-282 H-SB-282RE-10 20090929 NORMAL SO NORMAL SB 10 10 | SB-282 H-SB-282RE-3 20090929 NORMAL SO NORMAL SB 3 3 | SB-282 H-SB-282RE-4 20090929 NORMAL SO NORMAL SB 4 4 | SB-282 H-SB-282RE-5 20090929 NORMAL SO NORMAL SB 5 5 | SB-282 H-SB-282RE-6 20090929 NORMAL SO NORMAL SB 6 6 | SB-282 H-SB-282RE-7 20090929 ORIG SO NORMAL SB 7 7 | SB-282 H-SB-282RE-7-AVG 20090929 AVG SO NORMAL SB 7 7 | SB-282 H-SB-282RE-7-D 20090929 DUP SO NORMAL SB 7 7 | SB-282 H-SB-282RE-8 20090929 NORMAL SO NORMAL SB 8 8 | SB-282 H-SB-282RE-9 20090929 NORMAL SO NORMAL SB 9 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1080 | 149 | 182 | 1063 | 539 | 180 | 105 | 30 | 71 | 3534 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1080 | 149 | 182 | 1063 | 539 | 180 | 105 | 30 | 71 | 3534 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 810 | 110 | 140 | 910 | 470 | 160 J | 95.5 | 31 J | 58 | 3300 |
| BENZO(A)PYRENE | 22 | 15 | C | 700 | 88 | 110 | 670 | 330 | 100 J | 60.5 | 21 J | 38 | 2300 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 920 | 110 | 120 | 840 | 470 | 160 J | 94 | 28 J | 62 | 3200 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 300 | 41 | 68 | 270 | 150 | 60 J | 35.5 | 11 J | 12 | 980 |
| CHRYSENE | 22000 | 15000 | C | 960 | 110 | 160 | 1000 | 520 | 170 J | 102.5 | 35 J | 70 | 3900 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 160 | 32 | 37 | 170 | 91 | 39 J | 19.875 | 1.5 UJ | 18 | 430 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 430 | 64 | 82 | 440 | 220 | 84 J | 54.5 | 25 J | 31 | 1400 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 4280 | 555 | 717 | 4300 | 2251 | 773 | 462 | 151 | 289 | 15510 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-282A H-SB-282REA-3 20091110 NORMAL SO NORMAL SB 3 3 | SB-282A H-SB-282REA-5 20091110 NORMAL SO NORMAL SB 5 5 | SB-282A H-SB-282REA-7 20091110 NORMAL SO NORMAL SB 7 7 | SB-282A H-SB-282REA-9 20091110 ORIG SO NORMAL SB 9 9 | SB-282A H-SB-282REA-9-AVG 20091110 AVG SO NORMAL SB 9 9 | SB-282A H-SB-282REA-9-D 20091110 DUP SO NORMAL SB 9 9 | SB-282B H-SB-282REB-3 20091110 NORMAL SO NORMAL SB 3 3 | SB-282B H-SB-282REB-5 20091110 NORMAL SO NORMAL SB 5 5 | SB-282B H-SB-282REB-7 20091110 NORMAL SO NORMAL SB 7 7 | SB-282B H-SB-282REB-9 20091110 NORMAL SO NORMAL SB 9 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 24 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 3.5 | 1.6 U | 1.5 U | 1658 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 24 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.9 | 1.6 U | 1.5 U | 1657 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 15 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 11 | 1.2 U | 1.1 U | 2000 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 18 | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1200 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 18 | 1.4 U | 1.4 U | 1.35 U | 1.3 U | 7.9 | 1.5 U | 1.4 U | 1700 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2 U | 1.9 U | 1.9 U | 1.9 U | 2 U | 2.1 U | 2 U | 740 |
| CHRYSENE | 22000 | 15000 | C | 1 U | 13 | 1.1 U | 1 U | 1 U | 1 U | 10 | 1.1 U | 1.1 U | 2300 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 3.4 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 24 | 1.8 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 1.8 U | 770 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 88 | 0 U | 0 U | 0 U | 0 U | 28.9 | 0 U | 0 U | 8710 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-282C H-SB-282REC-3 20091110 NORMAL SO NORMAL SB 3 3 | SB-282C H-SB-282REC-5 20091110 NORMAL SO NORMAL SB 5 5 | SB-282C H-SB-282REC-7 20091110 NORMAL SO NORMAL SB 7 7 | SB-282C H-SB-282REC-9 20091110 ORIG SO NORMAL SB 9 9 | SB-282C H-SB-282REC-9-AVG 20091110 AVG SO NORMAL SB 9 9 | SB-282C H-SB-282REC-9-D 20091110 DUP SO NORMAL SB 9 9 | SB-282D H-SB-282RED-3 20091110 NORMAL SO NORMAL SB 3 3 | SB-282D H-SB-282RED-5 20091110 NORMAL SO NORMAL SB 5 5 | SB-282D H-SB-282RED-7 20091110 NORMAL SO NORMAL SB 7 7 | SB-282D H-SB-282RED-9 20091110 NORMAL SO NORMAL SB 9 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 307 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 307 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 220 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 210 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 1.5 U | 210 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 1.9 U | 2 U | 1.9 U | 1.95 U | 2 U | 1.9 U | 2 U | 2.1 U | 90 |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1 U | 1.1 U | 230 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 42 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 110 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 1112 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-283 | SB-283 | SB-284 | SB-284 | SB-474 | SB-474 | SB-604 | SB-604 | SB-604 | SB-604 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-283RE-3 | H-SB-283RE-4 | H-SB-284RE-3 | H-SB-284RE-4 | H-SB-474RE-5 | H-SB-474RE-6 | H-SB-604-3 | H-SB-604-4 | H-SB-604-5 | H-SB-604-6 |
| SAMPLE DATE | | | | 20090924 | 20090924 | 20090925 | 20090925 | 20090928 | 20090928 | 20090924 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 4 | 3 | 4 | 5 | 6 | 3 | 4 | 5 | 6 |
| BOTTOM DEPTH | | | | 3 | 4 | 3 | 4 | 5 | 6 | 3 | 4 | 5 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.6 U | 13 | 16 | 1.5 U | 195 | 1.6 U | 364 | 125 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 12 | 15 | 1.5 U | 195 | 1.6 U | 364 | 124 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 1.2 U | 12 | 13 | 1.1 U | 130 | 1.2 U | 270 | 110 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 10 | 11 | 1.5 U | 130 | 1.6 U | 260 | 98 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 1.5 U | 11 | 8.6 | 1.4 U | 110 | 1.5 U | 260 | 100 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 2 U | 2.1 U | 2.1 U | 7.8 | 1.9 U | 64 | 2.1 U | 91 | 36 |
| CHRYSENE | 22000 | 15000 | C | 1 U | 1.1 U | 1.1 U | 12 | 11 | 1 U | 150 | 1.1 U | 270 | 110 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 33 | 1.6 U | 37 | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.8 U | 1.9 U | 1.8 U | 18 | 1.7 U | 68 | 1.8 U | 130 | 49 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 45 | 69.4 | 0 U | 685 | 0 U | 1318 | 503 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-604 H-SB-604-7 20090924 NORMAL SO NORMAL SB 7 7 | SB-604A H-SB-604A-3 20091109 NORMAL SO NORMAL SB 3 3 | SB-604A H-SB-604A-5 20091109 NORMAL SO NORMAL SB 5 5 | SB-604A H-SB-604A-7 20091109 NORMAL SO NORMAL SB 7 7 | SB-604B H-SB-604B-3 20091110 NORMAL SO NORMAL SB 3 3 | SB-604B H-SB-604B-5 20091110 NORMAL SO NORMAL SB 5 5 | SB-604B H-SB-604B-7 20091110 NORMAL SO NORMAL SB 7 7 | SB-604D H-SB-604D-3 20091110 ORIG SO NORMAL SB 3 3 | SB-604D H-SB-604D-3-AVG 20091110 AVG SO NORMAL SB 3 3 | SB-604D H-SB-604D-3-D 20091110 DUP SO NORMAL SB 3 3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 34 | 1.6 U | 1.5 U | 1728 | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 34 | 1.6 U | 1.5 U | 1728 | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.2 U | 19 | 1.1 U | 1.1 U | 1400 | 1.1 U | 1.2 U | 1.2 U | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 28 | 1.6 U | 1.5 U | 1200 | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.5 U | 16 | 1.4 U | 1.4 U | 1200 | 1.4 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2.1 U | 11 | 2 U | 2 U | 530 | 2 U | 2.1 U | 2.1 U | 2.1 U |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 21 | 1.1 U | 1 U | 1300 | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 210 | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.9 U | 19 | 1.8 U | 1.7 U | 510 | 1.8 U | 1.9 U | 1.9 U | 1.9 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 114 | 0 U | 0 U | 6350 | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-604D | SB-604D | SB-605 | SB-605 | SB-606 | SB-606 | SB-607 | SB-607 | SB-608 | SB-608 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-604D-5 | H-SB-604D-7 | H-SB-605-3 | H-SB-605-4 | H-SB-606-3 | H-SB-606-4 | H-SB-607-3 | H-SB-607-4 | H-SB-608-3 | H-SB-608-4 |
| SAMPLE DATE | | | | 20091110 | 20091110 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090925 | 20090925 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | | | | 5 | 7 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.7 U | 1.7 U | 23 | 1.5 U | 2.6 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 2.7 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.7 U | 1.7 U | 23 | 1.5 U | 0.9 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 0.9 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.3 U | 21 | 1.1 U | 9 | 1.1 U | 1.2 U | 1.1 U | 1.2 U | 9 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.7 U | 1.7 U | 17 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.6 U | 1.6 U | 15 | 1.3 U | 1.4 U | 1.4 U | 1.5 U | 1.4 U | 1.5 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.2 U | 2.3 U | 8.3 | 1.9 U | 1.9 U | 2 U | 2.1 U | 2 U | 2.1 U | 2.1 U |
| CHRYSENE | 22000 | 15000 | C | 1.2 U | 1.2 U | 21 | 1 U | 1 U | 1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.7 U | 1.7 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 2 U | 19 | 1.7 U | 1.7 U | 1.7 U | 1.9 U | 1.8 U | 1.9 U | 1.9 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 101.3 | 0 U | 9 | 0 U | 0 U | 0 U | 0 U | 9 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-608 | SB-608 | SB-609 | SB-609 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-608-4-AVG | H-SB-608-4-D | H-SB-609-3 | H-SB-609-4 | H-SB-610-3 | H-SB-610-4 | H-SB-610-5 | H-SB-610-6 | H-SB-610-7 | H-SB-610B-3 |
| SAMPLE DATE | | | | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20091109 |
| SAMPLE CODE | | | | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 4 | 4 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 |
| BOTTOM DEPTH | | | | 4 | 4 | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.8 | 1.7 U | 20 | 47 | 477 | 62 | 20 | 1.6 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 0.9 | 1.7 U | 20 | 46 | 477 | 61 | 19 | 1.6 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 4.8 | 1.2 U | 19 | 44 | 410 | 54 | 22 J | 1.1 UJ | 1.1 UJ | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.65 U | 1.7 U | 16 | 36 | 320 | 47 | 15 J | 1.6 UJ | 1.5 UJ | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.5 U | 16 | 37 | 320 | 50 | 15 J | 1.4 UJ | 1.4 UJ | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.15 U | 2.2 U | 2.1 U | 20 | 140 | 17 | 8.7 J | 2 UJ | 2 UJ | 2.1 U |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 20 | 46 | 400 | 59 | 23 J | 1.1 UJ | 1.1 UJ | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.65 U | 1.7 U | 1.6 U | 1.6 U | 66 | 1.6 U | 1.5 UJ | 1.6 UJ | 1.5 UJ | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.9 U | 1.9 U | 1.9 U | 16 | 160 | 37 | 1.8 UJ | 1.8 UJ | 1.8 UJ | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 4.5 | 0 U | 71 | 199 | 1816 | 264 | 83.7 | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | 36 J | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-610B | SB-610B | SB-610B | SB-610C | SB-610C | SB-610D | SB-610D | SB-611 | SB-611 | SB-611 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-610B-5 | H-SB-610B-5-AVG | H-SB-610B-5-D | H-SB-610C-3 | H-SB-610C-5 | H-SB-610D-3 | H-SB-610D-5 | H-SB-611-3 | H-SB-611-4 | H-SB-611-5 |
| SAMPLE DATE | | | | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | | | | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 5 | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 |
| BOTTOM DEPTH | | | | 5 | 5 | 5 | 3 | 5 | 3 | 5 | 3 | 4 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 736 | 1.6 U | 10 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 736 | 1.6 U | 9.3 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.15 U | 1.2 U | 1.2 U | 1.1 U | 1.2 U | 1.1 U | 570 | 1.2 U | 11 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 520 | 1.6 U | 8.2 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.45 U | 1.5 U | 1.5 U | 1.4 U | 1.5 U | 1.4 U | 520 | 1.5 U | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2.05 U | 2.1 U | 2.1 U | 2 U | 2.1 U | 2 U | 190 | 2.1 U | 2.1 U |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 600 | 1.1 U | 11 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.55 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 80 | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 1.8 U | 1.9 U | 1.8 U | 1.8 U | 1.8 U | 240 | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 2720 | 0 U | 30.2 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-611 | SB-611 | SB-611A | SB-611A | SB-611D | SB-611D | SB-611D | SB-611D | SB-614 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-611-6 | H-SB-611-7 | H-SB-611A-3 | H-SB-611A-5 | H-SB-611D-3 | H-SB-611D-5 | H-SB-611D-5-AVG | H-SB-611D-5-D | H-SB-614-10 |
| SAMPLE DATE | | | | 20090925 | 20090925 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 | 20090925 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 6 | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| BOTTOM DEPTH | | | | 6 | 7 | 3 | 5 | 3 | 5 | 5 | 5 | 10 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.5 U | 30 | 323 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 5337 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | 29 | 323 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 5330 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 1.1 U | 17 | 310 | 1.1 U | 1.2 U | 1.2 U | 1.2 U | 3900 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | 24 | 210 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 4300 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.5 U | 1.4 U | 14 | 270 | 1.4 U | 1.5 U | 1.5 U | 1.5 U | 4100 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2.1 U | 2 U | 11 | 90 | 2 U | 2.1 U | 2.1 U | 2.1 U | 1600 |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 18 | 330 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 3600 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.6 U | 43 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 15 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 18 | 110 | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 2100 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 102 | 1363 | 0 U | 0 U | 0 U | 0 U | 19600 |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | MRC-MW08A | SB-200 | SB-200 | SB-201 | SB-201 | SB-202 | SB-202 | SB-203 | SB-203 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | MRC-MW08[0809] | SB-200-05 | SB-200-10 | SB-201-05 | SB-201-10 | SB-202-05 | SB-202-10 | SB-203-05 | SB-203-10 | SB-282-0405 |
| SAMPLE DATE | | | | 20050524 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20051026 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 8 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 4 |
| BOTTOM DEPTH | | | | 9 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | 6 U |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | 1.1 B | 3.3 | 0.62 B | 1.7 B | 0.81 B | 0.55 B | 0.8 B | 1.3 B | 6 U |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | 2.18 U | 0.94 J | 1.98 U | 2.1 U | 2.09 U | 2.02 U | 2.35 U | 1.98 U | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | 8.72 U | 2.14 J | 7.39 J | 5.33 J | 4.17 J | 8.08 U | 9.41 U | 7.92 U | 29 UR |
| ACETONE | 7000000 | 6100000 | N | NA | 12.8 J | 12.7 J | 111 J | 63 J | 78 J | 4.4 J | 9.3 J | 30 J | 15 B |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | 2.2 U | 0.68 J | 1.9 J | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U | 6 U |
| ETHYLBENZENE | 780000 | 5400 | C | NA | 2.2 U | 1.2 J | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U | 6 U |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | 4.4 U | 4.9 | 4 U | 4.2 U | 4.2 U | 4 U | 4.7 U | 4 U | 12 U |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | 4.4 U | 4.1 U | 4 U | 3.8 J | 4.2 U | 4 U | 4.7 U | 2.4 J | 6 B |
| NAPHTHALENE | 160000 | 3600 | C | NA | 28.1 | 66.4 | 0.56 J | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U | 6 U |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | 2.2 U | 1.2 J | 2 U | 2.1 U | 2.1 U | 2 U | 2.4 U | 2 U | 6 U |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | 9 U | 5 J | 5 J | 6 J | 8 U | 8 U | 9 U | 6 J | 12 UR |
| TOLUENE | 630000 | 500000 | N | NA | 2.2 U | 3.8 | 1.5 J | 7.6 | 6.4 | 5.7 | 5.4 | 5.3 | 6 U |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | 2.2 U | 1.1 J | 2 U | 2.7 | 2.7 | 2.5 | 2.5 | 2.4 | 6 U |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | 2.2 U | 2 U | 2 U | 2.1 U | 0.74 J | 0.74 J | 2.4 U | 2 U | 12 U |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | 791 U | 785 U | 48.7 J | 51 J | 795 U | 773 U | 43.1 J | 43 J | 960 UJ |
| DIBENZOFURAN | 7800 | 7800 | N | NA | 118 U | 91 J | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U | 380 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | 201 U | 199 U | 38 J | 213 U | 202 U | 196 U | 201 U | 195 U | 380 U |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | 118 U | 34 J | 117 U | 125 U | 119 U | 115 U | 118 U | 115 U | 380 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | 41.7 J | 452 | 82.1 U | 87.7 U | 83 U | 80.8 U | 82.7 U | 80.3 U | 380 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | 39 J | 412 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | 36 J | 381 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | 83 U | 82 U | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | 72 J | 595 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | NA | 165 | 943 | 82 U | 100 | 83 U | 120 | 83 U | 80 U | 380 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | NA | 124 | 943 | 82 U | 2.3 | 83 U | 75 | 83 U | 80 U | 380 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | 111 | 752 | 82 U | 23 J | 83 U | 54 J | 83 U | 80 U | 380 U |
| BENZO(A)PYRENE | 22 | 15 | C | NA | 100 | 671 | 82 U | 88 U | 83 U | 63 J | 83 U | 80 U | 380 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | 61 J | 435 | 82 U | 88 U | 83 U | 61 J | 83 U | 80 U | 380 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | 69 J | 337 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | 78 J | 536 | 82 U | 88 U | 83 U | 55 J | 83 U | 80 U | 380 U |
| CHRYSENE | 22000 | 15000 | C | NA | 118 | 819 | 82 U | 30 J | 83 U | 63 J | 83 U | 80 U | 380 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | 83 U | 116 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | 253 | 1770 | 82 U | 42 J | 83 U | 86 | 83 U | 80 U | 380 U |
| FLUORENE | 310000 | 230000 | N | NA | 52 J | 507 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | 55 J | 311 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | 83 U | 260 | 82 U | 88 U | 83 U | 81 U | 83 U | 80 U | 380 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | 329 | 2610 | 82 U | 88 U | 83 U | 48 J | 83 U | 80 U | 380 U |
| PYRENE | 230000 | 170000 | N | NA | 269 | 1960 | 82 U | 34 J | 83 U | 128 | 83 U | 80 U | 380 U |
| TOTAL PAHS | NC | NC | | NA | 1642 | 12472 | 0 U | 129 | 0 U | 558 | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | 0.3 U | 0.4 U | 0.9 | 0.2 U | 0.4 U | 0.3 U | 0.3 U | 0.8 | 0.67 UR |
| ARSENIC | 0.43 | 0.39 | C | NA | 5 | 4 | 3 | 1 | 4 | 2 | 3 | 4 | 3.5 |
| BARIUM | 1600 | 1500 | N | NA | 36 | 79 | 26 | 15 | 25 | 20 | 22 | 15 | 11.6 |
| BERYLLIUM | 16 | 16 | N | NA | 1.9 | 3.6 | 0.6 | 0.6 | 3.3 | 4.5 | 1.6 | 0.5 | 1.8 |
| CADMIUM | 3.9 | 7 | N | NA | 0.1 | 0.09 | 0.08 | 0.04 U | 0.2 | 0.2 | 0.08 | 0.09 | 0.07 U |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | 39.4 | 38.9 | 18 | 14.4 | 31.8 | 32.1 | 31.9 | 20.6 | 18.5 K |
| COBALT | NC | 2.3 | N | NA | 27.1 | 10.8 | 2.4 | 8.1 | 14.9 | 10.4 | 30.8 | 8.3 | 6.7 |
| COPPER | 310 | 310 | N | NA | 14 | 17 | 10 | 6 | 12 | 10 | 23 | 12 | 23 K |
| LEAD | 400 | 400 | | NA | 14 | 17 | 4 B | 5 | 17 | 11 | 13 | 5 | 5.7 |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | 0.02 L | 0.01 L | 0.24 L | 0.17 L | 0.002 UR | 0.002 UR | 0.02 L | 0.03 L | 0.01 U |
| MOLYBDENUM | NC | 39 | N | NA | 0.5 U | 0.6 U | 0.6 U | 0.5 B | 0.6 U | 0.5 U | 0.5 U | 0.5 U | 0.43 B |
| NICKEL | 160 | 150 | N | NA | 22 | 27 | 5 | 10 | 35 | 33 | 44 | 19 | 17.7 |
| SELENIUM | 39 | 39 | N | NA | 2 U | 3 | 2 U | 3 | 2 U | 2 U | 2 U | 2 U | 0.59 UL |
| SILVER | 39 | 39 | N | NA | 0.2 B | 0.3 B | 0.06 U | 0.3 B | 0.06 U | 0.05 U | 0.3 B | 0.05 U | 0.08 U |
| VANADIUM | 7.8 | 39 | N[11] | NA | 45.9 | 52.9 | 33.9 | 25.7 | 52.2 | 39.7 | 49.2 | 39.2 | 27.2 K |
| ZINC | 2300 | 2300 | N | NA | 44 | 62 | 25 | 30 | 51 | 68 | 55 | 26 | 28.1 K |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | 64400 | 173000 | 11100 | 30000 | 3800 B | 15900 | 13000 | 2400 B | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | 13100 U | 11800 U | 11200 U | 15200 U | 12300 U | 9550 U | 10500 U | 8550 U | 2900 U |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | 4600 J |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | 86 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | 0.4 U | 0.4 U | NA | NA | 0.4 U | 0.3 U | 0.78 | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | 1350 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | 4.9 | 5 | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-282 | SB-283 | SB-283 | SB-284 | SB-284 | SB-285 | SB-285 | SB-286 | SB-286 | SB-293 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-282-0910 | SB-283-0405 | SB-283-0910 | SB-284-0405 | SB-284-0910 | SB-285-0405 | SB-285-0910 | SB-286-0405 | SB-286-0910 | SB-293-0405 |
| SAMPLE DATE | | | | 20051026 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051028 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 |
| BOTTOM DEPTH | | | | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 6 U | 6 U | 6 U | 7 U | 6 U | 0.8 J | 6 U | 7 U | 6 U | 6 UJ |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 UJ |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 29 UR | 30 UR | 30 UR | 36 UR | 30 UR | 31 UR | 30 UR | 33 UR | 30 UR | 30 UR |
| ACETONE | 7000000 | 6100000 | N | 6 B | 14 J | 30 UR | 7 J | 30 UR | 13 J | 12 J | 70 J | 30 UR | 32 J |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 UJ |
| ETHYLBENZENE | 780000 | 5400 | C | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 UJ |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 11 U | 12 U | 12 U | 14 U | 12 U | 12 U | 12 U | 13 U | 12 U | 12 UJ |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 9 B | 3 B | 6 U | 4 B | 4 B | 7 B | 6 B | 8 B | 6 B | 11 B |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | 6 U | 6 U | 3 J | 5 J | 130 | 34 | 12 | 6 J | 6 UJ |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 UJ |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 11 UR | 12 UR | 12 UR | 14 UR | 12 UR | 12 UR | 12 UR | 13 UR | 12 UR | 12 UR |
| TOLUENE | 630000 | 500000 | N | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 UJ |
| TRICHLOROETHENE | 1600 | 2800 | C | 6 U | 6 U | 6 U | 7 U | 6 U | 6 U | 6 U | 7 U | 6 U | 6 UJ |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 11 U | 12 U | 12 U | 14 U | 12 U | 12 U | 12 U | 13 U | 12 U | 2 J |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | 940 UJ | 990 UJ | 970 UJ | 1200 UJ | 970 UJ | 1000 U | 980 U | 1100 U | 1000 U | 990 U |
| DIBENZOFURAN | 7800 | 7800 | N | 380 U | 400 U | 390 U | 470 U | 390 U | 110 J | 390 U | 440 U | 400 U | 400 U |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U | 400 U | 400 U |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U | 400 U | 400 U |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 380 U | 400 U | 390 U | 340 J | 390 U | 700 | 340 J | 440 U | 220 J | 400 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 380 U | 400 U | 390 U | 260 J | 390 U | 1100 | 410 | 440 U | 84 J | 400 U |
| ACENAPHTHENE | 470000 | 340000 | N | 380 U | 400 U | 390 U | 140 J | 390 U | 430 | 240 J | 440 U | 190 J | 400 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U | 400 U | 400 U |
| ANTHRACENE | 2300000 | 1700000 | N | 70 J | 400 U | 390 U | 120 J | 390 U | 580 | 310 J | 440 U | 290 J | 400 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 397 | 400 U | 390 U | 470 U | 390 U | 1415 | 899 | 440 U | 635 | 400 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 188 | 400 U | 390 U | 470 U | 390 U | 1210 | 704 | 440 U | 433 | 400 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 200 J | 400 U | 390 U | 470 U | 390 U | 900 | 520 | 440 U | 400 J | 400 U |
| BENZO(A)PYRENE | 22 | 15 | C | 150 J | 400 U | 390 U | 470 U | 390 U | 960 | 560 | 440 U | 340 J | 400 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 170 J | 400 U | 390 U | 470 U | 390 U | 960 | 570 | 440 U | 340 J | 400 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 380 U | 400 U | 390 U | 470 U | 390 U | 650 | 340 J | 440 U | 210 J | 400 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 97 J | 400 U | 390 U | 470 U | 390 U | 360 J | 86 J | 440 U | 400 U | 400 U |
| CHRYSENE | 22000 | 15000 | C | 240 J | 400 U | 390 U | 470 U | 390 U | 1200 | 650 | 440 U | 490 | 400 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 380 U | 400 U | 390 U | 470 U | 390 U | 410 U | 390 U | 440 U | 400 U | 400 U |
| FLUORANTHENE | 310000 | 230000 | N | 430 | 110 J | 390 U | 140 J | 390 U | 1400 | 820 | 440 U | 620 | 400 U |
| FLUORENE | 310000 | 230000 | N | 380 U | 400 U | 390 U | 210 J | 390 U | 480 | 280 J | 440 U | 250 J | 400 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 380 U | 400 U | 390 U | 470 U | 390 U | 590 | 330 J | 440 U | 190 J | 400 U |
| NAPHTHALENE | 160000 | 3600 | C | 380 U | 400 U | 390 U | 250 J | 390 U | 1200 | 460 | 440 U | 110 J | 400 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 530 | 120 J | 390 U | 570 | 390 U | 2200 | 1300 | 440 U | 1300 | 400 U |
| PYRENE | 230000 | 170000 | N | 720 | 180 J | 390 U | 220 J | 390 U | 2900 | 1700 | 440 U | 1100 | 400 U |
| TOTAL PAHS | NC | NC | | 2607 | 410 | 0 U | 1910 | 0 U | 15910 | 8576 | 0 U | 5914 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.34 UR | 0.65 UL | 0.88 UL | 1.18 UL | 0.61 UL | 1.29 UL | 1.34 UL | 0.46 UL | 0.37 UL | 0.36 U |
| ARSENIC | 0.43 | 0.39 | C | 5.2 | 1.6 B | 7.4 | 5.3 B | 1.9 B | 4.9 B | 5.2 B | 0.54 B | 0.77 B | 2.7 |
| BARIUM | 1600 | 1500 | N | 2.8 | 22.7 | 19.7 | 20 | 46.6 | 13.8 | 41.2 | 28.9 | 17.5 | 11.7 |
| BERYLLIUM | 16 | 16 | N | 0.33 L | 0.9 | 2.1 | 2.6 | 2 | 1.7 | 2.2 | 0.51 | 0.34 | 0.48 |
| CADMIUM | 3.9 | 7 | N | 0.03 U | 0.06 U | 0.09 U | 0.12 U | 0.06 U | 0.13 U | 0.13 U | 0.05 U | 0.04 U | 0.38 U |
| CHROMIUM | 12000 [8] | 12000 | N[8] | 19.6 K | 39.2 | 27 | 28.9 | 24.5 | 31.4 | 27 | 90.4 | 54.1 | 12.6 |
| COBALT | NC | 2.3 | N | 4 | 8.4 | 18.4 | 8.4 | 17.5 | 8.1 | 7.6 | 1.8 | 3 | 3.3 |
| COPPER | 310 | 310 | N | 6.7 K | 5 K | 14.5 | 16.2 | 10.7 | 14.8 | 18.2 | 4.1 | 2.3 B | 8.3 |
| LEAD | 400 | 400 | | 3.6 | 5 | 9.4 | 9.3 | 7.1 | 6.6 | 8.9 | 5.9 | 1.8 | 3.7 |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.01 U | 0.02 |
| MOLYBDENUM | NC | 39 | N | 0.53 B | 0.16 U | 0.34 | 0.19 U | 0.15 U | 0.33 | 0.74 | 0.23 U | 0.28 | 0.46 |
| NICKEL | 160 | 150 | N | 6.8 | 13.5 | 43.1 | 37.2 | 23.5 | 22.2 | 30.9 | 5.9 | 2.7 | 5.2 |
| SELENIUM | 39 | 39 | N | 0.3 UL | 0.57 U | 0.77 U | 1.03 U | 0.53 U | 1.12 U | 1.17 U | 0.41 U | 0.32 U | 0.31 UL |
| SILVER | 39 | 39 | N | 0.09 U | 0.08 UL | 0.07 UL | 0.1 UL | 0.08 UL | 0.07 UL | 0.07 UL | 0.12 UL | 0.09 UL | 0.38 UL |
| VANADIUM | 7.8 | 39 | N[11] | 34.4 K | 20.4 | 45.9 | 43.8 | 30.6 | 35.6 | 42.6 | 24.6 | 5.7 | 28.6 |
| ZINC | 2300 | 2300 | N | 9.5 K | 40.2 | 83.1 | 65.5 | 47.3 | 45.1 | 79.2 | 11.8 | 21 | 11.9 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 2900 U | 2700 U | 2700 U | 3600 | 2900 U | 2800 U | 2800 U | 2800 U | 6100 | 9000 |
| TPH (C09-C36) | NC | NC | | 130000 | 19000 | 4900 B | 8700 B | 2200 B | 200000 | 54000 | 4500 B | 110000 | 2900 J |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | 87 | 83 | 84 | 70 | 85 | 81 | 84 | 75 | 82 | 83 |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-293 | SB-294 | SB-294 | SB-462 | SB-462 | SB-462 | SB-462 | SB-463 | SB-463 | SB-463 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-293-0910 | SB-294-0405 | SB-294-0910 | SB-462-0203 | SB-462-0304 | SB-462-0506 | SB-462-0708 | SB-463-0203 | SB-463-0304 | SB-463-0506 |
| SAMPLE DATE | | | | 20051028 | 20051028 | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 9 | 4 | 9 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | | | | 10 | 5 | 10 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | 30 UR | 30 UR | 31 UR | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | 17 J | 37 L | 16 J | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | 12 U | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | 9 B | 10 B | 5 B | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | 12 UR | 12 UR | 12 UR | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | 6 U | 6 U | 6 U | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | 12 U | 12 U | 12 U | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | 980 U | 980 U | 1000 U | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 390 U | 390 U | 400 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.8 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 390 U | 390 U | 400 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.8 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 390 U | 390 U | 400 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.8 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | 390 U | 390 U | 400 U | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | 0.31 U | 0.44 U | 0.43 U | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | 1.7 | 2.4 | 3.4 | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | 2.9 | 8.7 | 11 | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | 0.14 B | 0.31 B | 0.37 B | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | 0.33 U | 0.46 U | 0.45 U | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | 7.5 | 9.4 | 16.6 | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | 1.8 | 2.6 | 3 | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | 6.6 | 5.3 | 9.3 | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | 1.6 | 2.6 | 3.5 | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.01 U | 0.01 | 0.01 U | 0.21 | 0.019 U | 0.021 U | 0.02 U | 0.063 | 0.021 U | 0.021 U |
| MOLYBDENUM | NC | 39 | N | 0.17 | 0.3 K | 1.2 | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | 3 | 3.4 | 5.1 | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | 0.27 UL | 0.38 U | 0.37 U | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | 0.44 L | 0.47 UL | 0.46 UL | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | 13.7 | 17.8 | 26.3 | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | 4 | 9 | 10.5 | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | 2800 U | 2800 U | 2900 U | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | 3800 J | 6000 U | 6100 U | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | 87.1 | 87.1 | 79.1 | 81.5 | 73.9 | 78.8 | 81.1 |
| TOTAL SOLIDS | NC | NC | | 84 | 84 | 81 | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-463 | SB-464 | SB-464 | SB-464 | SB-464 | SB-465 | SB-465 | SB-465 | SB-465 | SB-466 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-463-0708 | SB-464-0203 | SB-464-0304 | SB-464-0506 | SB-464-0708 | SB-465-0203 | SB-465-0304 | SB-465-0506 | SB-465-0708 | SB-466-0203 |
| SAMPLE DATE | | | | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | | | | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.4 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U | 1.5 U | 1.6 U | 1.5 U | 1.4 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | 1.4 U | 1.5 U | 1.6 UJ | 1.5 U | 1.4 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.021 U | 0.019 U | 0.021 U | 0.021 U | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.02 U | 0.019 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 80 | 89.4 | 81 | 79.3 | 84.7 | 89.9 | 84.7 | 83.9 | 84.2 | 89.8 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-466 | SB-466 | SB-466 | SB-467 | SB-467 | SB-467 | SB-467 | SB-468 | SB-468 | SB-468 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-466-0304 | SB-466-0506 | SB-466-0708 | SB-467-0203 | SB-467-0304 | SB-467-0506 | SB-467-0708 | SB-468-0203 | SB-468-0304 | SB-468-0506 |
| SAMPLE DATE | | | | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | | | | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.019 U | 0.02 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.02 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 88.6 | 82.9 | 84.4 | 88.6 | 88.5 | 83.6 | 86.4 | 85.5 | 85.1 | 83.9 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-468 | SB-469 | SB-469 | SB-469 | SB-469 | SB-620 | SB-620 | SB-620 | SB-620 | SB-621 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-468-0708 | SB-469-0203 | SB-469-0304 | SB-469-0506 | SB-469-0708 | H-SB-620-5 | H-SB-620-6 | H-SB-620-6-AVG | H-SB-620-6-D | H-SB-621-5 |
| SAMPLE DATE | | | | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 7 | 2 | 3 | 5 | 7 | 5 | 6 | 6 | 6 | 5 |
| BOTTOM DEPTH | | | | 8 | 3 | 4 | 6 | 8 | 5 | 6 | 6 | 6 | 5 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | **23** | 1.5 U | 1.5 U | 1.5 U | **22** |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | **22** | 1.5 U | 1.5 U | 1.5 U | **21** |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | 21 | 1.1 U | 1.1 U | 1.1 U | 17 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.5 U | **17** | 1.5 U | 1.5 U | 1.5 U | **16** |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | 20 | 1.4 U | 1.4 U | 1.4 U | 14 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | 2 U | 2 U | 2 U | 2 U | 2 U |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | 24 | 1.1 U | 1.05 U | 1 U | 18 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | 7.9 | 1.8 U | 1.75 U | 1.7 U | 18 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 89.9 | 0 U | 0 U | 0 U | 83 |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.02 U | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.6 | 87.4 | 82.2 | 83.6 | 84.6 | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-621 | SB-622 | SB-622 | SB-623 | SB-623 | SB-814 | SB-814 | SB-814 | SB-814 | SB-815 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-621-6 | H-SB-622-5 | H-SB-622-6 | H-SB-623-5 | H-SB-623-6 | H-SB-814-03 | H-SB-814-05 | H-SB-814-07 | H-SB-814-09 | H-SB-815-03 |
| SAMPLE DATE | | | | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 6 | 5 | 6 | 5 | 6 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | | 6 | 5 | 6 | 5 | 6 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 40 | 3.5 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 37 | 3.5 U |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 34 | 3.5 U |
| ACENAPHTHYLENE | 470000 | 340000 | N[5] | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 100 | 3.5 U |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 170 | 3.5 U |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 3.546 | 1.5 U | 34 | 44 | 3.9 U | 3.7 U | 3.9 U | 722 | 3.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.951 | 1.5 U | 33 | 43 | 3.9 U | 3.7 U | 3.9 U | 722 | 3.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 11 | 1.1 U | 22 | 26 | 3.9 U | 3.7 U | 3.9 U | 470 | 3.5 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 27 | 35 | 3.9 U | 3.7 U | 3.9 U | 520 | 3.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 8.4 | 1.4 U | 25 | 34 | 3.9 U | 3.7 U | 3.9 U | 480 | 3.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 360 | 3.5 U |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 1.9 U | 2 U | 1.9 U | 13 | 16 | 3.9 U | 3.7 U | 3.9 U | 250 | 3.5 U |
| CHRYSENE | 22000 | 15000 | C | 1 U | 11 | 1 U | 26 | 34 | 1.3 UJ | 1.2 UJ | 1.3 UJ | 510 | 1.2 UJ |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 3.9 U | 3.7 U | 3.9 U | 76 | 3.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 720 | 3.5 U |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 63 | 3.5 U |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.7 U | 1.7 U | 1.7 U | 15 | 21 | 3.9 U | 3.7 U | 3.9 U | 280 | 3.5 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 28 | 3.5 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 460 | 3.5 U |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | 3.9 U | 3.7 U | 3.9 U | 1400 | 3.5 U |
| TOTAL PAHS | NC | NC | | 0 U | 30.4 | 0 U | 128 | 166 | 0 U | 0 U | 0 U | 5958 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | | | SB-815 | SB-815 | SB-815 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-817 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | H-SB-815-05 | H-SB-815-07 | H-SB-815-09 | H-SB-816-03 | H-SB-816-03-AVG | H-SB-816-03-D | H-SB-816-05 | H-SB-816-07 | H-SB-816-09 | H-SB-817-03 |
| SAMPLE DATE | | | 20100826 | 20100826 | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 5 | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | | | 5 | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 (4) | 63000 N(5) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 (4) | 380000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | 3.9 U | 3.9 U | 4.1 U | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 4.1 U | 3.7 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | 3.9 U | 3.9 U | 4.1 U | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 4.1 U | 3.7 U |
| ACENAPHTHENE | 470000 | 340000 N | 3.9 U | 3.9 U | 4.1 U | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 30 J | 3.7 UJ |
| ACENAPHTHYLENE | 470000 | 340000 N(9) | 3.9 U | 3.9 U | 4.1 U | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 4.1 U | 3.7 U |
| ANTHRACENE | 2300000 | 1700000 N | 3.9 U | 3.9 U | 4.1 U | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 34 J | 3.7 UJ |
| BAP EQUIVALENT-HALFND | 22 | 15 | 11 | 3.9 U | 58 | 3.7 U | 3.75 U | 3.8 U | 25 | 3.8 U | 79 | 3.7 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 8.7 | 3.9 U | 56 | 3.7 U | 3.75 U | 3.8 U | 23 | 3.8 U | 77 | 3.7 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 3.9 U | 3.9 U | 38 | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 42 | 3.7 U |
| BENZO(A)PYRENE | 22 | 15 C | 8.7 | 3.9 U | 45 | 3.7 UJ | 3.75 U | 3.8 UJ | 23 J | 3.8 UJ | 62 J | 3.7 UJ |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 3.9 U | 3.9 U | 45 | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 61 J | 3.7 UJ |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N(7) | 3.9 U | 3.9 U | 40 | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 56 J | 3.7 UJ |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 3.9 U | 3.9 U | 23 | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 26 J | 3.7 UJ |
| CHRYSENE | 22000 | 15000 C | 1.3 UJ | 1.3 UJ | 43 J | 1.2 U | 1.25 U | 1.3 U | 1.3 U | 1.3 U | 48 | 1.2 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 3.9 U | 3.9 U | 4.1 U | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 4.1 UJ | 3.7 UJ |
| FLUORANTHENE | 310000 | 230000 N | 10 | 3.9 U | 54 | 3.7 UJ | 3.75 U | 3.8 UJ | 24 J | 3.8 UJ | 81 J | 3.7 UJ |
| FLUORENE | 310000 | 230000 N | 3.9 U | 3.9 U | 4.1 U | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 32 J | 3.7 UJ |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 3.9 U | 3.9 U | 27 | 3.7 UJ | 3.75 U | 3.8 UJ | 3.8 UJ | 3.8 UJ | 47 J | 3.7 UJ |
| NAPHTHALENE | 160000 | 3600 C | 3.9 U | 3.9 U | 4.1 U | 3.7 U | 3.75 U | 3.8 U | 3.8 U | 3.8 U | 4.1 U | 3.7 U |
| PHENANTHRENE | 2300000 | 170000 N(7) | 3.9 U | 3.9 U | 28 | 3.7 UJ | 3.75 U | 3.8 UJ | 16 J | 3.8 UJ | 77 J | 3.7 UJ |
| PYRENE | 230000 | 170000 N | 16 | 3.9 U | 88 | 3.7 U | 3.75 U | 3.8 U | 15 | 3.8 U | 110 | 3.7 U |
| TOTAL PAHS | NC | NC | 34.7 | 0 U | 431 | 0 U | 0 U | 0 U | 78 | 0 U | 706 | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 (8) | 12000 N(8) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 (9) | 2.3 N(10) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 N(11) | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | |
| PH | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-817 | SB-817 | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-817-05 | H-SB-817-07 | H-SB-817-07-AVG | H-SB-817-07-D | H-SB-817-09 |
| SAMPLE DATE | | | | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | | | | 5 | 7 | 7 | 7 | 9 |
| **VOLATILES (UG/KG)** | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 4 U | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 4 U | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| ACENAPHTHENE | 470000 | 340000 | N | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | 4 U | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| ANTHRACENE | 2300000 | 1700000 | N | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 38 | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 36 | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 16 | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| BENZO(A)PYRENE | 22 | 15 | C | 32 J | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 21 J | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| CHRYSENE | 22000 | 15000 | C | 14 | 1.3 U | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| FLUORANTHENE | 310000 | 230000 | N | 33 J | 3.8 UJ | 3.8 U | 3.8 UJ | 21 J |
| FLUORENE | 310000 | 230000 | N | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| NAPHTHALENE | 160000 | 3600 | C | 4 U | 3.8 U | 3.8 U | 3.8 U | 3.9 U |
| PHENANTHRENE | 2300000 | 170000 | N[7] | 4 UJ | 3.8 UJ | 3.8 U | 3.8 UJ | 3.9 UJ |
| PYRENE | 230000 | 170000 | N | 36 | 3.8 U | 3.8 U | 3.8 U | 11 |
| TOTAL PAHS | NC | NC | | 152 | 0 U | 0 U | 0 U | 32 |
| **METALS (MG/KG)** | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | NA | NA | NA | NA | NA |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-470 | SB-470 | SB-470 | SB-470 | SB-471 | SB-471 | SB-471 | SB-471 | SB-472 | SB-472 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-470-0203 | SB-470-0304 | SB-470-0506 | SB-470-0708 | SB-471-0203 | SB-471-0304 | SB-471-0506 | SB-471-0708 | SB-472-0203 | SB-472-0304 |
| SAMPLE DATE | | | | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.6 U | 1.6 U | **21** | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | **21** | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.6 U | 1.6 U | **21 J** | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 21 | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.023 L | 0.019 UL | 0.02 UL | 0.02 UL | 0.021 UL | 0.021 UL | 0.02 UL | 0.02 UL | 0.019 UL | 0.02 UL |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 88.5 | 86.8 | 82.3 | 83.7 | 81.1 | 80.7 | 82.7 | 83.7 | 86.6 | 81.5 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
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| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-472 | SB-472 | SB-473 | SB-473 | SB-473 | SB-473 | SB-474 | SB-474 | SB-474 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-472-0506 | SB-472-0708 | SB-473-0203 | SB-473-0304 | SB-473-0506 | SB-473-0708 | SB-474-0203 | SB-474-0304 | SB-474-0506 | SB-474-0708 |
| SAMPLE DATE | | | | 20071023 | 20071023 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 31 | 490 | 1.4 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 31 | 490 | 1.4 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.7 U | 1.6 U | 31 J | 490 | 1.4 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 31 | 490 | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.02 UL | 0.02 UJ | 0.019 UL | 0.02 UL | 0.022 UL | 0.021 UL | 0.025 | 0.095 | 0.018 U | 0.019 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 83.1 | 83.2 | 87.9 | 85.1 | 76.1 | 80.5 | 86 | 77.6 | 90.9 | 86.3 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-475 | SB-475 | SB-475 | SB-475 | SB-476 | SB-476 | SB-476 | SB-476 | SB-477 | SB-477 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-475-0203 | SB-475-0304 | SB-475-0506 | SB-475-0708 | SB-476-0203 | SB-476-0304 | SB-476-0506 | SB-476-0708 | SB-477-0203 | SB-477-0304 |
| SAMPLE DATE | | | | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.019 U | 0.02 U | 0.02 U | 0.02 U | 0.019 U | 0.021 U | 0.02 U | 0.02 U | 0.021 U | 0.021 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 87 | 81.8 | 81.4 | 83.3 | 85.8 | 79.9 | 83.3 | 83.6 | 78.2 | 79.8 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-477 | SB-477 | SB-478 | SB-478 | SB-478 | SB-478 | SB-479 | SB-479 | SB-479 | SB-479 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-477-0506 | SB-477-0708 | SB-478-0203 | SB-478-0304 | SB-478-0506 | SB-478-0708 | SB-479-0203 | SB-479-0304 | SB-479-0506 | SB-479-0708 |
| SAMPLE DATE | | | | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.02 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84.6 | 84.9 | 87.7 | 85.1 | 86.7 | 83.8 | 85.9 | 83.8 | 84.6 | 85.9 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-480 | SB-480 | SB-480 | SB-480 | SB-481 | SB-481 | SB-481 | SB-481 | SB-482 | SB-482 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-480-0203 | SB-480-0304 | SB-480-0506 | SB-480-0708 | SB-481-0203 | SB-481-0304 | SB-481-0506 | SB-481-0708 | SB-482-0203 | SB-482-0304 |
| SAMPLE DATE | | | | 20071025 | 20071025 | 20071025 | 20071025 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 10 | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 10 | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 10 J | 1.6 U | 1.6 U | 1.6 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 10 | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.019 U | 0.019 U | 0.02 U | 0.019 U | 0.21 | 0.02 U | 0.02 U | 0.02 U | 0.02 U | 0.02 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 89.5 | 88.1 | 84.1 | 85.6 | 85.8 | 84.3 | 82.2 | 82.6 | 82.7 | 85.1 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
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| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-482 | SB-482 | SB-483 | SB-483 | SB-483 | SB-483 | SB-484 | SB-484 | SB-484 | SB-484 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-482-0506 | SB-482-0708 | SB-483-0203 | SB-483-0304 | SB-483-0506 | SB-483-0708 | SB-484-0203 | SB-484-0304 | SB-484-0506 | SB-484-0708 |
| SAMPLE DATE | | | | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 28 | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 28 | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 28 J | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 28 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.02 U | 0.02 U | 0.035 | 0.02 U | 0.02 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U | 0.02 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 84 | 82.7 | 82.9 | 81.6 | 83.5 | 82.9 | 86.2 | 82.7 | 86.5 | 84.2 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-485 | SB-485 | SB-485 | SB-485 | SB-486 | SB-486 | SB-486 | SB-486 | SB-487 | SB-487 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-485-0203 | SB-485-0304 | SB-485-0506 | SB-485-0708 | SB-486-0203 | SB-486-0304 | SB-486-0506 | SB-486-0708 | SB-487-0203 | SB-487-0304 |
| SAMPLE DATE | | | | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | | | | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **VOLATILES (UG/KG)** | | | | | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 43 | 1.5 U | 1.5 U | 1.5 U | 380 U | 390 U | 410 U | 390 U | 400 U | 380 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 43 | 1.5 U | 1.5 U | 1.5 U | 380 U | 390 U | 410 U | 390 U | 400 U | 380 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 43 J | 1.5 U | 1.5 U | 1.5 U | 380 U | 390 U | 410 U | 390 U | 400 U | 380 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 43 | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.019 U | 0.02 U | 0.02 U | 0.02 U | 0.019 U | 0.02 U | 0.02 U | 0.019 U | 0.02 U | 0.019 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 88.7 | 84.4 | 85 | 84.8 | 86.3 | 84.9 | 81.3 | 85.6 | 82.4 | 88 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-487 | SB-487 | SB-488 | SB-488 | SB-488 | SB-488 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | SB-487-0506 | SB-487-0708 | SB-488-0203 | SB-488-0304 | SB-488-0506 | SB-488-0708 |
| SAMPLE DATE | | | | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | | | | 6 | 8 | 3 | 4 | 6 | 8 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,2,3-TRIMETHYLBENZENE | NC | NC | | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NC | 6200 | N | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NC | 78000 | N | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | 4700000 | 2800000 | N | NA | NA | NA | NA | NA | NA |
| ACETONE | 7000000 | 6100000 | N | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | 780000 | 82000 | N | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | 780000 | 5400 | C | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | 1600000 [4] | 63000 | N[5] | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | 85000 | 11000 | C | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA |
| O-XYLENE | 1600000 [4] | 380000 | N | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NC | NC | | NA | NA | NA | NA | NA | NA |
| TOLUENE | 630000 | 500000 | N | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | 1600 | 2800 | C | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NC | 79000 | N | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| BENZOIC ACID | NC | 24000000 | N | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | 7800 | 7800 | N | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | 780000 | 610000 | N | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | 130000 | 99000 | C | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[6] | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 390 U | 390 U | 370 U | 380 U | 400 U | 390 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 390 U | 390 U | 370 U | 380 U | 400 U | 390 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA |
| BENZO(A)PYRENE | 22 | 15 | C | 390 U | 390 U | 370 U | 380 U | 400 U | 390 UR |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | NA | NA | NA | NA | NA | NA |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | NA | NA | NA | NA | NA | NA |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[7] | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 0 U | 0 U | 0 U | 0 U |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | 3.1 | 3.1 | N | NA | NA | NA | NA | NA | NA |
| ARSENIC | 0.43 | 0.39 | C | NA | NA | NA | NA | NA | NA |
| BARIUM | 1600 | 1500 | N | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | 16 | 16 | N | NA | NA | NA | NA | NA | NA |
| CADMIUM | 3.9 | 7 | N | NA | NA | NA | NA | NA | NA |
| CHROMIUM | 12000 [8] | 12000 | N[8] | NA | NA | NA | NA | NA | NA |
| COBALT | NC | 2.3 | N | NA | NA | NA | NA | NA | NA |
| COPPER | 310 | 310 | N | NA | NA | NA | NA | NA | NA |
| LEAD | 400 | 400 | | NA | NA | NA | NA | NA | NA |
| MERCURY | 2.3 [9] | 2.3 | N[10] | 0.02 U | 0.02 U | 0.019 U | 0.019 U | 0.02 U | 0.02 U |
| MOLYBDENUM | NC | 39 | N | NA | NA | NA | NA | NA | NA |
| NICKEL | 160 | 150 | N | NA | NA | NA | NA | NA | NA |
| SELENIUM | 39 | 39 | N | NA | NA | NA | NA | NA | NA |
| SILVER | 39 | 39 | N | NA | NA | NA | NA | NA | NA |
| VANADIUM | 7.8 | 39 | N[11] | NA | NA | NA | NA | NA | NA |
| ZINC | 2300 | 2300 | N | NA | NA | NA | NA | NA | NA |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | 230000 | NC | | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NC | NC | | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NC | NC | | 83.8 | 85.3 | 88.5 | 86.3 | 82.1 | 85.2 |
| TOTAL SOLIDS | NC | NC | | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | 23 | 0.29 | C | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NC | NC | | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NC | NC | | NA | NA | NA | NA | NA | NA |

**Table A-28**
**Detected Concentrations Table for Subsurface Soil, 2-10 feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - The value is for xylenes.
5 - The value is for xylene, mixture.
6 - The value for acenaphthene is used as a surrogate for acenaphthylene.
7 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
8 - The value is for trivalent chromium.
9 - The value is for mercury (inorganic/mercuric dichloride).
10 - The value is for mercuric chloride.
11 - The value is for vanadium and compounds.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

**Table A-29**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-200RE | SB-200RE | SB-200RE | SB-200RE | SB-200RE | SB-282 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-200RE-11 | H-SB-200RE-12 | H-SB-200RE-13 | H-SB-200RE-14 | H-SB-200RE-15 | H-SB-282RE-11 | H-SB-282RE-12 | H-SB-282RE-13 | H-SB-282RE-14 |
| SAMPLE DATE | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-29**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-200RE | SB-200RE | SB-200RE | SB-200RE | SB-200RE | SB-282 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-200RE-11 | H-SB-200RE-12 | H-SB-200RE-13 | H-SB-200RE-14 | H-SB-200RE-15 | H-SB-282RE-11 | H-SB-282RE-12 | H-SB-282RE-13 | H-SB-282RE-14 |
| SAMPLE DATE | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 67 | 165 | 848 | 14 | 120 | 1.6 U | 16 | 1462 | 5.3 |
| BAP EQUIVALENT-POS | 66 | 165 | 848 | 13 | 119 | 1.6 U | 15 | 1462 | 3.8 |
| BENZO(A)ANTHRACENE | 59 | 140 | 700 | 13 | 110 | 1.2 U | 15 | 1400 | 10 |
| BENZO(A)PYRENE | 53 | 120 | 680 | 11 | 95 | 1.6 U | 10 | 930 | 1.5 U |
| BENZO(B)FLUORANTHENE | 46 | 110 | 630 | 9.5 | 82 | 1.5 U | 13 | 1200 | 9.4 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 31 | 44 | 290 | 2 U | 46 | 2.1 U | 2 U | 470 | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-29**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-200RE | SB-200RE | SB-200RE | SB-200RE | SB-200RE | SB-282 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-200RE-11 | H-SB-200RE-12 | H-SB-200RE-13 | H-SB-200RE-14 | H-SB-200RE-15 | H-SB-282RE-11 | H-SB-282RE-12 | H-SB-282RE-13 | H-SB-282RE-14 |
| SAMPLE DATE | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 63 | 140 | 730 | 12 | 110 | 1.1 U | 15 | 1600 | 11 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 14 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 210 | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 22 | 52 | 310 | 1.8 U | 42 | 1.9 U | 19 | 560 | 18 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 274 | 620 | 3340 | 45.5 | 485 | 0 U | 72 | 6370 | 48.4 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-29**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-200RE | SB-200RE | SB-200RE | SB-200RE | SB-200RE | SB-282 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-200RE-11 | H-SB-200RE-12 | H-SB-200RE-13 | H-SB-200RE-14 | H-SB-200RE-15 | H-SB-282RE-11 | H-SB-282RE-12 | H-SB-282RE-13 | H-SB-282RE-14 |
| SAMPLE DATE | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-282 | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B | SB-282B | SB-282C | SB-282C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-15 | H-SB-282REA-11 | H-SB-282REA-13 | H-SB-282REA-15 | H-SB-282REB-11 | H-SB-282REB-13 | H-SB-282REB-15 | H-SB-282REC-11 | H-SB-282REC-13 |
| SAMPLE DATE | 20090929 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-29**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B | SB-282B | SB-282C | SB-282C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-15 | H-SB-282REA-11 | H-SB-282REA-13 | H-SB-282REA-15 | H-SB-282REB-11 | H-SB-282REB-13 | H-SB-282REB-15 | H-SB-282REC-11 | H-SB-282REC-13 |
| SAMPLE DATE | 20090929 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 1.6 U | 1.6 U | 409 | 33 | 49 | 373 | 1.6 U | 2123 | 1250 |
| BAP EQUIVALENT-POS | 1.6 U | 1.6 U | 409 | 32 | 48 | 373 | 1.6 U | 2121 | 1249 |
| BENZO(A)ANTHRACENE | 1.1 U | 1.1 U | 250 | 14 | 53 | 350 | 1.2 U | 1800 | 1100 |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 290 | 27 | 35 | 240 | 1.6 U | 1700 | 990 |
| BENZO(B)FLUORANTHENE | 1.5 U | 1.4 U | 230 | 17 | 50 | 290 | 1.5 U | 1500 | 970 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2.1 U | 2.1 U | 150 | 9.8 | 25 | 120 | 2.1 U | 620 | 440 |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-29**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B | SB-282B | SB-282C | SB-282C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-15 | H-SB-282REA-11 | H-SB-282REA-13 | H-SB-282REA-15 | H-SB-282REB-11 | H-SB-282REB-13 | H-SB-282REB-15 | H-SB-282REC-11 | H-SB-282REC-13 |
| SAMPLE DATE | 20090929 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 1.1 U | 230 | 14 | 63 | 400 | 1.1 U | 2000 | 1100 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 54 | 1.4 U | 1.5 U | 51 | 1.6 U | 3.2 U | 3.3 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 150 | 20 | 22 | 160 | 1.8 U | 830 | 460 |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 0 U | 0 U | 1354 | 101.8 | 248 | 1611 | 0 U | 8450 | 5060 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-29**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-282 | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B | SB-282B | SB-282C | SB-282C |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-15 | H-SB-282REA-11 | H-SB-282REA-13 | H-SB-282REA-15 | H-SB-282REB-11 | H-SB-282REB-13 | H-SB-282REB-15 | H-SB-282REC-11 | H-SB-282REC-13 |
| SAMPLE DATE | 20090929 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-282C | SB-282D | SB-282D | SB-282D | SB-285 | SB-285 | SB-286RE | SB-286RE | SB-286RE |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REC-15 | H-SB-282RED-11 | H-SB-282RED-13 | H-SB-282RED-15 | H-SB-285RE-11 | H-SB-285RE-12 | H-SB-286RE-11 | H-SB-286RE-12 | H-SB-286RE-15 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-282C | SB-282D | SB-282D | SB-282D | SB-285 | SB-285 | SB-286RE | SB-286RE | SB-286RE |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REC-15 | H-SB-282RED-11 | H-SB-282RED-13 | H-SB-282RED-15 | H-SB-285RE-11 | H-SB-285RE-12 | H-SB-286RE-11 | H-SB-286RE-12 | H-SB-286RE-15 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 15 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 289 | 1.5 U | 225 | 1.5 U | 1.5 U | 1.5 U | 34 | 33 U | 1.6 U |
| BAP EQUIVALENT-POS | 288 | 1.5 U | 225 | 1.5 U | 1.5 U | 1.5 U | 32 | 33 U | 1.6 U |
| BENZO(A)ANTHRACENE | 250 | 1.1 U | 160 | 1.1 U | 1.1 U | 1.1 U | 1.2 U | 24 U | 1.2 U |
| BENZO(A)PYRENE | 230 | 1.5 U | 150 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 33 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 210 | 1.4 U | 150 | 1.4 U | 1.4 U | 1.4 U | 220 | 31 U | 1.5 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 94 | 2 U | 61 | 1.9 U | 2 U | 2 U | 140 | 44 U | 2.1 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-282C | SB-282D | SB-282D | SB-282D | SB-285 | SB-285 | SB-286RE | SB-286RE | SB-286RE |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REC-15 | H-SB-282RED-11 | H-SB-282RED-13 | H-SB-282RED-15 | H-SB-285RE-11 | H-SB-285RE-12 | H-SB-286RE-11 | H-SB-286RE-12 | H-SB-286RE-15 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 15 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 270 | 1 U | 180 | 1 U | 1.1 U | 1.1 U | 13 | 23 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 1.5 U | 35 | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 33 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 110 | 1.7 U | 79 | 1.7 U | 1.8 U | 1.8 U | 88 | 39 U | 1.9 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1164 | 0 U | 815 | 0 U | 0 U | 0 U | 461 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-282C | SB-282D | SB-282D | SB-282D | SB-285 | SB-285 | SB-286RE | SB-286RE | SB-286RE |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REC-15 | H-SB-282RED-11 | H-SB-282RED-13 | H-SB-282RED-15 | H-SB-285RE-11 | H-SB-285RE-12 | H-SB-286RE-11 | H-SB-286RE-12 | H-SB-286RE-15 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 15 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-596 | SB-596 | SB-597 | SB-597 | SB-598 | SB-598 | SB-599 | SB-599 | SB-612 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-596-11 | H-SB-596-12 | H-SB-597-11 | H-SB-597-12 | H-SB-598-11 | H-SB-598-12 | H-SB-599-11 | H-SB-599-12 | H-SB-612-11 |
| SAMPLE DATE | 20090929 | 20090929 | 20090928 | 20090928 | 20090929 | 20090929 | 20090929 | 20090929 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 | 11 |
| BOTTOM DEPTH | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-29**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-596 | SB-596 | SB-597 | SB-597 | SB-598 | SB-598 | SB-599 | SB-599 | SB-612 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-596-11 | H-SB-596-12 | H-SB-597-11 | H-SB-597-12 | H-SB-598-11 | H-SB-598-12 | H-SB-599-11 | H-SB-599-12 | H-SB-612-11 |
| SAMPLE DATE | 20090929 | 20090929 | 20090928 | 20090928 | 20090929 | 20090929 | 20090929 | 20090929 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 | 11 |
| BOTTOM DEPTH | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 2.6 | 130 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 15 | 36 | 9.4 |
| BAP EQUIVALENT-POS | 0.96 | 130 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 14 | 35 | 8.4 |
| BENZO(A)ANTHRACENE | 9.6 | 120 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 12 | 30 | 1.1 UJ |
| BENZO(A)PYRENE | 1.5 U | 83 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 10 | 27 | 8.4 J |
| BENZO(B)FLUORANTHENE | 1.4 U | 80 | 1.4 U | 1.4 U | 1.4 U | 1.4 U | 9.6 | 24 | 1.5 UJ |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2 U | 37 | 2 U | 2 U | 2 U | 2 U | 2.2 U | 13 | 2.1 UJ |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-596 | SB-596 | SB-597 | SB-597 | SB-598 | SB-598 | SB-599 | SB-599 | SB-612 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-596-11 | H-SB-596-12 | H-SB-597-11 | H-SB-597-12 | H-SB-598-11 | H-SB-598-12 | H-SB-599-11 | H-SB-599-12 | H-SB-612-11 |
| SAMPLE DATE | 20090929 | 20090929 | 20090928 | 20090928 | 20090929 | 20090929 | 20090929 | 20090929 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 | 11 |
| BOTTOM DEPTH | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 1.1 U | 120 | 1.1 U | 1.1 U | 1.1 U | 1.1 U | 11 | 32 | 12 J |
| DIBENZO(A,H)ANTHRACENE | 1.5 U | 22 | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 1.7 U | 1.6 U | 1.6 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 45 | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 18 | 23 | 1.8 UJ |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 9.6 | 507 | 0 U | 0 U | 0 U | 0 U | 60.6 | 149 | 20.4 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-29**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-596 | SB-596 | SB-597 | SB-597 | SB-598 | SB-598 | SB-599 | SB-599 | SB-612 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-596-11 | H-SB-596-12 | H-SB-597-11 | H-SB-597-12 | H-SB-598-11 | H-SB-598-12 | H-SB-599-11 | H-SB-599-12 | H-SB-612-11 |
| SAMPLE DATE | 20090929 | 20090929 | 20090928 | 20090928 | 20090929 | 20090929 | 20090929 | 20090929 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 | 11 |
| BOTTOM DEPTH | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-612 | SB-612 | SB-612 | SB-613 | SB-613 | SB-614 | SB-614 | SB-615 | SB-615 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-612-11-AVG | H-SB-612-11-D | H-SB-612-12 | H-SB-613-11 | H-SB-613-12 | H-SB-614-11 | H-SB-614-12 | H-SB-615-11 | H-SB-615-12 |
| SAMPLE DATE | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 |
| BOTTOM DEPTH | 11 | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-612 | SB-612 | SB-612 | SB-613 | SB-613 | SB-614 | SB-614 | SB-615 | SB-615 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-612-11-AVG | H-SB-612-11-D | H-SB-612-12 | H-SB-613-11 | H-SB-613-12 | H-SB-614-11 | H-SB-614-12 | H-SB-615-11 | H-SB-615-12 |
| SAMPLE DATE | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 |
| BOTTOM DEPTH | 11 | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 59 | 108 | 1.6 U | 89 | 43 | 35 | 100 | 11 | 21 |
| BAP EQUIVALENT-POS | 58 | 107 | 1.6 U | 88 | 42 | 34 | 99 | 10 | 21 |
| BENZO(A)ANTHRACENE | 50.275 | 100 J | 1.1 U | 77 | 41 | 22 | 53 | 13 | 20 |
| BENZO(A)PYRENE | 46.2 | 84 J | 1.6 U | 68 | 33 | 28 | 81 | 9.1 | 17 |
| BENZO(B)FLUORANTHENE | 43.375 | 86 J | 1.4 U | 84 | 34 | 25 | 83 | 1.4 U | 16 |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 25.025 | 49 J | 2 U | 29 | 15 | 14 | 37 | 2 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-612 | SB-612 | SB-612 | SB-613 | SB-613 | SB-614 | SB-614 | SB-615 | SB-615 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-612-11-AVG | H-SB-612-11-D | H-SB-612-12 | H-SB-613-11 | H-SB-613-12 | H-SB-614-11 | H-SB-614-12 | H-SB-615-11 | H-SB-615-12 |
| SAMPLE DATE | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 |
| BOTTOM DEPTH | 11 | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 54.5 | 97 J | 1.1 U | 87 | 39 | 24 | 73 | 11 | 22 |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 19.45 | 38 J | 1.8 U | 35 | 17 | 16 | 44 | 1.7 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 237.2 | 454 | 0 U | 380 | 179 | 129 | 371 | 33.1 | 75 |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-612 | SB-612 | SB-612 | SB-613 | SB-613 | SB-614 | SB-614 | SB-615 | SB-615 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-612-11-AVG | H-SB-612-11-D | H-SB-612-12 | H-SB-613-11 | H-SB-613-12 | H-SB-614-11 | H-SB-614-12 | H-SB-615-11 | H-SB-615-12 |
| SAMPLE DATE | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 |
| BOTTOM DEPTH | 11 | 11 | 12 | 11 | 12 | 11 | 12 | 11 | 12 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-616 | SB-616 | SB-616 | SB-616 | SB-617 | SB-617 | SB-617 | SB-617 | SB-618 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-616-11 | H-SB-616-11-AVG | H-SB-616-11-D | H-SB-616-12 | H-SB-617-11 | H-SB-617-11-AVG | H-SB-617-11-D | H-SB-617-12 | H-SB-618-11 |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 11 | 12 | 11 | 11 | 11 | 12 | 11 |
| BOTTOM DEPTH | 11 | 11 | 11 | 12 | 11 | 11 | 11 | 12 | 11 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-616 | SB-616 | SB-616 | SB-616 | SB-617 | SB-617 | SB-617 | SB-617 | SB-618 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-616-11 | H-SB-616-11-AVG | H-SB-616-11-D | H-SB-616-12 | H-SB-617-11 | H-SB-617-11-AVG | H-SB-617-11-D | H-SB-617-12 | H-SB-618-11 |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 11 | 12 | 11 | 11 | 11 | 12 | 11 |
| BOTTOM DEPTH | 11 | 11 | 11 | 12 | 11 | 11 | 11 | 12 | 11 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 116 | 60 | 3.9 | 1.5 U | 1.6 U | 6.7 | 13 | 31 U | 1.5 U |
| BAP EQUIVALENT-POS | 115 | 58 | 2.2 | 1.5 U | 1.6 U | 6.3 | 12 | 31 U | 1.5 U |
| BENZO(A)ANTHRACENE | 1.1 U | 5.775 | 11 | 1.1 U | 1.1 U | 6.775 | 13 | 22 U | 1.1 U |
| BENZO(A)PYRENE | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 5.15 | 9.5 | 31 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 1100 J | 555.5 | 11 J | 1.4 U | 1.4 U | 4.8 | 8.9 | 28 U | 1.4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 470 J | 235.525 | 2.1 UJ | 2 U | 2 U | 2 U | 2 U | 40 U | 2 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-616 | SB-616 | SB-616 | SB-616 | SB-617 | SB-617 | SB-617 | SB-617 | SB-618 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-616-11 | H-SB-616-11-AVG | H-SB-616-11-D | H-SB-616-12 | H-SB-617-11 | H-SB-617-11-AVG | H-SB-617-11-D | H-SB-617-12 | H-SB-618-11 |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 11 | 12 | 11 | 11 | 11 | 12 | 11 |
| BOTTOM DEPTH | 11 | 11 | 11 | 12 | 11 | 11 | 11 | 12 | 11 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 47 J | 30 | 13 J | 1.1 U | 1.1 U | 6.275 | 12 | 21 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 1.6 U | 1.6 U | 1.6 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 31 U | 1.5 U |
| FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 35 U | 1.8 U |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | 1617 | 826 | 35 | 0 U | 0 U | 21.7 | 43.4 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table A-29**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-616 | SB-616 | SB-616 | SB-616 | SB-617 | SB-617 | SB-617 | SB-617 | SB-618 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-616-11 | H-SB-616-11-AVG | H-SB-616-11-D | H-SB-616-12 | H-SB-617-11 | H-SB-617-11-AVG | H-SB-617-11-D | H-SB-617-12 | H-SB-618-11 |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 11 | 12 | 11 | 11 | 11 | 12 | 11 |
| BOTTOM DEPTH | 11 | 11 | 11 | 12 | 11 | 11 | 11 | 12 | 11 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-618 | SB-619 | SB-619 | SB-814 | SB-814 | SB-814 | SB-815 | SB-815 | SB-815 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-618-12 | H-SB-619-11 | H-SB-619-12 | H-SB-814-11 | H-SB-814-13 | H-SB-814-15 | H-SB-815-11 | H-SB-815-13 | H-SB-815-15 |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 11 | 12 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 12 | 11 | 12 | 11 | 13 | 15 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | | | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-618 | SB-619 | SB-619 | SB-814 | SB-814 | SB-814 | SB-815 | SB-815 | SB-815 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-618-12 | H-SB-619-11 | H-SB-619-12 | H-SB-814-11 | H-SB-814-13 | H-SB-814-15 | H-SB-815-11 | H-SB-815-13 | H-SB-815-15 |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 11 | 12 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 12 | 11 | 12 | 11 | 13 | 15 | 11 | 13 | 15 |
| VINYL CHLORIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | | | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NA | NA | NA | 4 U | 4.1 U | 3.9 U | 3.9 U | 4.2 U | 4 U |
| 2-METHYLNAPHTHALENE | NA | NA | NA | 4 U | 4.1 U | 3.9 U | 3.9 U | 4.2 U | 4 U |
| ACENAPHTHENE | NA | NA | NA | 4 U | 4.1 U | 3.9 U | 3.9 U | 10 | 4 U |
| ACENAPHTHYLENE | NA | NA | NA | 4 U | 4.1 U | 8 | 3.9 U | 9 | 4 U |
| ANTHRACENE | NA | NA | NA | 4 U | 4.1 U | 12 | 3.9 U | 45 | 4 U |
| BAP EQUIVALENT-HALFND | 2.9 | 1.6 U | 1.5 U | 4 U | 48 | 16 | 15 | 268 | 4 U |
| BAP EQUIVALENT-POS | 0.98 | 1.6 U | 1.5 U | 4 U | 46 | 14 | 13 | 268 | 4 U |
| BENZO(A)ANTHRACENE | 9.7 | 1.1 U | 1.1 U | 4 U | 27 | 11 | 3.9 U | 140 | 4 U |
| BENZO(A)PYRENE | 1.7 U | 1.6 U | 1.5 U | 4 U | 38 | 11 | 12 | 190 | 4 U |
| BENZO(B)FLUORANTHENE | 1.6 U | 1.4 U | 1.4 U | 4 U | 34 | 9.2 | 11 | 180 | 4 U |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | NA | NA | NA | 4 U | 29 | 9 | 9.9 | 160 | 4 U |
| BENZO(K)FLUORANTHENE | 2.2 U | 2 U | 2 U | 4 U | 14 | 14 | 3.9 U | 79 | 4 U |
| C1-CHRYSENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |

| LOCATION | SB-618 | SB-619 | SB-619 | SB-814 | SB-814 | SB-814 | SB-815 | SB-815 | SB-815 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-618-12 | H-SB-619-11 | H-SB-619-12 | H-SB-814-11 | H-SB-814-13 | H-SB-814-15 | H-SB-815-11 | H-SB-815-13 | H-SB-815-15 |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 11 | 12 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 12 | 11 | 12 | 11 | 13 | 15 | 11 | 13 | 15 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C1-FLUORENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C2-CHRYSENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-FLUORENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C2-NAPHTHALENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C3-CHRYSENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-FLUORENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C3-NAPHTHALENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C4-CHRYSENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| C4-NAPHTHALENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | NA | NA | NA | NA | NA | 78 U | NA | NA | NA |
| CHRYSENE | 9 | 1.1 U | 1.1 U | 1.3 UJ | 26 J | 1.3 UJ | 1.3 UJ | 170 | 1.3 UJ |
| DIBENZO(A,H)ANTHRACENE | 1.7 U | 1.6 U | 1.5 U | 4 U | 4.1 U | 3.9 U | 3.9 U | 33 | 4 U |
| FLUORANTHENE | NA | NA | NA | 4 U | 42 | 12 | 9.7 | 210 | 4 U |
| FLUORENE | NA | NA | NA | 4 U | 4.1 U | 8.7 | 3.9 U | 16 | 4 U |
| INDENO(1,2,3-CD)PYRENE | 1.9 U | 1.8 U | 1.8 U | 4 U | 20 | 13 | 3.9 U | 120 | 4 U |
| NAPHTHALENE | NA | NA | NA | 4 U | 4.1 U | 3.9 U | 3.9 U | 10 | 4 U |
| PHENANTHRENE | NA | NA | NA | 4 U | 19 | 11 | 3.9 U | 120 | 4 U |
| PYRENE | NA | NA | NA | 4 U | 82 | 12 | 17 | 320 | 4 U |
| TOTAL PAHS | 18.7 | 0 U | 0 U | 0 U | 331 | 130.9 | 59.6 | 1812 | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | | | | | | |
| 4,4'-DDD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | | | | | | |
| ANTIMONY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-618 | SB-619 | SB-619 | SB-814 | SB-814 | SB-814 | SB-815 | SB-815 | SB-815 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-618-12 | H-SB-619-11 | H-SB-619-12 | H-SB-814-11 | H-SB-814-13 | H-SB-814-15 | H-SB-815-11 | H-SB-815-13 | H-SB-815-15 |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 12 | 11 | 12 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 12 | 11 | 12 | 11 | 13 | 15 | 11 | 13 | 15 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | | | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | | | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | | | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | | | | | | |
| PH | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | | | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | | | | | | |
| ACTINIUM-228 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| LOCATION | SB-816 | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|
| SAMPLE ID | H-SB-816-11 | H-SB-817-11 | H-SB-817-13 | H-SB-817-15 |
| SAMPLE DATE | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 11 | 13 | 15 |
| **VOLATILES (UG/KG)** | | | | |
| 1,1,1,2-TETRACHLOROETHANE | NA | NA | NA | NA |
| 1,1,1-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2,2-TETRACHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROETHANE | NA | NA | NA | NA |
| 1,1,2-TRICHLOROTRIFLUOROETHANE | NA | NA | NA | NA |
| 1,1-DICHLOROETHANE | NA | NA | NA | NA |
| 1,1-DICHLOROETHENE | NA | NA | NA | NA |
| 1,1-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,2,3-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2,3-TRICHLOROPROPANE | NA | NA | NA | NA |
| 1,2,3-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2,4-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,2-DIBROMO-3-CHLOROPROPANE | NA | NA | NA | NA |
| 1,2-DIBROMOETHANE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROETHANE | NA | NA | NA | NA |
| 1,2-DICHLOROPROPANE | NA | NA | NA | NA |
| 1,3,5-TRIMETHYLBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROPROPANE | NA | NA | NA | NA |
| 1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2-DICHLOROPROPANE | NA | NA | NA | NA |
| 2-BUTANONE | NA | NA | NA | NA |
| 2-CHLOROETHYL VINYL ETHER | NA | NA | NA | NA |
| 2-CHLOROTOLUENE | NA | NA | NA | NA |
| 2-HEXANONE | NA | NA | NA | NA |
| 4-CHLOROTOLUENE | NA | NA | NA | NA |
| 4-ISOPROPYLTOLUENE | NA | NA | NA | NA |
| 4-METHYL-2-PENTANONE | NA | NA | NA | NA |
| ACETONE | NA | NA | NA | NA |
| BENZENE | NA | NA | NA | NA |
| BROMOBENZENE | NA | NA | NA | NA |
| BROMOCHLOROMETHANE | NA | NA | NA | NA |
| BROMODICHLOROMETHANE | NA | NA | NA | NA |
| BROMOFORM | NA | NA | NA | NA |
| BROMOMETHANE | NA | NA | NA | NA |
| CARBON DISULFIDE | NA | NA | NA | NA |
| CARBON TETRACHLORIDE | NA | NA | NA | NA |
| CHLOROBENZENE | NA | NA | NA | NA |
| CHLORODIBROMOMETHANE | NA | NA | NA | NA |
| CHLOROETHANE | NA | NA | NA | NA |
| CHLOROFORM | NA | NA | NA | NA |
| CHLOROMETHANE | NA | NA | NA | NA |
| CIS-1,2-DICHLOROETHENE | NA | NA | NA | NA |
| CIS-1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| DIBROMOMETHANE | NA | NA | NA | NA |
| DICHLORODIFLUOROMETHANE | NA | NA | NA | NA |
| DIISOPROPYL ETHER | NA | NA | NA | NA |
| ETHYL TERT-BUTYL ETHER | NA | NA | NA | NA |
| ETHYLBENZENE | NA | NA | NA | NA |
| FLUORODICHLOROMETHANE | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA |
| ISOPROPYLBENZENE | NA | NA | NA | NA |
| M+P-XYLENES | NA | NA | NA | NA |
| METHYL TERT-BUTYL ETHER | NA | NA | NA | NA |
| METHYLENE CHLORIDE | NA | NA | NA | NA |
| NAPHTHALENE | NA | NA | NA | NA |
| N-BUTYLBENZENE | NA | NA | NA | NA |
| N-PROPYLBENZENE | NA | NA | NA | NA |
| O-XYLENE | NA | NA | NA | NA |
| SEC-BUTYLBENZENE | NA | NA | NA | NA |
| STYRENE | NA | NA | NA | NA |
| TERT-AMYL METHYL ETHER | NA | NA | NA | NA |
| TERT-BUTYLBENZENE | NA | NA | NA | NA |
| TERTIARY-BUTYL ALCOHOL | NA | NA | NA | NA |
| TETRACHLOROETHENE | NA | NA | NA | NA |
| TOLUENE | NA | NA | NA | NA |
| TOTAL 1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TOTAL XYLENES | NA | NA | NA | NA |
| TRANS-1,2-DICHLOROETHENE | NA | NA | NA | NA |
| TRANS-1,3-DICHLOROPROPENE | NA | NA | NA | NA |
| TRICHLOROETHENE | NA | NA | NA | NA |
| TRICHLOROFLUOROMETHANE | NA | NA | NA | NA |
| VINYL ACETATE | NA | NA | NA | NA |

| LOCATION | SB-816 | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|
| SAMPLE ID | H-SB-816-11 | H-SB-817-11 | H-SB-817-13 | H-SB-817-15 |
| SAMPLE DATE | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 11 | 13 | 15 |
| VINYL CHLORIDE | NA | NA | NA | NA |
| **SEMIVOLATILES (UG/KG)** | | | | |
| 1,1-BIPHENYL | NA | NA | NA | NA |
| 1,2,4-TRICHLOROBENZENE | NA | NA | NA | NA |
| 1,2-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,3-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DICHLOROBENZENE | NA | NA | NA | NA |
| 1,4-DIOXANE | NA | NA | NA | NA |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | NA | NA | NA | NA |
| 2,4,5-TRICHLOROPHENOL | NA | NA | NA | NA |
| 2,4,6-TRICHLOROPHENOL | NA | NA | NA | NA |
| 2,4-DICHLOROPHENOL | NA | NA | NA | NA |
| 2,4-DIMETHYLPHENOL | NA | NA | NA | NA |
| 2,4-DINITROPHENOL | NA | NA | NA | NA |
| 2,4-DINITROTOLUENE | NA | NA | NA | NA |
| 2,6-DINITROTOLUENE | NA | NA | NA | NA |
| 2-CHLORONAPHTHALENE | NA | NA | NA | NA |
| 2-CHLOROPHENOL | NA | NA | NA | NA |
| 2-METHYLPHENOL | NA | NA | NA | NA |
| 2-NITROANILINE | NA | NA | NA | NA |
| 2-NITROPHENOL | NA | NA | NA | NA |
| 3&4-METHYLPHENOL | NA | NA | NA | NA |
| 3,3'-DICHLOROBENZIDINE | NA | NA | NA | NA |
| 3-NITROANILINE | NA | NA | NA | NA |
| 4,6-DINITRO-2-METHYLPHENOL | NA | NA | NA | NA |
| 4-BROMOPHENYL PHENYL ETHER | NA | NA | NA | NA |
| 4-CHLORO-3-METHYLPHENOL | NA | NA | NA | NA |
| 4-CHLOROANILINE | NA | NA | NA | NA |
| 4-CHLOROPHENYL PHENYL ETHER | NA | NA | NA | NA |
| 4-METHYLPHENOL | NA | NA | NA | NA |
| 4-NITROANILINE | NA | NA | NA | NA |
| 4-NITROPHENOL | NA | NA | NA | NA |
| ACETOPHENONE | NA | NA | NA | NA |
| ANILINE | NA | NA | NA | NA |
| ATRAZINE | NA | NA | NA | NA |
| AZOBENZENE | NA | NA | NA | NA |
| BENZALDEHYDE | NA | NA | NA | NA |
| BENZIDINE | NA | NA | NA | NA |
| BENZOIC ACID | NA | NA | NA | NA |
| BENZYL ALCOHOL | NA | NA | NA | NA |
| BIS(2-CHLOROETHOXY)METHANE | NA | NA | NA | NA |
| BIS(2-CHLOROETHYL)ETHER | NA | NA | NA | NA |
| BIS(2-ETHYLHEXYL)PHTHALATE | NA | NA | NA | NA |
| BUTYL BENZYL PHTHALATE | NA | NA | NA | NA |
| CAPROLACTAM | NA | NA | NA | NA |
| CARBAZOLE | NA | NA | NA | NA |
| DIBENZOFURAN | NA | NA | NA | NA |
| DIETHYL PHTHALATE | NA | NA | NA | NA |
| DIMETHYL PHTHALATE | NA | NA | NA | NA |
| DI-N-BUTYL PHTHALATE | NA | NA | NA | NA |
| DI-N-OCTYL PHTHALATE | NA | NA | NA | NA |
| HEXACHLOROBENZENE | NA | NA | NA | NA |
| HEXACHLOROBUTADIENE | NA | NA | NA | NA |
| HEXACHLOROCYCLOPENTADIENE | NA | NA | NA | NA |
| HEXACHLOROETHANE | NA | NA | NA | NA |
| ISOPHORONE | NA | NA | NA | NA |
| NITROBENZENE | NA | NA | NA | NA |
| N-NITROSODIMETHYLAMINE | NA | NA | NA | NA |
| N-NITROSO-DI-N-PROPYLAMINE | NA | NA | NA | NA |
| N-NITROSODIPHENYLAMINE | NA | NA | NA | NA |
| PENTACHLOROPHENOL | NA | NA | NA | NA |
| PHENOL | NA | NA | NA | NA |
| PYRIDINE | NA | NA | NA | NA |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | |
| 1-METHYLNAPHTHALENE | 11 | 3.9 U | 3.9 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 13 | 3.9 U | 3.9 U | 3.9 U |
| ACENAPHTHENE | 38 J | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| ACENAPHTHYLENE | 3.9 U | 3.9 U | 3.9 U | 3.9 U |
| ANTHRACENE | 58 J | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| BAP EQUIVALENT-HALFND | 203 | 3.9 U | 3.9 U | 3.9 U |
| BAP EQUIVALENT-POS | 201 | 3.9 U | 3.9 U | 3.9 U |
| BENZO(A)ANTHRACENE | 140 J | 3.9 U | 3.9 U | 3.9 U |
| BENZO(A)PYRENE | 160 J | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| BENZO(B)FLUORANTHENE | 170 J | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| BENZO(B+K)FLUORANTHENE | NA | NA | NA | NA |
| BENZO(G,H,I)PERYLENE | 140 J | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| BENZO(K)FLUORANTHENE | 68 J | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| C1-CHRYSENES | 240 J | NA | NA | NA |

**Table A-29**
**Summary of Analytical Results for Deep Subsurface Soils, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | SB-816 | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|
| SAMPLE ID | H-SB-816-11 | H-SB-817-11 | H-SB-817-13 | H-SB-817-15 |
| SAMPLE DATE | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 11 | 13 | 15 |
| C1-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | 290 J | NA | NA | NA |
| C1-FLUORENES | 79 U | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | 220 J | NA | NA | NA |
| C2-CHRYSENES | 140 J | NA | NA | NA |
| C2-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C2-FLUORENES | 79 U | NA | NA | NA |
| C2-NAPHTHALENES | 79 U | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | 180 J | NA | NA | NA |
| C3-CHRYSENES | 79 U | NA | NA | NA |
| C3-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C3-FLUORENES | 79 U | NA | NA | NA |
| C3-NAPHTHALENES | 79 U | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | 100 J | NA | NA | NA |
| C4-CHRYSENES | 79 U | NA | NA | NA |
| C4-CHRYSENES/BENZO(A)ANTHRACENES | NA | NA | NA | NA |
| C4-NAPHTHALENES | 79 U | NA | NA | NA |
| C4-PHENANTHRENES/ANTHRACENES | 79 U | NA | NA | NA |
| CHRYSENE | 140 J | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 3.9 UJ | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| FLUORANTHENE | 200 J | 17 J | 3.9 UJ | 3.9 UJ |
| FLUORENE | 42 J | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| INDENO(1,2,3-CD)PYRENE | 94 J | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| NAPHTHALENE | 3.9 U | 3.9 U | 3.9 U | 3.9 U |
| PHENANTHRENE | 170 J | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| PYRENE | 340 J | 3.9 U | 3.9 U | 3.9 U |
| TOTAL PAHS | 1773 | 17 | 0 U | 0 U |
| **PESTICIDES/PCBS (UG/KG)** | | | | |
| 4,4'-DDD | NA | NA | NA | NA |
| 4,4'-DDE | NA | NA | NA | NA |
| 4,4'-DDT | NA | NA | NA | NA |
| ALDRIN | NA | NA | NA | NA |
| ALPHA-BHC | NA | NA | NA | NA |
| ALPHA-CHLORDANE | NA | NA | NA | NA |
| AROCLOR-1016 | NA | NA | NA | NA |
| AROCLOR-1221 | NA | NA | NA | NA |
| AROCLOR-1232 | NA | NA | NA | NA |
| AROCLOR-1242 | NA | NA | NA | NA |
| AROCLOR-1248 | NA | NA | NA | NA |
| AROCLOR-1254 | NA | NA | NA | NA |
| AROCLOR-1260 | NA | NA | NA | NA |
| BETA-BHC | NA | NA | NA | NA |
| DELTA-BHC | NA | NA | NA | NA |
| DIELDRIN | NA | NA | NA | NA |
| ENDOSULFAN I | NA | NA | NA | NA |
| ENDOSULFAN II | NA | NA | NA | NA |
| ENDOSULFAN SULFATE | NA | NA | NA | NA |
| ENDRIN | NA | NA | NA | NA |
| ENDRIN ALDEHYDE | NA | NA | NA | NA |
| ENDRIN KETONE | NA | NA | NA | NA |
| GAMMA-BHC (LINDANE) | NA | NA | NA | NA |
| GAMMA-CHLORDANE | NA | NA | NA | NA |
| HEPTACHLOR | NA | NA | NA | NA |
| HEPTACHLOR EPOXIDE | NA | NA | NA | NA |
| METHOXYCHLOR | NA | NA | NA | NA |
| TOTAL AROCLOR | NA | NA | NA | NA |
| TOXAPHENE | NA | NA | NA | NA |
| **METALS (MG/KG)** | | | | |
| ANTIMONY | NA | NA | NA | NA |
| ARSENIC | NA | NA | NA | NA |
| BARIUM | NA | NA | NA | NA |
| BERYLLIUM | NA | NA | NA | NA |
| CADMIUM | NA | NA | NA | NA |
| CHROMIUM | NA | NA | NA | NA |
| COBALT | NA | NA | NA | NA |
| COPPER | NA | NA | NA | NA |
| IRON | NA | NA | NA | NA |
| LEAD | NA | NA | NA | NA |
| MANGANESE | NA | NA | NA | NA |
| MERCURY | NA | NA | NA | NA |
| MOLYBDENUM | NA | NA | NA | NA |
| NICKEL | NA | NA | NA | NA |
| SELENIUM | NA | NA | NA | NA |
| SILVER | NA | NA | NA | NA |
| THALLIUM | NA | NA | NA | NA |
| VANADIUM | NA | NA | NA | NA |
| ZINC | NA | NA | NA | NA |

| LOCATION | SB-816 | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|
| SAMPLE ID | H-SB-816-11 | H-SB-817-11 | H-SB-817-13 | H-SB-817-15 |
| SAMPLE DATE | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 11 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 11 | 13 | 15 |
| **PETROLEUM HYDROCARBONS (UG/KG)** | | | | |
| DIESEL RANGE ORGANICS | NA | NA | NA | NA |
| GASOLINE RANGE ORGANICS | NA | NA | NA | NA |
| TPH (C09-C36) | NA | NA | NA | NA |
| TPH (C10-C32) | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (%)** | | | | |
| PERCENT SOLIDS | NA | NA | NA | NA |
| TOTAL SOLIDS | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (MG/KG)** | | | | |
| HEXAVALENT CHROMIUM | NA | NA | NA | NA |
| TOTAL ORGANIC CARBON | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (S.U.)** | | | | |
| PH | NA | NA | NA | NA |
| **MISCELLANEOUS PARAMETERS (UG/KG)** | | | | |
| MERCURY (METHYL) | NA | NA | NA | NA |
| **RADIONUCLIDES (PCI/G)** | | | | |
| ACTINIUM-228 | NA | NA | NA | NA |
| ALUMINUM-26 | NA | NA | NA | NA |
| AMERICIUM-241 | NA | NA | NA | NA |
| ANTIMONY-124 | NA | NA | NA | NA |
| ANTIMONY-125 | NA | NA | NA | NA |
| BERYLLIUM-7 | NA | NA | NA | NA |
| BISMUTH-212 | NA | NA | NA | NA |
| BISMUTH-214 | NA | NA | NA | NA |
| CERIUM-139 | NA | NA | NA | NA |
| CERIUM-144 | NA | NA | NA | NA |
| CESIUM-134 | NA | NA | NA | NA |
| CESIUM-137 | NA | NA | NA | NA |
| CHROMIUM-51 | NA | NA | NA | NA |
| COBALT-56 | NA | NA | NA | NA |
| COBALT-57 | NA | NA | NA | NA |
| COBALT-58 | NA | NA | NA | NA |
| COBALT-60 | NA | NA | NA | NA |
| EUROPIUM-152 | NA | NA | NA | NA |
| EUROPIUM-154 | NA | NA | NA | NA |
| EUROPIUM-155 | NA | NA | NA | NA |
| IODINE-131 | NA | NA | NA | NA |
| IRON-59 | NA | NA | NA | NA |
| LEAD-212 | NA | NA | NA | NA |
| LEAD-214 | NA | NA | NA | NA |
| MANGANESE-54 | NA | NA | NA | NA |
| NIOBIUM-94 | NA | NA | NA | NA |
| NIOBIUM-95 | NA | NA | NA | NA |
| POTASSIUM-40 | NA | NA | NA | NA |
| PROTACTINIUM-234 | NA | NA | NA | NA |
| RADIUM-226 | NA | NA | NA | NA |
| RUTHENIUM-106 | NA | NA | NA | NA |
| SCANDIUM-46 | NA | NA | NA | NA |
| SILVER-110 | NA | NA | NA | NA |
| SODIUM-22 | NA | NA | NA | NA |
| THALLIUM-208 | NA | NA | NA | NA |
| THORIUM-227 | NA | NA | NA | NA |
| THORIUM-234 | NA | NA | NA | NA |
| URANIUM-235 | NA | NA | NA | NA |
| ZINC-65 | NA | NA | NA | NA |

**Definitions:**
B = Blank contamination
J = Estimated
K = Biased high
L = Biased low
NA = Not Applicable or Not Available
R = Rejected
U = Non-detected

**Table A-30**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-200RE | SB-200RE | SB-200RE | SB-200RE | SB-200RE | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-200RE-11 | H-SB-200RE-12 | H-SB-200RE-13 | H-SB-200RE-14 | H-SB-200RE-15 | H-SB-282RE-11 | H-SB-282RE-12 | H-SB-282RE-13 |
| SAMPLE DATE | | | | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 |
| BOTTOM DEPTH | | | | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 67 | 165 | 848 | 14 | 120 | 1.6 U | 16 | 1462 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 66 | 165 | 848 | 13 | 119 | 1.6 U | 14.715 | 1462 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 59 | 140 | 700 | 13 | 110 | 1.2 U | 15 | 1400 |
| BENZO(A)PYRENE | 22 | 15 | C | 53 | 120 | 680 | 11 | 95 | 1.6 U | 10 | 930 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 46 | 110 | 630 | 9.5 | 82 | 1.5 U | 13 | 1200 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 31 | 44 | 290 | 2 U | 46 | 2.1 U | 2 U | 470 |
| C1-CHRYSENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 63 | 140 | 730 | 12 | 110 | 1.1 U | 15 | 1600 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 14 | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 210 |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 22 | 52 | 310 | 1.8 U | 42 | 1.9 U | 19 | 560 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 274 | 620 | 3340 | 45.5 | 485 | 0 U | 72 | 6370 |

**Table A-30**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-282 | SB-282 | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B | SB-282B |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | H-SB-282RE-14 | H-SB-282RE-15 | H-SB-282REA-11 | H-SB-282REA-13 | H-SB-282REA-15 | H-SB-282REB-11 | H-SB-282REB-13 | H-SB-282REB-15 |
| SAMPLE DATE | | | 20090929 | 20090929 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | | | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | 5.3 | 1.6 U | 1.6 U | 409 | 33 | 49 | 373 | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 C | 3.8 | 1.6 U | 1.6 U | 409 | 32 | 48 | 373 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 C | 10 | 1.1 U | 1.1 U | 250 | 14 | 53 | 350 | 1.2 U |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 1.6 U | 1.6 U | 290 | 27 | 35 | 240 | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 9.4 | 1.5 U | 1.4 U | 230 | 17 | 50 | 290 | 1.5 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2 U | 2.1 U | 2.1 U | 150 | 9.8 | 25 | 120 | 2.1 U |
| C1-CHRYSENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 C | 11 | 1.1 U | 1.1 U | 230 | 14 | 63 | 400 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | 1.6 U | 1.6 U | 54 | 1.4 U | 1.5 U | 51 | 1.6 U |
| FLUORANTHENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 18 | 1.8 U | 1.8 U | 150 | 20 | 22 | 160 | 1.8 U |
| NAPHTHALENE | 160000 | 3600 C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | 48.4 | 0 U | 0 U | 1354 | 101.8 | 248 | 1611 | 0 U |

**Table A-30**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-282C | SB-282C | SB-282C | SB-282D | SB-282D | SB-282D | SB-285 | SB-285 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-282REC-11 | H-SB-282REC-13 | H-SB-282REC-15 | H-SB-282RED-11 | H-SB-282RED-13 | H-SB-282RED-15 | H-SB-285RE-11 | H-SB-285RE-12 |
| SAMPLE DATE | | | | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20090925 | 20090925 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 12 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 12 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 2123 | 1250 | 289 | 1.5 U | 225 | 1.5 U | 1.5 U | 1.5 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 2121 | 1249 | 288 | 1.5 U | 225 | 1.5 U | 1.5 U | 1.5 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1800 | 1100 | 250 | 1.1 U | 160 | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1700 | 990 | 230 | 1.5 U | 150 | 1.5 U | 1.5 U | 1.5 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1500 | 970 | 210 | 1.4 U | 150 | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 620 | 440 | 94 | 2 U | 61 | 1.9 U | 2 U | 2 U |
| C1-CHRYSENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 2000 | 1100 | 270 | 1 U | 180 | 1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.2 U | 3.3 U | 1.5 U | 1.5 U | 35 | 1.5 U | 1.5 U | 1.5 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 830 | 460 | 110 | 1.7 U | 79 | 1.7 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 8450 | 5060 | 1164 | 0 U | 815 | 0 U | 0 U | 0 U |

**Table A-30**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-286RE | SB-286RE | SB-286RE | SB-596 | SB-596 | SB-597 | SB-597 | SB-598 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-286RE-11 | H-SB-286RE-12 | H-SB-286RE-15 | H-SB-596-11 | H-SB-596-12 | H-SB-597-11 | H-SB-597-12 | H-SB-598-11 |
| SAMPLE DATE | | | | 20090925 | 20090925 | 20090925 | 20090929 | 20090929 | 20090928 | 20090928 | 20090929 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 11 | 12 | 15 | 11 | 12 | 11 | 12 | 11 |
| BOTTOM DEPTH | | | | 11 | 12 | 15 | 11 | 12 | 11 | 12 | 11 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 34 | 33 U | 1.6 U | 2.6 | 130 | 1.5 U | 1.6 U | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 32 | 33 U | 1.6 U | 0.96 | 130 | 1.5 U | 1.6 U | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.2 U | 24 U | 1.2 U | 9.6 | 120 | 1.1 U | 1.1 U | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 33 U | 1.6 U | 1.5 U | 83 | 1.5 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 220 | 31 U | 1.5 U | 1.4 U | 80 | 1.4 U | 1.4 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 140 | 44 U | 2.1 U | 2 U | 37 | 2 U | 2 U | 2 U |
| C1-CHRYSENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 13 | 23 U | 1.1 U | 1.1 U | 120 | 1.1 U | 1.1 U | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 33 U | 1.6 U | 1.5 U | 22 | 1.5 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 88 | 39 U | 1.9 U | 1.8 U | 45 | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 461 | 0 U | 0 U | 9.6 | 507 | 0 U | 0 U | 0 U |

**Table A-30**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-598 | SB-599 | SB-599 | SB-612 | SB-612 | SB-612 | SB-612 | SB-613 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-598-12 | H-SB-599-11 | H-SB-599-12 | H-SB-612-11 | H-SB-612-11-AVG | H-SB-612-11-D | H-SB-612-12 | H-SB-613-11 |
| SAMPLE DATE | | | | 20090929 | 20090929 | 20090929 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 12 | 11 | 12 | 11 | 11 | 11 | 12 | 11 |
| BOTTOM DEPTH | | | | 12 | 11 | 12 | 11 | 11 | 11 | 12 | 11 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.6 U | 15 | 36 | 9.4 | 59 | 108 | 1.6 U | 89 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.6 U | 14 | 35 | 8.4 | 58 | 107 | 1.6 U | 88 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 12 | 30 | 1.1 UJ | 50.275 | 100 J | 1.1 U | 77 |
| BENZO(A)PYRENE | 22 | 15 | C | 1.6 U | 10 | 27 | 8.4 J | 46.2 | 84 J | 1.6 U | 68 |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 9.6 | 24 | 1.5 UJ | 43.375 | 86 J | 1.4 U | 84 |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2.2 U | 13 | 2.1 UJ | 25.025 | 49 J | 2 U | 29 |
| C1-CHRYSENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 11 | 32 | 12 J | 54.5 | 97 J | 1.1 U | 87 |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.7 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 18 | 23 | 1.8 UJ | 19.45 | 38 J | 1.8 U | 35 |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 60.6 | 149 | 20.4 | 237.2 | 454 | 0 U | 380 |

**Table A-30**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-613 | SB-614 | SB-614 | SB-615 | SB-615 | SB-616 | SB-616 | SB-616 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-613-12 | H-SB-614-11 | H-SB-614-12 | H-SB-615-11 | H-SB-615-12 | H-SB-616-11 | H-SB-616-11-AVG | H-SB-616-11-D |
| SAMPLE DATE | | | | 20090928 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 12 | 11 | 12 | 11 | 12 | 11 | 11 | 11 |
| BOTTOM DEPTH | | | | 12 | 11 | 12 | 11 | 12 | 11 | 11 | 11 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 43 | 35 | 100 | 11 | 21 | 116 | 60 | 3.9 |
| BAP EQUIVALENT-POS | 22 | 15 | C | 42 | 34 | 99 | 10 | 21 | 115 | 58 | 2.2 |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 41 | 22 | 53 | 13 | 20 | 1.1 U | 5.775 | 11 |
| BENZO(A)PYRENE | 22 | 15 | C | 33 | 28 | 81 | 9.1 | 17 | 1.6 U | 1.6 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 34 | 25 | 83 | 1.4 U | 16 | 1100 J | 555.5 | 11 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 15 | 14 | 37 | 2 U | 2 U | 470 J | 235.525 | 2.1 UJ |
| C1-CHRYSENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 39 | 24 | 73 | 11 | 22 | 47 J | 30 | 13 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.6 U | 1.5 U | 1.5 U | 1.5 U | 1.5 U | 1.6 U | 1.6 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 17 | 16 | 44 | 1.7 U | 1.8 U | 1.8 U | 1.8 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 179 | 129 | 371 | 33.1 | 75 | 1617 | 826 | 35 |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-616 | SB-617 | SB-617 | SB-617 | SB-617 | SB-618 | SB-618 | SB-619 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-616-12 | H-SB-617-11 | H-SB-617-11-AVG | H-SB-617-11-D | H-SB-617-12 | H-SB-618-11 | H-SB-618-12 | H-SB-619-11 |
| SAMPLE DATE | | | | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | | | | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | 12 | 11 | 11 | 11 | 12 | 11 | 12 | 11 |
| BOTTOM DEPTH | | | | 12 | 11 | 11 | 11 | 12 | 11 | 12 | 11 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHENE | 470000 | 340000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | NA | NA | NA | NA | NA | NA | NA | NA |
| ANTHRACENE | 2300000 | 1700000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 1.5 U | 1.6 U | 6.7 | 13 | 31 U | 1.5 U | 2.9 | 1.6 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 1.5 U | 1.6 U | 6.3 | 12 | 31 U | 1.5 U | 0.98 | 1.6 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 1.1 U | 1.1 U | 6.775 | 13 | 22 U | 1.1 U | 9.7 | 1.1 U |
| BENZO(A)PYRENE | 22 | 15 | C | 1.5 U | 1.6 U | 5.15 | 9.5 | 31 U | 1.5 U | 1.7 U | 1.6 U |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 1.4 U | 1.4 U | 4.8 | 8.9 | 28 U | 1.4 U | 1.6 U | 1.4 U |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 2 U | 2 U | 2 U | 2 U | 40 U | 2 U | 2.2 U | 2 U |
| C1-CHRYSENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-CHRYSENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA | NA | NA | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.1 U | 1.1 U | 6.275 | 12 | 21 U | 1.1 U | 9 | 1.1 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 1.5 U | 1.6 U | 1.6 U | 1.6 U | 31 U | 1.5 U | 1.7 U | 1.6 U |
| FLUORANTHENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| FLUORENE | 310000 | 230000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 1.8 U | 1.8 U | 1.8 U | 1.8 U | 35 U | 1.8 U | 1.9 U | 1.8 U |
| NAPHTHALENE | 160000 | 3600 | C | NA | NA | NA | NA | NA | NA | NA | NA |
| PHENANTHRENE | 2300000 | 170000 | N[5] | NA | NA | NA | NA | NA | NA | NA | NA |
| PYRENE | 230000 | 170000 | N | NA | NA | NA | NA | NA | NA | NA | NA |
| TOTAL PAHS | NC | NC | | 0 U | 0 U | 21.7 | 43.4 | 0 U | 0 U | 18.7 | 0 U |

**Table A-30**
**Detected Concentrations Table for Deep Subsurface Soil, 10+ feet - Block H**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | SB-619 | SB-814 | SB-814 | SB-814 | SB-815 | SB-815 | SB-815 | SB-816 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | | | H-SB-619-12 | H-SB-814-11 | H-SB-814-13 | H-SB-814-15 | H-SB-815-11 | H-SB-815-13 | H-SB-815-15 | H-SB-816-11 |
| SAMPLE DATE | | | 20090925 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100827 |
| SAMPLE CODE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | | | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | | | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | 12 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | | | 12 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 C | NA | 4 U | 4.1 U | 3.9 U | 3.9 U | 4.2 U | 4 U | 11 |
| 2-METHYLNAPHTHALENE | 31000 | 31000 N | NA | 4 U | 4.1 U | 3.9 U | 3.9 U | 4.2 U | 4 U | 13 |
| ACENAPHTHENE | 470000 | 340000 N | NA | 4 U | 4.1 U | 3.9 U | 3.9 U | 10 | 4 U | 38 J |
| ACENAPHTHYLENE | 470000 | 340000 N[4] | NA | 4 U | 4.1 U | 8 | 3.9 U | 9 | 4 U | 3.9 U |
| ANTHRACENE | 2300000 | 1700000 N | NA | 4 U | 4.1 U | 12 | 3.9 U | 45 | 4 U | 58 J |
| BAP EQUIVALENT-HALFND | 22 | 15 | 1.5 U | 4 U | 48 | 16 | 15 | 268 | 4 U | 203 |
| BAP EQUIVALENT-POS | 22 | 15 C | 1.5 U | 4 U | 46 | 14 | 13 | 268 | 4 U | 201 |
| BENZO(A)ANTHRACENE | 220 | 150 C | 1.1 U | 4 U | 27 | 11 | 3.9 U | 140 | 4 U | 140 J |
| BENZO(A)PYRENE | 22 | 15 C | 1.5 U | 4 U | 38 | 11 | 12 | 190 | 4 U | 160 J |
| BENZO(B)FLUORANTHENE | 220 | 150 C | 1.4 U | 4 U | 34 | 9.2 | 11 | 180 | 4 U | 170 J |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 N[5] | NA | 4 U | 29 | 9 | 9.9 | 160 | 4 U | 140 J |
| BENZO(K)FLUORANTHENE | 2200 | 1500 C | 2 U | 4 U | 14 | 14 | 3.9 U | 79 | 4 U | 68 J |
| C1-CHRYSENES | NC | NC | NA | NA | NA | 78 U | NA | NA | NA | 240 J |
| C1-FLUORANTHENES/PYRENES | NC | NC | NA | NA | NA | 78 U | NA | NA | NA | 290 J |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | 78 U | NA | NA | NA | 220 J |
| C2-CHRYSENES | NC | NC | NA | NA | NA | 78 U | NA | NA | NA | 140 J |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | 78 U | NA | NA | NA | 180 J |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | NA | NA | NA | 78 U | NA | NA | NA | 100 J |
| CHRYSENE | 22000 | 15000 C | 1.1 U | 1.3 UJ | 26 J | 1.3 UJ | 1.3 UJ | 170 | 1.3 UJ | 140 J |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 C | 1.5 U | 4 U | 4.1 U | 3.9 U | 3.9 U | 33 | 4 U | 3.9 UJ |
| FLUORANTHENE | 310000 | 230000 N | NA | 4 U | 42 | 12 | 9.7 | 210 | 4 U | 200 J |
| FLUORENE | 310000 | 230000 N | NA | 4 U | 4.1 U | 8.7 | 3.9 U | 16 | 4 U | 42 J |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 C | 1.8 U | 4 U | 20 | 13 | 3.9 U | 120 | 4 U | 94 J |
| NAPHTHALENE | 160000 | 3600 C | NA | 4 U | 4.1 U | 3.9 U | 3.9 U | 10 | 4 U | 3.9 U |
| PHENANTHRENE | 2300000 | 170000 N[5] | NA | 4 U | 19 | 11 | 3.9 U | 120 | 4 U | 170 J |
| PYRENE | 230000 | 170000 N | NA | 4 U | 82 | 12 | 17 | 320 | 4 U | 340 J |
| TOTAL PAHS | NC | NC | 0 U | 0 U | 331 | 130.9 | 59.6 | 1812 | 0 U | 1773 |

| LOCATION | MDE Cleanup Standards [1][3] | USEPA Regional Screening Levels (RSLs) [2][3] | | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|---|---|
| SAMPLE ID | | | | H-SB-817-11 | H-SB-817-13 | H-SB-817-15 |
| SAMPLE DATE | | | | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | | | | NORMAL | NORMAL | NORMAL |
| MATRIX | | | | SO | SO | SO |
| SAMPLE TYPE | | | | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | | | | SB | SB | SB |
| TOP DEPTH | | | | 11 | 13 | 15 |
| BOTTOM DEPTH | | | | 11 | 13 | 15 |
| **POLYCYCLIC AROMATIC HYDROCARBONS (UG/KG)** | | | | | | |
| 1-METHYLNAPHTHALENE | NC | 22000 | C | 3.9 U | 3.9 U | 3.9 U |
| 2-METHYLNAPHTHALENE | 31000 | 31000 | N | 3.9 U | 3.9 U | 3.9 U |
| ACENAPHTHENE | 470000 | 340000 | N | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| ACENAPHTHYLENE | 470000 | 340000 | N[4] | 3.9 U | 3.9 U | 3.9 U |
| ANTHRACENE | 2300000 | 1700000 | N | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| BAP EQUIVALENT-HALFND | 22 | 15 | | 3.9 U | 3.9 U | 3.9 U |
| BAP EQUIVALENT-POS | 22 | 15 | C | 3.9 U | 3.9 U | 3.9 U |
| BENZO(A)ANTHRACENE | 220 | 150 | C | 3.9 U | 3.9 U | 3.9 U |
| BENZO(A)PYRENE | 22 | 15 | C | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| BENZO(B)FLUORANTHENE | 220 | 150 | C | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| BENZO(G,H,I)PERYLENE | 230000 | 170000 | N[5] | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| BENZO(K)FLUORANTHENE | 2200 | 1500 | C | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| C1-CHRYSENES | NC | NC | | NA | NA | NA |
| C1-FLUORANTHENES/PYRENES | NC | NC | | NA | NA | NA |
| C1-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA |
| C2-CHRYSENES | NC | NC | | NA | NA | NA |
| C2-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA |
| C3-PHENANTHRENES/ANTHRACENES | NC | NC | | NA | NA | NA |
| CHRYSENE | 22000 | 15000 | C | 1.3 U | 1.3 U | 1.3 U |
| DIBENZO(A,H)ANTHRACENE | 22 | 15 | C | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| FLUORANTHENE | 310000 | 230000 | N | 17 J | 3.9 UJ | 3.9 UJ |
| FLUORENE | 310000 | 230000 | N | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| INDENO(1,2,3-CD)PYRENE | 220 | 150 | C | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| NAPHTHALENE | 160000 | 3600 | C | 3.9 U | 3.9 U | 3.9 U |
| PHENANTHRENE | 2300000 | 170000 | N[5] | 3.9 UJ | 3.9 UJ | 3.9 UJ |
| PYRENE | 230000 | 170000 | N | 3.9 U | 3.9 U | 3.9 U |
| TOTAL PAHS | NC | NC | | 17 | 0 U | 0 U |

**Notes:**
1 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
2 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November 2010. Cancer (C) benchmark value = 1E-06, non-cancer (N) Hazard index (HI) = 0.1.
3 - Concentrations exceeding the MDE Cleanup Standard are shaded gray with black font. Concentrations exceeding the RSL for residential soil are shaded black with white font. Concentrations exceeding both the MDE Cleanup Standard and the RSL are shaded red with white font.
4 - The value for acenaphthene is used as a surrogate for acenaphthylene.
5 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.

C = Carcinogenic
N = Noncarcinogenic
NA = Not Applicable or Not Available
sat = Soil Saturation Concentration

# APPENDIX B—HISTORIC AERIALS

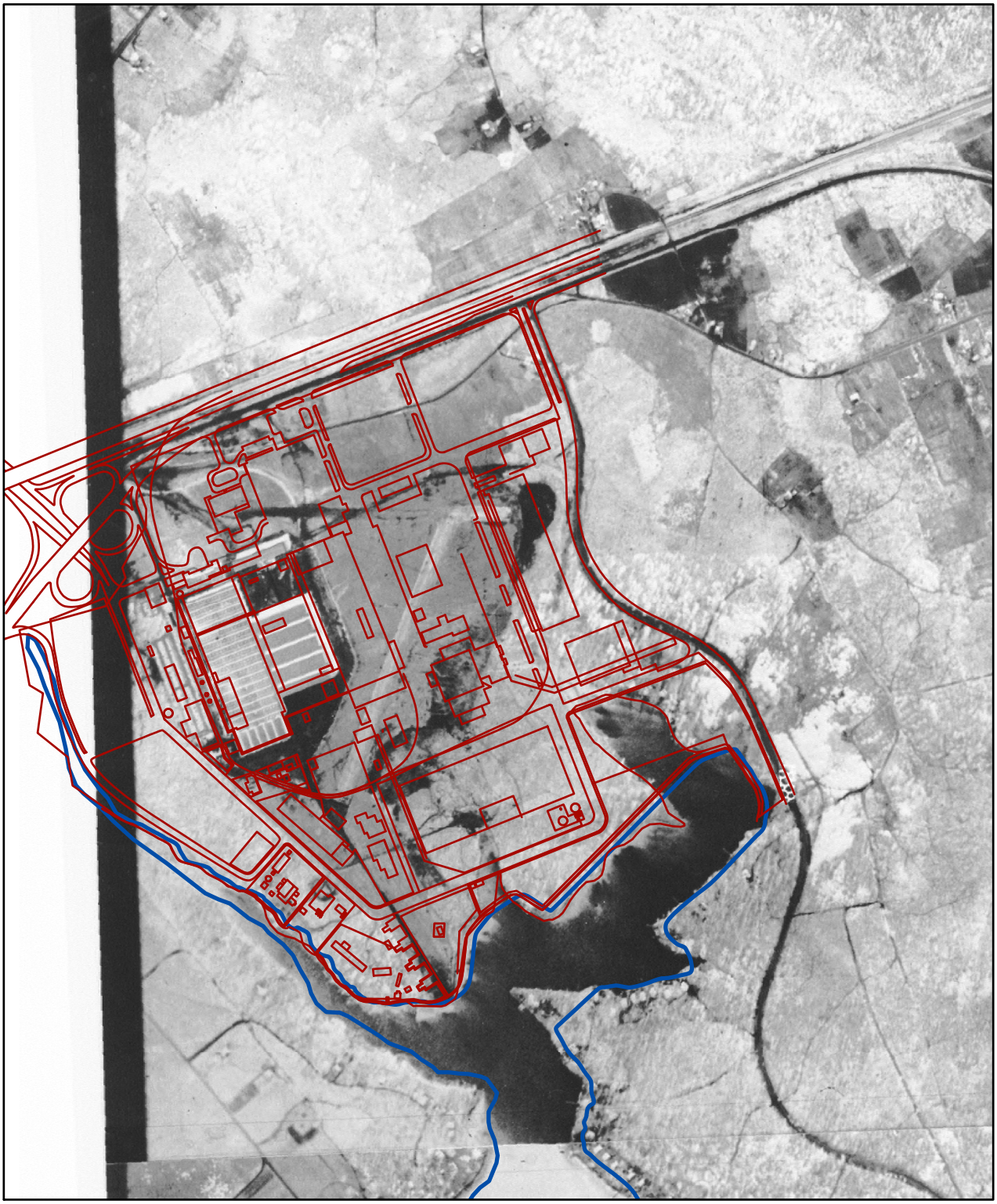

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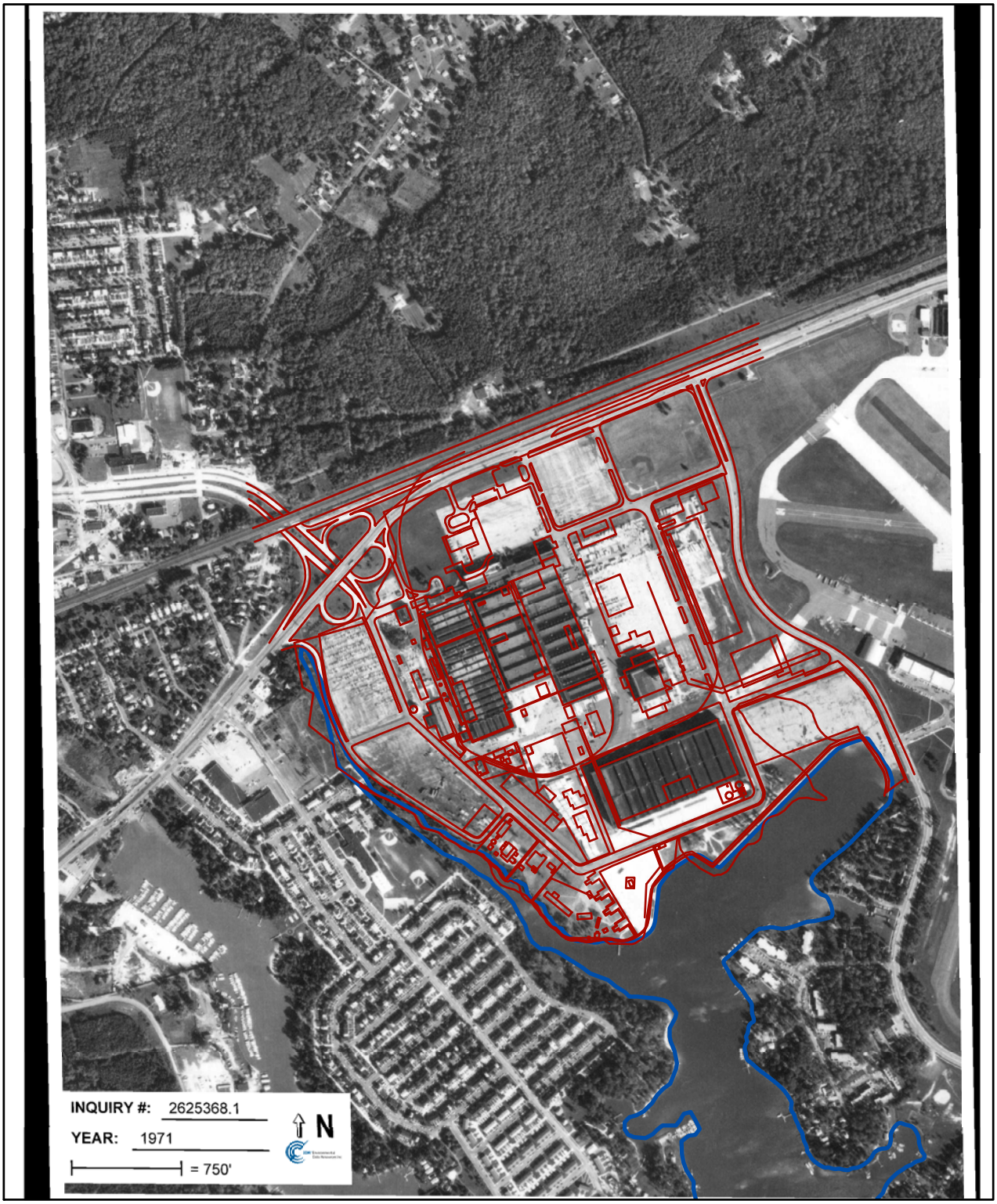


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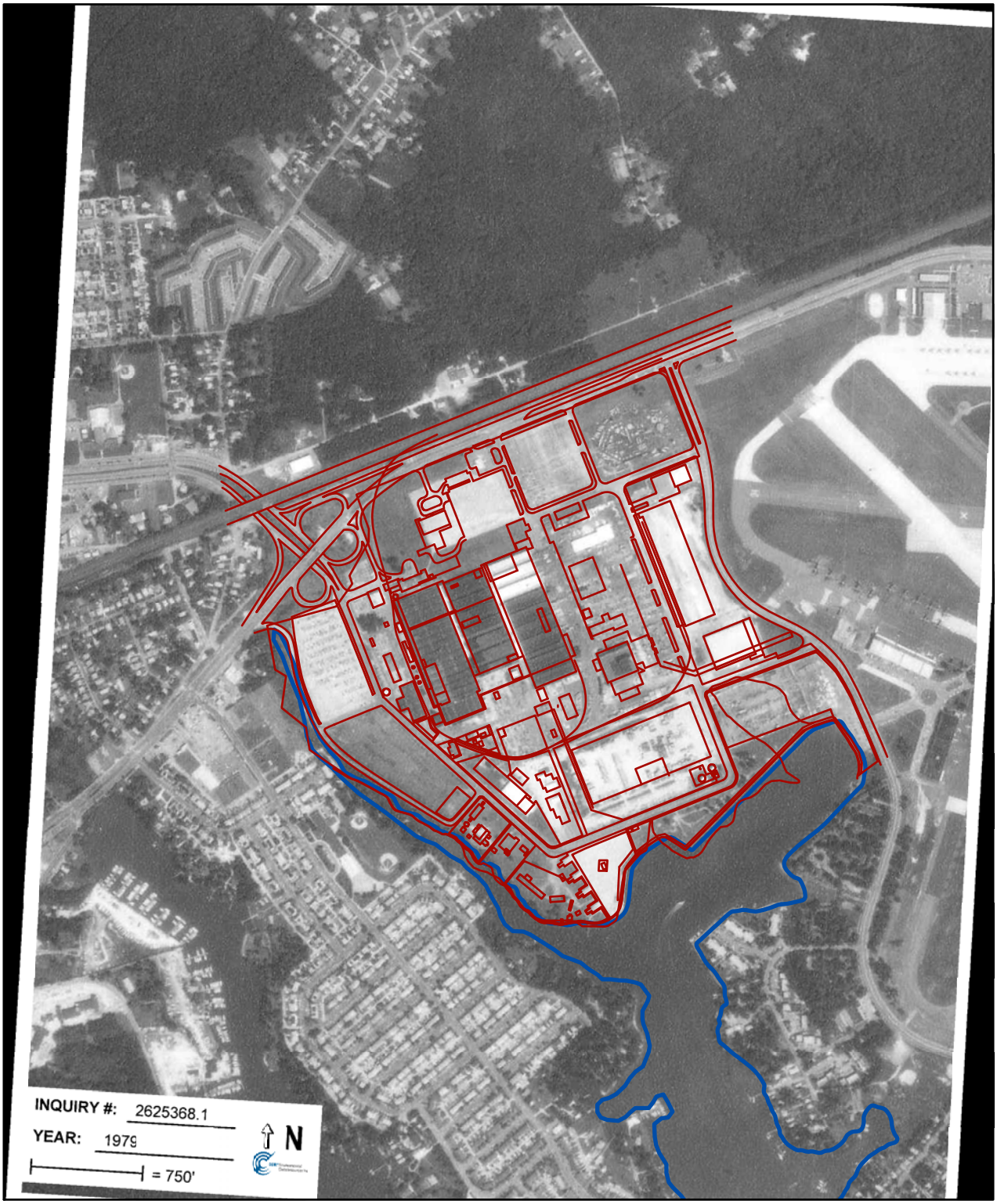


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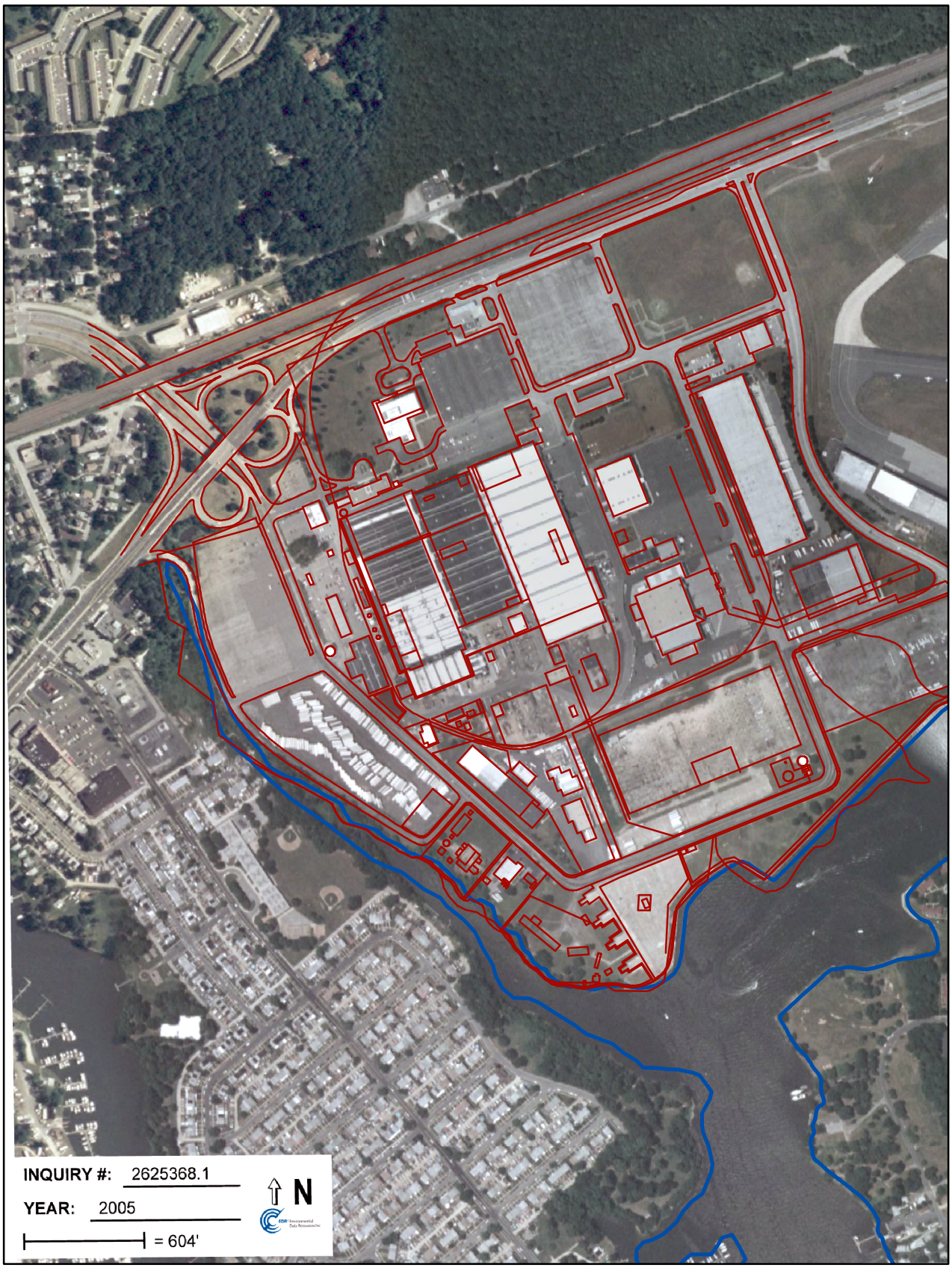


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# APPENDIX C—STATE OF MARYLAND BACKGROUND DATA FOR ARSENIC

# STATE OF MARYLAND

# DEPARTMENT OF THE ENVIRONMENT

# CLEANUP STANDARDS FOR SOIL AND GROUNDWATER

## JUNE 2008

## INTERIM FINAL GUIDANCE

(UPDATE No. 2.1)

# Appendix 2

## REFERENCE LEVELS OF METALS AND TRACE ELEMENTS IN SOILS OF MARYLAND

**As Indicated by Background Soil Samples**
**Collected As Part of National Priorities List, Federal Facility,**
**And CERCLA Investigations Conducted**
**Throughout Maryland**

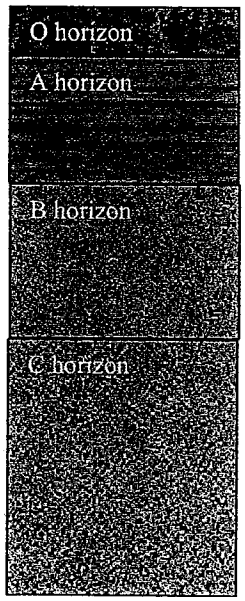

## INTRODUCTION

The 1980 Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) established a national process for investigating and remediating sites contaminated with hazardous substances. Since that time the environmental industry and government sectors have labored to establish cleanup standards that are practical and protective of human health and the environment.

One remediation approach commonly considered is clean up to "background." Many regulatory agencies define "background" as the concentration of a hazardous substance, if any, existing in the environment at the site prior to the release of a hazardous substance. The establishment of "background" as a cleanup standard results in the necessity of determining the concentration of a chemical prior to any releases. This approach is particularly significant when cleanup standards are being developed for naturally occurring metals and trace elements that are present in the soil.

The soil media is of particular concern during site investigations since it is commonly the first media that is impacted by a release of hazardous material. Soils also serve as the pathway to other environmental media, such as air (via dust) or groundwater (via seepage), or surface water (via runoff). As a result, establishing the "background" concentration for metals and trace elements in soils is one of the most critical components of a site investigation.

## OBJECTIVE

The Annotated Code of Maryland § 7-501 defines "background level" as the level of a substance occurring naturally at the site prior to any manmade spill or release.

The objective of this study is to evaluate previously collected information on "background" concentrations of metals and trace elements in Maryland and use statistical methods to develop "reference levels" for metals and trace elements in the soil. The information generated from this study has been used by the MDE in developing cleanup standards for metals and trace elements in soil.

## PROCESS

For the purpose of this study, the geographic area of the state has been divided into three provinces based upon broad differences in age, chemistry, and structure of the geologic units in each province. These provinces include Eastern Maryland, Central Maryland, and Western Maryland. Figure 1 depicts the boundaries of these provinces.

This study utilized laboratory derived analytical data collected on metals in soil from environmental investigations overseen by the MDE. The soil data used in this study were extracted from Federal Facility, National Priorities List, and CERCLA investigations completed throughout the state of Maryland. These soil samples were identified as "background" grab surface soil samples for the particular site subject to investigation by the MDE. A complete list of sites included in this study and the analytic results are provided in Attachment 1.

All soil samples were collected after 1990. The samples were analyzed using methods approved by the United States Environmental Protection Agency (EPA) and/or other approved methods for various programs within the MDE. Therefore, the data set used in this study is considered to be acceptable for the objectives identified.

## STATISTICAL ANALYSIS

Statistical analyses were conducted on data for each analyte included in the investigation. The statistical analyses included the mean, standard deviation, and maximum and minimum values. Since each particular site investigation has specific sampling objectives, not all samples were analyzed for all metals included in this study. Analytes that were not analyzed were not included in the statistical analysis. If an analyte was not detected, then a value equivalent to half the detection limit was used in the statistical analysis unless otherwise noted. The results of the analysis are presented in Attachment 2.

Values defined as the "Anticipated Typical Concentration" represent "reference levels" for each analyte. The Anticipated Typical Concentration (ATC) represents the mean concentration plus one standard deviation. The ATC represents a value that either matches or exceeds the majority of background concentration samples. ATC values were calculated for metals and trace elements in each of the three provinces of the state of Maryland identified in this study.

## SUMMARY TABLES

Background soil concentration data collected from environmental investigations overseen by the MDE for each geologic province is summarized in Attachment 1. Information present in Attachment 2 includes a statistical summary of metal species, the ATC, United States Geologic Survey (USGS) concentrations, and the proposed Maryland cleanup standards. The USGS concentrations represent the average concentrations of metals and trace elements in soils and other surficial material in the conterminous United States as reported by the USGS in 1984[1].

The proposed Maryland Cleanup Standards represent concentration levels at which no further remedial response action would be required based upon the potential threat posed by these substances to human health within the constraints of current knowledge. The soil concentration values for residential sites are intended for properties that are zoned for residential use, or have a projected future residential use.

## RESULTS

Comparison of the ATC to the Proposed Maryland Cleanup Standards for Residential sites shows that the reference levels for the following elements exceed the Maryland Cleanup Standards:

| | Anticipated Typical Concentration (ATC) | | | Proposed Maryland Cleanup Standards |
|---|---|---|---|---|
| **Analyte** | **Eastern Maryland** | **Central Maryland** | **Western Maryland** | **(residential)** |
| Aluminum | 1.1 E+04 | 1.9 E+04 | 2.0 E+04 | 7.8 E+03 |
| Arsenic | 3.6 E+00 | 4.9 E+00 | 1.1 E+01 | 4.3 E-01 |
| Chromium (total) | 2.8 E+01 | 3.0 E+01 | 4.2 E+01 | 2.3 E+01 |
| Iron | 1.5 E+04 | 2.6 E+04 | 3.9 E+04 | 5.5 E+03 |
| Manganese | 4.8 E+02 | 1.4 E+03 | 1.5 E+03 | 1.6 E+02 |
| Thallium | 3.9 E+00 | 1.5 E+00 | 4.6 E+00 | 5.5 E-01 |
| Vanadium | 3.0 E+01 | 35 E+01 | 1.2 E+02 | 7.8 E+00 |

All values are reported in parts per million.

When an ATC concentration for a given province exceeds the "Proposed Maryland Cleanup Standards (Residential)", the ATC value for the appropriate province may be proposed as an acceptable alternative to the risk derived value presented in the "Proposed Maryland Cleanup Standards (Residential)."

## DISCUSSION OF RESULTS

Several of the MDE derived reference levels for metals in soils exceed the proposed Maryland Cleanup Standards under a residential use setting. This result is a consequence of multiple factors and does not necessarily indicate that a hazard is posed to either human health or the environment in areas of the state where the reference levels exceed the proposed Residential Cleanup Standards.

The concentration of metals in soil under natural conditions are a result of both chemical and physical weathering processes on parent rock. The degree to which soils contain naturally occurring metals is dependent on the chemical make-up of the parent rock from which the soil was derived, and the degree of chemical and physical weathering and transport of eroded parent rock material to the soil media. This erosion and deposition relationship results in a high degree of variability with respect to the concentration of metals in soil.

All soil types contain metals. In most cases, the metals in the soil media are not present in their elemental form, but are present as ionic compounds. Ionic compounds are chemical combinations of metals (i.e. cations) and non-metals (i.e. anions) that bond together through a process of electron transfer. Metal compounds can form stable chemical complexes that exhibit markedly different characteristics from their elemental forms, and may pose less of a risk (i.e. lower bioavailability) to human health or the environment.

Metals that are bound up in relatively stable mineral complexes do not readily degrade and are not as readily bioavailable as metals in a pure form. Different valences of metals can produce dramatically different toxicities and different matrices may render them more or less bioavailable. These factors have ramifications for determining the potential health risks associated with metal reference concentrations that exceed soil Cleanup Standards. For example, property specific soil conditions such as moisture content, PH, cation exchange capacity, and total organic carbon content and the use of the land will affect the amount of metal species that are available to pose a health risk.

State and federal environmental regulatory programs routinely require the soil media to be tested by approved analytical laboratories for metal concentrations at properties subject to investigation. The laboratory analytical methods commonly used by regulatory programs do not, however, differentiate between metals that are in a pure form and metals that are bound up in chemical complexes. These analytical methods use acid digestions and other destructive methods to dissolve the soil, parent rock or organic complexes which results in the release of metals in a free state. The outcome of these analytical methods are concentrations that reflect the total amount of the elemental metal in the soil and do not typically consider the percentage of metal bound up in mineral or organic complexes.

MDE derived reference levels for metals in the soil are intended to represent concentrations that exist in the natural environment absent anthropogenic effects. Comparison of the reference levels to USGS background metal concentrations in native soil for the Conterminous United States indicates a good correlation exists between the data sets. With the exception of Selenium and Antimony, all derived reference concentrations are within one order of magnitude of the USGS average concentrations. In many instances the reference concentrations are lower than the USGS background concentrations. In light of the conservative risk based approach used to derive the cleanup standards for metals (i.e. all metals present in soil are assumed to exist as bioavailable free metals), the option to use reference levels rather than the proposed Maryland Cleanup Standards is not expected to result in unacceptable levels of risk. This may be a viable alternative when analytical data indicates metal concentrations are above the standards.

## STUDY LIMITATIONS

This investigation does not constitute a rigorous scientific analysis conducted in a controlled experimental setting. However, ATC reference levels can serve as general indicators of background levels of metals and trace elements in soil until a more rigorous and thorough background investigation can be completed.

## REFERENCES

1) Shacklett, H.T. and Boerngenm, J.G., 1984: Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States; USGS Professional Paper 1270.

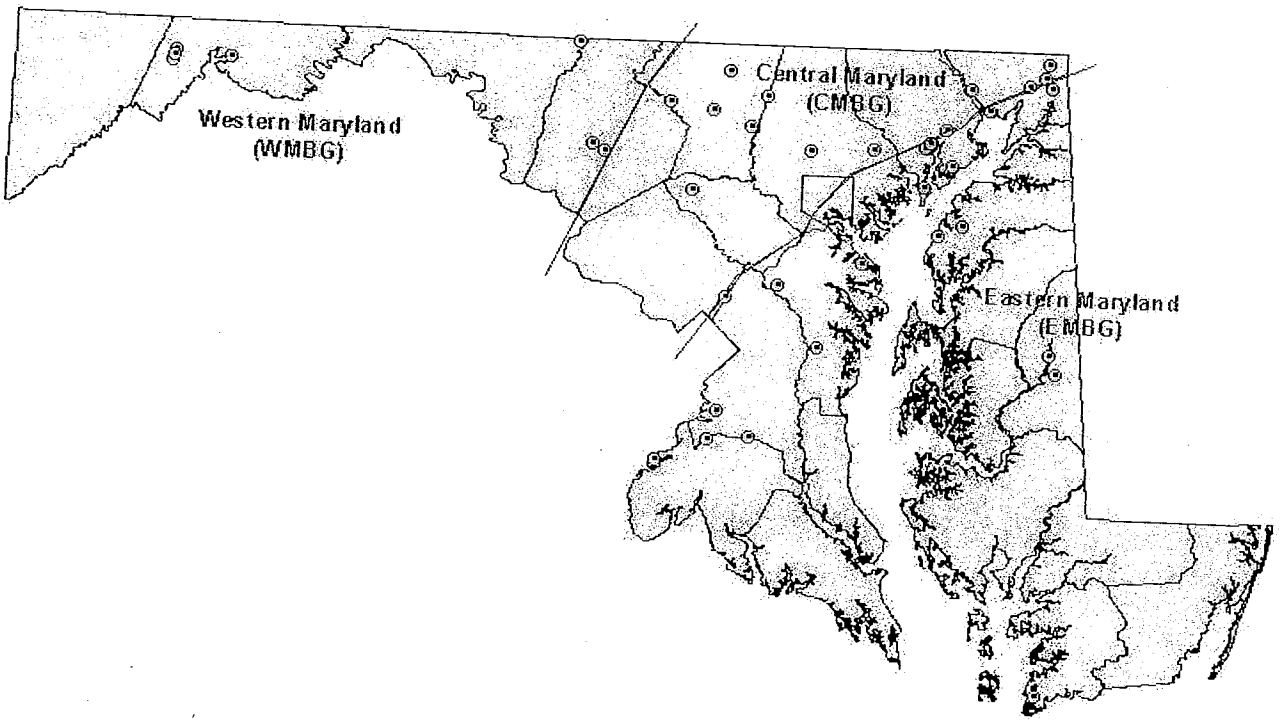


**Appendix 2 – Figure 1**

Location of hazardous substance properties used to derive reference levels for metals in Maryland. The State has been divided into three geological provinces for the purposes of developing regional reference levels.

# APPENDIX 2 - ATTACHMENT 1

# BACKGROUND SOIL METAL DATA FROM

# MDE SITE INVESTIGATIONS USED IN THIS STUDY

# EASTERN

| Site Name | Province | Designation | Aluminum | Antimony | Arsenic | Barium |
|---|---|---|---|---|---|---|
| Aberdeen Proving Ground | EMBG | S-1 | 3.7E+03 | *3.5E+00* | 2.8E+00 | 1.8E+01 |
| Aberdeen Proving Ground | EMBG | S-1 DUP | 3.3E+03 | *3.5E+00* | 2.4E+00 | 2.1E+01 |
| Aberdeen Proving Ground | EMBG | S-2 | 5.8E+03 | *3.0E+00* | 1.7E+00 | 2.7E+01 |
| Aberdeen Proving Ground | EMBG | S-3 | 8.4E+03 | *3.5E+00* | 2.5E+00 | 6.5E+01 |
| Aberdeen Proving Ground | EMBG | S-4 | 9.2E+03 | *4.9E+00* | 2.7E+00 | 4.7E+01 |
| Aberdeen Proving Ground | EMBG | S-5 | 1.4E+03 | *2.7E+00* | 1.3E+00 | 1.1E+01 |
| Aberdeen Proving Ground | EMBG | S-6 | 3.2E+03 | *2.8E+00* | 1.2E+00 | 1.0E+01 |
| Aberdeen Proving Ground | EMBG | S-6 DUP | 3.4E+03 | *2.8E+00* | 1.0E+00 | 1.1E+01 |
| Aberdeen Proving Ground | EMBG | S-7 | 6.9E+03 | *2.9E+00* | 1.5E+00 | 5.7E+01 |
| Aberdeen Proving Ground | EMBG | S-8 | 5.8E+03 | *3.3E+00* | 2.1E+00 | 4.2E+01 |
| Aberdeen Proving Ground | EMBG | S-9 | 8.3E+03 | *3.0E+00* | 2.7E+00 | 4.4E+01 |
| Aberdeen Proving Ground | EMBG | S-10 | 2.7E+03 | *3.1E+00* | 1.1E+00 | 1.2E+01 |
| Aberdeen Proving Ground | EMBG | S-11 | 2.8E+03 | *2.9E+00* | 1.1E+00 | 1.7E+01 |
| Aberdeen Proving Ground | EMBG | S-12 | 1.7E+04 | *3.6E+00* | 1.5E+00 | 9.0E+01 |
| Aberdeen Proving Ground | EMBG | S-13 | 7.7E+03 | *3.1E+00* | 2.3E+00 | 5.6E+01 |
| Aberdeen Proving Ground | EMBG | S-13 DUP | 1.1E+04 | *3.3E+00* | 2.1E+00 | 6.4E+01 |
| Aberdeen Proving Ground | EMBG | S-14 | 7.7E+03 | *3.2E+00* | 1.2E+00 | 9.0E+01 |
| Aberdeen Proving Ground | EMBG | S-15 | 2.6E+03 | *3.0E+00* | *1.2E-01* | 9.8E+00 |
| Aberdeen Proving Ground | EMBG | S-16 | 9.6E+03 | *3.1E+00* | 3.0E+00 | 3.6E+01 |
| Aberdeen Proving Ground | EMBG | S-17 | 4.8E+03 | *3.1E+00* | 2.1E+00 | 3.3E+01 |
| Aberdeen Proving Ground | EMBG | S-17 DUP | 5.6E+03 | *3.0E+00* | 2.0E+00 | 3.5E+01 |
| Aberdeen Proving Ground | EMBG | S-18 | 5.9E+03 | *3.2E+00* | 1.3E+00 | 2.0E+01 |
| Aberdeen Proving Ground | EMBG | S-19 | 1.6E+04 | *3.1E+00* | 2.4E+00 | 7.4E+01 |
| Aberdeen Proving Ground | EMBG | S-20 | 8.5E+03 | *3.1E+00* | 2.2E+00 | 3.4E+01 |
| Aberdeen Proving Ground | EMBG | S-21 | 9.8E+03 | *3.0E+00* | 3.7E+00 | 4.5E+01 |
| Aberdeen Proving Ground | EMBG | S-23 | 6.1E+03 | *3.2E+00* | 2.9E+00 | 5.4E+01 |
| Aberdeen Proving Ground | EMBG | S-24 | 1.3E+04 | *3.2E+00* | 3.5E+00 | 6.3E+01 |
| Aberdeen Proving Ground | EMBG | S-25 | 1.1E+04 | *3.5E+00* | 3.2E+00 | 8.1E+01 |
| Aberdeen Proving Ground | EMBG | S-26 | 7.3E+03 | *3.3E+00* | 2.8E+00 | 6.2E+01 |
| Aberdeen Proving Ground | EMBG | S-27 | 8.4E+03 | *3.0E+00* | 3.7E+00 | 4.4E+01 |
| Aberdeen Proving Ground | EMBG | S-28 | 9.1E+03 | *2.9E+00* | 1.5E+00 | 4.7E+01 |
| Aberdeen Proving Ground | EMBG | S-29 | 4.6E+03 | *3.5E+00* | 2.2E+00 | 1.8E+01 |
| Aberdeen Proving Ground | EMBG | S-30 | 5.9E+03 | *3.3E+00* | 3.5E+00 | 2.4E+01 |
| Indian Head | EMBG | BGDSS0010101 | 1.1E+04 | *5.1E-01* | 2.1E+00 | 5.2E+01 |
| Indian Head | EMBG | BGDSS0020101 | 2.0E+03 | *2.1E-01* | 7.8E-01 | 1.3E+01 |
| Indian Head | EMBG | BGDSS0030101 | 1.0E+04 | *5.1E-01* | 3.2E+00 | 6.7E+01 |
| Indian Head | EMBG | BGDSS0040101 | 7.5E+03 | *7.1E-01* | 2.8E+00 | 4.8E+01 |
| Indian Head | EMBG | BGDSS0050101 | 7.5E+03 | *5.3E-01* | 2.5E+00 | 3.6E+01 |

# EASTERN

| | | | | | | |
|---|---|---|---|---|---|---|
| Indian Head | EMBG | BGDSS0060101 | 2.6E+03 | *5.4E-01* | 1.7E+00 | 1.9E+01 |
| Indian Head | EMBG | BGDSS0070101 | 1.1E+04 | *4.2E-01* | 2.1E+00 | 3.7E+01 |
| Indian Head | EMBG | BGDSS0080101 | 1.3E+04 | *4.2E-01* | 3.1E+00 | 4.6E+01 |
| Indian Head | EMBG | BGDSS0090101 | 6.5E+03 | *2.8E-01* | 8.5E-01 | 3.4E+01 |
| Indian Head | EMBG | BGDSS0100101 | 6.2E+03 | *4.8E-01* | 2.5E+00 | 3.1E+01 |
| Indian Head | EMBG | S25-MW03-001 | 4.0E+03 | *1.8E-01* | 2.2E+00 | 3.0E+01 |
| Indian Head | EMBG | S26-MW03-001 | 1.3E+04 | *1.9E-01* | 3.3E+00 | 8.5E+01 |
| Fort Meade | EMBG | SSB-1 | 7.0E+03 | *2.5E+00* | 1.0E+00 | *2.0E+01* |
| Fort Meade | EMBG | SSB-2 | 5.6E+03 | *2.5E+00* | 2.8E+00 | *2.0E+01* |
| Fort Meade | EMBG | SSB-3 | 2.5E+03 | *2.5E+00* | 1.1E+00 | *2.0E+01* |
| Fort Meade | EMBG | SSB-4 | 1.8E+03 | *2.5E+00* | 1.2E+00 | *2.0E+01* |
| Fort Meade | EMBG | SSB-4X | 1.8E+03 | *2.5E+00* | 1.3E+00 | *2.0E+01* |
| Fort Meade | EMBG | SSB-5 | 3.0E+03 | *2.5E+00* | 1.3E+00 | *2.0E+01* |
| Tolchester | EMBG | MCHT13-S-4 | 1.1E+04 | *4.0E+00* | 4.0E+00 | 7.9E+01 |
| Crisfield City Dump | EMBG | Background Soil | 1.1E+04 | *6.0E+00* | 1.5E+00 | 3.8E+01 |
| Old Fort Road | EMBG | Background Soil | 1.8E+04 | *6.0E+00* | 2.9E+00 | 5.0E+01 |
| Nicholson Landfill | EMBG | Background Soil | 5.5E+03 | NA | 2.7E+00 | 3.0E+01 |
| Union Road | EMBG | Background Soil | 8.4E+03 | 1.7E+00 | 3.9E+00 | 7.2E+01 |
| Braxton Property | EMBG | Background Soil | 1.6E+04 | *6.0E+00* | 6.1E+00 | 5.5E+01 |
| Abingdon Landfill | EMBG | Background Soil | 7.3E+03 | *4.0E+00* | 2.6E+00 | 3.9E+01 |
| Waldorf Control | EMBG | Background Soil | 6.3E+03 | *6.0E+00* | 4.0E+00 | 5.2E+01 |
| Vicon | EMBG | Background Soil | 5.0E+03 | 9.6E+00 | 2.6E+00 | 2.0E+01 |
| Firestone Perryville | EMBG | Background Soil | 4.6E+03 | 5.2E+00 | 2.2E+00 | 3.4E+01 |
| SkipJack Chemicals | EMBG | Background Soil | 6.8E+03 | 6.0E+00 | *1.0E+00* | 3.2E+01 |
| Old West Denton Landfill | EMBG | Background Soil | 2.4E+03 | NA | *1.0E+00* | 1.7E+01 |
| Fort Smallwood Control | EMBG | Background Soil | 1.9E+03 | *6.0E+00* | *1.0E+00* | 1.0E+01 |
| Fort Smallwood Launch | EMBG | Background Soil | 1.9E+03 | *6.0E+00* | 2.1E+00 | 1.1E+01 |
| Davidsonville Launch | EMBG | Background Soil | 1.1E+04 | *1.6E+01* | 6.9E+00 | 1.2E+02 |
| US Naval Research Lab Waldorf | EMBG | SO 54A | 2.3E+03 | *6.0E+00* | *1.0E+00* | *2.0E+01* |
| US Naval Research Lab Waldorf | EMBG | SO 54B | 3.4E+03 | *6.0E+00* | *1.0E+00* | *2.0E+01* |
| US Naval Research Lab Waldorf | EMBG | SO 55A | 7.3E+03 | *6.0E+00* | *1.0E+00* | 5.8E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 55B | 4.5E+03 | *6.0E+00* | 2.5E+00 | *2.0E+01* |
| US Naval Research Lab Waldorf | EMBG | SO 56 | 6.6E+03 | *6.0E+00* | 1.8E+00 | 4.1E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 57 | 6.4E+03 | *6.0E+00* | 2.5E+00 | *2.0E+01* |
| US Naval Research Lab Waldorf | EMBG | S0 58 | 1.1E+04 | *6.0E+00* | 2.5E+00 | *2.0E+01* |
| US Naval Research Lab Waldorf | EMBG | SO 59 | 1.0E+04 | *6.0E+00* | 4.9E+00 | 1.7E+02 |
| US Naval Research Lab Waldorf | EMBG | SO 59(D) | 1.0E+04 | *6.0E+00* | 5.2E+00 | 1.6E+02 |
| US Naval Research Lab Waldorf | EMBG | SO 60 | 1.1E+04 | *6.0E+00* | 3.7E+00 | 7.4E+01 |

EMBG = Eastern Maryland Background, CMBG = Central Maryland Background, WMBG = Western Maryland Background. All values reported in parts per million. Not detected analytes reported at one half the detection limit. Not detected analytes italicized. NA = not applicable.

# EASTERN

| Site Name | Province | Designation | Beryllium | Cadmium | Calcium | Chromium (Total) | Cobalt |
|---|---|---|---|---|---|---|---|
| Aberdeen Proving Ground | EMBG | S-1 | *3.5E-01* | *3.5E-01* | 1.4E+02 | 6.7E+00 | 2.6E+00 |
| Aberdeen Proving Ground | EMBG | S-1 DUP | *3.5E-01* | *3.5E-01* | 1.9E+02 | 7.0E+00 | 2.0E+00 |
| Aberdeen Proving Ground | EMBG | S-2 | *3.0E-01* | *3.0E-01* | 1.4E+02 | 6.1E+00 | 6.4E+00 |
| Aberdeen Proving Ground | EMBG | S-3 | *3.5E-01* | *3.5E-01* | 1.3E+03 | 3.5E+01 | 9.2E+00 |
| Aberdeen Proving Ground | EMBG | S-4 | 1.4E+00 | *4.9E-01* | 1.1E+03 | 1.2E+01 | 1.6E+01 |
| Aberdeen Proving Ground | EMBG | S-5 | *2.7E-01* | *2.7E-01* | 6.7E+01 | 3.5E+00 | 1.2E+00 |
| Aberdeen Proving Ground | EMBG | S-6 | *2.8E-01* | *2.8E-01* | 7.6E+01 | 3.6E+00 | 6.8E-01 |
| Aberdeen Proving Ground | EMBG | S-6 DUP | *2.8E-01* | *2.8E-01* | 6.4E+01 | 4.4E+00 | 1.2E+00 |
| Aberdeen Proving Ground | EMBG | S-7 | 6.2E-01 | *2.9E-01* | 4.8E+02 | *1.2E+01* | 6.9E+00 |
| Aberdeen Proving Ground | EMBG | S-8 | *3.3E-01* | *3.3E-01* | 6.9E+02 | 1.4E+01 | 9.1E+00 |
| Aberdeen Proving Ground | EMBG | S-9 | *3.0E-01* | *3.0E-01* | 7.2E+02 | 1.7E+01 | 3.9E+00 |
| Aberdeen Proving Ground | EMBG | S-10 | *3.1E-01* | *3.1E-01* | 7.1E+01 | 7.5E+00 | *6.2E-01* |
| Aberdeen Proving Ground | EMBG | S-11 | *2.9E-01* | *2.9E-01* | 1.4E+03 | 5.3E+00 | 1.1E+00 |
| Aberdeen Proving Ground | EMBG | S-12 | 1.1E+00 | *3.6E-01* | 8.6E+02 | 2.9E+01 | 1.5E+01 |
| Aberdeen Proving Ground | EMBG | S-13 | *3.0E-01* | *3.0E-01* | 1.0E+03 | 7.1E+01 | 1.9E+01 |
| Aberdeen Proving Ground | EMBG | S-13 DUP | *3.2E-01* | *3.2E-01* | 1.1E+03 | 6.7E+01 | 1.6E+01 |
| Aberdeen Proving Ground | EMBG | S-14 | *3.2E-01* | *3.2E-01* | 6.4E+02 | 9.4E+00 | 5.2E+00 |
| Aberdeen Proving Ground | EMBG | S-15 | *3.0E-01* | *3.0E-01* | 8.2E+01 | *1.9E+01* | 1.8E+00 |
| Aberdeen Proving Ground | EMBG | S-16 | *3.0E-01* | *3.0E-01* | 9.2E+01 | 1.8E+01 | 5.1E+00 |
| Aberdeen Proving Ground | EMBG | S-17 | *3.1E-01* | *3.1E-01* | 2.2E+03 | 1.3E+01 | 3.6E+00 |
| Aberdeen Proving Ground | EMBG | S-17 DUP | *3.0E-01* | *3.0E-01* | 1.8E+03 | 1.3E+01 | 3.9E+00 |
| Aberdeen Proving Ground | EMBG | S-18 | *3.2E-01* | *3.2E-01* | 7.2E+01 | 1.0E+01 | 1.5E+00 |
| Aberdeen Proving Ground | EMBG | S-19 | 7.6E-01 | *3.1E-01* | 7.4E+02 | 1.8E+01 | 1.2E+01 |
| Aberdeen Proving Ground | EMBG | S-20 | *3.1E-01* | *3.1E-01* | 1.3E+02 | 1.2E+01 | 3.6E+00 |
| Aberdeen Proving Ground | EMBG | S-21 | *3.0E-01* | *3.0E-01* | 3.6E+02 | 1.4E+01 | 5.3E+00 |
| Aberdeen Proving Ground | EMBG | S-23 | 9.0E-01 | *3.1E-01* | 6.2E+02 | 1.3E+01 | 1.4E+01 |
| Aberdeen Proving Ground | EMBG | S-24 | 7.5E-01 | *3.1E-01* | 1.2E+02 | 1.6E+01 | 2.6E+01 |
| Aberdeen Proving Ground | EMBG | S-25 | *3.5E-01* | 1.4E+00 | 9.2E+02 | 1.7E+01 | 5.0E+00 |
| Aberdeen Proving Ground | EMBG | S-26 | *3.2E-01* | *3.2E-01* | 1.3E+03 | 1.5E+01 | 9.1E+00 |
| Aberdeen Proving Ground | EMBG | S-27 | *3.0E-01* | *3.0E-01* | 9.8E+02 | 1.1E+01 | 6.6E+00 |
| Aberdeen Proving Ground | EMBG | S-28 | *2.9E-01* | *2.9E-01* | 1.8E+02 | 2.8E+01 | 1.6E+01 |
| Aberdeen Proving Ground | EMBG | S-29 | *3.5E-01* | *3.5E-01* | 1.1E+02 | 8.7E+00 | 2.0E+00 |
| Aberdeen Proving Ground | EMBG | S-30 | *3.3E-01* | *3.3E-01* | 1.1E+02 | 4.3E+01 | 2.7E+00 |
| Indian Head | EMBG | BGDSS0010101 | 5.6E-01 | *6.5E-02* | 1.2E+02 | 1.3E+01 | 4.2E+00 |
| Indian Head | EMBG | BGDSS0020101 | *5.0E-02* | *5.5E-02* | 9.9E+01 | 3.5E+00 | 5.8E-01 |
| Indian Head | EMBG | BGDSS0030101 | 5.3E-01 | *6.0E-02* | 1.3E+02 | 1.9E+01 | 1.5E+01 |
| Indian Head | EMBG | BGDSS0040101 | 5.3E-01 | *6.5E-02* | 1.4E+02 | 1.3E+01 | 7.9E+00 |
| Indian Head | EMBG | BGDSS0050101 | 1.7E-01 | *7.0E-02* | 1.1E+02 | 1.3E+01 | 2.3E+00 |

# EASTERN

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|---|---|---|---|---|---|---|---|
| Indian Head | EMBG | BGDSS0060101 | 4.7E-01 | 2.5E-01 | 2.8E+02 | 1.2E+01 | 3.0E+00 |
| Indian Head | EMBG | BGDSS0070101 | 3.4E-01 | 2.2E-01 | 1.4E+02 | 1.3E+01 | 2.5E+00 |
| Indian Head | EMBG | BGDSS0080101 | 6.0E-01 | 2.6E-01 | 1.5E+02 | 1.6E+01 | 4.2E+00 |
| Indian Head | EMBG | BGDSS0090101 | 2.4E-01 | 1.5E-01 | 1.5E+02 | 7.7E+00 | 2.2E+00 |
| Indian Head | EMBG | BGDSS0100101 | 1.5E-01 | *1.4E-01* | 1.2E+02 | 9.2E+00 | 2.7E+00 |
| Indian Head | EMBG | S25-MW03-001 | 2.0E-01 | 5.4E-01 | 1.0E+02 | 1.1E+01 | 3.5E+00 |
| Indian Head | EMBG | S26-MW03-001 | 6.1E-01 | *2.9E-01* | 4.1E+02 | 2.1E+01 | 1.5E+01 |
| Fort Meade | EMBG | SSB-1 | 3.8E-01 | *2.5E-01* | 8.3E+02 | 1.4E+01 | 4.3E+00 |
| Fort Meade | EMBG | SSB-2 | 6.3E-01 | *2.5E-01* | 7.7E+02 | 9.4E+00 | 4.4E+00 |
| Fort Meade | EMBG | SSB-3 | 1.1E-01 | *2.5E-01* | *5.0E+01* | 6.0E+00 | *1.0E+00* |
| Fort Meade | EMBG | SSB-4 | 1.7E-01 | *2.5E-01* | *5.0E+01* | 6.4E+00 | *1.0E+00* |
| Fort Meade | EMBG | SSB-4X | 1.2E-01 | *2.5E-01* | *5.0E+01* | 7.0E+00 | *1.0E+00* |
| Fort Meade | EMBG | SSB-5 | 1.7E-01 | *2.5E-01* | *5.0E+01* | 1.2E+01 | 2.7E+00 |
| Tolchester | EMBG | MCHT13-S-4 | *5.0E-01* | 3.1E-01 | 9.5E+02 | 1.4E+01 | 9.0E+00 |
| Crisfield City Dump | EMBG | Background Soil | 2.3E-01 | *5.0E-01* | 4.3E+03 | 1.1E+01 | 1.2E+00 |
| Old Fort Road | EMBG | Background Soil | 4.8E-01 | *5.0E-01* | 7.7E+01 | 1.8E+01 | 3.5E+00 |
| Nicholson Landfill | EMBG | Background Soil | 7.1E-01 | NA | 7.7E+02 | 9.2E+00 | 3.8E+00 |
| Union Road | EMBG | Background Soil | 4.8E-01 | *5.0E-01* | 1.2E+03 | 5.7E+01 | 1.3E+01 |
| Braxton Property | EMBG | Background Soil | 5.3E-01 | *5.0E-01* | 3.5E+02 | 2.4E+01 | 1.2E+01 |
| Abingdon Landfill | EMBG | Background Soil | 3.9E-01 | *1.0E+00* | 2.8E+02 | 8.3E+00 | 7.0E+00 |
| Waldorf Control | EMBG | Background Soil | NA | *5.0E-01* | 1.3E+03 | 1.4E+01 | 6.5E+00 |
| Vicon | EMBG | Background Soil | 1.8E-01 | 9.0E-01 | 9.9E+01 | 1.7E+01 | 1.9E+00 |
| Firestone Perryville | EMBG | Background Soil | 4.0E-01 | *5.0E-01* | 9.7E+02 | 2.0E+01 | 4.8E+00 |
| SkipJack Chemicals | EMBG | Background Soil | *5.0E-01* | *5.0E-01* | 1.3E+03 | 7.1E+00 | *5.0E+00* |
| Old West Denton Landfill | EMBG | Background Soil | *5.0E-01* | *5.0E-01* | 3.8E+02 | 2.0E+00 | *5.0E+00* |
| Fort Smallwood Control | EMBG | Background Soil | *5.0E-01* | *5.0E-01* | *5.0E+02* | 3.4E+00 | *5.0E+00* |
| Fort Smallwood Launch | EMBG | Background Soil | *5.0E-01* | *5.0E-01* | 1.1E+02 | 3.9E+00 | *5.0E+00* |
| Davidsonville Launch | EMBG | Background Soil | 9.2E-01 | 1.0E+00 | 1.8E+03 | 2.6E+01 | 3.5E+00 |
| US Naval Research Lab Waldorf | EMBG | SO 54A | *5.0E-01* | *5.0E-01* | *5.0E+02* | 4.0E+00 | *5.0E+00* |
| US Naval Research Lab Waldorf | EMBG | SO 54B | *5.0E-01* | *5.0E-01* | *5.0E+02* | 7.4E+00 | *5.0E+00* |
| US Naval Research Lab Waldorf | EMBG | SO 55A | *5.0E-01* | *5.0E-01* | *5.0E+02* | 1.1E+01 | *5.0E+00* |
| US Naval Research Lab Waldorf | EMBG | SO 55B | *5.0E-01* | *5.0E-01* | *5.0E+02* | 6.3E+00 | *5.0E+00* |
| US Naval Research Lab Waldorf | EMBG | SO 56 | *5.0E-01* | *5.0E-01* | *5.0E+02* | 1.1E+01 | *5.0E+00* |
| US Naval Research Lab Waldorf | EMBG | SO 57 | *5.0E-01* | *5.0E-01* | *5.0E+02* | 1.8E+01 | *5.0E+00* |
| US Naval Research Lab Waldorf | EMBG | S0 58 | *5.0E-01* | *5.0E-01* | *5.0E+02* | 1.9E+01 | *5.0E+00* |
| US Naval Research Lab Waldorf | EMBG | SO 59 | 1.0E+00 | 1.9E+00 | 1.4E+03 | 1.7E+01 | *5.0E+00* |
| US Naval Research Lab Waldorf | EMBG | SO 59(D) | *5.0E-01* | 1.3E+00 | 1.4E+03 | 1.7E+01 | *5.0E+00* |
| US Naval Research Lab Waldorf | EMBG | SO 60 | *5.0E-01* | 1.3E+00 | *5.0E+02* | 2.5E+01 | *5.0E+00* |

EMBG = Eastern Maryland Background, CMBG = Central Maryland Background, WMBG = Western Maryland Background. All values reported in parts per million. Not detected analytes reported at one half the detection limit. Not detected analytes italicized. NA = not applicable.

# EASTERN

| Site Name | Province | Designation | Copper | Iron | Lead | Magnesium | Manganese |
|---|---|---|---|---|---|---|---|
| Aberdeen Proving Ground | EMBG | S-1 | 8.4E+00 | 5.1E+03 | 5.0E+01 | 2.0E+02 | 5.9E+01 |
| Aberdeen Proving Ground | EMBG | S-1 DUP | 8.6E+00 | 4.7E+03 | 5.0E+01 | 2.1E+02 | 5.0E+01 |
| Aberdeen Proving Ground | EMBG | S-2 | 5.1E+00 | 5.4E+03 | 1.0E+01 | 3.6E+02 | 1.9E+02 |
| Aberdeen Proving Ground | EMBG | S-3 | 2.8E+01 | 1.8E+04 | 1.2E+02 | 2.1E+03 | 3.0E+02 |
| Aberdeen Proving Ground | EMBG | S-4 | 1.3E+01 | 8.9E+03 | 3.0E+01 | 1.5E+03 | 1.8E+02 |
| Aberdeen Proving Ground | EMBG | S-5 | 4.8E+00 | 2.6E+03 | 1.4E+01 | 9.5E+01 | 6.9E+00 |
| Aberdeen Proving Ground | EMBG | S-6 | 3.3E+00 | 3.6E+03 | 8.0E+00 | 2.0E+02 | 1.2E+01 |
| Aberdeen Proving Ground | EMBG | S-6 DUP | 3.4E+00 | 3.6E+03 | 9.8E+00 | 2.2E+02 | 9.2E+00 |
| Aberdeen Proving Ground | EMBG | S-7 | 5.9E+00 | 1.0E+04 | 1.1E+01 | 1.1E+03 | 4.0E+02 |
| Aberdeen Proving Ground | EMBG | S-8 | 1.4E+01 | 1.2E+04 | 3.0E+01 | 7.1E+02 | 2.6E+02 |
| Aberdeen Proving Ground | EMBG | S-9 | 7.7E+00 | 1.5E+04 | 1.3E+01 | 1.2E+03 | 1.1E+02 |
| Aberdeen Proving Ground | EMBG | S-10 | 3.7E+00 | 4.2E+03 | 8.6E+00 | 1.3E+02 | 8.4E+00 |
| Aberdeen Proving Ground | EMBG | S-11 | 4.0E+00 | 4.5E+03 | 1.1E+01 | 2.0E+02 | 4.0E+01 |
| Aberdeen Proving Ground | EMBG | S-12 | 2.3E+01 | 2.4E+04 | 2.1E+01 | 3.9E+03 | 1.0E+03 |
| Aberdeen Proving Ground | EMBG | S-13 | 1.3E+01 | 1.6E+04 | 3.0E+01 | 1.4E+03 | 6.5E+02 |
| Aberdeen Proving Ground | EMBG | S-13 DUP | 1.4E+01 | 1.7E+04 | 2.7E+01 | 1.7E+03 | 5.3E+02 |
| Aberdeen Proving Ground | EMBG | S-14 | 5.6E+00 | 8.6E+03 | 1.6E+01 | 8.8E+02 | 2.7E+02 |
| Aberdeen Proving Ground | EMBG | S-15 | 4.6E+00 | 3.2E+03 | 5.5E+00 | 6.3E+01 | 5.0E+00 |
| Aberdeen Proving Ground | EMBG | S-16 | 5.7E+00 | 1.5E+04 | 2.2E+01 | 6.9E+02 | 1.5E+02 |
| Aberdeen Proving Ground | EMBG | S-17 | 9.3E+00 | 9.3E+03 | 3.0E+01 | 8.1E+02 | 1.7E+02 |
| Aberdeen Proving Ground | EMBG | S-17 DUP | 8.7E+00 | 9.4E+03 | 2.7E+01 | 8.7E+02 | 1.5E+02 |
| Aberdeen Proving Ground | EMBG | S-18 | 3.0E+00 | 7.6E+03 | 1.2E+01 | 3.6E+02 | 2.1E+01 |
| Aberdeen Proving Ground | EMBG | S-19 | 1.6E+01 | 1.9E+04 | 1.6E+01 | 3.1E+03 | 5.6E+02 |
| Aberdeen Proving Ground | EMBG | S-20 | 5.0E+00 | 1.2E+04 | 1.6E+01 | 1.0E+03 | 7.2E+01 |
| Aberdeen Proving Ground | EMBG | S-21 | 7.5E+00 | 1.4E+04 | 2.2E+01 | 9.8E+02 | 2.9E+02 |
| Aberdeen Proving Ground | EMBG | S-23 | 8.0E+00 | 9.8E+03 | 2.0E+01 | 4.7E+02 | 1.1E+03 |
| Aberdeen Proving Ground | EMBG | S-24 | 6.7E+00 | 1.7E+04 | 3.4E+01 | 1.1E+03 | 1.1E+03 |
| Aberdeen Proving Ground | EMBG | S-25 | 1.3E+01 | 2.0E+04 | 5.7E+01 | 1.4E+03 | 4.4E+02 |
| Aberdeen Proving Ground | EMBG | S-26 | 1.5E+01 | 1.5E+04 | 2.1E+01 | 1.2E+03 | 4.5E+02 |
| Aberdeen Proving Ground | EMBG | S-27 | 6.2E+00 | 1.4E+04 | 2.0E+01 | 1.3E+03 | 2.2E+02 |
| Aberdeen Proving Ground | EMBG | S-28 | 1.2E+01 | 1.9E+04 | 1.7E+01 | 5.7E+02 | 7.1E+02 |
| Aberdeen Proving Ground | EMBG | S-29 | 9.3E+00 | 8.9E+03 | 2.8E+01 | 3.4E+02 | 3.7E+01 |
| Aberdeen Proving Ground | EMBG | S-30 | 3.6E+00 | 1.8E+04 | 1.2E+01 | 3.7E+02 | 5.2E+01 |
| Indian Head | EMBG | BGDSS0010101 | 4.6E+00 | 9.4E+03 | 7.4E+00 | 7.1E+02 | 2.5E+02 |
| Indian Head | EMBG | BGDSS0020101 | 1.8E+00 | 2.8E+03 | 9.0E+00 | 1.4E+02 | 2.5E+01 |
| Indian Head | EMBG | BGDSS0030101 | 5.4E+00 | 1.5E+04 | 1.0E+01 | 7.5E+02 | 3.8E+02 |
| Indian Head | EMBG | BGDSS0040101 | 5.4E+00 | 1.2E+04 | 9.4E+00 | 5.7E+02 | 1.8E+02 |
| Indian Head | EMBG | BGDSS0050101 | 4.6E+00 | 9.6E+03 | 1.5E+01 | 4.8E+02 | 6.3E+01 |

# EASTERN

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|---|---|---|---|---|---|---|---|
| Indian Head | EMBG | BGDSS0060101 | 2.1E+00 | 7.3E+03 | 6.7E+00 | 3.5E+02 | 1.1E+02 |
| Indian Head | EMBG | BGDSS0070101 | 5.3E+00 | 1.0E+04 | 9.8E+00 | 6.7E+02 | 4.7E+01 |
| Indian Head | EMBG | BGDSS0080101 | 1.7E+01 | 1.3E+04 | 1.5E+02 | 1.1E+03 | 8.1E+01 |
| Indian Head | EMBG | BGDSS0090101 | 3.1E+00 | 4.4E+03 | 5.5E+00 | 4.5E+02 | 2.3E+01 |
| Indian Head | EMBG | BGDSS0100101 | 3.3E+00 | 6.5E+03 | 7.8E+00 | 4.0E+02 | 2.0E+02 |
| Indian Head | EMBG | S25-MW03-001 | 2.5E+00 | 7.9E+03 | 1.0E+01 | 2.4E+02 | 1.2E+02 |
| Indian Head | EMBG | S26-MW03-001 | 4.4E+00 | 2.5E+04 | 9.9E+00 | 1.1E+03 | 8.8E+02 |
| Fort Meade | EMBG | SSB-1 | 8.2E+00 | 1.2E+04 | 1.4E+01 | 1.2E+03 | 1.2E+02 |
| Fort Meade | EMBG | SSB-2 | 4.6E+00 | 7.7E+03 | 1.6E+01 | 8.4E+02 | 1.5E+02 |
| Fort Meade | EMBG | SSB-3 | 3.2E+00 | 5.1E+03 | *3.8E+00* | 2.1E+02 | 2.0E+01 |
| Fort Meade | EMBG | SSB-4 | 4.6E+00 | 7.7E+03 | 9.8E+00 | 1.1E+02 | 2.5E+01 |
| Fort Meade | EMBG | SSB-4X | 4.2E+00 | 8.9E+03 | 1.1E+01 | 1.2E+02 | 2.5E+01 |
| Fort Meade | EMBG | SSB-5 | 6.6E+00 | 1.2E+04 | 1.6E+01 | 3.1E+02 | 3.0E+01 |
| Tolchester | EMBG | MCHT13-S-4 | 9.3E+00 | 1.1E+04 | 3.8E+01 | 1.5E+03 | 2.3E+02 |
| Crisfield City Dump | EMBG | Background Soil | 4.8E+00 | 5.5E+03 | *1.6E+01* | 9.1E+02 | 2.8E+01 |
| Old Fort Road | EMBG | Background Soil | 5.3E+00 | 1.5E+04 | 9.4E+00 | 1.1E+03 | 4.9E+01 |
| Nicholson Landfill | EMBG | Background Soil | 8.7E+00 | 1.1E+04 | 9.2E+00 | 8.5E+02 | 1.2E+02 |
| Union Road | EMBG | Background Soil | 1.5E+01 | 1.4E+04 | 4.2E+01 | 1.7E+03 | 9.0E+02 |
| Braxton Property | EMBG | Background Soil | 1.1E+01 | 2.3E+03 | 1.3E+01 | 2.6E+03 | 2.3E+02 |
| Abingdon Landfill | EMBG | Background Soil | 6.7E+00 | 8.4E+03 | 6.7E+01 | 7.1E+02 | 3.5E+02 |
| Waldorf Control | EMBG | Background Soil | 1.0E+01 | 7.9E+03 | 4.4E+01 | 8.3E+02 | 1.2E+02 |
| Vicon | EMBG | Background Soil | 1.5E+01 | 1.2E+04 | 9.9E+00 | 3.4E+02 | 5.1E+01 |
| Firestone Perryville | EMBG | Background Soil | 1.2E+01 | 9.8E+03 | 2.2E+01 | 7.4E+02 | 2.7E+02 |
| SkipJack Chemicals | EMBG | Background Soil | *2.5E+00* | 5.3E+03 | 6.0E+01 | 5.0E+02 | 1.8E+02 |
| Old West Denton Landfill | EMBG | Background Soil | 5.0E+00 | 1.0E+03 | 2.3E+01 | 1.2E+02 | 4.3E+01 |
| Fort Smallwood Control | EMBG | Background Soil | 1.1E+01 | 2.1E+03 | 4.1E+00 | *5.0E+02* | 1.9E+01 |
| Fort Smallwood Launch | EMBG | Background Soil | 6.1E+00 | 3.0E+03 | 2.0E+01 | 9.5E+01 | 2.0E+01 |
| Davidsonville Launch | EMBG | Background Soil | 1.3E+01 | 1.3E+04 | 3.5E+01 | 1.7E+03 | 1.0E+02 |
| US Naval Research Lab Waldorf | EMBG | SO 54A | *2.5E+00* | 3.7E+03 | 7.3E+00 | *5.0E+02* | 1.4E+02 |
| US Naval Research Lab Waldorf | EMBG | SO 54B | *2.5E+00* | 5.4E+03 | 4.0E+00 | *5.0E+02* | 1.0E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 55A | *2.5E+00* | 1.2E+04 | 1.7E+01 | *5.0E+02* | 3.0E+02 |
| US Naval Research Lab Waldorf | EMBG | SO 55B | *2.5E+00* | 8.3E+03 | 5.0E+00 | *5.0E+02* | 1.1E+02 |
| US Naval Research Lab Waldorf | EMBG | SO 56 | *2.5E+00* | 5.8E+03 | 3.0E+01 | *5.0E+02* | 1.3E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 57 | *2.5E+00* | 7.6E+03 | 7.8E+00 | *5.0E+02* | 1.0E+02 |
| US Naval Research Lab Waldorf | EMBG | S0 58 | *2.5E+00* | 1.4E+04 | 7.7E+00 | *5.0E+02* | 8.0E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 59 | 6.3E+00 | 1.5E+04 | 3.1E+01 | *5.0E+02* | 1.9E+02 |
| US Naval Research Lab Waldorf | EMBG | SO 59(D) | 6.7E+00 | 1.4E+04 | 3.3E+01 | *5.0E+02* | 1.7E+02 |
| US Naval Research Lab Waldorf | EMBG | SO 60 | 5.0E+00 | 1.4E+04 | 1.7E+01 | 1.1E+03 | 2.5E+02 |

EMBG = Eastern Maryland Background, CMBG = Central Maryland Background, WMBG = Western Maryland Background. All values reported in parts per million. Not detected analytes reported at one half the detection limit. Not detected analytes italicized. NA = not applicable.

# EASTERN

| Site Name | Province | Designation | Mercury | Nickel | Potassium | Selenium | Silver |
|---|---|---|---|---|---|---|---|
| Aberdeen Proving Ground | EMBG | S-1 | NA | 4.3E+00 | 1.6E+02 | 4.6E-01 | *3.5E-01* |
| Aberdeen Proving Ground | EMBG | S-1 DUP | NA | 4.8E+00 | 1.8E+02 | 4.8E-01 | *3.5E-01* |
| Aberdeen Proving Ground | EMBG | S-2 | *6.2E-02* | 6.1E+00 | 1.8E+02 | *1.6E-01* | *3.0E-01* |
| Aberdeen Proving Ground | EMBG | S-3 | *3.5E-02* | 1.7E+01 | 3.2E+02 | 4.4E-01 | *3.5E-01* |
| Aberdeen Proving Ground | EMBG | S-4 | NA | 2.0E+01 | 5.4E+02 | *3.0E+00* | *4.9E-01* |
| Aberdeen Proving Ground | EMBG | S-5 | *5.0E-02* | 2.6E+00 | 7.1E+01 | *1.3E-01* | *2.7E-01* |
| Aberdeen Proving Ground | EMBG | S-6 | *5.5E-02* | 1.4E+00 | 1.0E+02 | *1.4E-01* | *2.8E-01* |
| Aberdeen Proving Ground | EMBG | S-6 DUP | *4.6E-02* | 2.6E+00 | 1.6E+02 | *1.4E-01* | *2.8E-01* |
| Aberdeen Proving Ground | EMBG | S-7 | *5.8E-02* | 8.0E+00 | 3.5E+02 | *1.5E-01* | *2.9E-01* |
| Aberdeen Proving Ground | EMBG | S-8 | 7.0E-02 | 1.0E+01 | 2.4E+02 | *1.7E-01* | *3.3E-01* |
| Aberdeen Proving Ground | EMBG | S-9 | *5.9E-02* | 6.4E+00 | 3.4E+02 | *1.5E-01* | *3.0E-01* |
| Aberdeen Proving Ground | EMBG | S-10 | *6.1E-02* | *9.3E-01* | 1.2E+02 | *1.5E-01* | *3.1E-01* |
| Aberdeen Proving Ground | EMBG | S-11 | *2.9E-02* | *8.6E-01* | 9.6E+01 | *1.4E-01* | *2.9E-01* |
| Aberdeen Proving Ground | EMBG | S-12 | *3.3E-02* | 2.1E+01 | 1.7E+03 | *1.8E-01* | *3.6E-01* |
| Aberdeen Proving Ground | EMBG | S-13 | *6.0E-02* | 2.4E+01 | 3.7E+02 | *1.6E-01* | *3.0E-01* |
| Aberdeen Proving Ground | EMBG | S-13 DUP | *6.2E-02* | 2.4E+01 | 4.2E+02 | *1.6E-01* | *3.2E-01* |
| Aberdeen Proving Ground | EMBG | S-14 | *3.2E-02* | 6.2E+00 | 2.2E+02 | NA | *3.2E-01* |
| Aberdeen Proving Ground | EMBG | S-15 | *3.1E-02* | *9.1E-01* | *3.6E+01* | NA | *3.0E-01* |
| Aberdeen Proving Ground | EMBG | S-16 | *3.1E-02* | 4.5E+00 | 1.8E+02 | NA | *3.0E-01* |
| Aberdeen Proving Ground | EMBG | S-17 | *6.3E-02* | 6.7E+00 | 3.1E+02 | *1.6E-01* | *3.1E-01* |
| Aberdeen Proving Ground | EMBG | S-17 DUP | *6.2E-02* | 6.8E+00 | 2.8E+02 | *1.6E-01* | *3.0E-01* |
| Aberdeen Proving Ground | EMBG | S-18 | *6.7E-02* | 2.7E+00 | 1.8E+02 | *1.6E-01* | *3.2E-01* |
| Aberdeen Proving Ground | EMBG | S-19 | *6.1E-02* | 1.4E+01 | 1.5E+03 | *1.6E-01* | *3.1E-01* |
| Aberdeen Proving Ground | EMBG | S-20 | *3.1E-02* | 6.4E+00 | 2.1E+02 | NA | *3.1E-01* |
| Aberdeen Proving Ground | EMBG | S-21 | *3.0E-01* | 6.9E+00 | 3.8E+02 | NA | *3.0E-01* |
| Aberdeen Proving Ground | EMBG | S-23 | *3.1E-02* | 9.0E+00 | 2.2E+02 | NA | *3.1E-01* |
| Aberdeen Proving Ground | EMBG | S-24 | *3.3E-02* | 7.8E+00 | 2.5E+02 | 5.0E-01 | *3.1E-01* |
| Aberdeen Proving Ground | EMBG | S-25 | *6.9E-02* | 1.1E+01 | 5.6E+02 | *1.7E-01* | *3.5E-01* |
| Aberdeen Proving Ground | EMBG | S-26 | *3.2E-02* | 9.0E+00 | 4.6E+02 | NA | *3.2E-01* |
| Aberdeen Proving Ground | EMBG | S-27 | *3.1E-02* | 8.0E+00 | 3.4E+02 | NA | *3.0E-01* |
| Aberdeen Proving Ground | EMBG | S-28 | *3.1E-02* | 1.5E+01 | 1.8E+02 | NA | *2.9E-01* |
| Aberdeen Proving Ground | EMBG | S-29 | *7.0E-02* | 3.2E+00 | 2.3E+02 | *1.8E-01* | *3.5E-01* |
| Aberdeen Proving Ground | EMBG | S-30 | *6.7E-02* | 4.5E+00 | 3.1E+02 | *1.7E-01* | *3.3E-01* |
| Indian Head | EMBG | BGDSS0010101 | 4.0E-02 | 5.8E+00 | 4.7E+02 | 3.0E-01 | *3.5E-02* |
| Indian Head | EMBG | BGDSS0020101 | 3.0E-02 | 1.7E+00 | 1.3E+02 | *1.1E-01* | 6.0E-02 |
| Indian Head | EMBG | BGDSS0030101 | 3.0E-02 | 7.8E+00 | 5.2E+02 | 7.0E-01 | *3.0E-02* |
| Indian Head | EMBG | BGDSS0040101 | 3.0E-02 | 5.5E+00 | 3.1E+02 | 8.3E-01 | *3.5E-02* |
| Indian Head | EMBG | BGDSS0050101 | 4.0E-02 | 3.2E+00 | 2.5E+02 | 5.1E-01 | 7.0E-02 |

# EASTERN

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Indian Head | EMBG | BGDSS0060101 | 3.0E-02 | 2.5E+00 | 7.5E+02 | 5.4E-01 | 1.0E-01 |
| Indian Head | EMBG | BGDSS0070101 | 5.0E-02 | 4.9E+00 | 5.1E+02 | 5.3E-01 | 3.5E-02 |
| Indian Head | EMBG | BGDSS0080101 | 5.0E-02 | 8.6E+00 | 7.9E+02 | 7.9E-01 | 3.5E-02 |
| Indian Head | EMBG | BGDSS0090101 | 3.0E-02 | 4.5E+00 | 4.5E+02 | 4.6E-01 | 1.0E-01 |
| Indian Head | EMBG | BGDSS0100101 | 2.0E-02 | 3.4E+00 | 3.0E+02 | 5.3E-01 | 7.5E-02 |
| Indian Head | EMBG | S25-MW03-001 | 8.0E-02 | 2.3E+00 | 2.2E+02 | 1.7E-01 | 5.5E-02 |
| Indian Head | EMBG | S26-MW03-001 | 7.0E-02 | 1.1E+01 | 7.8E+02 | 8.5E-02 | 5.5E-02 |
| Fort Meade | EMBG | SSB-1 | 5.0E-02 | 9.4E+00 | 5.0E+02 | 5.0E+00 | 2.5E-01 |
| Fort Meade | EMBG | SSB-2 | 5.0E-02 | 6.3E+00 | 3.5E+02 | 5.0E+00 | 2.5E-01 |
| Fort Meade | EMBG | SSB-3 | 5.0E-02 | 4.0E+00 | 1.3E+02 | 5.0E+00 | 2.5E-01 |
| Fort Meade | EMBG | SSB-4 | 5.0E-02 | 3.9E+00 | 1.2E+02 | 5.0E+00 | 2.5E-01 |
| Fort Meade | EMBG | SSB-4X | 5.0E-02 | 4.4E+00 | 5.0E+01 | 5.0E+00 | 2.5E-01 |
| Fort Meade | EMBG | SSB-5 | 5.0E-02 | 7.9E+00 | 2.1E+02 | 5.0E+00 | 2.5E-01 |
| Tolchester | EMBG | MCHT13-S-4 | 1.4E-01 | 1.2E+01 | 4.9E+02 | 6.2E-01 | 1.0E+00 |
| Crisfield City Dump | EMBG | Background Soil | 5.0E-02 | 5.7E+00 | 6.2E+02 | 2.3E-01 | 1.0E+00 |
| Old Fort Road | EMBG | Background Soil | 5.0E-02 | 5.7E+00 | 7.7E+02 | 2.3E-01 | 1.0E+00 |
| Nicholson Landfill | EMBG | Background Soil | 3.5E+00 | 3.6E+00 | 4.4E+02 | 2.1E-01 | 1.0E+00 |
| Union Road | EMBG | Background Soil | 5.0E-02 | 2.8E+01 | 3.3E+02 | 5.0E-01 | 1.0E+00 |
| Braxton Property | EMBG | Background Soil | 5.0E-02 | 1.3E+01 | 5.8E+02 | 5.0E-01 | 1.0E+00 |
| Abingdon Landfill | EMBG | Background Soil | 1.0E-01 | 5.8E+00 | 2.6E+02 | NA | 1.5E+00 |
| Waldorf Control | EMBG | Background Soil | 5.0E-02 | 5.6E+00 | 6.1E+02 | 5.0E-01 | 1.0E+00 |
| Vicon | EMBG | Background Soil | 1.2E-01 | 3.0E+00 | 1.5E+02 | 3.5E-01 | 9.0E-01 |
| Firestone Perryville | EMBG | Background Soil | 5.0E-02 | 1.0E+01 | 2.9E+02 | 5.0E-01 | 1.0E+00 |
| SkipJack Chemicals | EMBG | Background Soil | 5.0E-02 | 4.0E+00 | 5.0E+02 | 5.0E-01 | 1.0E+00 |
| Old West Denton Landfill | EMBG | Background Soil | 5.0E-02 | 4.0E+00 | 9.1E+01 | 5.0E-01 | 1.0E+00 |
| Fort Smallwood Control | EMBG | Background Soil | 1.0E-01 | 4.0E+00 | 5.0E+02 | 5.0E-01 | 2.7E-01 |
| Fort Smallwood Launch | EMBG | Background Soil | 1.0E-01 | 4.0E+00 | 5.0E+02 | 5.0E-01 | 2.6E-01 |
| Davidsonville Launch | EMBG | Background Soil | 1.0E-01 | 7.3E+00 | 1.1E+03 | 2.0E+00 | NA |
| US Naval Research Lab Waldorf | EMBG | SO 54A | 5.0E-02 | 4.0E+00 | 5.0E+02 | 5.0E-01 | 1.0E+00 |
| US Naval Research Lab Waldorf | EMBG | SO 54B | 5.0E-02 | 4.0E+00 | 5.0E+02 | 5.0E-01 | 1.0E+00 |
| US Naval Research Lab Waldorf | EMBG | SO 55A | 5.0E-02 | 4.0E+00 | 5.0E+02 | 5.0E-01 | 2.7E+00 |
| US Naval Research Lab Waldorf | EMBG | SO 55B | 5.0E-02 | 4.0E+00 | 5.0E+02 | 5.0E-01 | 1.0E+00 |
| US Naval Research Lab Waldorf | EMBG | SO 56 | 5.0E-02 | 4.0E+00 | 5.0E+02 | 5.0E-01 | 1.0E+00 |
| US Naval Research Lab Waldorf | EMBG | SO 57 | 5.0E-02 | 4.0E+00 | 5.0E+02 | 5.0E-01 | 1.0E+00 |
| US Naval Research Lab Waldorf | EMBG | S0 58 | 5.0E-02 | 4.0E+00 | 5.0E+02 | 5.0E-01 | 1.0E+00 |
| US Naval Research Lab Waldorf | EMBG | SO 59 | 5.0E-02 | 8.3E+00 | 5.0E+02 | 5.0E-01 | 1.0E+00 |
| US Naval Research Lab Waldorf | EMBG | SO 59(D) | 5.0E-02 | 9.1E+00 | 5.0E+02 | 5.0E-01 | 1.0E+00 |
| US Naval Research Lab Waldorf | EMBG | SO 60 | 5.0E-02 | 7.5E+00 | 1.4E+03 | 5.0E-01 | 1.0E+00 |

EMBG = Eastern Maryland Background, CMBG = Central Maryland Background, WMBG = Western Maryland Background. All values reported in parts per million. Not detected analytes reported at one half the detection limit. Not detected analytes italicized. NA = not applicable.

# EASTERN

| Site Name | Province | Designation | Sodium | Thallium | Vanadium | Zinc |
|---|---|---|---|---|---|---|
| Aberdeen Proving Ground | EMBG | S-1 | 4.4E+02 | *1.8E-01* | 1.8E+01 | 1.4E+01 |
| Aberdeen Proving Ground | EMBG | S-1 DUP | 4.4E+02 | *1.8E-01* | 2.0E+01 | 1.8E+01 |
| Aberdeen Proving Ground | EMBG | S-2 | 3.8E+02 | *1.6E-01* | 1.1E+01 | 1.7E+01 |
| Aberdeen Proving Ground | EMBG | S-3 | 6.6E+02 | *1.7E-01* | 4.7E+01 | 9.6E+01 |
| Aberdeen Proving Ground | EMBG | S-4 | 9.4E+02 | *2.4E-01* | 2.0E+01 | 7.4E+01 |
| Aberdeen Proving Ground | EMBG | S-5 | 2.3E+02 | *1.3E-01* | 1.3E+01 | 1.1E+01 |
| Aberdeen Proving Ground | EMBG | S-6 | 2.0E+02 | *1.4E-01* | 7.9E+00 | 6.6E+00 |
| Aberdeen Proving Ground | EMBG | S-6 DUP | 2.1E+02 | *1.4E-01* | 9.7E+00 | 7.5E+00 |
| Aberdeen Proving Ground | EMBG | S-7 | 3.8E+02 | *1.5E-01* | 1.8E+01 | 2.6E+01 |
| Aberdeen Proving Ground | EMBG | S-8 | 4.5E+02 | *1.7E-01* | 2.3E+01 | 4.1E+01 |
| Aberdeen Proving Ground | EMBG | S-9 | 4.2E+02 | *1.5E-01* | 2.7E+01 | 3.4E+01 |
| Aberdeen Proving Ground | EMBG | S-10 | 4.9E+02 | *1.5E-01* | 1.6E+01 | 4.9E+00 |
| Aberdeen Proving Ground | EMBG | S-11 | 3.4E+02 | *1.4E-01* | 1.2E+01 | 1.1E+01 |
| Aberdeen Proving Ground | EMBG | S-12 | 5.5E+02 | *1.8E-01* | 4.1E+01 | 6.1E+01 |
| Aberdeen Proving Ground | EMBG | S-13 | 4.0E+02 | *1.6E-01* | 2.9E+01 | 4.0E+01 |
| Aberdeen Proving Ground | EMBG | S-13 DUP | 4.4E+02 | *1.6E-01* | 3.2E+01 | 4.6E+01 |
| Aberdeen Proving Ground | EMBG | S-14 | 4.8E+02 | *1.6E-01* | 1.6E+01 | 2.9E+01 |
| Aberdeen Proving Ground | EMBG | S-15 | 4.7E+02 | *1.6E-01* | 2.2E+01 | 2.1E+01 |
| Aberdeen Proving Ground | EMBG | S-16 | 4.3E+02 | *1.5E-01* | 2.9E+01 | 2.1E+01 |
| Aberdeen Proving Ground | EMBG | S-17 | 4.5E+02 | *1.6E-01* | 1.7E+01 | 3.5E+01 |
| Aberdeen Proving Ground | EMBG | S-17 DUP | 3.4E+02 | *1.6E-01* | 1.8E+01 | 3.7E+01 |
| Aberdeen Proving Ground | EMBG | S-18 | 4.4E+02 | *1.6E-01* | 1.6E+01 | 1.1E+01 |
| Aberdeen Proving Ground | EMBG | S-19 | 4.0E+02 | *1.6E-01* | 3.2E+01 | 5.0E+01 |
| Aberdeen Proving Ground | EMBG | S-20 | 4.4E+02 | *1.5E-01* | 2.0E+01 | 2.0E+01 |
| Aberdeen Proving Ground | EMBG | S-21 | 4.3E+02 | *1.5E-01* | 2.3E+01 | 2.8E+01 |
| Aberdeen Proving Ground | EMBG | S-23 | 4.6E+02 | *1.6E-01* | 1.9E+01 | 2.9E+01 |
| Aberdeen Proving Ground | EMBG | S-24 | 3.8E+02 | *1.7E-01* | 2.6E+01 | 2.8E+01 |
| Aberdeen Proving Ground | EMBG | S-25 | 4.7E+02 | *1.7E-01* | 2.9E+01 | 3.2E+01 |
| Aberdeen Proving Ground | EMBG | S-26 | 4.6E+02 | *1.6E-01* | 2.7E+01 | 2.4E+02 |
| Aberdeen Proving Ground | EMBG | S-27 | 4.9E+02 | *1.5E-01* | 3.1E+01 | 4.7E+01 |
| Aberdeen Proving Ground | EMBG | S-28 | 4.3E+02 | *1.5E-01* | 1.8E+01 | 3.0E+01 |
| Aberdeen Proving Ground | EMBG | S-29 | 4.4E+02 | *1.8E-01* | 5.9E+01 | 2.7E+01 |
| Aberdeen Proving Ground | EMBG | S-30 | 5.0E+02 | *1.7E-01* | 1.6E+01 | 1.5E+01 |
| Indian Head | EMBG | BGDSS0010101 | *1.2E+01* | *1.3E-01* | 2.2E+01 | 2.2E+01 |
| Indian Head | EMBG | BGDSS0020101 | 2.2E+01 | *1.1E-01* | 1.3E+01 | 6.2E+00 |
| Indian Head | EMBG | BGDSS0030101 | 4.1E+01 | 3.8E-01 | 2.8E+01 | 2.6E+01 |
| Indian Head | EMBG | BGDSS0040101 | 5.1E+01 | 5.2E-01 | 2.3E+01 | 2.2E+01 |
| Indian Head | EMBG | BGDSS0050101 | 2.6E+01 | 5.2E-01 | 1.9E+01 | 1.6E+01 |

# EASTERN

| | | | | | | |
|---|---|---|---|---|---|---|
| Indian Head | EMBG | BGDSS0060101 | 3.9E+01 | *1.3E-01* | 1.2E+01 | 2.3E+01 |
| Indian Head | EMBG | BGDSS0070101 | 5.2E+01 | *1.3E-01* | 2.4E+01 | 2.0E+01 |
| Indian Head | EMBG | BGDSS0080101 | 5.0E+01 | 2.6E-01 | 2.9E+01 | 2.8E+01 |
| Indian Head | EMBG | BGDSS0090101 | 5.2E+01 | *1.4E-01* | 1.2E+01 | 1.5E+01 |
| Indian Head | EMBG | BGDSS0100101 | 5.3E+01 | *2.7E-01* | 1.3E+01 | 1.1E+01 |
| Indian Head | EMBG | S25-MW03-001 | *9.6E+00* | *1.4E-01* | 9.8E+00 | 1.1E+01 |
| Indian Head | EMBG | S26-MW03-001 | *1.0E+01* | *1.4E-01* | 3.9E+01 | 3.1E+01 |
| Fort Meade | EMBG | SSB-1 | 3.5E+02 | *1.0E+01* | 2.4E+01 | 2.3E+01 |
| Fort Meade | EMBG | SSB-2 | 3.7E+02 | *1.0E+01* | 1.6E+01 | 2.2E+01 |
| Fort Meade | EMBG | SSB-3 | 4.0E+02 | *1.0E+01* | 1.1E+01 | 7.4E+00 |
| Fort Meade | EMBG | SSB-4 | 3.3E+02 | *1.0E+01* | 1.4E+01 | 1.2E+01 |
| Fort Meade | EMBG | SSB-4X | 3.3E+02 | *1.0E+01* | 1.6E+01 | 1.3E+01 |
| Fort Meade | EMBG | SSB-5 | 3.3E+02 | *1.0E+01* | 2.0E+01 | 1.7E+01 |
| Tolchester | EMBG | MCHT13-S-4 | 5.7E+01 | NA | 2.2E+01 | 5.5E+01 |
| Crisfield City Dump | EMBG | Background Soil | 5.5E+02 | *3.4E-01* | 1.6E+01 | 1.9E+01 |
| Old Fort Road | EMBG | Background Soil | 3.8E+01 | *1.0E+00* | 3.1E+01 | 2.3E+01 |
| Nicholson Landfill | EMBG | Background Soil | 1.9E+01 | NA | 1.4E+01 | NA |
| Union Road | EMBG | Background Soil | 1.0E+02 | *1.0E+00* | 2.6E+01 | 6.6E+01 |
| Braxton Property | EMBG | Background Soil | 7.7E+01 | *1.0E+00* | 3.8E+01 | 3.6E+01 |
| Abingdon Landfill | EMBG | Background Soil | 7.8E+01 | 2.5E-01 | 4.3E+01 | 9.0E+00 |
| Waldorf Control | EMBG | Background Soil | 2.3E+01 | *1.0E+00* | 1.6E+01 | 1.0E+02 |
| Vicon | EMBG | Background Soil | 2.9E+01 | 3.5E-01 | 2.0E+01 | 2.4E+01 |
| Firestone Perryville | EMBG | Background Soil | 3.5E+01 | *1.0E+00* | 1.4E+01 | 4.3E+01 |
| SkipJack Chemicals | EMBG | Background Soil | 8.5E+01 | *1.0E+00* | 1.1E+01 | 3.4E+01 |
| Old West Denton Landfill | EMBG | Background Soil | *5.0E+02* | *1.0E+00* | 2.5E+00 | 5.5E+01 |
| Fort Smallwood Control | EMBG | Background Soil | *5.0E+01* | *1.0E+00* | 6.1E+00 | 2.2E+01 |
| Fort Smallwood Launch | EMBG | Background Soil | 1.6E+01 | *1.0E+00* | 9.1E+00 | 4.4E+01 |
| Davidsonville Launch | EMBG | Background Soil | 7.0E+01 | 1.0E+00 | 2.3E+01 | 6.6E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 54A | *5.0E+02* | *1.0E+00* | *5.0E+00* | 1.5E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 54B | *5.0E+02* | *1.0E+00* | 1.1E+01 | 7.0E+00 |
| US Naval Research Lab Waldorf | EMBG | SO 55A | *5.0E+02* | *1.0E+00* | 1.9E+01 | 2.8E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 55B | *5.0E+02* | *1.0E+00* | 1.5E+01 | 1.1E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 56 | *5.0E+02* | *1.0E+00* | 1.3E+01 | 1.2E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 57 | *5.0E+02* | *1.0E+00* | 1.2E+01 | 2.1E+01 |
| US Naval Research Lab Waldorf | EMBG | S0 58 | *5.0E+02* | *1.0E+00* | 2.5E+01 | 1.8E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 59 | *5.0E+02* | *1.0E+00* | 2.2E+01 | 4.1E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 59(D) | *5.0E+02* | *1.0E+00* | 2.3E+01 | 4.2E+01 |
| US Naval Research Lab Waldorf | EMBG | SO 60 | *5.0E+02* | *1.0E+00* | 2.3E+01 | 5.2E+01 |

EMBG = Eastern Maryland Background, CMBG = Central Maryland Background, WMBG = Western Maryland Background. All values reported in parts per million. Not detected analytes reported at one half the detection limit. Not detected analytes italicized. NA = not applicable.

# CENTRAL

| Site Name | Province | Designation | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium |
|---|---|---|---|---|---|---|---|---|
| Ordnance Products (7/99) | CMBG | BG-01 (0 - 0.5 feet) | 6.9E+03 | *6.0E+00* | 2.2E+00 | 4.5E+01 | 4.2E-01 | *5.0E-01* |
| Ordnance Products (7/99) | CMBG | BG-02 (0 - 0.5 feet) | 9.3E+03 | 7.3E-01 | 3.1E+00 | 5.6E+01 | 5.8E-01 | *5.0E-01* |
| Ordnance Products (7/99) | CMBG | BG-03 (0 - 0.5 feet) | 9.8E+03 | *6.0E+00* | 3.1E+00 | 4.2E+01 | 5.4E-01 | *5.0E-01* |
| Bush Valley Landfill | CMBG | BG-04 (0 - 0.5 feet) | 9.0E+03 | NA | 3.4E+00 | 4.3E+01 | 3.9E-01 | *5.0E-01* |
| Bush Valley Landfill | CMBG | SUS1 (8/92, 0-6") | 9.7E+03 | NA | *1.6E+00* | 3.8E+01 | *1.3E-01* | *1.2E+00* |
| Bush Valley Landfill | CMBG | SUS2 (8/92, 0-6") | 9.5E+03 | NA | *7.5E-01* | 6.2E+01 | 2.9E-01 | *1.3E+00* |
| Mullinex Farms | CMBG | SUS3 (8/92, 0-6") | 1.1E+04 | NA | *8.0E-01* | 6.4E+01 | 4.3E-01 | *1.3E+00* |
| MullinexFarms | CMBG | Background Soil | 1.3E+04 | *8.5E+00* | 1.5E+00 | 8.5E+01 | 5.1E+00 | *1.0E+00* |
| Hopkins Quarry | CMBG | Background Soil | 1.0E+04 | *8.5E+00* | 4.3E+00 | 1.1E+02 | 7.0E-01 | *1.0E+00* |
| Childs Property | CMBG | Background Soil | 1.7E+04 | *5.0E-01* | 2.8E+00 | 8.2E+01 | 9.0E-01 | *2.5E-01* |
| Big Elk Chapel Road | CMBG | Background Soil | 1.1E+04 | *6.0E+00* | 5.3E+00 | 6.7E+01 | 6.4E-01 | *5.0E-01* |
| Power Matic | CMBG | Background Soil | 2.2E+04 | *2.1E+00* | 3.4E+00 | 7.3E+01 | 7.2E-01 | *4.7E-01* |
| LeHigh Portland Cement | CMBG | Background Soil | 1.4E+04 | 1.1E+01 | *1.0E+00* | 7.0E+01 | 8.7E-01 | 1.8E+00 |
| Langs Junkyard | CMBG | Background Soil | 1.6E+04 | *6.0E+00* | 5.3E+00 | 2.0E+02 | 9.4E-01 | *5.0E-01* |
| Kate Wagner Landfill | CMBG | Background Soil | 9.7E+03 | NA | 3.8E+00 | 8.0E+01 | 8.1E-01 | *1.0E+00* |
| Bachmans Valley Landfill | CMBG | Background Soil | 1.5E+04 | *6.0E+00* | 3.8E+00 | 7.1E+01 | 6.7E-01 | *5.0E-01* |
| Maryvale Prep School | CMBG | Background Soil | 1.2E+04 | *6.0E+00* | 6.5E+00 | 4.3E+01 | 3.7E-01 | 1.6E+00 |
| Fork Control | CMBG | Background Soil | 1.2E+03 | NA | 2.9E+00 | 1.0E+02 | 8.1E-01 | *1.3E-01* |
| White Oak | CMBG | BG 04 SS | 3.7E+04 | 9.2E-01 | 2.5E+00 | 9.0E+01 | 2.1E+00 | *5.0E-01* |
| White Oak | CMBG | BG 05 SS | 8.5E+03 | 5.7E-01 | 3.1E+00 | 4.2E+01 | 6.0E-02 | *3.5E-02* |
| White Oak | CMBG | BG 06 SS | 1.0E+04 | 5.6E-01 | 4.2E+00 | 5.3E+01 | 1.9E-01 | *3.0E-02* |
| White Oak | CMBG | BG 101 SS | 7.6E+03 | 5.6E-01 | 2.2E+00 | 4.9E+01 | 2.0E-02 | 1.2E-01 |
| White Oak | CMBG | BG 07 SS | 6.5E+03 | 5.6E-01 | 2.1E+00 | 4.3E+01 | 2.0E-02 | 1.1E-01 |
| White Oak | CMBG | BG 10 SS | 9.5E+03 | 5.5E-01 | 4.2E+00 | 4.1E+01 | 1.6E-01 | *3.0E-02* |
| White Oak | CMBG | BG 09 SS | 1.2E+04 | 5.8E-01 | 4.6E+00 | 7.7E+01 | 5.0E-02 | 8.0E-02 |
| White Oak | CMBG | BG 100 SS | 1.7E+04 | 6.6E-01 | 5.2E+00 | 4.3E+01 | *1.0E-02* | 3.6E-01 |
| White Oak | CMBG | BG 102 SS | 2.1E+04 | 6.4E-01 | 6.7E+00 | 4.9E+01 | 2.0E-02 | 5.9E-01 |
| | | | 5.2E+03 | 6.6E-01 | 2.5E+00 | 2.0E+01 | *1.0E-02* | 1.5E-01 |

EMBG = Eastern Maryland Background, CMBG = Central Maryland Background, WMBG = Western Maryland Background. All values reported in parts per million. Not detected analytes reported at one half the detection limit. Not detected analytes italicized. NA = not applicable. Not detected XRF data excluded from analysis due to elevated detection limits.

# CENTRAL

| Site Name | Province | Designation | Calcium | Chromium(Total) | Cobalt | Copper | Iron | Lead |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| Ordnance Products (7/99) | CMBG | BG-01 (0 - 0.5 feet) | 3.9E+02 | 2.0E+01 | 8.2E+00 | 5.6E+00 | 1.2E+04 | 1.2E+01 |
| Ordnance Products (7/99) | CMBG | BG-02 (0 - 0.5 feet) | 3.4E+02 | 2.1E+01 | 9.0E+00 | 5.9E+00 | 1.3E+04 | 1.8E+01 |
| Ordnance Products (7/99) | CMBG | BG-03 (0 - 0.5 feet) | 1.3E+02 | 2.8E+01 | 6.7E+00 | 1.3E+01 | 2.1E+04 | 1.6E+01 |
| Ordnance Products (7/99) | CMBG | BG-04 (0 - 0.5 feet) | *5.0E+02* | 1.3E+01 | 3.3E+00 | 7.0E+00 | 9.1E+03 | 3.3E+01 |
| Bush Valley Landfill | CMBG | SUS1 (8/92, 0-6") | 1.6E+03 | 1.9E+01 | 3.6E+00 | 1.1E+01 | 1.6E+04 | 2.9E+01 |
| Bush Valley Landfill | CMBG | SUS2 (8/92, 0-6") | 1.4E+03 | 2.0E+01 | 1.0E+01 | 1.8E+01 | 1.8E+04 | 1.1E+01 |
| Bush Valley Landfill | CMBG | SUS3 (8/92, 0-6") | 1.4E+03 | 2.1E+01 | 8.9E+00 | 1.9E+01 | 2.0E+04 | 1.3E+01 |
| Mullinex Farms | CMBG | Background Soil | 8.1E+02 | 3.2E+01 | 5.7E+01 | 3.4E+01 | 2.5E+04 | 1.4E+01 |
| MullinexFarms | CMBG | Background Soil | 3.3E+03 | 7.1E+00 | 7.7E+01 | 1.6E+01 | 1.9E+04 | 4.1E+01 |
| Hopkins Quarry | CMBG | Background Soil | 1.4E+03 | 6.0E+00 | 6.1E+00 | 1.6E+01 | 2.1E+04 | 3.2E+01 |
| Childs Property | CMBG | Background Soil | 3.5E+03 | 1.9E+01 | 4.6E+00 | 1.2E+01 | 1.6E+04 | 5.3E+01 |
| Big Elk Chapel Road | CMBG | Background Soil | 8.0E+02 | 1.3E+01 | 6.1E+00 | 3.5E+01 | 1.7E+04 | 7.4E+00 |
| Power Matic | CMBG | Background Soil | 3.7E+04 | 3.4E+01 | 1.8E+01 | 4.4E+01 | 2.6E+04 | 1.8E+02 |
| LeHigh Portland Cement | CMBG | Background Soil | 3.0E+04 | 2.0E+01 | 1.3E+01 | 2.9E+01 | 2.5E+04 | 3.4E+01 |
| Langs Junkyard | CMBG | Background Soil | 1.6E+03 | 1.2E+01 | 1.1E+01 | 9.1E+00 | 1.7E+04 | 3.8E+01 |
| Kate Wagner Landfill | CMBG | Background Soil | 2.5E+03 | 2.2E+01 | 4.1E+01 | 2.8E+01 | 3.7E+04 | 3.4E+00 |
| Bachmans Valley Landfill | CMBG | Background Soil | 7.9E+02 | 1.8E+01 | 1.6E+01 | 2.5E+01 | 2.9E+04 | 3.8E+01 |
| Maryvale Prep School | CMBG | Background Soil | 8.9E+02 | 3.0E+01 | NA | 1.9E+01 | 2.6E+03 | 1.9E+01 |
| Fork Control | CMBG | Background Soil | 6.7E+02 | 3.1E+01 | 4.7E+01 | 2.9E+01 | 3.4E+04 | 1.4E+01 |
| White Oak | CMBG | BG 04 SS | 9.3E+01 | 1.2E+01 | 7.1E+00 | 4.8E+00 | 1.1E+04 | 2.8E+01 |
| White Oak | CMBG | BG 05 SS | 1.7E+02 | 2.1E+01 | 1.4E+01 | 9.4E+00 | 1.6E+04 | 2.5E+01 |
| White Oak | CMBG | BG 06 SS | 3.8E+02 | 1.2E+01 | 3.5E+00 | 1.9E+01 | 9.6E+03 | 4.2E+01 |
| White Oak | CMBG | BG 101 SS | 3.0E+02 | 1.0E+01 | 2.8E+00 | 1.7E+01 | 8.7E+03 | 3.6E+01 |
| White Oak | CMBG | BG 07 SS | 2.6E+02 | 1.3E+01 | 3.0E+00 | 5.5E+00 | 1.0E+04 | 1.8E+01 |
| White Oak | CMBG | BG 10 SS | 1.1E+03 | 5.6E+01 | 6.3E+00 | 1.3E+01 | 1.6E+04 | 3.1E+01 |
| White Oak | CMBG | BG 09 SS | 2.8E+02 | 1.9E+01 | 7.3E+00 | 1.2E+02 | 1.9E+04 | 1.3E+01 |
| White Oak | CMBG | BG 100 SS | 8.8E+01 | 2.7E+01 | 3.7E+00 | 1.1E+01 | 2.6E+04 | 1.2E+01 |
| White Oak | CMBG | BG 102 SS | 8.3E+01 | 8.4E+00 | 7.9E-01 | 3.4E+00 | 6.0E+03 | 1.8E+01 |

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# CENTRAL

| Site Name | Province | Designation | Magnesium | Manganese | Mercury | Nickel | Potassium | Selenium |
|---|---|---|---|---|---|---|---|---|
| Ordnance Products (7/99) | CMBG | BG-01 (0 - 0.5 feet) | 6.4E+02 | 3.8E+02 | *5.0E-02* | 7.9E+00 | 2.6E+02 | 7.9E-01 |
| Ordnance Products (7/99) | CMBG | BG-02 (0 - 0.5 feet) | 9.7E+02 | 4.9E+02 | *5.0E-02* | 7.9E+00 | 3.6E+02 | 9.0E-01 |
| Ordnance Products (7/99) | CMBG | BG-03 (0 - 0.5 feet) | 1.8E+03 | 2.7E+02 | *5.0E-02* | 9.0E+00 | 5.7E+02 | 1.8E+00 |
| Ordnance Products (7/99) | CMBG | BG-04 (0 - 0.5 feet) | 7.2E+02 | 1.3E+02 | *5.0E-02* | 6.8E+00 | 3.7E+02 | 8.2E-01 |
| Bush Valley Landfill | CMBG | SUS1 (8/92, 0-6") | 1.1E+03 | 9.6E+01 | *6.5E-02* | 5.1E+00 | 4.2E+02 | 8.1E-01 |
| Bush Valley Landfill | CMBG | SUS2 (8/92, 0-6") | 3.2E+03 | 4.4E+02 | *6.5E-02* | 1.3E+01 | 1.6E+03 | 7.5E-01 |
| Bush Valley Landfill | CMBG | SUS3 (8/92, 0-6") | 3.4E+03 | 4.7E+02 | 1.4E-01 | 1.2E+01 | 1.6E+03 | 6.4E-01 |
| Mullinex Farms | CMBG | Background Soil | 2.5E+03 | 2.2E+03 | NA | 4.1E+01 | 4.4E+02 | NA |
| MullinexFarms | CMBG | Background Soil | 5.0E+02 | 3.4E+03 | NA | *8.0E+00* | 2.2E+02 | NA |
| Hopkins Quarry | CMBG | Background Soil | 2.8E+03 | 8.0E+02 | *5.0E-02* | 8.0E+00 | 4.1E+03 | *2.5E-01* |
| Childs Property | CMBG | Background Soil | 1.6E+03 | 2.6E+02 | 2.1E-01 | 1.9E+01 | 8.2E+02 | 9.2E-01 |
| Big Elk Chapel Road | CMBG | Background Soil | 2.3E+03 | 2.3E+02 | *6.0E-02* | 6.1E+00 | 1.4E+03 | 6.3E-01 |
| Power Matic | CMBG | Background Soil | 8.3E+03 | 4.3E+02 | 1.0E-01 | 3.0E+01 | 2.9E+03 | *1.0E+00* |
| LeHigh Portland Cement | CMBG | Background Soil | 3.1E+03 | 2.0E+03 | 1.2E-01 | 1.5E+01 | 1.4E+03 | *5.0E-01* |
| Langs Junkyard | CMBG | Background Soil | 6.4E+02 | 6.8E+02 | *1.0E-01* | 5.1E+00 | 8.3E+02 | *1.5E+00* |
| Kate Wagner Landfill | CMBG | Background Soil | 1.1E+03 | NA | *8.5E-02* | *4.0E+00* | NA | *5.0E-01* |
| Bachmans Valley Landfill | CMBG | Background Soil | 2.3E+03 | 6.4E+02 | 1.7E-01 | 1.7E+01 | 1.5E+02 | *5.0E-01* |
| Maryvale Prep School | CMBG | Background Soil | 9.4E+02 | 1.1E+03 | *5.5E-02* | 1.1E+01 | 5.2E+02 | *4.8E-01* |
| Fork Control | CMBG | Background Soil | 6.7E+03 | 5.4E+02 | 4.0E-02 | 3.3E+01 | 6.9E+03 | 6.9E-01 |
| White Oak | CMBG | BG 04 SS | 6.5E+02 | 2.4E+02 | 7.0E-02 | 4.9E+00 | 3.1E+02 | *3.1E-01* |
| White Oak | CMBG | BG 05 SS | 9.2E+02 | 3.0E+02 | 6.0E-02 | 8.0E+00 | 5.4E+02 | *3.1E-01* |
| White Oak | CMBG | BG 06 SS | 3.7E+02 | 7.4E+01 | 2.1E-01 | 6.5E+00 | 3.6E+02 | 6.2E-01 |
| White Oak | CMBG | BG 101 SS | 3.1E+02 | 5.5E+01 | 1.8E-01 | 5.4E+00 | 3.0E+02 | 7.4E-01 |
| White Oak | CMBG | BG 07 SS | 7.7E+02 | 1.5E+02 | 4.0E-02 | 6.4E+00 | 3.6E+02 | *3.0E-01* |
| White Oak | CMBG | BG 10 SS | 1.2E+03 | 4.9E+02 | 1.1E-01 | 2.9E+01 | 8.6E+02 | 6.5E-01 |
| White Oak | CMBG | BG 09 SS | 1.7E+03 | 1.8E+02 | 4.0E-02 | 1.0E+01 | 1.0E+03 | 5.5E-01 |
| White Oak | CMBG | BG 100 SS | 1.2E+03 | 7.2E+01 | 2.0E-02 | 7.5E+00 | 1.0E+03 | 7.3E-01 |
| White Oak | CMBG | BG 102 SS | 3.2E+02 | 2.0E+01 | 5.0E-02 | 2.8E+00 | 2.4E+02 | 5.4E-01 |

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# CENTRAL

| Site Name | Province | Designation | Silver | Sodium | Thallium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| Ordnance Products (7/99) | CMBG | BG-01 (0 - 0.5 feet) | 3.6E-01 | 1.7E+02 | 1.3E+00 | 2.6E+01 | 1.8E+01 |
| Ordnance Products (7/99) | CMBG | BG-02 (0 - 0.5 feet) | 5.6E-01 | 2.5E+02 | 1.7E+00 | 2.6E+01 | 2.5E+01 |
| Ordnance Products (7/99) | CMBG | BG-03 (0 - 0.5 feet) | 6.9E-01 | 2.3E+02 | 2.9E+00 | 3.2E+01 | 3.1E+01 |
| Ordnance Products (7/99) | CMBG | BG-04 (0 - 0.5 feet) | *1.0E+00* | 2.3E+02 | *1.0E+00* | 2.0E+01 | 2.3E+01 |
| Bush Valley Landfill | CMBG | SUS1 (8/92, 0-6") | *7.5E-01* | 7.9E+01 | *2.5E-01* | 2.6E+01 | 3.9E+01 |
| Bush Valley Landfill | CMBG | SUS2 (8/92, 0-6") | *8.0E-01* | 7.0E+01 | *2.7E-01* | 3.3E+01 | 5.1E+01 |
| Bush Valley Landfill | CMBG | SUS3 (8/92, 0-6") | *8.0E-01* | 1.0E+02 | *2.6E-01* | 3.4E+01 | 5.9E+01 |
| Mullinex Farms | CMBG | Background Soil | *5.0E-01* | 1.1E+02 | NA | 3.3E+01 | 7.2E+01 |
| MullinexFarms | CMBG | Background Soil | *5.0E-01* | 8.0E+01 | NA | 1.9E+01 | 4.4E+01 |
| Hopkins Quarry | CMBG | Background Soil | *5.0E-01* | *1.0E+02* | *2.5E-01* | 1.7E+01 | 7.2E+01 |
| Childs Property | CMBG | Background Soil | *1.0E+00* | 1.4E+02 | *1.0E+00* | 2.0E+01 | 1.1E+02 |
| Big Elk Chapel Road | CMBG | Background Soil | *2.2E-01* | 5.9E+01 | *5.5E-01* | 5.6E+00 | 1.7E+01 |
| Power Matic | CMBG | Background Soil | 1.0E+00 | 8.6E+01 | 4.3E-01 | 4.2E+01 | 1.1E+02 |
| LeHigh Portland Cement | CMBG | Background Soil | 1.5E+00 | 3.8E+02 | 3.4E-01 | 3.2E+01 | 6.0E+01 |
| Langs Junkyard | CMBG | Background Soil | NA | 3.8E+01 | NA | 1.9E+01 | 3.2E+01 |
| Kate Wagner Landfill | CMBG | Background Soil | *1.0E+00* | 8.8E+01 | *1.0E+00* | 1.6E+01 | 4.3E+01 |
| Bachmans Valley Landfill | CMBG | Background Soil | *1.0E+00* | 3.6E+01 | *1.0E+00* | 1.9E+01 | 7.5E+01 |
| Maryvale Prep School | CMBG | Background Soil | *6.0E-01* | 5.0E+01 | *2.4E-01* | 3.8E+01 | 2.9E+01 |
| Fork Control | CMBG | Background Soil | *1.0E+00* | *5.0E+02* | 3.1E+00 | 3.7E+01 | 1.1E+02 |
| White Oak | CMBG | BG 04 SS | *8.5E-02* | 4.4E+01 | *3.2E-01* | 2.6E+01 | 1.9E+01 |
| White Oak | CMBG | BG 05 SS | *8.5E-02* | *4.3E+01* | *3.2E-01* | *1.2E+01* | 2.6E+01 |
| White Oak | CMBG | BG 06 SS | 1.3E+00 | 7.7E+01 | *3.2E-01* | 3.1E+01 | 2.3E+01 |
| White Oak | CMBG | BG 101 SS | 9.9E-01 | 5.8E+01 | *3.1E-01* | 2.7E+01 | 1.8E+01 |
| White Oak | CMBG | BG 07 SS | *8.5E-02* | *4.2E+01* | *3.1E-01* | 2.2E+01 | 2.0E+01 |
| White Oak | CMBG | BG 10 SS | *9.0E-02* | 6.5E+01 | *3.3E-01* | 2.8E+01 | 4.4E+01 |
| White Oak | CMBG | BG 09 SS | *1.1E-01* | 1.2E+02 | *2.8E-01* | 3.2E+01 | 3.1E+01 |
| White Oak | CMBG | BG 100 SS | *1.1E-01* | 1.3E+02 | *2.7E-01* | 4.3E+01 | 2.6E+01 |
| White Oak | CMBG | BG 102 SS | *1.1E-01* | *1.5E+01* | *2.7E-01* | 1.4E+01 | 7.8E+00 |

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# WESTERN

| Site Name | Province | Designation | Aluminum | Antimony | Arsenic | Barium | Beryllium | Cadmium |
|---|---|---|---|---|---|---|---|---|
| Ft. Detrick | WMBG | BORMWA1-A | NA | NA | 2.3E+01 | 5.5E+02 | NA | NA |
| Ft. Detrick | WMBG | BORMWA1-B | NA | NA | 2.2E+01 | 5.3E+02 | NA | NA |
| Ft. Detrick | WMBG | BORMWA2-B | NA | NA | NA | 5.5E+02 | NA | NA |
| Ft. Detrick | WMBG | BORMWA3-A | NA | NA | 1.1E+01 | 5.0E+02 | NA | NA |
| Ft. Detrick | WMBG | BORMWA3-B | NA | NA | NA | 5.6E+02 | NA | NA |
| Ft. Detrick | WMBG | BORMW9D-A | NA | NA | NA | 6.4E+02 | NA | NA |
| Ft. Detrick | WMBG | BORMW9D-B | NA | NA | 1.2E+01 | 5.6E+02 | NA | NA |
| Ft. Detrick | WMBG | BMW36D-A | 2.4E+04 | 5.0E+00 | 1.0E+01 | 1.6E+02 | 8.7E-01 | 2.5E-01 |
| Ft. Detrick | WMBG | AMWA3—0 | 2.0E+04 | 5.0E+00 | 1.0E+01 | 1.5E+02 | 1.1E+00 | 2.5E-01 |
| Ft. Detrick | WMBG | AMWA1-0.5 | 2.5E+04 | 5.0E+00 | 2.7E+01 | 1.1E+02 | 2.1E+00 | 2.5E-01 |
| Ft. Detrick | WMBG | AMWA2-0.5 | 2.1E+04 | 5.0E+00 | 2.0E+01 | 1.7E+02 | 2.7E+00 | 2.5E-01 |
| Frederick Tool and Die | WMBG | BMW47D-0 | 2.1E+04 | 5.0E+00 | 1.0E+01 | 1.2E+02 | 8.3E-01 | 2.5E-01 |
| Vale Summit | WMBG | Background Soil | 1.9E+04 | 3.3E+00 | 6.0E+00 | 1.1E+02 | 9.5E-01 | 3.7E-01 |
| Old Cumberland Land Fill | WMBG | Background Soil | 7.2E+03 | NA | NA | 1.6E+02 | 1.7E+00 | 1.2E+01 |
| Hoffman Land fill | WMBG | Background Soil | 7.0E+03 | 4.3E+00 | 8.2E+00 | 1.5E+02 | 6.1E-01 | 8.1E-01 |
| Cabin Run Land Fill | WMBG | Background Soil | 8.3E+03 | NA | 7.9E+00 | 1.4E+02 | 1.1E+00 | 4.3E-01 |
| Fort Ritchie | WMBG | BKSS07 | 6.3E+03 | 6.0E+00 | 6.1E+00 | 3.7E+01 | 3.0E-01 | 5.0E-01 |
| Fort Ritchie | WMBG | BKSS08 | 7.3E+03 | 2.5E-01 | 1.1E-01 | 6.5E+01 | 2.1E-01 | 3.1E-01 |
| Fort Ritchie | WMBG | BKSS09 | 9.3E+03 | 2.6E-01 | 5.5E-02 | 1.1E+02 | 3.7E-01 | 3.7E-01 |
| Fort Ritchie | WMBG | BKSS11 | 8.0E+03 | 2.6E-01 | 5.5E-02 | 1.4E+02 | 4.0E-01 | 3.7E-01 |
| Fort Ritchie | WMBG | BKSS12 | 4.9E+03 | 2.6E-01 | 4.1E-01 | 6.2E+01 | 1.2E-01 | 3.6E-01 |
| Fort Ritchie | WMBG | BKSS13 | 7.1E+03 | 2.5E-01 | 2.1E-01 | 3.4E+01 | 1.5E-01 | 4.0E-01 |
| Fort Ritchie | WMBG | BKSS14 | 5.4E+03 | 2.6E-01 | 1.4E-01 | 4.3E+01 | 1.3E-01 | 3.0E-01 |
| Fort Ritchie | WMBG | BKSS15 | 7.7E+03 | NA | 4.5E-01 | 3.9E+01 | 4.0E-02 | 7.6E-01 |
| Fort Ritchie | WMBG | BKSS16 | 6.2E+03 | 3.9E-01 | 5.9E-01 | 3.2E+01 | 4.0E-02 | 5.4E-01 |
| Fort Ritchie | WMBG | BKSS17 | 7.4E+03 | 2.8E-01 | 4.4E-01 | 8.2E+01 | 2.3E-01 | 3.5E-01 |
| Fort Ritchie | WMBG | BKSS18 | 9.1E+03 | 2.6E-01 | 5.5E-02 | 1.1E+02 | 4.2E-01 | 3.5E-01 |
| Fort Ritchie | WMBG | BKSS37 | 1.6E+04 | 2.8E-01 | 6.5E-01 | 2.9E+02 | 1.3E+00 | 5.5E-01 |
| Fort Ritchie | WMBG | BKSS38 | 8.1E+03 | 3.9E-01 | 3.0E+00 | 3.8E+01 | 1.9E-01 | 1.5E-01 |
| Fort Ritchie | WMBG | BKSS39 | 6.6E+03 | 3.8E-01 | 2.3E+00 | 5.0E+01 | 1.6E-01 | 9.8E-01 |
| Fort Ritchie | WMBG | BKSS40 | 5.6E+03 | 3.2E-01 | 2.7E+00 | 3.4E+01 | 1.2E-01 | 1.2E-01 |
| Fort Ritchie | WMBG | BKSS19 | 5.2E+03 | 3.2E-01 | 2.3E+00 | 2.3E+01 | 6.0E-02 | 1.3E-01 |
| Fort Ritchie | WMBG | BKSS20 | 1.8E+04 | 2.6E-01 | 1.1E-01 | 4.8E+01 | 3.4E-01 | 1.8E-01 |
| Fort Ritchie | WMBG | BKSS21 | 1.9E+04 | 7.6E-01 | 4.7E-01 | 7.0E+01 | 4.0E-01 | 3.6E+00 |
| Fort Ritchie | WMBG | BKSS22 | 1.5E+04 | 2.8E-01 | 6.0E-02 | 2.9E+01 | 3.0E-01 | 2.1E-01 |
| Fort Ritchie | WMBG | BKSS23 | 1.8E+04 | 2.6E-01 | 2.1E-01 | 5.7E+01 | 4.9E-01 | 2.1E-01 |
| Fort Ritchie | WMBG | BKSS24 | 1.4E+04 | 2.8E-01 | 3.2E-01 | 7.2E+01 | 5.5E-01 | 2.5E-01 |
| | | | 1.9E+04 | 8.6E-01 | 8.5E-01 | 6.6E+01 | 3.9E-01 | 3.8E+00 |

## WESTERN

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Fort Ritchie | WMBG | BKSS25 | 2.1E+04 | 2.7E-01 | 6.0E-02 | 9.0E+01 | 4.3E-01 | 2.3E-01 |
| Fort Ritchie | WMBG | BKSS26 | 2.2E+04 | 2.8E-01 | 6.0E-02 | 1.6E+02 | 5.1E-01 | 2.0E-01 |
| Fort Ritchie | WMBG | BKSS27 | 1.9E+04 | 3.1E-01 | 7.0E-02 | 1.3E+02 | 4.6E-01 | 5.4E-01 |
| Fort Ritchie | WMBG | BKSS28 | 1.5E+04 | 2.9E-01 | 6.0E-02 | 1.1E+02 | 8.3E-01 | 3.8E-01 |
| Fort Ritchie | WMBG | BKSS29 | 1.6E+04 | 2.8E-01 | 1.9E-01 | 8.1E+01 | 5.2E-01 | 3.1E-01 |
| Fort Ritchie | WMBG | BKSS30 | 2.0E+04 | 1.0E+00 | 1.2E-01 | 7.3E+01 | 2.8E-01 | 4.0E+00 |
| Fort Ritchie | WMBG | BKSS31 | 1.5E+04 | 7.3E-01 | 3.4E-01 | 5.2E+01 | 2.0E-01 | 2.1E+00 |
| Fort Ritchie | WMBG | BKSS32 | 2.0E+04 | 4.8E-01 | 1.2E-01 | 4.6E+01 | 3.1E-01 | 1.5E+00 |
| Fort Ritchie | WMBG | BKSS33 | 1.9E+04 | 1.5E+00 | 1.2E+00 | 2.0E+02 | 3.9E-01 | 3.0E+00 |
| Fort Ritchie | WMBG | BKSS34 | 2.0E+04 | 1.0E+00 | 1.2E-01 | 8.5E+01 | 3.0E-01 | 2.4E+00 |
| Fort Ritchie | WMBG | BKSS35 | 1.7E+04 | 1.1E+00 | 1.0E+00 | 3.5E+01 | 3.2E-01 | 5.1E+00 |
| Fort Ritchie | WMBG | BKSS36 | 1.6E+04 | 8.4E-01 | 1.6E-01 | 1.1E+02 | 3.3E-01 | 2.1E+00 |

EMBG = Eastern Maryland Background, CMBG = Central Maryland Background, WMBG = Western Maryland Background. All values reported in parts per million. Not detected analytes reported at one half the detection limit. Not detected analytes italicized. NA = not applicable. Not detected XRF data excluded from analysis due to elevated detection limits.

# WESTERN

| Site Name | Province | Designation | Calcium | Chromium (Total) | Cobalt | Copper | Iron | Lead |
|---|---|---|---|---|---|---|---|---|
| Ft. Detrick | WMBG | BORMWA1-A | 2.3E+03 | NA | NA | 2.8E+01 | 3.8E+04 | 2.8E+01 |
| Ft. Detrick | WMBG | BORMWA1-B | 2.7E+03 | NA | NA | 3.2E+01 | 6.1E+04 | 2.3E+01 |
| Ft. Detrick | WMBG | BORMWA2-B | 1.9E+03 | NA | 2.3E+01 | NA | 3.6E+04 | 1.5E+01 |
| Ft. Detrick | WMBG | BORMWA3-A | 1.5E+03 | NA | NA | NA | 2.3E+04 | 2.0E+01 |
| Ft. Detrick | WMBG | BORMWA3-B | 3.5E+02 | NA | NA | NA | 3.5E+04 | 1.2E+01 |
| Ft. Detrick | WMBG | BORMW9D-A | 2.3E+03 | NA | NA | 2.0E+01 | 4.1E+04 | 2.3E+01 |
| Ft. Detrick | WMBG | BORMW9D-B | 3.5E+03 | NA | NA | NA | 3.9E+04 | 2.0E+01 |
| Ft. Detrick | WMBG | BMW36D-A | 1.4E+03 | 2.1E+01 | 9.7E+00 | 1.2E+01 | 2.6E+04 | 2.2E+01 |
| Ft. Detrick | WMBG | AMWA3--0 | 5.4E+03 | 2.0E+01 | 1.3E+01 | 9.0E+00 | 2.1E+04 | 1.7E+01 |
| Ft. Detrick | WMBG | AMWA1-0.5 | 4.3E+03 | 3.7E+01 | 1.5E+01 | 2.4E+01 | 3.6E+04 | 2.7E+01 |
| Ft. Detrick | WMBG | AMWA2-0.5 | 1.9E+04 | 1.9E+01 | 1.6E+01 | 1.4E+01 | 2.6E+04 | 2.2E+01 |
| Frederick Tool and Die | WMBG | BMW47D-0 | 3.3E+03 | 2.1E+01 | 1.0E+01 | 1.2E+01 | 2.4E+04 | 3.3E+01 |
| Vale Summit | WMBG | Background Soil | 3.3E+03 | 2.6E+01 | 1.2E+01 | 2.5E+01 | 2.2E+04 | 1.4E+02 |
| Old Cumberland Land Fill | WMBG | Background Soil | 1.6E+03 | 2.3E+01 | 3.0E+01 | 4.8E+01 | 7.1E+04 | 4.5E+01 |
| Hoffman Land fill | WMBG | Background Soil | 3.7E+03 | 2.1E+01 | 5.8E+00 | 1.6E+01 | 2.1E+04 | 3.4E+01 |
| Cabin Run Land Fill | WMBG | Background Soil | 2.6E+03 | 1.2E+01 | 1.9E+01 | 2.9E+01 | 3.4E+04 | 3.5E+01 |
| Fort Ritchie | WMBG | BKSS07 | 5.9E+02 | 1.0E+01 | 3.6E+00 | 2.0E+01 | 2.5E+04 | 1.2E+01 |
| Fort Ritchie | WMBG | BKSS08 | 5.7E+01 | 3.7E+00 | 1.1E+00 | 1.4E+00 | 5.1E+03 | 3.7E+00 |
| Fort Ritchie | WMBG | BKSS09 | 1.2E+02 | 4.2E+00 | 2.6E+00 | 1.6E+00 | 5.4E+03 | 5.4E+00 |
| Fort Ritchie | WMBG | BKSS11 | 2.1E+02 | 3.4E+00 | 2.3E+00 | 1.4E+00 | 4.8E+03 | 7.6E+00 |
| Fort Ritchie | WMBG | BKSS12 | 1.3E+02 | 3.7E+00 | 8.7E-01 | 2.6E+00 | 5.2E+03 | 1.4E+01 |
| Fort Ritchie | WMBG | BKSS13 | 6.1E+01 | 5.2E+00 | 1.3E+00 | 1.3E+00 | 6.7E+03 | 6.6E+00 |
| Fort Ritchie | WMBG | BKSS14 | 9.5E+01 | 3.6E+00 | 8.0E-01 | 2.9E+00 | 4.5E+03 | 2.8E+01 |
| Fort Ritchie | WMBG | BKSS15 | 1.0E+02 | 3.1E+00 | 3.8E-01 | 9.0E-02 | 5.6E+03 | 3.0E+00 |
| Fort Ritchie | WMBG | BKSS16 | 7.2E+01 | 1.7E+00 | 4.3E-01 | 4.4E-01 | 4.3E+03 | 2.2E+01 |
| Fort Ritchie | WMBG | BKSS17 | 1.4E+02 | 3.4E+00 | 2.0E+00 | 1.8E+00 | 4.8E+03 | 1.4E+01 |
| Fort Ritchie | WMBG | BKSS18 | 1.3E+02 | 3.7E+00 | 2.3E+00 | 2.0E+00 | 4.8E+03 | 1.1E+01 |
| Fort Ritchie | WMBG | BKSS37 | 3.9E+02 | 4.5E+00 | 5.8E+00 | 5.7E+00 | 6.9E+03 | 2.0E+01 |
| Fort Ritchie | WMBG | BKSS38 | 8.9E+02 | 7.8E+00 | 2.1E+00 | 3.8E+00 | 1.0E+04 | 1.5E+01 |
| Fort Ritchie | WMBG | BKSS39 | 7.2E+02 | 5.4E+00 | 1.0E+00 | 3.2E+00 | 7.1E+03 | 1.8E+01 |
| Fort Ritchie | WMBG | BKSS40 | 8.7E+01 | 1.9E+01 | 3.9E-01 | 1.1E+00 | 7.0E+03 | 7.4E+00 |
| Fort Ritchie | WMBG | BKSS19 | 9.9E+01 | 4.9E+00 | 3.8E-01 | 1.7E+00 | 6.8E+03 | 8.9E+00 |
| Fort Ritchie | WMBG | BKSS20 | 8.1E+02 | 5.1E+01 | 4.2E+01 | 3.8E+01 | 3.0E+04 | 6.7E+00 |
| Fort Ritchie | WMBG | BKSS21 | 8.3E+02 | 3.8E+01 | 3.3E+01 | 2.4E+01 | 2.9E+04 | 1.4E+01 |
| Fort Ritchie | WMBG | BKSS22 | 9.4E+02 | 5.1E+01 | 2.4E+01 | 1.4E+01 | 2.5E+04 | 5.3E+00 |
| Fort Ritchie | WMBG | BKSS23 | 6.1E+02 | 5.5E+01 | 4.8E+01 | 3.8E+01 | 3.2E+04 | 5.0E+00 |
| Fort Ritchie | WMBG | BKSS24 | 9.3E+02 | 5.1E+01 | 4.5E+01 | 1.7E+01 | 2.7E+04 | 2.1E+01 |
| | | | 3.5E+03 | 3.8E+01 | 4.5E+01 | 2.4E+01 | 3.3E+04 | 1.8E+01 |

## WESTERN

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|---|---|---|---|---|---|---|---|---|
| Fort Ritchie | WMBG | BKSS25 | 8.4E+02 | 3.8E+01 | 3.1E+01 | 3.3E+01 | 3.0E+04 | 7.7E+00 |
| Fort Ritchie | WMBG | BKSS26 | 7.6E+02 | 3.5E+01 | 3.8E+01 | 4.2E+01 | 3.4E+04 | 1.1E+01 |
| Fort Ritchie | WMBG | BKSS27 | 2.2E+03 | 3.0E+01 | 3.1E+01 | 4.3E+01 | 3.1E+04 | 3.4E+01 |
| Fort Ritchie | WMBG | BKSS28 | 2.3E+03 | 5.3E+01 | 4.5E+01 | 3.0E+01 | 3.4E+04 | 1.9E+01 |
| Fort Ritchie | WMBG | BKSS29 | 2.5E+03 | 7.4E+01 | 3.7E+01 | 3.2E+01 | 3.0E+04 | 1.4E+01 |
| Fort Ritchie | WMBG | BKSS30 | 1.7E+03 | 3.0E+01 | 3.0E+01 | 2.7E+01 | 3.5E+04 | 2.2E+01 |
| Fort Ritchie | WMBG | BKSS31 | 3.9E+02 | 1.7E+01 | 1.7E+01 | 1.4E+01 | 2.4E+04 | 1.4E+01 |
| Fort Ritchie | WMBG | BKSS32 | 4.4E+02 | 2.1E+01 | 2.2E+01 | 1.5E+01 | 2.3E+04 | 1.1E+01 |
| Fort Ritchie | WMBG | BKSS33 | 2.2E+03 | 4.0E+01 | 3.0E+01 | 6.1E+01 | 3.7E+04 | 1.7E+02 |
| Fort Ritchie | WMBG | BKSS34 | 3.5E+03 | 3.3E+01 | 3.1E+01 | 2.3E+01 | 3.0E+04 | 2.3E+01 |
| Fort Ritchie | WMBG | BKSS35 | 1.6E+03 | 5.0E+01 | 3.2E+01 | 3.9E+01 | 3.5E+04 | 7.0E+00 |
| Fort Ritchie | WMBG | BKSS36 | 1.7E+03 | 2.8E+01 | 3.3E+01 | 2.6E+01 | 3.2E+04 | 1.7E+01 |

EMBG = Eastern Maryland Background, CMBG = Central Maryland Background, WMBG = Western Maryland Background. All values reported in parts per million. Not detected analytes reported at one half the detection limit. Not detected analytes italicized. NA = not applicable. Not detected XRF data excluded from analysis due to elevated detection limits.

# WESTERN

| Site Name | Province | Designation | Magnesium | Manganese | Mercury | Nickel | Potassium | Selenium |
|---|---|---|---|---|---|---|---|---|
| Ft. Detrick | WMBG | BORMWA1-A | NA | 1.0E+03 | NA | NA | 4.3E+04 | NA |
| Ft. Detrick | WMBG | BORMWA1-B | NA | 4.8E+02 | NA | NA | 3.9E+04 | NA |
| Ft. Detrick | WMBG | BORMWA2-B | NA | 2.7E+02 | NA | NA | 2.7E+04 | NA |
| Ft. Detrick | WMBG | BORMWA3-A | NA | 1.0E+03 | NA | NA | 1.8E+04 | NA |
| Ft. Detrick | WMBG | BORMWA3-B | NA | 3.1E+02 | NA | NA | 2.1E+04 | NA |
| Ft. Detrick | WMBG | BORMW9D-A | NA | 1.5E+03 | NA | NA | 2.0E+04 | NA |
| Ft. Detrick | WMBG | BORMW9D-B | NA | 1.7E+03 | NA | NA | 2.0E+04 | NA |
| Ft. Detrick | WMBG | BMW36D-A | 2.7E+03 | 4.3E+02 | 5.0E-02 | 1.6E+01 | 2.6E+03 | 5.0E+00 |
| Ft. Detrick | WMBG | AMWA3--0 | 2.6E+03 | 1.1E+03 | 5.0E-02 | 1.5E+01 | 2.5E+03 | 8.2E+00 |
| Ft. Detrick | WMBG | AMWA1-0.5 | 6.2E+03 | 9.0E+02 | 5.0E-02 | 2.9E+01 | 4.4E+03 | 9.6E+00 |
| Ft. Detrick | WMBG | AMWA2-0.5 | 4.1E+03 | 1.5E+03 | 5.0E-02 | 2.0E+01 | 3.6E+03 | 5.0E+00 |
| Frederick Tool and Die | WMBG | BMW47D-0 | 2.5E+03 | 5.5E+02 | 5.0E-02 | 1.4E+01 | 1.7E+03 | 5.0E+00 |
| Vale Summit | WMBG | Background Soil | 2.2E+03 | 8.3E+02 | 6.0E-02 | 1.6E+01 | 1.6E+03 | 7.3E-01 |
| Old Cumberland Land Fill | WMBG | Background Soil | 1.4E+03 | 1.7E+03 | 4.0E-02 | 4.7E+01 | 1.9E+03 | 8.6E-01 |
| Hoffman Land fill | WMBG | Background Soil | 6.5E+02 | 1.1E+02 | 6.0E-02 | 8.8E+00 | 5.7E+02 | 1.2E+00 |
| Cabin Run Land Fill | WMBG | Background Soil | 1.0E+03 | 1.2E+03 | 1.0E-01 | 2.2E+01 | 1.2E+03 | 3.5E-01 |
| Fort Ritchie | WMBG | BKSS07 | 2.5E+02 | 4.1E+01 | 5.0E-02 | 1.8E+00 | 1.0E+03 | NA |
| Fort Ritchie | WMBG | BKSS08 | 3.3E+02 | 5.7E+01 | 6.0E-02 | 1.9E+00 | 7.0E+02 | 9.0E-01 |
| Fort Ritchie | WMBG | BKSS09 | 4.8E+02 | 1.8E+02 | 6.0E-02 | 4.0E+00 | 8.7E+02 | 4.1E-01 |
| Fort Ritchie | WMBG | BKSS11 | 4.4E+02 | 4.5E+02 | 6.0E-02 | 3.0E+00 | 5.6E+02 | 1.0E+00 |
| Fort Ritchie | WMBG | BKSS12 | 2.7E+02 | 1.7E+02 | 8.0E-02 | 2.1E+00 | 1.5E+02 | 7.0E-01 |
| Fort Ritchie | WMBG | BKSS13 | 4.1E+02 | 1.7E+02 | 8.0E-02 | 2.6E+00 | 1.9E+02 | 7.1E-01 |
| Fort Ritchie | WMBG | BKSS14 | 2.4E+02 | 9.9E+01 | 8.0E-02 | 2.0E+00 | 1.7E+02 | 9.6E-01 |
| Fort Ritchie | WMBG | BKSS15 | 1.9E+02 | 4.4E+01 | 7.0E-02 | 1.4E+00 | 2.4E+02 | 5.9E-01 |
| Fort Ritchie | WMBG | BKSS16 | 9.1E+01 | 1.5E+02 | 9.0E-02 | 7.5E-01 | 6.2E+02 | 9.0E-01 |
| Fort Ritchie | WMBG | BKSS17 | 2.9E+02 | 1.9E+02 | 8.0E-02 | 2.4E+00 | 5.3E+02 | 6.7E-01 |
| Fort Ritchie | WMBG | BKSS18 | 4.2E+02 | 1.6E+02 | 8.0E-02 | 4.0E+00 | 5.7E+02 | 9.9E-01 |
| Fort Ritchie | WMBG | BKSS37 | 5.8E+02 | 2.4E+03 | 1.2E-01 | 1.3E+01 | 6.1E+02 | 1.8E+00 |
| Fort Ritchie | WMBG | BKSS38 | 6.6E+02 | 1.1E+02 | 7.0E-02 | 4.7E+00 | 5.7E+02 | 3.6E-01 |
| Fort Ritchie | WMBG | BKSS39 | 3.7E+02 | 5.9E+01 | 8.0E-02 | 2.9E+00 | 5.2E+02 | 6.4E-01 |
| Fort Ritchie | WMBG | BKSS40 | 2.4E+02 | 4.0E+01 | 7.0E-02 | 8.4E+00 | 3.7E+02 | 5.3E-01 |
| Fort Ritchie | WMBG | BKSS19 | 2.5E+02 | 2.3E+01 | 6.0E-02 | 2.1E+00 | 3.9E+02 | 4.0E-01 |
| Fort Ritchie | WMBG | BKSS20 | 1.3E+04 | 9.5E+02 | 7.0E-02 | 5.3E+01 | 1.1E+02 | 1.7E+00 |
| Fort Ritchie | WMBG | BKSS21 | 8.9E+03 | 1.1E+03 | 1.3E-01 | 4.4E+01 | 1.4E+02 | 1.8E+00 |
| Fort Ritchie | WMBG | BKSS22 | 1.2E+04 | 3.3E+02 | 3.5E-02 | 5.2E+01 | 1.1E+02 | 1.5E+00 |
| Fort Ritchie | WMBG | BKSS23 | 8.3E+03 | 9.1E+02 | 6.0E-02 | 4.9E+01 | 1.3E+02 | 1.6E+00 |
| Fort Ritchie | WMBG | BKSS24 | 4.4E+03 | 1.9E+03 | 9.0E-02 | 3.4E+01 | 1.8E+02 | 1.9E+00 |
| | | | 8.6E+03 | 1.4E+03 | 1.0E-01 | 3.8E+01 | 2.2E+02 | 2.4E+00 |

## WESTERN

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|---|---|---|---|---|---|---|---|---|
| Fort Ritchie | WMBG | BKSS25 | 1.3E+04 | 8.0E+02 | 7.0E-02 | 4.8E+01 | 1.5E+02 | 1.7E+00 |
| Fort Ritchie | WMBG | BKSS26 | 1.4E+04 | 1.1E+03 | 8.0E-02 | 5.3E+01 | 1.5E+02 | 1.6E+00 |
| Fort Ritchie | WMBG | BKSS27 | 1.2E+04 | 1.8E+03 | 1.3E-01 | 4.2E+01 | 4.3E+02 | 2.2E+00 |
| Fort Ritchie | WMBG | BKSS28 | 6.9E+03 | 2.1E+03 | 1.1E-01 | 3.8E+01 | 1.5E+02 | 2.2E+00 |
| Fort Ritchie | WMBG | BKSS29 | 1.1E+04 | 1.9E+03 | 9.0E-02 | 5.2E+01 | 1.3E+02 | 2.2E+00 |
| Fort Ritchie | WMBG | BKSS30 | 9.8E+03 | 8.6E+02 | 9.0E-02 | 3.8E+01 | 1.8E+02 | 2.1E+00 |
| Fort Ritchie | WMBG | BKSS31 | 4.1E+03 | 1.4E+03 | 8.0E-02 | 1.9E+01 | 1.9E+02 | 1.0E+00 |
| Fort Ritchie | WMBG | BKSS32 | 1.3E+04 | 4.4E+02 | 1.2E-01 | 3.0E+01 | 1.6E+02 | 1.5E+00 |
| Fort Ritchie | WMBG | BKSS33 | 1.3E+04 | 2.0E+03 | 1.7E-01 | 4.6E+01 | 2.1E+02 | 2.4E+00 |
| Fort Ritchie | WMBG | BKSS34 | 1.4E+04 | 1.3E+03 | 1.8E-01 | 4.3E+01 | 2.0E+02 | 2.1E+00 |
| Fort Ritchie | WMBG | BKSS35 | 1.3E+04 | 6.3E+02 | 8.0E-02 | 5.8E+01 | 1.3E+02 | 2.4E+00 |
| Fort Ritchie | WMBG | BKSS36 | 1.1E+04 | 1.9E+03 | 1.5E-01 | 3.7E+01 | 1.2E+02 | 2.1E+00 |

EMBG = Eastern Maryland Background, CMBG = Central Maryland Background, WMBG = Western Maryland Background. All values reported in parts per million. Not detected analytes reported at one half the detection limit. Not detected analytes italicized. NA = not applicable. Not detected XRF data excluded from analysis due to elevated detection limits.

# WESTERN

| Site Name | Province | Designation | Silver | Sodium | Thallium | Vanadium | Zinc |
|---|---|---|---|---|---|---|---|
| Ft. Detrick | WMBG | BORMWA1-A | NA | NA | NA | 1.9E+02 | 7.9E+01 |
| Ft. Detrick | WMBG | BORMWA1-B | NA | NA | NA | 1.5E+02 | 6.3E+01 |
| Ft. Detrick | WMBG | BORMWA2-B | NA | NA | NA | 1.7E+02 | 6.1E+01 |
| Ft. Detrick | WMBG | BORMWA3-A | NA | NA | NA | 1.7E+02 | 6.2E+01 |
| Ft. Detrick | WMBG | BORMWA3-B | NA | NA | NA | 1.6E+02 | 6.6E+01 |
| Ft. Detrick | WMBG | BORMW9D-A | NA | NA | NA | 1.9E+02 | 9.0E+01 |
| Ft. Detrick | WMBG | BORMW9D-B | NA | NA | NA | 2.4E+02 | 7.5E+01 |
| Ft. Detrick | WMBG | BMW36D-A | 1.0E+00 | 9.6E+01 | 1.0E+01 | 5.4E+01 | 6.2E+01 |
| Ft. Detrick | WMBG | AMWA3--0 | 1.0E+00 | 1.0E+02 | 1.0E+01 | 4.7E+01 | 5.4E+01 |
| Ft. Detrick | WMBG | AMWA1-0.5 | 1.0E+00 | 9.3E+01 | 1.0E+01 | 6.1E+01 | 6.1E+01 |
| Ft. Detrick | WMBG | AMWA2-0.5 | 1.0E+00 | 7.2E+01 | 1.0E+01 | 5.3E+01 | 5.9E+01 |
| Ft. Detrick | WMBG | BMW47D-0 | 1.0E+00 | 7.4E+01 | 1.0E+01 | 5.2E+01 | 6.3E+01 |
| Frederick Tool and Die | WMBG | Background Soil | 1.7E+00 | 5.3E+01 | 4.8E-01 | 3.5E+01 | 1.1E+02 |
| Vale Summit | WMBG | Background Soil | NA | NA | NA | 3.4E+01 | 1.6E+02 |
| Old Cumberland Land Fill | WMBG | Background Soil | 2.2E-01 | 8.9E+01 | 4.3E-01 | 1.9E+01 | 1.3E+02 |
| Hoffman Land fill | WMBG | Background Soil | 1.0E+00 | 1.2E+02 | 1.0E+00 | 1.8E+01 | 7.8E+01 |
| Cabin Run Land Fill | WMBG | Background Soil | 1.0E+00 | 3.8E+01 | 1.0E+00 | 2.3E+01 | 2.5E+01 |
| Fort Ritchie | WMBG | BKSS07 | 1.7E+00 | 7.2E+01 | 6.0E-02 | 7.8E+00 | 1.0E+01 |
| Fort Ritchie | WMBG | BKSS08 | 1.7E+00 | 7.7E+01 | 1.2E-01 | 8.4E+00 | 1.8E+01 |
| Fort Ritchie | WMBG | BKSS09 | 3.5E+00 | 7.4E+01 | 1.2E-01 | 7.2E+00 | 1.6E+01 |
| Fort Ritchie | WMBG | BKSS11 | 1.8E+00 | 7.6E+01 | 1.2E-01 | 8.9E+00 | 1.0E+01 |
| Fort Ritchie | WMBG | BKSS12 | 1.7E+00 | 7.0E+01 | 1.2E-01 | 1.1E+01 | 1.1E+01 |
| Fort Ritchie | WMBG | BKSS13 | 1.7E+00 | 7.2E+01 | 1.2E-01 | 8.0E+00 | 1.0E+01 |
| Fort Ritchie | WMBG | BKSS14 | 9.5E-02 | 8.4E+01 | 6.0E-02 | 7.5E+00 | 8.4E+00 |
| Fort Ritchie | WMBG | BKSS15 | 2.1E-01 | 9.7E+01 | 6.5E-02 | 4.1E+00 | 5.5E+00 |
| Fort Ritchie | WMBG | BKSS16 | 1.9E+00 | 7.5E+01 | 1.3E-01 | 7.5E+00 | 1.4E+01 |
| Fort Ritchie | WMBG | BKSS17 | 1.7E+00 | 7.3E+01 | 1.2E-01 | 7.8E+00 | 2.0E+01 |
| Fort Ritchie | WMBG | BKSS18 | 1.9E+00 | 8.0E+01 | 6.5E-02 | 7.4E+00 | 6.4E+01 |
| Fort Ritchie | WMBG | BKSS37 | 9.5E-02 | 9.5E+01 | 6.0E-02 | 1.4E+01 | 2.5E+01 |
| Fort Ritchie | WMBG | BKSS38 | 1.0E-01 | 1.1E+02 | 1.9E-01 | 9.7E+00 | 2.2E+01 |
| Fort Ritchie | WMBG | BKSS39 | 9.5E-02 | 9.3E+01 | 6.0E-02 | 8.2E+00 | 1.0E+01 |
| Fort Ritchie | WMBG | BKSS40 | 9.5E-02 | 9.4E+01 | 2.5E-01 | 8.6E+00 | 9.7E+00 |
| Fort Ritchie | WMBG | BKSS19 | 1.7E+01 | 9.2E+01 | 6.0E-02 | 9.3E+01 | 6.3E+01 |
| Fort Ritchie | WMBG | BKSS20 | 2.1E-01 | 1.0E+02 | 6.5E-02 | 7.3E+01 | 5.7E+01 |
| Fort Ritchie | WMBG | BKSS21 | 1.9E+01 | 8.8E+01 | 6.5E-02 | 8.2E+01 | 5.3E+01 |
| Fort Ritchie | WMBG | BKSS22 | 1.8E+01 | 7.7E+01 | 1.6E-01 | 1.1E+02 | 5.6E+01 |
| Fort Ritchie | WMBG | BKSS23 | 1.9E+01 | 8.2E+01 | 1.5E-01 | 9.2E+01 | 4.7E+01 |
| Fort Ritchie | WMBG | BKSS24 | 2.1E-01 | 1.2E+02 | 6.5E-02 | 7.8E+01 | 6.2E+01 |

## WESTERN

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Fort Ritchie | WMBG | BKSS25 | 1.8E+01 | 8.1E+01 | 1.5E-01 | 8.5E+01 | 8.7E+01 |
| Fort Ritchie | WMBG | BKSS26 | 1.8E+01 | 8.0E+01 | 1.3E-01 | 1.1E+02 | 9.9E+01 |
| Fort Ritchie | WMBG | BKSS27 | 2.1E+01 | 9.5E+01 | 7.5E-02 | 9.7E+01 | 1.0E+02 |
| Fort Ritchie | WMBG | BKSS28 | 1.9E+01 | 1.0E+02 | 1.4E-01 | 1.1E+02 | 7.2E+01 |
| Fort Ritchie | WMBG | BKSS29 | 1.9E+01 | 1.2E+02 | 1.4E-01 | 9.6E+01 | 7.2E+01 |
| Fort Ritchie | WMBG | BKSS30 | 2.1E-01 | 1.3E+02 | 6.5E-02 | 8.7E+01 | 6.6E+01 |
| Fort Ritchie | WMBG | BKSS31 | 1.0E-01 | 9.2E+01 | 6.5E-02 | 4.0E+01 | 3.2E+01 |
| Fort Ritchie | WMBG | BKSS32 | 1.1E-01 | 1.2E+02 | 1.3E-01 | 3.7E+01 | 6.5E+01 |
| Fort Ritchie | WMBG | BKSS33 | 1.1E-01 | 1.4E+02 | 1.3E-01 | 7.1E+01 | 2.8E+02 |
| Fort Ritchie | WMBG | BKSS34 | 1.1E-01 | 1.8E+02 | 1.4E-01 | 6.0E+01 | 8.6E+01 |
| Fort Ritchie | WMBG | BKSS35 | 5.0E-01 | 1.2E+02 | 1.5E-01 | 9.0E+01 | 6.0E+01 |
| Fort Ritchie | WMBG | BKSS36 | 1.1E-01 | 1.2E+02 | 1.3E-01 | 6.0E+01 | 9.1E+01 |

EMBG = Eastern Maryland Background, CMBG = Central Maryland Background, WMBG = Western Maryland Background. All values reported in parts per million. Not detected analytes reported at one half the detection limit. Not detected analytes italicized. NA = not applicable. Not detected XRF data excluded from analysis due to elevated detection limits.

# APPENDIX D—HHRA TABLES

# APPENDIX D

## SUPPORTING INFORMATION FOR HEALTH RISK ASSESSMENT


**D-1 RAGS Part D Tables**
**D-2 ProUCL Output**
**D-3 Sample Calculations**
**D-4 Historical Filtered Groundwater Samples**
**D-5 Refined Risk Evaluation of DRO/GRO**

# APPENDIX D-1

# RAGS PART D TABLES

**LIST OF TABLES**
**RAGS PART D TABLE 1**
**SELECTION OF EXPOSURE PATHWAYS**

**Table No.**

1 Selection of Exposure Pathways

**Table 1**

**Selection of Exposure Pathways - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Scenario Timeframe | Medium | Exposure Medium | Exposure Point | Receptor Population | Receptor Age | Exposure Route | Type of Analysis | Rationale for Selection or Exclusion of Exposure Pathway |
|---|---|---|---|---|---|---|---|---|
| Current/Future | Surface Soil | Surface Soil | Tax Blocks | Construction Workers | Adult | Ingestion<br>Dermal | Quant<br>Quant | Construction workers may have contact with surface soil during excavation activities. |
| | | | | Industrial Worker | Adult | Ingestion<br>Dermal | Quant<br>Quant | Industrial workers may contact surface soil during normal work activities. |
| | | | | Commercial Receptors | Child | Ingestion<br>Dermal | Quant<br>Quant | Child commercial receptors may contact surface soil while at the site. |
| | | | | | Adolescent | Ingestion<br>Dermal | Quant<br>Quant | Adolescent commercial receptors may contact surface soil while at the site. |
| | | | | | Adult | Ingestion<br>Dermal | Quant<br>Quant | Adult commercial receptors may contact surface soil while at the site. |
| | | | | Recreational Users | Child | Ingestion<br>Dermal | Quant<br>Quant | Child recreational users may contact surface soil while at the site. |
| | | | | | Adolescent | Ingestion<br>Dermal | Quant<br>Quant | Adolescent recreational users may contact surface soil while at the site. |
| | | | | | Adult | Ingestion<br>Dermal | Quant<br>Quant | Adult recreational users may contact surface soil while at the site. |
| | | Air | Tax Blocks | Construction Workers | Adult | Inhalation | Quant | Construction workers may be exposed to fugitive dust and volatile emissions during construction activities. |
| | | | | Industrial Worker | Adult | Inhalation | Quant | Industrial workers may be exposed to fugitive dust and volatile emissions during work activities. |
| | | | | Commercial Receptors | Child | Inhalation | Quant | Child commercial receptors may be exposed to fugitive dust and volatile emissions while at the site. |
| | | | | | Adolescent | Inhalation | Quant | Adolescent commercial receptors may be exposed to fugitive dust and volatile emissions while at the site. |
| | | | | | Adult | Inhalation | Quant | Adult commercial receptors may be exposed to fugitive dust and volatile emissions while at the site. |
| | | | | Recreational Users | Child | Inhalation | Quant | Child recreational users may be exposed to fugitive dust and volatile emissions while at the site. |
| | | | | | Adolescent | Inhalation | Quant | Adolescent recreational users may be exposed to fugitive dust and volatile emissions while at the site. |
| | | | | | Adult | Inhalation | Quant | Adult recreational users may be exposed to fugitive dust and volatile emissions while at the site. |
| | Subsurface Soil | Subsurface Soil | Tax Blocks | Construction Workers | Adult | Ingestion<br>Dermal | Quant<br>Quant | Construction workers may have contact with subsurface soil during excavation activities. |
| | | | | Industrial Worker | Adult | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by industrial workers is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | commercial Land use Users | Child | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by child commercial receptors is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adolescent | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by adolescent commercial land use users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adult | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by adult commercial land use users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | Recreational Users | Child | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by child recreational users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adolescent | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by adolescent recreational users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adult | Ingestion<br>Dermal | Quant<br>Quant | Although exposure to subsurface soil by adult recreational users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |

**Table 1**

**Selection of Exposure Pathways - Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
**Page 2 of 2**

| Scenario Timeframe | Medium | Exposure Medium | Exposure Point | Receptor Population | Receptor Age | Exposure Route | Type of Analysis | Rationale for Selection or Exclusion of Exposure Pathway |
|---|---|---|---|---|---|---|---|---|
| Current/Future | Subsurface Soil | Air | Tax Blocks | Construction Workers | Adult | Inhalation | Quant | Construction workers may be exposed to fugitive dust and volatile emissions during construction activities. |
| | | | | Industrial Worker | Adult | Inhalation | Quant | Although exposure to subsurface soil by industrial workers is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | Commercial Receptors | Child | Inhalation | Quant | Although exposure to subsurface soil by child commercial receptors is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adolescent | Inhalation | Quant | Although exposure to subsurface soil by adolescent commercial receptors is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adult | Inhalation | Quant | Although exposure to subsurface soil by adult commercial receptors is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | Recreational Users | Child | Inhalation | Quant | Although exposure to subsurface soil by child recreational users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adolescent | Inhalation | Quant | Although exposure to subsurface soil by adolescent recreational users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adult | Inhalation | Quant | Although exposure to subsurface soil by adult recreational users is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| Future | Surface Soil | Surface Soil | Tax Blocks | Residents | Child | Ingestion<br>Dermal | Quant<br>Quant | |
| | | | | | Adolescent | Ingestion<br>Dermal | Quant<br>Quant | Although a future residential scenario is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adult | Ingestion<br>Dermal | Quant<br>Quant | |
| | | Air | Tax Blocks | Residents | Child | Inhalation | Quant | |
| | | | | | Adolescent | Inhalation | Quant | Although a future residential scenario is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adult | Inhalation | Quant | |
| | Subsurface Soil | Subsurface Soil | Tax Blocks | Residents | Child | Ingestion<br>Dermal | Quant<br>Quant | |
| | | | | | Adolescent | Ingestion<br>Dermal | Quant<br>Quant | Although a future residential scenario is considered unlikely at the site, this scenario is included to aid in future risk management decisions. |
| | | | | | Adult | Ingestion<br>Dermal | Quant<br>Quant | |
| | | Air | Tax Blocks | Residents | Child | Inhalation | Quant | |
| | | | | | Adolescent | Inhalation | Quant | Although a future residential scenario is considered unlikely at the site. this scenario is included to aid in future risk management decisions. |
| | | | | | Adult | Inhalation | Quant | |

Notes:
Quant - Quantitative.

**LIST OF TABLES**
**RAGS PART D TABLE 2**
**OCCURRENCE, DISTRIBUTION AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN**

**Table No.**


2.1 Surface Soil - Direct Contact
2.2 Surface Soil - Migration From Soil to Groundwater
2.3 Subsurface Soil - Direct Contact
2.4 Subsurface Soil - Migration From Soil to Groundwater

**Table 2.1**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Direct Contact With Surface Soil (0-2 feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Volatile Organic Compounds** | | | | | | | | | | | | | |
| | 75-34-3 | 1,1-DICHLOROETHANE | 1 J | 1 J | ug/kg | SB-195-SS | 1/109 | 0.27 - 710 | 1 | 1600000 | 3,300 C | 120,000 N | No | BSL |
| | 75-35-4 | 1,1-DICHLOROETHENE | 2.5 | 2.5 | ug/kg | SB-195-SS | 1/109 | 0.39 - 750 | 2.5 | 390000 | 24,000 N | 29,000 N | No | BSL |
| | 87-61-6 | **1,2,3-TRICHLOROBENZENE** | 11 J | 43000 J | ug/kg | E-SB-833K-02 | 8/109 | 0.28 - 8 | 43000 | NA | **4,900 N** | NA | **Yes** | ASL |
| | 526-73-8 | 1,2,3-TRIMETHYLBENZENE | 0.2 J | 0.4 J | ug/kg | SB-284-0102 | 3/56 | 0.13 - 7.1 | 0.4 | NA | NA | NA | No | NTX |
| | 120-82-1 | **1,2,4-TRICHLOROBENZENE** | 47 J | 210000 | ug/kg | E-SB-833K-02 | 8/109 | 0.2 - 8 | 210000 | **78000** | **6,200 N[8]** | **18,000 N** | **Yes** | ASL |
| | 95-63-6 | 1,2,4-TRIMETHYLBENZENE | 0.83 J | 33 | ug/kg | SB-66-SS | 4/109 | 0.48 - 210 | 33 | NA | 6,200 N | 12,000 N | No | BSL |
| | 95-50-1 | 1,2-DICHLOROBENZENE | 3.4 J | 970 J | ug/kg | E-SB-833E-02 | 4/109 | 0.27 - 360 | 970 | 700000 | 190,000 N | 600,000 sat | No | BSL |
| | 108-67-8 | 1,3,5-TRIMETHYLBENZENE | 23 | 23 | ug/kg | SB-66-SS | 1/53 | 1.92 - 8 | 23 | NA | 78,000 N | 7,200 N | No | BSL |
| | 541-73-1 | 1,3-DICHLOROBENZENE | 0.33 J | 1100 J | ug/kg | E-SB-833K-02 | 4/109 | 0.26 - 190 | 1100 | 23000 | NA | NA | No | BSL |
| | 106-46-7 | **1,4-DICHLOROBENZENE** | 1.3 J | 2700 J | ug/kg | E-SB-833K-02 | 7/109 | 0.49 - 8 | 2700 | 27000 | **2,400 C** | 1,100,000 N | **Yes** | ASL |
| | 78-93-3 | 2-BUTANONE | 1.6 J | 88 J | ug/kg | E-SB-833J-02 | 24/104 | 1 - 1800 | 88 | 4700000 | 2,800,000 N | 24,000,000 sat | No | BSL |
| | 67-64-1 | ACETONE | 7.3 J | 440 J | ug/kg | D-SB-788-SS | 31/107 | 4.7 - 9800 | 440 | 7000000 | 6,100,000 N | NA | No | BSL |
| | 71-43-2 | BENZENE | 0.72 J | 0.72 J | ug/kg | D-SS-786-01 | 1/110 | 0.17 - 500 | 0.72 | 12000 | 1,100 C | 830 C | No | BSL |
| | 75-15-0 | CARBON DISULFIDE | 0.65 J | 7.1 | ug/kg | SB-238-SS | 20/109 | 0.33 - 500 | 7.1 | 780000 | 82,000 N | 720,000 sat | No | BSL |
| | 108-90-7 | CHLOROBENZENE | 12 | 12 | ug/kg | E-SB-833G-02 | 1/109 | 0.24 - 270 | 12 | 160000 | 29,000 N | 13,000 N | No | BSL |
| | 74-87-3 | CHLOROMETHANE | 3 J | 3 J | ug/kg | SB-284-0102 | 1/109 | 0.3 - 580 | 3 | NA | 12,000 N | 2,100 C | No | BSL |
| | 100-41-4 | ETHYLBENZENE | 0.31 J | 8 | ug/kg | SB-66-SS | 3/110 | 0.19 - 230 | 8 | 780000 | 5,400 C | 400,000 sat | No | BSL |
| | 98-82-8 | ISOPROPYLBENZENE | 47 J | 47 J | ug/kg | SB-84-SS | 1/109 | 0.12 - 270 | 47 | 780000 | 210,000 N | 850,000 sat | No | BSL |
| | -- | M+P-XYLENES | 10 J | 10 J | ug/kg | SB-66-SS, SB-33A-SS | 2/109 | 0.89 - 260 | 10 | 1600000 [9] | 63,000 N[10] | 70,000 N[10] | No | BSL |
| | 75-09-2 | METHYLENE CHLORIDE | 2.9 J | 88 J | ug/kg | E-SB-833F-02 | 20/109 | 0.5 - 3200 | 88 | 85000 | 11,000 C | 13,000 C | No | BSL |
| | 104-51-8 | N-BUTYLBENZENE | 0.9 J | 0.9 J | ug/kg | SB-284-0102 | 1/109 | 0.17 - 330 | 0.9 | NA | NA | NA | No | NTX |
| | 103-65-1 | N-PROPYLBENZENE | 7 J | 7 J | ug/kg | SB-84-SS | 1/109 | 0.3 - 580 | 7 | NA | 340,000 N | NA | No | BSL |
| | 91-20-3 | NAPHTHALENE | 2 J | 260 | ug/kg | SB-66-SS | 8/110 | 0.14 - 280 | 260 | 160000 | 3,600 C | 17,000 N | No | BSL |
| | 95-47-6 | O-XYLENE | 0.43 J | 23 | ug/kg | SB-66-SS | 2/109 | 0.26 - 360 | 23 | 1600000 [9] | 380,000 N | NA | No | BSL |
| | 75-65-0 | TERTIARY-BUTYL ALCOHOL | 5 J | 620 J | ug/kg | E-SB-833L-02 | 4/20 | 8 - 61 | 620 | NA | NA | NA | No | NTX |
| | 127-18-4 | TETRACHLOROETHENE | 1.8 J | 1.8 J | ug/kg | E-SB-833N-02 | 1/109 | 0.39 - 500 | 1.8 | 1200 | 550 C | 10,000 C | No | BSL |
| | 108-88-3 | TOLUENE | 0.31 J | 13.3 | ug/kg | SB-202-SS | 14/110 | 0.2 - 710 | 13.3 | 630000 | 500,000 N | 650,000 sat | No | BSL |
| | 1330-20-7 | TOTAL XYLENES | 1.1 J | 1.2 J | ug/kg | SB-500-0001 | 2/69 | 0.5 - 340 | 1.2 | 1600000 [9] | 63,000 N | 70,000 N | No | BSL |
| | 79-01-6 | TRICHLOROETHENE | 0.65 J | 4.8 | ug/kg | SB-202-SS | 6/109 | 0.31 - 410 | 4.8 | 1600 | 2,800 C | 71 C | No | BSL |
| | 75-69-4 | TRICHLOROFLUOROMETHANE | 0.85 J | 0.85 J | ug/kg | D-SB-794-SS | 1/109 | 0.25 - 670 | 0.85 | NA | 79,000 N | 110,000 N | No | BSL |
| | **Semivolatile Organic Compounds** | | | | | | | | | | | | | |
| | 88-74-4 | 2-NITROANILINE | 44 J | 44 J | ug/kg | SB-6A-SS | 1/108 | 9.5 - 15000 | 44 | NA | 61,000 N | 120 N | No | BSL |
| | 65-85-0 | BENZOIC ACID | 67.4 J | 925 | ug/kg | SB-267-SS | 11/31 | 40.9 - 16000 | 925 | NA | 24,000,000 N | NA | No | BSL |
| | 100-51-6 | BENZYL ALCOHOL | 47.5 J | 47.5 J | ug/kg | SB-269-02 | 1/29 | 360 - 8110 | 47.5 | NA | 610,000 N | NA | No | BSL |
| | 117-81-7 | BIS(2-ETHYLHEXYL)PHTHALATE | 20 J | 93 J | ug/kg | SB-505-0001 | 9/108 | 20 - 7600 | 93 | 46000 | 35,000 C | NA | No | BSL |
| | 85-68-7 | BUTYL BENZYL PHTHALATE | 25 J | 120 J | ug/kg | SB-507-0001 | 3/108 | 10 - 7600 | 120 | NA | 260,000 C | NA | No | BSL |
| | 105-60-2 | CAPROLACTAM | 140 J | 140 J | ug/kg | SB-1A-SS | 1/77 | 39 - 7600 | 140 | NA | 3,100,000 N | NA | No | BSL |
| | 86-74-8 | CARBAZOLE | 27 J | 4640 | ug/kg | SB-268-SS | 18/108 | 28 - 7600 | 4640 | 32000 | NA | NA | No | BSL |
| | 84-74-2 | DI-N-BUTYL PHTHALATE | 28 J | 38 J | ug/kg | SB-266-SS | 6/108 | 16 - 7600 | 38 | 780000 | 610,000 N | NA | No | BSL |
| | 117-84-0 | DI-N-OCTYL PHTHALATE | 53 J | 53 J | ug/kg | SB-95-SS | 1/108 | 28 - 7600 | 53 | NA | NA | NA | No | NTX |
| | 132-64-9 | DIBENZOFURAN | 11 J | 1650 J | ug/kg | SB-268-SS | 13/108 | 3.4 - 7600 | 1650 | 7800 | 7,800 N | NA | No | BSL |
| | 131-11-3 | DIMETHYL PHTHALATE | 60 J | 2000 J | ug/kg | SB-58-SS | 2/108 | 18 - 8110 | 2000 | NA | NA | NA | No | NTX |
| | 108-95-2 | PHENOL | 420 | 940 J | ug/kg | SB-92-SS | 2/108 | 28 - 8110 | 940 | 2300000 | 1,800,000 N | NA | No | BSL |
| | **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | | |
| | 90-12-0 | 1-METHYLNAPHTHALENE | 10 | 480 | ug/kg | D-SB-771-SS | 9/82 | 3.4 - 1670 | 480 | NA | 22,000 C | NA | No | BSL |
| | 91-57-6 | 2-METHYLNAPHTHALENE | 8.9 | 990 J | ug/kg | SB-66-SS | 23/159 | 3.4 - 7600 | 990 | 31000 | 31,000 N | NA | No | BSL |
| | 83-32-9 | ACENAPHTHENE | 7.5 J | 4500 | ug/kg | D-SB-771-SS | 46/198 | 3.4 - 7600 | 4500 | 470000 | 340,000 N | NA | No | BSL |
| | 208-96-8 | ACENAPHTHYLENE | 10 | 1600 J | ug/kg | SB-67-SS | 28/198 | 3.4 - 7600 | 1600 | 470000 | 340,000 N[11] | NA | No | BSL |
| | 120-12-7 | ANTHRACENE | 10 | 9420 | ug/kg | SB-268-SS | 71/198 | 3.5 - 7600 | 9420 | 2300000 | 1,700,000 N | NA | No | BSL |
| | -- | **BAP EQUIVALENT-POSITIVE RESULTS[21]** | 0.0072 | 49963 | ug/kg | F-SB-95RE-1 | 429/565 | 1.4 - 4200 | 49963 | **22** | **15 C** | NA | **Yes** | ASL |
| | -- | **BAP EQUIVALENT-1/2 NONDETECT[21]** | 1.6 | 50001 | ug/kg | F-SB-95RE-1 | 429/565 | 1.4 - 4200 | 50001 | **22** | **15 C** | NA | **Yes** | ASL |
| | 56-55-3 | **BENZO(A)ANTHRACENE** | 2.8 J | 42000 | ug/kg | F-SB-95RE-1 | 330/458 | 1 - 4800 | 42000 | **220** | **150 C** | NA | **Yes** | ASL |
| | 50-32-8 | **BENZO(A)PYRENE** | 2.8 J | 38000 | ug/kg | F-SB-95RE-1 | 407/565 | 1.4 - 4800 | 38000 | **22** | **15 C** | NA | **Yes** | ASL |
| | 205-99-2 | **BENZO(B)FLUORANTHENE** | 1.9 J | 55000 | ug/kg | F-SB-95RE-1 | 340/452 | 1.3 - 4800 | 55000 | **220** | **150 C** | NA | **Yes** | ASL |
| | -- | **BENZO(B+K)FLUORANTHENE** | 220 J | 7200 J | ug/kg | SB-84-SS | 4/6 | 400 - 2100 | 7200 | **220 [19]** | **150 C[19]** | NA | **Yes** | ASL |
| | 191-24-2 | BENZO(G,H,I)PERYLENE | 8 J | 24000 J | ug/kg | SB-91-SS | 98/198 | 3.5 - 7600 | 24000 | 230000 | 170,000 N[12] | NA | No | BSL |
| | 207-08-9 | **BENZO(K)FLUORANTHENE** | 1.475 | 23000 | ug/kg | F-SB-95RE-1, SB-268-SS | 283/452 | 1.6 - 7600 | 23000 | **2200** | **1,500 C** | NA | **Yes** | ASL |
| | 218-01-9 | **CHRYSENE** | 3.2 J | 41000 | ug/kg | G-SB-761C-1 | 343/458 | 0.96 - 4200 | 41000 | **22000** | **15,000 C** | NA | **Yes** | ASL |
| | 53-70-3 | **DIBENZO(A,H)ANTHRACENE** | 2.8 J | 7200 J | ug/kg | SB-91-SS | 179/458 | 1.4 - 7600 | 7200 | **22** | **15 C** | NA | **Yes** | ASL |
| | 206-44-0 | FLUORANTHENE | 8.4 | 63200 | ug/kg | SB-268-SS | 136/198 | 3.6 - 4800 | 63200 | 310000 | 230,000 N | NA | No | BSL |
| | 86-73-7 | FLUORENE | 8.8 | 3580 | ug/kg | SB-268-SS | 48/198 | 3.4 - 7600 | 3580 | 310000 | 230,000 N | NA | No | BSL |

**Table 2.1**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Direct Contact With Surface Soil (0-2 feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Polycyclic Aromatic Hydrocarbons (continued)** | | | | | | | | | | | | | |
| | 193-39-5 | **INDENO(1,2,3-CD)PYRENE** | 2.4 J | 20000 | ug/kg | F-SB-95RE-1 | 305/458 | 0.41 - 7600 | 20000 | **220** | **150 C** | NA | **Yes** | ASL |
| | 91-20-3 | NAPHTHALENE | 7.3 | 3100 | ug/kg | D-SB-771-SS | 42/198 | 3.4 - 7600 | 3100 | 160000 | 3,600 C | 17,000 N | No | BSL |
| | 85-01-8 | PHENANTHRENE | 8 | 36100 | ug/kg | SB-268-SS | 111/198 | 3.5 - 4800 | 36100 | 2300000 | 170,000 N[12] | NA | No | BSL |
| | 129-00-0 | PYRENE | 7 J | 55000 J | ug/kg | SB-91-SS | 143/198 | 3.6 - 3700 | 55000 | 230000 | 170,000 N | NA | No | BSL |
| | **Pesticides/Polychlorinated Biphenyls** | | | | | | | | | | | | | |
| | 72-54-8 | 4,4'-DDD | 4 J | 4 J | ug/kg | D-SB-794-SS | 1/27 | 0.66 - 1200 | 4 | 2700 | 2,000 C | NA | No | BSL |
| | 72-55-9 | 4,4'-DDE | 1.5 J | 7.8 J | ug/kg | D-SS-783-01 | 3/27 | 0.41 - 1200 | 7.8 | 1900 | 1,400 C | NA | No | BSL |
| | 53469-21-9 | AROCLOR-1242 | 32 J | 58 | ug/kg | SB-235-SS | 2/341 | 14 - 740000 | 58 | 320 | 220 C | NA | No | BSL |
| | 11097-69-1 | **AROCLOR-1254** | 12 J | 36000 | ug/kg | SB-555-SS0-0.5 | 5/341 | 17 - 740000 | 36000 | **320** | **110 N[8]** | NA | **Yes** | ASL |
| | 11096-82-5 | **AROCLOR-1260** | 4.3 J | 1800000 | ug/kg | SB-353-0001 | 151/341 | 17 - 410 | 1800000 | **320** | **220 C** | NA | **Yes** | ASL |
| | 319-85-7 | BETA-BHC | 6.4 J | 9.1 J | ug/kg | D-SS-783-01 | 2/27 | 1.2 - 1200 | 9.1 | 350 | 270 C | 6,000 C | No | BSL |
| | 1336-36-3 | **TOTAL AROCLOR** | 4.3 | 1800000 | ug/kg | SB-353-0001 | 153/341 | 0 - 0 | 1800000 | **320 [13]** | **220 C[14]** | NA | **Yes** | ASL |
| | **Metals** | | | | | | | | | | | | | |
| | 7440-36-0 | **ANTIMONY** | 0.031 L | 4 L | mg/kg | SB-237-01 | 54/102 | 0.025 - 3.3 | 4 | **3.1** | **3.1 N** | NA | **Yes** | ASL |
| | 7440-38-2 | **ARSENIC** | 0.52 J | 37 | mg/kg | SB-92-SS | 111/133 | 0.48 - 4.8 | 37 | **0.43** | **0.39 C** | 769 C | **Yes** | ASL |
| | 7440-39-3 | BARIUM | 3.7 | 207 | mg/kg | SB-268-SS | 73/73 | -- | 207 | 1600 | 1,500 N | 70900 N | No | BSL |
| | 7440-41-7 | BERYLLIUM | 0.055 J | 5.4 | mg/kg | SB-91-SS | 77/115 | 0.05 - 4 | 5.4 | 16 | 16 N | 1380 C | No | BSL |
| | 7440-43-9 | **CADMIUM** | 0.0125 | 14 | mg/kg | SB-85-SS | 45/115 | 0.0082 - 4 | 14 | **3.9** | **7 N** | 1840 C | **Yes** | ASL |
| | 7440-47-3 | CHROMIUM | 3.1 K | 185 | mg/kg | SB-237-01 | 115/115 | -- | 185 | 12000 [15] | 12,000 N[15] | 276 C | No | BSL |
| | 7440-48-4 | **COBALT** | 0.5 | 51.2 | mg/kg | SB-197-SS | 73/73 | -- | 51.2 | NA | **2.3 N** | 1180 C | **Yes** | ASL |
| | 7440-50-8 | COPPER | 2.9 | 74 | mg/kg | SB-55-SS | 114/115 | 2.6 - 2.6 | 74 | 310 | 310 N | NA | No | BSL |
| | 7439-89-6 | **IRON** | 3870 | 29900 | mg/kg | SB-518-0001 | 36/36 | -- | 29900 | **5500** | **5,500 N** | NA | **Yes** | ASL |
| | 7439-92-1 | **LEAD** | 0.98 | 447 | mg/kg | SB-268-SS | 106/115 | 2.8 - 8 | 447 | **400** | **400** | NA | **Yes** | ASL |
| | 7439-96-5 | **MANGANESE** | 9.4 J | 1370 J | mg/kg | SB-503-0001 | 36/36 | -- | 1,370 | **160** | **180 N** | 7090 N | **Yes** | ASL |
| | 7439-97-6 | **MERCURY** | 0.01 | 4.2 | mg/kg | SB-84-SS | 94/167 | 0.01 - 0.16 | 4.2 | **2.3 [16]** | **2.3 N[17]** | NA | **Yes** | ASL |
| | 7439-98-7 | **MOLYBDENUM** | 0.14 J | 63 | mg/kg | SB-237-01 | 25/73 | 0.077 - 2 | 63 | NA | **39 N** | NA | **Yes** | ASL |
| | 7440-02-0 | **NICKEL** | 0.64 | 280 J | mg/kg | SB-86-SS | 108/115 | 5 - 9 | 280 | **160** | **150 N** | NA | **Yes** | ASL |
| | 7782-49-2 | SELENIUM | 0.11 J | 4.7 | mg/kg | SB-91-SS | 43/115 | 0.18 - 4 | 4.7 | 39 | 39 N | NA | No | BSL |
| | 7440-22-4 | SILVER | 0.023 J | 3.4 | mg/kg | SB-23A-SS | 36/89 | 0.017 - 3.2 | 3.4 | 39 | 39 N | NA | No | BSL |
| | 7440-28-0 | THALLIUM | 0.026 K | 0.38 | mg/kg | SB-504-0001 | 15/115 | 0.014 - 3.2 | 0.38 | 0.55 | NA | NA | No | BSL |
| | 7440-62-2 | **VANADIUM** | 8.5 J | 60.7 J | mg/kg | SB-505-0001 | 73/73 | -- | 60.7 | **7.8** | **39 N[18]** | NA | **Yes** | ASL |
| | 7440-66-6 | ZINC | 2.9 | 302 | mg/kg | SB-505-0001 | 95/115 | 3.1 - 40 | 302 | 2300 | 2,300 N | NA | No | BSL |
| | **Petroleum Hydrocarbons** | | | | | | | | | | | | | |
| | -- | **DIESEL RANGE ORGANICS** | 8600 J | 8900000 J | ug/kg | E-SB-833A-02 | 47/73 | 10000 - 18000 | 8900000 | **230000** | NA | NA | **Yes** | ASL |
| | -- | **GASOLINE RANGE ORGANICS** | 31 J | 810000 | ug/kg | G-SB-734-0-4 | 23/85 | 13.1 - 13300 | 810000 | **230000** | NA | NA | **Yes** | ASL |
| | -- | TPH (C09-C36) | 3300 J | 34000 | ug/kg | SB-284-0102 | 6/7 | 6100 - 6100 | 34000 | NA | 28,400,000 N[20] | NA | No | BSL |
| | -- | TPH (C10-C32) | 2200 J | 650000 | ug/kg | SB-503-0001 | 13/21 | 610 - 22000 | 650000 | NA | 28,400,000 N[20] | NA | No | BSL |
| | **Miscellaneous Parameters** | | | | | | | | | | | | | |
| | 18540-29-9 | **HEXAVALENT CHROMIUM** | 0.32 J | 3.6 | mg/kg | SB-268-SS, SB-265-SS | 15/24 | 0.28 - 0.4 | 3.6 | 23 | **0.29 C** | 276 C | **Yes** | ASL |
| | 22967-92-6 | MERCURY (METHYL) | 0.071 J | 1.467 J | ug/kg | SB-237-01 | 5/5 | -- | 1.467 | 780 | 780 N | NA | No | BSL |
| | -- | PERCENT SOLIDS | 46.1 | 97 | % | SB-569-SS0.5-1 | 285/285 | -- | 97 | NA | NA | NA | No | NTX |
| | -- | PH | 6 | 8.4 | S.U. | SB-265-02 | 6/6 | -- | 8.4 | NA | NA | NA | No | NTX |
| | -- | TOTAL SOLIDS | 82 | 92 | % | SB-293-0102 | 7/7 | -- | 92 | NA | NA | NA | No | NTX |

**Footnotes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations.
2 - Values presented are sample-specific quantitation limits.
3 - The maximum detected concentration is used for screening purposes.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag).
6 - USEPA Soil Screening Levels. EPA Internet Site at http://rais.ornl.gov/epa/ssl1.shtml.
7 - The chemical is selected as a global COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
8 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
9 - The value is for xylenes.
10 - The value is for xylene, mixture.
11 - The value for acenaphthene is used as a surrogate for acenaphthylene.
12 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
13 - The value is for PCB (total).
14 - The value is for polychlorinated biphenyls (high risk).
15 - The value is for trivalent chromium.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NA = Not Applicable/Not Available
sat = soil saturation concentration

**Rationale Codes:**
For selection as a COPC:
ASL = Above Screening Level

For elimination as a COPC:
BSL = Below COPC Screening Level
NTX = No toxicity criteria

**Table 2.1**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Direct Contact With Surface Soil (0-2 feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

16 - The value is for mercury (inorganic/mercuric dichloride).
17 - The value is for mercuric chloride.
18 - The value is for vanadium and compounds.
19 - The value for benzo(b)fluoranthene is used as a surrogate for benzo(b+k)fluoranthene.
20 - The value for total petroleum hydrocarbons (aliphatic low) is used.
21 - See Section 3 of the text for BaP equivalent calculation methodology.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

**Associated Samples:** All surface soil samples (0-2 feet) from all tax blocks (D, E, F, G, and H) were included. See Tables 3-1 through 3-5 for sample lists.

**Table 2.2**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Migration from Surface Soil (0-2 feet) to Groundwater**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Protection of Groundwater[4] | USEPA SSL for Protection of Groundwater[5] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Volatile Organic Compounds** | | | | | | | | | | | | |
| | 75-34-3 | **1,1-DICHLOROETHANE** | 1 J | 1 J | ug/kg | SB-195-SS | 1/109 | 0.27 - 710 | 1 | 5100 | **0.69** | **Yes** | ASL |
| | 75-35-4 | 1,1-DICHLOROETHENE | 2.5 | 2.5 | ug/kg | SB-195-SS | 1/109 | 0.39 - 750 | 2.5 | 2900 | 120 | No | BSL |
| | 87-61-6 | **1,2,3-TRICHLOROBENZENE** | 11 J | 43000 J | ug/kg | E-SB-833K-02 | 8/109 | 0.28 - 8 | 43000 | NA | **87** | **Yes** | ASL |
| | 526-73-8 | 1,2,3-TRIMETHYLBENZENE | 0.2 J | 0.4 J | ug/kg | SB-284-0102 | 3/56 | 0.13 - 7.1 | 0.4 | NA | NA | No | NTX |
| | 120-82-1 | **1,2,4-TRICHLOROBENZENE** | 47 J | 210000 | ug/kg | E-SB-833K-02 | 8/109 | 0.2 - 8 | 210000 | **2400** | **6.8** | **Yes** | ASL |
| | 95-63-6 | **1,2,4-TRIMETHYLBENZENE** | 0.83 J | 33 | ug/kg | SB-66-SS | 4/109 | 0.48 - 210 | 33 | NA | **21** | **Yes** | ASL |
| | 95-50-1 | **1,2-DICHLOROBENZENE** | 3.4 J | 970 J | ug/kg | E-SB-833E-02 | 4/109 | 0.27 - 360 | 970 | 4600 | **360** | **Yes** | ASL |
| | 108-67-8 | 1,3,5-TRIMETHYLBENZENE | 23 | 23 | ug/kg | SB-66-SS | 1/53 | 1.92 - 8 | 23 | NA | 520 | No | BSL |
| | 541-73-1 | **1,3-DICHLOROBENZENE** | 0.33 J | 1100 J | ug/kg | E-SB-833K-02 | 4/109 | 0.26 - 190 | 1100 | **290** | NA | **Yes** | ASL |
| | 106-46-7 | **1,4-DICHLOROBENZENE** | 1.3 J | 2700 J | ug/kg | E-SB-833K-02 | 7/109 | 0.49 - 8 | 2700 | **4.2** | **0.41** | **Yes** | ASL |
| | 78-93-3 | 2-BUTANONE | 1.6 J | 88 J | ug/kg | E-SB-833J-02 | 24/104 | 1 - 1800 | 88 | 29000 | 1,500 | No | BSL |
| | 67-64-1 | ACETONE | 7.3 J | 440 J | ug/kg | D-SB-788-SS | 31/107 | 4.7 - 9800 | 440 | 22000 | 4,500 | No | BSL |
| | 71-43-2 | **BENZENE** | 0.72 J | 0.72 J | ug/kg | D-SS-786-01 | 1/110 | 0.17 - 500 | 0.72 | 1.9 | **0.21** | **Yes** | ASL |
| | 75-15-0 | CARBON DISULFIDE | 0.65 J | 7.1 | ug/kg | SB-238-SS | 20/109 | 0.33 - 500 | 7.1 | 19000 | 310 | No | BSL |
| | 108-90-7 | CHLOROBENZENE | 12 | 12 | ug/kg | E-SB-833G-02 | 1/109 | 0.24 - 270 | 12 | 680 | 62 | No | BSL |
| | 74-87-3 | CHLOROMETHANE | 3 J | 3 J | ug/kg | SB-284-0102 | 1/109 | 0.3 - 580 | 3 | 930 | 49 | No | BSL |
| | 100-41-4 | **ETHYLBENZENE** | 0.31 J | 8 | ug/kg | SB-66-SS | 3/110 | 0.19 - 230 | 8 | 15000 | **1.7** | **Yes** | ASL |
| | 98-82-8 | ISOPROPYLBENZENE | 47 J | 47 J | ug/kg | SB-84-SS | 1/109 | 0.12 - 270 | 47 | 64000 | 1,100 | No | BSL |
| | -- | M+P-XYLENES | 10 J | 10 J | ug/kg | SB-66-SS, SB-33A-SS | 2/109 | 0.89 - 260 | 10 | 3000 [7] | 200 [8] | No | BSL |
| | 75-09-2 | **METHYLENE CHLORIDE** | 2.9 J | 88 J | ug/kg | E-SB-833F-02 | 20/109 | 0.5 - 3200 | 88 | **19** | **1.2** | **Yes** | ASL |
| | 104-51-8 | N-BUTYLBENZENE | 0.9 J | 0.9 J | ug/kg | SB-284-0102 | 1/109 | 0.17 - 330 | 0.9 | NA | NA | No | NTX |
| | 103-65-1 | N-PROPYLBENZENE | 7 J | 7 J | ug/kg | SB-84-SS | 1/109 | 0.3 - 580 | 7 | NA | 2,500 | No | BSL |
| | 91-20-3 | **NAPHTHALENE** | 2 J | 260 | ug/kg | SB-66-SS | 8/110 | 0.14 - 280 | 260 | **150** | **0.47** | **Yes** | ASL |
| | 95-47-6 | O-XYLENE | 0.43 J | 23 | ug/kg | SB-66-SS | 2/109 | 0.26 - 360 | 23 | 3000 [7] | 1,200 | No | BSL |
| | 75-65-0 | TERTIARY-BUTYL ALCOHOL | 5 J | 620 J | ug/kg | E-SB-833L-02 | 4/20 | 8 - 61 | 620 | NA | NA | No | NTX |
| | 127-18-4 | **TETRACHLOROETHENE** | 1.8 J | 1.8 J | ug/kg | E-SB-833N-02 | 1/109 | 0.39 - 500 | 1.8 | 4.7 | **0.049** | **Yes** | ASL |
| | 108-88-3 | TOLUENE | 0.31 J | 13.3 | ug/kg | SB-202-SS | 14/110 | 0.2 - 710 | 13.3 | 27000 | 1,600 | No | BSL |
| | 1330-20-7 | TOTAL XYLENES | 1.1 J | 1.2 J | ug/kg | SB-500-0001 | 2/69 | 0.5 - 340 | 1.2 | 3000 [7] | 200 | No | BSL |
| | 79-01-6 | **TRICHLOROETHENE** | 0.65 J | 4.8 | ug/kg | SB-202-SS | 6/109 | 0.31 - 410 | 4.8 | **0.26** | **0.72** | **Yes** | ASL |
| | 75-69-4 | TRICHLOROFLUOROMETHANE | 0.85 J | 0.85 J | ug/kg | D-SB-794-SS | 1/109 | 0.25 - 670 | 0.85 | NA | 830 | No | BSL |
| | **Semivolatile Organic Compounds** | | | | | | | | | | | | |
| | 88-74-4 | 2-NITROANILINE | 44 J | 44 J | ug/kg | SB-6A-SS | 1/108 | 9.5 - 15000 | 44 | NA | 150 | No | BSL |
| | 65-85-0 | BENZOIC ACID | 67.4 J | 925 | ug/kg | SB-267-SS | 11/31 | 40.9 - 16000 | 925 | NA | 34,000 | No | BSL |
| | 100-51-6 | BENZYL ALCOHOL | 47.5 J | 47.5 J | ug/kg | SB-269-02 | 1/29 | 360 - 8110 | 47.5 | NA | 890 | No | BSL |
| | 117-81-7 | BIS(2-ETHYLHEXYL)PHTHALATE | 20 J | 93 J | ug/kg | SB-505-0001 | 9/108 | 20 - 7600 | 93 | 2900000 | 1,100 | No | BSL |
| | 85-68-7 | BUTYL BENZYL PHTHALATE | 25 J | 120 J | ug/kg | SB-507-0001 | 3/108 | 10 - 7600 | 120 | NA | 510 | No | BSL |
| | 105-60-2 | CAPROLACTAM | 140 J | 140 J | ug/kg | SB-1A-SS | 1/77 | 39 - 7600 | 140 | NA | 4,500 | No | BSL |
| | 86-74-8 | **CARBAZOLE** | 27 J | 4640 | ug/kg | SB-268-SS | 18/108 | 28 - 7600 | 4640 | **470** | NA | **Yes** | ASL |
| | 84-74-2 | DI-N-BUTYL PHTHALATE | 28 J | 38 J | ug/kg | SB-266-SS | 6/108 | 16 - 7600 | 38 | 5000000 | 9,200 | No | BSL |
| | 117-84-0 | DI-N-OCTYL PHTHALATE | 53 J | 53 J | ug/kg | SB-95-SS | 1/108 | 28 - 7600 | 53 | NA | NA | No | NTX |
| | 132-64-9 | **DIBENZOFURAN** | 11 J | 1650 J | ug/kg | SB-268-SS | 13/108 | 3.4 - 7600 | 1650 | -- | **680** | **Yes** | ASL |
| | 131-11-3 | DIMETHYL PHTHALATE | 60 J | 2000 J | ug/kg | SB-58-SS | 2/108 | 18 - 8110 | 2000 | NA | NA | No | NTX |
| | 108-95-2 | PHENOL | 420 | 940 J | ug/kg | SB-92-SS | 2/108 | 28 - 8110 | 940 | 67000 | 6,300 | No | BSL |

**Table 2.2**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Migration from Surface Soil (0-2 feet) to Groundwater**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Protection of Groundwater[4] | USEPA SSL for Protection of Groundwater[5] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | |
| | 90-12-0 | **1-METHYLNAPHTHALENE** | 10 | 480 | ug/kg | D-SB-771-SS | 9/82 | 3.4 - 1670 | 480 | NA | **12** | **Yes** | ASL |
| | 91-57-6 | **2-METHYLNAPHTHALENE** | 8.9 | 990 J | ug/kg | SB-66-SS | 23/159 | 3.4 - 7600 | 990 | 4400 | **750** | **Yes** | ASL |
| | 83-32-9 | ACENAPHTHENE | 7.5 J | 4500 | ug/kg | D-SB-771-SS | 46/198 | 3.4 - 7600 | 4500 | 100000 | 22,000 | No | BSL |
| | 208-96-8 | ACENAPHTHYLENE | 10 | 1600 J | ug/kg | SB-67-SS | 28/198 | 3.4 - 7600 | 1600 | 100000 | 22,000 [9] | No | BSL |
| | 120-12-7 | ANTHRACENE | 10 | 9420 | ug/kg | SB-268-SS | 71/198 | 3.5 - 7600 | 9420 | 470000 | 360,000 | No | BSL |
| | -- | **BAP EQUIVALENT-POSITIVE RESULTS[15]** | 0.0072 | 49963 | ug/kg | F-SB-95RE-1 | 429/565 | 1.4 - 4200 | 49963 | **120** | **3.5** | **Yes** | ASL |
| | -- | **BAP EQUIVALENT-1/2 NONDETECT[15]** | 1.6 | 50001 | ug/kg | F-SB-95RE-1 | 429/565 | 1.4 - 4200 | 50001 | **120** | **3.5** | **Yes** | ASL |
| | 56-55-3 | **BENZO(A)ANTHRACENE** | 2.8 J | 42000 | ug/kg | F-SB-95RE-1 | 330/458 | 1 - 4800 | 42000 | **480** | **10** | **Yes** | ASL |
| | 50-32-8 | **BENZO(A)PYRENE** | 2.8 J | 38000 | ug/kg | F-SB-95RE-1 | 407/565 | 1.4 - 4800 | 38000 | **120** | **3.5** | **Yes** | ASL |
| | 205-99-2 | **BENZO(B)FLUORANTHENE** | 1.9 J | 55000 | ug/kg | F-SB-95RE-1 | 340/452 | 1.3 - 4800 | 55000 | **1500** | **35** | **Yes** | ASL |
| | -- | **BENZO(B+K)FLUORANTHENE** | 220 J | 7200 J | ug/kg | SB-84-SS | 4/6 | 400 - 2100 | 7200 | **1500** [14] | **35** [14] | **Yes** | ASL |
| | 191-24-2 | BENZO(G,H,I)PERYLENE | 8 J | 24000 J | ug/kg | SB-91-SS | 98/198 | 3.5 - 7600 | 24000 | 680000 | 120,000 [10] | No | BSL |
| | 207-08-9 | **BENZO(K)FLUORANTHENE** | 1.475 | 23000 | ug/kg | F-SB-95RE-1, SB-268-SS | 283/452 | 1.6 - 7600 | 23000 | **15000** | **350** | **Yes** | ASL |
| | 218-01-9 | **CHRYSENE** | 3.2 J | 41000 | ug/kg | G-SB-761C-1 | 343/458 | 0.96 - 4200 | 41000 | 48000 | **1,100** | **Yes** | ASL |
| | 53-70-3 | **DIBENZO(A,H)ANTHRACENE** | 2.8 J | 7200 J | ug/kg | SB-91-SS | 179/458 | 1.4 - 7600 | 7200 | **460** | **11** | **Yes** | ASL |
| | 206-44-0 | FLUORANTHENE | 8.4 | 63200 | ug/kg | SB-268-SS | 136/198 | 3.6 - 4800 | 63200 | 6300000 | 160,000 | No | BSL |
| | 86-73-7 | FLUORENE | 8.8 | 3580 | ug/kg | SB-268-SS | 48/198 | 3.4 - 7600 | 3580 | 140000 | 27,000 | No | BSL |
| | 193-39-5 | **INDENO(1,2,3-CD)PYRENE** | 2.4 J | 20000 | ug/kg | F-SB-95RE-1 | 305/458 | 0.41 - 7600 | 20000 | **4200** | **120** | **Yes** | ASL |
| | 91-20-3 | **NAPHTHALENE** | 7.3 | 3100 | ug/kg | D-SB-771-SS | 42/198 | 3.4 - 7600 | 3100 | **150** | **0.47** | **Yes** | ASL |
| | 85-01-8 | PHENANTHRENE | 8 | 36100 | ug/kg | SB-268-SS | 111/198 | 3.5 - 4800 | 36100 | 470000 | 120,000 [10] | No | BSL |
| | 129-00-0 | PYRENE | 7 J | 55000 J | ug/kg | SB-91-SS | 143/198 | 3.6 - 3700 | 55000 | 680000 | 120,000 | No | BSL |
| | **Pesticides/Polychlorinated Biphenyls** | | | | | | | | | | | | |
| | 72-54-8 | 4,4'-DDD | 4 J | 4 J | ug/kg | D-SB-794-SS | 1/27 | 0.66 - 1200 | 4 | 11000 | 66 | No | BSL |
| | 72-55-9 | 4,4'-DDE | 1.5 J | 7.8 J | ug/kg | D-SS-783-01 | 3/27 | 0.41 - 1200 | 7.8 | 35000 | 47 | No | BSL |
| | 53469-21-9 | **AROCLOR-1242** | 32 J | 58 | ug/kg | SB-235-SS | 2/341 | 14 - 740000 | 58 | -- | **5.3** | **Yes** | ASL |
| | 11097-69-1 | **AROCLOR-1254** | 12 J | 36,000 | ug/kg | SB-555-SS0-0.5 | 5/341 | 17 - 740000 | 36000 | **1100** | **8.8** | **Yes** | ASL |
| | 11096-82-5 | **AROCLOR-1260** | 4.3 J | 1800000 | ug/kg | SB-353-0001 | 151/341 | 17 - 410 | 1800000 | -- | **24** | **Yes** | ASL |
| | 319-85-7 | **BETA-BHC** | 6.4 J | 9.1 J | ug/kg | D-SS-783-01 | 2/27 | 1.2 - 1200 | 9.1 | **3.1** | **0.22** | **Yes** | ASL |
| | 1336-36-3 | **TOTAL AROCLOR** | 4.3 | 1800000 | ug/kg | SB-353-0001 | 153/341 | 0 - 0 | 1800000 | **410** [11] | NA | **Yes** | ASL |
| | **Metals** | | | | | | | | | | | | |
| | 7440-36-0 | **ANTIMONY** | 0.031 L | 4 L | mg/kg | SB-237-01 | 54/102 | 0.025 - 3.3 | 4 | 13 | **0.66** | **Yes** | ASL |
| | 7440-38-2 | **ARSENIC** | 0.52 J | 37 | mg/kg | SB-92-SS | 111/133 | 0.48 - 4.8 | 37 | **0.026** | **0.0013** | **Yes** | ASL |
| | 7440-39-3 | BARIUM | 3.7 | 207 | mg/kg | SB-268-SS | 73/73 | -- | 207 | 6000 | 300 | No | BSL |
| | 7440-41-7 | BERYLLIUM | 0.055 J | 5.4 | mg/kg | SB-91-SS | 77/115 | 0.05 - 4 | 5.4 | 1200 | 58 | No | BSL |
| | 7440-43-9 | **CADMIUM** | 0.0125 | 14 | mg/kg | SB-85-SS | 45/115 | 0.0082 - 4 | 14 | 27 | **1.4** | **Yes** | ASL |
| | 7440-47-3 | CHROMIUM | 3.1 K | 185 | mg/kg | SB-237-01 | 115/115 | -- | 185 | 2000000000 [12] | 99,000,000 [12] | No | BSL |
| | 7440-48-4 | **COBALT** | 0.5 | 51.2 | mg/kg | SB-197-SS | 73/73 | -- | 51.2 | NA | **0.49** | **Yes** | ASL |
| | 7440-50-8 | **COPPER** | 2.9 | 74 | mg/kg | SB-55-SS | 114/115 | 2.6 - 2.6 | 74 | 11000 | **51** | **Yes** | ASL |
| | 7439-89-6 | **IRON** | 3870 | 29900 | mg/kg | SB-518-0001 | 36/36 | -- | 29900 | -- | **640** | **Yes** | ASL |
| | 7439-92-1 | **LEAD** | 0.98 | 447 | mg/kg | SB-268-SS | 106/115 | 2.8 - 8 | 447 | -- | **14** [13] | **Yes** | ASL |
| | 7439-96-5 | **MANGANESE** | 9.4 J | 1370 J | mg/kg | SB-503-0001 | 36/36 | -- | 1370 | **950** | **57** | **Yes** | ASL |
| | 7439-97-6 | MERCURY | 0.01 | 4.2 | mg/kg | SB-84-SS | 94/167 | 0.01 - 0.16 | 4.2 | -- | NA | No | NTX |
| | 7439-98-7 | **MOLYBDENUM** | 0.14 J | 63 | mg/kg | SB-237-01 | 25/73 | 0.077 - 2 | 63 | NA | **3.7** | **Yes** | ASL |
| | 7440-02-0 | **NICKEL** | 0.64 | 280 J | mg/kg | SB-86-SS | 108/115 | 5 - 9 | 280 | -- | **48** | **Yes** | ASL |

**Table 2.2**

**Occurrence, Distribution, and Selection of Global Chemicals of Potential Concern - Migration from Surface Soil (0-2 feet) to Groundwater**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Protection of Groundwater[4] | USEPA SSL for Protection of Groundwater[5] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Metals (continued)** | | | | | | | | | | | | |
| | 7782-49-2 | **SELENIUM** | 0.11 J | 4.7 | mg/kg | SB-91-SS | 43/115 | 0.18 - 4 | 4.7 | 19 | **1.0** | **Yes** | ASL |
| | 7440-22-4 | **SILVER** | 0.023 J | 3.4 | mg/kg | SB-23A-SS | 36/89 | 0.017 - 3.2 | 3.4 | 31 | **1.6** | **Yes** | ASL |
| | 7440-28-0 | THALLIUM | 0.026 K | 0.38 | mg/kg | SB-504-0001 | 15/115 | 0.014 - 3.2 | 0.38 | 3.6 | NA | No | BSL |
| | 7440-62-2 | VANADIUM | 8.5 J | 60.7 J | mg/kg | SB-505-0001 | 73/73 | -- | 60.7 | 730 | 180 | No | BSL |
| | 7440-66-6 | ZINC | 2.9 | 302 | mg/kg | SB-505-0001 | 95/115 | 3.1 - 40 | 302 | 14000 | 680 | No | BSL |
| | **Petroleum Hydrocarbons** | | | | | | | | | | | | |
| | -- | DIESEL RANGE ORGANICS | 8600 J | 8900000 J | ug/kg | E-SB-833A-02 | 47/73 | 10000 - 18000 | 8900000 | -- | NA | No | NTX |
| | -- | GASOLINE RANGE ORGANICS | 31 J | 810000 | ug/kg | G-SB-734-0-4 | 23/85 | 13.1 - 13300 | 810000 | -- | NA | No | NTX |
| | -- | TPH (C09-C36) | 3300 J | 34000 | ug/kg | SB-284-0102 | 6/7 | 6100 - 6100 | 34000 | NA | NA | No | NTX |
| | -- | TPH (C10-C32) | 2200 J | 650000 | ug/kg | SB-503-0001 | 13/21 | 610 - 22000 | 650000 | NA | NA | No | NTX |
| | **Miscellaneous Parameters** | | | | | | | | | | | | |
| | 18540-29-9 | **HEXAVALENT CHROMIUM** | 0.32 J | 3.6 | mg/kg | SB-268-SS, SB-265-SS | 15/24 | 0.28 - 0.4 | 3.6 | 42 | **0.00083** | **Yes** | ASL |
| | 22967-92-6 | MERCURY (METHYL) | 0.071 J | 1.467 J | ug/kg | SB-237-01 | 5/5 | -- | 1.467 | -- | NA | No | NTX |
| | -- | PERCENT SOLIDS | 46.1 | 97 | % | SB-569-SS0.5-1 | 285/285 | -- | 97 | NA | NA | No | NTX |
| | -- | PH | 6 | 8.4 | S.U. | SB-265-02 | 6/6 | -- | 8.4 | NA | NA | No | NTX |
| | -- | TOTAL SOLIDS | 82 | 92 | % | SB-293-0102 | 7/7 | -- | 92 | NA | NA | No | NTX |

**Footnotes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations.
2 - Values presented are sample-specific quantitation limits.
3 - The maximum detected concentration is used for screening purposes.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag).
6 - The chemical is selected as a global COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
7 - The value is for xylenes.
8 - The value is for xylene, mixture.
9 - The value for acenaphthene is used as a surrogate for acenaphthylene.
10 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
11 - The value is for PCB (total).
12 - The value is for trivalent chromium.
13 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
14 - The value for benzo(b)fluoranthene is used as a surrogate for benzo(b+k)fluoranthene.
15 - See Section 3 of the text for BaP equivalent calculation methodology.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

**Associated Samples:** All surface soil samples (0-2 feet) from all tax blocks (D, E, F, G, and H) were included. See Tables 3-1 through 3-5 for sample lists.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NA = Not Applicable/Not Available
sat = soil saturation concentration

**Rationale Codes:**
For selection as a COPC:
ASL = Above Screening Level

For elimination as a COPC:
BSL = Below COPC Screening Level
NTX = No toxicity criteria

**Table 2.3**

**Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Direct Contact With Subsurface Soil (2-10 feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Volatile Organic Compounds** | | | | | | | | | | | | | |
| | 75-34-3 | 1,1-DICHLOROETHANE | 0.48 J | 0.69 J | ug/kg | SB-515-0406, SB-515-0810 | 3/266 | 0.25 - 44000 | 0.69 | 1600000 | 3,300 C | 120,000 N | No | BSL |
| | 75-35-4 | 1,1-DICHLOROETHENE | 0.54 J | 1.1 J | ug/kg | D-SB-793-09 | 2/266 | 0.36 - 46000 | 1.1 | 390000 | 24,000 N | 29,000 N | No | BSL |
| | 87-61-6 | **1,2,3-TRICHLOROBENZENE** | 0.6 J | 2200000 | ug/kg | E-SB-833-09 | 32/266 | 0.26 - 518 | 2200000 | NA | **4,900 N** | NA | **Yes** | ASL |
| | 526-73-8 | 1,2,3-TRIMETHYLBENZENE | 0.15 J | 49 J | ug/kg | E-SB-833L-04 | 15/172 | 0.12 - 2900 | 49 | NA | NA | NA | No | NTX |
| | 120-82-1 | **1,2,4-TRICHLOROBENZENE** | 5.9 J | 9600000 | ug/kg | E-SB-833-09 | 32/266 | 0.19 - 518 | 9600000 | **78000** | **6200 N[8]** | **18000 N** | **Yes** | ASL |
| | 95-63-6 | 1,2,4-TRIMETHYLBENZENE | 0.69 J | 658 | ug/kg | SB-238-05 | 9/266 | 0.45 - 13000 | 658 | NA | 6,200 N | 12,000 N | No | BSL |
| | 95-50-1 | 1,2-DICHLOROBENZENE | 0.39 J | 120000 J | ug/kg | E-SB-833-09 | 25/266 | 0.25 - 290 | 120000 | 700000 | 190,000 N | 600000 sat | No | BSL |
| | 107-06-2 | 1,2-DICHLOROETHANE | 1.5 J | 51 J | ug/kg | E-SB-833K-10 | 2/266 | 0.24 - 26000 | 51 | 7000 | 430 C | 360 C | No | BSL |
| | 108-67-8 | 1,3,5-TRIMETHYLBENZENE | 0.94 J | 139 J | ug/kg | SB-238-05 | 2/94 | 1.93 - 61 | 139 | NA | 78,000 N | 7,200 N | No | BSL |
| | 541-73-1 | **1,3-DICHLOROBENZENE** | 0.39 J | 38000 J | ug/kg | E-SB-833A-10 | 14/266 | 0.24 - 12000 | 38000 | **23000** | NA | NA | **Yes** | ASL |
| | 106-46-7 | **1,4-DICHLOROBENZENE** | 1.6 J | 130000 J | ug/kg | E-SB-833-09 | 28/266 | 0.46 - 290 | 130000 | **27000** | **2,400 C** | 1,100,000 N | **Yes** | ASL |
| | 78-93-3 | 2-BUTANONE | 1.3 J | 110 J | ug/kg | E-SB-833L-06 | 56/242 | 0.98 - 110000 | 110 | 4700000 | 2,800,000 N | 24000000 sat | No | BSL |
| | 99-87-6 | 4-ISOPROPYLTOLUENE | 0.34 J | 165 J | ug/kg | SB-238-05 | 5/266 | 0.15 - 12000 | 165 | NA | NA | NA | No | NTX |
| | 67-64-1 | ACETONE | 3.6 J | 16000 J | ug/kg | E-SB-833E-06 | 99/261 | 4.4 - 800000 | 16000 | 7000000 | 6,100,000 N | NA | No | BSL |
| | 71-43-2 | BENZENE | 0.33 J | 7 | ug/kg | SB-89-05 | 8/303 | 0.16 - 31000 | 7 | 12000 | 1,100 C | 830 C | No | BSL |
| | 74-83-9 | BROMOMETHANE | 0.49 | 0.49 | ug/kg | D-SB-783-09 | 1/266 | 0.38 - 75000 | 0.49 | 11000 | 730 N | 940 N | No | BSL |
| | 75-15-0 | CARBON DISULFIDE | 0.45 J | 35 J | ug/kg | D-SB-786-03 | 17/266 | 0.31 - 31000 | 35 | 780000 | 82,000 N | 720,000 sat | No | BSL |
| | 56-23-5 | CARBON TETRACHLORIDE | 0.88 J | 0.88 J | ug/kg | E-SB-833G-08 | 1/266 | 0.26 - 16000 | 0.88 | 4900 | 610 C | 330 C | No | BSL |
| | 108-90-7 | CHLOROBENZENE | 1.8 J | 4000 J | ug/kg | E-SB-833L-08 | 12/266 | 0.23 - 16000 | 4000 | 160000 | 29,000 N | 13,000 N | No | BSL |
| | 156-59-2 | CIS-1,2-DICHLOROETHENE | 0.37 J | 9.7 | ug/kg | SB-515-0406 | 4/266 | 0.25 - 18000 | 9.7 | 78000 | 16000 N | NA | No | BSL |
| | 100-41-4 | ETHYLBENZENE | 0.67 J | 394 | ug/kg | SB-238-05 | 7/303 | 0.18 - 14000 | 394 | 780000 | 5,400 C | 400,000 sat | No | BSL |
| | 98-82-8 | ISOPROPYLBENZENE | 0.82 J | 990 J | ug/kg | SB-84-05 | 5/266 | 0.11 - 17000 | 990 | 780000 | 210,000 N | 850,000 sat | No | BSL |
| | -- | M+P-XYLENES | 2.1 J | 270 J | ug/kg | SB-238-05 | 7/266 | 0.84 - 16000 | 270 | 1600000 [9] | 63,000 N[10] | 70000 N[10] | No | BSL |
| | 75-09-2 | METHYLENE CHLORIDE | 2.4 J | 4800 J | ug/kg | E-SB-833E-06 | 40/266 | 0.47 - 360000 | 4800 | 85000 | 11,000 C | 13000 C | No | BSL |
| | 104-51-8 | N-BUTYLBENZENE | 125 J | 2900 J | ug/kg | E-SB-833A-06 | 3/266 | 0.16 - 21000 | 2900 | NA | NA | NA | No | NTX |
| | 103-65-1 | N-PROPYLBENZENE | 1.2 J | 2200 J | ug/kg | SB-84-05 | 3/266 | 0.28 - 36000 | 2200 | NA | 340,000 N | NA | No | BSL |
| | 91-20-3 | **NAPHTHALENE** | 0.56 J | 159000 | ug/kg | SB-238-05 | 24/303 | 0.13 - 140000 | 159000 | 160000 | **3,600 C** | **17000 N** | **Yes** | ASL |
| | 95-47-6 | O-XYLENE | 0.8 J | 186 J | ug/kg | SB-238-05 | 9/266 | 0.24 - 22000 | 186 | 1600000 [9] | 380,000 N | NA | No | BSL |
| | 135-98-8 | SEC-BUTYLBENZENE | 380 J | 380 J | ug/kg | E-SB-833A-06 | 1/266 | 0.13 - 12000 | 380 | NA | NA | NA | No | NTX |
| | 75-65-0 | TERTIARY-BUTYL ALCOHOL | 5 J | 1200 J | ug/kg | E-SB-833L-04 | 13/65 | 8 - 7200000 | 1200 | NA | NA | NA | No | NTX |
| | 127-18-4 | TETRACHLOROETHENE | 0.49 J | 2.6 J | ug/kg | E-SB-833G-08 | 4/266 | 0.36 - 31000 | 2.6 | 1200 | 550 C | 10000 C | No | BSL |
| | 108-88-3 | TOLUENE | 0.21 J | 270 J | ug/kg | E-SB-833I-10 | 41/303 | 0.19 - 44000 | 270 | 630000 | 500000 N | 650000 sat | No | BSL |
| | 1330-20-7 | TOTAL XYLENES | 1.5 J | 600 | ug/kg | SB-88-05 | 15/230 | 0.47 - 21000 | 600 | 1600000 [9] | 63000 N | 70000 N | No | BSL |
| | 79-01-6 | TRICHLOROETHENE | 0.32 J | 2.7 | ug/kg | SB-202-05, SB-201-10 | 16/266 | 0.29 - 25000 | 2.7 | 1600 | 2800 C | 71 C | No | BSL |
| | 75-69-4 | TRICHLOROFLUOROMETHANE | 0.74 J | 29 | ug/kg | SB-520-0810 | 5/266 | 0.24 - 41000 | 29 | NA | 79,000 N | 110000 N | No | BSL |
| | 75-01-4 | VINYL CHLORIDE | 0.48 J | 3.5 J | ug/kg | SB-515-0406 | 3/266 | 0.27 - 46000 | 3.5 | 90 | 60 C | 280 C | No | BSL |
| | **Semivolatile Organic Compounds** | | | | | | | | | | | | | |
| | 105-67-9 | 2,4-DIMETHYLPHENOL | 68 J | 68 J | ug/kg | SB-238-05 | 1/214 | 22 - 65000 | 68 | 160000 | 120,000 N | NA | No | BSL |
| | 65-85-0 | BENZOIC ACID | 43 J | 136 J | ug/kg | SB-195-05 | 6/45 | 42.3 - 1200 | 136 | NA | 24000000 N | NA | No | BSL |
| | 117-81-7 | BIS(2-ETHYLHEXYL)PHTHALATE | 22 J | 190 J | ug/kg | SB-296-0910 | 17/214 | 21 - 62000 | 190 | 46000 | 35000 C | NA | No | BSL |
| | 85-68-7 | BUTYL BENZYL PHTHALATE | 36 J | 36 J | ug/kg | D-SB-795-07 | 1/214 | 11 - 33000 | 36 | NA | 260,000 C | NA | No | BSL |
| | 86-74-8 | CARBAZOLE | 22 J | 5690 | ug/kg | SB-238-05 | 9/214 | 30 - 88000 | 5690 | 32000 | NA | NA | No | BSL |
| | 84-74-2 | DI-N-BUTYL PHTHALATE | 38 J | 76 J | ug/kg | SB-66-10 | 3/214 | 17 - 49000 | 76 | 780000 | 610000 N | NA | No | BSL |
| | 117-84-0 | DI-N-OCTYL PHTHALATE | 76 J | 76 J | ug/kg | SB-63-05 | 1/214 | 30 - 88000 | 76 | NA | NA | NA | No | NTX |
| | 132-64-9 | DIBENZOFURAN | 8.9 J | 3980 | ug/kg | SB-238-05 | 16/214 | 3.6 - 11000 | 3980 | 7800 | 7,800 N | NA | No | BSL |
| | 131-11-3 | DIMETHYL PHTHALATE | 62 J | 310 J | ug/kg | SB-55-10 | 3/214 | 19 - 55000 | 310 | NA | NA | NA | No | NTX |
| | 86-30-6 | N-NITROSODIPHENYLAMINE | 34 J | 81 J | ug/kg | SB-238-05 | 2/213 | 23 - 69000 | 81 | 130000 | 99,000 C | NA | No | BSL |
| | 108-95-2 | PHENOL | 140 J | 1900 | ug/kg | SB-81-05 | 11/214 | 30 - 88000 | 1900 | 2300000 | 1800000 N | NA | No | BSL |

**Table 2.3**

**Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Direct Contact With Subsurface Soil (2-10 feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | | |
| | 90-12-0 | 1-METHYLNAPHTHALENE | 8.6 | 3420 | ug/kg | SB-238-05 | 27/232 | 3.5 - 440 | 3420 | NA | 22,000 C | NA | No | BSL |
| | 91-57-6 | 2-METHYLNAPHTHALENE | 7.9 | 6900 | ug/kg | SB-238-05 | 43/401 | 3.5 - 11000 | 6900 | 31000 | 31000 N | NA | No | BSL |
| | 83-32-9 | ACENAPHTHENE | 8.2 | 27000 | ug/kg | E-SB-833-09 | 56/401 | 3.5 - 3900 | 27000 | 470000 | 340000 N | NA | No | BSL |
| | 208-96-8 | ACENAPHTHYLENE | 7.9 | 1000 | ug/kg | G-SB-813-09 | 36/401 | 3.5 - 11000 | 1000 | 470000 | 340000 N[11] | NA | No | BSL |
| | 120-12-7 | ANTHRACENE | 5.25 | 28000 | ug/kg | E-SB-833-09 | 79/401 | 3.5 - 3900 | 28000 | 2300000 | 1700000 | NA | No | BSL |
| | -- | **BAP EQUIVALENT-POSITIVE RESULTS[20]** | 0.008 | 57089 | ug/kg | G-SB-735A-5 | 797/1929 | 1.4 - 4200 | 57089 | **22** | **15 C** | NA | **Yes** | ASL |
| | -- | **BAP EQUIVALENT-1/2 NONDETECT[20]** | 1.2 | 57089 | ug/kg | G-SB-735A-5 | 797/1929 | 1.4 - 4200 | 57089 | **22** | **15 C** | NA | **Yes** | ASL |
| | 56-55-3 | **BENZO(A)ANTHRACENE** | 1.4 J | 44000 | ug/kg | G-SB-735A-5 | 610/1467 | 1 - 3800 | 44000 | **220** | **150 C** | NA | **Yes** | ASL |
| | 50-32-8 | **BENZO(A)PYRENE** | 2.6 J | 37000 | ug/kg | G-SB-735A-5 | 727/1928 | 1.4 - 4200 | 37000 | **22** | **15 C** | NA | **Yes** | ASL |
| | 205-99-2 | **BENZO(B)FLUORANTHENE** | 1.6 J | 55000 | ug/kg | G-SB-735A-5 | 648/1459 | 1.3 - 3800 | 55000 | **220** | **150 C** | NA | **Yes** | ASL |
| | 191-24-2 | BENZO(G,H,I)PERYLENE | 6.375 | 9200 J | ug/kg | G-SB-806-09 | 100/401 | 3.5 - 11000 | 9200 | 230000 | 170000 N[12] | NA | No | BSL |
| | 207-08-9 | **BENZO(K)FLUORANTHENE** | 2.25 | 25000 | ug/kg | G-SB-735A-5 | 472/1459 | 1.4 - 11000 | 25000 | **2200** | **1500 C** | NA | **Yes** | ASL |
| | 218-01-9 | **CHRYSENE** | 1.4 J | 42000 | ug/kg | E-SB-833-09 | 625/1467 | 0.97 - 3800 | 42000 | **22000** | **15000 C** | NA | **Yes** | ASL |
| | 53-70-3 | **DIBENZO(A,H)ANTHRACENE** | 3.05 | 7800 | ug/kg | G-SB-735A-5 | 267/1467 | 1.4 - 11000 | 7800 | **22** | **15 C** | NA | **Yes** | ASL |
| | 206-44-0 | FLUORANTHENE | 8.4 | 81000 | ug/kg | E-SB-833-09 | 146/401 | 3.5 - 3800 | 81000 | 310000 | 230000 N | NA | No | BSL |
| | 86-73-7 | FLUORENE | 8.5 | 6330 | ug/kg | SB-238-05 | 53/401 | 3.5 - 11000 | 6330 | 310000 | 230000 N | NA | No | BSL |
| | 193-39-5 | **INDENO(1,2,3-CD)PYRENE** | 0.96 J | 21000 J | ug/kg | G-SB-714-6, G-SB-735A-5 | 543/1467 | 0.41 - 11000 | 21000 | **220** | **150 C** | NA | **Yes** | ASL |
| | 91-20-3 | **NAPHTHALENE** | 8.4 | 31000 | ug/kg | SB-238-05 | 62/401 | 3.5 - 11000 | 31000 | 160000 | **3,600 C** | **17000 N** | **Yes** | ASL |
| | 85-01-8 | PHENANTHRENE | 5.575 | 88000 | ug/kg | E-SB-833-09 | 109/401 | 3.5 - 3900 | 88,000 | 2300000 | 170,000 N[12] | NA | No | BSL |
| | 129-00-0 | PYRENE | 7.8 | 60000 | ug/kg | E-SB-833-09 | 149/401 | 3.5 - 3800 | 60000 | 230000 | 170,000 N | NA | No | BSL |
| | **Pesticides/Polychlorinated Biphenyls** | | | | | | | | | | | | | |
| | 72-55-9 | 4,4'-DDE | 34 J | 34 J | ug/kg | D-SB-790-05 | 1/78 | 0.43 - 46 | 34 | 1900 | 1,400 C | NA | No | BSL |
| | 11097-69-1 | **AROCLOR-1254** | 27 | 9800 | ug/kg | SB-555-4 | 3/550 | 15 - 1100000 | 9800 | **320** | **110 N[8]** | NA | **Yes** | ASL |
| | 11096-82-5 | **AROCLOR-1260** | 8.1 J | 24000000 | ug/kg | E-SB-833-09 | 100/550 | 4.8 - 360 | 24000000 | **320** | **220 C** | NA | **Yes** | ASL |
| | 319-85-7 | BETA-BHC | 1.3 J | 1.3 J | ug/kg | D-SB-792-03 | 1/78 | 1.2 - 66 | 1.3 | 350 | 270 C | 6000 C | No | BSL |
| | 1336-36-3 | **TOTAL AROCLOR** | 8 | 24000000 | ug/kg | E-SB-833-09 | 102/550 | 0 - 0 | 24000000 | **320 [13]** | **220 C[14]** | NA | **Yes** | ASL |
| | **Metals** | | | | | | | | | | | | | |
| | 7440-36-0 | ANTIMONY | 0.056 L | 2 L | mg/kg | SB-236-05 | 59/207 | 0.0056 - 3.6 | 2 | 3.1 | 3.1 N | NA | No | BSL |
| | 7440-38-2 | **ARSENIC** | 0.22 L | 14.3 | mg/kg | D-SB-786-07 | 202/233 | 0.51 - 5.3 | 14.3 | **0.43** | **0.39 C** | 769 C | **Yes** | ASL |
| | 7440-39-3 | BARIUM | 1.6 | 103 | mg/kg | SB-236-05 | 155/155 | -- | 103 | 1600 | 1,500 N | 70900 N | No | BSL |
| | 7440-41-7 | BERYLLIUM | 0.076 | 6.6 J | mg/kg | D-SB-795-03 | 160/226 | 0.015 - 3.6 | 6.6 | 16 | 16 N | 1380 C | No | BSL |
| | 7440-43-9 | CADMIUM | 0.016 | 1.1 | mg/kg | D-SB-788-03 | 67/226 | 0.0037 - 3.6 | 1.1 | 3.9 | 7 N | 1840 C | No | BSL |
| | 7440-47-3 | CHROMIUM | 1.5 J | 120 J | mg/kg | SB-60-10 | 215/225 | 2.6 - 14 | 120 | 12000 [15] | 12,000 N[15] | 276 C | No | BSL |
| | 7440-48-4 | **COBALT** | 0.18 | 68.1 | mg/kg | SB-197-05 | 153/155 | 3.2 - 11 | 68.1 | NA | **2.3 N** | 1180 C | **Yes** | ASL |
| | 7440-50-8 | COPPER | 1 J | 110 J | mg/kg | D-SB-784-07 | 217/226 | 2.3 - 3.4 | 110 | 310 | 310 N | NA | No | BSL |
| | 7439-89-6 | **IRON** | 1290 | 72900 J | mg/kg | D-SB-787-09 | 102/102 | -- | 72900 | **5500** | **5,500 N** | NA | **Yes** | ASL |
| | 7439-92-1 | **LEAD** | 0.71 J | 1,010 | mg/kg | D-SB-783-03 | 211/226 | 1 - 4 | 1010 | **400** | **400** | NA | **Yes** | ASL |
| | 7439-96-5 | **MANGANESE** | 2.2 L | 326 J | mg/kg | D-SB-794-03 | 102/102 | -- | 326 | **160** | **180 N** | 7090 N | **Yes** | ASL |
| | 7439-97-6 | **MERCURY** | 0.007 | 3.3 | mg/kg | SB-33-05 | 103/424 | 0.002 - 0.15 | 3.3 | **2.3 [16]** | **2.3 N[17]** | NA | **Yes** | ASL |
| | 7439-98-7 | MOLYBDENUM | 0.16 J | 1.3 J | mg/kg | SB-504-0810 | 72/155 | 0.072 - 0.9 | 1.3 | NA | 39 N | NA | No | BSL |
| | 7440-02-0 | NICKEL | 0.76 J | 150 | mg/kg | SB-55-05 | 212/226 | 0.39 - 3.6 | 150 | 160 | 150 N | NA | No | BSL |
| | 7782-49-2 | SELENIUM | 0.2 | 11 L | mg/kg | SB-31-05 | 100/218 | 0.18 - 11 | 11 | 39 | 39 N | NA | No | BSL |
| | 7440-22-4 | SILVER | 0.03 | 2.3 | mg/kg | SB-236-05 | 56/174 | 0.0079 - 3.1 | 2.3 | 39 | 39 N | NA | No | BSL |
| | 7440-28-0 | THALLIUM | 0.018 J | 0.21 K | mg/kg | SB-504-0810 | 46/226 | 0.0052 - 5 | 0.21 | 0.55 | NA | NA | No | BSL |
| | 7440-62-2 | **VANADIUM** | 2.1 | 90.5 | mg/kg | SB-249-10 | 155/155 | -- | 90.5 | **7.8** | **39 N[18]** | NA | **Yes** | ASL |
| | 7440-66-6 | ZINC | 2.8 | 270 | mg/kg | SB-55-05 | 173/226 | 5.2 - 60 | 270 | 2300 | 2,300 N | NA | No | BSL |

**Table 2.3**

**Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Direct Contact With Subsurface Soil (2-10 feet)**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Residential Soil[4] | USEPA RSL Residential Soil[5] | USEPA SSL Soil to Air[6] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[7] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Petroleum Hydrocarbons** | | | | | | | | | | | | | |
| | -- | **DIESEL RANGE ORGANICS** | 840 J | 28000000 | ug/kg | E-SB-833-09 | 87/192 | 2400 - 29000 | 28000000 | **230000** | NA | NA | **Yes** | ASL |
| | -- | **GASOLINE RANGE ORGANICS** | 34 J | 980000 | ug/kg | G-SB-728-4 | 44/220 | 51 - 15200 | 980000 | **230000** | NA | NA | **Yes** | ASL |
| | -- | TPH (C09-C36) | 2900 J | 200000 | ug/kg | SB-285-0405 | 11/24 | 2200 - 8700 | 200000 | NA | 28,400,000 N[19] | NA | No | BSL |
| | -- | TPH (C10-C32) | 640 J | 48000 | ug/kg | SB-502-0406 | 10/39 | 990 - 130000 | 48000 | NA | 28,400,000 N[19] | NA | No | BSL |
| | **Miscellaneous Parameters** | | | | | | | | | | | | | |
| | 18540-29-9 | **HEXAVALENT CHROMIUM** | 0.33 J | 1.1 | mg/kg | D-SB-788-03 | 31/76 | 0.3 - 0.4 | 1.1 | 23 | **0.29 C** | 276 C | **Yes** | ASL |
| | 22967-92-6 | MERCURY (METHYL) | 0.31 K | 1.21 J | ug/kg | SB-236-05 | 3/3 | -- | 1.21 | 780 | 780 N | NA | No | BSL |
| | -- | PERCENT SOLIDS | 62.5 | 95.9 | % | SB-395-0203 | 608/608 | -- | 95.9 | NA | NA | NA | No | NTX |
| | -- | PH | 4.9 | 7.7 | S.U. | SB-236-05 | 5/5 | -- | 7.7 | NA | NA | NA | No | NTX |
| | -- | TOTAL ORGANIC CARBON | 690 J | 1350 | mg/kg | MRC-MW08[0809] | 2/3 | 238 | 1350 | NA | NA | NA | No | NTX |
| | -- | TOTAL SOLIDS | 70 | 88 | % | SB-297-0405 | 24/24 | -- | 88 | NA | NA | NA | No | NTX |

**Footnotes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations.
2 - Values presented are sample-specific quantitation limits.
3 - The maximum detected concentration is used for screening purposes.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag).
6 - USEPA Soil Screening Levels. EPA Internet Site at http://rais.ornl.gov/epa/ssl1.shtml.
7 - The chemical is selected as a global COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
8 - One tenth the noncarcinogenic level is less than the carcinogenic level; therefore, the noncarcinogenic level is presented.
9 - The value is for xylenes.
10 - The value is for xylene, mixture.
11 - The value for acenaphthene is used as a surrogate for acenaphthylene.
12 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
13 - The value is for PCB (total).
14 - The value is for polychlorinated biphenyls (high risk).
15 - The value is for trivalent chromium.
16 - The value is for mercury (inorganic/mercuric dichloride).
17 - The value is for mercuric chloride.
18 - The value is for vanadium and compounds.
19 - The value for total petroleum hydrocarbons (aliphatic low) is used.
20 - See Section 3 of the text for BaP equivalent calculation methodology.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

**Associated Samples:** All subsurface soil (2-10 feet) samples from all tax blocks (D, E, F, G, and H) were included. See Tables 3-6 through 3-10 for sample lists.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NA = Not Applicable/Not Available
sat = soil saturation concentration

**Rationale Codes:**
For selection as a COPC:
ASL = Above Screening Level

For elimination as a COPC:
BSL = Below COPC Screening Level
NTX = No toxicity criteria

**Table 2.4**

**Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Migration from Subsurface Soil (2-10 feet) to Groundwater**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Protection of Groundwater[4] | USEPA SSL for Protection of Groundwater[5] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Volatile Organic Compounds** | | | | | | | | | | | | |
| | 75-34-3 | 1,1-DICHLOROETHANE | 0.48 J | 0.69 J | ug/kg | SB-515-0406, SB-515-0810 | 3/266 | 0.25 - 44000 | 0.69 | 5100 | 0.69 | No | BSL |
| | 75-35-4 | 1,1-DICHLOROETHENE | 0.54 J | 1.1 J | ug/kg | D-SB-793-09 | 2/266 | 0.36 - 46000 | 1.1 | 2900 | 120 | No | BSL |
| | 87-61-6 | **1,2,3-TRICHLOROBENZENE** | 0.6 J | 2200000 | ug/kg | E-SB-833-09 | 32/266 | 0.26 - 518 | 2200000 | NA | **87** | **Yes** | ASL |
| | 526-73-8 | 1,2,3-TRIMETHYLBENZENE | 0.15 J | 49 J | ug/kg | E-SB-833L-04 | 15/172 | 0.12 - 2900 | 49 | NA | NA | No | NTX |
| | 120-82-1 | **1,2,4-TRICHLOROBENZENE** | 5.9 J | 9600000 | ug/kg | E-SB-833-09 | 32/266 | 0.19 - 518 | 9600000 | **2400** | **6.8** | **Yes** | ASL |
| | 95-63-6 | **1,2,4-TRIMETHYLBENZENE** | 0.69 J | 658 | ug/kg | SB-238-05 | 9/266 | 0.45 - 13000 | 658 | NA | **21** | **Yes** | ASL |
| | 95-50-1 | **1,2-DICHLOROBENZENE** | 0.39 J | 120000 J | ug/kg | E-SB-833-09 | 25/266 | 0.25 - 290 | 120000 | **4600** | **360** | **Yes** | ASL |
| | 107-06-2 | **1,2-DICHLOROETHANE** | 1.5 J | 51 J | ug/kg | E-SB-833K-10 | 2/266 | 0.24 - 26000 | 51 | **1** | **0.042** | **Yes** | ASL |
| | 108-67-8 | 1,3,5-TRIMETHYLBENZENE | 0.94 J | 139 J | ug/kg | SB-238-05 | 2/94 | 1.93 - 61 | 139 | NA | 520 | No | BSL |
| | 541-73-1 | **1,3-DICHLOROBENZENE** | 0.39 J | 38000 J | ug/kg | E-SB-833A-10 | 14/266 | 0.24 - 12000 | 38000 | **290** | NA | **Yes** | ASL |
| | 106-46-7 | **1,4-DICHLOROBENZENE** | 1.6 J | 130000 J | ug/kg | E-SB-833-09 | 28/266 | 0.46 - 290 | 130000 | **4.2** | **0.41** | **Yes** | ASL |
| | 78-93-3 | 2-BUTANONE | 1.3 J | 110 J | ug/kg | E-SB-833L-06 | 56/242 | 0.98 - 110000 | 110 | 29000 | 1,500 | No | BSL |
| | 99-87-6 | 4-ISOPROPYLTOLUENE | 0.34 J | 165 J | ug/kg | SB-238-05 | 5/266 | 0.15 - 12000 | 165 | NA | NA | No | NTX |
| | 67-64-1 | **ACETONE** | 3.6 J | 16000 J | ug/kg | E-SB-833E-06 | 99/261 | 4.4 - 800000 | 16000 | 22000 | **4,500** | **Yes** | ASL |
| | 71-43-2 | **BENZENE** | 0.33 J | 7 | ug/kg | SB-89-05 | 8/303 | 0.16 - 31000 | 7 | **1.9** | **0.21** | **Yes** | ASL |
| | 74-83-9 | BROMOMETHANE | 0.49 | 0.49 | ug/kg | D-SB-783-09 | 1/266 | 0.38 - 75000 | 0.49 | 41 | 2.2 | No | BSL |
| | 75-15-0 | CARBON DISULFIDE | 0.45 J | 35 J | ug/kg | D-SB-786-03 | 17/266 | 0.31 - 31000 | 35 | 19000 | 310 | No | BSL |
| | 56-23-5 | **CARBON TETRACHLORIDE** | 0.88 J | 0.88 J | ug/kg | E-SB-833G-08 | 1/266 | 0.26 - 16000 | 0.88 | 2.1 | **0.17** | **Yes** | ASL |
| | 108-90-7 | **CHLOROBENZENE** | 1.8 J | 4000 J | ug/kg | E-SB-833L-08 | 12/266 | 0.23 - 16000 | 4000 | **680** | **62** | **Yes** | ASL |
| | 156-59-2 | CIS-1,2-DICHLOROETHENE | 0.37 J | 9.7 | ug/kg | SB-515-0406 | 4/266 | 0.25 - 18000 | 9.7 | NA | 21 | No | BSL |
| | 100-41-4 | **ETHYLBENZENE** | 0.67 J | 394 | ug/kg | SB-238-05 | 7/303 | 0.18 - 14000 | 394 | 15000 | **1.7** | **Yes** | ASL |
| | 98-82-8 | ISOPROPYLBENZENE | 0.82 J | 990 J | ug/kg | SB-84-05 | 5/266 | 0.11 - 17000 | 990 | 64000 | 1,100 | No | BSL |
| | -- | **M+P-XYLENES** | 2.1 J | 270 J | ug/kg | SB-238-05 | 7/266 | 0.84 - 16000 | 270 | 3000 [7] | **200** [8] | **Yes** | ASL |
| | 75-09-2 | **METHYLENE CHLORIDE** | 2.4 J | 4,800 J | ug/kg | E-SB-833E-06 | 40/266 | 0.47 - 360000 | 4800 | **19** | **1.2** | **Yes** | ASL |
| | 104-51-8 | N-BUTYLBENZENE | 125 J | 2900 J | ug/kg | E-SB-833A-06 | 3/266 | 0.16 - 21000 | 2900 | NA | NA | No | NTX |
| | 103-65-1 | N-PROPYLBENZENE | 1.2 J | 2200 J | ug/kg | SB-84-05 | 3/266 | 0.28 - 36000 | 2200 | NA | 2,500 | No | BSL |
| | 91-20-3 | **NAPHTHALENE** | 0.56 J | 159000 | ug/kg | SB-238-05 | 24/303 | 0.13 - 140000 | 159000 | **150** | **0.47** | **Yes** | ASL |
| | 95-47-6 | O-XYLENE | 0.8 J | 186 J | ug/kg | SB-238-05 | 9/266 | 0.24 - 22000 | 186 | 3000 [7] | 1,200 | No | BSL |
| | 135-98-8 | SEC-BUTYLBENZENE | 380 J | 380 J | ug/kg | E-SB-833A-06 | 1/266 | 0.13 - 12000 | 380 | NA | NA | No | NTX |
| | 75-65-0 | TERTIARY-BUTYL ALCOHOL | 5 J | 1200 J | ug/kg | E-SB-833L-04 | 13/65 | 8 - 7200000 | 1200 | NA | NA | No | NTX |
| | 127-18-4 | **TETRACHLOROETHENE** | 0.49 J | 2.6 J | ug/kg | E-SB-833G-08 | 4/266 | 0.36 - 31000 | 2.6 | 4.7 | **0.049** | **Yes** | ASL |
| | 108-88-3 | TOLUENE | 0.21 J | 270 J | ug/kg | E-SB-833I-10 | 41/303 | 0.19 - 44000 | 270 | 27000 | 1600 | No | NTX |
| | 1330-20-7 | **TOTAL XYLENES** | 1.5 J | 600 | ug/kg | SB-88-05 | 15/230 | 0.47 - 21000 | 600 | 3000 [7] | **200** | **Yes** | ASL |
| | 79-01-6 | **TRICHLOROETHENE** | 0.32 J | 2.7 | ug/kg | SB-202-05, SB-201-10 | 16/266 | 0.29 - 25000 | 2.7 | **0.26** | **0.72** | **Yes** | ASL |
| | 75-69-4 | TRICHLOROFLUOROMETHANE | 0.74 J | 29 | ug/kg | SB-520-0810 | 5/266 | 0.24 - 41000 | 29 | NA | 830 | No | NTX |
| | 75-01-4 | **VINYL CHLORIDE** | 0.48 J | 3.5 J | ug/kg | SB-515-0406 | 3/266 | 0.27 - 46000 | 3.5 | **0.12** | **0.0056** | **Yes** | ASL |
| | **Semivolatile Organic Compounds** | | | | | | | | | | | | |
| | 105-67-9 | 2,4-DIMETHYLPHENOL | 68 J | 68 J | ug/kg | SB-238-05 | 1/214 | 22 - 65000 | 68 | 6700 | 860 | No | BSL |
| | 65-85-0 | BENZOIC ACID | 43 J | 136 J | ug/kg | SB-195-05 | 6/45 | 42.3 - 1200 | 136 | NA | 34000 | No | BSL |
| | 117-81-7 | BIS(2-ETHYLHEXYL)PHTHALATE | 22 J | 190 J | ug/kg | SB-296-0910 | 17/214 | 21 - 62000 | 190 | 2900000 | 1100 | No | BSL |
| | 85-68-7 | BUTYL BENZYL PHTHALATE | 36 J | 36 J | ug/kg | D-SB-795-07 | 1/214 | 11 - 33000 | 36 | NA | 510 | No | BSL |
| | 86-74-8 | **CARBAZOLE** | 22 J | 5690 | ug/kg | SB-238-05 | 9/214 | 30 - 88000 | 5690 | **470** | NA | **Yes** | ASL |
| | 84-74-2 | DI-N-BUTYL PHTHALATE | 38 J | 76 J | ug/kg | SB-66-10 | 3/214 | 17 - 49000 | 76 | 5000000 | 9200 | No | BSL |
| | 117-84-0 | DI-N-OCTYL PHTHALATE | 76 J | 76 J | ug/kg | SB-63-05 | 1/214 | 30 - 88000 | 76 | NA | NA | No | NTX |
| | 132-64-9 | **DIBENZOFURAN** | 8.9 J | 3980 | ug/kg | SB-238-05 | 16/214 | 3.6 - 11000 | 3980 | NA | **680** | **Yes** | ASL |

**Table 2.4**

**Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Migration from Subsurface Soil (2-10 feet) to Groundwater**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Protection of Groundwater[4] | USEPA SSL for Protection of Groundwater[5] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Semivolatile Organic Compounds (continued)** | | | | | | | | | | | | |
| | 131-11-3 | DIMETHYL PHTHALATE | 62 J | 310 J | ug/kg | SB-55-10 | 3/214 | 19 - 55000 | 310 | NA | NA | No | NTX |
| | 86-30-6 | **N-NITROSODIPHENYLAMINE** | 34 J | 81 J | ug/kg | SB-238-05 | 2/213 | 23 - 69000 | 81 | 760 | **75** | **Yes** | ASL |
| | 108-95-2 | PHENOL | 140 J | 1900 | ug/kg | SB-81-05 | 11/214 | 30 - 88000 | 1900 | 67000 | 6300 | No | BSL |
| | **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | | | |
| | 90-12-0 | **1-METHYLNAPHTHALENE** | 8.6 | 3420 | ug/kg | SB-238-05 | 27/232 | 3.5 - 440 | 3420 | NA | **12** | **Yes** | ASL |
| | 91-57-6 | **2-METHYLNAPHTHALENE** | 7.9 | 6900 | ug/kg | SB-238-05 | 43/401 | 3.5 - 11000 | 6900 | **4400** | **750** | **Yes** | ASL |
| | 83-32-9 | **ACENAPHTHENE** | 8.2 | 27000 | ug/kg | E-SB-833-09 | 56/401 | 3.5 - 3900 | 27000 | 100000 | **22000** | **Yes** | ASL |
| | 208-96-8 | ACENAPHTHYLENE | 7.9 | 1000 | ug/kg | G-SB-813-09 | 36/401 | 3.5 - 11000 | 1000 | 100000 | 22000 [9] | No | BSL |
| | 120-12-7 | ANTHRACENE | 5.25 | 28000 | ug/kg | E-SB-833-09 | 79/401 | 3.5 - 3900 | 28000 | 470000 | 360000 | No | BSL |
| | -- | **BAP EQUIVALENT-POSITIVE RESULTS[14]** | 0.008 | 57089 | ug/kg | G-SB-735A-5 | 797/1929 | 1.4 - 4200 | 57089 | **120** | **3.5** | **Yes** | ASL |
| | -- | **BAP EQUIVALENT-1/2 NONDETECT[14]** | 1.2 | 57089 | ug/kg | G-SB-735A-5 | 797/1929 | 1.4 - 4200 | 57089 | **120** | **3.5** | **Yes** | ASL |
| | 56-55-3 | **BENZO(A)ANTHRACENE** | 1.4 J | 44000 | ug/kg | G-SB-735A-5 | 610/1467 | 1 - 3800 | 44000 | **480** | **10** | **Yes** | ASL |
| | 50-32-8 | **BENZO(A)PYRENE** | 2.6 J | 37000 | ug/kg | G-SB-735A-5 | 727/1928 | 1.4 - 4200 | 37000 | **120** | **3.5** | **Yes** | ASL |
| | 205-99-2 | **BENZO(B)FLUORANTHENE** | 1.6 J | 55000 | ug/kg | G-SB-735A-5 | 648/1459 | 1.3 - 3800 | 55000 | **1500** | **35** | **Yes** | ASL |
| | 191-24-2 | BENZO(G,H,I)PERYLENE | 6.375 | 9200 J | ug/kg | G-SB-806-09 | 100/401 | 3.5 - 11000 | 9200 | 680000 | 120000 [10] | No | BSL |
| | 207-08-9 | **BENZO(K)FLUORANTHENE** | 2.25 | 25000 | ug/kg | G-SB-735A-5 | 472/1459 | 1.4 - 11000 | 25000 | **15000** | **350** | **Yes** | ASL |
| | 218-01-9 | **CHRYSENE** | 1.4 J | 42000 | ug/kg | E-SB-833-09 | 625/1467 | 0.97 - 3800 | 42000 | 48000 | **1100** | **Yes** | ASL |
| | 53-70-3 | **DIBENZO(A,H)ANTHRACENE** | 3.05 | 7800 | ug/kg | G-SB-735A-5 | 267/1467 | 1.4 - 11000 | 7800 | **460** | **11** | **Yes** | ASL |
| | 206-44-0 | FLUORANTHENE | 8.4 | 81000 | ug/kg | E-SB-833-09 | 146/401 | 3.5 - 3800 | 81000 | 6300000 | 160000 | No | BSL |
| | 86-73-7 | FLUORENE | 8.5 | 6330 | ug/kg | SB-238-05 | 53/401 | 3.5 - 11000 | 6330 | 140000 | 27000 | No | BSL |
| | 193-39-5 | **INDENO(1,2,3-CD)PYRENE** | 0.96 J | 21000 J | ug/kg | G-SB-714-6, G-SB-735A-5 | 543/1467 | 0.41 - 11000 | 21000 | **4200** | **120** | **Yes** | ASL |
| | 91-20-3 | **NAPHTHALENE** | 8.4 | 31000 | ug/kg | SB-238-05 | 62/401 | 3.5 - 11000 | 31000 | **150** | **0.47** | **Yes** | ASL |
| | 85-01-8 | PHENANTHRENE | 5.575 | 88000 | ug/kg | E-SB-833-09 | 109/401 | 3.5 - 3900 | 88000 | 470000 | 120,000 [10] | No | BSL |
| | 129-00-0 | PYRENE | 7.8 | 60000 | ug/kg | E-SB-833-09 | 149/401 | 3.5 - 3800 | 60000 | 680000 | 120,000 | No | BSL |
| | **Pesticides/Polychlorinated Biphenyls** | | | | | | | | | | | | |
| | 72-55-9 | 4,4'-DDE | 34 J | 34 J | ug/kg | D-SB-790-05 | 1/78 | 0.43 - 46 | 34 | 35000 | 47 | No | BSL |
| | 11097-69-1 | **AROCLOR-1254** | 27 | 9800 | ug/kg | SB-555-4 | 3/550 | 15 - 1100000 | 9800 | **1100** | **8.8** | **Yes** | ASL |
| | 11096-82-5 | **AROCLOR-1260** | 8.1 J | 24000000 | ug/kg | E-SB-833-09 | 100/550 | 4.8 - 360 | 24000000 | NA | **24** | **Yes** | ASL |
| | 319-85-7 | **BETA-BHC** | 1.3 J | 1.3 J | ug/kg | D-SB-792-03 | 1/78 | 1.2 - 66 | 1.3 | 3.1 | **0.22** | **Yes** | ASL |
| | 1336-36-3 | **TOTAL AROCLOR** | 8 | 24000000 | ug/kg | E-SB-833-09 | 102/550 | 0 - 0 | 24000000 | **410 [11]** | NA | **Yes** | ASL |
| | **Metals** | | | | | | | | | | | | |
| | 7440-36-0 | **ANTIMONY** | 0.056 L | 2 L | mg/kg | SB-236-05 | 59/207 | 0.0056 - 3.6 | 2 | 13 | **0.66** | **Yes** | ASL |
| | 7440-38-2 | **ARSENIC** | 0.22 L | 14.3 | mg/kg | D-SB-786-07 | 202/233 | 0.51 - 5.3 | 14.3 | **0.026** | **0.0013** | **Yes** | ASL |
| | 7440-39-3 | BARIUM | 1.6 | 103 | mg/kg | SB-236-05 | 155/155 | -- | 103 | 6000 | 300 | No | BSL |
| | 7440-41-7 | BERYLLIUM | 0.076 | 6.6 J | mg/kg | D-SB-795-03 | 160/226 | 0.015 - 3.6 | 6.6 | 1200 | 58 | No | BSL |
| | 7440-43-9 | CADMIUM | 0.016 | 1.1 | mg/kg | D-SB-788-03 | 67/226 | 0.0037 - 3.6 | 1.1 | 27 | 1.4 | No | BSL |
| | 7440-47-3 | CHROMIUM | 1.5 J | 120 J | mg/kg | SB-60-10 | 215/225 | 2.6 - 14 | 120 | 2000000000 [12] | 99,000,000 [12] | No | BSL |
| | 7440-48-4 | **COBALT** | 0.18 | 68.1 | mg/kg | SB-197-05 | 153/155 | 3.2 - 11 | 68.1 | NA | **0.49** | **Yes** | ASL |
| | 7440-50-8 | **COPPER** | 1 J | 110 J | mg/kg | D-SB-784-07 | 217/226 | 2.3 - 3.4 | 110 | 11000 | **51** | **Yes** | ASL |
| | 7439-89-6 | **IRON** | 1290 | 72900 J | mg/kg | D-SB-787-09 | 102/102 | -- | 72900 | NA | **640** | **Yes** | ASL |
| | 7439-92-1 | **LEAD** | 0.71 J | 1010 | mg/kg | D-SB-783-03 | 211/226 | 1 - 4 | 1010 | NA | **14 [13]** | **Yes** | ASL |
| | 7439-96-5 | **MANGANESE** | 2.2 L | 326 J | mg/kg | D-SB-794-03 | 102/102 | -- | 326 | 950 | **57** | **Yes** | ASL |
| | 7439-97-6 | MERCURY | 0.007 | 3.3 | mg/kg | SB-33-05 | 103/424 | 0.002 - 0.15 | 3.3 | NA | NA | No | BSL |
| | 7439-98-7 | MOLYBDENUM | 0.16 J | 1.3 J | mg/kg | SB-504-0810 | 72/155 | 0.072 - 0.9 | 1.3 | NA | 3.7 | No | BSL |

**Table 2.4**

**Occurrence, Distribution, and Selection of Chemicals of Potential Concern - Migration from Subsurface Soil (2-10 feet) to Groundwater**
**All Tax Blocks - Human Health Risk Assessment**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Exposure Point | CAS Number | Chemical | Minimum Concentration[1] | Maximum Concentration[1] | Units | Sample of Maximum Concentration | Frequency of Detection | Range of Nondetects[2] | Concentration Used for Screening[3] | MDE Cleanup Standards for Protection of Groundwater[4] | USEPA SSL for Protection of Groundwater[5] | Global COPC Flag | Rationale for Contaminant Deletion or Selection[6] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| All Tax Blocks | **Metals (continued)** | | | | | | | | | | | | |
| | 7440-02-0 | **NICKEL** | 0.76 J | 150 | mg/kg | SB-55-05 | 212/226 | 0.39 - 3.6 | 150 | NA | **48** | **Yes** | ASL |
| | 7782-49-2 | **SELENIUM** | 0.2 | 11 L | mg/kg | SB-31-05 | 100/218 | 0.18 - 11 | 11 | 19 | **1.0** | **Yes** | ASL |
| | 7440-22-4 | **SILVER** | 0.03 | 2.3 | mg/kg | SB-236-05 | 56/174 | 0.0079 - 3.1 | 2.3 | 31 | **1.6** | **Yes** | ASL |
| | 7440-28-0 | THALLIUM | 0.018 J | 0.21 K | mg/kg | SB-504-0810 | 46/226 | 0.0052 - 5 | 0.21 | 3.6 | NA | No | BSL |
| | 7440-62-2 | VANADIUM | 2.1 | 90.5 | mg/kg | SB-249-10 | 155/155 | -- | 90.5 | 730 | 180 | No | BSL |
| | 7440-66-6 | ZINC | 2.8 | 270 | mg/kg | SB-55-05 | 173/226 | 5.2 - 60 | 270 | 14000 | 680 | No | BSL |
| | **Petroleum Hydrocarbons** | | | | | | | | | | | | |
| | -- | DIESEL RANGE ORGANICS | 840 J | 28000000 | ug/kg | E-SB-833-09 | 87/192 | 2400 - 29000 | 28000000 | NA | NA | No | NTX |
| | -- | GASOLINE RANGE ORGANICS | 34 J | 980000 | ug/kg | G-SB-728-4 | 44/220 | 51 - 15200 | 980000 | NA | NA | No | NTX |
| | -- | TPH (C09-C36) | 2900 J | 200000 | ug/kg | SB-285-0405 | 11/24 | 2200 - 8700 | 200000 | NA | NA | No | NTX |
| | -- | TPH (C10-C32) | 640 J | 48000 | ug/kg | SB-502-0406 | 10/39 | 990 - 130000 | 48,000 | NA | NA | No | NTX |
| | **Miscellaneous Parameters** | | | | | | | | | | | | |
| | 18540-29-9 | **HEXAVALENT CHROMIUM** | 0.33 J | 1.1 | mg/kg | D-SB-788-03 | 31/76 | 0.3 - 0.4 | 1.1 | 42 | **0.00083** | **Yes** | ASL |
| | 22967-92-6 | MERCURY (METHYL) | 0.31 K | 1.21 J | ug/kg | SB-236-05 | 3/3 | -- | 1.21 | NA | NA | No | NTX |
| | -- | PERCENT SOLIDS | 62.5 | 95.9 | % | SB-395-0203 | 608/608 | -- | 95.9 | NA | NA | No | NTX |
| | -- | PH | 4.9 | 7.7 | S.U. | SB-236-05 | 5/5 | -- | 7.7 | NA | NA | No | NTX |
| | -- | TOTAL ORGANIC CARBON | 690 J | 1350 | mg/kg | MRC-MW08[0809] | 2/3 | 238 | 1350 | NA | NA | No | NTX |
| | -- | TOTAL SOLIDS | 70 | 88 | % | SB-297-0405 | 24/24 | -- | 88 | NA | NA | No | NTX |

**Footnotes:**
1 - Sample and duplicate are considered as two separate samples when determining the minimum and maximum concentrations.
2 - Values presented are sample-specific quantitation limits.
3 - The maximum detected concentration is used for screening purposes.
4 - State of Maryland Department of the Environment (MDE) Cleanup Standards for Soil and Groundwater, June 2008.
5 - USEPA Regional Screening Levels (RSLs) for Chemical Contaminants at Superfund Sites, November, 2010. The noncarcinogenic values (denoted with a "N" flag) are the screening level divided by 10 to correspond to a target hazard quotient of 0.1. Carcinogenic values represent an incremental cancer risk of 1.0E-06 (carcinogens denoted with a "C" flag).
6 - The chemical is selected as a global COPC if the maximum detected concentration exceeds the risk-based COPC screening level.
7 - The value is for xylenes.
8 - The value is for xylene, mixture.
9 - The value for acenaphthene is used as a surrogate for acenaphthylene.
10 - The value for pyrene is used as a surrogate for benzo(g,h,i)perylene and phenanthrene.
11 - The value is for PCB (total).
12 - The value is for trivalent chromium.
13 - Calculated from the EPA website (http://epa-prgs.ornl.gov/cgi-bin/chemicals/csl_search).
14 - See Secction 3 of the text for BaP equivalent calculation methodology.

Shaded criterion indicates that the maximum detected concentration exceeds one or more screening criteria. Shaded chemical name indicates that the chemical was retained as a COPC.

**Associated Samples:** All subsurface soil (2-10 feet) samples from all tax blocks (D, E, F, G, and H) were included. See tables 3-6 through 3-10 for sample lists.

**Definitions:**
BaP = Benzo(a)pyrene
C = Carcinogen
COPC = Chemical Of Potential Concern
J = Estimated value
K = Biased high
L = Biased low
N = Noncarcinogen
NA = Not Applicable/Not Available
sat = soil saturation concentration

**Rationale Codes:**
For selection as a COPC:
ASL = Above Screening Level

For elimination as a COPC:
BSL = Below COPC Screening Level
NTX = No toxicity criteria

**LIST OF TABLES**
**RAGS PART D TABLE 3**
**MEDIUM-SPECIFIC EXPOSURE POINT CONCENTRATION SUMMARY**


| Table No. | Reasonable Maximum Exposures |
|---|---|
| 3.1.RME | Surface Soil - Block D |
| 3.2.RME | Surface Soil - Block E |
| 3.3.RME | Surface Soil - Block F |
| 3.4.RME | Surface Soil - Block G |
| 3.5.RME | Surface Soil - Block H |
| 3.2.RME | Subsurface Soil - Block D |
| 3.3.RME | Subsurface Soil - Block E |
| 3.4.RME | Subsurface Soil - Block F |
| 3.5.RME | Subsurface Soil - Block G |
| 3.6.RME | Subsurface Soil - Block H |

TABLE 3.1.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil

| Exposure Point | Chemical of Potential Concern | Units | Arithmetic Mean | 95% UCL (Distribution) | Maximum Concentration (Qualifier)[4] | Exposure Point Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Value | Units | Statistic | Rationale |
| Tax Block D | 1,2,3-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,2,4-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,4-DICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | BENZO(A)PYRENE EQUIVALENTS[5] | mg/kg | 1.6 | 3.8 (NP) | 22.5 | 3.8 | mg/kg | 97.5% KM (Chebyshev) UCL | Pro UCL 4.00.05 |
| | AROCLOR-1254 | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | AROCLOR-1260 | mg/kg | NA | NA | 0.02 | 0.02 | mg/kg | Maximum Concentration | (1) |
| | ANTIMONY | mg/kg | 0.66 | 0.48 (G) | 3 | 0.48 | mg/kg | 95% KM (t) UCL | Pro UCL 4.00.05 |
| | ARSENIC | mg/kg | 2.1 | 3.5 (G) | 6 | 3.5 | mg/kg | 95% KM (Chebyshev) UCL | Pro UCL 4.00.05 |
| | CADMIUM | mg/kg | 0.70 | 0.15 (N) | 0.4 | 0.15 | mg/kg | 95% KM (t) UCL | Pro UCL 4.00.05 |
| | COBALT | mg/kg | 6.1 | 10.7 (G) | 27.5 | 10.7 | mg/kg | 95% Approximate Gamma UCL | Pro UCL 4.00.05 |
| | IRON | mg/kg | 11700 | 16300 (G) | 25400 | 16300 | mg/kg | 95% Approximate Gamma UCL | Pro UCL 4.00.05 |
| | LEAD | mg/kg | 20.6 | 29.2 (G) | 75 | 20.6 | mg/kg | Average Concentration | (2) |
| | MANGANESE | mg/kg | 56.3 | 89.9 (G) | 183 | 89.9 | mg/kg | 95% Approximate Gamma UCL | Pro UCL 4.00.05 |
| | MERCURY | mg/kg | 0.15 | 0.25 (G) | 1.7 | 0.25 | mg/kg | 95% KM (t) UCL | Pro UCL 4.00.05 |
| | MOLYBDENUM | mg/kg | 0.38 | 0.45 (N) | 0.61 | 0.45 | mg/kg | 95% KM (t) UCL | Pro UCL 4.00.05 |
| | NICKEL | mg/kg | 10.9 | 14.6 (G) | 40.6 | 14.6 | mg/kg | 95% Approximate Gamma UCL | Pro UCL 4.00.05 |
| | VANADIUM | mg/kg | 20.9 | 25.6 (G) | 43.3 | 25.6 | mg/kg | 95% Approximate Gamma UCL | Pro UCL 4.00.05 |
| | DIESEL RANGE ORGANICS | mg/kg | 140 | 550 (NP) | 1800 | 550 | mg/kg | 97.5% KM (Chebyshev) UCL | Pro UCL 4.00.05 |
| | GASOLINE RANGE ORGANICS | mg/kg | 0.43 | 0.81 (G) | 4.8 | 0.81 | mg/kg | 95% KM (t) UCL | Pro UCL 4.00.05 |
| | HEXAVALENT CHROMIUM[3] | mg/kg | 0.75 | 0.87 (N) | 1.8 | 0.87 | mg/kg | 95% Student's-t UCL | Pro UCL 4.00.05 |

Notes:
(1) There are less than three detected concentrations reliable statistics cannot be calculated. The maximum concentration is used as the EPC.
(2) The average concentration is used as the EPC for lead.
(3) Calculated by multiplying the total chromium concentration by 0.05.
(4) The maximum concentration considers the original and duplicate sample results and positive detections only. Thus, the maximum concentration presented may differ from that provided by ProUCL, which considers averages of duplicate pairs as well as non-detected results.
(5) See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

Acronyms
NA = Not Applicable
ND = Not Detected

TABLE 3.2.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil

| Exposure Point | Chemical of Potential Concern | Units | Arithmetic Mean | 95% UCL (Distribution) | Maximum Concentration (Qualifier)[4] | Exposure Point Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Value | Units | Statistic | Rationale |
| Tax Block E | 1,2,3-TRICHLOROBENZENE | mg/kg | 2.0 | 16.3 (L) | 43 | 16.3 | mg/kg | 99% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | 1,2,4-TRICHLOROBENZENE | mg/kg | 9.4 | 77.7 (L) | 210 | 77.7 | mg/kg | 99% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | 1,4-DICHLOROBENZENE | mg/kg | 0.10 | 0.23 (G) | 2.7 | 0.23 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | BENZO(A)PYRENE EQUIVALENTS[5] | mg/kg | 0.65 | 1.5 (L) | 11 | 1.5 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | AROCLOR-1254 | mg/kg | NA | NA | 36 | 36 | mg/kg | Maximum Concentration | (1) |
| | AROCLOR-1260 | mg/kg | 34.6 | 108 (NP) | 1800 | 108 | mg/kg | 97.5% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | ANTIMONY | mg/kg | 0.56 | 0.37 (G) | 2.2 | 0.37 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | ARSENIC | mg/kg | 1.8 | 2.2 (L) | 9.6 | 2.2 | mg/kg | 95% H-UCL | ProUCL 4.00.05 |
| | CADMIUM | mg/kg | 0.74 | 2.7 (L) | 6.4 | 2.7 | mg/kg | 99% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | COBALT | mg/kg | 5.9 | 11.6 (NP) | 27.2 | 11.6 | mg/kg | 95% Chebyshev (Mean, Sd) UCL | ProUCL 4.00.05 |
| | IRON | mg/kg | 15200 | 17200 (N) | 29900 | 17200 | mg/kg | 95% Student's-t UCL | ProUCL 4.00.05 |
| | LEAD | mg/kg | 21.6 | 82.3 (NP) | 278 | 21.6 | mg/kg | Average Concentration | (2) |
| | MANGANESE | mg/kg | 118 | 174 (L) | 1370 | 174 | mg/kg | 95% H-UCL | ProUCL 4.00.05 |
| | MERCURY | mg/kg | 0.066 | 0.12 (N) | 0.41 | 0.12 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | MOLYBDENUM | mg/kg | 0.36 | 0.83 (N) | 3.2 | 0.83 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | NICKEL | mg/kg | 9.5 | 10.9 (N) | 20 | 10.9 | mg/kg | 95% Student's-t UCL | ProUCL 4.00.05 |
| | VANADIUM | mg/kg | 19.3 | 24.0 (NP) | 60.7 | 24.0 | mg/kg | 95% Modified-t UCL | ProUCL 4.00.05 |
| | DIESEL RANGE ORGANICS | mg/kg | 956 | 2340 (G) | 8900 | 2340 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | GASOLINE RANGE ORGANICS | mg/kg | 0.25 | 0.48 (N) | 1.4 | 0.48 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | HEXAVALENT CHROMIUM[3] | mg/kg | 0.76 | 1.3 (NP) | 4.2 | 1.3 | mg/kg | 95% Chebyshev (Mean, Sd) UCL | ProUCL 4.00.05 |

Notes:

(1) There are less than three detected concentrations reliable statistics cannot be calculated. The maximum concentration is used as the EPC.
(2) The average concentration is used as the EPC for lead.
(3) Calculated by multiplying the total chromium concentration by 0.05.
(4) The maximum concentration considers the original and duplicate sample results and positive detections only. Thus, the maximum concentration presented may differ from that provided by ProUCL, which considers averages of duplicate pairs as well as non-detected results.
(5) See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

Acronyms
NA = Not Applicable

TABLE 3.3.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil

| Exposure Point | Chemical of Potential Concern | Units | Arithmetic Mean | 95% UCL (Distribution) | Maximum Concentration (Qualifier)[4] | Exposure Point Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Value | Units | Statistic | Rationale |
| Tax Block F | 1,2,3-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,2,4-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,4-DICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | BENZO(A)PYRENE EQUIVALENTS[5] | mg/kg | 2.0 | 6.1 (L) | 50 | 6.1 | mg/kg | 97.5% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | AROCLOR-1254 | mg/kg | NA | NA | 0.096 | 0.096 | mg/kg | Maximum Concentration | (1) |
| | AROCLOR-1260 | mg/kg | 0.096 | 0.16 (L) | 1.4 | 0.16 | mg/kg | 95% KM (BCA) UCL | ProUCL 4.00.05 |
| | ANTIMONY | mg/kg | 1.1 | 1.4 (NP) | 4 | 1.4 | mg/kg | 95% KM (BCA) UCL | ProUCL 4.00.05 |
| | ARSENIC | mg/kg | 2.6 | 3.1 (N) | 6 | 3.1 | mg/kg | 95% KM (Percentile Bootstrap) UCL | ProUCL 4.00.05 |
| | CADMIUM | mg/kg | 1.1 | 1.2 (L) | 4.5 | 1.2 | mg/kg | 95% KM (Percentile Bootstrap) UCL | ProUCL 4.00.05 |
| | COBALT | mg/kg | 6.1 | 7.0 (N) | 11.7 | 7.0 | mg/kg | 95% Student's-t UCL | ProUCL 4.00.05 |
| | IRON | NA | NA | NA | NA | NA | NA | NA | No data available |
| | LEAD | mg/kg | 58.9 | 140 (G) | 447 | 58.9 | mg/kg | Average Concentration | (2) |
| | MANGANESE | NA | NA | NA | NA | NA | NA | NA | No data available |
| | MERCURY | mg/kg | 0.46 | 0.87 (G) | 2.7 | 0.87 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | MOLYBDENUM | mg/kg | NA | NA | 63 | 63 | mg/kg | Maximum Concentration | (1) |
| | NICKEL | mg/kg | 10.2 | 12.4 (N) | 27 | 12.4 | mg/kg | 95% KM (Percentile Bootstrap) UCL | ProUCL 4.00.05 |
| | VANADIUM | mg/kg | 31.8 | 35.0 (N) | 49 | 35.0 | mg/kg | 95% Student's-t UCL | ProUCL 4.00.05 |
| | DIESEL RANGE ORGANICS | mg/kg | 46.6 | 91.8 (N) | 271 | 91.8 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | GASOLINE RANGE ORGANICS | mg/kg | NA | NA | 1.2 | 1.2 | mg/kg | Maximum Concentration | (1) |
| | HEXAVALENT CHROMIUM[3] | mg/kg | 1.3 | 2.7 (NP) | 9.25 | 2.7 | mg/kg | 95% Chebyshev (Mean, Sd) UCL | ProUCL 4.00.05 |

Notes:

(1) There are less than three detected concentrations reliable statistics cannot be calculated. The maximum concentration is used as the EPC.
(2) The average concentration is used as the EPC for lead.
(3) Calculated by multiplying the total chromium concentration by 0.05.
(4) The maximum concentration considers the original and duplicate sample results and positive detections only. Thus, the maximum concentration presented may differ from that provided by ProUCL, which considers averages of duplicate pairs as well as non-detected results.
(5) See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

Acronyms
NA = Not Applicable
ND = Not Detected

TABLE 3.4.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil

| Exposure Point | Chemical of Potential Concern | Units | Arithmetic Mean | 95% UCL (Distribution) | Maximum Concentration (Qualifier)[4] | Exposure Point Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Value | Units | Statistic | Rationale |
| Tax Block G | 1,2,3-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,2,4-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,4-DICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | BENZO(A)PYRENE EQUIVALENTS[5] | mg/kg | 1.5 | 3.7 (NP) | 38.7 | 3.7 | mg/kg | 97.5% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | AROCLOR-1254 | mg/kg | NA | NA | 0.012 | 0.012 | mg/kg | Maximum Concentration | (1) |
| | AROCLOR-1260 | mg/kg | 0.18 | 0.26 (G) | 1.2 | 0.26 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | ANTIMONY | mg/kg | 1.4 | 1.7 (G) | 3.9 | 1.7 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | ARSENIC | mg/kg | 3.0 | 7.9 (NP) | 37 | 7.9 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | CADMIUM | mg/kg | NA | NA | 14 | 14 | mg/kg | Maximum Concentration | (1) |
| | COBALT | mg/kg | 15.1 | 41.2 (G) | 51.2 | 41.2 | mg/kg | 95% Approximate Gamma UCL | ProUCL 4.00.05 |
| | IRON | NA | NA | NA | NA | NA | NA | NA | No data available |
| | LEAD | mg/kg | 68.3 | 140 | 340 | 68.3 | mg/kg | Average Concentration | (2) |
| | MANGANESE | NA | NA | NA | NA | NA | NA | NA | No data available |
| | MERCURY | mg/kg | 0.48 | 1.8 (G) | 4.2 | 1.8 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | MOLYBDENUM | mg/kg | NA | NA | ND | NA | NA | NA | No data available |
| | NICKEL | mg/kg | 49.3 | 161 (NP) | 280 | 161 | mg/kg | 95% Chebyshev (Mean, Sd) UCL | ProUCL 4.00.05 |
| | VANADIUM | mg/kg | 25.7 | 31.5 (N) | 39.2 | 31.5 | mg/kg | 95% Student's-t UCL | ProUCL 4.00.06 |
| | DIESEL RANGE ORGANICS | mg/kg | 50.1 | 77.4 (N) | 163 | 77.4 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.07 |
| | GASOLINE RANGE ORGANICS | mg/kg | 54.1 | 131 (G) | 810 | 131 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.08 |
| | HEXAVALENT CHROMIUM[3] | mg/kg | 1.1 | 1.3 (G) | 2.4 | 1.3 | mg/kg | 95% Approximate Gamma UCL | ProUCL 4.00.09 |

Notes:

(1) There are less than three detected concentrations reliable statistics cannot be calculated. The maximum concentration is used as the EPC.
(2) The average concentration is used as the EPC for lead.
(3) Calculated by multiplying the total chromium concentration by 0.05.
(4) The maximum concentration considers the original and duplicate sample results and positive detections only. Thus, the maximum concentration presented may differ from that provided by ProUCL, which considers averages of duplicate pairs as well as non-detected results.
(5) See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

Acronyms
NA = Not Applicable
ND = Not Detected

TABLE 3.5.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil
Exposure Medium: Surface Soil

| Exposure Point | Chemical of Potential Concern | Units | Arithmetic Mean | 95% UCL (Distribution) | Maximum Concentration (Qualifier)[5] | Exposure Point Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Value | Units | Statistic | Rationale |
| Tax Block H | 1,2,3-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,2,4-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,4-DICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | BENZO(A)PYRENE EQUIVALENTS[5] | mg/kg | 1.7 | 11.8 (NP) | 45.9 | 11.8 | mg/kg | 99% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | AROCLOR-1254 | mg/kg | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | AROCLOR-1260 | mg/kg | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | ANTIMONY | mg/kg | 0.48 | 0.82 (N) | 1 | 0.82 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | ARSENIC | mg/kg | 2.1 | 3.5 (G) | 6.1 | 3.5 | mg/kg | 95% KM (BCA) UCL | ProUCL 4.00.05 |
| | CADMIUM | mg/kg | 0.12 | 0.20 (N) | 0.5 | 0.2 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | COBALT | mg/kg | 6.5 | 9.3 (G) | 19.7 | 9.3 | mg/kg | 95% Approximate Gamma UCL | ProUCL 4.00.05 |
| | IRON | NA | NA | NA | NA | NA | NA | NA | No data available |
| | LEAD | mg/kg | 6.8 | 9.0 (L) | 18 | 6.8 | mg/kg | Mean Concentration | (1) |
| | MANGANESE | NA | NA | NA | NA | NA | NA | NA | No data available |
| | MERCURY | mg/kg | 0.071 | 0.19 (NP) | 1.14 | 0.19 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | MOLYBDENUM | mg/kg | 0.35 | 0.45 (N) | 0.55 | 0.45 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | NICKEL | mg/kg | 9.1 | 10.9 (N) | 15 | 10.9 | mg/kg | 95% Student's-t UCL | ProUCL 4.00.05 |
| | VANADIUM | mg/kg | 21.7 | 27.2 (G) | 37.9 | 27.2 | mg/kg | 95% Approximate Gamma UCL | ProUCL 4.00.05 |
| | DIESEL RANGE ORGANICS | mg/kg | NA | NA | 242 | 242 | mg/kg | Maximum Concentration | (2) |
| | GASOLINE RANGE ORGANICS | mg/kg | 3.7 | NA(1) | 12 | 12 | mg/kg | Maximum Concentration | (3) |
| | HEXAVALENT CHROMIUM[4] | mg/kg | 0.79 | 1.1 (L) | 1.5 | 1.1 | mg/kg | 95% H-UCL | ProUCL 4.00.05 |

Notes:

(1) The average concentration is used as the EPC for lead.
(2) There are less than five samples meaningful statistics cannot be computed.
(3) There are less than three detected concentrations reliable statistics cannot be calculated. The maximum concentration is used as the EPC.
(4) Calculated by multiplying the total chromium concentration by 0.05.
(5) The maximum concentration considers the original and duplicate sample results and positive detections only. Thus, the maximum concentration presented may differ from that provided by ProUCL, which considers averages of duplicate pairs as well as non-detected results.
(5) See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

Acronyms
NA = Not Applicable
ND = Not Detected

TABLE 3.6.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Subsurface Soil
Exposure Medium: Subsurface Soil

| Exposure Point | Chemical of Potential Concern | Units | Arithmetic Mean | 95% UCL (Distribution) | Maximum Concentration (Qualifier)[4] | Exposure Point Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Value | Units | Statistic | Rationale |
| Tax Block D | 1,2,3-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,2,4-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,3-DICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,4-DICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | NAPHTHALENE (VOC) | mg/kg | 0.072 | NA | 4 | 4.0 | mg/kg | Maximum Concentration | (1) |
| | BENZO(A)PYRENE EQUIVALENTS[5] | mg/kg | 0.25 | 0.65 (NP) | 24.4 | 0.65 | mg/kg | 97.5% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | NAPHTHALENE (PAH) | mg/kg | 0.087 | 0.068 (NP) | 1.6 | 0.068 | mg/kg | 95% KM (BCA) UCL | ProUCL 4.00.05 |
| | AROCLOR-1254 | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | AROCLOR-1260 | mg/kg | NA | NA | 0.24 | 0.24 | mg/kg | Maximum Concentration | (1) |
| | ARSENIC | mg/kg | 4.2 | 4.6 (N) | 14.3 | 4.6 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | COBALT | mg/kg | 10.1 | 11.7 (L) | 33 | 11.7 | mg/kg | 95% H-UCL | ProUCL 4.00.05 |
| | IRON | mg/kg | 27900 | 30900 (N) | 72,900 | 30900 | mg/kg | 95% Student's-t UCL | ProUCL 4.00.05 |
| | LEAD | mg/kg | 22.9 | 46.6 (NP) | 1010 | 22.9 | mg/kg | Average Concentration | (2) |
| | MANGANESE | mg/kg | 56.9 | 67.6 (G) | 326 | 67.6 | mg/kg | 95% Approximate Gamma UCL | ProUCL 4.00.05 |
| | MERCURY | mg/kg | 0.13 | 0.18 (NP) | 3.3 | 0.18 | mg/kg | 95% KM (BCA) UCL | ProUCL 4.00.05 |
| | VANADIUM | mg/kg | 38.6 | 42.2 (N) | 90.5 | 42.2 | mg/kg | 95% Student's-t UCL | ProUCL 4.00.05 |
| | DIESEL RANGE ORGANICS | mg/kg | 22.5 | 40.3 (NP) | 230 | 40.3 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | GASOLINE RANGE ORGANICS | mg/kg | 0.044 | NA | 0.25 | 0.25 | mg/kg | Maximum Concentration | (1) |
| | HEXAVALENT CHROMIUM[3] | mg/kg | 1.1 | 1.4 (NP) | 6 | 1.4 | mg/kg | 95% Chebyshev (Mean, Sd) UCL | ProUCL 4.00.05 |

Notes:

(1) There are less than three detected concentrations reliable statistics cannot be calculated. The maximum concentration is used as the EPC.
(2) The average concentration is used as the EPC for lead.
(3) Calculated by multiplying the total chromium concentration by 0.05.
(4) The maximum concentration considers the original and duplicate sample results and positive detections only. Thus, the maximum concentration presented may differ from that provided by ProUCL, which considers averages of duplicate pairs as well as non-detected results.
(5) See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

Acronyms
NA = Not Applicable
ND = Not Detected

TABLE 3.7.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Subsurface Soil
Exposure Medium: Subsurface Soil

| Exposure Point | Chemical of Potential Concern | Units | Arithmetic Mean | 95% UCL (Distribution) | Maximum Concentration (Qualifier)[4] | Exposure Point Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Value | Units | Statistic | Rationale |
| Tax Block E | 1,2,3-TRICHLOROBENZENE | mg/kg | 25.7 | 165 (L) | 2200 | 165 | mg/kg | 97.5% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | 1,2,4-TRICHLOROBENZENE | mg/kg | 117 | 724 (L) | 9600 | 724 | mg/kg | 97.5% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | 1,3-DICHLOROBENZENE | mg/kg | 0.89 | 4.2 (L) | 38 | 4.2 | mg/kg | 97.5% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | 1,4-DICHLOROBENZENE | mg/kg | 1.9 | 10.4 (L) | 130 | 10.4 | mg/kg | 97.5% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | NAPHTHALENE (VOC) | mg/kg | 0.014 | 0.025 (G) | 0.13 | 0.025 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | BENZO(A)PYRENE EQUIVALENTS[5] | mg/kg | 0.57 | 1.7 (NP) | 39.3 | 1.7 | mg/kg | 95% KM (BCA) UCL | ProUCL 4.00.05 |
| | NAPHTHALENE (PAH) | mg/kg | 0.19 | 0.072 (L) | 0.46 | 0.072 | mg/kg | 95% KM (BCA) UCL | ProUCL 4.00.05 |
| | AROCLOR-1254 | mg/kg | NA | NA | 9.8 | 9.8 | mg/kg | Maximum Concentration | (1) |
| | AROCLOR-1260 | mg/kg | 117 | 709 (NP) | 24000 | 709 | mg/kg | 97.5% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | ARSENIC | mg/kg | 1.3 | 1.5 (G) | 5.5 | 1.5 | mg/kg | 95% Approximate Gamma UCL | ProUCL 4.00.05 |
| | COBALT | mg/kg | 3.3 | 4.0 (G) | 9.1 | 4.0 | mg/kg | 95% Approximate Gamma UCL | ProUCL 4.00.05 |
| | IRON | mg/kg | 14100 | 17100 (G) | 42,200 | 17100 | mg/kg | 95% Approximate Gamma UCL | ProUCL 4.00.05 |
| | LEAD | mg/kg | 3.6 | 4.3 (G) | 14.4 | 3.6 | mg/kg | Average Concentration | (2) |
| | MANGANESE | mg/kg | 58.0 | 93.9 (L) | 280 | 93.9 | mg/kg | 95% H-UCL | ProUCL 4.00.05 |
| | MERCURY | mg/kg | NA | NA | 0.29 | 0.29 | mg/kg | Maximum Concentration | (3) |
| | VANADIUM | mg/kg | 12.4 | 13.8 (N) | 21.1 | 13.8 | mg/kg | 95% Student's-t UCL | ProUCL 4.00.05 |
| | DIESEL RANGE ORGANICS | mg/kg | 826 | 2010 (G) | 28,000 | 2010 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | GASOLINE RANGE ORGANICS | mg/kg | 10.4 | 81.1 (NP) | 170 | 81.1 | mg/kg | 99% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | HEXAVALENT CHROMIUM[3] | mg/kg | 1.2 | 0.49 (G) | 1.2 | 0.49 | mg/kg | 95% KM (BCA) UCL | ProUCL 4.00.05 |

Notes:

(1) There are less than three detected concentrations reliable statistics cannot be calculated. The maximum concentration is used as the EPC.
(2) The average concentration is used as the EPC for lead.
(3) Calculated by multiplying the total chromium concentration by 0.05.
(4) The maximum concentration considers the original and duplicate sample results and positive detections only. Thus, the maximum concentration presented may differ from that provided by ProUCL, which considers averages of duplicate pairs as well as non-detected results.
(5) See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

Acronyms
NA = Not Applicable
ND = Not Detected

TABLE 3.8.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Subsurface Soil
Exposure Medium: Subsurface Soil

| Exposure Point | Chemical of Potential Concern | Units | Arithmetic Mean | 95% UCL (Distribution) | Maximum Concentration (Qualifier)[4] | Exposure Point Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Value | Units | Statistic | Rationale |
| Tax Block F | 1,2,3-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,2,4-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,3-DICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,4-DICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | NAPHTHALENE (VOC) | mg/kg | NA | NA | 159 | 159 | mg/kg | Maximum Concentration | ProUCL 4.00.05 |
| | BENZO(A)PYRENE EQUIVALENTS[5] | mg/kg | 0.10 | 0.22 (NP) | 7.6 | 0.22 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | NAPHTHALENE (PAH) | mg/kg | NA | NA | 31 | 31 | mg/kg | Maximum Concentration | (1) |
| | AROCLOR-1254 | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | AROCLOR-1260 | mg/kg | 0.028 | 0.017 | 0.027 | 0.017 | mg/kg | 95% KM(t) UCL | ProUCL 4.00.05 |
| | ARSENIC | mg/kg | 1.9 | 2.4 (G) | 7.0 | 2.4 | mg/kg | 95% KM (Percentile Bootstrap) UCL | ProUCL 4.00.05 |
| | COBALT | mg/kg | 9.5 | 18.7 (NP) | 32.3 | 18.7 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | IRON | NA | NA | NA | NA | NA | NA | NA | No data available |
| | LEAD | mg/kg | 10.4 | 20.9 (NP) | 81 | 10.4 | mg/kg | Average Concentration | (2) |
| | MANGANESE | NA | NA | NA | NA | NA | NA | NA | No data available |
| | MERCURY | mg/kg | 0.19 | 0.27 (G) | 1.8 | 0.27 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | VANADIUM | mg/kg | 34.9 | 39.9 (N) | 61.6 | 39.9 | mg/kg | Use 95% Student's-t UCL | ProUCL 4.00.05 |
| | DIESEL RANGE ORGANICS | mg/kg | 48.9 | 522 (L) | 881 | 522 | mg/kg | 99% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | GASOLINE RANGE ORGANICS | mg/kg | NA | NA | 21.2 | 21.2 | mg/kg | Maximum Concentration | (1) |
| | HEXAVALENT CHROMIUM[3] | mg/kg | 0.86 | 0.98 (G) | 2.0 | 0.98 | mg/kg | 95% KM (BCA) UCL | ProUCL 4.00.05 |

Notes:
(1) There are less than three detected concentrations reliable statistics cannot be calculated. The maximum concentration is used as the EPC.
(2) The average concentration is used as the EPC for lead.
(3) Calculated by multiplying the total chromium concentration by 0.05.
(4) The maximum concentration considers the original and duplicate sample results and positive detections only. Thus, the maximum concentration presented may differ from that provided by ProUCL, which considers averages of duplicate pairs as well as non-detected results.
(5) See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

Acronyms
NA = Not Applicable
ND = Not Detected

TABLE 3.9.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Subsurface Soil
Exposure Medium: Subsurface Soil

| Exposure Point | Chemical of Potential Concern | Units | Arithmetic Mean | 95% UCL (Distribution) | Maximum Concentration (Qualifier)[4] | Exposure Point Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Value | Units | Statistic | Rationale |
| Tax Block G | 1,2,3-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,2,4-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,3-DICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,4-DICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | NAPHTHALENE (VOC) | mg/kg | 0.054 | 0.063 (G) | 0.62 | 0.063 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | BENZO(A)PYRENE EQUIVALENTS[5] | mg/kg | 0.65 | 1.3 (NP) | 57.1 | 1.3 | mg/kg | 97.5% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | NAPHTHALENE (PAH) | mg/kg | 0.051 | 0.037 (G) | 0.51 | 0.037 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | AROCLOR-1254 | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | AROCLOR-1260 | mg/kg | NA | NA | 0.014 | 0.014 | mg/kg | Maximum Concentration | (1) |
| | ARSENIC | mg/kg | 2.9 | 3.6 (N) | 8.5 | 3.6 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | COBALT | mg/kg | 11.3 | 31.0 (G) | 68.1 | 31.0 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | IRON | mg/kg | NA | NA | 17,200 | 17200 | mg/kg | Maximum Concentration | (1) |
| | LEAD | mg/kg | 7.0 | 8.4 (G) | 18 | 8.4 | mg/kg | Average Concentration | (2) |
| | MANGANESE | mg/kg | NA | NA | 123 | 123 | mg/kg | Maximum Concentration | (1) |
| | MERCURY | mg/kg | 0.029 | 0.014 (NP) | 0.03 | 0.014 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | VANADIUM | mg/kg | 36.6 | 46.3 (N) | 72.7 | 46.3 | mg/kg | 95% Student's-t UCL | ProUCL 4.00.05 |
| | DIESEL RANGE ORGANICS | mg/kg | 16.2 | 21.7 (G) | 105 | 21.7 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | GASOLINE RANGE ORGANICS | mg/kg | 782 | 131 (G) | 980 | 131 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | HEXAVALENT CHROMIUM[3] | mg/kg | 0.95 | 1.1 (N) | 2 | 1.1 | mg/kg | 95% Student's-t UCL | ProUCL 4.00.05 |

Notes:

(1) There are less than three detected concentrations reliable statistics cannot be calculated. The maximum concentration is used as the EPC.
(2) The average concentration is used as the EPC for lead.
(3) Calculated by multiplying the total chromium concentration by 0.05.
(4) The maximum concentration considers the original and duplicate sample results and positive detections only. Thus, the maximum concentration presented may differ from that provided by ProUCL, which considers averages of duplicate pairs as well as non-detected results.
(5) See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

Acronyms
NA = Not Applicable
ND = Not Detected

TABLE 3.10.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Subsurface Soil
Exposure Medium: Subsurface Soil

| Exposure Point | Chemical of Potential Concern | Units | Arithmetic Mean | 95% UCL (Distribution) | Maximum Concentration (Qualifier)[3] | Exposure Point Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Value | Units | Statistic | Rationale |
| Tax Block H | 1,2,3-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,2,4-TRICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,3-DICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | 1,4-DICHLOROBENZENE | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | NAPHTHALENE (VOC) | mg/kg | 0.014 | 0.025 (G) | 0.13 | 0.025 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | BENZO(A)PYRENE EQUIVALENTS[4] | mg/kg | 0.13 | 0.25 (L) | 5.3 | 0.25 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | NAPHTHALENE (PAH) | mg/kg | 0.12 | 0.15 (N) | 1.2 | 0.15 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | AROCLOR-1254 | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | AROCLOR-1260 | NA | NA | NA | ND | NA | NA | NA | Chemical not detected |
| | ARSENIC | mg/kg | 2.8 | 3.6 (N) | 7.4 | 3.6 | mg/kg | 95% KM (Percentile Bootstrap) UCL | ProUCL 4.00.05 |
| | COBALT | mg/kg | 9.4 | 12.9 (G) | 30.8 | 12.9 | mg/kg | 95% Approximate Gamma UCL | ProUCL 4.00.05 |
| | IRON | NA | NA | NA | NA | NA | NA | NA | No data available |
| | LEAD | mg/kg | 7.2 | 9.0 (N) | 17 | 7.2 | mg/kg | Average Concentration | (1) |
| | MANGANESE | NA | NA | NA | NA | NA | NA | NA | No data available |
| | MERCURY | mg/kg | 0.018 | 0.031 (L) | 0.24 | 0.031 | mg/kg | 95% KM (BCA) UCL | ProUCL 4.00.05 |
| | VANADIUM | mg/kg | 33.5 | 38.1 (N) | 52.9 | 38.1 | mg/kg | 95% Student's-t UCL | ProUCL 4.00.05 |
| | DIESEL RANGE ORGANICS | mg/kg | 38.8 | 130 (G) | 173 | 130 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 4.00.05 |
| | GASOLINE RANGE ORGANICS | mg/kg | 3.5 | 2.6 (N) | 9 | 2.6 | mg/kg | 95% KM (t) UCL | ProUCL 4.00.05 |
| | HEXAVALENT CHROMIUM[2] | mg/kg | 1.4 | 1.8 (G) | 4.5 | 1.8 | mg/kg | 95% Approximate Gamma UCL | ProUCL 4.00.05 |

Notes:
(1) The average concentration is used as the EPC for lead.
(2) Calculated by multiplying the total chromium concentration by 0.05.
(3) The maximum concentration considers the original and duplicate sample results and positive detections only. Thus, the maximum concentration presented may differ from that provided by ProUCL, which considers averages of duplicate pairs as well as non-detected results.
(4) See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

Acronyms
NA = Not Applicable
ND = Not Detected

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**VALUES USED FOR DAILY INTAKE CALCULATIONS**


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| 4.2.RME | Construction Workers Exposed to Air Emissions from Surface Soil/Subsurface Soil |
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TABLE 4.1.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - CONSTRUCTION WORKERS- SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Ingestion | Construction Workers | Adult | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002a | Intake (mg/kg/day) = |
| | | | | IR-S | Ingestion Rate | 480 | mg/day | USEPA, 2002b | |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | CS x IRS x CF3 x FI x EF x ED |
| | | | | FI | Fraction Ingested | 1 | unitless | USEPA, 2002b | BW x AT |
| | | | | EF | Exposure Frequency | 250 | days/year | (1) | |
| | | | | ED | Exposure Duration | 1 | years | (1) | |
| | | | | BW | Body Weight | 70 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 365 | days | USEPA, 1989 | |
| Dermal | Construction Workers | Adult | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002a | Dermally Absorbed Dose (mg/kg/day) = |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | |
| | | | | SA | Skin Surface Available for Contact | 3280 | cm2 | USEPA, 2004 | CS x CF3 x SA x SSAF x DABS x EV x EF x ED |
| | | | | SSAF | Soil to Skin Adherence Factor | 0.3 | mg/cm2/event | USEPA, 2004 | BW x AT |
| | | | | DABS | Absorption Factor | Chemical Specific | unitless | USEPA, 2004 | |
| | | | | EV | Events Frequency | 1 | events/day | USEPA, 2004 | |
| | | | | EF | Exposure Frequency | 250 | days/year | (1) | |
| | | | | ED | Exposure Duration | 1 | years | (1) | |
| | | | | BW | Body Weight | 70 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 365 | days | USEPA, 1989 | |

Notes:

1 - Professional judgment.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.

USEPA, 2002a:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

**Unit Intake Calculations**

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 6.71E-08 Cancer Dermal Intake = 1.38E-07

Noncancer Ingestion Intake = 4.70E-06 Noncancer Dermal Intake = 9.63E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.2.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - CONSTRUCTION WORKERS - SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Inhalation | Construction Workers | Adult | Tax Block Soils | CA | Chemical concentration in air | Calculated | mg/m3 | USEPA, 2002a | Exposure Concentration ($mg/m^3$) = |
| | | | | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002b | |
| | | | | ET | Exposure Time | 8 | hours/day | (1) | $\frac{CA \times ET \times EF \times ED}{AT \times 24\ hours/day}$ |
| | | | | EF | Exposure Frequency | 250 | days/year | (1) | |
| | | | | ED | Exposure Duration | 1 | years | (1) | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | CA = (1/PEF + 1/VF) x Cs |
| | | | | AT-N | Averaging Time (Non-Cancer) | 365 | days | USEPA, 1989 | |
| | | | | PEF | Particulate Emission Factor | 1.43E+06 | m3/kg | USEPA, 2002a | |
| | | | | VF | Volatilization Factor | Chemical-specific | m3/kg | USEPA, 2002a | |

Notes:

1 - Professional judgment.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

**Unit Intake Calculations**

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Cancer Inhalation Intake = 3.26E-03 Noncancer Inhalation Intake = 2.28E-01

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.3.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - INDUSTRIAL WORKERS - SOIL

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Ingestion | Industrial Workers | Adult | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002a | Intake (mg/kg/day) = |
| | | | | IR-S | Ingestion Rate | 50 | mg/day | USEPA, 2002b | |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | CS x IRS x CF3 x FI x EF x ED |
| | | | | FI | Fraction Ingested | 1 | unitless | USEPA, 2002b | BW x AT |
| | | | | EF | Exposure Frequency | 250 | days/year | USEPA, 2002b | |
| | | | | ED | Exposure Duration | 25 | years | USEPA, 2002b | |
| | | | | BW | Body Weight | 70 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 9125 | days | USEPA, 1989 | |
| Dermal | Industrial Workers | Adult | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Dermally Absorbed Dose (mg/kg/day) = |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | |
| | | | | SA | Skin Surface Available for Contact | 3300 | cm2 | USEPA, 2004 | CS x CF3 x SA x SSAF x DABS x EV x EF x ED |
| | | | | SSAF | Soil to Skin Adherence Factor | 0.2 | mg/cm2/event | USEPA, 2004 | BW x AT |
| | | | | DABS | Absorption Factor | Chemical Specific | unitless | USEPA, 2004 | |
| | | | | EV | Events Frequency | 1 | events/day | USEPA, 2004 | |
| | | | | EF | Exposure Frequency | 250 | days/year | USEPA, 2002b | |
| | | | | ED | Exposure Duration | 25 | years | USEPA, 1989 | |
| | | | | BW | Body Weight | 70 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 9125 | days | USEPA, 1989 | |

Sources:


USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.

USEPA, 2002a:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.


**Unit Intake Calculations**

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 1.75E-07 Cancer Dermal Intake = 2.31E-06

Noncancer Ingestion Intake = 4.89E-07 Noncancer Dermal Intake = 6.46E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.4.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - INDUSTRIAL WORKERS - SOIL TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Inhalation | Industrial Workers | Adult | Tax Block Soils | CA | Chemical concentration in air | Calculated | mg/m3 | USEPA, 2002a | Exposure Concentration ($mg/m^3$) = |
| | | | | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002b | |
| | | | | ET | Exposure Time | 8 | hours/day | (1) | $\frac{CA \times ET \times EF \times ED}{AT \times 24\ hours/day}$ |
| | | | | EF | Exposure Frequency | 250 | days/year | USEPA, 2002a | |
| | | | | ED | Exposure Duration | 25 | years | USEPA, 2002a | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | CA = (1/PEF + 1/VF) x Cs |
| | | | | AT-N | Averaging Time (Non-Cancer) | 9125 | days | USEPA, 1989 | |
| | | | | PEF | Particulate Emission Factor | 3.23E+09 | m3/kg | USEPA 2010 | |
| | | | | VF | Volatilization Factor | Chemical-specific | m3/kg | USEPA, 2002a | |
| | | | | Q/C | Inverse of mean concentration at center of source | 87.36898 | g/m2-s per kg/m3 | USEPA 2010 | |
| | | | | Ut | Equivalent threshold of wind velocity at 7m. | 11.32 | m/sec | USEPA 2010 | |
| | | | | Um | Mean annual wind speed | 4.29 | m/sec | USEPA 2010 | |
| | | | | V | Fraction of vegetative cover | 0.5 | unitless | USEPA 2010 | |
| | | | | F(x) | Function dependent of Um/Ut | 0.0993 | unitless | USEPA 2010 | |

Notes:

1 - Length of typical work day.

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2010: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.

**Unit Intake Calculations**

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Cancer Inhalation Intake = 8.15E-02 Noncancer Inhalation Intake = 2.28E-01

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.5.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - CHILD COMMERCIAL RECEPTORS - SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Ingestion | Commercial | Child | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Intake (mg/kg/day) = |
| | | | | IR-S | Ingestion Rate | 200 | mg/day | MDE, 2008 | |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | CS x IRS x CF3 x FI x EF x ED |
| | | | | FI | Fraction Ingested | 1 | unitless | (1), MDE, 2008 | BW x AT |
| | | | | EF | Exposure Frequency | 132 | days/year | MDE, 2008 | |
| | | | | ED1 | Exposure Duration (Age 0 - 2) | 2 | years | (2), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 2 - 6) | 4 | years | (2), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 15 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 2190 | days | USEPA, 1989 | |
| Dermal | Commercial | Child | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Dermally Absorbed Dose (mg/kg/day) = |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | |
| | | | | SA | Skin Surface Available for Contact | 2,350 | cm2 | MDE, 2008 | CS x CF3 x SA x SSAF x DABS x EV x EF x ED |
| | | | | SSAF | Soil to Skin Adherence Factor | 0.2 | mg/cm2/event | MDE, 2008 | BW x AT |
| | | | | DABS | Absorption Factor | Chemical Specific | unitless | USEPA, 2004 | |
| | | | | EV | Events Frequency | 1 | events/day | MDE, 2008 | |
| | | | | EF | Exposure Frequency | 132 | days/year | MDE, 2008 | |
| | | | | ED1 | Exposure Duration (Age 0 - 2) | 2 | years | (2), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 2 - 6) | 4 | years | (2), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 15 | kg | MDE, 2008 | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 2190 | days | USEPA, 1989 | |

Notes:

1 - Same as child resident.

2 - Children will be evaluated as one age group (0 - 6 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, children commercial receptors will be evaluated as two age groups, 0 - 2 years and 2 - 6 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

**Unit Intake Calculations**

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 0 - 6) = 4.13E-07 Cancer Dermal Intake (Age 0 - 6) = 9.71E-07

Mutagenic Chemicals

Cancer Ingestion Intake (Age 0 - 2) = 1.38E-07 Cancer Dermal Intake (Age 0 - 2) = 3.24E-07

Cancer Ingestion Intake (Age 2 - 6) = 2.76E-07 Cancer Dermal Intake (Age 2 - 6) = 6.48E-07

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 4.82E-06 Noncancer Dermal Intake = 1.13E-05

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.6.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - CHILD COMMERCIAL RECEPTORS - SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Inhalation | Commercial | Child | Tax Block Soils | CA | Chemical concentration in air | Calculated | mg/m3 | USEPA, 2002a | Exposure Concentration ($mg/m^3$) = |
| | | | | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002b | |
| | | | | ET | Exposure Time | 4 | hours/day | MDE, 2008 | $\frac{CA \times ET \times EF \times ED}{AT \times 24\ hours/day}$ |
| | | | | EF | Exposure Frequency | 132 | days/year | MDE, 2008 | |
| | | | | ED1 | Exposure Duration (Age 0 - 2) | 2 | years | (1), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 2 - 6) | 4 | years | (1), USEPA, 1989, 2005 | CA = (1/PEF + 1/VF) x Cs |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 2,190 | days | USEPA, 1989 | |
| | | | | PEF | Particulate Emission Factor | 3.23E+09 | m3/kg | USEPA 2010 | |
| | | | | VF | Volatilization Factor | Chemical-specific | m3/kg | USEPA, 2002a | |
| | | | | Q/C | Inverse of mean concentration at center of source | 87.36898 | g/m2-s per kg/m3 | USEPA 2010 | |
| | | | | Ut | Equivalent threshold of wind velocity at 7m. | 11.32 | m/sec | USEPA 2010 | |
| | | | | Um | Mean annual wind speed | 4.29 | m/sec | USEPA 2010 | |
| | | | | V | Fraction of vegetative cover | 0.5 | unitless | USEPA 2010 | |
| | | | | F(x) | Function dependent of Um/Ut | 0.0993 | unitless | USEPA 2010 | |

Notes:

1 - Children will be evaluated as one age group (0 - 6 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, children commercial receptors will be evaluated as two age groups, 0 - 2 years and 2 - 6 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:


MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2010: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.


**Unit Intake Calculations**

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Non-Mutagenic Chemicals

Cancer Inhalation Intake (Age 0 - 6) = 5.17E-03 Noncancer Inhalation Intake = 6.03E-02

Mutagenic Chemicals

Cancer Inhalation Intake (Age 0 - 2) = 1.72E-03

Cancer Inhalation Intake (Age 2 - 6) = 3.44E-03

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.7.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADOLESCENT COMMERCIAL RECEPTORS - SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Ingestion | Commercial | Adolescent | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Intake (mg/kg/day) = |
| | | | | IR-S | Ingestion Rate | 100 | mg/day | MDE, 2008 | |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | CS x IRS x CF3 x FI x EF x ED |
| | | | | FI | Fraction Ingested | 1 | unitless | (1), MDE, 2008 | BW x AT |
| | | | | EF | Exposure Frequency | 132 | days/year | MDE, 2008 | |
| | | | | ED | Exposure Duration (Age 6 - 16) | 10 | years | (2), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 16 - 18) | 2 | years | (2), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 40 | kg | MDE, 2008 | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4380 | days | USEPA, 1989 | |
| Dermal | Commercial | Adolescent | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Dermally Absorbed Dose (mg/kg/day) = |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | |
| | | | | SA | Skin Surface Available for Contact | 4,320 | cm2 | MDE, 2008 | CS x CF3 x SA x SSAF x DABS x EV x EF x ED |
| | | | | SSAF | Soil to Skin Adherence Factor | 0.2 | mg/cm2/event | MDE, 2008 | BW x AT |
| | | | | DABS | Absorption Factor | Chemical Specific | unitless | USEPA, 2004 | |
| | | | | EV | Events Frequency | 1 | events/day | MDE, 2008 | |
| | | | | EF | Exposure Frequency | 132 | days/year | MDE, 2008 | |
| | | | | ED | Exposure Duration (Age 6 - 16) | 10 | years | (2), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 16 - 18) | 2 | years | (2), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 40 | kg | MDE, 2008 | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4380 | days | USEPA, 1989 | |

Notes:

1 - Same as adolescent resident.

2 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

**Unit Intake Calculations**

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 18) = 1.55E-07 Cancer Dermal Intake (Age 6 - 18) = 1.34E-06

Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 16) = 1.29E-07 Cancer Dermal Intake (Age 6 - 16) = 1.12E-06

Cancer Ingestion Intake (Age 16 - 18) = 2.58E-08 Cancer Dermal Intake (Age 16 - 18) = 2.23E-07

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 9.04E-07 Noncancer Dermal Intake = 7.81E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.8.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADOLESCENT COMMERCIAL RECEPTORS - SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Inhalation | Commercial | Adolescent | Tax Block Soils | CA | Chemical concentration in air | Calculated | mg/m3 | USEPA, 2002a | Exposure Concentration ($mg/m^3$) = |
| | | | | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002b | |
| | | | | ET | Exposure Time | 4 | hours/day | (1), MDE, 2008 | $\frac{CA \times ET \times EF \times ED}{AT \times 24\ hours/day}$ |
| | | | | EF | Exposure Frequency | 132 | days/year | (1), MDE, 2008 | |
| | | | | ED | Exposure Duration (Age 6 - 16) | 10 | years | (2), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 16 - 18) | 2 | years | (2), USEPA, 1989, 2005 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | CA = (1/PEF + 1/VF) x Cs |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4,380 | days | USEPA, 1989 | |
| | | | | PEF | Particulate Emission Factor | 3.23E+09 | m3/kg | USEPA 2010 | |
| | | | | VF | Volatilization Factor | Chemical-specific | m3/kg | USEPA, 2002a | |
| | | | | Q/C | Inverse of mean concentration at center of source | 87.36898 | g/m2-s per kg/m3 | USEPA 2010 | |
| | | | | Ut | Equivalent threshold of wind velocity at 7m. | 11.32 | m/sec | USEPA 2010 | |
| | | | | Um | Mean annual wind speed | 4.29 | m/sec | USEPA 2010 | |
| | | | | V | Fraction of vegetative cover | 0.5 | unitless | USEPA 2010 | |
| | | | | F(x) | Function dependent of Um/Ut | 0.0993 | unitless | USEPA 2010 | |

Notes:

1 - Assume on site 8 hours per day 132 days per year.

2 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2010: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.

**Unit Intake Calculations**

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Non-Mutagenic Chemicals

Cancer Inhalation Intake (Age 6 - 18) = 1.03E-02 Noncancer Inhalation Intake = 6.03E-02

Mutagenic Chemicals

Cancer Inhalation Intake (Age 6 - 16) = 8.61E-03

Cancer Inhalation Intake (Age 16 - 18) = 1.72E-03

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.9.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADULT COMMERCIAL RECEPTORS - SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Ingestion | Commercial | Adult | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Intake (mg/kg/day) = |
| | | | | IR-S | Ingestion Rate | 50 | mg/day | MDE, 2008 | |
| | | | | CF3 | Conversion Factor 3 | 1.0E-06 | kg/mg | -- | CS x IRS x CF3 x FI x EF x ED |
| | | | | FI | Fraction Ingested | 1 | unitless | MDE, 2008 | BW x AT |
| | | | | EF | Exposure Frequency | 250 | days/year | MDE, 2008 | |
| | | | | ED | Exposure Duration (Age 16 - 30) | 25 | years | MDE, 2008 | |
| | | | | BW | Body Weight | 70 | kg | MDE, 2008 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 9,125 | days | USEPA, 1989 | |
| Dermal | Commercial | Adult | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Dermally Absorbed Dose (mg/kg/day) = |
| | | | | CF3 | Conversion Factor 3 | 1.0E-06 | kg/mg | -- | |
| | | | | SA | Skin Surface Available for Contact | 3,300 | cm2 | MDE, 2008 | CS x CF3 x SA x SSAF x DABS x EV x EF x ED |
| | | | | SSAF | Soil to Skin Adherence Factor | 0.2 | mg/cm2/event | MDE, 2008 | BW x AT |
| | | | | DABS | Absorption Factor | Chemical Specific | unitless | USEPA, 2004 | |
| | | | | EV | Events Frequency | 1 | events/day | MDE, 2008 | |
| | | | | EF | Exposure Frequency | 250 | days/year | MDE, 2008 | |
| | | | | ED | Exposure Duration (Age 16 - 30) | 25 | years | MDE, 2008 | |
| | | | | BW | Body Weight | 70 | kg | MDE, 2008 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 9,125 | days | USEPA, 1989 | |

Notes:

1 - Same as adult resident.

Sources:

MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

**Unit Intake Calculations**

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 16 - 30) = 1.75E-07 Cancer Dermal Intake (Age 16 - 30) = 2.31E-06

Mutagenic Chemicals

Cancer Ingestion Intake (Age 16 - 30) = 1.75E-07 Cancer Dermal Intake (Age 16 - 30) = 2.31E-06

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 4.89E-07 Noncancer Dermal Intake = 6.46E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.10.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADULT COMMERCIAL RECEPTORS - SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Inhalation | Commercial | Adult | Tax Block Soils | CA | Chemical concentration in air | Calculated | mg/m3 | USEPA, 2002a | Exposure Concentration ($mg/m^3$) = |
| | | | | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002b | |
| | | | | ET | Exposure Time | 8 | hours/day | (1), MDE, 2008 | $\frac{CA \times ET \times EF \times ED}{AT \times 24\ hours/day}$ |
| | | | | EF | Exposure Frequency | 250 | days/year | (1), MDE, 2008 | |
| | | | | ED | Exposure Duration (Age 16 - 30) | 25 | years | (2), USEPA, 1989, 2005 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | CA = (1/PEF + 1/VF) x Cs |
| | | | | AT-N | Averaging Time (Non-Cancer) | 9125 | days | USEPA, 1989 | |
| | | | | PEF | Particulate Emission Factor | 3.23E+09 | m3/kg | USEPA 2010 | |
| | | | | VF | Volatilization Factor | Chemical-specific | m3/kg | USEPA, 2002a | |
| | | | | Q/C | Inverse of mean concentration at center of source | 87.36898 | g/m2-s per kg/m3 | USEPA 2010 | |
| | | | | Ut | Equivalent threshold of wind velocity at 7m. | 11.32 | m/sec | USEPA 2010 | |
| | | | | Um | Mean annual wind speed | 4.29 | m/sec | USEPA 2010 | |
| | | | | V | Fraction of vegetative cover | 0.5 | unitless | USEPA 2010 | |
| | | | | F(x) | Function dependent of Um/Ut | 0.0993 | unitless | USEPA 2010 | |

Notes:

1 - Professional judgment. Assume on site 8 hours per day 250 days per year.

2 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:


MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2010: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.


**Unit Intake Calculations**

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Non-Mutagenic Chemicals

Cancer Inhalation Intake (Age 16 - 30) = 8.15E-02

Noncarcinogenic Chemicals

Noncancer Inhalation Intake = 2.28E-01

Mutagenic Chemicals

Cancer Inhalation Intake (Age 16 - 30) = 8.15E-02

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.11.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - CHILD RECREATIONAL USERS - SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Ingestion | Recreational User | Child | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Intake (mg/kg/day) = |
| | | | | IR-S | Ingestion Rate | 200 | mg/day | USEPA, 1991 | |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | CS x IRS x CF3 x FI x EF x ED |
| | | | | FI | Fraction Ingested | 1 | unitless | (1) | BW x AT |
| | | | | EF | Exposure Frequency | 250 | days/year | MDE, 2008 | |
| | | | | ED1 | Exposure Duration (Age 0 - 2) | 2 | years | (2), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 2 - 6) | 4 | years | (2), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 15 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 2190 | days | USEPA, 1989 | |
| Dermal | Recreational User | Child | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Dermally Absorbed Dose (mg/kg/day) = |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | |
| | | | | SA | Skin Surface Available for Contact | 2,800 | cm2 | USEPA, 2004 | CS x CF3 x SA x SSAF x DABS x EV x EF x ED |
| | | | | SSAF | Soil to Skin Adherence Factor | 0.2 | mg/cm2/event | USEPA, 2004 | BW x AT |
| | | | | DABS | Absorption Factor | Chemical Specific | unitless | USEPA, 2004 | |
| | | | | EV | Events Frequency | 1 | events/day | USEPA, 2004 | |
| | | | | EF | Exposure Frequency | 250 | days/year | MDE, 2008 | |
| | | | | ED1 | Exposure Duration (Age 0 - 2) | 2 | years | (2), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 2 - 6) | 4 | years | (2), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 15 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 2190 | days | USEPA, 1989 | |

Notes:

1 - Same as child resident.

2 - Children will be evaluated as one age group (0 - 6 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, children recreational users will be evaluated as two age groups, 0 - 2 years and 2 - 6 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1991: Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. OSWER Directive 9285.6-03.

USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

**Unit Intake Calculations**

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 0 - 6) = 7.83E-07 Cancer Dermal Intake (Age 0 - 6) = 2.19E-06

Mutagenic Chemicals

Cancer Ingestion Intake (Age 0 - 2) = 2.61E-07 Cancer Dermal Intake (Age 0 - 2) = 7.31E-07

Cancer Ingestion Intake (Age 2 - 6) = 5.22E-07 Cancer Dermal Intake (Age 2 - 6) = 1.46E-06

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 9.13E-06 Noncancer Dermal Intake = 2.56E-05

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.12.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - CHILD RECREATIONAL USERS - SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Inhalation | Recreational User | Child | Tax Block Soils | CA | Chemical concentration in air | Calculated | mg/m3 | USEPA, 2002a | Exposure Concentration ($mg/m^3$) = |
| | | | | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002b | |
| | | | | ET | Exposure Time | 8 | hours/day | (1) | $\frac{CA \times ET \times EF \times ED}{AT \times 24\ hours/day}$ |
| | | | | EF | Exposure Frequency | 250 | days/year | (1) | |
| | | | | ED1 | Exposure Duration (Age 0 - 2) | 2 | years | (2), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 2 - 6) | 4 | years | (2), USEPA, 1989, 2005 | CA = (1/PEF + 1/VF) x Cs |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 2,190 | days | USEPA, 1989 | |
| | | | | PEF | Particulate Emission Factor | 3.23E+09 | m3/kg | USEPA 2010 | |
| | | | | VF | Volatilization Factor | Chemical-specific | m3/kg | USEPA, 2002a | |
| | | | | Q/C | Inverse of mean concentration at center of source | 87.36898 | g/m2-s per kg/m3 | USEPA 2010 | |
| | | | | Ut | Equivalent threshold of wind velocity at 7m. | 11.32 | m/sec | USEPA 2010 | |
| | | | | Um | Mean annual wind speed | 4.29 | m/sec | USEPA 2010 | |
| | | | | V | Fraction of vegetative cover | 0.5 | unitless | USEPA 2010 | |
| | | | | F(x) | Function dependent of Um/Ut | 0.0993 | unitless | USEPA 2010 | |

Notes:

1 - Assume on site for 8 hours per day 250 days per year.

2 - Children will be evaluated as one age group (0 - 6 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, children recreational users will be evaluated as two age groups, 0 - 2 years and 2 - 6 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2010: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.

**Unit Intake Calculations**

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Non-Mutagenic Chemicals

Cancer Inhalation Intake (Age 0 - 6) = 1.96E-02 Noncancer Inhalation Intake = 2.28E-01

Mutagenic Chemicals

Cancer Inhalation Intake (Age 0 - 2) = 6.52E-03

Cancer Inhalation Intake (Age 2 - 6) = 1.30E-02

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.13.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADOLESCENT RECREATIONAL USERS - SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Ingestion | Recreational User | Adolescent | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Intake (mg/kg/day) = |
| | | | | IR-S | Ingestion Rate | 100 | mg/day | USEPA, 1991 | |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | CS x IRS x CF3 x FI x EF x ED |
| | | | | FI | Fraction Ingested | 1 | unitless | (1) | BW x AT |
| | | | | EF | Exposure Frequency | 250 | days/year | MDE, 2008 | |
| | | | | ED | Exposure Duration (Age 6 - 16) | 10 | years | (2), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 16 - 18) | 2 | years | (2), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 40 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4380 | days | USEPA, 1989 | |
| Dermal | Recreational User | Adolescent | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Dermally Absorbed Dose (mg/kg/day) = |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | |
| | | | | SA | Skin Surface Available for Contact | 4,320 | cm2 | USEPA, 2004 | CS x CF3 x SA x SSAF x DABS x EV x EF x ED |
| | | | | SSAF | Soil to Skin Adherence Factor | 0.07 | mg/cm2/event | USEPA, 2004 | BW x AT |
| | | | | DABS | Absorption Factor | Chemical Specific | unitless | USEPA, 2004 | |
| | | | | EV | Events Frequency | 1 | events/day | USEPA, 2004 | |
| | | | | EF | Exposure Frequency | 250 | days/year | MDE, 2008 | |
| | | | | ED | Exposure Duration (Age 6 - 16) | 10 | years | (2), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 16 - 18) | 2 | years | (2), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 40 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4380 | days | USEPA, 1989 | |

Notes:

1 - Same as adolescent resident.

2 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1991: Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors. OSWER Directive 9285.6-03.

USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

**Unit Intake Calculations**

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 18) = 2.94E-07 Cancer Dermal Intake (Age 6 - 18) = 8.88E-07

Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 16) = 2.45E-07 Cancer Dermal Intake (Age 6 - 16) = 7.40E-07

Cancer Ingestion Intake (Age 16 - 18) = 4.89E-08 Cancer Dermal Intake (Age 16 - 18) = 1.48E-07

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 1.71E-06 Noncancer Dermal Intake = 5.18E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.14.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADOLESCENT RECREATIONAL USERS - SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Inhalation | Recreational User | Adolescent | Tax Block Soils | CA | Chemical concentration in air | Calculated | mg/m3 | USEPA, 2002a | Exposure Concentration ($mg/m^3$) = |
| | | | | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002b | |
| | | | | ET | Exposure Time | 8 | hours/day | (1) | $\frac{CA \times ET \times EF \times ED}{AT \times 24\ hours/day}$ |
| | | | | EF | Exposure Frequency | 250 | days/year | (1) | |
| | | | | ED | Exposure Duration (Age 6 - 16) | 10 | years | (2), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 16 - 18) | 2 | years | (2), USEPA, 1989, 2005 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | CA = (1/PEF + 1/VF) x Cs |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4,380 | days | USEPA, 1989 | |
| | | | | PEF | Particulate Emission Factor | 3.23E+09 | m3/kg | USEPA 2010 | |
| | | | | VF | Volatilization Factor | Chemical-specific | m3/kg | USEPA, 2002a | |
| | | | | Q/C | Inverse of mean concentration at center of source | 87.36898 | g/m2-s per kg/m3 | USEPA 2010 | |
| | | | | Ut | Equivalent threshold of wind velocity at 7m. | 11.32 | m/sec | USEPA 2010 | |
| | | | | Um | Mean annual wind speed | 4.29 | m/sec | USEPA 2010 | |
| | | | | V | Fraction of vegetative cover | 0.5 | unitless | USEPA 2010 | |
| | | | | F(x) | Function dependent of Um/Ut | 0.0993 | unitless | USEPA 2010 | |

Notes:

1 - Assume on site for 8 hours per day 250 days per year.

2 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2010: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.

**Unit Intake Calculations**

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Non-Mutagenic Chemicals

Cancer Inhalation Intake (Age 6 - 18) = 3.91E-02 Noncancer Inhalation Intake = 2.28E-01

Mutagenic Chemicals

Cancer Inhalation Intake (Age 6 - 16) = 3.26E-02

Cancer Inhalation Intake (Age 16 - 18) = 6.52E-03

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.15.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADULT RECREATIONAL USERS - SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Ingestion | Recreational User | Adult | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Intake (mg/kg/day) = |
| | | | | IR-S | Ingestion Rate | 100 | mg/day | USEPA, 1991 | |
| | | | | CF3 | Conversion Factor 3 | 1.0E-06 | kg/mg | -- | CS x IRS x CF3 x FI x EF x ED |
| | | | | FI | Fraction Ingested | 1 | unitless | (1) | BW x AT |
| | | | | EF | Exposure Frequency | 250 | days/year | MDE, 2008 | |
| | | | | ED | Exposure Duration (Age 18 - 30) | 12 | years | (2), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 70 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4,380 | days | USEPA, 1989 | |
| Dermal | Recreational User | Adult | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Dermally Absorbed Dose (mg/kg/day) = |
| | | | | CF3 | Conversion Factor 3 | 1.0E-06 | kg/mg | -- | |
| | | | | SA | Skin Surface Available for Contact | 5,700 | cm2 | USEPA, 2004 | CS x CF3 x SA x SSAF x DABS x EV x EF x ED |
| | | | | SSAF | Soil to Skin Adherence Factor | 0.07 | mg/cm2/event | USEPA, 2004 | BW x AT |
| | | | | DABS | Absorption Factor | Chemical Specific | unitless | USEPA, 2004 | |
| | | | | EV | Events Frequency | 1 | events/day | USEPA, 2004 | |
| | | | | EF | Exposure Frequency | 250 | days/year | MDE, 2008 | |
| | | | | ED | Exposure Duration (Age 18 - 30) | 12 | years | (2), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 70 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4,380 | days | USEPA, 1989 | |

Notes:

1 - Same as adult resident.

2 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:


MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1991: Risk Assessment Guidance for Superfund - Supplemental Guidance- Standard Default Exposure Factors Interim Final.

USEPA, 2002: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.


**Unit Intake Calculations**

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 18 - 30) = 1.68E-07 Cancer Dermal Intake (Age 18 - 30) = 6.69E-07

Mutagenic Chemicals

Cancer Ingestion Intake (Age 18 - 30) = 1.68E-07 Cancer Dermal Intake (Age 18 - 30) = 6.69E-07

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 9.78E-07 Noncancer Dermal Intake = 3.90E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.16.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADULT RECREATIONAL USERS - SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Inhalation | Recreational User | Adult | Tax Block Soils | CA | Chemical concentration in air | Calculated | mg/m3 | USEPA, 2002a | Exposure Concentration ($mg/m^3$) = |
| | | | | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002b | |
| | | | | ET | Exposure Time | 8 | hours/day | (1) | $\frac{CA \times ET \times EF \times ED}{AT \times 24\ hours/day}$ |
| | | | | EF | Exposure Frequency | 250 | days/year | (1) | |
| | | | | ED | Exposure Duration (Age 18 - 30) | 12 | years | (2), USEPA, 1989, 2005 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | CA = (1/PEF + 1/VF) x Cs |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4380 | days | USEPA, 1989 | |
| | | | | PEF | Particulate Emission Factor | 3.23E+09 | m3/kg | USEPA 2010 | |
| | | | | VF | Volatilization Factor | Chemical-specific | m3/kg | USEPA, 2002a | |
| | | | | Q/C | Inverse of mean concentration at center of source | 87.36898 | g/m2-s per kg/m3 | USEPA 2010 | |
| | | | | Ut | Equivalent threshold of wind velocity at 7m. | 11.32 | m/sec | USEPA 2010 | |
| | | | | Um | Mean annual wind speed | 4.29 | m/sec | USEPA 2010 | |
| | | | | V | Fraction of vegetative cover | 0.5 | unitless | USEPA 2010 | |
| | | | | F(x) | Function dependent of Um/Ut | 0.0993 | unitless | USEPA 2010 | |

Notes:

1 - Professional judgment. Assume on site 8 hours per day 250 days per year.

2 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2010: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.

**Unit Intake Calculations**

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Non-Mutagenic Chemicals

Cancer Inhalation Intake (Age 18 - 30) = 3.91E-02

Noncarcinogenic Chemicals

Noncancer Inhalation Intake = 2.28E-01

Mutagenic Chemicals

Cancer Inhalation Intake (Age 18 - 30) = 3.91E-02

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.17.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - CHILD RESIDENTS - SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Ingestion | Resident | Child | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002a | Intake (mg/kg/day) = |
| | | | | IR-S | Ingestion Rate | 200 | mg/day | USEPA, 1991 | |
| | | | | CF3 | Conversion Factor 3 | 1.0E-06 | kg/mg | -- | CS x IRS x CF3 x FI x EF x ED |
| | | | | FI | Fraction Ingested | 1 | unitless | USEPA, 1991 | BW x AT |
| | | | | EF | Exposure Frequency | 350 | days/year | USEPA, 2002b | |
| | | | | ED1 | Exposure Duration (Age 0 - 2) | 2 | years | (1), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 2 - 6) | 4 | years | (1), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 15 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 2,190 | days | USEPA, 1989 | |
| Dermal | Resident | Child | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Dermally Absorbed Dose (mg/kg/day) = |
| | | | | CF3 | Conversion Factor 3 | 1E-06 | kg/mg | -- | |
| | | | | SA | Skin Surface Available for Contact | 2,800 | cm2 | USEPA, 2004 | CS x CF3 x SA x SSAF x DABS x EV x EF x ED |
| | | | | SSAF | Soil to Skin Adherence Factor | 0.2 | mg/cm2/event | USEPA, 2004 | BW x AT |
| | | | | DABS | Absorption Factor | Chemical Specific | unitless | USEPA, 2004 | |
| | | | | EV | Events Frequency | 1 | events/day | USEPA, 2004 | |
| | | | | EF | Exposure Frequency | 350 | days/year | USEPA, 2002b | |
| | | | | ED1 | Exposure Duration (Age 0 - 2) | 2 | years | (1), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 2 - 6) | 4 | years | (1), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 15 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 2,190 | days | USEPA, 1989 | |

Notes:

1 - Children will be evaluated as one age group (0 - 6 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, residential children will be evaluated as two age groups, 0 - 2 years and 2 - 6 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:


USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1991: Risk Assessment Guidance for Superfund - Supplemental Guidance- Standard Default Exposure Factors Interim Final.

USEPA, 2002a:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.


**Unit Intake Calculations**

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 0 - 6) = 1.10E-06 Cancer Dermal Intake (Age 0 - 6) = 3.07E-06

Mutagenic Chemicals

Cancer Ingestion Intake (Age 0 - 2) = 3.65E-07 Cancer Dermal Intake (Age 0 - 2) = 1.02E-06

Cancer Ingestion Intake (Age 2 - 6) = 7.31E-07 Cancer Dermal Intake (Age 2 - 6) = 2.05E-06

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 1.28E-05 Noncancer Dermal Intake = 3.58E-05

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.18.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - CHILD RESIDENTS SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Inhalation | Resident | Child | Tax Block Soils | CA | Chemical concentration in air | Calculated | mg/m3 | USEPA, 2002a | Exposure Concentration ($mg/m^3$) = |
| | | | | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002b | |
| | | | | ET | Exposure Time | 24 | hours/day | USEPA, 1991 | $\frac{CA \times ET \times EF \times ED}{AT \times 24 \text{ hours/day}}$ |
| | | | | EF | Exposure Frequency | 350 | days/year | USEPA, 1994 | |
| | | | | ED1 | Exposure Duration (Age 0 - 2) | 2 | years | (1), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 2 - 6) | 4 | years | (1), USEPA, 1989, 2005 | CA = (1/PEF + 1/VF) x Cs |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 2190 | days | USEPA, 1989 | |
| | | | | PEF | Particulate Emission Factor | 3.23E+09 | m3/kg | USEPA 2010 | |
| | | | | VF | Volatilization Factor | Chemical-specific | m3/kg | USEPA, 2002a | |
| | | | | Q/C | Inverse of mean concentration at center of source | 87.36898 | g/m2-s per kg/m3 | USEPA 2010 | |
| | | | | Ut | Equivalent threshold of wind velocity at 7m. | 11.32 | m/sec | USEPA 2010 | |
| | | | | Um | Mean annual wind speed | 4.29 | m/sec | USEPA 2010 | |
| | | | | V | Fraction of vegetative cover | 0.5 | unitless | USEPA 2010 | |
| | | | | F(x) | Function dependent of Um/Ut | 0.0993 | unitless | USEPA 2010 | |

Notes:

1 - Children will be evaluated as one age group (0 - 6 years) for non-mutagenic chemicals. For chemicals that act via the mutagenic mode of action, residential children will be evaluated as two age groups, 0 - 2 years and 2 - 6 years in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:


USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 1991: Risk Assessment Guidance for Superfund - Supplemental Guidance- Standard Default Exposure Factors Interim Final.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2010: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.


**Unit Intake Calculations**

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Non-Mutagenic Chemicals

Cancer Inhalation Intake (Age 0 - 6) = 8.22E-02

Noncarcinogenic Chemicals

Noncancer Inhalation Intake = 1.92E+00

Mutagenic Chemicals

Cancer Inhalation Intake (Age 0 - 2) = 2.74E-02

Cancer Inhalation Intake (Age 2 - 6) = 5.48E-02

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.19.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADOLESCENT RESIDENTS - SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Ingestion | Resident | Adolescent | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002a | Intake (mg/kg/day) = |
| | | | | IR-S | Ingestion Rate | 100 | mg/day | USEPA, 1991 | |
| | | | | CF3 | Conversion Factor 3 | 1.0E-06 | kg/mg | -- | CS x IRS x CF3 x FI x EF x ED |
| | | | | FI | Fraction Ingested | 1 | unitless | USEPA, 1991 | BW x AT |
| | | | | EF | Exposure Frequency | 350 | days/year | USEPA, 2002b | |
| | | | | ED | Exposure Duration (Age 6 - 16) | 10 | years | (1), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 16 - 18) | 2 | years | (1), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 40 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4,380 | days | USEPA, 1989 | |
| Dermal | Resident | Adolescent | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Dermally Absorbed Dose (mg/kg/day) = |
| | | | | CF3 | Conversion Factor 3 | 1E-06 | kg/mg | -- | |
| | | | | SA | Skin Surface Available for Contact | 4,320 | cm2 | MDE, 2008 | CS x CF3 x SA x SSAF x DABS x EV x EF x ED |
| | | | | SSAF | Soil to Skin Adherence Factor | 0.1 | mg/cm2/event | USEPA, 2004 | BW x AT |
| | | | | DABS | Absorption Factor | Chemical Specific | unitless | USEPA, 2004 | |
| | | | | EV | Events Frequency | 1 | events/day | USEPA, 2004 | |
| | | | | EF | Exposure Frequency | 350 | days/year | USEPA, 2002b | |
| | | | | ED | Exposure Duration (Age 6 - 16) | 10 | years | (1), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 16 - 18) | 2 | years | (1), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 40 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4,380 | days | USEPA, 1989 | |

Notes:

1 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:


MDE, 2008: Cleanup Standards for Soil and Groundwater. Interim Final Guidance, June.

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. EPA/540/1-86/060.

USEPA, 1991: Risk Assessment Guidance for Superfund - Supplemental Guidance- Standard Default Exposure Factors Interim Final.

USEPA, 2002a:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.


**Unit Intake Calculations**

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 18) = 4.11E-07 Cancer Dermal Intake (Age 6 - 18) = 1.24E-06

Mutagenic Chemicals

Cancer Ingestion Intake (Age 6 - 16) = 3.42E-07 Cancer Dermal Intake (Age 6 - 16) = 1.04E-06

Cancer Ingestion Intake (Age 16 - 18) = 6.85E-08 Cancer Dermal Intake (Age 16 - 18) = 2.07E-07

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 2.40E-06 Noncancer Dermal Intake = 7.25E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.20.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADOLESCENT RESIDENTS SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Inhalation | Resident | Adolescent | Tax Block Soils | CA | Chemical concentration in air | Calculated | mg/m3 | USEPA, 2002a | Exposure Concentration ($mg/m^3$) = |
| | | | | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002b | |
| | | | | ET | Exposure Time | 24 | hours/day | USEPA, 1991 | CA x ET x EF x ED |
| | | | | EF | Exposure Frequency | 350 | days/year | USEPA, 2002a | AT x 24 hours/day |
| | | | | ED | Exposure Duration (Age 6 - 16) | 10 | years | (1), USEPA, 1989, 2005 | |
| | | | | ED2 | Exposure Duration (Age 16 - 18) | 2 | years | (1), USEPA, 1989, 2005 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | CA = (1/PEF + 1/VF) x Cs |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4380 | days | USEPA, 1989 | |
| | | | | PEF | Particulate Emission Factor | 3.23E+09 | m3/kg | USEPA 2010 | |
| | | | | VF | Volatilization Factor | Chemical-specific | m3/kg | USEPA, 2002a | |
| | | | | Q/C | Inverse of mean concentration at center of source | 87.36898 | g/m2-s per kg/m3 | USEPA 2010 | |
| | | | | Ut | Equivalent threshold of wind velocity at 7m. | 11.32 | m/sec | USEPA 2010 | |
| | | | | Um | Mean annual wind speed | 4.29 | m/sec | USEPA 2010 | |
| | | | | V | Fraction of vegetative cover | 0.5 | unitless | USEPA 2010 | |
| | | | | F(x) | Function dependent of Um/Ut | 0.0993 | unitless | USEPA 2010 | |

Notes:

1 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 1991: Risk Assessment Guidance for Superfund - Supplemental Guidance- Standard Default Exposure Factors Interim Final.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2010: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.

**Unit Intake Calculations**

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Non-Mutagenic Chemicals

Cancer Inhalation Intake (Age 6 - 18) = 1.64E-01

Noncarcinogenic Chemicals

Noncancer Inhalation Intake = 1.92E+00

Mutagenic Chemicals

Cancer Inhalation Intake (Age 6 - 16) = 1.37E-01

Cancer Inhalation Intake (Age 16 - 18) = 2.74E-02

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 4.21.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADULT RESIDENTS - SOILS

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Ingestion | Resident | Adult | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002a | Intake (mg/kg/day) = |
| | | | | IR-S | Ingestion Rate | 100 | mg/day | USEPA, 1991 | |
| | | | | CF3 | Conversion Factor 3 | 1.0E-06 | kg/mg | -- | CS x IRS x CF3 x FI x EF x ED |
| | | | | FI | Fraction Ingested | 1 | unitless | USEPA, 1991 | BW x AT |
| | | | | EF | Exposure Frequency | 350 | days/year | USEPA, 2002b | |
| | | | | ED | Exposure Duration (Age 18 - 30) | 12 | years | (1), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 70 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4,380 | days | USEPA, 1989 | |
| Dermal | Resident | Adult | Tax Block Soils | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Dermally Absorbed Dose (mg/kg/day) = |
| | | | | CF3 | Conversion Factor 3 | 1.0E-06 | kg/mg | -- | |
| | | | | SA | Skin Surface Available for Contact | 5,700 | cm2 | USEPA, 2004 | CS x CF3 x SA x SSAF x DABS x EV x EF x ED |
| | | | | SSAF | Soil to Skin Adherence Factor | 0.07 | mg/cm2/event | USEPA, 2004 | BW x AT |
| | | | | DABS | Absorption Factor | Chemical Specific | unitless | USEPA, 2004 | |
| | | | | EV | Events Frequency | 1 | events/day | USEPA, 2004 | |
| | | | | EF | Exposure Frequency | 350 | days/year | USEPA, 2002b | |
| | | | | ED | Exposure Duration (Age 18 - 30) | 12 | years | (1), USEPA, 1989, 2005 | |
| | | | | BW | Body Weight | 70 | kg | USEPA, 1989 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4,380 | days | USEPA, 1989 | |

Notes:

1 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:


USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.

USEPA, 1991: Risk Assessment Guidance for Superfund - Supplemental Guidance- Standard Default Exposure Factors Interim Final.

USEPA, 1993: Superfund Standard Default Exposure Factors for the Central Tendency and Reasonable Maximum Exposure.

USEPA, 2002:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2002b: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.


**Unit Intake Calculations**

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Non-Mutagenic Chemicals

Cancer Ingestion Intake (Age 18 - 30) = 2.35E-07 Cancer Dermal Intake (Age 18 - 30) = 9.37E-07

Mutagenic Chemicals

Cancer Ingestion Intake (Age 18 - 30) = 2.35E-07 Cancer Dermal Intake (Age 18 - 30) = 9.37E-07

Noncarcinogenic Chemicals

Noncancer Ingestion Intake = 1.37E-06 Noncancer Dermal Intake = 5.47E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.22.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - ADULT RESIDENTS - SOILS TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Inhalation | Resident | Adult | Tax Block Soils | CA | Chemical concentration in air | Calculated | mg/m3 | USEPA, 2002a | Exposure Concentration ($mg/m^3$) = |
| | | | | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002b | |
| | | | | ET | Exposure Time | 24 | hours/day | USEPA, 1991 | $\frac{CA \times ET \times EF \times ED}{AT \times 24\ hours/day}$ |
| | | | | EF | Exposure Frequency | 350 | days/year | USEPA, 2002a | |
| | | | | ED | Exposure Duration (Age 18 - 30) | 12 | years | (1), USEPA, 1989, 2005 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 1989 | $CA = (1/PEF + 1/VF) \times Cs$ |
| | | | | AT-N | Averaging Time (Non-Cancer) | 4380 | days | USEPA, 1989 | |
| | | | | PEF | Particulate Emission Factor | 3.23E+09 | m3/kg | USEPA 2010 | |
| | | | | VF | Volatilization Factor | Chemical-specific | m3/kg | USEPA, 2002a | $PEF = \frac{Q/C \times 3600}{0.036 \times (1-V) \times (U_m/U_t)^3 \times F(x)}$ |
| | | | | Q/C | Inverse of mean concentration at center of source | 87.36898 | g/m2-s per kg/m3 | USEPA 2010 | |
| | | | | Ut | Equivalent threshold of wind velocity at 7m. | 11.32 | m/sec | USEPA 2010 | $F(x) = 0.18 * (8x^3 + 12x) * \exp(-x^2)$ |
| | | | | Um | Mean annual wind speed | 4.29 | m/sec | USEPA 2010 | |
| | | | | V | Fraction of vegetative cover | 0.5 | unitless | USEPA 2010 | |
| | | | | F(x) | Function dependent of Um/Ut | 0.0993 | unitless | USEPA 2010 | $x = 0.886 * Ut / Um$ |

Notes:

1 - For chemicals that act via the mutagenic mode of action the intake will be multiplied by the appropriate age-dependent adjustment factor in accordance with USEPA's Supplemental Guidance of Assessing Susceptibility from Early-Life Exposure to Carcinogens (USEPA, 2005).

Sources:


USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A. USEPA/540/1-86/060.

USEPA, 1991: Risk Assessment Guidance for Superfund - Supplemental Guidance- Standard Default Exposure Factors Interim Final.

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b: Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10.

USEPA, 2010: Soil Screening Guidance calculation Internet site at http://risk.lsd.ornl.gov/calc_start.htm. Site-specific values for Philadelphia, PA.


**Unit Intake Calculations**

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Non-Mutagenic Chemicals

Cancer Inhalation Intake (Age 18 - 30) = 1.64E-01

Noncarcinogenic Chemicals

Noncancer Inhalation Intake = 9.59E-01

Mutagenic Chemicals

Cancer Inhalation Intake (Age 18 - 30) = 1.64E-01

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

**LIST OF TABLES**
**RAGS PART D TABLE 5**
**NON-CANCER TOXICITY DATA**

**Table No.**


5.1 Non-Cancer Toxicity Data - Oral/Dermal
5.2 Non-Cancer Toxicity Data - Inhalation

**Table 5.1**

**Non-Cancer Toxicity Data -- Oral/Dermal**
**Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
**Page 1 of 2**

| Chemical of Potential Concern | Chronic/ Subchronic | Oral RfD | | Oral Absorption Efficiency for Dermal[1] | Absorbed RfD for Dermal[2] | | Primary Target Organ(s) | Combined Uncertainty/Modifying Factors | RfD:Target Organ(s) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Value | Units | | Value | Units | | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Volatile Organic Compounds** | | | | | | | | | | |
| 1,2,3-Trichlorobenzene | Subchronic | 8.00E-03 | mg/kg/day | 1 | 8.0E-03 | mg/kg/day | Body Weight | 1000/1 | PPRTV | 9/11/2009 |
| | Chronic | 8.0E-04 | mg/kg/day | 1 | 8.0E-04 | mg/kg/day | Adrenals | NA | PPRTV | 9/11/2009 |
| 1,2,4-Trichlorobenzene | Subchronic | 9.0E-02 | mg/kg/day | 1 | 9.0E-02 | mg/kg/day | Liver | 100/1 | PPRTV | 6/16/2009 |
| | Chronic | 1.0E-02 | mg/kg/day | 1 | 1.0E-02 | mg/kg/day | Adrenals | 1000/1 | IRIS | 04/08/2011 |
| 1,3-Dichlorobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | Chronic | 7.0E-02 | mg/kg/day | 1 | 7.0E-02 | mg/kg/day | Liver | NA | ATSDR | 07/2006 |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | |
| Benzo(a)anthracene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(a)pyrene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(b)fluoranthene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(k)fluoranthene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chrysene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibenzo(a,h)anthracene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Indeno(1,2,3-cd)pyrene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | Chronic | 2.0E-02 | mg/kg/day | 1 | 2.0E-02 | mg/kg/day | Body Weight | 3000/1 | IRIS | 04/08/2011 |
| **Polychlorinated Biphenyls** | | | | | | | | | | |
| Aroclor-1254 | Chronic | 2.0E-05 | mg/kg/day | 1 | 2.0E-05 | mg/kg/day | Autoimmune | 300/1 | IRIS | 04/08/2011 |
| Aroclor-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Metals** | | | | | | | | | | |
| Antimony | Subchronic | 4.0E-04 | mg/kg/day | 0.15 | 6.0E-05 | mg/kg/day | Blood | 1000/1 | PPRTV | 7/29/2008 |
| | Chronic | 4.0E-04 | mg/kg/day | 0.15 | 6.0E-05 | mg/kg/day | Blood | 1000/1 | IRIS | 04/08/2011 |
| Arsenic | Chronic | 3.0E-04 | mg/kg/day | 1 | 3.0E-04 | mg/kg/day | Skin, CVS | 3/1 | IRIS | 04/08/2011 |
| Cadmium[3] | Chronic | 1.0E-03 | mg/kg/day | 0.03 | 2.5E-05 | mg/kg/day | Kidney | 10/1 | IRIS | 04/08/2011 |
| Cobalt | Subchronic | 3.0E-03 | mg/kg/day | 1 | 3.0E-03 | mg/kg/day | Thyroid | 300/1 | PPRTV | 8/25/208 |
| | Chronic | 3.0E-04 | mg/kg/day | 1 | 3.0E-04 | mg/kg/day | Blood | NA | PPRTV | 8/25/2008 |
| Iron | Subchronic | 7.0E-01 | mg/kg/day | 1 | 7.0E-01 | mg/kg/day | GS | 1.5 | PPRTV | 9/11/2006 |
| | Chronic | 7.0E-01 | mg/kg/day | 1 | 7.0E-01 | mg/kg/day | GS | 1.5 | PPRTV | 9/11/2006 |
| Lead | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese[4] | Chronic | 1.4E-01 | mg/kg/day | 1.00 | 1.4E-01 | mg/kg/day | CNS | 1 | IRIS | 04/08/2011 |
| Mercury[5] | Chronic | 3.0E-04 | mg/kg/day | 0.07 | 2.1E-05 | mg/kg/day | Autoimmune | 1000/1 | IRIS | 04/08/2011 |
| Molybdenum | Chronic | 5.0E-03 | mg/kg/day | 1 | 5.0E-03 | mg/kg/day | Gout | 30/1 | IRIS | 04/08/2011 |
| Nickel | Chronic | 2.0E-02 | mg/kg/day | 0.04 | 8.0E-04 | mg/kg/day | Body Weight | 300/1 | IRIS | 04/08/2011 |
| Vanadium | Subchronic | 1.0E-02 | mg/kg/day | 1 | 1.0E-02 | mg/kg/day | Kidney | 10 | ATSDR | 9/2009 |
| | Chronic | 5.0E-03 | mg/kg/day | 1 | 5.0E-03 | mg/kg/day | Kidney | 300 | RSL | 11/2010 |
| **Petroleum Hydrocarbons** | | | | | | | | | | |
| Diesel Range Organics | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Gasoline Range Organics | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Miscellaneous Parameters** | | | | | | | | | | |
| Hexavalent Chromium | Chronic | 3.0E-03 | mg/kg/day | 0.025 | 7.5E-05 | mg/kg/day | None Reported | 300/3 | IRIS | 04/08/2011 |

**Table 5.1**

**Non-Cancer Toxicity Data -- Oral/Dermal**
**Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


Notes:
1 - U.S. EPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
2 - Adjusted dermal RfD = Oral RfD x Oral Absorption Efficiency for Dermal.
3 - Values are for cadmium - diet.
4 - Values are for manganese - diet.
5 - Values are for mercuric chloride.

Definitions:
ATSDR = Agency for Toxic Substances and Disease Registry
CNS = Central Nervous System.
CVS = Cardiovascular system.
GS = Gastrointestinal.
IRIS = Integrated Risk Information System.
NA = Not available.
RSL = USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, November 2010.
PPRTV = Provisional Peer Reviewed Toxicity Value.

**Table 5.2**

**Non-Cancer Toxicity Data -- Inhalation**
**Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
**Page 1 of 2**

| Chemical of Potential Concern | Chronic/ Subchronic | Inhalation RfC | | Extrapolated RfD[1] | | Primary Target Organ(s) | Combined Uncertainty/Modifying Factors | RfC : Target Organ(s) | |
|---|---|---|---|---|---|---|---|---|---|
| | | Value | Units | Value | Units | | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Volatile Organic Compounds** | | | | | | | | | |
| 1,2,3-Trichlorobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | Subchronic | 2.0E-02 | $mg/m^3$ | 5.7E-03 | (mg/kg/day) | Urinary Tract | NA | PPRTV | 6/17/2009 |
| | Chronic | 2.0E-03 | $mg/m^3$ | 5.7E-04 | (mg/kg/day) | Adrenals | NA | PPRTV | 6/17/2009 |
| 1,3-Dichlorobenzene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | Subchronic | 1.2E+00 | $mg/m^3$ | 3.4E-01 | (mg/kg/day) | Liver | NA | ATSDR | 07/2006 |
| | Chronic | 8.0E-01 | $mg/m^3$ | 2.3E-01 | (mg/kg/day) | Liver | 100/1 | IRIS | 04/08/2011 |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | |
| Benzo(a)anthracene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(a)pyrene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(b)fluoranthene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Benzo(k)fluoranthene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Chrysene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Dibenzo(a,h)anthracene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Indeno(1,2,3-cd)pyrene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Naphthalene | Chronic | 3.0E-03 | $mg/m^3$ | 8.6E-04 | (mg/kg/day) | Respiratory | 3000/1 | IRIS | 04/08/2011 |
| **Polychlorinated Biphenyls** | | | | | | | | | |
| Aroclor-1254 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Aroclor-1260 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Metals** | | | | | | | | | |
| Antimony | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Arsenic | Chronic | 1.5E-05 | mg/m3 | 4.3E-06 | (mg/kg/day) | NA | NA | Cal EPA | 11/2010 |
| Cadmium | Chronic | 1.0E-05 | mg/m3 | 2.9E-06 | (mg/kg/day) | Kidney | NA | ATSDR | 9/2008 |
| Cobalt | Chronic | 6.0E-06 | $mg/m^3$ | 1.7E-06 | (mg/kg/day) | Lungs | NA | PPRTV | 8/25/2008 |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Lead | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Manganese | Chronic | 5.0E-05 | $mg/m^3$ | 1.4E-05 | (mg/kg/day) | CNS | 1000/1 | IRIS | 04/08/2011 |
| Mercury[2] | Chronic | 3.0E-05 | $mg/m^3$ | 8.6E-06 | (mg/kg/day) | Autoimmune | NA | Cal EPA | 11/2010 |
| Molybdenum | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Nickel | Chronic | 9.0E-05 | $mg/m^3$ | 2.6E-05 | (mg/kg/day) | Body Weight | NA | ASTDR | 9/2005 |
| Vanadium | NA | NA | NA | NA | NA | NA | NA | NA | NA |

**Table 5.2**

**Non-Cancer Toxicity Data -- Inhalation**
**Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
**Page 2 of 2**

| Chemical of Potential Concern | Chronic/ Subchronic | Inhalation RfC | | Extrapolated RfD(1) | | Primary Target Organ(s) | Combined Uncertainty/Modifying Factors | RfC : Target Organ(s) | |
|---|---|---|---|---|---|---|---|---|---|
| | | Value | Units | Value | Units | | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Petroleum Hydrocarbons** | | | | | | | | | |
| Diesel Range Organics | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Gasoline Range Organics | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Miscellaneous Parameters** | | | | | | | | | |
| Hexavalent Chromium | Chronic | 1.0E-04 | $mg/m^3$ | 2.9E-05 | (mg/kg/day) | Lungs | 300/1 | IRIS | 04/08/2011 |

Notes:
1 - Extrapolated RfD = RfC *20$m^3$/day / 70 kg
2 - Value is for mercuric chloride.
Definitions:
ATSDR = Agency for Toxic Substances and Disease Registry.
Cal EPA = California Environmental Protection Agency.
CNS = Central Nervous System.
IRIS = Integrated Risk Information System.
NA = Not available.
PPRTV = Provisional Peer Reviewed Toxicity Value.

**LIST OF TABLES**
**RAGS PART D TABLE 6**
**CANCER TOXICITY DATA**

**Table No.**


6.1 Cancer Toxicity Data - Oral/Dermal
6.2 Cancer Toxicity Data - Inhalation

**Table 6.1**

**Cancer Toxicity Data -- Oral/Dermal**
**Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
**Page 1 of 2**

| Chemical of Potential Concern | Oral Cancer Slope Factor | | Oral Absorption Efficiency for Dermal[1] | Absorbed Cancer Slope Factor for Dermal[2] | | Weight of Evidence/ Cancer Guideline Description | Oral CSF | |
|---|---|---|---|---|---|---|---|---|
| | Value | Units | | Value | Units | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Volatile Organic Compounds** | | | | | | | | |
| 1,2,3-Trichlorobenzene | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1 | 2.9E-02 | $(mg/kg/day)^{-1}$ | NA | PPRTV | 6/17/2009 |
| 1,3-Dichlorobenzene | NA | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | 5.4E-03 | $(mg/kg/day)^{-1}$ | 1 | 5.4E-03 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | |
| Benzo(a)anthracene[3] | 7.3E-01 | $(mg/kg/day)^{-1}$ | 1 | 7.3E-01 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 7/1993 |
| Benzo(a)pyrene[3] | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1 | 7.3E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | IRIS | 04/08/2011 |
| Benzo(b)fluoranthene[3] | 7.3E-01 | $(mg/kg/day)^{-1}$ | 1 | 7.3E-01 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 7/1993 |
| Benzo(k)fluoranthene[3] | 7.3E-02 | $(mg/kg/day)^{-1}$ | 1 | 7.3E-02 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 7/1993 |
| Chrysene[3] | 7.3E-03 | $(mg/kg/day)^{-1}$ | 1 | 7.3E-03 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 7/1993 |
| Dibenzo(a,h)anthracene[3] | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1 | 7.3E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 7/1993 |
| Indeno(1,2,3-cd)pyrene[3] | 7.3E-01 | $(mg/kg/day)^{-1}$ | 1 | 7.3E-01 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 7/1993 |
| Naphthalene | NA | NA | NA | NA | NA | C / Possible human carcinogen | IRIS | 04/08/2011 |
| **Polychlorinated Biphenyls** | | | | | | | | |
| Aroclor-1254 | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1 | 2.0E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(2) | 9/1996 |
| Aroclor-1260 | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1 | 2.0E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(2) | 9/1996 |
| **Metals** | | | | | | | | |
| Antimony | NA | NA | NA | NA | NA | NA | NA | NA |
| Arsenic | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1 | 1.5E+00 | $(mg/kg/day)^{-1}$ | A / Known human carcinogen | IRIS | 04/08/2011 |
| Cadmium | NA | NA | NA | NA | NA | B1 / Probable human carcinogen | IRIS | 04/08/2011 |
| Cobalt | NA | NA | NA | NA | NA | NA | NA | NA |
| Iron | NA | NA | NA | NA | NA | NA | NA | NA |
| Lead | NA | NA | NA | NA | NA | B2 / Probable human carcinogen | IRIS | 04/08/2011 |
| Manganese | NA | NA | NA | NA | NA | D / Not classifiable as to human carcinogenicity | IRIS | 04/08/2011 |
| Mercury | NA | NA | NA | NA | NA | C / Possible human carcinogen | IRIS | 04/08/2011 |
| Molybdenum | NA | NA | NA | NA | NA | NA | NA | NA |
| Nickel | NA | NA | NA | NA | NA | NA | NA | NA |
| Vanadium | NA | NA | NA | NA | NA | NA | NA | NA |
| **Petroleum Hydrocarbons** | | | | | | | | |
| Diesel Range Organics | NA | NA | NA | NA | NA | NA | NA | NA |
| Gasoline Range Organics | NA | NA | NA | NA | NA | NA | NA | NA |
| **Miscellaneous Parameters** | | | | | | | | |
| Hexavalent Chromium[3] | 5.0E-01 | $(mg/kg/day)^{-1}$ | 0.025 | 2.0E+01 | $(mg/kg/day)^{-1}$ | A / Known human carcinogen | NJ | 11/2010 |

**Table 6.1**

**Cancer Toxicity Data -- Oral/Dermal**
**Tax Block Soils**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


Notes:
1 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
2 - Adjusted cancer slope factor for dermal = Oral cancer slope factor / Oral Absorption Efficiency for Dermal.
3 - Several PAHs and hexavalent chromium are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
Cal EPA = California Environmental Protection Agency.
IRIS = Integrated Risk Information System.
NA = Not available.
NJ = New Jersey.
PPRTV = Provisional Peer Reviwed Toxicity Value.
USEPA(1) = OSWER Directive No.9285.7-75.
USEPA(2) = USEPA, PCBs: Cancer Dose-Response Assessment and Applications to Environmental Mixtures, September 1996, EPA/600/P-96/001F.

**Table 6.2**

**Cancer Toxicity Data -- Inhalation**
**Tax Blocks Soil**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**
**Page 1 of 2**

| Chemical of Potential Concern | Unit Risk | | Inhalation Cancer Slope Factor[1] | | Weight of Evidence/ Cancer Guideline Description | Unit Risk : Inhalation CSF | |
|---|---|---|---|---|---|---|---|
| | Value | Units | Value | Units | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Volatile Organic Compounds** | | | | | | | |
| 1,2,3-Trichlorobenzene | NA | NA | NA | NA | NA | NA | NA |
| 1,2,4-Trichlorobenzene | NA | NA | NA | NA | NA | NA | NA |
| 1,3-Dichlorobenzene | NA | NA | NA | NA | NA | NA | NA |
| 1,4-Dichlorobenzene | 1.1E-05 | $(ug/m^3)^{-1}$ | 3.9E-02 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | |
| Benzo(a)anthracene[2] | 1.1E-04 | $(ug/m^3)^{-1}$ | 3.9E-01 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Benzo(a)pyrene[2] | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.9E+00 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Benzo(b)fluoranthene[2] | 1.1E-04 | $(ug/m^3)^{-1}$ | 3.9E-01 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Benzo(k)fluoranthene[2] | 1.1E-04 | $(ug/m^3)^{-1}$ | 3.9E-01 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Chrysene[2] | 1.1E-05 | $(ug/m^3)^{-1}$ | 3.9E-02 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Dibenzo(a,h)anthracene[2] | 1.2E-03 | $(ug/m^3)^{-1}$ | 4.2E+00 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Indeno(1,2,3-cd)pyrene[2] | 1.1E-04 | $(ug/m^3)^{-1}$ | 3.9E-01 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |
| Naphthalene | 3.4E-05 | $(ug/m3)^{-1}$ | 1.2E-01 | $(mg/kg/day)^{-1}$ | C / Possible Human Carcinogen | Cal EPA | 11/2010 |
| **Polychlorinated Biphenyls** | | | | | | | |
| Aroclor-1254 | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.0E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 9/1996 |
| Aroclor-1260 | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.0E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | USEPA(1) | 9/1996 |
| **Metals** | | | | | | | |
| Antimony | NA | NA | NA | NA | NA | NA | NA |
| Arsenic | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.5E+01 | $(mg/kg/day)^{-1}$ | A / Known human carcinogen | IRIS | 04/08/2011 |
| Cadmium | 1.8E-03 | $(ug/m^3)^{-1}$ | 6.3E+00 | $(mg/kg/day)^{-1}$ | B1 / Probable human carcinogen | IRIS | 04/08/2011 |
| Cobalt | 9.0E-03 | $(ug/m^3)^{-1}$ | 3.2E+01 | $(mg/kg/day)^{-1}$ | NA | PPRTV | 8/25/2008 |
| Iron | NA | NA | NA | NA | NA | NA | NA |
| Lead | NA | NA | NA | NA | B2 / Probable human carcinogen | IRIS | 04/08/2011 |
| Manganese | NA | NA | NA | NA | D / Not classifiable as to human carcinogenicity | IRIS | 04/08/2011 |
| Mercury | NA | NA | NA | NA | C / Possible human carcinogen | IRIS | 04/08/2011 |
| Molybdenum | NA | NA | NA | NA | NA | NA | NA |
| Nickel | 2.6E-04 | $(ug/m^3)^{-1}$ | 9.1E-01 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 11/2010 |

**Table 6.2**

**Cancer Toxicity Data -- Inhalation**
**Tax Blocks Soil**
**Lockheed Martin, Middle River Complex**
**Middle River, Maryland**


| Chemical of Potential Concern | Unit Risk | | Inhalation Cancer Slope Factor[1] | | Weight of Evidence/ Cancer Guideline Description | Unit Risk : Inhalation CSF | |
|---|---|---|---|---|---|---|---|
| | Value | Units | Value | Units | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Metals (Continued)** | | | | | | | |
| Vanadium | NA | NA | NA | NA | NA | NA | NA |
| **Petroleum Hydrocarbons** | | | | | | | |
| Diesel Range Organics | NA | NA | NA | NA | NA | NA | NA |
| Gasoline Range Organics | NA | NA | NA | NA | NA | NA | NA |
| **Miscellaneous Parameters** | | | | | | | |
| Hexavalent Chromium[2] | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.9E+02 | $(mg/kg/day)^{-1}$ | A / Known human carcinogen | IRIS | 04/08/2011 |

Notes:

1 - Inhalation CSF = Unit Risk * 70 kg / $20m^3$/day.

2 - Several PAHs and hexavalent chromium are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

Definitions:

Cal EPA = California Environmental Protection Agency.

IRIS = Integrated Risk Information System.

NA = Not available.

PPRTV = Provisional Peer Reviewed Toxicity Value.

USEPA(1) = USEPA, PCBs: Cancer Dose-Response Assessment and Applications to Environmental Mixtures, September 1996, EPA/600/P-96/001F.

**LIST OF TABLES**
**RAGS PART D TABLE 7**
**CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS**

| Table No. | REASONABLE MAXIMUM EXPOSURES |
|---|---|
| 7.1.RME | Construction Worker |
| 7.2.RME | Industrial Worker |
| 7.3.RME | Child Commercial Receptor |
| 7.4.RME | Adolescent Commercial Receptor |
| 7.5.RME | Adult Commercial Receptor |
| 7.6.RME | Child Recreational User |
| 7.7.RME | Adolescent Recreational User |
| 7.8.RME | Adult Recreational User |
| 7.9.RME | Child Resident |
| 7.10.RME | Adolescent Resident |
| 7.11.RME | Adult Resident |

Note: Tables are block-specific.

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block D | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 2.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.9E-06 | 1.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 1.3E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.7E-09 | 9.4E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 3.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.006 |
| | | | | ARSENIC | 3.50 | mg/kg | 2.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.5E-07 | 1.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | CADMIUM | 0.150 | mg/kg | 1.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0007 |
| | | | | COBALT | 10.7 | mg/kg | 7.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.0E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.02 |
| | | | | IRON | 16,300 | mg/kg | 1.1E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 20.6 | mg/kg | 1.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 6.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.003 |
| | | | | MERCURY | 0.250 | mg/kg | 1.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 3.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | NICKEL | 14.6 | mg/kg | 9.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.9E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 25.6 | mg/kg | 1.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 3.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 5.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 5.8E-08 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.9E-08 | 4.1E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 2.2E-06 | | | | | 0.2 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 6.8E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.0E-07 | 4.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 3.9E-10 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.7E-10 | 2.7E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 6.6E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.6E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0008 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.4E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-08 | 1.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | CADMIUM | 0.150 | mg/kg | 2.1E-11 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00006 |
| | | | | COBALT | 10.7 | mg/kg | 1.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | IRON | 16,300 | mg/kg | 2.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 20.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.7E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00006 |
| | | | | MERCURY | 0.250 | mg/kg | 3.4E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.001 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 6.2E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000009 |
| | | | | NICKEL | 14.6 | mg/kg | 2.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.002 |
| | | | | VANADIUM | 25.6 | mg/kg | 3.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-06 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.0002 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 1.2E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.4E-08 | 8.4E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 5.4E-07 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 2.8E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 2.8E-06 | | | | | 0.2 |

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block D | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 2.7E-6 | $mg/m^3$ | 8.7E-09 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 9.5E-09 | 6.1E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 1.4E-8 | $mg/m^3$ | 4.6E-11 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.6E-11 | 3.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 3.4E-7 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.7E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 2.4E-6 | $mg/m^3$ | 8.0E-09 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.4E-08 | 5.6E-07 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.04 |
| | | | | CADMIUM | 1.0E-7 | $mg/m^3$ | 3.4E-10 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 6.2E-10 | 2.4E-08 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.002 |
| | | | | COBALT | 7.5E-6 | $mg/m^3$ | 2.4E-08 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.2E-07 | 1.7E-06 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.3 |
| | | | | IRON | 0.011 | $mg/m^3$ | 3.7E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.6E-03 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 1.4E-5 | $mg/m^3$ | 4.7E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.3E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 6.3E-5 | $mg/m^3$ | 2.1E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-05 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.3 |
| | | | | MERCURY | 1.7E-7 | $mg/m^3$ | 5.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.0E-08 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.001 |
| | | | | MOLYBDENUM | 3.1E-7 | $mg/m^3$ | 1.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 1.0E-5 | $mg/m^3$ | 3.3E-08 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 8.7E-09 | 2.3E-06 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.03 |
| | | | | VANADIUM | 1.8E-5 | $mg/m^3$ | 5.8E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.1E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 3.8E-4 | $mg/m^3$ | 1.3E-06 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.8E-05 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 5.7E-7 | $mg/m^3$ | 1.8E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 6.1E-7 | $mg/m^3$ | 2.0E-09 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.7E-07 | 1.4E-07 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.001 |
| | | | Exp. Route Total | | | | | | | | 4.4E-07 | | | | | 0.6 |
| | | Exposure Point Total | | | | | | | | | 4.4E-07 | | | | | 0.6 |
| | Exposure Medium Total | | | | | | | | | | 4.4E-07 | | | | | 0.6 |
| Medium Total | | | | | | | | | | | 3.2E-06 | | | | | 0.9 |

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block D | Ingestion | NAPHTHALENE | 4.00 | mg/kg | 2.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0009 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 4.4E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.2E-07 | 3.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 1.6E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.2E-08 | 1.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 3.1E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.6E-07 | 2.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.07 |
| | | | | COBALT | 11.7 | mg/kg | 7.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.5E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.02 |
| | | | | IRON | 30,900 | mg/kg | 2.1E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-01 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.2 |
| | | | | LEAD | 22.9 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 4.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.002 |
| | | | | MERCURY | 0.180 | mg/kg | 1.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 42.2 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 2.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 1.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 9.4E-08 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 4.7E-08 | 6.6E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 8.6E-07 | | | | | 0.3 |
| | | | Dermal | NAPHTHALENE | 4.00 | mg/kg | 7.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.0E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 1.2E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.5E-08 | 8.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 4.6E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.2E-09 | 3.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 1.9E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.8E-08 | 1.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 11.7 | mg/kg | 1.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | IRON | 30,900 | mg/kg | 4.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.004 |
| | | | | LEAD | 22.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 9.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.5E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00005 |
| | | | | MERCURY | 0.180 | mg/kg | 2.5E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0008 |
| | | | | VANADIUM | 42.2 | mg/kg | 5.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-06 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 1.9E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 3.9E-08 | 1.3E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.6E-07 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 1.0E-06 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | | | | 1.0E-06 | | | | | 0.3 |

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block D | Inhalation | NAPHTHALENE | 0.000 | $mg/m^3$ | 1.5E-06 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 5.1E-08 | 1.0E-04 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.03 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.5E-7 | $mg/m^3$ | 1.5E-09 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.6E-09 | 1.0E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 1.7E-7 | $mg/m^3$ | 5.5E-10 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.1E-10 | 3.8E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 3.2E-6 | $mg/m^3$ | 1.0E-08 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 4.5E-08 | 7.3E-07 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.05 |
| | | | | COBALT | 8.2E-6 | $mg/m^3$ | 2.7E-08 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.4E-07 | 1.9E-06 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.3 |
| | | | | IRON | 0.022 | $mg/m^3$ | 7.0E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.9E-03 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 1.6E-5 | $mg/m^3$ | 5.2E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.7E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 4.7E-5 | $mg/m^3$ | 1.5E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-05 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.2 |
| | | | | MERCURY | 1.3E-7 | $mg/m^3$ | 4.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.9E-08 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0010 |
| | | | | VANADIUM | 3.0E-5 | $mg/m^3$ | 9.6E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.7E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 2.8E-5 | $mg/m^3$ | 9.2E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.4E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.7E-7 | $mg/m^3$ | 5.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.0E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 9.8E-7 | $mg/m^3$ | 3.2E-09 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.7E-07 | 2.2E-07 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.002 |
| | | | Exp. Route Total | | | | | | | | 6.1E-07 | | | | | 0.6 |
| | | Exposure Point Total | | | | | | | | | 6.1E-07 | | | | | 0.6 |
| | Exposure Medium Total | | | | | | | | | | 6.1E-07 | | | | | 0.6 |
| Medium Total | | | | | | | | | | | 1.6E-06 | | | | | 1.0 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block D | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 6.6E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.8E-06 | 1.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 3.5E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.0E-09 | 9.8E-09 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 8.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.0006 |
| | | | | ARSENIC | 3.50 | mg/kg | 6.1E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.2E-07 | 1.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | CADMIUM | 0.150 | mg/kg | 2.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.3E-08 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.00007 |
| | | | | COBALT | 10.7 | mg/kg | 1.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | IRON | 16,300 | mg/kg | 2.8E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.0E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 20.6 | mg/kg | 3.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0003 |
| | | | | MERCURY | 0.250 | mg/kg | 4.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0004 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 7.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00004 |
| | | | | NICKEL | 14.6 | mg/kg | 2.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.1E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0004 |
| | | | | VANADIUM | 25.6 | mg/kg | 4.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 9.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 1.5E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 7.6E-08 | 4.3E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0001 |
| | | | Exp. Route Total | | | | | | | | 5.8E-06 | | | | | 0.04 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 1.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.3E-06 | 3.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 6.5E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.3E-08 | 1.8E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0005 |
| | | | | ARSENIC | 3.50 | mg/kg | 2.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.6E-07 | 6.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 0.150 | mg/kg | 3.5E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.7E-10 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00004 |
| | | | | COBALT | 10.7 | mg/kg | 2.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 16,300 | mg/kg | 3.8E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 20.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00004 |
| | | | | MERCURY | 0.250 | mg/kg | 5.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0008 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000006 |
| | | | | NICKEL | 14.6 | mg/kg | 3.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 25.6 | mg/kg | 5.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 2.0E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 4.0E-07 | 5.6E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0007 |
| | | | Exp. Route Total | | | | | | | | 9.1E-06 | | | | | 0.010 |
| | | Exposure Point Total | | | | | | | | | 1.5E-05 | | | | | 0.05 |
| | Exposure Medium Total | | | | | | | | | | 1.5E-05 | | | | | 0.05 |

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block D | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.2E-9 | $mg/m^3$ | 9.6E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.1E-10 | 2.7E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 6.2E-12 | $mg/m^3$ | 5.0E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.9E-13 | 1.4E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 1.5E-10 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 8.8E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.8E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | CADMIUM | 4.6E-11 | $mg/m^3$ | 3.8E-12 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 6.8E-12 | 1.1E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000001 |
| | | | | COBALT | 3.3E-9 | $mg/m^3$ | 2.7E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.4E-09 | 7.6E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | IRON | 5.0E-6 | $mg/m^3$ | 4.1E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 6.4E-9 | $mg/m^3$ | 5.2E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.8E-8 | $mg/m^3$ | 2.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.4E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0001 |
| | | | | MERCURY | 7.7E-11 | $mg/m^3$ | 6.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000006 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 4.5E-9 | $mg/m^3$ | 3.7E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 9.6E-11 | 1.0E-09 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | VANADIUM | 7.9E-9 | $mg/m^3$ | 6.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.7E-7 | $mg/m^3$ | 1.4E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-10 | $mg/m^3$ | 2.0E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.7E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 2.7E-10 | $mg/m^3$ | 2.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.8E-09 | 6.1E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000006 |
| | | | Exp. Route Total | | | | | | | | 4.9E-09 | | | | | 0.0003 |
| | | Exposure Point Total | | | | | | | | | 4.9E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | | | | 4.9E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | | | | 1.5E-05 | | | | | 0.05 |

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block D | Ingestion | NAPHTHALENE | 4.00 | mg/kg | 7.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00010 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 1.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.3E-07 | 3.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 4.2E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.4E-08 | 1.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 8.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.2E-06 | 2.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | COBALT | 11.7 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | IRON | 30,900 | mg/kg | 5.4E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 22.9 | mg/kg | 4.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0002 |
| | | | | MERCURY | 0.180 | mg/kg | 3.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.8E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0003 |
| | | | | VANADIUM | 42.2 | mg/kg | 7.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.004 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 7.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 4.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 2.4E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.2E-07 | 6.8E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 2.2E-06 | | | | | 0.05 |
| | | | Dermal | NAPHTHALENE | 4.00 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 1.9E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.4E-06 | 5.5E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 7.7E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 2.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 3.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.8E-07 | 8.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 11.7 | mg/kg | 2.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | IRON | 30,900 | mg/kg | 7.1E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 22.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00003 |
| | | | | MERCURY | 0.180 | mg/kg | 4.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0006 |
| | | | | VANADIUM | 42.2 | mg/kg | 9.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 3.2E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 6.5E-07 | 9.0E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 2.7E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 4.9E-06 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | | | | 4.9E-06 | | | | | 0.06 |

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block D | Inhalation | NAPHTHALENE | 6.2E-5 | $mg/m^3$ | 5.1E-06 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.7E-07 | 1.4E-05 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 2.0E-10 | $mg/m^3$ | 1.6E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.8E-11 | 4.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 7.4E-11 | $mg/m^3$ | 6.1E-12 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.5E-12 | 1.7E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.4E-9 | $mg/m^3$ | 1.2E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 5.0E-10 | 3.3E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 3.0E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.7E-09 | 8.3E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | IRON | 9.6E-6 | $mg/m^3$ | 7.8E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 7.1E-9 | $mg/m^3$ | 5.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.1E-8 | $mg/m^3$ | 1.7E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00010 |
| | | | | MERCURY | 5.6E-11 | $mg/m^3$ | 4.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000004 |
| | | | | VANADIUM | 1.3E-8 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.0E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.2E-8 | $mg/m^3$ | 1.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 7.7E-11 | $mg/m^3$ | 6.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.3E-10 | $mg/m^3$ | 3.5E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.0E-09 | 9.9E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000010 |
| | | | Exp. Route Total | | | | | | | | 1.8E-07 | | | | | 0.005 |
| | | Exposure Point Total | | | | | | | | | 1.8E-07 | | | | | 0.005 |
| | Exposure Medium Total | | | | | | | | | | 1.8E-07 | | | | | 0.005 |
| Medium Total | | | | | | | | | | | 5.1E-06 | | | | | 0.07 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block D | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 8.4E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 6.1E-05 | 1.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 8.3E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.7E-08 | 9.6E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 2.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.006 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.4E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-06 | 1.7E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | CADMIUM | 0.150 | mg/kg | 6.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.2E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0007 |
| | | | | COBALT | 10.7 | mg/kg | 4.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | IRON | 16,300 | mg/kg | 6.7E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 20.6 | mg/kg | 8.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 3.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.003 |
| | | | | MERCURY | 0.250 | mg/kg | 1.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | NICKEL | 14.6 | mg/kg | 6.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.004 |
| | | | | VANADIUM | 25.6 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 2.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 3.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 1.9E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 9.6E-07 | 4.2E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 6.4E-05 | | | | | 0.4 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 2.6E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.9E-05 | 5.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 2.7E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.4E-09 | 3.2E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 4.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.4E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0009 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | CADMIUM | 0.150 | mg/kg | 1.5E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00007 |
| | | | | COBALT | 10.7 | mg/kg | 1.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | IRON | 16,300 | mg/kg | 1.6E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 20.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 8.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00007 |
| | | | | MERCURY | 0.250 | mg/kg | 2.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.001 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 4.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.1E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00001 |
| | | | | NICKEL | 14.6 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.002 |
| | | | | VANADIUM | 25.6 | mg/kg | 2.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0006 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 4.5E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 9.0E-07 | 9.9E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 2.0E-05 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 8.4E-05 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | | | | 8.4E-05 | | | | | 0.4 |

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block D | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.2E-9 | mg/m$^3$ | 3.2E-11 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 3.6E-11 | 7.1E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 6.2E-12 | mg/m$^3$ | 3.2E-14 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.8E-14 | 3.7E-13 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 1.5E-10 | mg/m$^3$ | 7.7E-13 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.0E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 1.1E-9 | mg/m$^3$ | 5.6E-12 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 2.4E-11 | 6.5E-11 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.000004 |
| | | | | CADMIUM | 4.6E-11 | mg/m$^3$ | 2.4E-13 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 4.3E-13 | 2.8E-12 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.0000003 |
| | | | | COBALT | 3.3E-9 | mg/m$^3$ | 1.7E-11 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 1.5E-10 | 2.0E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.00003 |
| | | | | IRON | 5.0E-6 | mg/m$^3$ | 2.6E-08 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.0E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | LEAD | 6.4E-9 | mg/m$^3$ | 3.3E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.8E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MANGANESE | 2.8E-8 | mg/m$^3$ | 1.4E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.7E-09 | (mg/m$^3$) | 5.0E-05 | (mg/m$^3$) | 0.00003 |
| | | | | MERCURY | 7.7E-11 | mg/m$^3$ | 4.0E-13 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.7E-12 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.0000002 |
| | | | | MOLYBDENUM | 1.4E-10 | mg/m$^3$ | 7.2E-13 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 8.4E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 4.5E-9 | mg/m$^3$ | 2.3E-11 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 6.1E-12 | 2.7E-10 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.000003 |
| | | | | VANADIUM | 7.9E-9 | mg/m$^3$ | 4.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.8E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 1.7E-7 | mg/m$^3$ | 8.8E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.0E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-10 | mg/m$^3$ | 1.3E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.5E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.7E-10 | mg/m$^3$ | 7.4E-12 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 6.2E-10 | 1.6E-11 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.0000002 |
| | | | Exp. Route Total | | | | | | | | 8.4E-10 | | | | | 0.00007 |
| | | Exposure Point Total | | | | | | | | | 8.4E-10 | | | | | 0.00007 |
| | Exposure Medium Total | | | | | | | | | | 8.4E-10 | | | | | 0.00007 |
| Medium Total | | | | | | | | | | | 8.4E-05 | | | | | 0.4 |

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block D | Ingestion | NAPHTHALENE | 4.00 | mg/kg | 1.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0010 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 1.4E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.0E-05 | 3.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 9.9E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.0E-07 | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 1.9E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.9E-06 | 2.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.07 |
| | | | | COBALT | 11.7 | mg/kg | 4.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | IRON | 30,900 | mg/kg | 1.3E-02 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-01 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.2 |
| | | | | LEAD | 22.9 | mg/kg | 9.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 2.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.002 |
| | | | | MERCURY | 0.180 | mg/kg | 7.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.7E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 42.2 | mg/kg | 1.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.04 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 1.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 1.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 3.1E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.5E-06 | 6.8E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.5E-05 | | | | | 0.5 |
| | | | Dermal | NAPHTHALENE | 4.00 | mg/kg | 5.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.9E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 4.4E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.2E-06 | 9.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 3.3E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.5E-08 | 3.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 1.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.0E-07 | 1.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | COBALT | 11.7 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | IRON | 30,900 | mg/kg | 3.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.005 |
| | | | | LEAD | 22.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 6.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00005 |
| | | | | MERCURY | 0.180 | mg/kg | 1.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0010 |
| | | | | VANADIUM | 42.2 | mg/kg | 4.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.8E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0010 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 7.3E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.5E-06 | 1.6E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 4.9E-06 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 2.0E-05 | | | | | 0.5 |
| | Exposure Medium Total | | | | | | | | | | 2.0E-05 | | | | | 0.5 |

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block D | Inhalation | NAPHTHALENE | 6.2E-5 | $mg/m^3$ | 3.2E-07 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.1E-08 | 3.8E-06 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 2.0E-10 | $mg/m^3$ | 5.5E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 6.1E-12 | 1.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 7.4E-11 | $mg/m^3$ | 3.8E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.2E-13 | 4.5E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.4E-9 | $mg/m^3$ | 7.4E-12 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.2E-11 | 8.6E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000006 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 1.9E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.7E-10 | 2.2E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00004 |
| | | | | IRON | 9.6E-6 | $mg/m^3$ | 4.9E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.8E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 7.1E-9 | $mg/m^3$ | 3.7E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.1E-8 | $mg/m^3$ | 1.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00003 |
| | | | | MERCURY | 5.6E-11 | $mg/m^3$ | 2.9E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.4E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000001 |
| | | | | VANADIUM | 1.3E-8 | $mg/m^3$ | 6.7E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.2E-8 | $mg/m^3$ | 6.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 7.7E-11 | $mg/m^3$ | 4.0E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.7E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.3E-10 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.0E-09 | 2.6E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000003 |
| | | | Exp. Route Total | | | | | | | | 1.2E-08 | | | | | 0.001 |
| | | Exposure Point Total | | | | | | | | | 1.2E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | | | | 1.2E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | | | | 2.0E-05 | | | | | 0.5 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block D | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 1.6E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.1E-05 | 3.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 3.1E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.2E-09 | 1.8E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 7.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.001 |
| | | | | ARSENIC | 3.50 | mg/kg | 5.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.1E-07 | 3.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 0.150 | mg/kg | 2.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0001 |
| | | | | COBALT | 10.7 | mg/kg | 1.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | IRON | 16,300 | mg/kg | 2.5E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 20.6 | mg/kg | 3.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.1E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0006 |
| | | | | MERCURY | 0.250 | mg/kg | 3.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0008 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 7.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00008 |
| | | | | NICKEL | 14.6 | mg/kg | 2.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 25.6 | mg/kg | 4.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.005 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 8.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.0E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 3.6E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.8E-07 | 7.9E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0003 |
| | | | Exp. Route Total | | | | | | | | 1.2E-05 | | | | | 0.07 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 1.8E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.3E-05 | 3.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 3.7E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.5E-09 | 2.2E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 6.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0006 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.1E-07 | 8.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | CADMIUM | 0.150 | mg/kg | 2.0E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00005 |
| | | | | COBALT | 10.7 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | IRON | 16,300 | mg/kg | 2.2E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 20.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00005 |
| | | | | MERCURY | 0.250 | mg/kg | 3.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0009 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 6.0E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000007 |
| | | | | NICKEL | 14.6 | mg/kg | 2.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 25.6 | mg/kg | 3.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 3.1E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 6.2E-07 | 6.8E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 1.4E-05 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 2.6E-05 | | | | | 0.08 |
| | Exposure Medium Total | | | | | | | | | | 2.6E-05 | | | | | 0.08 |

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | Value | Units | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block D | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.2E-9 | $mg/m^3$ | 3.2E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.6E-11 | 7.1E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 6.2E-12 | $mg/m^3$ | 6.4E-14 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.6E-14 | 3.7E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 1.5E-10 | $mg/m^3$ | 1.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.0E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 4.8E-11 | 6.5E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000004 |
| | | | | CADMIUM | 4.6E-11 | $mg/m^3$ | 4.8E-13 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 8.6E-13 | 2.8E-12 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.0000003 |
| | | | | COBALT | 3.3E-9 | $mg/m^3$ | 3.4E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 3.1E-10 | 2.0E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00003 |
| | | | | IRON | 5.0E-6 | $mg/m^3$ | 5.2E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.0E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 6.4E-9 | $mg/m^3$ | 6.6E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.8E-8 | $mg/m^3$ | 2.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.7E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00003 |
| | | | | MERCURY | 7.7E-11 | $mg/m^3$ | 8.0E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.7E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000002 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 1.4E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.4E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 4.5E-9 | $mg/m^3$ | 4.7E-11 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 1.2E-11 | 2.7E-10 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.000003 |
| | | | | VANADIUM | 7.9E-9 | $mg/m^3$ | 8.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.7E-7 | $mg/m^3$ | 1.8E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.0E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-10 | $mg/m^3$ | 2.6E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 2.7E-10 | $mg/m^3$ | 7.4E-12 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 6.2E-10 | 1.6E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000002 |
| | | | Exp. Route Total | | | | | | | | 1.0E-09 | | | | | 0.00007 |
| | | Exposure Point Total | | | | | | | | | 1.0E-09 | | | | | 0.00007 |
| | Exposure Medium Total | | | | | | | | | | 1.0E-09 | | | | | 0.00007 |
| Medium Total | | | | | | | | | | | 2.6E-05 | | | | | 0.08 |

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block D | Ingestion | NAPHTHALENE | 4.00 | mg/kg | 6.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 2.7E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.0E-06 | 5.9E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 3.7E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.4E-08 | 2.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 7.1E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.1E-06 | 4.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 11.7 | mg/kg | 1.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | IRON | 30,900 | mg/kg | 4.8E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.04 |
| | | | | LEAD | 22.9 | mg/kg | 3.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 1.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0004 |
| | | | | MERCURY | 0.180 | mg/kg | 2.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 42.2 | mg/kg | 6.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.008 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 6.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 3.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 5.8E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.9E-07 | 1.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 3.4E-06 | | | | | 0.10 |
| | | | Dermal | NAPHTHALENE | 4.00 | mg/kg | 7.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 3.0E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.2E-06 | 6.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 4.5E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.0E-08 | 2.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 1.8E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.8E-07 | 1.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 11.7 | mg/kg | 1.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | IRON | 30,900 | mg/kg | 4.1E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 22.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 9.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00004 |
| | | | | MERCURY | 0.180 | mg/kg | 2.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 42.2 | mg/kg | 5.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0007 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 5.0E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.0E-06 | 1.1E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 3.6E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 7.0E-06 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 7.0E-06 | | | | | 0.1 |

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block D | Inhalation | NAPHTHALENE | 6.2E-5 | $mg/m^3$ | 6.5E-07 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 2.2E-08 | 3.8E-06 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 2.0E-10 | $mg/m^3$ | 5.5E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 6.1E-12 | 1.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 7.4E-11 | $mg/m^3$ | 7.7E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 4.4E-13 | 4.5E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.4E-9 | $mg/m^3$ | 1.5E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 6.3E-11 | 8.6E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000006 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 3.7E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 3.4E-10 | 2.2E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00004 |
| | | | | IRON | 9.6E-6 | $mg/m^3$ | 9.9E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.8E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 7.1E-9 | $mg/m^3$ | 7.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.1E-8 | $mg/m^3$ | 2.2E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00003 |
| | | | | MERCURY | 5.6E-11 | $mg/m^3$ | 5.8E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.4E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000001 |
| | | | | VANADIUM | 1.3E-8 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.2E-8 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 7.7E-11 | $mg/m^3$ | 8.0E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.7E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.3E-10 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.0E-09 | 2.6E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000003 |
| | | | Exp. Route Total | | | | | | | | 2.3E-08 | | | | | 0.001 |
| | | Exposure Point Total | | | | | | | | | 2.3E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | | | | 2.3E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | | | | 7.0E-06 | | | | | 0.1 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block D | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 6.6E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.8E-06 | 1.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 3.5E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.0E-09 | 9.8E-09 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 8.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.0006 |
| | | | | ARSENIC | 3.50 | mg/kg | 6.1E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.2E-07 | 1.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | CADMIUM | 0.150 | mg/kg | 2.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.3E-08 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.00007 |
| | | | | COBALT | 10.7 | mg/kg | 1.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | IRON | 16,300 | mg/kg | 2.8E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.0E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 20.6 | mg/kg | 3.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0003 |
| | | | | MERCURY | 0.250 | mg/kg | 4.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0004 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 7.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00004 |
| | | | | NICKEL | 14.6 | mg/kg | 2.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.1E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0004 |
| | | | | VANADIUM | 25.6 | mg/kg | 4.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 9.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 1.5E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 7.6E-08 | 4.3E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0001 |
| | | | Exp. Route Total | | | | | | | | 5.8E-06 | | | | | 0.04 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 1.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.3E-06 | 3.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 6.5E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.3E-08 | 1.8E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0005 |
| | | | | ARSENIC | 3.50 | mg/kg | 2.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.6E-07 | 6.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 0.150 | mg/kg | 3.5E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.7E-10 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00004 |
| | | | | COBALT | 10.7 | mg/kg | 2.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 16,300 | mg/kg | 3.8E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 20.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00004 |
| | | | | MERCURY | 0.250 | mg/kg | 5.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0008 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000006 |
| | | | | NICKEL | 14.6 | mg/kg | 3.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 25.6 | mg/kg | 5.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 2.0E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 4.0E-07 | 5.6E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0007 |
| | | | Exp. Route Total | | | | | | | | 9.1E-06 | | | | | 0.010 |
| | | Exposure Point Total | | | | | | | | | 1.5E-05 | | | | | 0.05 |
| | Exposure Medium Total | | | | | | | | | | 1.5E-05 | | | | | 0.05 |

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block D | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.2E-9 | $mg/m^3$ | 9.6E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.1E-10 | 2.7E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 6.2E-12 | $mg/m^3$ | 5.0E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.9E-13 | 1.4E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 1.5E-10 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 8.8E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.8E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | CADMIUM | 4.6E-11 | $mg/m^3$ | 3.8E-12 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 6.8E-12 | 1.1E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000001 |
| | | | | COBALT | 3.3E-9 | $mg/m^3$ | 2.7E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.4E-09 | 7.6E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | IRON | 5.0E-6 | $mg/m^3$ | 4.1E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 6.4E-9 | $mg/m^3$ | 5.2E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.8E-8 | $mg/m^3$ | 2.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.4E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0001 |
| | | | | MERCURY | 7.7E-11 | $mg/m^3$ | 6.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000006 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 4.5E-9 | $mg/m^3$ | 3.7E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 9.6E-11 | 1.0E-09 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | VANADIUM | 7.9E-9 | $mg/m^3$ | 6.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.7E-7 | $mg/m^3$ | 1.4E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-10 | $mg/m^3$ | 2.0E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.7E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 2.7E-10 | $mg/m^3$ | 2.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.8E-09 | 6.1E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000006 |
| | | | Exp. Route Total | | | | | | | | 4.9E-09 | | | | | 0.0003 |
| | | Exposure Point Total | | | | | | | | | 4.9E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | | | | 4.9E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | | | | 1.5E-05 | | | | | 0.05 |

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block D | Ingestion | NAPHTHALENE | 4.00 | mg/kg | 7.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00010 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 1.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.3E-07 | 3.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 4.2E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.4E-08 | 1.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 8.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.2E-06 | 2.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | COBALT | 11.7 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | IRON | 30,900 | mg/kg | 5.4E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 22.9 | mg/kg | 4.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0002 |
| | | | | MERCURY | 0.180 | mg/kg | 3.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.8E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0003 |
| | | | | VANADIUM | 42.2 | mg/kg | 7.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.004 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 7.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 4.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 2.4E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.2E-07 | 6.8E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 2.2E-06 | | | | | 0.05 |
| | | | Dermal | NAPHTHALENE | 4.00 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 1.9E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.4E-06 | 5.5E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 7.7E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 2.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 3.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.8E-07 | 8.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 11.7 | mg/kg | 2.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | IRON | 30,900 | mg/kg | 7.1E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 22.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00003 |
| | | | | MERCURY | 0.180 | mg/kg | 4.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0006 |
| | | | | VANADIUM | 42.2 | mg/kg | 9.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 3.2E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 6.5E-07 | 9.0E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 2.7E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 4.9E-06 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | | | | 4.9E-06 | | | | | 0.06 |
| | Air | Block D | Inhalation | NAPHTHALENE | 6.2E-5 | $mg/m^3$ | 5.1E-06 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.7E-07 | 1.4E-05 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 2.0E-10 | $mg/m^3$ | 1.6E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.8E-11 | 4.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 7.4E-11 | $mg/m^3$ | 6.1E-12 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.5E-12 | 1.7E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.4E-9 | $mg/m^3$ | 1.2E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 5.0E-10 | 3.3E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 3.0E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.7E-09 | 8.3E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | IRON | 9.6E-6 | $mg/m^3$ | 7.8E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 7.1E-9 | $mg/m^3$ | 5.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.1E-8 | $mg/m^3$ | 1.7E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00010 |
| | | | | MERCURY | 5.6E-11 | $mg/m^3$ | 4.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000004 |
| | | | | VANADIUM | 1.3E-8 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.0E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.2E-8 | $mg/m^3$ | 1.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 7.7E-11 | $mg/m^3$ | 6.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.3E-10 | $mg/m^3$ | 3.5E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.0E-09 | 9.9E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000010 |
| | | | Exp. Route Total | | | | | | | | 1.8E-07 | | | | | 0.005 |
| | | Exposure Point Total | | | | | | | | | 1.8E-07 | | | | | 0.005 |
| | Exposure Medium Total | | | | | | | | | | 1.8E-07 | | | | | 0.005 |
| Medium Total | | | | | | | | | | | 5.1E-06 | | | | | 0.07 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block D | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 1.6E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.2E-04 | 3.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 1.6E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.1E-08 | 1.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 3.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.01 |
| | | | | ARSENIC | 3.50 | mg/kg | 2.7E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.1E-06 | 3.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | CADMIUM | 0.150 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 10.7 | mg/kg | 8.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.8E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.3 |
| | | | | IRON | 16,300 | mg/kg | 1.3E-02 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-01 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.2 |
| | | | | LEAD | 20.6 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 7.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.2E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.006 |
| | | | | MERCURY | 0.250 | mg/kg | 2.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 3.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0008 |
| | | | | NICKEL | 14.6 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.007 |
| | | | | VANADIUM | 25.6 | mg/kg | 2.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.05 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 4.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.0E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 6.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 3.6E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.8E-06 | 7.9E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.003 |
| | | | Exp. Route Total | | | | | | | | 1.2E-04 | | | | | 0.7 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 5.8E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.2E-05 | 1.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 6.1E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.2E-08 | 7.2E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.50 | mg/kg | 2.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.5E-07 | 2.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.009 |
| | | | | CADMIUM | 0.150 | mg/kg | 3.3E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0002 |
| | | | | COBALT | 10.7 | mg/kg | 2.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.009 |
| | | | | IRON | 16,300 | mg/kg | 3.6E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.006 |
| | | | | LEAD | 20.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0002 |
| | | | | MERCURY | 0.250 | mg/kg | 5.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.003 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 9.9E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00002 |
| | | | | NICKEL | 14.6 | mg/kg | 3.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.005 |
| | | | | VANADIUM | 25.6 | mg/kg | 5.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.001 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 1.0E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.0E-06 | 2.2E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.003 |
| | | | Exp. Route Total | | | | | | | | 4.5E-05 | | | | | 0.04 |
| | | Exposure Point Total | | | | | | | | | 1.7E-04 | | | | | 0.8 |
| | Exposure Medium Total | | | | | | | | | | 1.7E-04 | | | | | 0.8 |

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block D | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.2E-9 | $mg/m^3$ | 1.2E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.4E-10 | 2.7E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 6.2E-12 | $mg/m^3$ | 1.2E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 6.9E-14 | 1.4E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 1.5E-10 | $mg/m^3$ | 2.9E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 2.1E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 9.1E-11 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | CADMIUM | 4.6E-11 | $mg/m^3$ | 9.1E-13 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 1.6E-12 | 1.1E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000001 |
| | | | | COBALT | 3.3E-9 | $mg/m^3$ | 6.5E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 5.8E-10 | 7.6E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | IRON | 5.0E-6 | $mg/m^3$ | 9.9E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 6.4E-9 | $mg/m^3$ | 1.2E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.8E-8 | $mg/m^3$ | 5.4E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.4E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0001 |
| | | | | MERCURY | 7.7E-11 | $mg/m^3$ | 1.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000006 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 2.7E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 4.5E-9 | $mg/m^3$ | 8.8E-11 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 2.3E-11 | 1.0E-09 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | VANADIUM | 7.9E-9 | $mg/m^3$ | 1.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.7E-7 | $mg/m^3$ | 3.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-10 | $mg/m^3$ | 4.9E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.7E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 2.7E-10 | $mg/m^3$ | 2.8E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.4E-09 | 6.1E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000006 |
| | | | Exp. Route Total | | | | | | | | 3.2E-09 | | | | | 0.0003 |
| | | Exposure Point Total | | | | | | | | | 3.2E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | | | | 3.2E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | | | | 1.7E-04 | | | | | 0.8 |

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block D | Ingestion | NAPHTHALENE | 4.00 | mg/kg | 3.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 2.7E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.0E-05 | 5.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 1.9E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.8E-07 | 2.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 3.6E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 5.4E-06 | 4.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | COBALT | 11.7 | mg/kg | 9.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.4 |
| | | | | IRON | 30,900 | mg/kg | 2.4E-02 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-01 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.4 |
| | | | | LEAD | 22.9 | mg/kg | 1.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 5.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.004 |
| | | | | MERCURY | 0.180 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | VANADIUM | 42.2 | mg/kg | 3.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.08 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 3.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 2.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 5.8E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.9E-06 | 1.3E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 2.9E-05 | | | | | 1.0 |
| | | | Dermal | NAPHTHALENE | 4.00 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 9.9E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 7.2E-06 | 2.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 7.4E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 8.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 3.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.5E-07 | 3.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 11.7 | mg/kg | 2.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.010 |
| | | | | IRON | 30,900 | mg/kg | 6.8E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 22.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0001 |
| | | | | MERCURY | 0.180 | mg/kg | 3.9E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.6E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.002 |
| | | | | VANADIUM | 42.2 | mg/kg | 9.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 1.6E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 3.3E-06 | 3.6E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.005 |
| | | | Exp. Route Total | | | | | | | | 1.1E-05 | | | | | 0.04 |
| | | Exposure Point Total | | | | | | | | | 4.0E-05 | | | | | 1.0 |
| | Exposure Medium Total | | | | | | | | | | 4.0E-05 | | | | | 1.0 |

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block D | Inhalation | NAPHTHALENE | 6.2E-5 | $mg/m^3$ | 1.2E-06 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 4.2E-08 | 1.4E-05 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 2.0E-10 | $mg/m^3$ | 2.1E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.3E-11 | 4.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 7.4E-11 | $mg/m^3$ | 1.5E-12 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 8.3E-13 | 1.7E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.4E-9 | $mg/m^3$ | 2.8E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.2E-10 | 3.3E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 7.1E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 6.4E-10 | 8.3E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | IRON | 9.6E-6 | $mg/m^3$ | 1.9E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 7.1E-9 | $mg/m^3$ | 1.4E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.1E-8 | $mg/m^3$ | 4.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00010 |
| | | | | MERCURY | 5.6E-11 | $mg/m^3$ | 1.1E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000004 |
| | | | | VANADIUM | 1.3E-8 | $mg/m^3$ | 2.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.0E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.2E-8 | $mg/m^3$ | 2.4E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 7.7E-11 | $mg/m^3$ | 1.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.3E-10 | $mg/m^3$ | 4.5E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.8E-09 | 9.9E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000010 |
| | | | Exp. Route Total | | | | | | | | 4.6E-08 | | | | | 0.005 |
| | | Exposure Point Total | | | | | | | | | 4.6E-08 | | | | | 0.005 |
| | Exposure Medium Total | | | | | | | | | | 4.6E-08 | | | | | 0.005 |
| Medium Total | | | | | | | | | | | 4.0E-05 | | | | | 1.0 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block D | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 3.0E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.2E-05 | 6.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 5.9E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.2E-08 | 3.4E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.2E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.0E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.5E-06 | 6.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | CADMIUM | 0.150 | mg/kg | 4.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | COBALT | 10.7 | mg/kg | 3.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | IRON | 16,300 | mg/kg | 4.8E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.04 |
| | | | | LEAD | 20.6 | mg/kg | 6.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 2.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.001 |
| | | | | MERCURY | 0.250 | mg/kg | 7.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | NICKEL | 14.6 | mg/kg | 4.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 25.6 | mg/kg | 7.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.009 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 1.6E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 2.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 6.8E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 3.4E-07 | 1.5E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0005 |
| | | | Exp. Route Total | | | | | | | | 2.4E-05 | | | | | 0.1 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 1.2E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.5E-06 | 2.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 2.5E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.0E-09 | 1.4E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 4.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0004 |
| | | | | ARSENIC | 3.50 | mg/kg | 9.3E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.4E-07 | 5.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 0.150 | mg/kg | 1.3E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.8E-10 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00003 |
| | | | | COBALT | 10.7 | mg/kg | 9.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 16,300 | mg/kg | 1.4E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-04 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 20.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 8.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.7E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00003 |
| | | | | MERCURY | 0.250 | mg/kg | 2.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0006 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 4.0E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000005 |
| | | | | NICKEL | 14.6 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.6E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 25.6 | mg/kg | 2.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 2.1E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 4.1E-07 | 4.5E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0006 |
| | | | Exp. Route Total | | | | | | | | 9.1E-06 | | | | | 0.008 |
| | | Exposure Point Total | | | | | | | | | 3.3E-05 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 3.3E-05 | | | | | 0.1 |

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block D | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.2E-9 | $mg/m^3$ | 1.2E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.4E-10 | 2.7E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 6.2E-12 | $mg/m^3$ | 2.4E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.4E-13 | 1.4E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 1.5E-10 | $mg/m^3$ | 5.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 4.2E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.8E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | CADMIUM | 4.6E-11 | $mg/m^3$ | 1.8E-12 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 3.3E-12 | 1.1E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000001 |
| | | | | COBALT | 3.3E-9 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.2E-09 | 7.6E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | IRON | 5.0E-6 | $mg/m^3$ | 2.0E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 6.4E-9 | $mg/m^3$ | 2.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.8E-8 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.4E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0001 |
| | | | | MERCURY | 7.7E-11 | $mg/m^3$ | 3.0E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000006 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 5.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 4.5E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 4.6E-11 | 1.0E-09 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | VANADIUM | 7.9E-9 | $mg/m^3$ | 3.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.7E-7 | $mg/m^3$ | 6.7E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-10 | $mg/m^3$ | 9.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.7E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 2.7E-10 | $mg/m^3$ | 2.8E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.4E-09 | 6.1E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000006 |
| | | | Exp. Route Total | | | | | | | | 3.9E-09 | | | | | 0.0003 |
| | | Exposure Point Total | | | | | | | | | 3.9E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | | | | 3.9E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | | | | 3.3E-05 | | | | | 0.1 |

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block D | Ingestion | NAPHTHALENE | 4.00 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 5.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.7E-06 | 1.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 7.0E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.4E-07 | 4.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 1.4E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.0E-06 | 7.9E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | COBALT | 11.7 | mg/kg | 3.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.07 |
| | | | | IRON | 30,900 | mg/kg | 9.1E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.08 |
| | | | | LEAD | 22.9 | mg/kg | 6.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 2.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0008 |
| | | | | MERCURY | 0.180 | mg/kg | 5.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 42.2 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.2E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 7.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 1.1E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 5.5E-07 | 2.4E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 6.4E-06 | | | | | 0.2 |
| | | | Dermal | NAPHTHALENE | 4.00 | mg/kg | 4.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 2.0E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.5E-06 | 4.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 3.0E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.0E-08 | 1.7E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 1.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.8E-07 | 7.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 11.7 | mg/kg | 1.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 30,900 | mg/kg | 2.7E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 22.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 6.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00003 |
| | | | | MERCURY | 0.180 | mg/kg | 1.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.3E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0004 |
| | | | | VANADIUM | 42.2 | mg/kg | 3.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 3.3E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 6.6E-07 | 7.2E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0010 |
| | | | Exp. Route Total | | | | | | | | 2.4E-06 | | | | | 0.009 |
| | | Exposure Point Total | | | | | | | | | 8.8E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 8.8E-06 | | | | | 0.2 |

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block D | Inhalation | NAPHTHALENE | 6.2E-5 | $mg/m^3$ | 2.4E-06 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 8.3E-08 | 1.4E-05 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 2.0E-10 | $mg/m^3$ | 2.1E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.3E-11 | 4.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 7.4E-11 | $mg/m^3$ | 2.9E-12 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.7E-12 | 1.7E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.4E-9 | $mg/m^3$ | 5.6E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.4E-10 | 3.3E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 1.4E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.3E-09 | 8.3E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | IRON | 9.6E-6 | $mg/m^3$ | 3.7E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 7.1E-9 | $mg/m^3$ | 2.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.1E-8 | $mg/m^3$ | 8.2E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00010 |
| | | | | MERCURY | 5.6E-11 | $mg/m^3$ | 2.2E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000004 |
| | | | | VANADIUM | 1.3E-8 | $mg/m^3$ | 5.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.0E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.2E-8 | $mg/m^3$ | 4.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 7.7E-11 | $mg/m^3$ | 3.0E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.3E-10 | $mg/m^3$ | 4.5E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.8E-09 | 9.9E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000010 |
| | | | Exp. Route Total | | | | | | | | 8.8E-08 | | | | | 0.005 |
| | | Exposure Point Total | | | | | | | | | 8.8E-08 | | | | | 0.005 |
| | Exposure Medium Total | | | | | | | | | | 8.8E-08 | | | | | 0.005 |
| Medium Total | | | | | | | | | | | 8.9E-06 | | | | | 0.2 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block D | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 6.4E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.7E-06 | 3.7E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 3.4E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.7E-09 | 2.0E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 8.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.7E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.001 |
| | | | | ARSENIC | 3.50 | mg/kg | 5.9E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.8E-07 | 3.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 0.150 | mg/kg | 2.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0001 |
| | | | | COBALT | 10.7 | mg/kg | 1.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | IRON | 16,300 | mg/kg | 2.7E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 20.6 | mg/kg | 3.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 1.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.8E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0006 |
| | | | | MERCURY | 0.250 | mg/kg | 4.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0008 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 7.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00009 |
| | | | | NICKEL | 14.6 | mg/kg | 2.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 25.6 | mg/kg | 4.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.005 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 9.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 1.5E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 7.3E-08 | 8.5E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0003 |
| | | | Exp. Route Total | | | | | | | | 5.6E-06 | | | | | 0.08 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 3.3E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.4E-06 | 1.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 1.9E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.7E-09 | 1.1E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 3.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0003 |
| | | | | ARSENIC | 3.50 | mg/kg | 7.0E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.1E-07 | 4.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | CADMIUM | 0.150 | mg/kg | 1.0E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.9E-10 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00002 |
| | | | | COBALT | 10.7 | mg/kg | 7.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | IRON | 16,300 | mg/kg | 1.1E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-04 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.0009 |
| | | | | LEAD | 20.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 6.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00003 |
| | | | | MERCURY | 0.250 | mg/kg | 1.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.8E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0005 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 3.0E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000004 |
| | | | | NICKEL | 14.6 | mg/kg | 9.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.7E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 25.6 | mg/kg | 1.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 5.8E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.2E-07 | 3.4E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0005 |
| | | | Exp. Route Total | | | | | | | | 2.6E-06 | | | | | 0.006 |
| | | Exposure Point Total | | | | | | | | | 8.3E-06 | | | | | 0.08 |
| | Exposure Medium Total | | | | | | | | | | 8.3E-06 | | | | | 0.08 |

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block D | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.2E-9 | mg/m$^3$ | 4.6E-11 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 5.1E-11 | 2.7E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 6.2E-12 | mg/m$^3$ | 2.4E-13 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.4E-13 | 1.4E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 1.5E-10 | mg/m$^3$ | 5.8E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.4E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 1.1E-9 | mg/m$^3$ | 4.2E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 1.8E-10 | 2.5E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00002 |
| | | | | CADMIUM | 4.6E-11 | mg/m$^3$ | 1.8E-12 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 3.3E-12 | 1.1E-11 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.000001 |
| | | | | COBALT | 3.3E-9 | mg/m$^3$ | 1.3E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 1.2E-09 | 7.6E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0001 |
| | | | | IRON | 5.0E-6 | mg/m$^3$ | 2.0E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.2E-06 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | LEAD | 6.4E-9 | mg/m$^3$ | 2.5E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MANGANESE | 2.8E-8 | mg/m$^3$ | 1.1E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.4E-09 | (mg/m$^3$) | 5.0E-05 | (mg/m$^3$) | 0.0001 |
| | | | | MERCURY | 7.7E-11 | mg/m$^3$ | 3.0E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.8E-11 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.0000006 |
| | | | | MOLYBDENUM | 1.4E-10 | mg/m$^3$ | 5.5E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.2E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 4.5E-9 | mg/m$^3$ | 1.8E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 4.6E-11 | 1.0E-09 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.00001 |
| | | | | VANADIUM | 7.9E-9 | mg/m$^3$ | 3.1E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.8E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 1.7E-7 | mg/m$^3$ | 6.7E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.9E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-10 | mg/m$^3$ | 9.8E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.7E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.7E-10 | mg/m$^3$ | 1.1E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 8.9E-10 | 6.1E-11 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.0000006 |
| | | | Exp. Route Total | | | | | | | | 2.3E-09 | | | | | 0.0003 |
| | | Exposure Point Total | | | | | | | | | 2.3E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | | | | 2.3E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | | | | 8.3E-06 | | | | | 0.08 |

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block D | Ingestion | NAPHTHALENE | 4.00 | mg/kg | 6.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 1.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.0E-07 | 6.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 4.0E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.1E-08 | 2.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 7.7E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.2E-06 | 4.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 11.7 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | IRON | 30,900 | mg/kg | 5.2E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.04 |
| | | | | LEAD | 22.9 | mg/kg | 3.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.6E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0005 |
| | | | | MERCURY | 0.180 | mg/kg | 3.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0006 |
| | | | | VANADIUM | 42.2 | mg/kg | 7.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.008 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 6.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 4.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 2.3E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.2E-07 | 1.4E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0005 |
| | | | Exp. Route Total | | | | | | | | 2.2E-06 | | | | | 0.1 |
| | | | Dermal | NAPHTHALENE | 4.00 | mg/kg | 3.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 5.7E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.1E-07 | 3.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 2.2E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.5E-08 | 1.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 9.2E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.4E-07 | 5.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 11.7 | mg/kg | 7.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 30,900 | mg/kg | 2.1E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 22.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 4.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00002 |
| | | | | MERCURY | 0.180 | mg/kg | 1.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0003 |
| | | | | VANADIUM | 42.2 | mg/kg | 2.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 9.4E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.9E-07 | 5.5E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0007 |
| | | | Exp. Route Total | | | | | | | | 7.8E-07 | | | | | 0.007 |
| | | Exposure Point Total | | | | | | | | | 2.9E-06 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 2.9E-06 | | | | | 0.1 |

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block D | Inhalation | NAPHTHALENE | 6.2E-5 | $mg/m^3$ | 2.4E-06 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 8.3E-08 | 1.4E-05 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 2.0E-10 | $mg/m^3$ | 7.9E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 8.7E-12 | 4.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 7.4E-11 | $mg/m^3$ | 2.9E-12 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.7E-12 | 1.7E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.4E-9 | $mg/m^3$ | 5.6E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.4E-10 | 3.3E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 1.4E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.3E-09 | 8.3E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | IRON | 9.6E-6 | $mg/m^3$ | 3.7E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 7.1E-9 | $mg/m^3$ | 2.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.1E-8 | $mg/m^3$ | 8.2E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00010 |
| | | | | MERCURY | 5.6E-11 | $mg/m^3$ | 2.2E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000004 |
| | | | | VANADIUM | 1.3E-8 | $mg/m^3$ | 5.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.0E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.2E-8 | $mg/m^3$ | 4.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 7.7E-11 | $mg/m^3$ | 3.0E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.3E-10 | $mg/m^3$ | 1.7E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.4E-09 | 9.9E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000010 |
| | | | Exp. Route Total | | | | | | | | 8.6E-08 | | | | | 0.005 |
| | | Exposure Point Total | | | | | | | | | 8.6E-08 | | | | | 0.005 |
| | Exposure Medium Total | | | | | | | | | | 8.6E-08 | | | | | 0.005 |
| Medium Total | | | | | | | | | | | 3.0E-06 | | | | | 0.1 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block D | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 2.2E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.6E-04 | 4.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 2.2E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.4E-08 | 2.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 5.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.02 |
| | | | | ARSENIC | 3.50 | mg/kg | 3.8E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 5.8E-06 | 4.5E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | CADMIUM | 0.150 | mg/kg | 1.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 10.7 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.5 |
| | | | | IRON | 16,300 | mg/kg | 1.8E-02 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-01 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.3 |
| | | | | LEAD | 20.6 | mg/kg | 2.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 9.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.008 |
| | | | | MERCURY | 0.250 | mg/kg | 2.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 4.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.001 |
| | | | | NICKEL | 14.6 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.009 |
| | | | | VANADIUM | 25.6 | mg/kg | 2.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.07 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 6.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 8.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 5.1E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.5E-06 | 1.1E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 1.7E-04 | | | | | 1.0 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 8.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.9E-05 | 1.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 8.6E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.7E-08 | 1.0E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 1.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.003 |
| | | | | ARSENIC | 3.50 | mg/kg | 3.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.8E-07 | 3.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 0.150 | mg/kg | 4.6E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.4E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0002 |
| | | | | COBALT | 10.7 | mg/kg | 3.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | IRON | 16,300 | mg/kg | 5.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.008 |
| | | | | LEAD | 20.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0002 |
| | | | | MERCURY | 0.250 | mg/kg | 7.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.9E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.004 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00003 |
| | | | | NICKEL | 14.6 | mg/kg | 4.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.2E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.007 |
| | | | | VANADIUM | 25.6 | mg/kg | 7.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.2E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 1.4E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.8E-06 | 3.1E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 6.2E-05 | | | | | 0.05 |
| | | Exposure Point Total | | | | | | | | | 2.3E-04 | | | | | 1.1 |
| | Exposure Medium Total | | | | | | | | | | 2.3E-04 | | | | | 1.1 |

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block D | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.2E-9 | mg/m$^3$ | 5.2E-10 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 5.7E-10 | 1.1E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 6.2E-12 | mg/m$^3$ | 5.1E-13 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 2.9E-13 | 5.9E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 1.5E-10 | mg/m$^3$ | 1.2E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.4E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 1.1E-9 | mg/m$^3$ | 8.9E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 3.8E-10 | 1.0E-09 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00007 |
| | | | | CADMIUM | 4.6E-11 | mg/m$^3$ | 3.8E-12 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 6.9E-12 | 4.5E-11 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.000004 |
| | | | | COBALT | 3.3E-9 | mg/m$^3$ | 2.7E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 2.5E-09 | 3.2E-09 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0005 |
| | | | | IRON | 5.0E-6 | mg/m$^3$ | 4.1E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.8E-06 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | LEAD | 6.4E-9 | mg/m$^3$ | 5.2E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.1E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MANGANESE | 2.8E-8 | mg/m$^3$ | 2.3E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.7E-08 | (mg/m$^3$) | 5.0E-05 | (mg/m$^3$) | 0.0005 |
| | | | | MERCURY | 7.7E-11 | mg/m$^3$ | 6.4E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 7.4E-11 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000002 |
| | | | | MOLYBDENUM | 1.4E-10 | mg/m$^3$ | 1.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.3E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 4.5E-9 | mg/m$^3$ | 3.7E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 9.7E-11 | 4.3E-09 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.00005 |
| | | | | VANADIUM | 7.9E-9 | mg/m$^3$ | 6.5E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 7.6E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 1.7E-7 | mg/m$^3$ | 1.4E-08 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.6E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-10 | mg/m$^3$ | 2.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.4E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.7E-10 | mg/m$^3$ | 1.2E-10 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 9.9E-09 | 2.6E-10 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 1.3E-08 | | | | | 0.001 |
| | | Exposure Point Total | | | | | | | | | 1.3E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | | | | 2.3E-04 | | | | | 1.1 |

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block D | Ingestion | NAPHTHALENE | 4.00 | mg/kg | 4.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.1E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 3.8E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.8E-05 | 8.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 2.6E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.3E-07 | 3.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 5.0E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 7.6E-06 | 5.9E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | COBALT | 11.7 | mg/kg | 1.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.5 |
| | | | | IRON | 30,900 | mg/kg | 3.4E-02 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-01 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.6 |
| | | | | LEAD | 22.9 | mg/kg | 2.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 7.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.6E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.006 |
| | | | | MERCURY | 0.180 | mg/kg | 2.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | VANADIUM | 42.2 | mg/kg | 4.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.4E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.1 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 4.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 2.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 8.2E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 4.1E-06 | 1.8E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.006 |
| | | | Exp. Route Total | | | | | | | | 4.0E-05 | | | | | 1.4 |
| | | | Dermal | NAPHTHALENE | 4.00 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0009 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 1.4E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.0E-05 | 3.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 1.0E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.1E-07 | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 4.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 6.4E-07 | 4.9E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 11.7 | mg/kg | 3.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | IRON | 30,900 | mg/kg | 9.5E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 22.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0002 |
| | | | | MERCURY | 0.180 | mg/kg | 5.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 42.2 | mg/kg | 1.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 2.3E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 4.6E-06 | 5.0E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.007 |
| | | | Exp. Route Total | | | | | | | | 1.6E-05 | | | | | 0.06 |
| | | Exposure Point Total | | | | | | | | | 5.5E-05 | | | | | 1.4 |
| | Exposure Medium Total | | | | | | | | | | 5.5E-05 | | | | | 1.4 |

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block D | Inhalation | NAPHTHALENE | 6.2E-5 | $mg/m^3$ | 5.1E-06 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.7E-07 | 6.0E-05 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.02 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 2.0E-10 | $mg/m^3$ | 8.8E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 9.7E-11 | 1.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 7.4E-11 | $mg/m^3$ | 6.1E-12 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.5E-12 | 7.1E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.4E-9 | $mg/m^3$ | 1.2E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 5.0E-10 | 1.4E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00009 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 3.0E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.7E-09 | 3.5E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0006 |
| | | | | IRON | 9.6E-6 | $mg/m^3$ | 7.9E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 7.1E-9 | $mg/m^3$ | 5.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.1E-8 | $mg/m^3$ | 1.7E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0004 |
| | | | | MERCURY | 5.6E-11 | $mg/m^3$ | 4.6E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.3E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | VANADIUM | 1.3E-8 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.2E-8 | $mg/m^3$ | 1.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 7.7E-11 | $mg/m^3$ | 6.4E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.3E-10 | $mg/m^3$ | 1.9E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.6E-08 | 4.2E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000004 |
| | | | Exp. Route Total | | | | | | | | 1.9E-07 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 1.9E-07 | | | | | 0.02 |
| | Exposure Medium Total | | | | | | | | | | 1.9E-07 | | | | | 0.02 |
| Medium Total | | | | | | | | | | | 5.6E-05 | | | | | 1.5 |
| | | | | | | | | | | Total of Receptor Risks Across All Media | 2.9E-04 | | | Total of Receptor Hazards Across All Media | | 2.5 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block D | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 4.2E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.0E-05 | 9.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 8.2E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.6E-08 | 4.8E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 2.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.003 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.4E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-06 | 8.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | CADMIUM | 0.150 | mg/kg | 6.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | COBALT | 10.7 | mg/kg | 4.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.09 |
| | | | | IRON | 16,300 | mg/kg | 6.7E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.06 |
| | | | | LEAD | 20.6 | mg/kg | 8.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 3.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.002 |
| | | | | MERCURY | 0.250 | mg/kg | 1.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | NICKEL | 14.6 | mg/kg | 6.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.002 |
| | | | | VANADIUM | 25.6 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 2.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 3.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 9.5E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 4.8E-07 | 2.1E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0007 |
| | | | Exp. Route Total | | | | | | | | 3.3E-05 | | | | | 0.2 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 1.6E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.2E-05 | 3.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 3.5E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.0E-09 | 2.0E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 6.0E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0006 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.0E-07 | 7.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | CADMIUM | 0.150 | mg/kg | 1.9E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00004 |
| | | | | COBALT | 10.7 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | IRON | 16,300 | mg/kg | 2.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 20.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.5E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00005 |
| | | | | MERCURY | 0.250 | mg/kg | 3.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0009 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 5.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000007 |
| | | | | NICKEL | 14.6 | mg/kg | 1.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 25.6 | mg/kg | 3.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 2.9E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 5.8E-07 | 6.3E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 1.3E-05 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 4.6E-05 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 4.6E-05 | | | | | 0.2 |

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block D | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.2E-9 | mg/m$^3$ | 5.2E-10 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 5.7E-10 | 1.1E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 6.2E-12 | mg/m$^3$ | 1.0E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 5.8E-13 | 5.9E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 1.5E-10 | mg/m$^3$ | 2.4E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.4E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 1.1E-9 | mg/m$^3$ | 1.8E-10 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 7.7E-10 | 1.0E-09 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00007 |
| | | | | CADMIUM | 4.6E-11 | mg/m$^3$ | 7.6E-12 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 1.4E-11 | 4.5E-11 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.000004 |
| | | | | COBALT | 3.3E-9 | mg/m$^3$ | 5.4E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 4.9E-09 | 3.2E-09 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0005 |
| | | | | IRON | 5.0E-6 | mg/m$^3$ | 8.3E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.8E-06 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | LEAD | 6.4E-9 | mg/m$^3$ | 1.0E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.1E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MANGANESE | 2.8E-8 | mg/m$^3$ | 4.6E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.7E-08 | (mg/m$^3$) | 5.0E-05 | (mg/m$^3$) | 0.0005 |
| | | | | MERCURY | 7.7E-11 | mg/m$^3$ | 1.3E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 7.4E-11 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000002 |
| | | | | MOLYBDENUM | 1.4E-10 | mg/m$^3$ | 2.3E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.3E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 4.5E-9 | mg/m$^3$ | 7.4E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 1.9E-10 | 4.3E-09 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.00005 |
| | | | | VANADIUM | 7.9E-9 | mg/m$^3$ | 1.3E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 7.6E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 1.7E-7 | mg/m$^3$ | 2.8E-08 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.6E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-10 | mg/m$^3$ | 4.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.4E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.7E-10 | mg/m$^3$ | 1.2E-10 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 9.9E-09 | 2.6E-10 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 1.6E-08 | | | | | 0.001 |
| | | Exposure Point Total | | | | | | | | | 1.6E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | | | | 1.6E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | | | | 4.6E-05 | | | | | 0.2 |

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block D | Ingestion | NAPHTHALENE | 4.00 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.6E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 7.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.2E-06 | 1.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 9.9E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.0E-07 | 5.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 1.9E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.8E-06 | 1.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | COBALT | 11.7 | mg/kg | 4.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.09 |
| | | | | IRON | 30,900 | mg/kg | 1.3E-02 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.4E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 22.9 | mg/kg | 9.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 2.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.001 |
| | | | | MERCURY | 0.180 | mg/kg | 7.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 42.2 | mg/kg | 1.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 1.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 1.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 1.5E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 7.7E-07 | 3.4E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 9.0E-06 | | | | | 0.3 |
| | | | Dermal | NAPHTHALENE | 4.00 | mg/kg | 6.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 2.8E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.0E-06 | 6.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 4.2E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.4E-08 | 2.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 1.7E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.6E-07 | 1.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 11.7 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | IRON | 30,900 | mg/kg | 3.8E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 22.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 8.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.9E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00004 |
| | | | | MERCURY | 0.180 | mg/kg | 2.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0006 |
| | | | | VANADIUM | 42.2 | mg/kg | 5.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0006 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 4.6E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 9.3E-07 | 1.0E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 3.3E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 1.2E-05 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | | | | 1.2E-05 | | | | | 0.3 |

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block D | Inhalation | NAPHTHALENE | 6.2E-5 | $mg/m^3$ | 1.0E-05 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 3.5E-07 | 6.0E-05 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.02 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 2.0E-10 | $mg/m^3$ | 8.8E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 9.7E-11 | 1.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 7.4E-11 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 7.0E-12 | 7.1E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.4E-9 | $mg/m^3$ | 2.3E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.0E-09 | 1.4E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00009 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 6.0E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 5.4E-09 | 3.5E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0006 |
| | | | | IRON | 9.6E-6 | $mg/m^3$ | 1.6E-06 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 7.1E-9 | $mg/m^3$ | 1.2E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.1E-8 | $mg/m^3$ | 3.4E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0004 |
| | | | | MERCURY | 5.6E-11 | $mg/m^3$ | 9.2E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.3E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | VANADIUM | 1.3E-8 | $mg/m^3$ | 2.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.2E-8 | $mg/m^3$ | 2.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 7.7E-11 | $mg/m^3$ | 1.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.3E-10 | $mg/m^3$ | 1.9E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.6E-08 | 4.2E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000004 |
| | | | Exp. Route Total | | | | | | | | 3.7E-07 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 3.7E-07 | | | | | 0.02 |
| | Exposure Medium Total | | | | | | | | | | 3.7E-07 | | | | | 0.02 |
| Medium Total | | | | | | | | | | | 1.3E-05 | | | | | 0.3 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block D | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 8.9E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 6.5E-06 | 5.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 4.7E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.4E-09 | 2.7E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.6E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.50 | mg/kg | 8.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.2E-06 | 4.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | CADMIUM | 0.150 | mg/kg | 3.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | COBALT | 10.7 | mg/kg | 2.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | IRON | 16,300 | mg/kg | 3.8E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.03 |
| | | | | LEAD | 20.6 | mg/kg | 4.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 2.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0009 |
| | | | | MERCURY | 0.250 | mg/kg | 5.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0001 |
| | | | | NICKEL | 14.6 | mg/kg | 3.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0010 |
| | | | | VANADIUM | 25.6 | mg/kg | 6.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.007 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 1.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.5E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 1.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 2.0E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.0E-07 | 1.2E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 7.9E-06 | | | | | 0.1 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.80 | mg/kg | 4.6E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.4E-06 | 2.7E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.020 | mg/kg | 2.6E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.2E-09 | 1.5E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.480 | mg/kg | 4.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0004 |
| | | | | ARSENIC | 3.50 | mg/kg | 9.8E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 5.7E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 0.150 | mg/kg | 1.4E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.2E-10 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00003 |
| | | | | COBALT | 10.7 | mg/kg | 1.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 16,300 | mg/kg | 1.5E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.9E-04 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 20.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 89.9 | mg/kg | 8.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.9E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00004 |
| | | | | MERCURY | 0.250 | mg/kg | 2.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0007 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 4.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000005 |
| | | | | NICKEL | 14.6 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.0E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0010 |
| | | | | VANADIUM | 25.6 | mg/kg | 2.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 550 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.810 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.870 | mg/kg | 8.2E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.6E-07 | 4.8E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0006 |
| | | | Exp. Route Total | | | | | | | | 3.7E-06 | | | | | 0.008 |
| | | Exposure Point Total | | | | | | | | | 1.2E-05 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 1.2E-05 | | | | | 0.1 |

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block D | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.2E-9 | $mg/m^3$ | 1.9E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.1E-10 | 1.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 6.2E-12 | $mg/m^3$ | 1.0E-12 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 5.8E-13 | 5.9E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 1.5E-10 | $mg/m^3$ | 2.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 7.7E-10 | 1.0E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | CADMIUM | 4.6E-11 | $mg/m^3$ | 7.6E-12 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 1.4E-11 | 4.5E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000004 |
| | | | | COBALT | 3.3E-9 | $mg/m^3$ | 5.4E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 4.9E-09 | 3.2E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0005 |
| | | | | IRON | 5.0E-6 | $mg/m^3$ | 8.3E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 6.4E-9 | $mg/m^3$ | 1.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.8E-8 | $mg/m^3$ | 4.6E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.7E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0005 |
| | | | | MERCURY | 7.7E-11 | $mg/m^3$ | 1.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.4E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 2.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 4.5E-9 | $mg/m^3$ | 7.4E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 1.9E-10 | 4.3E-09 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.00005 |
| | | | | VANADIUM | 7.9E-9 | $mg/m^3$ | 1.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.7E-7 | $mg/m^3$ | 2.8E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.6E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-10 | $mg/m^3$ | 4.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 2.7E-10 | $mg/m^3$ | 4.4E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.7E-09 | 2.6E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 9.8E-09 | | | | | 0.001 |
| | | Exposure Point Total | | | | | | | | | 9.8E-09 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | | | | 9.8E-09 | | | | | 0.001 |
| Medium Total | | | | | | | | | | | 1.2E-05 | | | | | 0.1 |

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block D | Ingestion | NAPHTHALENE | 4.00 | mg/kg | 9.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.5E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 1.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.1E-06 | 8.9E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 5.6E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.1E-07 | 3.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 1.1E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.6E-06 | 6.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 11.7 | mg/kg | 2.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | IRON | 30,900 | mg/kg | 7.3E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.06 |
| | | | | LEAD | 22.9 | mg/kg | 5.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.3E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0007 |
| | | | | MERCURY | 0.180 | mg/kg | 4.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0008 |
| | | | | VANADIUM | 42.2 | mg/kg | 9.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 9.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 5.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 3.3E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.6E-07 | 1.9E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0006 |
| | | | Exp. Route Total | | | | | | | | 3.0E-06 | | | | | 0.1 |
| | | | Dermal | NAPHTHALENE | 4.00 | mg/kg | 4.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.650 | mg/kg | 7.9E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.8E-07 | 4.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.240 | mg/kg | 3.1E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.3E-08 | 1.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 4.60 | mg/kg | 1.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.9E-07 | 7.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 11.7 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 30,900 | mg/kg | 2.9E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 22.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 67.6 | mg/kg | 6.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00003 |
| | | | | MERCURY | 0.180 | mg/kg | 1.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.8E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 42.2 | mg/kg | 4.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 40.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.250 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.40 | mg/kg | 1.3E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.6E-07 | 7.7E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 1.1E-06 | | | | | 0.009 |
| | | Exposure Point Total | | | | | | | | | 4.1E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 4.1E-06 | | | | | 0.2 |

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK D - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block D | Inhalation | NAPHTHALENE | 6.2E-5 | $mg/m^3$ | 1.0E-05 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 3.5E-07 | 6.0E-05 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.02 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 2.0E-10 | $mg/m^3$ | 3.3E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.6E-11 | 1.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 7.4E-11 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 7.0E-12 | 7.1E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.4E-9 | $mg/m^3$ | 2.3E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.0E-09 | 1.4E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00009 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 6.0E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 5.4E-09 | 3.5E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0006 |
| | | | | IRON | 9.6E-6 | $mg/m^3$ | 1.6E-06 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 7.1E-9 | $mg/m^3$ | 1.2E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.1E-8 | $mg/m^3$ | 3.4E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0004 |
| | | | | MERCURY | 5.6E-11 | $mg/m^3$ | 9.2E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.3E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | VANADIUM | 1.3E-8 | $mg/m^3$ | 2.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.2E-8 | $mg/m^3$ | 2.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 7.7E-11 | $mg/m^3$ | 1.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.3E-10 | $mg/m^3$ | 7.1E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 6.0E-09 | 4.2E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000004 |
| | | | Exp. Route Total | | | | | | | | 3.6E-07 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 3.6E-07 | | | | | 0.02 |
| | Exposure Medium Total | | | | | | | | | | 3.6E-07 | | | | | 0.02 |
| Medium Total | | | | | | | | | | | 4.5E-06 | | | | | 0.2 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-05 | (mg/kg/day) | 8.0E-03 | (mg/kg/day) | 0.01 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 5.2E-06 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 3.6E-04 | (mg/kg/day) | 9.0E-02 | (mg/kg/day) | 0.004 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 1.5E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 8.3E-11 | 1.1E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 1.0E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 7.3E-07 | 7.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 2.4E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.8E-06 | 1.7E-04 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 8.5 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 7.2E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.4E-05 | 5.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 2.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.004 |
| | | | | ARSENIC | 2.20 | mg/kg | 1.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-07 | 1.0E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | CADMIUM | 2.70 | mg/kg | 1.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 11.6 | mg/kg | 7.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.4E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.02 |
| | | | | IRON | 17,200 | mg/kg | 1.2E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.1E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 21.6 | mg/kg | 1.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.2E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.006 |
| | | | | MERCURY | 0.120 | mg/kg | 8.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 5.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0008 |
| | | | | NICKEL | 10.9 | mg/kg | 7.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.1E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 24.0 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 1.6E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-02 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 3.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 8.7E-08 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 4.4E-08 | 6.1E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 2.0E-05 | | | | | 8.7 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 6.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.7E-06 | (mg/kg/day) | 8.0E-03 | (mg/kg/day) | 0.001 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 3.2E-07 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 9.3E-09 | 2.2E-05 | (mg/kg/day) | 9.0E-02 | (mg/kg/day) | 0.0002 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 9.5E-10 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 5.1E-12 | 6.6E-08 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0000009 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 2.7E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.0E-07 | 1.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 6.9E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.4E-06 | 4.9E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 2.4 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 2.1E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.2E-06 | 1.5E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 5.1E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0006 |
| | | | | ARSENIC | 2.20 | mg/kg | 9.1E-09 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.4E-08 | 6.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 2.70 | mg/kg | 3.7E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 11.6 | mg/kg | 1.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | IRON | 17,200 | mg/kg | 2.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 21.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 2.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0001 |
| | | | | MERCURY | 0.120 | mg/kg | 1.7E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0006 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 1.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.0E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00002 |
| | | | | NICKEL | 10.9 | mg/kg | 1.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 24.0 | mg/kg | 3.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.0002 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 1.8E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 3.6E-08 | 1.3E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 5.8E-06 | | | | | 2.4 |
| | | Exposure Point Total | | | | | | | | | 2.6E-05 | | | | | 11 |
| | Exposure Medium Total | | | | | | | | | | 2.6E-05 | | | | | 11 |

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 0.002 | $mg/m^3$ | 7.5E-06 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.3E-04 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.012 | $mg/m^3$ | 3.8E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.7E-03 | $(mg/m^3)$ | 2.0E-02 | $(mg/m^3)$ | 0.1 |
| | | | | 1,4-DICHLOROBENZENE | 0.000 | $mg/m^3$ | 3.2E-07 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 3.6E-09 | 2.3E-05 | $(mg/m^3)$ | 1.2E+00 | $(mg/m^3)$ | 0.00002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.0E-6 | $mg/m^3$ | 3.4E-09 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.8E-09 | 2.4E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 2.5E-5 | $mg/m^3$ | 8.2E-08 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 4.7E-08 | 5.7E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 7.6E-5 | $mg/m^3$ | 2.5E-07 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.4E-07 | 1.7E-05 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 2.6E-7 | $mg/m^3$ | 8.4E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.5E-6 | $mg/m^3$ | 5.0E-09 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.2E-08 | 3.5E-07 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.02 |
| | | | | CADMIUM | 1.9E-6 | $mg/m^3$ | 6.2E-09 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 1.1E-08 | 4.3E-07 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.04 |
| | | | | COBALT | 8.1E-6 | $mg/m^3$ | 2.6E-08 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.4E-07 | 1.9E-06 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.3 |
| | | | | IRON | 0.012 | $mg/m^3$ | 3.9E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.7E-03 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 1.5E-5 | $mg/m^3$ | 4.9E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.4E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 1.2E-4 | $mg/m^3$ | 4.0E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-05 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.6 |
| | | | | MERCURY | 8.4E-8 | $mg/m^3$ | 2.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-08 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0006 |
| | | | | MOLYBDENUM | 5.8E-7 | $mg/m^3$ | 1.9E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 7.6E-6 | $mg/m^3$ | 2.5E-08 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 6.5E-09 | 1.7E-06 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.02 |
| | | | | VANADIUM | 1.7E-5 | $mg/m^3$ | 5.5E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.8E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 0.002 | $mg/m^3$ | 5.3E-06 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.7E-04 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.4E-7 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.7E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 9.1E-7 | $mg/m^3$ | 3.0E-09 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.5E-07 | 2.1E-07 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.002 |
| | | | Exp. Route Total | | | | | | | | 7.2E-07 | | | | | 1.1 |
| | | Exposure Point Total | | | | | | | | | 7.2E-07 | | | | | 1.1 |
| | Exposure Medium Total | | | | | | | | | | 7.2E-07 | | | | | 1.1 |
| Medium Total | | | | | | | | | | | 2.7E-05 | | | | | 12 |

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-04 | (mg/kg/day) | 8.0E-03 | (mg/kg/day) | 0.1 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 4.9E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1.4E-06 | 3.4E-03 | (mg/kg/day) | 9.0E-02 | (mg/kg/day) | 0.04 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 2.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 7.0E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 3.8E-09 | 4.9E-05 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 1.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.3E-07 | 8.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 4.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00002 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 6.6E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.3E-06 | 4.6E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 2.3 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 4.8E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.5E-05 | 3.3E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 1.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 7.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 4.00 | mg/kg | 2.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.006 |
| | | | | IRON | 17,100 | mg/kg | 1.1E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.0E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 3.60 | mg/kg | 2.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 6.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.003 |
| | | | | MERCURY | 0.290 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | VANADIUM | 13.8 | mg/kg | 9.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.5E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.006 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 1.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 5.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 3.3E-08 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.6E-08 | 2.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 9.9E-05 | | | | | 2.6 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 6.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.8E-05 | (mg/kg/day) | 8.0E-03 | (mg/kg/day) | 0.01 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 3.0E-06 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 8.7E-08 | 2.1E-04 | (mg/kg/day) | 9.0E-02 | (mg/kg/day) | 0.002 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 1.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 4.3E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 2.3E-10 | 3.0E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00004 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 3.0E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.2E-07 | 2.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 1.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.0E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000005 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 1.9E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.8E-07 | 1.3E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.7 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 1.4E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.7E-05 | 9.6E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 6.2E-09 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.3E-09 | 4.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 4.00 | mg/kg | 5.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0001 |
| | | | | IRON | 17,100 | mg/kg | 2.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 3.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.0E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00006 |
| | | | | MERCURY | 0.290 | mg/kg | 4.0E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 13.8 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-06 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.0001 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 6.7E-10 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.3E-08 | 4.7E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0006 |
| | | | Exp. Route Total | | | | | | | | 2.8E-05 | | | | | 0.7 |
| | | Exposure Point Total | | | | | | | | | 1.3E-04 | | | | | 3.3 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-04 | | | | | 3.3 |

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 0.021 | $mg/m^3$ | 7.0E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.9E-03 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.06 | $mg/m^3$ | 2.0E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-02 | $(mg/m^3)$ | 2.0E+00 | $(mg/m^3)$ | 0.007 |
| | | | | 1,3-DICHLOROBENZENE | 2.9E-6 | $mg/m^3$ | 9.6E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.7E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,4-DICHLOROBENZENE | 0.004 | $mg/m^3$ | 1.5E-05 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 1.6E-07 | 1.0E-03 | $(mg/m^3)$ | 1.2E+00 | $(mg/m^3)$ | 0.0009 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.2E-6 | $mg/m^3$ | 3.9E-09 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 4.3E-09 | 2.7E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 7.0E-6 | $mg/m^3$ | 2.3E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 7.8E-10 | 1.6E-06 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0005 |
| | | | | AROCLOR-1254 | 6.9E-6 | $mg/m^3$ | 2.2E-08 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.3E-08 | 1.6E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 5.0E-4 | $mg/m^3$ | 1.6E-06 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 9.2E-07 | 1.1E-04 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.0E-6 | $mg/m^3$ | 3.4E-09 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.5E-08 | 2.4E-07 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.02 |
| | | | | COBALT | 2.8E-6 | $mg/m^3$ | 9.1E-09 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 8.2E-08 | 6.4E-07 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.1 |
| | | | | IRON | 0.012 | $mg/m^3$ | 3.9E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.7E-03 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 2.5E-6 | $mg/m^3$ | 8.2E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.7E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 6.6E-5 | $mg/m^3$ | 2.1E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-05 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.3 |
| | | | | MERCURY | 2.0E-7 | $mg/m^3$ | 6.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.6E-08 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.002 |
| | | | | VANADIUM | 9.7E-6 | $mg/m^3$ | 3.1E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 0.001 | $mg/m^3$ | 4.6E-06 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-04 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 5.7E-5 | $mg/m^3$ | 1.8E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-05 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-7 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 9.4E-08 | 7.8E-08 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 1.3E-06 | | | | | 0.4 |
| | | Exposure Point Total | | | | | | | | | 1.3E-06 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-06 | | | | | 0.4 |
| Medium Total | | | | | | | | | | | 1.3E-04 | | | | | 3.7 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.0E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.010 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 1.4E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 3.9E-07 | 3.8E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.004 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 4.0E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 2.2E-10 | 1.1E-07 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.000002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 2.6E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.9E-06 | 7.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 6.3E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.3E-05 | 1.8E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.9 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 1.9E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.8E-05 | 5.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 6.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.0005 |
| | | | | ARSENIC | 2.20 | mg/kg | 3.8E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 5.8E-07 | 1.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | CADMIUM | 2.70 | mg/kg | 4.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 11.6 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | IRON | 17,200 | mg/kg | 3.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 21.6 | mg/kg | 3.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 3.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.5E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0006 |
| | | | | MERCURY | 0.120 | mg/kg | 2.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.9E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0002 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00008 |
| | | | | NICKEL | 10.9 | mg/kg | 1.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | VANADIUM | 24.0 | mg/kg | 4.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 4.1E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 8.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 2.3E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.1E-07 | 6.4E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 5.3E-05 | | | | | 0.9 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.004 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 5.4E-06 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1.6E-07 | 1.5E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.002 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 1.6E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 8.6E-11 | 4.5E-08 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0000006 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 4.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.3E-06 | 1.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 1.2E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.3E-05 | 3.3E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 1.6 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 3.5E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.0E-05 | 9.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 8.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0004 |
| | | | | ARSENIC | 2.20 | mg/kg | 1.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.3E-07 | 4.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | CADMIUM | 2.70 | mg/kg | 6.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0007 |
| | | | | COBALT | 11.6 | mg/kg | 2.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 17,200 | mg/kg | 4.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 21.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 4.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00008 |
| | | | | MERCURY | 0.120 | mg/kg | 2.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0004 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.4E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00001 |
| | | | | NICKEL | 10.9 | mg/kg | 2.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 24.0 | mg/kg | 5.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 3.0E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 6.0E-07 | 8.4E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 9.7E-05 | | | | | 1.6 |
| | | Exposure Point Total | | | | | | | | | 1.5E-04 | | | | | 2.6 |
| | Exposure Medium Total | | | | | | | | | | 1.5E-04 | | | | | 2.6 |

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 3.7E-4 | $mg/m^3$ | 3.0E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.5E-05 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.002 | $mg/m^3$ | 1.5E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.3E-04 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 0.2 |
| | | | | 1,4-DICHLOROBENZENE | 1.6E-5 | $mg/m^3$ | 1.3E-06 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 1.4E-08 | 3.7E-06 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.000005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.6E-10 | $mg/m^3$ | 3.8E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 4.2E-11 | 1.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 1.1E-8 | $mg/m^3$ | 9.1E-10 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 5.2E-10 | 2.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 3.3E-8 | $mg/m^3$ | 2.7E-09 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.6E-09 | 7.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 1.1E-10 | $mg/m^3$ | 9.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 6.8E-10 | $mg/m^3$ | 5.6E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.4E-10 | 1.6E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | CADMIUM | 8.4E-10 | $mg/m^3$ | 6.8E-11 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 1.2E-10 | 1.9E-10 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 2.9E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.6E-09 | 8.2E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 4.3E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 6.7E-9 | $mg/m^3$ | 5.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 5.4E-8 | $mg/m^3$ | 4.4E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0002 |
| | | | | MERCURY | 3.7E-11 | $mg/m^3$ | 3.0E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.5E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000003 |
| | | | | MOLYBDENUM | 2.6E-10 | $mg/m^3$ | 2.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.9E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 2.8E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 7.2E-11 | 7.7E-10 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.000009 |
| | | | | VANADIUM | 7.4E-9 | $mg/m^3$ | 6.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.2E-7 | $mg/m^3$ | 5.9E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.7E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.5E-10 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | $mg/m^3$ | 3.3E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.8E-09 | 9.2E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000009 |
| | | | Exp. Route Total | | | | | | | | 2.2E-08 | | | | | 0.2 |
| | | Exposure Point Total | | | | | | | | | 2.2E-08 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 2.2E-08 | | | | | 0.2 |
| Medium Total | | | | | | | | | | | 1.5E-04 | | | | | 2.8 |

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 2.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.1E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.1 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 1.3E-04 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 3.7E-06 | 3.5E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.04 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 7.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 1.8E-06 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 9.8E-09 | 5.1E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 3.0E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.2E-06 | 8.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 1.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000002 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 1.7E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.4E-06 | 4.8E-06 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.2 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 1.2E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.5E-04 | 3.5E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 2.6E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.9E-07 | 7.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 4.00 | mg/kg | 7.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.007 |
| | | | | IRON | 17,100 | mg/kg | 3.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 3.60 | mg/kg | 6.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.6E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0003 |
| | | | | MERCURY | 0.290 | mg/kg | 5.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 13.8 | mg/kg | 2.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.001 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 3.5E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 8.6E-08 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 4.3E-08 | 2.4E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.00008 |
| | | | Exp. Route Total | | | | | | | | 2.6E-04 | | | | | 0.4 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.04 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 5.0E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1.5E-06 | 1.4E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.01 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 2.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 7.2E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 3.9E-09 | 2.0E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 5.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.7E-06 | 1.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 2.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 3.2E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.3E-06 | 8.9E-06 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.4 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 2.3E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.6E-04 | 6.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 1.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.6E-07 | 2.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0010 |
| | | | | COBALT | 4.00 | mg/kg | 9.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | IRON | 17,100 | mg/kg | 3.9E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 3.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 2.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00004 |
| | | | | MERCURY | 0.290 | mg/kg | 6.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 13.8 | mg/kg | 3.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.9E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 1.1E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.3E-07 | 3.2E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 4.7E-04 | | | | | 0.5 |
| | | Exposure Point Total | | | | | | | | | 7.3E-04 | | | | | 0.9 |
| | Exposure Medium Total | | | | | | | | | | 7.3E-04 | | | | | 0.9 |

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 0.003 | $mg/m^3$ | 2.8E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.8E-04 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.010 | $mg/m^3$ | 8.0E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.3E-03 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 1.1 |
| | | | | 1,3-DICHLOROBENZENE | 1.3E-9 | $mg/m^3$ | 1.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,4-DICHLOROBENZENE | 7.2E-4 | $mg/m^3$ | 5.9E-05 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 6.5E-07 | 1.7E-04 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 5.3E-10 | $mg/m^3$ | 4.3E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 4.7E-11 | 1.2E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 1.1E-6 | $mg/m^3$ | 9.2E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 3.1E-09 | 2.6E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00009 |
| | | | | AROCLOR-1254 | 3.0E-9 | $mg/m^3$ | 2.5E-10 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.4E-10 | 6.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 2.2E-7 | $mg/m^3$ | 1.8E-08 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.0E-08 | 5.0E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 4.6E-10 | $mg/m^3$ | 3.8E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.6E-10 | 1.1E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000007 |
| | | | | COBALT | 1.2E-9 | $mg/m^3$ | 1.0E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 9.1E-10 | 2.8E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00005 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 4.3E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 1.1E-9 | $mg/m^3$ | 9.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.9E-8 | $mg/m^3$ | 2.4E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.6E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0001 |
| | | | | MERCURY | 9.0E-11 | $mg/m^3$ | 7.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000007 |
| | | | | VANADIUM | 4.3E-9 | $mg/m^3$ | 3.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.2E-7 | $mg/m^3$ | 5.1E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-8 | $mg/m^3$ | 2.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 1.5E-10 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.0E-09 | 3.5E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000003 |
| | | | Exp. Route Total | | | | | | | | 6.7E-07 | | | | | 1.1 |
| | | Exposure Point Total | | | | | | | | | 6.7E-07 | | | | | 1.1 |
| | Exposure Medium Total | | | | | | | | | | 6.7E-07 | | | | | 1.1 |
| Medium Total | | | | | | | | | | | 7.3E-04 | | | | | 2.0 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 6.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.10 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 3.2E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 9.3E-07 | 3.7E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.04 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 9.5E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 5.1E-10 | 1.1E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 3.3E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.4E-05 | 7.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 1.5E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.0E-05 | 1.7E-04 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 8.7 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 4.5E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.9E-05 | 5.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.004 |
| | | | | ARSENIC | 2.20 | mg/kg | 9.1E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.4E-06 | 1.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | CADMIUM | 2.70 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 11.6 | mg/kg | 4.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | IRON | 17,200 | mg/kg | 7.1E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.3E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 21.6 | mg/kg | 8.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 7.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.006 |
| | | | | MERCURY | 0.120 | mg/kg | 5.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 3.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0008 |
| | | | | NICKEL | 10.9 | mg/kg | 4.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 24.0 | mg/kg | 9.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 9.7E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-02 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 2.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 2.9E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.4E-06 | 6.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.5E-04 | | | | | 9.2 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 4.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.5E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.007 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 2.3E-06 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 6.6E-08 | 2.6E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.003 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 6.7E-09 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 3.6E-11 | 7.8E-08 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.000001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 1.0E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 7.4E-06 | 2.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 4.9E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.8E-06 | 5.7E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 2.9 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 1.5E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.9E-05 | 1.7E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 3.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0007 |
| | | | | ARSENIC | 2.20 | mg/kg | 6.4E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.6E-08 | 7.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 2.70 | mg/kg | 2.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 11.6 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | IRON | 17,200 | mg/kg | 1.7E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 21.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 1.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0001 |
| | | | | MERCURY | 0.120 | mg/kg | 1.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0006 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 8.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00002 |
| | | | | NICKEL | 10.9 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.002 |
| | | | | VANADIUM | 24.0 | mg/kg | 2.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 6.7E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.3E-06 | 1.5E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 4.8E-05 | | | | | 2.9 |
| | | Exposure Point Total | | | | | | | | | 1.9E-04 | | | | | 12 |
| | Exposure Medium Total | | | | | | | | | | 1.9E-04 | | | | | 12 |

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 3.7E-4 | $mg/m^3$ | 1.9E-06 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-05 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.002 | $mg/m^3$ | 9.8E-06 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-04 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 0.06 |
| | | | | 1,4-DICHLOROBENZENE | 1.6E-5 | $mg/m^3$ | 8.3E-08 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 9.1E-10 | 9.7E-07 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.000001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.6E-10 | $mg/m^3$ | 1.3E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.4E-11 | 2.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 1.1E-8 | $mg/m^3$ | 5.8E-11 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.3E-11 | 6.7E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 3.3E-8 | $mg/m^3$ | 1.7E-10 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 9.8E-11 | 2.0E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 1.1E-10 | $mg/m^3$ | 5.9E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.9E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 6.8E-10 | $mg/m^3$ | 3.5E-12 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.5E-11 | 4.1E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000003 |
| | | | | CADMIUM | 8.4E-10 | $mg/m^3$ | 4.3E-12 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 7.8E-12 | 5.0E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000005 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 1.9E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.7E-10 | 2.2E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00004 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 2.8E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 6.7E-9 | $mg/m^3$ | 3.5E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 5.4E-8 | $mg/m^3$ | 2.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00006 |
| | | | | MERCURY | 3.7E-11 | $mg/m^3$ | 1.9E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00000007 |
| | | | | MOLYBDENUM | 2.6E-10 | $mg/m^3$ | 1.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 1.7E-11 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 4.5E-12 | 2.0E-10 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | VANADIUM | 7.4E-9 | $mg/m^3$ | 3.8E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.2E-7 | $mg/m^3$ | 3.7E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.4E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.5E-10 | $mg/m^3$ | 7.7E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.0E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 9.3E-10 | 2.4E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000002 |
| | | | Exp. Route Total | | | | | | | | 2.2E-09 | | | | | 0.06 |
| | | Exposure Point Total | | | | | | | | | 2.2E-09 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | | | | 2.2E-09 | | | | | 0.06 |
| Medium Total | | | | | | | | | | | 1.9E-04 | | | | | 12 |

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 6.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.0E-04 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 1.0 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 3.0E-04 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 8.7E-06 | 3.5E-03 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.3 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 1.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 4.3E-06 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 2.3E-08 | 5.0E-05 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 3.7E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.7E-05 | 8.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 3.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00002 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 4.1E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.1E-06 | 4.7E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 2.4 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 2.9E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.9E-04 | 3.4E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 6.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.3E-07 | 7.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 4.00 | mg/kg | 1.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | IRON | 17,100 | mg/kg | 7.1E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.2E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 3.60 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 3.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.003 |
| | | | | MERCURY | 0.290 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | VANADIUM | 13.8 | mg/kg | 5.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.7E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 8.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.7E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 3.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 1.1E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 5.4E-07 | 2.4E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 6.3E-04 | | | | | 3.9 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 4.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.07 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 2.1E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 6.1E-07 | 2.5E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.02 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 3.0E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 1.6E-09 | 3.5E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 1.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.4E-06 | 2.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 9.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000005 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 1.3E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.7E-06 | 1.6E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.8 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 9.6E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.9E-04 | 1.1E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 4.4E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 6.6E-08 | 5.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 4.00 | mg/kg | 3.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 17,100 | mg/kg | 1.7E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 3.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 9.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00008 |
| | | | | MERCURY | 0.290 | mg/kg | 2.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.002 |
| | | | | VANADIUM | 13.8 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 2.5E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 5.1E-07 | 5.6E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0007 |
| | | | Exp. Route Total | | | | | | | | 2.1E-04 | | | | | 0.9 |
| | | Exposure Point Total | | | | | | | | | 8.4E-04 | | | | | 4.8 |
| | Exposure Medium Total | | | | | | | | | | 8.4E-04 | | | | | 4.8 |

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 0.003 | $mg/m^3$ | 1.8E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.1E-04 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.010 | $mg/m^3$ | 5.1E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.9E-04 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 0.3 |
| | | | | 1,3-DICHLOROBENZENE | 1.3E-9 | $mg/m^3$ | 6.7E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,4-DICHLOROBENZENE | 7.2E-4 | $mg/m^3$ | 3.7E-06 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 4.1E-08 | 4.4E-05 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.00005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 5.3E-10 | $mg/m^3$ | 1.5E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.6E-11 | 3.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 1.1E-6 | $mg/m^3$ | 5.8E-09 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 2.0E-10 | 6.8E-08 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00002 |
| | | | | AROCLOR-1254 | 3.0E-9 | $mg/m^3$ | 1.6E-11 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 8.9E-12 | 1.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 2.2E-7 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 6.5E-10 | 1.3E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 4.6E-10 | $mg/m^3$ | 2.4E-12 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.0E-11 | 2.8E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | COBALT | 1.2E-9 | $mg/m^3$ | 6.4E-12 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 5.8E-11 | 7.5E-11 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00001 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 2.7E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 1.1E-9 | $mg/m^3$ | 5.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.7E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.9E-8 | $mg/m^3$ | 1.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | MERCURY | 9.0E-11 | $mg/m^3$ | 4.6E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.4E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000002 |
| | | | | VANADIUM | 4.3E-9 | $mg/m^3$ | 2.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.6E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.2E-7 | $mg/m^3$ | 3.2E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.8E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-8 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 1.5E-10 | $mg/m^3$ | 4.2E-12 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.5E-10 | 9.1E-12 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.00000009 |
| | | | Exp. Route Total | | | | | | | | 4.2E-08 | | | | | 0.3 |
| | | Exposure Point Total | | | | | | | | | 4.2E-08 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | | | | 4.2E-08 | | | | | 0.3 |
| Medium Total | | | | | | | | | | | 8.4E-04 | | | | | 5.1 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 2.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.02 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 1.2E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 3.5E-07 | 7.0E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.007 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 3.6E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 1.9E-10 | 2.1E-07 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 6.2E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.5E-06 | 1.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 5.6E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.1E-05 | 3.3E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 1.6 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 1.7E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.3E-05 | 9.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 5.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.0008 |
| | | | | ARSENIC | 2.20 | mg/kg | 3.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 5.1E-07 | 2.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.007 |
| | | | | CADMIUM | 2.70 | mg/kg | 4.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 11.6 | mg/kg | 1.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | IRON | 17,200 | mg/kg | 2.7E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 21.6 | mg/kg | 3.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 2.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.001 |
| | | | | MERCURY | 0.120 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0004 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.5E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | NICKEL | 10.9 | mg/kg | 1.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.9E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 24.0 | mg/kg | 3.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.004 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 3.6E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 7.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 5.4E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.7E-07 | 1.2E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 5.0E-05 | | | | | 1.7 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 6.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.005 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 3.1E-06 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 9.1E-08 | 1.8E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.002 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 9.2E-09 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 5.0E-11 | 5.4E-08 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0000008 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 7.0E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.1E-06 | 1.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 6.7E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.3E-05 | 3.9E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 2.0 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 2.0E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.0E-05 | 1.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 5.0E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0005 |
| | | | | ARSENIC | 2.20 | mg/kg | 8.8E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.3E-07 | 5.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 2.70 | mg/kg | 3.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0008 |
| | | | | COBALT | 11.6 | mg/kg | 1.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | IRON | 17,200 | mg/kg | 2.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 21.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 2.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00010 |
| | | | | MERCURY | 0.120 | mg/kg | 1.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0004 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.5E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00001 |
| | | | | NICKEL | 10.9 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.5E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 24.0 | mg/kg | 3.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 4.6E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 9.3E-07 | 1.0E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 6.0E-05 | | | | | 2.0 |
| | | Exposure Point Total | | | | | | | | | 1.1E-04 | | | | | 3.7 |
| | Exposure Medium Total | | | | | | | | | | 1.1E-04 | | | | | 3.7 |

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 3.7E-4 | mg/m$^3$ | 3.8E-06 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.2E-05 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.002 | mg/m$^3$ | 2.0E-05 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.1E-04 | (mg/m$^3$) | 2.0E-03 | (mg/m$^3$) | 0.06 |
| | | | | 1,4-DICHLOROBENZENE | 1.6E-5 | mg/m$^3$ | 1.7E-07 | (mg/m$^3$) | 1.1E-05 | (ug/m$^3$)$^{-1}$ | 1.8E-09 | 9.7E-07 | (mg/m$^3$) | 8.0E-01 | (mg/m$^3$) | 0.000001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.6E-10 | mg/m$^3$ | 1.3E-11 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 1.4E-11 | 2.8E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 1.1E-8 | mg/m$^3$ | 1.2E-10 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 6.6E-11 | 6.7E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 3.3E-8 | mg/m$^3$ | 3.5E-10 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 2.0E-10 | 2.0E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 1.1E-10 | mg/m$^3$ | 1.2E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.9E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 6.8E-10 | mg/m$^3$ | 7.0E-12 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 3.0E-11 | 4.1E-11 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.000003 |
| | | | | CADMIUM | 8.4E-10 | mg/m$^3$ | 8.6E-12 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 1.6E-11 | 5.0E-11 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.000005 |
| | | | | COBALT | 3.6E-9 | mg/m$^3$ | 3.7E-11 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 3.3E-10 | 2.2E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.00004 |
| | | | | IRON | 5.3E-6 | mg/m$^3$ | 5.5E-08 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.2E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | LEAD | 6.7E-9 | mg/m$^3$ | 6.9E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.0E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MANGANESE | 5.4E-8 | mg/m$^3$ | 5.6E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.2E-09 | (mg/m$^3$) | 5.0E-05 | (mg/m$^3$) | 0.00006 |
| | | | | MERCURY | 3.7E-11 | mg/m$^3$ | 3.8E-13 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.2E-12 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.00000007 |
| | | | | MOLYBDENUM | 2.6E-10 | mg/m$^3$ | 2.7E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.5E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.4E-9 | mg/m$^3$ | 3.5E-11 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 9.1E-12 | 2.0E-10 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.000002 |
| | | | | VANADIUM | 7.4E-9 | mg/m$^3$ | 7.7E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.5E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 7.2E-7 | mg/m$^3$ | 7.5E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.4E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.5E-10 | mg/m$^3$ | 1.5E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.0E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | mg/m$^3$ | 1.1E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 9.3E-10 | 2.4E-11 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.0000002 |
| | | | Exp. Route Total | | | | | | | | 3.4E-09 | | | | | 0.06 |
| | | Exposure Point Total | | | | | | | | | 3.4E-09 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | | | | 3.4E-09 | | | | | 0.06 |
| Medium Total | | | | | | | | | | | 1.1E-04 | | | | | 3.8 |

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 2.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.2 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 1.1E-04 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 3.3E-06 | 6.5E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.07 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 6.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 1.6E-06 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 8.7E-09 | 9.4E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 7.0E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.1E-06 | 1.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.5E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 1.5E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.0E-06 | 8.9E-06 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.4 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 1.1E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.2E-04 | 6.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 2.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.5E-07 | 1.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | COBALT | 4.00 | mg/kg | 6.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | IRON | 17,100 | mg/kg | 2.7E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 3.60 | mg/kg | 5.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 1.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.5E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0006 |
| | | | | MERCURY | 0.290 | mg/kg | 4.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 13.8 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 3.1E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 1.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 2.0E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.0E-07 | 4.4E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0001 |
| | | | Exp. Route Total | | | | | | | | 2.3E-04 | | | | | 0.7 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 6.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.05 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 2.9E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 8.4E-07 | 1.7E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.02 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 1.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 4.2E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 2.3E-09 | 2.4E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 7.9E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.8E-06 | 1.7E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 1.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.3E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000004 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 1.8E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.7E-06 | 1.1E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.5 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 1.3E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.7E-04 | 7.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 6.0E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.0E-08 | 3.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 4.00 | mg/kg | 5.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | IRON | 17,100 | mg/kg | 2.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 3.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 1.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.3E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00005 |
| | | | | MERCURY | 0.290 | mg/kg | 3.9E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 13.8 | mg/kg | 1.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 1.7E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 3.5E-07 | 3.8E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0005 |
| | | | Exp. Route Total | | | | | | | | 2.8E-04 | | | | | 0.6 |
| | | Exposure Point Total | | | | | | | | | 5.1E-04 | | | | | 1.3 |
| | Exposure Medium Total | | | | | | | | | | 5.1E-04 | | | | | 1.3 |

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 0.003 | $mg/m^3$ | 3.6E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.1E-04 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.010 | $mg/m^3$ | 1.0E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.9E-04 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 0.3 |
| | | | | 1,3-DICHLOROBENZENE | 1.3E-9 | $mg/m^3$ | 1.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,4-DICHLOROBENZENE | 7.2E-4 | $mg/m^3$ | 7.5E-06 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 8.2E-08 | 4.4E-05 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.00005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 5.3E-10 | $mg/m^3$ | 1.5E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.6E-11 | 3.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 1.1E-6 | $mg/m^3$ | 1.2E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 4.0E-10 | 6.8E-08 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00002 |
| | | | | AROCLOR-1254 | 3.0E-9 | $mg/m^3$ | 3.1E-11 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.8E-11 | 1.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 2.2E-7 | $mg/m^3$ | 2.3E-09 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.3E-09 | 1.3E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 4.6E-10 | $mg/m^3$ | 4.8E-12 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.1E-11 | 2.8E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | COBALT | 1.2E-9 | $mg/m^3$ | 1.3E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.2E-10 | 7.5E-11 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00001 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 5.5E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 1.1E-9 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.7E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.9E-8 | $mg/m^3$ | 3.0E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | MERCURY | 9.0E-11 | $mg/m^3$ | 9.3E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.4E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000002 |
| | | | | VANADIUM | 4.3E-9 | $mg/m^3$ | 4.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.6E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.2E-7 | $mg/m^3$ | 6.4E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.8E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-8 | $mg/m^3$ | 2.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 1.5E-10 | $mg/m^3$ | 4.2E-12 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.5E-10 | 9.1E-12 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.00000009 |
| | | | Exp. Route Total | | | | | | | | 8.5E-08 | | | | | 0.3 |
| | | Exposure Point Total | | | | | | | | | 8.5E-08 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | | | | 8.5E-08 | | | | | 0.3 |
| Medium Total | | | | | | | | | | | 5.1E-04 | | | | | 1.6 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.0E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.010 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 1.4E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 3.9E-07 | 3.8E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.004 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 4.0E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 2.2E-10 | 1.1E-07 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.000002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 2.6E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.9E-06 | 7.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 6.3E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.3E-05 | 1.8E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.9 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 1.9E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.8E-05 | 5.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 6.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.0005 |
| | | | | ARSENIC | 2.20 | mg/kg | 3.8E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 5.8E-07 | 1.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | CADMIUM | 2.70 | mg/kg | 4.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 11.6 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | IRON | 17,200 | mg/kg | 3.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 21.6 | mg/kg | 3.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 3.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.5E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0006 |
| | | | | MERCURY | 0.120 | mg/kg | 2.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.9E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0002 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00008 |
| | | | | NICKEL | 10.9 | mg/kg | 1.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | VANADIUM | 24.0 | mg/kg | 4.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 4.1E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 8.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 2.3E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.1E-07 | 6.4E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 5.3E-05 | | | | | 0.9 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.004 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 5.4E-06 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1.6E-07 | 1.5E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.002 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 1.6E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 8.6E-11 | 4.5E-08 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0000006 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 4.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.3E-06 | 1.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 1.2E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.3E-05 | 3.3E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 1.6 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 3.5E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.0E-05 | 9.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 8.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0004 |
| | | | | ARSENIC | 2.20 | mg/kg | 1.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.3E-07 | 4.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | CADMIUM | 2.70 | mg/kg | 6.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0007 |
| | | | | COBALT | 11.6 | mg/kg | 2.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 17,200 | mg/kg | 4.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 21.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 4.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00008 |
| | | | | MERCURY | 0.120 | mg/kg | 2.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0004 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.4E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00001 |
| | | | | NICKEL | 10.9 | mg/kg | 2.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 24.0 | mg/kg | 5.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 3.0E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 6.0E-07 | 8.4E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 9.7E-05 | | | | | 1.6 |
| | | Exposure Point Total | | | | | | | | | 1.5E-04 | | | | | 2.6 |
| | Exposure Medium Total | | | | | | | | | | 1.5E-04 | | | | | 2.6 |

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 3.7E-4 | mg/m$^3$ | 3.0E-05 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 8.5E-05 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.002 | mg/m$^3$ | 1.5E-04 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.3E-04 | (mg/m$^3$) | 2.0E-03 | (mg/m$^3$) | 0.2 |
| | | | | 1,4-DICHLOROBENZENE | 1.6E-5 | mg/m$^3$ | 1.3E-06 | (mg/m$^3$) | 1.1E-05 | (ug/m$^3$)$^{-1}$ | 1.4E-08 | 3.7E-06 | (mg/m$^3$) | 8.0E-01 | (mg/m$^3$) | 0.000005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.6E-10 | mg/m$^3$ | 3.8E-11 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 4.2E-11 | 1.1E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 1.1E-8 | mg/m$^3$ | 9.1E-10 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 5.2E-10 | 2.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 3.3E-8 | mg/m$^3$ | 2.7E-09 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.6E-09 | 7.6E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 1.1E-10 | mg/m$^3$ | 9.3E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.6E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 6.8E-10 | mg/m$^3$ | 5.6E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 2.4E-10 | 1.6E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00001 |
| | | | | CADMIUM | 8.4E-10 | mg/m$^3$ | 6.8E-11 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 1.2E-10 | 1.9E-10 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.00002 |
| | | | | COBALT | 3.6E-9 | mg/m$^3$ | 2.9E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 2.6E-09 | 8.2E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0001 |
| | | | | IRON | 5.3E-6 | mg/m$^3$ | 4.3E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.2E-06 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | LEAD | 6.7E-9 | mg/m$^3$ | 5.5E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MANGANESE | 5.4E-8 | mg/m$^3$ | 4.4E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.2E-08 | (mg/m$^3$) | 5.0E-05 | (mg/m$^3$) | 0.0002 |
| | | | | MERCURY | 3.7E-11 | mg/m$^3$ | 3.0E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 8.5E-12 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.0000003 |
| | | | | MOLYBDENUM | 2.6E-10 | mg/m$^3$ | 2.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.9E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.4E-9 | mg/m$^3$ | 2.8E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 7.2E-11 | 7.7E-10 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.000009 |
| | | | | VANADIUM | 7.4E-9 | mg/m$^3$ | 6.1E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.7E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 7.2E-7 | mg/m$^3$ | 5.9E-08 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.7E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.5E-10 | mg/m$^3$ | 1.2E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.4E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | mg/m$^3$ | 3.3E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 2.8E-09 | 9.2E-11 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.0000009 |
| | | | Exp. Route Total | | | | | | | | 2.2E-08 | | | | | 0.2 |
| | | Exposure Point Total | | | | | | | | | 2.2E-08 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 2.2E-08 | | | | | 0.2 |
| Medium Total | | | | | | | | | | | 1.5E-04 | | | | | 2.8 |

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 2.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.1E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.1 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 1.3E-04 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 3.7E-06 | 3.5E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.04 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 7.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 1.8E-06 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 9.8E-09 | 5.1E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 3.0E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.2E-06 | 8.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 1.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000002 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 1.7E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.4E-06 | 4.8E-06 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.2 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 1.2E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.5E-04 | 3.5E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 2.6E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.9E-07 | 7.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 4.00 | mg/kg | 7.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.007 |
| | | | | IRON | 17,100 | mg/kg | 3.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 3.60 | mg/kg | 6.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.6E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0003 |
| | | | | MERCURY | 0.290 | mg/kg | 5.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 13.8 | mg/kg | 2.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.001 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 3.5E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 8.6E-08 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 4.3E-08 | 2.4E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.00008 |
| | | | Exp. Route Total | | | | | | | | 2.6E-04 | | | | | 0.4 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.04 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 5.0E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1.5E-06 | 1.4E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.01 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 2.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 7.2E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 3.9E-09 | 2.0E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 5.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.7E-06 | 1.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 2.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 3.2E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.3E-06 | 8.9E-06 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.4 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 2.3E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.6E-04 | 6.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 1.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.6E-07 | 2.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0010 |
| | | | | COBALT | 4.00 | mg/kg | 9.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | IRON | 17,100 | mg/kg | 3.9E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 3.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 2.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00004 |
| | | | | MERCURY | 0.290 | mg/kg | 6.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 13.8 | mg/kg | 3.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.9E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 1.1E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.3E-07 | 3.2E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 4.7E-04 | | | | | 0.5 |
| | | Exposure Point Total | | | | | | | | | 7.3E-04 | | | | | 0.9 |
| | Exposure Medium Total | | | | | | | | | | 7.3E-04 | | | | | 0.9 |

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 0.003 | $mg/m^3$ | 2.8E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.8E-04 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.010 | $mg/m^3$ | 8.0E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.3E-03 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 1.1 |
| | | | | 1,3-DICHLOROBENZENE | 1.3E-9 | $mg/m^3$ | 1.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,4-DICHLOROBENZENE | 7.2E-4 | $mg/m^3$ | 5.9E-05 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 6.5E-07 | 1.7E-04 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 5.3E-10 | $mg/m^3$ | 4.3E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 4.7E-11 | 1.2E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 1.1E-6 | $mg/m^3$ | 9.2E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 3.1E-09 | 2.6E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00009 |
| | | | | AROCLOR-1254 | 3.0E-9 | $mg/m^3$ | 2.5E-10 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.4E-10 | 6.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 2.2E-7 | $mg/m^3$ | 1.8E-08 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.0E-08 | 5.0E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 4.6E-10 | $mg/m^3$ | 3.8E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.6E-10 | 1.1E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000007 |
| | | | | COBALT | 1.2E-9 | $mg/m^3$ | 1.0E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 9.1E-10 | 2.8E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00005 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 4.3E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 1.1E-9 | $mg/m^3$ | 9.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.9E-8 | $mg/m^3$ | 2.4E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.6E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0001 |
| | | | | MERCURY | 9.0E-11 | $mg/m^3$ | 7.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000007 |
| | | | | VANADIUM | 4.3E-9 | $mg/m^3$ | 3.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.2E-7 | $mg/m^3$ | 5.1E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-8 | $mg/m^3$ | 2.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 1.5E-10 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.0E-09 | 3.5E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000003 |
| | | | Exp. Route Total | | | | | | | | 6.7E-07 | | | | | 1.1 |
| | | Exposure Point Total | | | | | | | | | 6.7E-07 | | | | | 1.1 |
| | Exposure Medium Total | | | | | | | | | | 6.7E-07 | | | | | 1.1 |
| Medium Total | | | | | | | | | | | 7.3E-04 | | | | | 2.0 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 1.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.2 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 6.1E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1.8E-06 | 7.1E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.07 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 1.8E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 9.7E-10 | 2.1E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 6.3E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.6E-05 | 1.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 2.8E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.6E-05 | 3.3E-04 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 16 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 8.5E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.7E-04 | 9.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 2.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.008 |
| | | | | ARSENIC | 2.20 | mg/kg | 1.7E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.6E-06 | 2.0E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.07 |
| | | | | CADMIUM | 2.70 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 11.6 | mg/kg | 9.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.4 |
| | | | | IRON | 17,200 | mg/kg | 1.3E-02 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-01 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.2 |
| | | | | LEAD | 21.6 | mg/kg | 1.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 1.4E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-03 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.01 |
| | | | | MERCURY | 0.120 | mg/kg | 9.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 6.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.6E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | NICKEL | 10.9 | mg/kg | 8.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.005 |
| | | | | VANADIUM | 24.0 | mg/kg | 1.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.04 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 1.8E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-02 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 3.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 5.4E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.7E-06 | 1.2E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 2.8E-04 | | | | | 17 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.02 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 5.1E-06 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 6.0E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.006 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 1.5E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 8.2E-11 | 1.8E-07 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 2.3E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.7E-05 | 5.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 1.1E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.2E-05 | 1.3E-04 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 6.4 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 3.3E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.6E-05 | 3.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 8.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.5E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 2.20 | mg/kg | 1.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-07 | 1.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | CADMIUM | 2.70 | mg/kg | 5.9E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.9E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 11.6 | mg/kg | 2.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.010 |
| | | | | IRON | 17,200 | mg/kg | 3.8E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.006 |
| | | | | LEAD | 21.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 3.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0003 |
| | | | | MERCURY | 0.120 | mg/kg | 2.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.001 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 1.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00004 |
| | | | | NICKEL | 10.9 | mg/kg | 2.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 24.0 | mg/kg | 5.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.001 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 1.5E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 3.0E-06 | 3.3E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 1.1E-04 | | | | | 6.5 |
| | | Exposure Point Total | | | | | | | | | 3.9E-04 | | | | | 24 |
| | Exposure Medium Total | | | | | | | | | | 3.9E-04 | | | | | 24 |

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 3.7E-4 | mg/m$^3$ | 7.2E-06 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 8.5E-05 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.002 | mg/m$^3$ | 3.7E-05 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.3E-04 | (mg/m$^3$) | 2.0E-03 | (mg/m$^3$) | 0.2 |
| | | | | 1,4-DICHLOROBENZENE | 1.6E-5 | mg/m$^3$ | 3.1E-07 | (mg/m$^3$) | 1.1E-05 | (ug/m$^3$)$^{-1}$ | 3.5E-09 | 3.7E-06 | (mg/m$^3$) | 8.0E-01 | (mg/m$^3$) | 0.000005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.6E-10 | mg/m$^3$ | 4.8E-11 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 5.3E-11 | 1.1E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 1.1E-8 | mg/m$^3$ | 2.2E-10 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.2E-10 | 2.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 3.3E-8 | mg/m$^3$ | 6.5E-10 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 3.7E-10 | 7.6E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 1.1E-10 | mg/m$^3$ | 2.2E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.6E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 6.8E-10 | mg/m$^3$ | 1.3E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 5.7E-11 | 1.6E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00001 |
| | | | | CADMIUM | 8.4E-10 | mg/m$^3$ | 1.6E-11 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 2.9E-11 | 1.9E-10 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.00002 |
| | | | | COBALT | 3.6E-9 | mg/m$^3$ | 7.0E-11 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 6.3E-10 | 8.2E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0001 |
| | | | | IRON | 5.3E-6 | mg/m$^3$ | 1.0E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.2E-06 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | LEAD | 6.7E-9 | mg/m$^3$ | 1.3E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MANGANESE | 5.4E-8 | mg/m$^3$ | 1.1E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.2E-08 | (mg/m$^3$) | 5.0E-05 | (mg/m$^3$) | 0.0002 |
| | | | | MERCURY | 3.7E-11 | mg/m$^3$ | 7.3E-13 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 8.5E-12 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.0000003 |
| | | | | MOLYBDENUM | 2.6E-10 | mg/m$^3$ | 5.0E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.9E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.4E-9 | mg/m$^3$ | 6.6E-11 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 1.7E-11 | 7.7E-10 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.000009 |
| | | | | VANADIUM | 7.4E-9 | mg/m$^3$ | 1.5E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.7E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 7.2E-7 | mg/m$^3$ | 1.4E-08 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.7E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.5E-10 | mg/m$^3$ | 2.9E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.4E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | mg/m$^3$ | 4.2E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 3.5E-09 | 9.2E-11 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.0000009 |
| | | | Exp. Route Total | | | | | | | | 8.3E-09 | | | | | 0.2 |
| | | Exposure Point Total | | | | | | | | | 8.3E-09 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 8.3E-09 | | | | | 0.2 |
| Medium Total | | | | | | | | | | | 3.9E-04 | | | | | 24 |

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 1.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-03 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 1.9 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 5.7E-04 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1.6E-05 | 6.6E-03 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.7 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 3.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 8.1E-06 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 4.4E-08 | 9.5E-05 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 7.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.2E-05 | 1.6E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 5.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.6E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00003 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 7.7E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.5E-05 | 8.9E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 4.5 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 5.5E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.1E-03 | 6.5E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 1.2E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.8E-06 | 1.4E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | COBALT | 4.00 | mg/kg | 3.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | IRON | 17,100 | mg/kg | 1.3E-02 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-01 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.2 |
| | | | | LEAD | 3.60 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 7.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.6E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.006 |
| | | | | MERCURY | 0.290 | mg/kg | 2.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.009 |
| | | | | VANADIUM | 13.8 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.03 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 1.6E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-02 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 6.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 2.0E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.0E-06 | 4.5E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 1.2E-03 | | | | | 7.5 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.2 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 4.8E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1.4E-06 | 5.6E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.06 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 2.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 6.8E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 3.7E-09 | 8.0E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 2.6E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.9E-05 | 5.7E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 2.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00001 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 3.0E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.0E-06 | 3.5E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 1.8 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 2.2E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.4E-04 | 2.5E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 9.9E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 4.00 | mg/kg | 8.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | IRON | 17,100 | mg/kg | 3.7E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.006 |
| | | | | LEAD | 3.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0002 |
| | | | | MERCURY | 0.290 | mg/kg | 6.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.4E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.004 |
| | | | | VANADIUM | 13.8 | mg/kg | 3.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0007 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 5.7E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.1E-06 | 1.3E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 4.6E-04 | | | | | 2.0 |
| | | Exposure Point Total | | | | | | | | | 1.7E-03 | | | | | 9.4 |
| | Exposure Medium Total | | | | | | | | | | 1.7E-03 | | | | | 9.4 |

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 0.003 | $mg/m^3$ | 6.7E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.8E-04 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.010 | $mg/m^3$ | 1.9E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.3E-03 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 1.1 |
| | | | | 1,3-DICHLOROBENZENE | 1.3E-9 | $mg/m^3$ | 2.5E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,4-DICHLOROBENZENE | 7.2E-4 | $mg/m^3$ | 1.4E-05 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 1.6E-07 | 1.7E-04 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 5.3E-10 | $mg/m^3$ | 5.5E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 6.0E-11 | 1.2E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 1.1E-6 | $mg/m^3$ | 2.2E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 7.5E-10 | 2.6E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00009 |
| | | | | AROCLOR-1254 | 3.0E-9 | $mg/m^3$ | 5.9E-11 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.4E-11 | 6.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 2.2E-7 | $mg/m^3$ | 4.3E-09 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.4E-09 | 5.0E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 4.6E-10 | $mg/m^3$ | 9.1E-12 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.9E-11 | 1.1E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000007 |
| | | | | COBALT | 1.2E-9 | $mg/m^3$ | 2.4E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.2E-10 | 2.8E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00005 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 1.0E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 1.1E-9 | $mg/m^3$ | 2.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.9E-8 | $mg/m^3$ | 5.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.6E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0001 |
| | | | | MERCURY | 9.0E-11 | $mg/m^3$ | 1.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000007 |
| | | | | VANADIUM | 4.3E-9 | $mg/m^3$ | 8.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.2E-7 | $mg/m^3$ | 1.2E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-8 | $mg/m^3$ | 4.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 1.5E-10 | $mg/m^3$ | 1.6E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.3E-09 | 3.5E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000003 |
| | | | Exp. Route Total | | | | | | | | 1.6E-07 | | | | | 1.1 |
| | | Exposure Point Total | | | | | | | | | 1.6E-07 | | | | | 1.1 |
| | Exposure Medium Total | | | | | | | | | | 1.6E-07 | | | | | 1.1 |
| Medium Total | | | | | | | | | | | 1.7E-03 | | | | | 11 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 4.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.03 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 2.3E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 6.6E-07 | 1.3E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.01 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 6.8E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 3.6E-10 | 3.9E-07 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.000006 |
| | | | | BENZO(A)PYRENE EQUIVALE | 1.50 | mg/kg | 1.2E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.6E-06 | 2.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 1.1E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.1E-05 | 6.2E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 3.1 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 3.2E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.3E-05 | 1.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.3E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 2.20 | mg/kg | 6.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.7E-07 | 3.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 2.70 | mg/kg | 7.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.6E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.005 |
| | | | | COBALT | 11.6 | mg/kg | 3.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.07 |
| | | | | IRON | 17,200 | mg/kg | 5.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.04 |
| | | | | LEAD | 21.6 | mg/kg | 6.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 5.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.002 |
| | | | | MERCURY | 0.120 | mg/kg | 3.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0007 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 2.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | NICKEL | 10.9 | mg/kg | 3.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 24.0 | mg/kg | 7.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.008 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 6.9E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 1.0E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 5.1E-07 | 2.2E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0007 |
| | | | Exp. Route Total | | | | | | | | 9.5E-05 | | | | | 3.3 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 4.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.003 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 2.1E-06 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 6.0E-08 | 1.2E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.001 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 6.1E-09 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 3.3E-11 | 3.6E-08 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0000005 |
| | | | | BENZO(A)PYRENE EQUIVALE | 1.50 | mg/kg | 4.6E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.4E-06 | 1.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 4.5E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.9E-06 | 2.6E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 1.3 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 1.3E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.7E-05 | 7.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 3.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0003 |
| | | | | ARSENIC | 2.20 | mg/kg | 5.9E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.8E-08 | 3.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | CADMIUM | 2.70 | mg/kg | 2.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0006 |
| | | | | COBALT | 11.6 | mg/kg | 1.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 17,200 | mg/kg | 1.5E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.9E-04 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 21.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.0E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00006 |
| | | | | MERCURY | 0.120 | mg/kg | 1.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0003 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 7.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000009 |
| | | | | NICKEL | 10.9 | mg/kg | 9.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 24.0 | mg/kg | 2.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 3.1E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 6.2E-07 | 6.7E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 4.0E-05 | | | | | 1.3 |
| | | Exposure Point Total | | | | | | | | | 1.4E-04 | | | | | 4.6 |
| | Exposure Medium Total | | | | | | | | | | 1.4E-04 | | | | | 4.6 |

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 3.7E-4 | $mg/m^3$ | 1.4E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.5E-05 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.002 | $mg/m^3$ | 7.4E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.3E-04 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 0.2 |
| | | | | 1,4-DICHLOROBENZENE | 1.6E-5 | $mg/m^3$ | 6.3E-07 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 6.9E-09 | 3.7E-06 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.000005 |
| | | | | BENZO(A)PYRENE EQUIVALE | 4.6E-10 | $mg/m^3$ | 4.8E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 5.3E-11 | 1.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 1.1E-8 | $mg/m^3$ | 4.4E-10 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.5E-10 | 2.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 3.3E-8 | $mg/m^3$ | 1.3E-09 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 7.5E-10 | 7.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 1.1E-10 | $mg/m^3$ | 4.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 6.8E-10 | $mg/m^3$ | 2.7E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.1E-10 | 1.6E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | CADMIUM | 8.4E-10 | $mg/m^3$ | 3.3E-11 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 5.9E-11 | 1.9E-10 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 1.4E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.3E-09 | 8.2E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 2.1E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 6.7E-9 | $mg/m^3$ | 2.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 5.4E-8 | $mg/m^3$ | 2.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0002 |
| | | | | MERCURY | 3.7E-11 | $mg/m^3$ | 1.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.5E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000003 |
| | | | | MOLYBDENUM | 2.6E-10 | $mg/m^3$ | 1.0E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.9E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 3.4E-11 | 7.7E-10 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.000009 |
| | | | | VANADIUM | 7.4E-9 | $mg/m^3$ | 2.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.2E-7 | $mg/m^3$ | 2.8E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.7E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.5E-10 | $mg/m^3$ | 5.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | $mg/m^3$ | 4.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.5E-09 | 9.2E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000009 |
| | | | Exp. Route Total | | | | | | | | 1.3E-08 | | | | | 0.2 |
| | | Exposure Point Total | | | | | | | | | 1.3E-08 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-08 | | | | | 0.2 |
| Medium Total | | | | | | | | | | | 1.4E-04 | | | | | 4.8 |

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 4.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-04 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.4 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 2.1E-04 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 6.2E-06 | 1.2E-03 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.1 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 3.1E-06 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 1.6E-08 | 1.8E-05 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | BENZO(A)PYRENE EQUIVALE | 1.70 | mg/kg | 1.3E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 9.7E-06 | 2.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 2.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000006 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 2.9E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.8E-06 | 1.7E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.8 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 2.1E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.2E-04 | 1.2E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 4.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 6.6E-07 | 2.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.009 |
| | | | | COBALT | 4.00 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | IRON | 17,100 | mg/kg | 5.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.04 |
| | | | | LEAD | 3.60 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 2.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.001 |
| | | | | MERCURY | 0.290 | mg/kg | 8.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | VANADIUM | 13.8 | mg/kg | 4.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.005 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 5.9E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 2.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 3.8E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.9E-07 | 8.4E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0003 |
| | | | Exp. Route Total | | | | | | | | 4.4E-04 | | | | | 1.4 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 4.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.03 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 1.9E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 5.6E-07 | 1.1E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.01 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.5E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 2.8E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 1.5E-09 | 1.6E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00002 |
| | | | | BENZO(A)PYRENE EQUIVALE | 1.70 | mg/kg | 5.2E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.8E-06 | 1.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 8.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.8E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000002 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 1.2E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.4E-06 | 7.1E-06 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.4 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 8.8E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.8E-04 | 5.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 4.0E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 6.0E-08 | 2.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0008 |
| | | | | COBALT | 4.00 | mg/kg | 3.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0007 |
| | | | | IRON | 17,100 | mg/kg | 1.5E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.9E-04 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 3.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 8.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.9E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00003 |
| | | | | MERCURY | 0.290 | mg/kg | 2.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 13.8 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.1E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0001 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 1.2E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.3E-07 | 2.5E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0003 |
| | | | Exp. Route Total | | | | | | | | 1.8E-04 | | | | | 0.4 |
| | | Exposure Point Total | | | | | | | | | 6.2E-04 | | | | | 1.8 |
| | Exposure Medium Total | | | | | | | | | | 6.2E-04 | | | | | 1.8 |

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 0.003 | mg/m$^3$ | 1.3E-04 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 7.8E-04 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.010 | mg/m$^3$ | 3.9E-04 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.3E-03 | (mg/m$^3$) | 2.0E-03 | (mg/m$^3$) | 1.1 |
| | | | | 1,3-DICHLOROBENZENE | 1.3E-9 | mg/m$^3$ | 5.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.0E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | 1,4-DICHLOROBENZENE | 7.2E-4 | mg/m$^3$ | 2.8E-05 | (mg/m$^3$) | 1.1E-05 | (ug/m$^3$)$^{-1}$ | 3.1E-07 | 1.7E-04 | (mg/m$^3$) | 8.0E-01 | (mg/m$^3$) | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALE | 5.3E-10 | mg/m$^3$ | 5.5E-11 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 6.0E-11 | 1.2E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NAPHTHALENE | 1.1E-6 | mg/m$^3$ | 4.4E-08 | (mg/m$^3$) | 3.4E-05 | (ug/m$^3$)$^{-1}$ | 1.5E-09 | 2.6E-07 | (mg/m$^3$) | 3.0E-03 | (mg/m$^3$) | 0.00009 |
| | | | | AROCLOR-1254 | 3.0E-9 | mg/m$^3$ | 1.2E-10 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 6.8E-11 | 6.9E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 2.2E-7 | mg/m$^3$ | 8.6E-09 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 4.9E-09 | 5.0E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 4.6E-10 | mg/m$^3$ | 1.8E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 7.8E-11 | 1.1E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.000007 |
| | | | | COBALT | 1.2E-9 | mg/m$^3$ | 4.8E-11 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 4.4E-10 | 2.8E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.00005 |
| | | | | IRON | 5.3E-6 | mg/m$^3$ | 2.1E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.2E-06 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | LEAD | 1.1E-9 | mg/m$^3$ | 4.4E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.5E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MANGANESE | 2.9E-8 | mg/m$^3$ | 1.1E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.6E-09 | (mg/m$^3$) | 5.0E-05 | (mg/m$^3$) | 0.0001 |
| | | | | MERCURY | 9.0E-11 | mg/m$^3$ | 3.5E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.0E-11 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.0000007 |
| | | | | VANADIUM | 4.3E-9 | mg/m$^3$ | 1.7E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.8E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 6.2E-7 | mg/m$^3$ | 2.4E-08 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.4E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-8 | mg/m$^3$ | 9.8E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.7E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.5E-10 | mg/m$^3$ | 1.6E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 1.3E-09 | 3.5E-11 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.0000003 |
| | | | Exp. Route Total | | | | | | | | 3.2E-07 | | | | | 1.1 |
| | | Exposure Point Total | | | | | | | | | 3.2E-07 | | | | | 1.1 |
| | Exposure Medium Total | | | | | | | | | | 3.2E-07 | | | | | 1.1 |
| Medium Total | | | | | | | | | | | 6.2E-04 | | | | | 2.9 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 2.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.02 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 1.3E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 3.8E-07 | 7.6E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.008 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 3.9E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 2.1E-10 | 2.3E-07 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 2.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.8E-06 | 1.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 6.0E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.2E-05 | 3.5E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 1.8 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 1.8E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.6E-05 | 1.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 6.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | ARSENIC | 2.20 | mg/kg | 3.7E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 5.5E-07 | 2.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.007 |
| | | | | CADMIUM | 2.70 | mg/kg | 4.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 11.6 | mg/kg | 1.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | IRON | 17,200 | mg/kg | 2.9E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 21.6 | mg/kg | 3.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 2.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.001 |
| | | | | MERCURY | 0.120 | mg/kg | 2.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0004 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.1E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | NICKEL | 10.9 | mg/kg | 1.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 24.0 | mg/kg | 4.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.005 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 3.9E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 8.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.7E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 2.2E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.1E-07 | 1.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 5.1E-05 | | | | | 1.9 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 3.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.002 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 1.6E-06 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 4.5E-08 | 9.1E-06 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.0009 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 4.6E-09 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 2.5E-11 | 2.7E-08 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0000004 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 1.3E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 9.5E-07 | 7.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 3.4E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.7E-06 | 2.0E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 1.0 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 1.0E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.0E-05 | 5.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 2.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0002 |
| | | | | ARSENIC | 2.20 | mg/kg | 4.4E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 6.6E-08 | 2.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | CADMIUM | 2.70 | mg/kg | 1.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0004 |
| | | | | COBALT | 11.6 | mg/kg | 7.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 17,200 | mg/kg | 1.2E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.7E-04 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.0010 |
| | | | | LEAD | 21.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00005 |
| | | | | MERCURY | 0.120 | mg/kg | 8.0E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.7E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0002 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 5.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000006 |
| | | | | NICKEL | 10.9 | mg/kg | 7.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 24.0 | mg/kg | 1.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 8.7E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.7E-07 | 5.1E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0007 |
| | | | Exp. Route Total | | | | | | | | 2.8E-05 | | | | | 1.0 |
| | | Exposure Point Total | | | | | | | | | 7.9E-05 | | | | | 2.9 |
| | Exposure Medium Total | | | | | | | | | | 7.9E-05 | | | | | 2.9 |

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 3.7E-4 | $mg/m^3$ | 1.4E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.5E-05 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.002 | $mg/m^3$ | 7.4E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.3E-04 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 0.2 |
| | | | | 1,4-DICHLOROBENZENE | 1.6E-5 | $mg/m^3$ | 6.3E-07 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 6.9E-09 | 3.7E-06 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.000005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.6E-10 | $mg/m^3$ | 1.8E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.0E-11 | 1.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 1.1E-8 | $mg/m^3$ | 4.4E-10 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.5E-10 | 2.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 3.3E-8 | $mg/m^3$ | 1.3E-09 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 7.5E-10 | 7.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 1.1E-10 | $mg/m^3$ | 4.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 6.8E-10 | $mg/m^3$ | 2.7E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.1E-10 | 1.6E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | CADMIUM | 8.4E-10 | $mg/m^3$ | 3.3E-11 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 5.9E-11 | 1.9E-10 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 1.4E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.3E-09 | 8.2E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 2.1E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 6.7E-9 | $mg/m^3$ | 2.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 5.4E-8 | $mg/m^3$ | 2.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0002 |
| | | | | MERCURY | 3.7E-11 | $mg/m^3$ | 1.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.5E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000003 |
| | | | | MOLYBDENUM | 2.6E-10 | $mg/m^3$ | 1.0E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.9E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 3.4E-11 | 7.7E-10 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.000009 |
| | | | | VANADIUM | 7.4E-9 | $mg/m^3$ | 2.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.2E-7 | $mg/m^3$ | 2.8E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.7E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.5E-10 | $mg/m^3$ | 5.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | $mg/m^3$ | 1.6E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.3E-09 | 9.2E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000009 |
| | | | Exp. Route Total | | | | | | | | 1.1E-08 | | | | | 0.2 |
| | | Exposure Point Total | | | | | | | | | 1.1E-08 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 1.1E-08 | | | | | 0.2 |
| Medium Total | | | | | | | | | | | 7.9E-05 | | | | | 3.1 |

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 2.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-04 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.2 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 1.2E-04 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 3.5E-06 | 7.1E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.07 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 7.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 1.7E-06 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 9.4E-09 | 1.0E-05 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 2.9E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.1E-06 | 1.7E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 1.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000004 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 1.6E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.3E-06 | 9.6E-06 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.5 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 1.2E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.4E-04 | 6.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 2.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.8E-07 | 1.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | COBALT | 4.00 | mg/kg | 6.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | IRON | 17,100 | mg/kg | 2.9E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 3.60 | mg/kg | 6.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.2E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0007 |
| | | | | MERCURY | 0.290 | mg/kg | 4.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 13.8 | mg/kg | 2.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 3.4E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 8.2E-08 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 4.1E-08 | 4.8E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 2.5E-04 | | | | | 0.8 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 3.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.02 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 1.5E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 4.2E-07 | 8.5E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.008 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 8.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.9E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 2.1E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 1.1E-09 | 1.2E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 1.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.1E-06 | 8.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 6.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000002 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 9.2E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.8E-06 | 5.4E-06 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.3 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 6.6E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.3E-04 | 3.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 3.0E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.5E-08 | 1.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0006 |
| | | | | COBALT | 4.00 | mg/kg | 2.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0005 |
| | | | | IRON | 17,100 | mg/kg | 1.1E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.7E-04 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.0010 |
| | | | | LEAD | 3.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 6.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00003 |
| | | | | MERCURY | 0.290 | mg/kg | 1.9E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 13.8 | mg/kg | 9.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.4E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0001 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 3.3E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 6.6E-08 | 1.9E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0003 |
| | | | Exp. Route Total | | | | | | | | 1.4E-04 | | | | | 0.3 |
| | | Exposure Point Total | | | | | | | | | 3.8E-04 | | | | | 1.1 |
| | Exposure Medium Total | | | | | | | | | | 3.8E-04 | | | | | 1.1 |

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 0.003 | $mg/m^3$ | 1.3E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.8E-04 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.010 | $mg/m^3$ | 3.9E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.3E-03 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 1.1 |
| | | | | 1,3-DICHLOROBENZENE | 1.3E-9 | $mg/m^3$ | 5.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,4-DICHLOROBENZENE | 7.2E-4 | $mg/m^3$ | 2.8E-05 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 3.1E-07 | 1.7E-04 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 5.3E-10 | $mg/m^3$ | 2.1E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.3E-11 | 1.2E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 1.1E-6 | $mg/m^3$ | 4.4E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.5E-09 | 2.6E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00009 |
| | | | | AROCLOR-1254 | 3.0E-9 | $mg/m^3$ | 1.2E-10 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 6.8E-11 | 6.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 2.2E-7 | $mg/m^3$ | 8.6E-09 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 4.9E-09 | 5.0E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 4.6E-10 | $mg/m^3$ | 1.8E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 7.8E-11 | 1.1E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000007 |
| | | | | COBALT | 1.2E-9 | $mg/m^3$ | 4.8E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 4.4E-10 | 2.8E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00005 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 2.1E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 1.1E-9 | $mg/m^3$ | 4.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.9E-8 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.6E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0001 |
| | | | | MERCURY | 9.0E-11 | $mg/m^3$ | 3.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000007 |
| | | | | VANADIUM | 4.3E-9 | $mg/m^3$ | 1.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.2E-7 | $mg/m^3$ | 2.4E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-8 | $mg/m^3$ | 9.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 1.5E-10 | $mg/m^3$ | 5.9E-12 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 5.0E-10 | 3.5E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000003 |
| | | | Exp. Route Total | | | | | | | | 3.2E-07 | | | | | 1.1 |
| | | Exposure Point Total | | | | | | | | | 3.2E-07 | | | | | 1.1 |
| | Exposure Medium Total | | | | | | | | | | 3.2E-07 | | | | | 1.1 |
| Medium Total | | | | | | | | | | | 3.8E-04 | | | | | 2.2 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 1.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-04 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.3 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 8.5E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 2.5E-06 | 9.9E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.10 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 2.5E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 1.4E-09 | 2.9E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00004 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 8.8E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 6.4E-05 | 1.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 3.9E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.9E-05 | 4.6E-04 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 23 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 1.2E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.4E-04 | 1.4E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 4.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.7E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.01 |
| | | | | ARSENIC | 2.20 | mg/kg | 2.4E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.6E-06 | 2.8E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.09 |
| | | | | CADMIUM | 2.70 | mg/kg | 3.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.03 |
| | | | | COBALT | 11.6 | mg/kg | 1.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.5 |
| | | | | IRON | 17,200 | mg/kg | 1.9E-02 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-01 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.3 |
| | | | | LEAD | 21.6 | mg/kg | 2.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 1.9E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-03 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.02 |
| | | | | MERCURY | 0.120 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 9.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | NICKEL | 10.9 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.007 |
| | | | | VANADIUM | 24.0 | mg/kg | 2.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.06 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 2.6E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-02 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 5.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 7.6E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 3.8E-06 | 1.7E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.006 |
| | | | Exp. Route Total | | | | | | | | 3.9E-04 | | | | | 24 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.02 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 7.2E-06 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 2.1E-07 | 8.3E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.008 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 2.1E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 1.1E-10 | 2.5E-07 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.000004 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 3.2E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.3E-05 | 7.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 1.5E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.1E-05 | 1.8E-04 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 9.0 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 4.6E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.3E-05 | 5.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 2.20 | mg/kg | 2.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.0E-07 | 2.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | CADMIUM | 2.70 | mg/kg | 8.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.7E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 11.6 | mg/kg | 3.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | IRON | 17,200 | mg/kg | 5.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.009 |
| | | | | LEAD | 21.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 5.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0004 |
| | | | | MERCURY | 0.120 | mg/kg | 3.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.002 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 2.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00006 |
| | | | | NICKEL | 10.9 | mg/kg | 3.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.005 |
| | | | | VANADIUM | 24.0 | mg/kg | 7.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.6E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 2.1E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 4.3E-06 | 4.7E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.006 |
| | | | Exp. Route Total | | | | | | | | 1.5E-04 | | | | | 9.1 |
| | | Exposure Point Total | | | | | | | | | 5.4E-04 | | | | | 34 |
| | Exposure Medium Total | | | | | | | | | | 5.4E-04 | | | | | 34 |

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 3.7E-4 | mg/m$^3$ | 3.0E-05 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.5E-04 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.002 | mg/m$^3$ | 1.6E-04 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.8E-03 | (mg/m$^3$) | 2.0E-03 | (mg/m$^3$) | 0.9 |
| | | | | 1,4-DICHLOROBENZENE | 1.6E-5 | mg/m$^3$ | 1.3E-06 | (mg/m$^3$) | 1.1E-05 | (ug/m$^3$)$^{-1}$ | 1.4E-08 | 1.5E-05 | (mg/m$^3$) | 8.0E-01 | (mg/m$^3$) | 0.00002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.6E-10 | mg/m$^3$ | 2.0E-10 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 2.2E-10 | 4.5E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 1.1E-8 | mg/m$^3$ | 9.2E-10 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 5.2E-10 | 1.1E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 3.3E-8 | mg/m$^3$ | 2.7E-09 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.6E-09 | 3.2E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 1.1E-10 | mg/m$^3$ | 9.4E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.1E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 6.8E-10 | mg/m$^3$ | 5.6E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 2.4E-10 | 6.5E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00004 |
| | | | | CADMIUM | 8.4E-10 | mg/m$^3$ | 6.9E-11 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 1.2E-10 | 8.0E-10 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.00008 |
| | | | | COBALT | 3.6E-9 | mg/m$^3$ | 3.0E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 2.7E-09 | 3.4E-09 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0006 |
| | | | | IRON | 5.3E-6 | mg/m$^3$ | 4.4E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.1E-06 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | LEAD | 6.7E-9 | mg/m$^3$ | 5.5E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.4E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MANGANESE | 5.4E-8 | mg/m$^3$ | 4.4E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.2E-08 | (mg/m$^3$) | 5.0E-05 | (mg/m$^3$) | 0.001 |
| | | | | MERCURY | 3.7E-11 | mg/m$^3$ | 3.1E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.6E-11 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000001 |
| | | | | MOLYBDENUM | 2.6E-10 | mg/m$^3$ | 2.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.5E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.4E-9 | mg/m$^3$ | 2.8E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 7.2E-11 | 3.2E-09 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.00004 |
| | | | | VANADIUM | 7.4E-9 | mg/m$^3$ | 6.1E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 7.1E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 7.2E-7 | mg/m$^3$ | 6.0E-08 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.9E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.5E-10 | mg/m$^3$ | 1.2E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.4E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | mg/m$^3$ | 1.8E-10 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 1.5E-08 | 3.9E-10 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.000004 |
| | | | Exp. Route Total | | | | | | | | 3.5E-08 | | | | | 0.9 |
| | | Exposure Point Total | | | | | | | | | 3.5E-08 | | | | | 0.9 |
| | Exposure Medium Total | | | | | | | | | | 3.5E-08 | | | | | 0.9 |
| Medium Total | | | | | | | | | | | 5.4E-04 | | | | | 34 |

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 1.8E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-03 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 2.6 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 7.9E-04 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 2.3E-05 | 9.3E-03 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.9 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 4.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 1.1E-05 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 6.2E-08 | 1.3E-04 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 9.9E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 7.3E-05 | 2.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 7.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.2E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00005 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 1.1E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.1E-05 | 1.3E-04 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 6.3 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 7.8E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.6E-03 | 9.1E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 1.6E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.5E-06 | 1.9E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | COBALT | 4.00 | mg/kg | 4.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | IRON | 17,100 | mg/kg | 1.9E-02 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-01 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.3 |
| | | | | LEAD | 3.60 | mg/kg | 3.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.6E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 1.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-03 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.009 |
| | | | | MERCURY | 0.290 | mg/kg | 3.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | VANADIUM | 13.8 | mg/kg | 1.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.04 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 2.2E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-02 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 8.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 2.9E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.4E-06 | 6.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.7E-03 | | | | | 10 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 1.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-04 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.2 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 6.7E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 1.9E-06 | 7.8E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.08 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 3.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 9.6E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 5.2E-09 | 1.1E-05 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 3.6E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.6E-05 | 7.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 2.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00002 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 4.2E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.4E-06 | 4.9E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 2.5 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 3.0E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.1E-04 | 3.6E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 1.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.1E-07 | 1.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | COBALT | 4.00 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | IRON | 17,100 | mg/kg | 5.2E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.009 |
| | | | | LEAD | 3.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 2.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0002 |
| | | | | MERCURY | 0.290 | mg/kg | 8.9E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-07 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.005 |
| | | | | VANADIUM | 13.8 | mg/kg | 4.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.9E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0010 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 8.0E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.6E-06 | 1.8E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 6.5E-04 | | | | | 2.8 |
| | | Exposure Point Total | | | | | | | | | 2.3E-03 | | | | | 13 |
| | Exposure Medium Total | | | | | | | | | | 2.3E-03 | | | | | 13 |

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 0.003 | $mg/m^3$ | 2.8E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.3E-03 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.010 | $mg/m^3$ | 8.1E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.5E-03 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 4.7 |
| | | | | 1,3-DICHLOROBENZENE | 1.3E-9 | $mg/m^3$ | 1.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,4-DICHLOROBENZENE | 7.2E-4 | $mg/m^3$ | 6.0E-05 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 6.6E-07 | 7.0E-04 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.0009 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 5.3E-10 | $mg/m^3$ | 2.3E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.5E-10 | 5.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 1.1E-6 | $mg/m^3$ | 9.2E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 3.1E-09 | 1.1E-06 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0004 |
| | | | | AROCLOR-1254 | 3.0E-9 | $mg/m^3$ | 2.5E-10 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.4E-10 | 2.9E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 2.2E-7 | $mg/m^3$ | 1.8E-08 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.0E-08 | 2.1E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 4.6E-10 | $mg/m^3$ | 3.8E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.6E-10 | 4.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00003 |
| | | | | COBALT | 1.2E-9 | $mg/m^3$ | 1.0E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 9.2E-10 | 1.2E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0002 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 4.4E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 1.1E-9 | $mg/m^3$ | 9.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.9E-8 | $mg/m^3$ | 2.4E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0006 |
| | | | | MERCURY | 9.0E-11 | $mg/m^3$ | 7.4E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.6E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000003 |
| | | | | VANADIUM | 4.3E-9 | $mg/m^3$ | 3.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.2E-7 | $mg/m^3$ | 5.1E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.0E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-8 | $mg/m^3$ | 2.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 1.5E-10 | $mg/m^3$ | 6.6E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 5.6E-09 | 1.5E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000001 |
| | | | Exp. Route Total | | | | | | | | 6.8E-07 | | | | | 4.7 |
| | | Exposure Point Total | | | | | | | | | 6.8E-07 | | | | | 4.7 |
| | Exposure Medium Total | | | | | | | | | | 6.8E-07 | | | | | 4.7 |
| | Exposure Medium Total | | | | | | | | | | 6.8E-07 | | | | | 4.7 |
| Medium Total | | | | | | | | | | | 2.3E-03 | | | | | 18 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 6.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.05 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 3.2E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 9.3E-07 | 1.9E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.02 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 9.5E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 5.1E-10 | 5.5E-07 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.000008 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 1.6E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.2E-05 | 3.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 1.5E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.0E-05 | 8.6E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 4.3 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 4.4E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.9E-05 | 2.6E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.9E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 2.20 | mg/kg | 9.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.4E-06 | 5.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | CADMIUM | 2.70 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.5E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.006 |
| | | | | COBALT | 11.6 | mg/kg | 4.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.09 |
| | | | | IRON | 17,200 | mg/kg | 7.1E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.06 |
| | | | | LEAD | 21.6 | mg/kg | 8.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 7.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.003 |
| | | | | MERCURY | 0.120 | mg/kg | 4.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0010 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 3.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | NICKEL | 10.9 | mg/kg | 4.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 24.0 | mg/kg | 9.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 9.6E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 2.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 1.4E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 7.1E-07 | 3.1E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 1.3E-04 | | | | | 4.6 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 6.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.004 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 2.9E-06 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 8.4E-08 | 1.7E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.002 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 8.6E-09 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 4.6E-11 | 5.0E-08 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0000007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.50 | mg/kg | 6.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.7E-06 | 1.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 6.3E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.3E-05 | 3.7E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 1.8 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 1.9E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.8E-05 | 1.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 4.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0004 |
| | | | | ARSENIC | 2.20 | mg/kg | 8.2E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.2E-07 | 4.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 2.70 | mg/kg | 3.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0008 |
| | | | | COBALT | 11.6 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | IRON | 17,200 | mg/kg | 2.1E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 21.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 2.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00009 |
| | | | | MERCURY | 0.120 | mg/kg | 1.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.7E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0004 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 1.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00001 |
| | | | | NICKEL | 10.9 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0010 |
| | | | | VANADIUM | 24.0 | mg/kg | 3.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 4.3E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 8.6E-07 | 9.4E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 5.6E-05 | | | | | 1.8 |
| | | Exposure Point Total | | | | | | | | | 1.9E-04 | | | | | 6.4 |
| | Exposure Medium Total | | | | | | | | | | 1.9E-04 | | | | | 6.4 |

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 3.7E-4 | $mg/m^3$ | 6.1E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.5E-04 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.002 | $mg/m^3$ | 3.1E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-03 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 0.9 |
| | | | | 1,4-DICHLOROBENZENE | 1.6E-5 | $mg/m^3$ | 2.6E-06 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 2.9E-08 | 1.5E-05 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.00002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.6E-10 | $mg/m^3$ | 2.0E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.2E-10 | 4.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 1.1E-8 | $mg/m^3$ | 1.8E-09 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.0E-09 | 1.1E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 3.3E-8 | $mg/m^3$ | 5.5E-09 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.1E-09 | 3.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 1.1E-10 | $mg/m^3$ | 1.9E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 6.8E-10 | $mg/m^3$ | 1.1E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 4.8E-10 | 6.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | CADMIUM | 8.4E-10 | $mg/m^3$ | 1.4E-10 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 2.5E-10 | 8.0E-10 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.00008 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 5.9E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 5.3E-09 | 3.4E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0006 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 8.8E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 6.7E-9 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.4E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 5.4E-8 | $mg/m^3$ | 8.9E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.2E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.001 |
| | | | | MERCURY | 3.7E-11 | $mg/m^3$ | 6.1E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.6E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000001 |
| | | | | MOLYBDENUM | 2.6E-10 | $mg/m^3$ | 4.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 5.5E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 1.4E-10 | 3.2E-09 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | VANADIUM | 7.4E-9 | $mg/m^3$ | 1.2E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.2E-7 | $mg/m^3$ | 1.2E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.9E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.5E-10 | $mg/m^3$ | 2.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.5E-08 | 3.9E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000004 |
| | | | Exp. Route Total | | | | | | | | 5.4E-08 | | | | | 0.9 |
| | | Exposure Point Total | | | | | | | | | 5.4E-08 | | | | | 0.9 |
| | Exposure Medium Total | | | | | | | | | | 5.4E-08 | | | | | 0.9 |
| Medium Total | | | | | | | | | | | 1.9E-04 | | | | | 7.3 |

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 6.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-04 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.5 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 3.0E-04 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 8.6E-06 | 1.7E-03 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.2 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 1.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 4.3E-06 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 2.3E-08 | 2.5E-05 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0004 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 1.9E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.4E-05 | 4.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 3.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000009 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 4.0E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.1E-06 | 2.3E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 1.2 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 2.9E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.8E-04 | 1.7E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 6.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.2E-07 | 3.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 4.00 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | IRON | 17,100 | mg/kg | 7.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.06 |
| | | | | LEAD | 3.60 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 3.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.002 |
| | | | | MERCURY | 0.290 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | VANADIUM | 13.8 | mg/kg | 5.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.007 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 8.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.8E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 3.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 5.4E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.7E-07 | 1.2E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 6.1E-04 | | | | | 2.0 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 6.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.04 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 2.7E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 7.8E-07 | 1.6E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.02 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 1.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 3.9E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 2.1E-09 | 2.3E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.70 | mg/kg | 7.3E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.3E-06 | 1.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 1.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 1.7E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.4E-06 | 9.9E-06 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.5 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 1.2E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.5E-04 | 7.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 5.6E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.4E-08 | 3.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 4.00 | mg/kg | 5.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0010 |
| | | | | IRON | 17,100 | mg/kg | 2.1E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 3.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00005 |
| | | | | MERCURY | 0.290 | mg/kg | 3.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 13.8 | mg/kg | 1.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 1.6E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 3.2E-07 | 3.6E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0005 |
| | | | Exp. Route Total | | | | | | | | 2.6E-04 | | | | | 0.6 |
| | | Exposure Point Total | | | | | | | | | 8.7E-04 | | | | | 2.5 |
| | Exposure Medium Total | | | | | | | | | | 8.7E-04 | | | | | 2.5 |

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 0.003 | $mg/m^3$ | 5.7E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.3E-03 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.010 | $mg/m^3$ | 1.6E-03 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.5E-03 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 4.7 |
| | | | | 1,3-DICHLOROBENZENE | 1.3E-9 | $mg/m^3$ | 2.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,4-DICHLOROBENZENE | 7.2E-4 | $mg/m^3$ | 1.2E-04 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 1.3E-06 | 7.0E-04 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.0009 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 5.3E-10 | $mg/m^3$ | 2.3E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.5E-10 | 5.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 1.1E-6 | $mg/m^3$ | 1.8E-07 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 6.3E-09 | 1.1E-06 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0004 |
| | | | | AROCLOR-1254 | 3.0E-9 | $mg/m^3$ | 5.0E-10 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.8E-10 | 2.9E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 2.2E-7 | $mg/m^3$ | 3.6E-08 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.1E-08 | 2.1E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 4.6E-10 | $mg/m^3$ | 7.6E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.3E-10 | 4.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00003 |
| | | | | COBALT | 1.2E-9 | $mg/m^3$ | 2.0E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.8E-09 | 1.2E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0002 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 8.7E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 1.1E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.9E-8 | $mg/m^3$ | 4.8E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0006 |
| | | | | MERCURY | 9.0E-11 | $mg/m^3$ | 1.5E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.6E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000003 |
| | | | | VANADIUM | 4.3E-9 | $mg/m^3$ | 7.0E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.2E-7 | $mg/m^3$ | 1.0E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.0E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-8 | $mg/m^3$ | 4.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 1.5E-10 | $mg/m^3$ | 6.6E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 5.6E-09 | 1.5E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000001 |
| | | | Exp. Route Total | | | | | | | | 1.3E-06 | | | | | 4.7 |
| | | Exposure Point Total | | | | | | | | | 1.3E-06 | | | | | 4.7 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-06 | | | | | 4.7 |
| Medium Total | | | | | | | | | | | 8.7E-04 | | | | | 7.2 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 3.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.03 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 1.8E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 5.3E-07 | 1.1E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.01 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 5.4E-08 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 2.9E-10 | 3.2E-07 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.000005 |
| | | | | BENZO(A)PYRENE EQUIVALE | 1.50 | mg/kg | 3.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.6E-06 | 2.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 8.5E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.7E-05 | 4.9E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 2.5 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 2.5E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.1E-05 | 1.5E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 8.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.1E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.001 |
| | | | | ARSENIC | 2.20 | mg/kg | 5.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 7.7E-07 | 3.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 2.70 | mg/kg | 6.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 11.6 | mg/kg | 2.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | IRON | 17,200 | mg/kg | 4.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.03 |
| | | | | LEAD | 21.6 | mg/kg | 5.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 4.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.002 |
| | | | | MERCURY | 0.120 | mg/kg | 2.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0005 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 1.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | NICKEL | 10.9 | mg/kg | 2.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 24.0 | mg/kg | 5.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.007 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 5.5E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 3.1E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 1.8E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0006 |
| | | | Exp. Route Total | | | | | | | | 7.2E-05 | | | | | 2.6 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 16.3 | mg/kg | 4.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.003 |
| | | | | 1,2,4-TRICHLOROBENZENE | 77.7 | mg/kg | 2.2E-06 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 6.3E-08 | 1.3E-05 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.001 |
| | | | | 1,4-DICHLOROBENZENE | 0.230 | mg/kg | 6.5E-09 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 3.5E-11 | 3.8E-08 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0000005 |
| | | | | BENZO(A)PYRENE EQUIVALE | 1.50 | mg/kg | 1.8E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.3E-06 | 1.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 36.0 | mg/kg | 4.7E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.4E-06 | 2.8E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 1.4 |
| | | | | AROCLOR-1260 | 108 | mg/kg | 1.4E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.8E-05 | 8.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.370 | mg/kg | 3.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0003 |
| | | | | ARSENIC | 2.20 | mg/kg | 6.2E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.3E-08 | 3.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | CADMIUM | 2.70 | mg/kg | 2.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0006 |
| | | | | COBALT | 11.6 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | IRON | 17,200 | mg/kg | 1.6E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-04 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 21.6 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 174 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.5E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00007 |
| | | | | MERCURY | 0.120 | mg/kg | 1.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.6E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0003 |
| | | | | MOLYBDENUM | 0.830 | mg/kg | 7.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000009 |
| | | | | NICKEL | 10.9 | mg/kg | 1.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 24.0 | mg/kg | 2.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 2,340 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 0.480 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 1.2E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.4E-07 | 7.1E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 4.0E-05 | | | | | 1.4 |
| | | Exposure Point Total | | | | | | | | | 1.1E-04 | | | | | 4.0 |
| | Exposure Medium Total | | | | | | | | | | 1.1E-04 | | | | | 4.0 |

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 3.7E-4 | $mg/m^3$ | 6.1E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.5E-04 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.002 | $mg/m^3$ | 3.1E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-03 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 0.9 |
| | | | | 1,4-DICHLOROBENZENE | 1.6E-5 | $mg/m^3$ | 2.6E-06 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 2.9E-08 | 1.5E-05 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.00002 |
| | | | | BENZO(A)PYRENE EQUIVALE | 4.6E-10 | $mg/m^3$ | 7.6E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 8.4E-11 | 4.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 1.1E-8 | $mg/m^3$ | 1.8E-09 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.0E-09 | 1.1E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 3.3E-8 | $mg/m^3$ | 5.5E-09 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.1E-09 | 3.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 1.1E-10 | $mg/m^3$ | 1.9E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 6.8E-10 | $mg/m^3$ | 1.1E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 4.8E-10 | 6.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | CADMIUM | 8.4E-10 | $mg/m^3$ | 1.4E-10 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 2.5E-10 | 8.0E-10 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.00008 |
| | | | | COBALT | 3.6E-9 | $mg/m^3$ | 5.9E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 5.3E-09 | 3.4E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0006 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 8.8E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 6.7E-9 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.4E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 5.4E-8 | $mg/m^3$ | 8.9E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.2E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.001 |
| | | | | MERCURY | 3.7E-11 | $mg/m^3$ | 6.1E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.6E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000001 |
| | | | | MOLYBDENUM | 2.6E-10 | $mg/m^3$ | 4.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 5.5E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 1.4E-10 | 3.2E-09 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | VANADIUM | 7.4E-9 | $mg/m^3$ | 1.2E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.2E-7 | $mg/m^3$ | 1.2E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.9E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.5E-10 | $mg/m^3$ | 2.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | $mg/m^3$ | 6.6E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 5.6E-09 | 3.9E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000004 |
| | | | Exp. Route Total | | | | | | | | 4.5E-08 | | | | | 0.9 |
| | | Exposure Point Total | | | | | | | | | 4.5E-08 | | | | | 0.9 |
| | Exposure Medium Total | | | | | | | | | | 4.5E-08 | | | | | 0.9 |
| Medium Total | | | | | | | | | | | 1.1E-04 | | | | | 4.9 |

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block E | Ingestion | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 3.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-04 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.3 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 1.7E-04 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 4.9E-06 | 9.9E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.10 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 9.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 2.4E-06 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 1.3E-08 | 1.4E-05 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.0002 |
| | | | | BENZO(A)PYRENE EQUIVALE | 1.70 | mg/kg | 4.0E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.9E-06 | 2.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 1.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.9E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000005 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 2.3E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.6E-06 | 1.3E-05 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.7 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 1.7E-04 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.3E-04 | 9.7E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 3.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 5.3E-07 | 2.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.007 |
| | | | | COBALT | 4.00 | mg/kg | 9.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | IRON | 17,100 | mg/kg | 4.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.03 |
| | | | | LEAD | 3.60 | mg/kg | 8.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 2.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0009 |
| | | | | MERCURY | 0.290 | mg/kg | 6.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 13.8 | mg/kg | 3.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.004 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 4.7E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 1.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 1.2E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 5.8E-08 | 6.7E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 3.5E-04 | | | | | 1.1 |
| | | | Dermal | 1,2,3-TRICHLOROBENZENE | 165 | mg/kg | 4.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.03 |
| | | | | 1,2,4-TRICHLOROBENZENE | 724 | mg/kg | 2.0E-05 | (mg/kg/day) | 2.9E-02 | $(mg/kg/day)^{-1}$ | 5.9E-07 | 1.2E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.01 |
| | | | | 1,3-DICHLOROBENZENE | 4.20 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.9E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | 1,4-DICHLOROBENZENE | 10.4 | mg/kg | 2.9E-07 | (mg/kg/day) | 5.4E-03 | $(mg/kg/day)^{-1}$ | 1.6E-09 | 1.7E-06 | (mg/kg/day) | 7.0E-02 | (mg/kg/day) | 0.00002 |
| | | | | BENZO(A)PYRENE EQUIVALE | 1.70 | mg/kg | 2.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.5E-06 | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.072 | mg/kg | 8.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.1E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | AROCLOR-1254 | 9.80 | mg/kg | 1.3E-06 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.6E-06 | 7.5E-06 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.4 |
| | | | | AROCLOR-1260 | 709 | mg/kg | 9.3E-05 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.9E-04 | 5.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 1.50 | mg/kg | 4.2E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 6.3E-08 | 2.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0008 |
| | | | | COBALT | 4.00 | mg/kg | 3.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0007 |
| | | | | IRON | 17,100 | mg/kg | 1.6E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.3E-04 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 3.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 93.9 | mg/kg | 8.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.1E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00004 |
| | | | | MERCURY | 0.290 | mg/kg | 2.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0008 |
| | | | | VANADIUM | 13.8 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.5E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | DIESEL RANGE ORGANICS | 2,010 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 81.1 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.490 | mg/kg | 4.6E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 9.2E-08 | 2.7E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 1.9E-04 | | | | | 0.4 |
| | | Exposure Point Total | | | | | | | | | 5.4E-04 | | | | | 1.5 |
| | Exposure Medium Total | | | | | | | | | | 5.4E-04 | | | | | 1.5 |

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK E - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block E | Inhalation | 1,2,3-TRICHLOROBENZENE | 0.003 | $mg/m^3$ | 5.7E-04 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.3E-03 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,2,4-TRICHLOROBENZENE | 0.010 | $mg/m^3$ | 1.6E-03 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.5E-03 | $(mg/m^3)$ | 2.0E-03 | $(mg/m^3)$ | 4.7 |
| | | | | 1,3-DICHLOROBENZENE | 1.3E-9 | $mg/m^3$ | 2.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | 1,4-DICHLOROBENZENE | 7.2E-4 | $mg/m^3$ | 1.2E-04 | $(mg/m^3)$ | 1.1E-05 | $(ug/m^3)^{-1}$ | 1.3E-06 | 7.0E-04 | $(mg/m^3)$ | 8.0E-01 | $(mg/m^3)$ | 0.0009 |
| | | | | BENZO(A)PYRENE EQUIVALE | 5.3E-10 | $mg/m^3$ | 8.7E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 9.5E-11 | 5.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 1.1E-6 | $mg/m^3$ | 1.8E-07 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 6.3E-09 | 1.1E-06 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0004 |
| | | | | AROCLOR-1254 | 3.0E-9 | $mg/m^3$ | 5.0E-10 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.8E-10 | 2.9E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 2.2E-7 | $mg/m^3$ | 3.6E-08 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.1E-08 | 2.1E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 4.6E-10 | $mg/m^3$ | 7.6E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.3E-10 | 4.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00003 |
| | | | | COBALT | 1.2E-9 | $mg/m^3$ | 2.0E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.8E-09 | 1.2E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0002 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 8.7E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 1.1E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 2.9E-8 | $mg/m^3$ | 4.8E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0006 |
| | | | | MERCURY | 9.0E-11 | $mg/m^3$ | 1.5E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.6E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000003 |
| | | | | VANADIUM | 4.3E-9 | $mg/m^3$ | 7.0E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.2E-7 | $mg/m^3$ | 1.0E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.0E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.5E-8 | $mg/m^3$ | 4.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 1.5E-10 | $mg/m^3$ | 2.5E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.1E-09 | 1.5E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000001 |
| | | | Exp. Route Total | | | | | | | | 1.3E-06 | | | | | 4.7 |
| | | Exposure Point Total | | | | | | | | | 1.3E-06 | | | | | 4.7 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-06 | | | | | 4.7 |
| Medium Total | | | | | | | | | | | 5.4E-04 | | | | | 6.3 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block F | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 4.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.0E-06 | 2.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 6.4E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.3E-08 | 4.5E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.02 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 1.1E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.1E-08 | 7.5E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 9.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.6E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.02 |
| | | | | ARSENIC | 3.10 | mg/kg | 2.1E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.1E-07 | 1.5E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | CADMIUM | 1.20 | mg/kg | 8.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.006 |
| | | | | COBALT | 7.00 | mg/kg | 4.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 58.9 | mg/kg | 4.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 5.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 4.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.06 |
| | | | | NICKEL | 12.4 | mg/kg | 8.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 35.0 | mg/kg | 2.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 6.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 8.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 1.8E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 9.1E-08 | 1.3E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 3.4E-06 | | | | | 0.2 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 1.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.0E-07 | 7.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 1.8E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.7E-09 | 1.3E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.006 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 3.1E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.2E-09 | 2.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 1.9E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.10 | mg/kg | 1.3E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.9E-08 | 9.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | CADMIUM | 1.20 | mg/kg | 1.7E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0005 |
| | | | | COBALT | 7.00 | mg/kg | 9.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.7E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | LEAD | 58.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 1.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.004 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 8.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.001 |
| | | | | NICKEL | 12.4 | mg/kg | 1.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 35.0 | mg/kg | 4.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-06 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 3.7E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 7.4E-08 | 2.6E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.003 |
| | | | Exp. Route Total | | | | | | | | 9.0E-07 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 4.3E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 4.3E-06 | | | | | 0.2 |

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block F | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 4.3E-6 | mg/m$^3$ | 1.4E-08 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 1.5E-08 | 9.7E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 6.7E-8 | mg/m$^3$ | 2.2E-10 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.2E-10 | 1.5E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 1.1E-7 | mg/m$^3$ | 3.6E-10 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 2.1E-10 | 2.6E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 9.8E-7 | mg/m$^3$ | 3.2E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.2E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 2.2E-6 | mg/m$^3$ | 7.1E-09 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 3.0E-08 | 4.9E-07 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.03 |
| | | | | CADMIUM | 8.4E-7 | mg/m$^3$ | 2.7E-09 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 4.9E-09 | 1.9E-07 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.02 |
| | | | | COBALT | 4.9E-6 | mg/m$^3$ | 1.6E-08 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 1.4E-07 | 1.1E-06 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.2 |
| | | | | LEAD | 4.1E-5 | mg/m$^3$ | 1.3E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.4E-06 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 6.1E-7 | mg/m$^3$ | 2.0E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.4E-07 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.005 |
| | | | | MOLYBDENUM | 4.4E-5 | mg/m$^3$ | 1.4E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.0E-05 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 8.7E-6 | mg/m$^3$ | 2.8E-08 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 7.4E-09 | 2.0E-06 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.02 |
| | | | | VANADIUM | 2.4E-5 | mg/m$^3$ | 8.0E-08 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.6E-06 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 6.4E-5 | mg/m$^3$ | 2.1E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.5E-05 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 8.4E-7 | mg/m$^3$ | 2.7E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.9E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.9E-6 | mg/m$^3$ | 6.2E-09 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 5.2E-07 | 4.3E-07 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 7.2E-07 | | | | | 0.3 |
| | | Exposure Point Total | | | | | | | | | 7.2E-07 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | | | | 7.2E-07 | | | | | 0.3 |
| Medium Total | | | | | | | | | | | 5.0E-06 | | | | | 0.5 |

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block F | Ingestion | NAPHTHALENE | 159 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.5E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.04 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 1.5E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.1E-07 | 1.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 1.1E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.3E-09 | 8.0E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 1.6E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.4E-07 | 1.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | COBALT | 18.7 | mg/kg | 1.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.8E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.03 |
| | | | | LEAD | 10.4 | mg/kg | 7.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 1.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | VANADIUM | 39.9 | mg/kg | 2.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 3.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 1.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 6.6E-08 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 3.3E-08 | 4.6E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 3.8E-07 | | | | | 0.1 |
| | | | Dermal | NAPHTHALENE | 159 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.010 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 3.9E-09 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.9E-08 | 2.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 3.3E-10 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.5E-10 | 2.3E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 9.9E-09 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.5E-08 | 6.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 18.7 | mg/kg | 2.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 10.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 3.7E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 39.9 | mg/kg | 5.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-06 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 1.3E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.7E-08 | 9.4E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 7.1E-08 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 4.6E-07 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 4.6E-07 | | | | | 0.1 |
| | Air | Block F | Inhalation | NAPHTHALENE | 0.015 | $mg/m^3$ | 5.0E-05 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.7E-06 | 3.5E-03 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 1.2 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.5E-7 | $mg/m^3$ | 5.0E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 5.5E-10 | 3.5E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 1.2E-8 | $mg/m^3$ | 3.9E-11 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.2E-11 | 2.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.7E-6 | $mg/m^3$ | 5.5E-09 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.4E-08 | 3.8E-07 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.03 |
| | | | | COBALT | 1.3E-5 | $mg/m^3$ | 4.3E-08 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 3.8E-07 | 3.0E-06 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.5 |
| | | | | LEAD | 7.3E-6 | $mg/m^3$ | 2.4E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.7E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 1.9E-7 | $mg/m^3$ | 6.2E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.3E-08 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.001 |
| | | | | VANADIUM | 2.8E-5 | $mg/m^3$ | 9.1E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.4E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 3.7E-4 | $mg/m^3$ | 1.2E-06 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.3E-05 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.5E-5 | $mg/m^3$ | 4.8E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.4E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 6.9E-7 | $mg/m^3$ | 2.2E-09 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.9E-07 | 1.6E-07 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.002 |
| | | | Exp. Route Total | | | | | | | | 2.3E-06 | | | | | 1.7 |
| | | Exposure Point Total | | | | | | | | | 2.3E-06 | | | | | 1.7 |
| | Exposure Medium Total | | | | | | | | | | 2.3E-06 | | | | | 1.7 |
| Medium Total | | | | | | | | | | | 2.8E-06 | | | | | 1.8 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block F | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 1.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 7.8E-06 | 3.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 1.7E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.4E-08 | 4.7E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.002 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 2.8E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.6E-08 | 7.8E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 2.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.10 | mg/kg | 5.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.1E-07 | 1.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | CADMIUM | 1.20 | mg/kg | 2.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.9E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0006 |
| | | | | COBALT | 7.00 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 58.9 | mg/kg | 1.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.006 |
| | | | | NICKEL | 12.4 | mg/kg | 2.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | VANADIUM | 35.0 | mg/kg | 6.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 2.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.9E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 4.7E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.4E-07 | 1.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 8.9E-06 | | | | | 0.03 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 1.8E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.3E-05 | 5.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 3.1E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.2E-08 | 8.7E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.004 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 5.2E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.0E-07 | 1.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 3.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.0E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.10 | mg/kg | 2.1E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.2E-07 | 6.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 1.20 | mg/kg | 2.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0003 |
| | | | | COBALT | 7.00 | mg/kg | 1.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 58.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 2.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.003 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0008 |
| | | | | NICKEL | 12.4 | mg/kg | 2.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.0E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 35.0 | mg/kg | 8.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 6.2E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.2E-06 | 1.7E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.5E-05 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 2.4E-05 | | | | | 0.05 |
| | Exposure Medium Total | | | | | | | | | | 2.4E-05 | | | | | 0.05 |

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block F | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.9E-9 | mg/m$^3$ | 1.5E-10 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 1.7E-10 | 4.3E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.0E-11 | mg/m$^3$ | 2.4E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.4E-12 | 6.8E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 5.0E-11 | mg/m$^3$ | 4.0E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 2.3E-12 | 1.1E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 4.3E-10 | mg/m$^3$ | 3.5E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.9E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 9.6E-10 | mg/m$^3$ | 7.8E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 3.4E-10 | 2.2E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00001 |
| | | | | CADMIUM | 3.7E-10 | mg/m$^3$ | 3.0E-11 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 5.5E-11 | 8.5E-11 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.000008 |
| | | | | COBALT | 2.2E-9 | mg/m$^3$ | 1.8E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 1.6E-09 | 4.9E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.00008 |
| | | | | LEAD | 1.8E-8 | mg/m$^3$ | 1.5E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.2E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 2.7E-10 | mg/m$^3$ | 2.2E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.1E-11 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000002 |
| | | | | MOLYBDENUM | 2.0E-8 | mg/m$^3$ | 1.6E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.8E-9 | mg/m$^3$ | 3.1E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 8.1E-11 | 8.8E-10 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.000010 |
| | | | | VANADIUM | 1.1E-8 | mg/m$^3$ | 8.8E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.8E-8 | mg/m$^3$ | 2.3E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-10 | mg/m$^3$ | 3.0E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 8.5E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 8.4E-10 | mg/m$^3$ | 6.8E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 5.7E-09 | 1.9E-10 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.000002 |
| | | | Exp. Route Total | | | | | | | | 8.0E-09 | | | | | 0.0001 |
| | | Exposure Point Total | | | | | | | | | 8.0E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | | | | 8.0E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | | | | 2.4E-05 | | | | | 0.05 |
| Subsurface Soil | Subsurface Soil | Block F | Ingestion | NAPHTHALENE | 159 | mg/kg | 2.8E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 7.8E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.004 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 3.8E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 2.8E-07 | 1.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 3.0E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 5.9E-09 | 8.3E-09 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 4.2E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 6.3E-07 | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 18.7 | mg/kg | 3.3E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 9.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | LEAD | 10.4 | mg/kg | 1.8E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 4.7E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0004 |
| | | | | VANADIUM | 39.9 | mg/kg | 7.0E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.004 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 9.1E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.6E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 3.7E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 1.7E-07 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 8.6E-08 | 4.8E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 1.0E-06 | | | | | 0.04 |
| | | | Dermal | NAPHTHALENE | 159 | mg/kg | 4.8E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 6.6E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 4.8E-07 | 1.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 5.5E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 1.1E-08 | 1.5E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 1.7E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 2.5E-07 | 4.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 18.7 | mg/kg | 4.3E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | LEAD | 10.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 6.2E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.7E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0008 |
| | | | | VANADIUM | 39.9 | mg/kg | 9.2E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.6E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 2.3E-08 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 4.5E-07 | 6.3E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 1.2E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 2.2E-06 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | | | | 2.2E-06 | | | | | 0.06 |

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block F | Inhalation | NAPHTHALENE | 0.002 | $mg/m^3$ | 2.0E-04 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 6.9E-06 | 5.7E-04 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.2 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 6.8E-11 | $mg/m^3$ | 5.6E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 6.1E-12 | 1.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 5.3E-12 | $mg/m^3$ | 4.3E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.4E-13 | 1.2E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 7.4E-10 | $mg/m^3$ | 6.1E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.6E-10 | 1.7E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | COBALT | 5.8E-9 | $mg/m^3$ | 4.7E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 4.2E-09 | 1.3E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0002 |
| | | | | LEAD | 3.2E-9 | $mg/m^3$ | 2.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 8.4E-11 | $mg/m^3$ | 6.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000006 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 1.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.6E-7 | $mg/m^3$ | 1.3E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.7E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 6.6E-9 | $mg/m^3$ | 5.4E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.0E-10 | $mg/m^3$ | 2.5E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.1E-09 | 6.9E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000007 |
| | | | Exp. Route Total | | | | | | | | 6.9E-06 | | | | | 0.2 |
| | | Exposure Point Total | | | | | | | | | 6.9E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 6.9E-06 | | | | | 0.2 |
| Medium Total | | | | | | | | | | | 9.1E-06 | | | | | 0.2 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block F | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 1.3E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 9.8E-05 | 2.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 4.0E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.9E-08 | 4.6E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.02 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 6.6E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.3E-07 | 7.7E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 5.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.02 |
| | | | | ARSENIC | 3.10 | mg/kg | 1.3E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.9E-06 | 1.5E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | CADMIUM | 1.20 | mg/kg | 5.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.006 |
| | | | | COBALT | 7.00 | mg/kg | 2.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 58.9 | mg/kg | 2.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 3.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 2.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.06 |
| | | | | NICKEL | 12.4 | mg/kg | 5.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 35.0 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.03 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 3.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 5.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 6.0E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 3.0E-06 | 1.3E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 1.0E-04 | | | | | 0.3 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 4.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.0E-05 | 9.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 1.3E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.6E-08 | 1.5E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.008 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 2.2E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.4E-08 | 2.5E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 1.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.003 |
| | | | | ARSENIC | 3.10 | mg/kg | 9.0E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.4E-07 | 1.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | CADMIUM | 1.20 | mg/kg | 1.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0005 |
| | | | | COBALT | 7.00 | mg/kg | 6.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 58.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 8.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.9E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.005 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 6.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.001 |
| | | | | NICKEL | 12.4 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.002 |
| | | | | VANADIUM | 35.0 | mg/kg | 3.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0008 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 1.4E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.8E-06 | 3.1E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 3.3E-05 | | | | | 0.03 |
| | | Exposure Point Total | | | | | | | | | 1.4E-04 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | | | | 1.4E-04 | | | | | 0.4 |

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block F | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.9E-9 | mg/m$^3$ | 5.2E-11 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 5.7E-11 | 1.1E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.0E-11 | mg/m$^3$ | 1.5E-13 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 8.8E-14 | 1.8E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 5.0E-11 | mg/m$^3$ | 2.6E-13 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.5E-13 | 3.0E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 4.3E-10 | mg/m$^3$ | 2.2E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.6E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 9.6E-10 | mg/m$^3$ | 5.0E-12 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 2.1E-11 | 5.8E-11 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.000004 |
| | | | | CADMIUM | 3.7E-10 | mg/m$^3$ | 1.9E-12 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 3.5E-12 | 2.2E-11 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.000002 |
| | | | | COBALT | 2.2E-9 | mg/m$^3$ | 1.1E-11 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 1.0E-10 | 1.3E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.00002 |
| | | | | LEAD | 1.8E-8 | mg/m$^3$ | 9.4E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.1E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 2.7E-10 | mg/m$^3$ | 1.4E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.6E-11 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.0000005 |
| | | | | MOLYBDENUM | 2.0E-8 | mg/m$^3$ | 1.0E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.2E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.8E-9 | mg/m$^3$ | 2.0E-11 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 5.2E-12 | 2.3E-10 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.000003 |
| | | | | VANADIUM | 1.1E-8 | mg/m$^3$ | 5.6E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.5E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.8E-8 | mg/m$^3$ | 1.5E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.7E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-10 | mg/m$^3$ | 1.9E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.2E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 8.4E-10 | mg/m$^3$ | 2.3E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 1.9E-09 | 5.0E-11 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.0000005 |
| | | | Exp. Route Total | | | | | | | | 2.1E-09 | | | | | 0.00003 |
| | | Exposure Point Total | | | | | | | | | 2.1E-09 | | | | | 0.00003 |
| | Exposure Medium Total | | | | | | | | | | 2.1E-09 | | | | | 0.00003 |
| Medium Total | | | | | | | | | | | 1.4E-04 | | | | | 0.4 |
| Subsurface Soil | Subsurface Soil | Block F | Ingestion | NAPHTHALENE | 159 | mg/kg | 6.6E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 7.7E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.04 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 4.8E-07 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 3.5E-06 | 1.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 7.0E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 1.4E-08 | 8.2E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 9.9E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 1.5E-06 | 1.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | COBALT | 18.7 | mg/kg | 7.7E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 9.0E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.3 |
| | | | | LEAD | 10.4 | mg/kg | 4.3E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | VANADIUM | 39.9 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.9E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.04 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 2.2E-04 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.5E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 8.8E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.0E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 2.2E-06 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 1.1E-06 | 4.7E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 6.1E-06 | | | | | 0.4 |
| | | | Dermal | NAPHTHALENE | 159 | mg/kg | 2.0E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.3E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.01 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 1.5E-07 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 1.1E-06 | 3.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 2.3E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 4.6E-09 | 2.7E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 7.0E-08 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 1.0E-07 | 8.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 18.7 | mg/kg | 1.8E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.007 |
| | | | | LEAD | 10.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 2.6E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.1E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 39.9 | mg/kg | 3.9E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 4.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0009 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 5.1E-08 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 1.0E-06 | 1.1E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 2.2E-06 | | | | | 0.03 |
| | | Exposure Point Total | | | | | | | | | 8.3E-06 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | | | | 8.3E-06 | | | | | 0.4 |

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block F | Inhalation | NAPHTHALENE | 0.002 | $mg/m^3$ | 1.3E-05 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 4.4E-07 | 1.5E-04 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.05 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 6.8E-11 | $mg/m^3$ | 1.9E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.1E-12 | 4.1E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 5.3E-12 | $mg/m^3$ | 2.7E-14 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.5E-14 | 3.2E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 7.4E-10 | $mg/m^3$ | 3.8E-12 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.7E-11 | 4.5E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000003 |
| | | | | COBALT | 5.8E-9 | $mg/m^3$ | 3.0E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.7E-10 | 3.5E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00006 |
| | | | | LEAD | 3.2E-9 | $mg/m^3$ | 1.7E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 8.4E-11 | $mg/m^3$ | 4.3E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.0E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000002 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 6.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.6E-7 | $mg/m^3$ | 8.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 6.6E-9 | $mg/m^3$ | 3.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.0E-10 | $mg/m^3$ | 8.4E-12 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 7.0E-10 | 1.8E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000002 |
| | | | Exp. Route Total | | | | | | | | 4.4E-07 | | | | | 0.05 |
| | | Exposure Point Total | | | | | | | | | 4.4E-07 | | | | | 0.05 |
| | Exposure Medium Total | | | | | | | | | | 4.4E-07 | | | | | 0.05 |
| Medium Total | | | | | | | | | | | 8.8E-06 | | | | | 0.5 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block F | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 2.5E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.8E-05 | 5.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 1.5E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.0E-08 | 8.7E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.004 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 2.5E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.0E-08 | 1.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 2.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.003 |
| | | | | ARSENIC | 3.10 | mg/kg | 4.8E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 7.2E-07 | 2.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.009 |
| | | | | CADMIUM | 1.20 | mg/kg | 1.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 7.00 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 58.9 | mg/kg | 9.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 9.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.7E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | NICKEL | 12.4 | mg/kg | 1.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0006 |
| | | | | VANADIUM | 35.0 | mg/kg | 5.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.006 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 1.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 1.1E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 5.6E-07 | 2.4E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 2.0E-05 | | | | | 0.06 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 2.8E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.1E-05 | 6.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 1.8E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.6E-08 | 1.0E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.005 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 3.0E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.0E-08 | 1.7E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.10 | mg/kg | 1.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.9E-07 | 7.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 1.20 | mg/kg | 1.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0004 |
| | | | | COBALT | 7.00 | mg/kg | 9.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 58.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 1.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.003 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 8.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.9E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0010 |
| | | | | NICKEL | 12.4 | mg/kg | 1.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.7E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 35.0 | mg/kg | 4.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 9.6E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.9E-06 | 2.1E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.003 |
| | | | Exp. Route Total | | | | | | | | 2.3E-05 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 4.3E-05 | | | | | 0.08 |
| | Exposure Medium Total | | | | | | | | | | 4.3E-05 | | | | | 0.08 |

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block F | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.9E-9 | mg/m$^3$ | 5.2E-11 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 5.7E-11 | 1.1E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.0E-11 | mg/m$^3$ | 3.1E-13 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.8E-13 | 1.8E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 5.0E-11 | mg/m$^3$ | 5.1E-13 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 2.9E-13 | 3.0E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 4.3E-10 | mg/m$^3$ | 4.5E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.6E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 9.6E-10 | mg/m$^3$ | 9.9E-12 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 4.3E-11 | 5.8E-11 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.000004 |
| | | | | CADMIUM | 3.7E-10 | mg/m$^3$ | 3.8E-12 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 6.9E-12 | 2.2E-11 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.000002 |
| | | | | COBALT | 2.2E-9 | mg/m$^3$ | 2.2E-11 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 2.0E-10 | 1.3E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.00002 |
| | | | | LEAD | 1.8E-8 | mg/m$^3$ | 1.9E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.1E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 2.7E-10 | mg/m$^3$ | 2.8E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.6E-11 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.0000005 |
| | | | | MOLYBDENUM | 2.0E-8 | mg/m$^3$ | 2.0E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.2E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.8E-9 | mg/m$^3$ | 4.0E-11 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 1.0E-11 | 2.3E-10 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.000003 |
| | | | | VANADIUM | 1.1E-8 | mg/m$^3$ | 1.1E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.5E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.8E-8 | mg/m$^3$ | 2.9E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.7E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-10 | mg/m$^3$ | 3.8E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.2E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 8.4E-10 | mg/m$^3$ | 2.3E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 1.9E-09 | 5.0E-11 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.0000005 |
| | | | Exp. Route Total | | | | | | | | 2.3E-09 | | | | | 0.00003 |
| | | Exposure Point Total | | | | | | | | | 2.3E-09 | | | | | 0.00003 |
| | Exposure Medium Total | | | | | | | | | | 2.3E-09 | | | | | 0.00003 |
| Medium Total | | | | | | | | | | | 4.3E-05 | | | | | 0.08 |
| Subsurface Soil | Subsurface Soil | Block F | Ingestion | NAPHTHALENE | 159 | mg/kg | 2.5E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.4E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 9.1E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 6.6E-07 | 2.0E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 2.6E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 5.3E-09 | 1.5E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 3.7E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 5.6E-07 | 2.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.007 |
| | | | | COBALT | 18.7 | mg/kg | 2.9E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.7E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | LEAD | 10.4 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 9.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 4.2E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0008 |
| | | | | VANADIUM | 39.9 | mg/kg | 6.2E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.6E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.007 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 8.1E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 4.7E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 3.3E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 4.1E-07 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 2.0E-07 | 8.9E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0003 |
| | | | Exp. Route Total | | | | | | | | 1.4E-06 | | | | | 0.08 |
| | | | Dermal | NAPHTHALENE | 159 | mg/kg | 2.8E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.6E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.008 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 1.0E-07 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 7.5E-07 | 2.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 3.2E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 6.4E-09 | 1.9E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 9.6E-08 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 1.4E-07 | 5.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 18.7 | mg/kg | 2.5E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | LEAD | 10.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 3.6E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.1E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 39.9 | mg/kg | 5.3E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0006 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 3.5E-08 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 7.0E-07 | 7.7E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 1.6E-06 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 3.0E-06 | | | | | 0.10 |
| | Exposure Medium Total | | | | | | | | | | 3.0E-06 | | | | | 0.10 |

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block F | Inhalation | NAPHTHALENE | 0.002 | $mg/m^3$ | 2.6E-05 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 8.7E-07 | 1.5E-04 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.05 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 6.8E-11 | $mg/m^3$ | 1.9E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.1E-12 | 4.1E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 5.3E-12 | $mg/m^3$ | 5.4E-14 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.1E-14 | 3.2E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 7.4E-10 | $mg/m^3$ | 7.7E-12 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.3E-11 | 4.5E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000003 |
| | | | | COBALT | 5.8E-9 | $mg/m^3$ | 6.0E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 5.4E-10 | 3.5E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00006 |
| | | | | LEAD | 3.2E-9 | $mg/m^3$ | 3.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 8.4E-11 | $mg/m^3$ | 8.6E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.0E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000002 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.6E-7 | $mg/m^3$ | 1.7E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 6.6E-9 | $mg/m^3$ | 6.8E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.0E-10 | $mg/m^3$ | 8.4E-12 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 7.0E-10 | 1.8E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000002 |
| | | | Exp. Route Total | | | | | | | | 8.7E-07 | | | | | 0.05 |
| | | Exposure Point Total | | | | | | | | | 8.7E-07 | | | | | 0.05 |
| | Exposure Medium Total | | | | | | | | | | 8.7E-07 | | | | | 0.05 |
| Medium Total | | | | | | | | | | | 3.9E-06 | | | | | 0.1 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block F | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 1.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 7.8E-06 | 3.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 1.7E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.4E-08 | 4.7E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.002 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 2.8E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.6E-08 | 7.8E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 2.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.10 | mg/kg | 5.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.1E-07 | 1.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | CADMIUM | 1.20 | mg/kg | 2.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.9E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0006 |
| | | | | COBALT | 7.00 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 58.9 | mg/kg | 1.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.006 |
| | | | | NICKEL | 12.4 | mg/kg | 2.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | VANADIUM | 35.0 | mg/kg | 6.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 2.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.9E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 4.7E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.4E-07 | 1.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 8.9E-06 | | | | | 0.03 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 1.8E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.3E-05 | 5.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 3.1E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.2E-08 | 8.7E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.004 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 5.2E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.0E-07 | 1.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 3.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.0E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.10 | mg/kg | 2.1E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.2E-07 | 6.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 1.20 | mg/kg | 2.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0003 |
| | | | | COBALT | 7.00 | mg/kg | 1.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 58.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 2.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.003 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0008 |
| | | | | NICKEL | 12.4 | mg/kg | 2.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.0E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 35.0 | mg/kg | 8.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 6.2E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.2E-06 | 1.7E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.5E-05 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 2.4E-05 | | | | | 0.05 |
| | Exposure Medium Total | | | | | | | | | | 2.4E-05 | | | | | 0.05 |

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block F | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.9E-9 | mg/m$^3$ | 1.5E-10 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 1.7E-10 | 4.3E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.0E-11 | mg/m$^3$ | 2.4E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.4E-12 | 6.8E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 5.0E-11 | mg/m$^3$ | 4.0E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 2.3E-12 | 1.1E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 4.3E-10 | mg/m$^3$ | 3.5E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.9E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 9.6E-10 | mg/m$^3$ | 7.8E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 3.4E-10 | 2.2E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00001 |
| | | | | CADMIUM | 3.7E-10 | mg/m$^3$ | 3.0E-11 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 5.5E-11 | 8.5E-11 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.000008 |
| | | | | COBALT | 2.2E-9 | mg/m$^3$ | 1.8E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 1.6E-09 | 4.9E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.00008 |
| | | | | LEAD | 1.8E-8 | mg/m$^3$ | 1.5E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.2E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 2.7E-10 | mg/m$^3$ | 2.2E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.1E-11 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000002 |
| | | | | MOLYBDENUM | 2.0E-8 | mg/m$^3$ | 1.6E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.8E-9 | mg/m$^3$ | 3.1E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 8.1E-11 | 8.8E-10 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.000010 |
| | | | | VANADIUM | 1.1E-8 | mg/m$^3$ | 8.8E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.8E-8 | mg/m$^3$ | 2.3E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-10 | mg/m$^3$ | 3.0E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 8.5E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 8.4E-10 | mg/m$^3$ | 6.8E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 5.7E-09 | 1.9E-10 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.000002 |
| | | | Exp. Route Total | | | | | | | | 8.0E-09 | | | | | 0.0001 |
| | | Exposure Point Total | | | | | | | | | 8.0E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | | | | 8.0E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | | | | 2.4E-05 | | | | | 0.05 |
| Subsurface Soil | Subsurface Soil | Block F | Ingestion | NAPHTHALENE | 159 | mg/kg | 2.8E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 7.8E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.004 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 3.8E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 2.8E-07 | 1.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 3.0E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 5.9E-09 | 8.3E-09 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 4.2E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 6.3E-07 | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 18.7 | mg/kg | 3.3E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 9.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | LEAD | 10.4 | mg/kg | 1.8E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 4.7E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0004 |
| | | | | VANADIUM | 39.9 | mg/kg | 7.0E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.004 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 9.1E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.6E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 3.7E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 1.7E-07 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 8.6E-08 | 4.8E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 1.0E-06 | | | | | 0.04 |
| | | | Dermal | NAPHTHALENE | 159 | mg/kg | 4.8E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 6.6E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 4.8E-07 | 1.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 5.5E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 1.1E-08 | 1.5E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 1.7E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 2.5E-07 | 4.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 18.7 | mg/kg | 4.3E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | LEAD | 10.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 6.2E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.7E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0008 |
| | | | | VANADIUM | 39.9 | mg/kg | 9.2E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.6E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 2.3E-08 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 4.5E-07 | 6.3E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 1.2E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 2.2E-06 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | | | | 2.2E-06 | | | | | 0.06 |

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block F | Inhalation | NAPHTHALENE | 0.002 | $mg/m^3$ | 2.0E-04 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 6.9E-06 | 5.7E-04 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.2 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 6.8E-11 | $mg/m^3$ | 5.6E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 6.1E-12 | 1.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 5.3E-12 | $mg/m^3$ | 4.3E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.4E-13 | 1.2E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 7.4E-10 | $mg/m^3$ | 6.1E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.6E-10 | 1.7E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | COBALT | 5.8E-9 | $mg/m^3$ | 4.7E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 4.2E-09 | 1.3E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0002 |
| | | | | LEAD | 3.2E-9 | $mg/m^3$ | 2.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 8.4E-11 | $mg/m^3$ | 6.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000006 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 1.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.6E-7 | $mg/m^3$ | 1.3E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.7E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 6.6E-9 | $mg/m^3$ | 5.4E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.0E-10 | $mg/m^3$ | 2.5E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.1E-09 | 6.9E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000007 |
| | | | Exp. Route Total | | | | | | | | 6.9E-06 | | | | | 0.2 |
| | | Exposure Point Total | | | | | | | | | 6.9E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 6.9E-06 | | | | | 0.2 |
| Medium Total | | | | | | | | | | | 9.1E-06 | | | | | 0.2 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block F | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 2.5E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.9E-04 | 5.6E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 7.5E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 8.8E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.04 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 1.3E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.5E-07 | 1.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.03 |
| | | | | ARSENIC | 3.10 | mg/kg | 2.4E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.6E-06 | 2.8E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.09 |
| | | | | CADMIUM | 1.20 | mg/kg | 9.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 7.00 | mg/kg | 5.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | LEAD | 58.9 | mg/kg | 4.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 6.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 4.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.1 |
| | | | | NICKEL | 12.4 | mg/kg | 9.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.006 |
| | | | | VANADIUM | 35.0 | mg/kg | 2.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.06 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 7.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 9.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 1.1E-05 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 5.6E-06 | 2.5E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.008 |
| | | | Exp. Route Total | | | | | | | | 2.0E-04 | | | | | 0.6 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 9.3E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 6.8E-05 | 2.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 2.9E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.9E-08 | 3.4E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.02 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 4.9E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.8E-08 | 5.7E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 3.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.006 |
| | | | | ARSENIC | 3.10 | mg/kg | 2.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.1E-07 | 2.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | CADMIUM | 1.20 | mg/kg | 2.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 7.00 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | LEAD | 58.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-07 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.01 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 1.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | NICKEL | 12.4 | mg/kg | 2.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.004 |
| | | | | VANADIUM | 35.0 | mg/kg | 7.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.9E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 3.2E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 6.3E-06 | 6.9E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.009 |
| | | | Exp. Route Total | | | | | | | | 7.4E-05 | | | | | 0.07 |
| | | Exposure Point Total | | | | | | | | | 2.7E-04 | | | | | 0.7 |
| | Exposure Medium Total | | | | | | | | | | 2.7E-04 | | | | | 0.7 |

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block F | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.9E-9 | $mg/m^3$ | 2.0E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.2E-10 | 4.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 3.0E-11 | $mg/m^3$ | 5.8E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.3E-13 | 6.8E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 5.0E-11 | $mg/m^3$ | 9.7E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 5.5E-13 | 1.1E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 4.3E-10 | $mg/m^3$ | 8.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.9E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 9.6E-10 | $mg/m^3$ | 1.9E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 8.1E-11 | 2.2E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | CADMIUM | 3.7E-10 | $mg/m^3$ | 7.3E-12 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 1.3E-11 | 8.5E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000008 |
| | | | | COBALT | 2.2E-9 | $mg/m^3$ | 4.2E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 3.8E-10 | 4.9E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00008 |
| | | | | LEAD | 1.8E-8 | $mg/m^3$ | 3.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 2.7E-10 | $mg/m^3$ | 5.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.1E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | MOLYBDENUM | 2.0E-8 | $mg/m^3$ | 3.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.8E-9 | $mg/m^3$ | 7.5E-11 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 2.0E-11 | 8.8E-10 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.000010 |
| | | | | VANADIUM | 1.1E-8 | $mg/m^3$ | 2.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 2.8E-8 | $mg/m^3$ | 5.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-10 | $mg/m^3$ | 7.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.5E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 8.4E-10 | $mg/m^3$ | 8.7E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 7.3E-09 | 1.9E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000002 |
| | | | Exp. Route Total | | | | | | | | 8.0E-09 | | | | | 0.0001 |
| | | Exposure Point Total | | | | | | | | | 8.0E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | | | | 8.0E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | | | | 2.7E-04 | | | | | 0.7 |

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block F | Ingestion | NAPHTHALENE | 159 | mg/kg | 1.2E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-03 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.07 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 9.2E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 6.7E-06 | 2.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 1.3E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.7E-08 | 1.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 1.9E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.8E-06 | 2.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.07 |
| | | | | COBALT | 18.7 | mg/kg | 1.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.6 |
| | | | | LEAD | 10.4 | mg/kg | 8.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 2.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | VANADIUM | 39.9 | mg/kg | 3.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.07 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 4.1E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.8E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 1.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 4.1E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.0E-06 | 8.9E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.003 |
| | | | Exp. Route Total | | | | | | | | 1.2E-05 | | | | | 0.8 |
| | | | Dermal | NAPHTHALENE | 159 | mg/kg | 4.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.03 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 3.3E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.4E-06 | 7.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 5.2E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.0E-08 | 6.1E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 1.6E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.4E-07 | 1.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | COBALT | 18.7 | mg/kg | 4.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 10.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 5.9E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.9E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 39.9 | mg/kg | 8.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 1.1E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.3E-06 | 2.5E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.003 |
| | | | Exp. Route Total | | | | | | | | 5.0E-06 | | | | | 0.06 |
| | | Exposure Point Total | | | | | | | | | 1.7E-05 | | | | | 0.9 |
| | Exposure Medium Total | | | | | | | | | | 1.7E-05 | | | | | 0.9 |
| | Air | Block F | Inhalation | NAPHTHALENE | 0.002 | $mg/m^3$ | 4.9E-05 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.7E-06 | 5.7E-04 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.2 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 6.8E-11 | $mg/m^3$ | 7.1E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 7.8E-12 | 1.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 5.3E-12 | $mg/m^3$ | 1.0E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 5.9E-14 | 1.2E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 7.4E-10 | $mg/m^3$ | 1.5E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 6.3E-11 | 1.7E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | COBALT | 5.8E-9 | $mg/m^3$ | 1.1E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.0E-09 | 1.3E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0002 |
| | | | | LEAD | 3.2E-9 | $mg/m^3$ | 6.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 8.4E-11 | $mg/m^3$ | 1.6E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000006 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 2.4E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.6E-7 | $mg/m^3$ | 3.2E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.7E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 6.6E-9 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.0E-10 | $mg/m^3$ | 3.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.7E-09 | 6.9E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000007 |
| | | | Exp. Route Total | | | | | | | | 1.7E-06 | | | | | 0.2 |
| | | Exposure Point Total | | | | | | | | | 1.7E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 1.7E-06 | | | | | 0.2 |
| Medium Total | | | | | | | | | | | 1.8E-05 | | | | | 1.0 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block F | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 4.8E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.5E-05 | 1.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 2.8E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.6E-08 | 1.6E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.008 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 4.7E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.4E-08 | 2.7E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 4.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.006 |
| | | | | ARSENIC | 3.10 | mg/kg | 9.1E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.4E-06 | 5.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | CADMIUM | 1.20 | mg/kg | 3.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 7.00 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | LEAD | 58.9 | mg/kg | 1.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 2.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 1.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.02 |
| | | | | NICKEL | 12.4 | mg/kg | 3.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 35.0 | mg/kg | 1.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 2.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 3.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 2.1E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.1E-06 | 4.6E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 3.7E-05 | | | | | 0.1 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 1.9E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.4E-05 | 4.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 1.2E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.4E-08 | 7.0E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.003 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 2.0E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.0E-08 | 1.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 1.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.2E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.001 |
| | | | | ARSENIC | 3.10 | mg/kg | 8.3E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.2E-07 | 4.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 1.20 | mg/kg | 1.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0002 |
| | | | | COBALT | 7.00 | mg/kg | 6.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 58.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 7.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.002 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 5.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0007 |
| | | | | NICKEL | 12.4 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0008 |
| | | | | VANADIUM | 35.0 | mg/kg | 3.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 6.4E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.3E-06 | 1.4E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.5E-05 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 5.3E-05 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 5.3E-05 | | | | | 0.1 |

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block F | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.9E-9 | mg/m$^3$ | 2.0E-10 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 2.2E-10 | 4.3E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.0E-11 | mg/m$^3$ | 1.2E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 6.6E-13 | 6.8E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 5.0E-11 | mg/m$^3$ | 1.9E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.1E-12 | 1.1E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 4.3E-10 | mg/m$^3$ | 1.7E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.9E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 9.6E-10 | mg/m$^3$ | 3.8E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 1.6E-10 | 2.2E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00001 |
| | | | | CADMIUM | 3.7E-10 | mg/m$^3$ | 1.5E-11 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 2.6E-11 | 8.5E-11 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.000008 |
| | | | | COBALT | 2.2E-9 | mg/m$^3$ | 8.5E-11 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 7.6E-10 | 4.9E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.00008 |
| | | | | LEAD | 1.8E-8 | mg/m$^3$ | 7.1E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.2E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 2.7E-10 | mg/m$^3$ | 1.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.1E-11 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000002 |
| | | | | MOLYBDENUM | 2.0E-8 | mg/m$^3$ | 7.6E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.8E-9 | mg/m$^3$ | 1.5E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 3.9E-11 | 8.8E-10 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.000010 |
| | | | | VANADIUM | 1.1E-8 | mg/m$^3$ | 4.2E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.8E-8 | mg/m$^3$ | 1.1E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-10 | mg/m$^3$ | 1.5E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 8.5E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 8.4E-10 | mg/m$^3$ | 8.7E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 7.3E-09 | 1.9E-10 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.000002 |
| | | | Exp. Route Total | | | | | | | | 8.5E-09 | | | | | 0.0001 |
| | | Exposure Point Total | | | | | | | | | 8.5E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | | | | 8.5E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | | | | 5.3E-05 | | | | | 0.1 |
| Subsurface Soil | Subsurface Soil | Block F | Ingestion | NAPHTHALENE | 159 | mg/kg | 4.7E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.7E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.01 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 1.7E-07 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 1.3E-06 | 3.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 5.0E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 1.0E-08 | 2.9E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 7.0E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 1.1E-06 | 4.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 18.7 | mg/kg | 5.5E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 10.4 | mg/kg | 3.1E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 7.9E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 4.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | VANADIUM | 39.9 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 6.8E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 1.5E-04 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 8.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 6.2E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.6E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 7.7E-07 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 3.8E-07 | 1.7E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0006 |
| | | | Exp. Route Total | | | | | | | | 2.7E-06 | | | | | 0.1 |
| | | | Dermal | NAPHTHALENE | 159 | mg/kg | 1.8E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 6.8E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 4.9E-07 | 1.5E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 2.1E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 4.2E-09 | 1.2E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 6.4E-08 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 9.6E-08 | 3.7E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 18.7 | mg/kg | 1.7E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 9.7E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 10.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 2.4E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.4E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 39.9 | mg/kg | 3.5E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 2.3E-08 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 4.6E-07 | 5.1E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0007 |
| | | | Exp. Route Total | | | | | | | | 1.1E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 3.8E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 3.8E-06 | | | | | 0.2 |

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block F | Inhalation | NAPHTHALENE | 0.002 | $mg/m^3$ | 9.7E-05 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 3.3E-06 | 5.7E-04 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.2 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 6.8E-11 | $mg/m^3$ | 7.1E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 7.8E-12 | 1.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 5.3E-12 | $mg/m^3$ | 2.1E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.2E-13 | 1.2E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 7.4E-10 | $mg/m^3$ | 2.9E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.3E-10 | 1.7E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | COBALT | 5.8E-9 | $mg/m^3$ | 2.3E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.0E-09 | 1.3E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0002 |
| | | | | LEAD | 3.2E-9 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 8.4E-11 | $mg/m^3$ | 3.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000006 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 4.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.6E-7 | $mg/m^3$ | 6.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.7E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 6.6E-9 | $mg/m^3$ | 2.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.0E-10 | $mg/m^3$ | 3.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.7E-09 | 6.9E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000007 |
| | | | Exp. Route Total | | | | | | | | 3.3E-06 | | | | | 0.2 |
| | | Exposure Point Total | | | | | | | | | 3.3E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 3.3E-06 | | | | | 0.2 |
| Medium Total | | | | | | | | | | | 7.1E-06 | | | | | 0.4 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block F | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 1.0E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 7.5E-06 | 6.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 1.6E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.2E-08 | 9.4E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.005 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 2.7E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.4E-08 | 1.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 2.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.003 |
| | | | | ARSENIC | 3.10 | mg/kg | 5.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 7.8E-07 | 3.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 1.20 | mg/kg | 2.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 7.00 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 58.9 | mg/kg | 9.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | NICKEL | 12.4 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0006 |
| | | | | VANADIUM | 35.0 | mg/kg | 5.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.007 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 1.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 2.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 4.5E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.3E-07 | 2.6E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 8.6E-06 | | | | | 0.07 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 5.3E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.9E-06 | 3.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 9.0E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.8E-08 | 5.2E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.003 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 1.5E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.0E-08 | 8.7E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 9.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.5E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0009 |
| | | | | ARSENIC | 3.10 | mg/kg | 6.2E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.3E-08 | 3.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | CADMIUM | 1.20 | mg/kg | 8.0E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.7E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0002 |
| | | | | COBALT | 7.00 | mg/kg | 4.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | LEAD | 58.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 5.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.002 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 4.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | NICKEL | 12.4 | mg/kg | 8.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.8E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0006 |
| | | | | VANADIUM | 35.0 | mg/kg | 2.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 1.8E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 3.6E-07 | 1.1E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 4.4E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 1.3E-05 | | | | | 0.08 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-05 | | | | | 0.08 |

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block F | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.9E-9 | mg/m$^3$ | 7.4E-11 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 8.1E-11 | 4.3E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.0E-11 | mg/m$^3$ | 1.2E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 6.6E-13 | 6.8E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 5.0E-11 | mg/m$^3$ | 1.9E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.1E-12 | 1.1E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 4.3E-10 | mg/m$^3$ | 1.7E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.9E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 9.6E-10 | mg/m$^3$ | 3.8E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 1.6E-10 | 2.2E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00001 |
| | | | | CADMIUM | 3.7E-10 | mg/m$^3$ | 1.5E-11 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 2.6E-11 | 8.5E-11 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.000008 |
| | | | | COBALT | 2.2E-9 | mg/m$^3$ | 8.5E-11 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 7.6E-10 | 4.9E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.00008 |
| | | | | LEAD | 1.8E-8 | mg/m$^3$ | 7.1E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.2E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 2.7E-10 | mg/m$^3$ | 1.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.1E-11 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000002 |
| | | | | MOLYBDENUM | 2.0E-8 | mg/m$^3$ | 7.6E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.8E-9 | mg/m$^3$ | 1.5E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 3.9E-11 | 8.8E-10 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.000010 |
| | | | | VANADIUM | 1.1E-8 | mg/m$^3$ | 4.2E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.8E-8 | mg/m$^3$ | 1.1E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 6.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-10 | mg/m$^3$ | 1.5E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 8.5E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 8.4E-10 | mg/m$^3$ | 3.3E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 2.7E-09 | 1.9E-10 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.000002 |
| | | | Exp. Route Total | | | | | | | | 3.8E-09 | | | | | 0.0001 |
| | | Exposure Point Total | | | | | | | | | 3.8E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | | | | 3.8E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | | | | 1.3E-05 | | | | | 0.08 |
| Subsurface Soil | Subsurface Soil | Block F | Ingestion | NAPHTHALENE | 159 | mg/kg | 2.7E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.6E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.008 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 3.7E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 2.7E-07 | 2.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 2.9E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 5.7E-09 | 1.7E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 4.0E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 6.0E-07 | 2.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | COBALT | 18.7 | mg/kg | 3.1E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.8E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | LEAD | 10.4 | mg/kg | 1.7E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 4.5E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 39.9 | mg/kg | 6.7E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.9E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.008 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 8.8E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 3.6E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 1.6E-07 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 8.2E-08 | 9.6E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0003 |
| | | | Exp. Route Total | | | | | | | | 9.6E-07 | | | | | 0.09 |
| | | | Dermal | NAPHTHALENE | 159 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 8.1E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.004 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 1.9E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 1.4E-07 | 1.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 1.6E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 3.2E-09 | 9.3E-09 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 4.8E-08 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 7.2E-08 | 2.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | COBALT | 18.7 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 7.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 10.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 1.8E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.1E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 39.9 | mg/kg | 2.7E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.6E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 6.6E-09 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 1.3E-07 | 3.8E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0005 |
| | | | Exp. Route Total | | | | | | | | 3.5E-07 | | | | | 0.009 |
| | | Exposure Point Total | | | | | | | | | 1.3E-06 | | | | | 0.09 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-06 | | | | | 0.09 |

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block F | Inhalation | NAPHTHALENE | 0.002 | $mg/m^3$ | 9.7E-05 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 3.3E-06 | 5.7E-04 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.2 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 6.8E-11 | $mg/m^3$ | 2.7E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.9E-12 | 1.6E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 5.3E-12 | $mg/m^3$ | 2.1E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.2E-13 | 1.2E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 7.4E-10 | $mg/m^3$ | 2.9E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.3E-10 | 1.7E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00001 |
| | | | | COBALT | 5.8E-9 | $mg/m^3$ | 2.3E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.0E-09 | 1.3E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0002 |
| | | | | LEAD | 3.2E-9 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 8.4E-11 | $mg/m^3$ | 3.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000006 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 4.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.6E-7 | $mg/m^3$ | 6.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.7E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 6.6E-9 | $mg/m^3$ | 2.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.0E-10 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.0E-09 | 6.9E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000007 |
| | | | Exp. Route Total | | | | | | | | 3.3E-06 | | | | | 0.2 |
| | | Exposure Point Total | | | | | | | | | 3.3E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 3.3E-06 | | | | | 0.2 |
| Medium Total | | | | | | | | | | | 4.6E-06 | | | | | 0.3 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block F | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 3.6E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.6E-04 | 7.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 1.1E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.1E-07 | 1.2E-06 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.06 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 1.8E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.5E-07 | 2.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-05 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.04 |
| | | | | ARSENIC | 3.10 | mg/kg | 3.4E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 5.1E-06 | 4.0E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | CADMIUM | 1.20 | mg/kg | 1.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 7.00 | mg/kg | 7.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.9E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.3 |
| | | | | LEAD | 58.9 | mg/kg | 6.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.5E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 9.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 6.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.1E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.2 |
| | | | | NICKEL | 12.4 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.008 |
| | | | | VANADIUM | 35.0 | mg/kg | 3.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.09 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 1.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 1.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 1.6E-05 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 7.9E-06 | 3.5E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.01 |
| | | | Exp. Route Total | | | | | | | | 2.7E-04 | | | | | 0.9 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 1.3E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 9.5E-05 | 2.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 4.1E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.2E-08 | 4.8E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.02 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 6.9E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.4E-07 | 8.0E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 4.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.0E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.008 |
| | | | | ARSENIC | 3.10 | mg/kg | 2.9E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.3E-07 | 3.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 1.20 | mg/kg | 3.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 7.00 | mg/kg | 2.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | LEAD | 58.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 2.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-07 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.01 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 1.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.005 |
| | | | | NICKEL | 12.4 | mg/kg | 3.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.006 |
| | | | | VANADIUM | 35.0 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 4.4E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 8.8E-06 | 9.7E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.01 |
| | | | Exp. Route Total | | | | | | | | 1.0E-04 | | | | | 0.09 |
| | | Exposure Point Total | | | | | | | | | 3.8E-04 | | | | | 1.0 |
| | Exposure Medium Total | | | | | | | | | | 3.8E-04 | | | | | 1.0 |

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block F | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.9E-9 | mg/m$^3$ | 8.3E-10 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 9.1E-10 | 1.8E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.0E-11 | mg/m$^3$ | 2.4E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.4E-12 | 2.8E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 5.0E-11 | mg/m$^3$ | 4.1E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 2.3E-12 | 4.7E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 4.3E-10 | mg/m$^3$ | 3.6E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.2E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 9.6E-10 | mg/m$^3$ | 7.9E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 3.4E-10 | 9.2E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00006 |
| | | | | CADMIUM | 3.7E-10 | mg/m$^3$ | 3.1E-11 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 5.5E-11 | 3.6E-10 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.00004 |
| | | | | COBALT | 2.2E-9 | mg/m$^3$ | 1.8E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 1.6E-09 | 2.1E-09 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0003 |
| | | | | LEAD | 1.8E-8 | mg/m$^3$ | 1.5E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.7E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 2.7E-10 | mg/m$^3$ | 2.2E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.6E-10 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000009 |
| | | | | MOLYBDENUM | 2.0E-8 | mg/m$^3$ | 1.6E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.9E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.8E-9 | mg/m$^3$ | 3.2E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 8.2E-11 | 3.7E-09 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.00004 |
| | | | | VANADIUM | 1.1E-8 | mg/m$^3$ | 8.9E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.0E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.8E-8 | mg/m$^3$ | 2.3E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.7E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-10 | mg/m$^3$ | 3.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.6E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 8.4E-10 | mg/m$^3$ | 3.7E-10 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 3.1E-08 | 8.0E-10 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.000008 |
| | | | Exp. Route Total | | | | | | | | 3.4E-08 | | | | | 0.0005 |
| | | Exposure Point Total | | | | | | | | | 3.4E-08 | | | | | 0.0005 |
| | Exposure Medium Total | | | | | | | | | | 3.4E-08 | | | | | 0.0005 |
| Medium Total | | | | | | | | | | | 3.8E-04 | | | | | 1.0 |
| Subsurface Soil | Subsurface Soil | Block F | Ingestion | NAPHTHALENE | 159 | mg/kg | 1.7E-04 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.0E-03 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.1 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 1.3E-06 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 9.4E-06 | 2.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 1.9E-08 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 3.7E-08 | 2.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 2.6E-06 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 3.9E-06 | 3.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | COBALT | 18.7 | mg/kg | 2.0E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.4E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.8 |
| | | | | LEAD | 10.4 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 3.0E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | VANADIUM | 39.9 | mg/kg | 4.4E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.1E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.1 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 5.7E-04 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 6.7E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 2.3E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.7E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 5.7E-06 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 2.9E-06 | 1.3E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 1.6E-05 | | | | | 1.1 |
| | | | Dermal | NAPHTHALENE | 159 | mg/kg | 6.3E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 7.4E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.04 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 4.7E-07 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 3.4E-06 | 1.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 7.3E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 1.5E-08 | 8.5E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 2.2E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 3.3E-07 | 2.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.009 |
| | | | | COBALT | 18.7 | mg/kg | 5.7E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 6.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 10.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 8.3E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 9.7E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.005 |
| | | | | VANADIUM | 39.9 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.4E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 1.6E-07 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 3.2E-06 | 3.5E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.005 |
| | | | Exp. Route Total | | | | | | | | 7.0E-06 | | | | | 0.08 |
| | | Exposure Point Total | | | | | | | | | 2.3E-05 | | | | | 1.2 |
| | Exposure Medium Total | | | | | | | | | | 2.3E-05 | | | | | 1.2 |

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block F | Inhalation | NAPHTHALENE | 0.002 | $mg/m^3$ | 2.0E-04 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 6.9E-06 | 2.4E-03 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.8 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 6.8E-11 | $mg/m^3$ | 3.0E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.3E-11 | 6.5E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 5.3E-12 | $mg/m^3$ | 4.3E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.5E-13 | 5.0E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 7.4E-10 | $mg/m^3$ | 6.1E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.6E-10 | 7.1E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00005 |
| | | | | COBALT | 5.8E-9 | $mg/m^3$ | 4.8E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 4.3E-09 | 5.6E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0009 |
| | | | | LEAD | 3.2E-9 | $mg/m^3$ | 2.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 8.4E-11 | $mg/m^3$ | 6.9E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.0E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000003 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 1.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.6E-7 | $mg/m^3$ | 1.3E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 6.6E-9 | $mg/m^3$ | 5.4E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.0E-10 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.1E-08 | 2.9E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 7.0E-06 | | | | | 0.8 |
| | | Exposure Point Total | | | | | | | | | 7.0E-06 | | | | | 0.8 |
| | Exposure Medium Total | | | | | | | | | | 7.0E-06 | | | | | 0.8 |
| Medium Total | | | | | | | | | | | 3.0E-05 | | | | | 2.0 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block F | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 6.7E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.9E-05 | 1.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 3.9E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.9E-08 | 2.3E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.01 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 6.6E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.3E-07 | 3.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 5.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.008 |
| | | | | ARSENIC | 3.10 | mg/kg | 1.3E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.9E-06 | 7.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | CADMIUM | 1.20 | mg/kg | 4.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 7.00 | mg/kg | 2.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | LEAD | 58.9 | mg/kg | 2.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 3.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.007 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 2.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.03 |
| | | | | NICKEL | 12.4 | mg/kg | 5.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 35.0 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 3.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 4.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 3.0E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.5E-06 | 6.5E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 5.2E-05 | | | | | 0.2 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 2.6E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.9E-05 | 5.7E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 1.7E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.3E-08 | 9.7E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.005 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 2.8E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.6E-08 | 1.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 1.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.10 | mg/kg | 1.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.7E-07 | 6.7E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 1.20 | mg/kg | 1.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.7E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0003 |
| | | | | COBALT | 7.00 | mg/kg | 8.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 58.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.3E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.003 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 7.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.6E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0009 |
| | | | | NICKEL | 12.4 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.0E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 35.0 | mg/kg | 4.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 8.9E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.8E-06 | 2.0E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.003 |
| | | | Exp. Route Total | | | | | | | | 2.1E-05 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 7.4E-05 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 7.4E-05 | | | | | 0.2 |

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block F | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.9E-9 | mg/m$^3$ | 8.3E-10 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 9.1E-10 | 1.8E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.0E-11 | mg/m$^3$ | 4.9E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 2.8E-12 | 2.8E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 5.0E-11 | mg/m$^3$ | 8.1E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 4.6E-12 | 4.7E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 4.3E-10 | mg/m$^3$ | 7.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.2E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 9.6E-10 | mg/m$^3$ | 1.6E-10 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 6.8E-10 | 9.2E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00006 |
| | | | | CADMIUM | 3.7E-10 | mg/m$^3$ | 6.1E-11 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 1.1E-10 | 3.6E-10 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.00004 |
| | | | | COBALT | 2.2E-9 | mg/m$^3$ | 3.6E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 3.2E-09 | 2.1E-09 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0003 |
| | | | | LEAD | 1.8E-8 | mg/m$^3$ | 3.0E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.7E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 2.7E-10 | mg/m$^3$ | 4.4E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.6E-10 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000009 |
| | | | | MOLYBDENUM | 2.0E-8 | mg/m$^3$ | 3.2E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.9E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.8E-9 | mg/m$^3$ | 6.3E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 1.6E-10 | 3.7E-09 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.00004 |
| | | | | VANADIUM | 1.1E-8 | mg/m$^3$ | 1.8E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.0E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.8E-8 | mg/m$^3$ | 4.7E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.7E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-10 | mg/m$^3$ | 6.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.6E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 8.4E-10 | mg/m$^3$ | 3.7E-10 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 3.1E-08 | 8.0E-10 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.000008 |
| | | | Exp. Route Total | | | | | | | | 3.6E-08 | | | | | 0.0005 |
| | | Exposure Point Total | | | | | | | | | 3.6E-08 | | | | | 0.0005 |
| | Exposure Medium Total | | | | | | | | | | 3.6E-08 | | | | | 0.0005 |
| Medium Total | | | | | | | | | | | 7.4E-05 | | | | | 0.2 |
| Subsurface Soil | Subsurface Soil | Block F | Ingestion | NAPHTHALENE | 159 | mg/kg | 6.5E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.8E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.02 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 2.4E-07 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 1.8E-06 | 5.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 7.0E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 1.4E-08 | 4.1E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 9.9E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 1.5E-06 | 5.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 18.7 | mg/kg | 7.7E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 4.5E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 10.4 | mg/kg | 4.3E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 6.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | VANADIUM | 39.9 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 9.6E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 2.1E-04 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.3E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 8.7E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 1.1E-06 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 5.4E-07 | 2.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 3.8E-06 | | | | | 0.2 |
| | | | Dermal | NAPHTHALENE | 159 | mg/kg | 2.6E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 9.5E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 6.9E-07 | 2.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 3.0E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 5.9E-09 | 1.7E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 8.9E-08 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 1.3E-07 | 5.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 18.7 | mg/kg | 2.3E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | LEAD | 10.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 3.4E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.0E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 39.9 | mg/kg | 5.0E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.9E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0006 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 3.2E-08 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 6.5E-07 | 7.1E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 1.5E-06 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 5.3E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 5.3E-06 | | | | | 0.2 |

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block F | Inhalation | NAPHTHALENE | 0.002 | $mg/m^3$ | 4.1E-04 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.4E-05 | 2.4E-03 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.8 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 6.8E-11 | $mg/m^3$ | 3.0E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.3E-11 | 6.5E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 5.3E-12 | $mg/m^3$ | 8.7E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 4.9E-13 | 5.0E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 7.4E-10 | $mg/m^3$ | 1.2E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 5.3E-10 | 7.1E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00005 |
| | | | | COBALT | 5.8E-9 | $mg/m^3$ | 9.5E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 8.6E-09 | 5.6E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0009 |
| | | | | LEAD | 3.2E-9 | $mg/m^3$ | 5.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 8.4E-11 | $mg/m^3$ | 1.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.0E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000003 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 2.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.6E-7 | $mg/m^3$ | 2.7E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 6.6E-9 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.0E-10 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.1E-08 | 2.9E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 1.4E-05 | | | | | 0.8 |
| | | Exposure Point Total | | | | | | | | | 1.4E-05 | | | | | 0.8 |
| | Exposure Medium Total | | | | | | | | | | 1.4E-05 | | | | | 0.8 |
| Medium Total | | | | | | | | | | | 1.9E-05 | | | | | 1.0 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block F | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 1.4E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.0E-05 | 8.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 2.3E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.5E-08 | 1.3E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.007 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 3.8E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.5E-08 | 2.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 3.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.005 |
| | | | | ARSENIC | 3.10 | mg/kg | 7.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.1E-06 | 4.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 1.20 | mg/kg | 2.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 7.00 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | LEAD | 58.9 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 2.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 1.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.6E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.02 |
| | | | | NICKEL | 12.4 | mg/kg | 2.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0008 |
| | | | | VANADIUM | 35.0 | mg/kg | 8.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.8E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.010 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 2.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 2.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 6.3E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 3.2E-07 | 3.7E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 1.2E-05 | | | | | 0.09 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 6.10 | mg/kg | 7.4E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.4E-06 | 4.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.096 | mg/kg | 1.3E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.5E-08 | 7.3E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.004 |
| | | | | AROCLOR-1260 | 0.160 | mg/kg | 2.1E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.2E-08 | 1.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.40 | mg/kg | 1.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.001 |
| | | | | ARSENIC | 3.10 | mg/kg | 8.7E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.3E-07 | 5.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 1.20 | mg/kg | 1.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.6E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0003 |
| | | | | COBALT | 7.00 | mg/kg | 6.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 58.9 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.870 | mg/kg | 8.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.8E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.002 |
| | | | | MOLYBDENUM | 63.0 | mg/kg | 5.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0007 |
| | | | | NICKEL | 12.4 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0008 |
| | | | | VANADIUM | 35.0 | mg/kg | 3.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 91.8 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 2.70 | mg/kg | 2.5E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 5.1E-07 | 1.5E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 6.1E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 1.8E-05 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 1.8E-05 | | | | | 0.1 |

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block F | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.9E-9 | mg/m$^3$ | 3.1E-10 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 3.4E-10 | 1.8E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.0E-11 | mg/m$^3$ | 4.9E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 2.8E-12 | 2.8E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 5.0E-11 | mg/m$^3$ | 8.1E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 4.6E-12 | 4.7E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 4.3E-10 | mg/m$^3$ | 7.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.2E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 9.6E-10 | mg/m$^3$ | 1.6E-10 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 6.8E-10 | 9.2E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00006 |
| | | | | CADMIUM | 3.7E-10 | mg/m$^3$ | 6.1E-11 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 1.1E-10 | 3.6E-10 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.00004 |
| | | | | COBALT | 2.2E-9 | mg/m$^3$ | 3.6E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 3.2E-09 | 2.1E-09 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0003 |
| | | | | LEAD | 1.8E-8 | mg/m$^3$ | 3.0E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.7E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 2.7E-10 | mg/m$^3$ | 4.4E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.6E-10 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000009 |
| | | | | MOLYBDENUM | 2.0E-8 | mg/m$^3$ | 3.2E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.9E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | NICKEL | 3.8E-9 | mg/m$^3$ | 6.3E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 1.6E-10 | 3.7E-09 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.00004 |
| | | | | VANADIUM | 1.1E-8 | mg/m$^3$ | 1.8E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.0E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.8E-8 | mg/m$^3$ | 4.7E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.7E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-10 | mg/m$^3$ | 6.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.6E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 8.4E-10 | mg/m$^3$ | 1.4E-10 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 1.2E-08 | 8.0E-10 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.000008 |
| | | | Exp. Route Total | | | | | | | | 1.6E-08 | | | | | 0.0005 |
| | | Exposure Point Total | | | | | | | | | 1.6E-08 | | | | | 0.0005 |
| | Exposure Medium Total | | | | | | | | | | 1.6E-08 | | | | | 0.0005 |
| Medium Total | | | | | | | | | | | 1.8E-05 | | | | | 0.1 |
| Subsurface Soil | Subsurface Soil | Block F | Ingestion | NAPHTHALENE | 159 | mg/kg | 3.7E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.2E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.01 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 5.2E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 3.8E-07 | 3.0E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 4.0E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 8.0E-09 | 2.3E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 5.6E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 8.5E-07 | 3.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 18.7 | mg/kg | 4.4E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.09 |
| | | | | LEAD | 10.4 | mg/kg | 2.4E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 6.3E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.7E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 39.9 | mg/kg | 9.4E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.5E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 1.2E-04 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 7.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 5.0E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 2.3E-07 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 1.2E-07 | 1.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 1.3E-06 | | | | | 0.1 |
| | | | Dermal | NAPHTHALENE | 159 | mg/kg | 1.9E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.006 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 0.220 | mg/kg | 2.7E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 2.0E-07 | 1.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.017 | mg/kg | 2.2E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 4.5E-09 | 1.3E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 2.40 | mg/kg | 6.7E-08 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 1.0E-07 | 3.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 18.7 | mg/kg | 1.8E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 10.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.270 | mg/kg | 2.5E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.5E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 39.9 | mg/kg | 3.7E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.2E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 522 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 21.2 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 0.980 | mg/kg | 9.2E-09 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 1.8E-07 | 5.4E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0007 |
| | | | Exp. Route Total | | | | | | | | 4.8E-07 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 1.8E-06 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 1.8E-06 | | | | | 0.1 |

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK F - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block F | Inhalation | NAPHTHALENE | 0.002 | $mg/m^3$ | 4.1E-04 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.4E-05 | 2.4E-03 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.8 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 6.8E-11 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.2E-11 | 6.5E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 5.3E-12 | $mg/m^3$ | 8.7E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 4.9E-13 | 5.0E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 7.4E-10 | $mg/m^3$ | 1.2E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 5.3E-10 | 7.1E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00005 |
| | | | | COBALT | 5.8E-9 | $mg/m^3$ | 9.5E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 8.6E-09 | 5.6E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0009 |
| | | | | LEAD | 3.2E-9 | $mg/m^3$ | 5.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 8.4E-11 | $mg/m^3$ | 1.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.0E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000003 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 2.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.6E-7 | $mg/m^3$ | 2.7E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 6.6E-9 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.0E-10 | $mg/m^3$ | 5.0E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 4.2E-09 | 2.9E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 1.4E-05 | | | | | 0.8 |
| | | Exposure Point Total | | | | | | | | | 1.4E-05 | | | | | 0.8 |
| | Exposure Medium Total | | | | | | | | | | 1.4E-05 | | | | | 0.8 |
| Medium Total | | | | | | | | | | | 1.6E-05 | | | | | 0.9 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 2.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.8E-06 | 1.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 8.1E-10 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.6E-09 | 5.6E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.003 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 1.7E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.5E-08 | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.0E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.02 |
| | | | | ARSENIC | 7.90 | mg/kg | 5.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.0E-07 | 3.7E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | CADMIUM | 14.0 | mg/kg | 9.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.6E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.07 |
| | | | | COBALT | 41.2 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-04 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.06 |
| | | | | LEAD | 68.3 | mg/kg | 4.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | NICKEL | 161 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.6E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.04 |
| | | | | VANADIUM | 31.5 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 5.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 8.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 8.7E-08 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 4.4E-08 | 6.1E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 2.7E-06 | | | | | 0.4 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 6.6E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.8E-07 | 4.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 2.3E-10 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.6E-10 | 1.6E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0008 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 5.0E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.0E-08 | 3.5E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 2.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.003 |
| | | | | ARSENIC | 7.90 | mg/kg | 3.3E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.9E-08 | 2.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | CADMIUM | 14.0 | mg/kg | 1.9E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-07 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.005 |
| | | | | COBALT | 41.2 | mg/kg | 5.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 68.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 2.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-07 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.008 |
| | | | | NICKEL | 161 | mg/kg | 2.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.02 |
| | | | | VANADIUM | 31.5 | mg/kg | 4.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-06 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 1.8E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 3.6E-08 | 1.3E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 5.8E-07 | | | | | 0.05 |
| | | Exposure Point Total | | | | | | | | | 3.3E-06 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | | | | 3.3E-06 | | | | | 0.4 |

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 2.6E-6 | mg/m$^3$ | 8.4E-09 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 9.3E-09 | 5.9E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 8.4E-9 | mg/m$^3$ | 2.7E-11 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.6E-11 | 1.9E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 1.8E-7 | mg/m$^3$ | 5.9E-10 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 3.4E-10 | 4.2E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 1.2E-6 | mg/m$^3$ | 3.9E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.7E-07 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 5.5E-6 | mg/m$^3$ | 1.8E-08 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 7.7E-08 | 1.3E-06 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.08 |
| | | | | CADMIUM | 9.8E-6 | mg/m$^3$ | 3.2E-08 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 5.7E-08 | 2.2E-06 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.2 |
| | | | | COBALT | 2.9E-5 | mg/m$^3$ | 9.4E-08 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 8.5E-07 | 6.6E-06 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 1.1 |
| | | | | LEAD | 4.8E-5 | mg/m$^3$ | 1.6E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.1E-05 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 1.3E-6 | mg/m$^3$ | 4.1E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.9E-07 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.010 |
| | | | | NICKEL | 1.1E-4 | mg/m$^3$ | 3.7E-07 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 9.5E-08 | 2.6E-05 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.3 |
| | | | | VANADIUM | 2.2E-5 | mg/m$^3$ | 7.2E-08 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.0E-06 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 5.4E-5 | mg/m$^3$ | 1.8E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.2E-05 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 9.2E-5 | mg/m$^3$ | 3.0E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.1E-05 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 9.1E-7 | mg/m$^3$ | 3.0E-09 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 2.5E-07 | 2.1E-07 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.3E-06 | | | | | 1.7 |
| | | Exposure Point Total | | | | | | | | | 1.3E-06 | | | | | 1.7 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-06 | | | | | 1.7 |
| Medium Total | | | | | | | | | | | 4.6E-06 | | | | | 2.1 |
| Subsurface Soil | Subsurface Soil | Block G | Ingestion | NAPHTHALENE | 0.063 | mg/kg | 4.2E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.0E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 8.7E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 6.4E-07 | 6.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 9.4E-10 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 1.9E-09 | 6.6E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 2.4E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 3.6E-07 | 1.7E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | COBALT | 31.0 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.05 |
| | | | | IRON | 17,200 | mg/kg | 1.2E-03 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 8.1E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 8.40 | mg/kg | 5.6E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 8.3E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.8E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.004 |
| | | | | MERCURY | 0.014 | mg/kg | 9.4E-10 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 6.6E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0002 |
| | | | | VANADIUM | 46.3 | mg/kg | 3.1E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.2E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.0E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 8.8E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 6.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 7.4E-08 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 3.7E-08 | 5.2E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.0E-06 | | | | | 0.2 |
| | | | Dermal | NAPHTHALENE | 0.063 | mg/kg | 1.1E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 7.9E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000004 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 2.3E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 1.7E-07 | 1.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 2.7E-10 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 5.4E-10 | 1.9E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 1.5E-08 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 2.2E-08 | 1.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 31.0 | mg/kg | 4.3E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.0E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0010 |
| | | | | IRON | 17,200 | mg/kg | 2.4E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.7E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 8.40 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 1.7E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00008 |
| | | | | MERCURY | 0.014 | mg/kg | 1.9E-11 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.3E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00006 |
| | | | | VANADIUM | 46.3 | mg/kg | 6.4E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 4.5E-06 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.5E-09 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 3.0E-08 | 1.1E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 2.2E-07 | | | | | 0.009 |
| | | Exposure Point Total | | | | | | | | | 1.3E-06 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-06 | | | | | 0.3 |

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block G | Inhalation | NAPHTHALENE | 6.1E-6 | $mg/m^3$ | 2.0E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 6.8E-10 | 1.4E-06 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 9.1E-7 | $mg/m^3$ | 3.0E-09 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.3E-09 | 2.1E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 9.8E-9 | $mg/m^3$ | 3.2E-11 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.8E-11 | 2.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 2.5E-6 | $mg/m^3$ | 8.2E-09 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.5E-08 | 5.7E-07 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.04 |
| | | | | COBALT | 2.2E-5 | $mg/m^3$ | 7.1E-08 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 6.4E-07 | 4.9E-06 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.8 |
| | | | | IRON | 0.012 | $mg/m^3$ | 3.9E-05 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.7E-03 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 5.9E-6 | $mg/m^3$ | 1.9E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 8.6E-5 | $mg/m^3$ | 2.8E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-05 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.4 |
| | | | | MERCURY | 9.8E-9 | $mg/m^3$ | 3.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-09 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | VANADIUM | 3.2E-5 | $mg/m^3$ | 1.1E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.4E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.5E-5 | $mg/m^3$ | 4.9E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.5E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 9.2E-5 | $mg/m^3$ | 3.0E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.1E-05 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 7.7E-7 | $mg/m^3$ | 2.5E-09 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.1E-07 | 1.8E-07 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.002 |
| | | | Exp. Route Total | | | | | | | | 8.9E-07 | | | | | 1.3 |
| | | Exposure Point Total | | | | | | | | | 8.9E-07 | | | | | 1.3 |
| | Exposure Medium Total | | | | | | | | | | 8.9E-07 | | | | | 1.3 |
| Medium Total | | | | | | | | | | | 2.1E-06 | | | | | 1.5 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 6.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.7E-06 | 1.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 2.1E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.2E-09 | 5.9E-09 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0003 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 4.5E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.1E-08 | 1.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 3.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.3E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 7.90 | mg/kg | 1.4E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.1E-06 | 3.9E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 14.0 | mg/kg | 2.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.007 |
| | | | | COBALT | 41.2 | mg/kg | 7.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.07 |
| | | | | LEAD | 68.3 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 3.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | NICKEL | 161 | mg/kg | 2.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.004 |
| | | | | VANADIUM | 31.5 | mg/kg | 5.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 2.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 2.3E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.1E-07 | 6.4E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 7.0E-06 | | | | | 0.10 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 1.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.1E-06 | 3.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 3.9E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.7E-09 | 1.1E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0005 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 8.4E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.7E-07 | 2.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 3.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 7.90 | mg/kg | 5.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.2E-07 | 1.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | CADMIUM | 14.0 | mg/kg | 3.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.0E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 41.2 | mg/kg | 9.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.009 |
| | | | | LEAD | 68.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 4.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-07 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.006 |
| | | | | NICKEL | 161 | mg/kg | 3.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.01 |
| | | | | VANADIUM | 31.5 | mg/kg | 7.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 3.0E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 6.0E-07 | 8.4E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 9.7E-06 | | | | | 0.04 |
| | | Exposure Point Total | | | | | | | | | 1.7E-05 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 1.7E-05 | | | | | 0.1 |

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.1E-9 | $mg/m^3$ | 9.3E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.0E-10 | 2.6E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 3.7E-12 | $mg/m^3$ | 3.0E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.7E-13 | 8.5E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 8.0E-11 | $mg/m^3$ | 6.6E-12 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.7E-12 | 1.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 5.3E-10 | $mg/m^3$ | 4.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 2.4E-9 | $mg/m^3$ | 2.0E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 8.6E-10 | 5.6E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | CADMIUM | 4.3E-9 | $mg/m^3$ | 3.5E-10 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 6.4E-10 | 9.9E-10 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.00010 |
| | | | | COBALT | 1.3E-8 | $mg/m^3$ | 1.0E-09 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 9.4E-09 | 2.9E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0005 |
| | | | | LEAD | 2.1E-8 | $mg/m^3$ | 1.7E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.6E-10 | $mg/m^3$ | 4.5E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-10 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000004 |
| | | | | NICKEL | 5.0E-8 | $mg/m^3$ | 4.1E-09 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 1.1E-09 | 1.1E-08 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.0001 |
| | | | | VANADIUM | 9.8E-9 | $mg/m^3$ | 8.0E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 2.4E-8 | $mg/m^3$ | 2.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 3.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | $mg/m^3$ | 3.3E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.8E-09 | 9.2E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000009 |
| | | | Exp. Route Total | | | | | | | | 1.5E-08 | | | | | 0.0008 |
| | | Exposure Point Total | | | | | | | | | 1.5E-08 | | | | | 0.0008 |
| | Exposure Medium Total | | | | | | | | | | 1.5E-08 | | | | | 0.0008 |
| Medium Total | | | | | | | | | | | 1.7E-05 | | | | | 0.1 |

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block G | Ingestion | NAPHTHALENE | 0.063 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 2.3E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.7E-06 | 6.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 2.4E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.9E-09 | 6.8E-09 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 6.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.4E-07 | 1.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | COBALT | 31.0 | mg/kg | 5.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | IRON | 17,200 | mg/kg | 3.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 8.40 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 2.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0004 |
| | | | | MERCURY | 0.014 | mg/kg | 2.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-09 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.00002 |
| | | | | VANADIUM | 46.3 | mg/kg | 8.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.005 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 3.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 2.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.9E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 9.6E-08 | 5.4E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 2.7E-06 | | | | | 0.07 |
| | | | Dermal | NAPHTHALENE | 0.063 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 3.9E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.8E-06 | 1.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 4.5E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.0E-09 | 1.3E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 2.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.7E-07 | 7.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 31.0 | mg/kg | 7.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.007 |
| | | | | IRON | 17,200 | mg/kg | 4.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 8.40 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00006 |
| | | | | MERCURY | 0.014 | mg/kg | 3.2E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.0E-10 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00004 |
| | | | | VANADIUM | 46.3 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0006 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 2.5E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 5.1E-07 | 7.1E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 3.7E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 6.4E-06 | | | | | 0.09 |
| | Exposure Medium Total | | | | | | | | | | 6.4E-06 | | | | | 0.09 |

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block G | Inhalation | NAPHTHALENE | 9.8E-7 | $mg/m^3$ | 8.0E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 2.7E-09 | 2.2E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.0E-10 | $mg/m^3$ | 3.3E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.6E-11 | 9.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 4.3E-12 | $mg/m^3$ | 3.5E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.0E-13 | 9.9E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 9.1E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.9E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 9.6E-9 | $mg/m^3$ | 7.8E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 7.0E-09 | 2.2E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0004 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 4.3E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 2.6E-9 | $mg/m^3$ | 2.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 3.8E-8 | $mg/m^3$ | 3.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.7E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0002 |
| | | | | MERCURY | 4.3E-12 | $mg/m^3$ | 3.5E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.9E-13 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00000003 |
| | | | | VANADIUM | 1.4E-8 | $mg/m^3$ | 1.2E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.7E-9 | $mg/m^3$ | 5.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 3.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 2.8E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.3E-09 | 7.8E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000008 |
| | | | Exp. Route Total | | | | | | | | 1.3E-08 | | | | | 0.0006 |
| | | Exposure Point Total | | | | | | | | | 1.3E-08 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-08 | | | | | 0.0006 |
| Medium Total | | | | | | | | | | | 6.5E-06 | | | | | 0.09 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 8.2E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 6.0E-05 | 1.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 5.0E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.9E-09 | 5.8E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.003 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 1.1E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.1E-07 | 1.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 7.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.2E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.02 |
| | | | | ARSENIC | 7.90 | mg/kg | 3.3E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.9E-06 | 3.8E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | CADMIUM | 14.0 | mg/kg | 5.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.07 |
| | | | | COBALT | 41.2 | mg/kg | 1.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.7 |
| | | | | LEAD | 68.3 | mg/kg | 2.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 7.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | NICKEL | 161 | mg/kg | 6.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.8E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.04 |
| | | | | VANADIUM | 31.5 | mg/kg | 1.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.03 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 3.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 5.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.3E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 2.9E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.4E-06 | 6.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 6.6E-05 | | | | | 1.0 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 2.5E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.8E-05 | 5.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 1.6E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.3E-09 | 1.9E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0010 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 3.5E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.1E-08 | 4.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 1.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.003 |
| | | | | ARSENIC | 7.90 | mg/kg | 2.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.5E-07 | 2.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.009 |
| | | | | CADMIUM | 14.0 | mg/kg | 1.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-07 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.006 |
| | | | | COBALT | 41.2 | mg/kg | 4.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 68.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 1.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-07 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.010 |
| | | | | NICKEL | 161 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.02 |
| | | | | VANADIUM | 31.5 | mg/kg | 3.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0007 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 6.7E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.3E-06 | 1.5E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 2.0E-05 | | | | | 0.07 |
| | | Exposure Point Total | | | | | | | | | 8.6E-05 | | | | | 1.1 |
| | Exposure Medium Total | | | | | | | | | | 8.6E-05 | | | | | 1.1 |

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.1E-9 | mg/m$^3$ | 3.2E-11 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 3.5E-11 | 6.9E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.7E-12 | mg/m$^3$ | 1.9E-14 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.1E-14 | 2.2E-13 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 8.0E-11 | mg/m$^3$ | 4.2E-13 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 2.4E-13 | 4.9E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 5.3E-10 | mg/m$^3$ | 2.7E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.2E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 2.4E-9 | mg/m$^3$ | 1.3E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 5.4E-11 | 1.5E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.000010 |
| | | | | CADMIUM | 4.3E-9 | mg/m$^3$ | 2.2E-11 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 4.0E-11 | 2.6E-10 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.00003 |
| | | | | COBALT | 1.3E-8 | mg/m$^3$ | 6.6E-11 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 5.9E-10 | 7.7E-10 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0001 |
| | | | | LEAD | 2.1E-8 | mg/m$^3$ | 1.1E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.3E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 5.6E-10 | mg/m$^3$ | 2.9E-12 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.4E-11 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000001 |
| | | | | NICKEL | 5.0E-8 | mg/m$^3$ | 2.6E-10 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 6.7E-11 | 3.0E-09 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.00003 |
| | | | | VANADIUM | 9.8E-9 | mg/m$^3$ | 5.0E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.9E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.4E-8 | mg/m$^3$ | 1.2E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.4E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | mg/m$^3$ | 2.1E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.4E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | mg/m$^3$ | 1.1E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 9.3E-10 | 2.4E-11 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.0000002 |
| | | | Exp. Route Total | | | | | | | | 1.7E-09 | | | | | 0.0002 |
| | | Exposure Point Total | | | | | | | | | 1.7E-09 | | | | | 0.0002 |
| | Exposure Medium Total | | | | | | | | | | 1.7E-09 | | | | | 0.0002 |
| Medium Total | | | | | | | | | | | 8.6E-05 | | | | | 1.1 |

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block G | Ingestion | NAPHTHALENE | 0.063 | mg/kg | 2.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 2.9E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.1E-05 | 6.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 5.8E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.2E-08 | 6.8E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 1.5E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-06 | 1.7E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | COBALT | 31.0 | mg/kg | 1.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.5 |
| | | | | IRON | 17,200 | mg/kg | 7.1E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.3E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 8.40 | mg/kg | 3.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 5.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.9E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.004 |
| | | | | MERCURY | 0.014 | mg/kg | 5.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0002 |
| | | | | VANADIUM | 46.3 | mg/kg | 1.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.04 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 9.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 5.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.3E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 2.4E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.2E-06 | 5.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 2.4E-05 | | | | | 0.7 |
| | | | Dermal | NAPHTHALENE | 0.063 | mg/kg | 8.0E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.3E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 8.8E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 6.4E-06 | 1.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 1.9E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.8E-09 | 2.2E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 1.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.6E-07 | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 31.0 | mg/kg | 3.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | IRON | 17,200 | mg/kg | 1.7E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 8.40 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00010 |
| | | | | MERCURY | 0.014 | mg/kg | 1.4E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00008 |
| | | | | VANADIUM | 46.3 | mg/kg | 4.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.2E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.001 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 5.7E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.1E-06 | 1.2E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 7.7E-06 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 3.2E-05 | | | | | 0.7 |
| | Exposure Medium Total | | | | | | | | | | 3.2E-05 | | | | | 0.7 |

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block G | Inhalation | NAPHTHALENE | 9.8E-7 | $mg/m^3$ | 5.1E-09 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.7E-10 | 5.9E-08 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.0E-10 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.2E-11 | 2.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 4.3E-12 | $mg/m^3$ | 2.2E-14 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.3E-14 | 2.6E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 5.8E-12 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.5E-11 | 6.7E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000004 |
| | | | | COBALT | 9.6E-9 | $mg/m^3$ | 5.0E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 4.5E-10 | 5.8E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00010 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 2.8E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 2.6E-9 | $mg/m^3$ | 1.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.6E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 3.8E-8 | $mg/m^3$ | 2.0E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.3E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00005 |
| | | | | MERCURY | 4.3E-12 | $mg/m^3$ | 2.2E-14 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.6E-13 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 8.70831E-09 |
| | | | | VANADIUM | 1.4E-8 | $mg/m^3$ | 7.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.6E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.7E-9 | $mg/m^3$ | 3.5E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 2.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 9.4E-12 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 7.9E-10 | 2.1E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000002 |
| | | | Exp. Route Total | | | | | | | | 1.4E-09 | | | | | 0.0002 |
| | | Exposure Point Total | | | | | | | | | 1.4E-09 | | | | | 0.0002 |
| | Exposure Medium Total | | | | | | | | | | 1.4E-09 | | | | | 0.0002 |
| Medium Total | | | | | | | | | | | 3.2E-05 | | | | | 0.7 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 1.5E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.1E-05 | 3.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 1.9E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.7E-09 | 1.1E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0005 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 4.0E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.1E-08 | 2.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 2.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.004 |
| | | | | ARSENIC | 7.90 | mg/kg | 1.2E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.8E-06 | 7.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | CADMIUM | 14.0 | mg/kg | 2.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 41.2 | mg/kg | 6.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 68.3 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 2.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | NICKEL | 161 | mg/kg | 2.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.007 |
| | | | | VANADIUM | 31.5 | mg/kg | 4.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.006 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 2.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 5.4E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.7E-07 | 1.2E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 1.3E-05 | | | | | 0.2 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 1.7E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.3E-05 | 3.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 2.2E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.5E-09 | 1.3E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0007 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 4.9E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.7E-08 | 2.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 2.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 7.90 | mg/kg | 3.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.8E-07 | 1.9E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | CADMIUM | 14.0 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-07 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 41.2 | mg/kg | 5.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 68.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 2.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-07 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.007 |
| | | | | NICKEL | 161 | mg/kg | 2.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.02 |
| | | | | VANADIUM | 31.5 | mg/kg | 4.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 4.6E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 9.3E-07 | 1.0E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 1.4E-05 | | | | | 0.05 |
| | | Exposure Point Total | | | | | | | | | 2.7E-05 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 2.7E-05 | | | | | 0.2 |

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.1E-9 | $mg/m^3$ | 3.2E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.5E-11 | 6.9E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 3.7E-12 | $mg/m^3$ | 3.8E-14 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.2E-14 | 2.2E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 8.0E-11 | $mg/m^3$ | 8.3E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 4.7E-13 | 4.9E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 5.3E-10 | $mg/m^3$ | 5.4E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 2.4E-9 | $mg/m^3$ | 2.5E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.1E-10 | 1.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000010 |
| | | | | CADMIUM | 4.3E-9 | $mg/m^3$ | 4.5E-11 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 8.1E-11 | 2.6E-10 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.00003 |
| | | | | COBALT | 1.3E-8 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.2E-09 | 7.7E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | LEAD | 2.1E-8 | $mg/m^3$ | 2.2E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.6E-10 | $mg/m^3$ | 5.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.4E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000001 |
| | | | | NICKEL | 5.0E-8 | $mg/m^3$ | 5.2E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 1.3E-10 | 3.0E-09 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.00003 |
| | | | | VANADIUM | 9.8E-9 | $mg/m^3$ | 1.0E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 2.4E-8 | $mg/m^3$ | 2.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 4.2E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 9.3E-10 | 2.4E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000002 |
| | | | Exp. Route Total | | | | | | | | 2.5E-09 | | | | | 0.0002 |
| | | Exposure Point Total | | | | | | | | | 2.5E-09 | | | | | 0.0002 |
| | Exposure Medium Total | | | | | | | | | | 2.5E-09 | | | | | 0.0002 |
| Medium Total | | | | | | | | | | | 2.7E-05 | | | | | 0.2 |
| Subsurface Soil | Subsurface Soil | Block G | Ingestion | NAPHTHALENE | 0.063 | mg/kg | 9.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.7E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 5.4E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.9E-06 | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 2.2E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.3E-09 | 1.3E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 5.6E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.4E-07 | 3.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 31.0 | mg/kg | 4.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.09 |
| | | | | IRON | 17,200 | mg/kg | 2.7E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 8.40 | mg/kg | 1.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 1.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0008 |
| | | | | MERCURY | 0.014 | mg/kg | 2.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.00004 |
| | | | | VANADIUM | 46.3 | mg/kg | 7.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.008 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 3.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 2.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 4.5E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.3E-07 | 9.9E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0003 |
| | | | Exp. Route Total | | | | | | | | 5.0E-06 | | | | | 0.1 |
| | | | Dermal | NAPHTHALENE | 0.063 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 6.0E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.4E-06 | 1.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 2.6E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.2E-09 | 1.5E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 1.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-07 | 8.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 31.0 | mg/kg | 4.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | IRON | 17,200 | mg/kg | 2.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 8.40 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.6E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00007 |
| | | | | MERCURY | 0.014 | mg/kg | 1.9E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00005 |
| | | | | VANADIUM | 46.3 | mg/kg | 6.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0007 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 3.9E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 7.9E-07 | 8.6E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 5.4E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 1.0E-05 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 1.0E-05 | | | | | 0.2 |

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block G | Inhalation | NAPHTHALENE | 9.8E-7 | $mg/m^3$ | 1.0E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 3.5E-10 | 5.9E-08 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.0E-10 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.2E-11 | 2.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 4.3E-12 | $mg/m^3$ | 4.5E-14 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.6E-14 | 2.6E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 5.0E-11 | 6.7E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000004 |
| | | | | COBALT | 9.6E-9 | $mg/m^3$ | 9.9E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 8.9E-10 | 5.8E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00010 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 5.5E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 2.6E-9 | $mg/m^3$ | 2.7E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.6E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 3.8E-8 | $mg/m^3$ | 3.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.3E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.00005 |
| | | | | MERCURY | 4.3E-12 | $mg/m^3$ | 4.5E-14 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.6E-13 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 8.70831E-09 |
| | | | | VANADIUM | 1.4E-8 | $mg/m^3$ | 1.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.6E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.7E-9 | $mg/m^3$ | 6.9E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 4.2E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 9.4E-12 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 7.9E-10 | 2.1E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000002 |
| | | | Exp. Route Total | | | | | | | | 2.1E-09 | | | | | 0.0002 |
| | | Exposure Point Total | | | | | | | | | 2.1E-09 | | | | | 0.0002 |
| | Exposure Medium Total | | | | | | | | | | 2.1E-09 | | | | | 0.0002 |
| Medium Total | | | | | | | | | | | 1.0E-05 | | | | | 0.2 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALE | 3.70 | mg/kg | 6.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.7E-06 | 1.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 2.1E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.2E-09 | 5.9E-09 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0003 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 4.5E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.1E-08 | 1.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 3.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.3E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 7.90 | mg/kg | 1.4E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.1E-06 | 3.9E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 14.0 | mg/kg | 2.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.007 |
| | | | | COBALT | 41.2 | mg/kg | 7.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.07 |
| | | | | LEAD | 68.3 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 3.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | NICKEL | 161 | mg/kg | 2.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.004 |
| | | | | VANADIUM | 31.5 | mg/kg | 5.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 2.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 2.3E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.1E-07 | 6.4E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 7.0E-06 | | | | | 0.10 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALE | 3.70 | mg/kg | 1.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.1E-06 | 3.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 3.9E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.7E-09 | 1.1E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0005 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 8.4E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.7E-07 | 2.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 3.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 7.90 | mg/kg | 5.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.2E-07 | 1.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | CADMIUM | 14.0 | mg/kg | 3.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.0E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 41.2 | mg/kg | 9.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.009 |
| | | | | LEAD | 68.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 4.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-07 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.006 |
| | | | | NICKEL | 161 | mg/kg | 3.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.01 |
| | | | | VANADIUM | 31.5 | mg/kg | 7.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 3.0E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 6.0E-07 | 8.4E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 9.7E-06 | | | | | 0.04 |
| | | Exposure Point Total | | | | | | | | | 1.7E-05 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 1.7E-05 | | | | | 0.1 |

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALE | 1.1E-9 | $mg/m^3$ | 9.3E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.0E-10 | 2.6E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 3.7E-12 | $mg/m^3$ | 3.0E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 1.7E-13 | 8.5E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 8.0E-11 | $mg/m^3$ | 6.6E-12 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.7E-12 | 1.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 5.3E-10 | $mg/m^3$ | 4.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 2.4E-9 | $mg/m^3$ | 2.0E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 8.6E-10 | 5.6E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | CADMIUM | 4.3E-9 | $mg/m^3$ | 3.5E-10 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 6.4E-10 | 9.9E-10 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.00010 |
| | | | | COBALT | 1.3E-8 | $mg/m^3$ | 1.0E-09 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 9.4E-09 | 2.9E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0005 |
| | | | | LEAD | 2.1E-8 | $mg/m^3$ | 1.7E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.6E-10 | $mg/m^3$ | 4.5E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-10 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000004 |
| | | | | NICKEL | 5.0E-8 | $mg/m^3$ | 4.1E-09 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 1.1E-09 | 1.1E-08 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.0001 |
| | | | | VANADIUM | 9.8E-9 | $mg/m^3$ | 8.0E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 2.4E-8 | $mg/m^3$ | 2.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 3.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | $mg/m^3$ | 3.3E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.8E-09 | 9.2E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000009 |
| | | | Exp. Route Total | | | | | | | | 1.5E-08 | | | | | 0.0008 |
| | | Exposure Point Total | | | | | | | | | 1.5E-08 | | | | | 0.0008 |
| | Exposure Medium Total | | | | | | | | | | 1.5E-08 | | | | | 0.0008 |
| Medium Total | | | | | | | | | | | 1.7E-05 | | | | | 0.1 |

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block G | Ingestion | NAPHTHALENE | 0.063 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000002 |
| | | | | BENZO(A)PYRENE EQUIVALE | 1.30 | mg/kg | 2.3E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.7E-06 | 6.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 2.4E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.9E-09 | 6.8E-09 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 6.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.4E-07 | 1.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | COBALT | 31.0 | mg/kg | 5.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | IRON | 17,200 | mg/kg | 3.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 8.40 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 2.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0004 |
| | | | | MERCURY | 0.014 | mg/kg | 2.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-09 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.00002 |
| | | | | VANADIUM | 46.3 | mg/kg | 8.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.005 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 3.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 2.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.9E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 9.6E-08 | 5.4E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 2.7E-06 | | | | | 0.07 |
| | | | Dermal | NAPHTHALENE | 0.063 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | BENZO(A)PYRENE EQUIVALE | 1.30 | mg/kg | 3.9E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.8E-06 | 1.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 4.5E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.0E-09 | 1.3E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 2.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.7E-07 | 7.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 31.0 | mg/kg | 7.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.007 |
| | | | | IRON | 17,200 | mg/kg | 4.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 8.40 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00006 |
| | | | | MERCURY | 0.014 | mg/kg | 3.2E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.0E-10 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00004 |
| | | | | VANADIUM | 46.3 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0006 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 2.5E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 5.1E-07 | 7.1E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 3.7E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 6.4E-06 | | | | | 0.09 |
| | Exposure Medium Total | | | | | | | | | | 6.4E-06 | | | | | 0.09 |

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block G | Inhalation | NAPHTHALENE | 9.8E-7 | $mg/m^3$ | 8.0E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 2.7E-09 | 2.2E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00007 |
| | | | | BENZO(A)PYRENE EQUIVALE | 4.0E-10 | $mg/m^3$ | 3.3E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.6E-11 | 9.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 4.3E-12 | $mg/m^3$ | 3.5E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.0E-13 | 9.9E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 9.1E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.9E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 9.6E-9 | $mg/m^3$ | 7.8E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 7.0E-09 | 2.2E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0004 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 4.3E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 2.6E-9 | $mg/m^3$ | 2.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 3.8E-8 | $mg/m^3$ | 3.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.7E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0002 |
| | | | | MERCURY | 4.3E-12 | $mg/m^3$ | 3.5E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.9E-13 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00000003 |
| | | | | VANADIUM | 1.4E-8 | $mg/m^3$ | 1.2E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.7E-9 | $mg/m^3$ | 5.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 3.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 2.8E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.3E-09 | 7.8E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000008 |
| | | | Exp. Route Total | | | | | | | | 1.3E-08 | | | | | 0.0006 |
| | | Exposure Point Total | | | | | | | | | 1.3E-08 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-08 | | | | | 0.0006 |
| Medium Total | | | | | | | | | | | 6.5E-06 | | | | | 0.09 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 1.5E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.1E-04 | 3.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 9.4E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.9E-08 | 1.1E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.005 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 2.0E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.1E-07 | 2.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 1.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-05 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.04 |
| | | | | ARSENIC | 7.90 | mg/kg | 6.2E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.3E-06 | 7.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | CADMIUM | 14.0 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.1 |
| | | | | COBALT | 41.2 | mg/kg | 3.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.8E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 1.3 |
| | | | | LEAD | 68.3 | mg/kg | 5.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 1.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | NICKEL | 161 | mg/kg | 1.3E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-03 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.07 |
| | | | | VANADIUM | 31.5 | mg/kg | 2.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.06 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 6.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 1.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 5.4E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.7E-06 | 1.2E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 1.3E-04 | | | | | 1.9 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 5.6E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.1E-05 | 1.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 3.7E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.4E-09 | 4.3E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.002 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 8.0E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.6E-07 | 9.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 3.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.007 |
| | | | | ARSENIC | 7.90 | mg/kg | 5.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 7.8E-07 | 6.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | CADMIUM | 14.0 | mg/kg | 3.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-07 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 41.2 | mg/kg | 9.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | LEAD | 68.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 3.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.6E-07 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.02 |
| | | | | NICKEL | 161 | mg/kg | 3.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.05 |
| | | | | VANADIUM | 31.5 | mg/kg | 6.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 1.5E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 3.0E-06 | 3.3E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 4.5E-05 | | | | | 0.2 |
| | | Exposure Point Total | | | | | | | | | 1.7E-04 | | | | | 2.0 |
| | Exposure Medium Total | | | | | | | | | | 1.7E-04 | | | | | 2.0 |

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.1E-9 | $mg/m^3$ | 1.2E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.3E-10 | 2.6E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 3.7E-12 | $mg/m^3$ | 7.3E-14 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 4.1E-14 | 8.5E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 8.0E-11 | $mg/m^3$ | 1.6E-12 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 9.0E-13 | 1.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 5.3E-10 | $mg/m^3$ | 1.0E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 2.4E-9 | $mg/m^3$ | 4.8E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.1E-10 | 5.6E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | CADMIUM | 4.3E-9 | $mg/m^3$ | 8.5E-11 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 1.5E-10 | 9.9E-10 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.00010 |
| | | | | COBALT | 1.3E-8 | $mg/m^3$ | 2.5E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.2E-09 | 2.9E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0005 |
| | | | | LEAD | 2.1E-8 | $mg/m^3$ | 4.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.6E-10 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-10 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000004 |
| | | | | NICKEL | 5.0E-8 | $mg/m^3$ | 9.8E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 2.5E-10 | 1.1E-08 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.0001 |
| | | | | VANADIUM | 9.8E-9 | $mg/m^3$ | 1.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 2.4E-8 | $mg/m^3$ | 4.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 7.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | $mg/m^3$ | 4.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.5E-09 | 9.2E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000009 |
| | | | Exp. Route Total | | | | | | | | 6.5E-09 | | | | | 0.0008 |
| | | Exposure Point Total | | | | | | | | | 6.5E-09 | | | | | 0.0008 |
| | Exposure Medium Total | | | | | | | | | | 6.5E-09 | | | | | 0.0008 |
| Medium Total | | | | | | | | | | | 1.7E-04 | | | | | 2.0 |
| Subsurface Soil | Subsurface Soil | Block G | Ingestion | NAPHTHALENE | 0.063 | mg/kg | 4.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 5.4E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.0E-05 | 1.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 1.1E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.2E-08 | 1.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 2.8E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.2E-06 | 3.3E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | COBALT | 31.0 | mg/kg | 2.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.9 |
| | | | | IRON | 17,200 | mg/kg | 1.3E-02 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-01 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.2 |
| | | | | LEAD | 8.40 | mg/kg | 6.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 9.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.008 |
| | | | | MERCURY | 0.014 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0004 |
| | | | | VANADIUM | 46.3 | mg/kg | 3.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.08 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 1.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 1.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 4.6E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.3E-06 | 1.0E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.003 |
| | | | Exp. Route Total | | | | | | | | 4.6E-05 | | | | | 1.4 |
| | | | Dermal | NAPHTHALENE | 0.063 | mg/kg | 1.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 2.0E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.4E-05 | 4.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 4.3E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.6E-09 | 5.0E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 2.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.6E-07 | 2.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.009 |
| | | | | COBALT | 31.0 | mg/kg | 6.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | IRON | 17,200 | mg/kg | 3.8E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.006 |
| | | | | LEAD | 8.40 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 2.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0002 |
| | | | | MERCURY | 0.014 | mg/kg | 3.1E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0002 |
| | | | | VANADIUM | 46.3 | mg/kg | 1.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.3E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.6E-06 | 2.8E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 1.7E-05 | | | | | 0.05 |
| | | Exposure Point Total | | | | | | | | | 6.4E-05 | | | | | 1.4 |
| | Exposure Medium Total | | | | | | | | | | 6.4E-05 | | | | | 1.4 |

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block G | Inhalation | NAPHTHALENE | 9.8E-7 | $mg/m^3$ | 1.9E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 6.5E-10 | 2.2E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.0E-10 | $mg/m^3$ | 4.2E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 4.6E-11 | 9.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 4.3E-12 | $mg/m^3$ | 8.5E-14 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 4.8E-14 | 9.9E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 2.2E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 9.4E-11 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 9.6E-9 | $mg/m^3$ | 1.9E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.7E-09 | 2.2E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0004 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 1.0E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 2.6E-9 | $mg/m^3$ | 5.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 3.8E-8 | $mg/m^3$ | 7.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.7E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0002 |
| | | | | MERCURY | 4.3E-12 | $mg/m^3$ | 8.5E-14 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.9E-13 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00000003 |
| | | | | VANADIUM | 1.4E-8 | $mg/m^3$ | 2.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.7E-9 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 7.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 3.6E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.0E-09 | 7.8E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000008 |
| | | | Exp. Route Total | | | | | | | | 5.5E-09 | | | | | 0.0006 |
| | | Exposure Point Total | | | | | | | | | 5.5E-09 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | | | | 5.5E-09 | | | | | 0.0006 |
| Medium Total | | | | | | | | | | | 6.4E-05 | | | | | 1.4 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 2.9E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.1E-05 | 6.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 3.5E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 7.0E-09 | 2.1E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.001 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 7.6E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 4.5E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 5.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.007 |
| | | | | ARSENIC | 7.90 | mg/kg | 2.3E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.5E-06 | 1.4E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | CADMIUM | 14.0 | mg/kg | 4.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 41.2 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | LEAD | 68.3 | mg/kg | 2.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 5.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | NICKEL | 161 | mg/kg | 4.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.01 |
| | | | | VANADIUM | 31.5 | mg/kg | 9.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.4E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 2.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 3.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 1.0E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 5.1E-07 | 2.2E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0007 |
| | | | Exp. Route Total | | | | | | | | 2.5E-05 | | | | | 0.3 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 1.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.3E-06 | 2.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 1.5E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.0E-09 | 8.7E-09 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0004 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 3.2E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.5E-08 | 1.9E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 1.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.8E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.001 |
| | | | | ARSENIC | 7.90 | mg/kg | 2.1E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.2E-07 | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | CADMIUM | 14.0 | mg/kg | 1.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.2E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 41.2 | mg/kg | 3.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.007 |
| | | | | LEAD | 68.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 1.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.3E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.004 |
| | | | | NICKEL | 161 | mg/kg | 1.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.3E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.01 |
| | | | | VANADIUM | 31.5 | mg/kg | 2.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 3.1E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 6.2E-07 | 6.7E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 9.3E-06 | | | | | 0.03 |
| | | Exposure Point Total | | | | | | | | | 3.5E-05 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | | | | 3.5E-05 | | | | | 0.4 |

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.1E-9 | mg/m$^3$ | 1.2E-10 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 1.3E-10 | 2.6E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.7E-12 | mg/m$^3$ | 1.5E-13 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 8.3E-14 | 8.5E-13 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 8.0E-11 | mg/m$^3$ | 3.2E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.8E-12 | 1.8E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 5.3E-10 | mg/m$^3$ | 2.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.2E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 2.4E-9 | mg/m$^3$ | 9.6E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 4.1E-10 | 5.6E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00004 |
| | | | | CADMIUM | 4.3E-9 | mg/m$^3$ | 1.7E-10 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 3.1E-10 | 9.9E-10 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.00010 |
| | | | | COBALT | 1.3E-8 | mg/m$^3$ | 5.0E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 4.5E-09 | 2.9E-09 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0005 |
| | | | | LEAD | 2.1E-8 | mg/m$^3$ | 8.3E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.8E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 5.6E-10 | mg/m$^3$ | 2.2E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.3E-10 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000004 |
| | | | | NICKEL | 5.0E-8 | mg/m$^3$ | 2.0E-09 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 5.1E-10 | 1.1E-08 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.0001 |
| | | | | VANADIUM | 9.8E-9 | mg/m$^3$ | 3.8E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.2E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.4E-8 | mg/m$^3$ | 9.4E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | mg/m$^3$ | 1.6E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.3E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | mg/m$^3$ | 4.2E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 3.5E-09 | 9.2E-11 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.0000009 |
| | | | Exp. Route Total | | | | | | | | 9.4E-09 | | | | | 0.0008 |
| | | Exposure Point Total | | | | | | | | | 9.4E-09 | | | | | 0.0008 |
| | Exposure Medium Total | | | | | | | | | | 9.4E-09 | | | | | 0.0008 |
| Medium Total | | | | | | | | | | | 3.5E-05 | | | | | 0.4 |

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block G | Ingestion | NAPHTHALENE | 0.063 | mg/kg | 1.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000005 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 1.0E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 7.4E-06 | 2.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 4.1E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.2E-09 | 2.4E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 1.1E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.6E-06 | 6.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 31.0 | mg/kg | 9.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | IRON | 17,200 | mg/kg | 5.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.04 |
| | | | | LEAD | 8.40 | mg/kg | 2.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 3.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.002 |
| | | | | MERCURY | 0.014 | mg/kg | 4.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.00008 |
| | | | | VANADIUM | 46.3 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 6.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 3.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 8.6E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 4.3E-07 | 1.9E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0006 |
| | | | Exp. Route Total | | | | | | | | 9.5E-06 | | | | | 0.3 |
| | | | Dermal | NAPHTHALENE | 0.063 | mg/kg | 7.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 4.0E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.9E-06 | 8.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 1.7E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.5E-09 | 1.0E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 9.6E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.4E-07 | 5.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 31.0 | mg/kg | 2.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | IRON | 17,200 | mg/kg | 1.5E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.9E-04 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 8.40 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00005 |
| | | | | MERCURY | 0.014 | mg/kg | 1.2E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.2E-10 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00003 |
| | | | | VANADIUM | 46.3 | mg/kg | 4.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 2.6E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 5.2E-07 | 5.7E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 3.6E-06 | | | | | 0.010 |
| | | Exposure Point Total | | | | | | | | | 1.3E-05 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-05 | | | | | 0.3 |

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block G | Inhalation | NAPHTHALENE | 9.8E-7 | mg/m$^3$ | 3.9E-08 | (mg/m$^3$) | 3.4E-05 | (ug/m$^3$)$^{-1}$ | 1.3E-09 | 2.2E-07 | (mg/m$^3$) | 3.0E-03 | (mg/m$^3$) | 0.00007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.0E-10 | mg/m$^3$ | 4.2E-11 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 4.6E-11 | 9.2E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 4.3E-12 | mg/m$^3$ | 1.7E-13 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 9.7E-14 | 9.9E-13 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 1.1E-9 | mg/m$^3$ | 4.4E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 1.9E-10 | 2.5E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00002 |
| | | | | COBALT | 9.6E-9 | mg/m$^3$ | 3.8E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 3.4E-09 | 2.2E-09 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0004 |
| | | | | IRON | 5.3E-6 | mg/m$^3$ | 2.1E-07 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.2E-06 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | LEAD | 2.6E-9 | mg/m$^3$ | 1.0E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.9E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MANGANESE | 3.8E-8 | mg/m$^3$ | 1.5E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 8.7E-09 | (mg/m$^3$) | 5.0E-05 | (mg/m$^3$) | 0.0002 |
| | | | | MERCURY | 4.3E-12 | mg/m$^3$ | 1.7E-13 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.9E-13 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.00000003 |
| | | | | VANADIUM | 1.4E-8 | mg/m$^3$ | 5.6E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.3E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 6.7E-9 | mg/m$^3$ | 2.6E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | mg/m$^3$ | 1.6E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.3E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | mg/m$^3$ | 3.6E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 3.0E-09 | 7.8E-11 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.0000008 |
| | | | Exp. Route Total | | | | | | | | 7.9E-09 | | | | | 0.0006 |
| | | Exposure Point Total | | | | | | | | | 7.9E-09 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | | | | 7.9E-09 | | | | | 0.0006 |
| Medium Total | | | | | | | | | | | 1.3E-05 | | | | | 0.3 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 6.2E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.5E-06 | 3.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 2.0E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.0E-09 | 1.2E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0006 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 4.4E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 8.7E-08 | 2.5E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 2.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.004 |
| | | | | ARSENIC | 7.90 | mg/kg | 1.3E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.0E-06 | 7.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | CADMIUM | 14.0 | mg/kg | 2.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 41.2 | mg/kg | 6.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 68.3 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 3.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | NICKEL | 161 | mg/kg | 2.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.008 |
| | | | | VANADIUM | 31.5 | mg/kg | 5.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.006 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 1.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.6E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 2.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 2.2E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.1E-07 | 1.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 6.7E-06 | | | | | 0.2 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 3.2E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.4E-06 | 1.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 1.1E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.2E-09 | 6.6E-09 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0003 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 2.4E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.9E-08 | 1.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.6E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.001 |
| | | | | ARSENIC | 7.90 | mg/kg | 1.6E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.4E-07 | 9.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | CADMIUM | 14.0 | mg/kg | 9.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.5E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 41.2 | mg/kg | 2.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | LEAD | 68.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 1.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.003 |
| | | | | NICKEL | 161 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.3E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.008 |
| | | | | VANADIUM | 31.5 | mg/kg | 2.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 8.7E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.7E-07 | 5.1E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0007 |
| | | | Exp. Route Total | | | | | | | | 2.8E-06 | | | | | 0.02 |
| | | Exposure Point Total | | | | | | | | | 9.5E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 9.5E-06 | | | | | 0.2 |

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.1E-9 | mg/m$^3$ | 4.5E-11 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 4.9E-11 | 2.6E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.7E-12 | mg/m$^3$ | 1.5E-13 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 8.3E-14 | 8.5E-13 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 8.0E-11 | mg/m$^3$ | 3.2E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.8E-12 | 1.8E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 5.3E-10 | mg/m$^3$ | 2.1E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.2E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 2.4E-9 | mg/m$^3$ | 9.6E-11 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 4.1E-10 | 5.6E-10 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.00004 |
| | | | | CADMIUM | 4.3E-9 | mg/m$^3$ | 1.7E-10 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 3.1E-10 | 9.9E-10 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.00010 |
| | | | | COBALT | 1.3E-8 | mg/m$^3$ | 5.0E-10 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 4.5E-09 | 2.9E-09 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.0005 |
| | | | | LEAD | 2.1E-8 | mg/m$^3$ | 8.3E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 4.8E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 5.6E-10 | mg/m$^3$ | 2.2E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 1.3E-10 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.000004 |
| | | | | NICKEL | 5.0E-8 | mg/m$^3$ | 2.0E-09 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 5.1E-10 | 1.1E-08 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.0001 |
| | | | | VANADIUM | 9.8E-9 | mg/m$^3$ | 3.8E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.2E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.4E-8 | mg/m$^3$ | 9.4E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.5E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | mg/m$^3$ | 1.6E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.3E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | mg/m$^3$ | 1.6E-11 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 1.3E-09 | 9.2E-11 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.0000009 |
| | | | Exp. Route Total | | | | | | | | 7.1E-09 | | | | | 0.0008 |
| | | Exposure Point Total | | | | | | | | | 7.1E-09 | | | | | 0.0008 |
| | Exposure Medium Total | | | | | | | | | | 7.1E-09 | | | | | 0.0008 |
| Medium Total | | | | | | | | | | | 9.5E-06 | | | | | 0.2 |
| Subsurface Soil | Subsurface Soil | Block G | Ingestion | NAPHTHALENE | 0.063 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 6.2E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 2.2E-07 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 1.6E-06 | 1.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 2.3E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 4.7E-09 | 1.4E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 6.0E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 9.1E-07 | 3.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 31.0 | mg/kg | 5.2E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.0E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | IRON | 17,200 | mg/kg | 2.9E-03 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.7E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 8.40 | mg/kg | 1.4E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 8.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 2.1E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0009 |
| | | | | MERCURY | 0.014 | mg/kg | 2.3E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.4E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.00005 |
| | | | | VANADIUM | 46.3 | mg/kg | 7.8E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 4.5E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.009 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 3.6E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 2.2E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.8E-07 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 9.2E-08 | 1.1E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 2.6E-06 | | | | | 0.1 |
| | | | Dermal | NAPHTHALENE | 0.063 | mg/kg | 5.5E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.2E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 1.1E-07 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 8.3E-07 | 6.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 1.3E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 2.6E-09 | 7.7E-09 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 7.2E-08 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 1.1E-07 | 4.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 31.0 | mg/kg | 2.1E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | IRON | 17,200 | mg/kg | 1.2E-04 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 6.7E-04 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.0010 |
| | | | | LEAD | 8.40 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 8.2E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 4.8E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00003 |
| | | | | MERCURY | 0.014 | mg/kg | 9.4E-11 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.5E-10 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00003 |
| | | | | VANADIUM | 46.3 | mg/kg | 3.1E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.8E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 7.4E-09 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 1.5E-07 | 4.3E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0006 |
| | | | Exp. Route Total | | | | | | | | 1.1E-06 | | | | | 0.007 |
| | | Exposure Point Total | | | | | | | | | 3.7E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 3.7E-06 | | | | | 0.2 |

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block G | Inhalation | NAPHTHALENE | 9.8E-7 | $mg/m^3$ | 3.9E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.3E-09 | 2.2E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00007 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.0E-10 | $mg/m^3$ | 1.6E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.7E-11 | 9.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 4.3E-12 | $mg/m^3$ | 1.7E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 9.7E-14 | 9.9E-13 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 4.4E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.9E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 9.6E-9 | $mg/m^3$ | 3.8E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 3.4E-09 | 2.2E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0004 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 2.1E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.2E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 2.6E-9 | $mg/m^3$ | 1.0E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 3.8E-8 | $mg/m^3$ | 1.5E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.7E-09 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0002 |
| | | | | MERCURY | 4.3E-12 | $mg/m^3$ | 1.7E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.9E-13 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00000003 |
| | | | | VANADIUM | 1.4E-8 | $mg/m^3$ | 5.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.7E-9 | $mg/m^3$ | 2.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 1.6E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.3E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 1.3E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.1E-09 | 7.8E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000008 |
| | | | Exp. Route Total | | | | | | | | 6.0E-09 | | | | | 0.0006 |
| | | Exposure Point Total | | | | | | | | | 6.0E-09 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | | | | 6.0E-09 | | | | | 0.0006 |
| Medium Total | | | | | | | | | | | 3.7E-06 | | | | | 0.2 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 2.2E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.6E-04 | 4.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 1.3E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.6E-08 | 1.5E-07 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.008 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 2.8E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.7E-07 | 3.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 1.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-05 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.05 |
| | | | | ARSENIC | 7.90 | mg/kg | 8.7E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.3E-05 | 1.0E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.3 |
| | | | | CADMIUM | 14.0 | mg/kg | 1.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-04 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.2 |
| | | | | COBALT | 41.2 | mg/kg | 4.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 1.8 |
| | | | | LEAD | 68.3 | mg/kg | 7.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.7E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.08 |
| | | | | NICKEL | 161 | mg/kg | 1.8E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-03 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.1 |
| | | | | VANADIUM | 31.5 | mg/kg | 3.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.08 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 8.5E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 1.4E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 7.6E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 3.8E-06 | 1.7E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.006 |
| | | | Exp. Route Total | | | | | | | | 1.8E-04 | | | | | 2.6 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 7.9E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.7E-05 | 1.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 5.2E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.0E-08 | 6.0E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.003 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 1.1E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.2E-07 | 1.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 5.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.01 |
| | | | | ARSENIC | 7.90 | mg/kg | 7.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.1E-06 | 8.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | CADMIUM | 14.0 | mg/kg | 4.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.0E-07 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 41.2 | mg/kg | 1.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | LEAD | 68.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 5.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-07 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.03 |
| | | | | NICKEL | 161 | mg/kg | 4.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.07 |
| | | | | VANADIUM | 31.5 | mg/kg | 9.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 2.1E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 4.3E-06 | 4.7E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.006 |
| | | | Exp. Route Total | | | | | | | | 6.3E-05 | | | | | 0.2 |
| | | Exposure Point Total | | | | | | | | | 2.4E-04 | | | | | 2.8 |
| | Exposure Medium Total | | | | | | | | | | 2.4E-04 | | | | | 2.8 |

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.1E-9 | mg/m$^3$ | 5.0E-10 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 5.5E-10 | 1.1E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.7E-12 | mg/m$^3$ | 3.1E-13 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 1.7E-13 | 3.6E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 8.0E-11 | mg/m$^3$ | 6.6E-12 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 3.8E-12 | 7.7E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 5.3E-10 | mg/m$^3$ | 4.3E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.0E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 2.4E-9 | mg/m$^3$ | 2.0E-10 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 8.6E-10 | 2.3E-09 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.0002 |
| | | | | CADMIUM | 4.3E-9 | mg/m$^3$ | 3.6E-10 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 6.4E-10 | 4.2E-09 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.0004 |
| | | | | COBALT | 1.3E-8 | mg/m$^3$ | 1.0E-09 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 9.4E-09 | 1.2E-08 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.002 |
| | | | | LEAD | 2.1E-8 | mg/m$^3$ | 1.7E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.0E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 5.6E-10 | mg/m$^3$ | 4.6E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.3E-10 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.00002 |
| | | | | NICKEL | 5.0E-8 | mg/m$^3$ | 4.1E-09 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 1.1E-09 | 4.8E-08 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.0005 |
| | | | | VANADIUM | 9.8E-9 | mg/m$^3$ | 8.0E-10 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.4E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.4E-8 | mg/m$^3$ | 2.0E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.3E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | mg/m$^3$ | 3.3E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.9E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | mg/m$^3$ | 1.8E-10 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 1.5E-08 | 3.9E-10 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.000004 |
| | | | Exp. Route Total | | | | | | | | 2.7E-08 | | | | | 0.003 |
| | | Exposure Point Total | | | | | | | | | 2.7E-08 | | | | | 0.003 |
| | Exposure Medium Total | | | | | | | | | | 2.7E-08 | | | | | 0.003 |
| Medium Total | | | | | | | | | | | 2.4E-04 | | | | | 2.8 |
| Subsurface Soil | Subsurface Soil | Block G | Ingestion | NAPHTHALENE | 0.063 | mg/kg | 6.9E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 8.1E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00004 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 7.6E-06 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 5.5E-05 | 1.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 1.5E-08 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 3.1E-08 | 1.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 3.9E-06 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 5.9E-06 | 4.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | COBALT | 31.0 | mg/kg | 3.4E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 4.0E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 1.3 |
| | | | | IRON | 17,200 | mg/kg | 1.9E-02 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.2E-01 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.3 |
| | | | | LEAD | 8.40 | mg/kg | 9.2E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 1.3E-04 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.6E-03 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.01 |
| | | | | MERCURY | 0.014 | mg/kg | 1.5E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0006 |
| | | | | VANADIUM | 46.3 | mg/kg | 5.1E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.9E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.1 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 2.4E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 1.4E-04 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.7E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 6.4E-06 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 3.2E-06 | 1.4E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.005 |
| | | | Exp. Route Total | | | | | | | | 6.5E-05 | | | | | 1.9 |
| | | | Dermal | NAPHTHALENE | 0.063 | mg/kg | 2.5E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.9E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00001 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 2.8E-06 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 2.0E-05 | 6.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 6.0E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 1.2E-08 | 7.0E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 3.3E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 5.0E-07 | 3.9E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 31.0 | mg/kg | 9.5E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | IRON | 17,200 | mg/kg | 5.3E-04 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 6.2E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.009 |
| | | | | LEAD | 8.40 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 3.8E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 4.4E-05 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.0003 |
| | | | | MERCURY | 0.014 | mg/kg | 4.3E-10 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.0E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0002 |
| | | | | VANADIUM | 46.3 | mg/kg | 1.4E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.7E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.8E-07 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 3.6E-06 | 3.9E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.005 |
| | | | Exp. Route Total | | | | | | | | 2.4E-05 | | | | | 0.07 |
| | | Exposure Point Total | | | | | | | | | 8.9E-05 | | | | | 2.0 |
| | Exposure Medium Total | | | | | | | | | | 8.9E-05 | | | | | 2.0 |

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block G | Inhalation | NAPHTHALENE | 9.8E-7 | $mg/m^3$ | 8.1E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 2.8E-09 | 9.4E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.0E-10 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.9E-10 | 3.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 4.3E-12 | $mg/m^3$ | 3.6E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 2.0E-13 | 4.2E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 9.2E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.9E-10 | 1.1E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | COBALT | 9.6E-9 | $mg/m^3$ | 7.9E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 7.1E-09 | 9.2E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.002 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 4.4E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 2.6E-9 | $mg/m^3$ | 2.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 3.8E-8 | $mg/m^3$ | 3.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.7E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0007 |
| | | | | MERCURY | 4.3E-12 | $mg/m^3$ | 3.6E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.2E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000001 |
| | | | | VANADIUM | 1.4E-8 | $mg/m^3$ | 1.2E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.7E-9 | $mg/m^3$ | 5.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.4E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 3.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 1.5E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.3E-08 | 3.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 2.3E-08 | | | | | 0.003 |
| | | Exposure Point Total | | | | | | | | | 2.3E-08 | | | | | 0.003 |
| | Exposure Medium Total | | | | | | | | | | 2.3E-08 | | | | | 0.003 |
| Medium Total | | | | | | | | | | | 8.9E-05 | | | | | 2.0 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 4.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.0E-05 | 8.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 4.9E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.9E-09 | 2.9E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.001 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 1.1E-07 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 2.1E-07 | 6.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 7.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.01 |
| | | | | ARSENIC | 7.90 | mg/kg | 3.2E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.9E-06 | 1.9E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | CADMIUM | 14.0 | mg/kg | 5.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.03 |
| | | | | COBALT | 41.2 | mg/kg | 1.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.9E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.3 |
| | | | | LEAD | 68.3 | mg/kg | 2.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 7.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | NICKEL | 161 | mg/kg | 6.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.02 |
| | | | | VANADIUM | 31.5 | mg/kg | 1.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.6E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 3.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 5.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 1.4E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 7.1E-07 | 3.1E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 3.5E-05 | | | | | 0.5 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 1.6E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.2E-05 | 3.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 2.1E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 4.2E-09 | 1.2E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0006 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 4.5E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 9.0E-08 | 2.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 2.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 7.90 | mg/kg | 2.9E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.4E-07 | 1.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | CADMIUM | 14.0 | mg/kg | 1.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-07 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 41.2 | mg/kg | 5.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.010 |
| | | | | LEAD | 68.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 2.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-07 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.006 |
| | | | | NICKEL | 161 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.01 |
| | | | | VANADIUM | 31.5 | mg/kg | 3.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 4.3E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 8.6E-07 | 9.4E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 1.3E-05 | | | | | 0.04 |
| | | Exposure Point Total | | | | | | | | | 4.8E-05 | | | | | 0.5 |
| | Exposure Medium Total | | | | | | | | | | 4.8E-05 | | | | | 0.5 |

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.1E-9 | mg/m$^3$ | 5.0E-10 | (mg/m$^3$) | 1.1E-03 | (ug/m$^3$)$^{-1}$ | 5.5E-10 | 1.1E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1254 | 3.7E-12 | mg/m$^3$ | 6.1E-13 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 3.5E-13 | 3.6E-12 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | AROCLOR-1260 | 8.0E-11 | mg/m$^3$ | 1.3E-11 | (mg/m$^3$) | 5.7E-04 | (ug/m$^3$)$^{-1}$ | 7.5E-12 | 7.7E-11 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ANTIMONY | 5.3E-10 | mg/m$^3$ | 8.7E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.0E-10 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | ARSENIC | 2.4E-9 | mg/m$^3$ | 4.0E-10 | (mg/m$^3$) | 4.3E-03 | (ug/m$^3$)$^{-1}$ | 1.7E-09 | 2.3E-09 | (mg/m$^3$) | 1.5E-05 | (mg/m$^3$) | 0.0002 |
| | | | | CADMIUM | 4.3E-9 | mg/m$^3$ | 7.1E-10 | (mg/m$^3$) | 1.8E-03 | (ug/m$^3$)$^{-1}$ | 1.3E-09 | 4.2E-09 | (mg/m$^3$) | 1.0E-05 | (mg/m$^3$) | 0.0004 |
| | | | | COBALT | 1.3E-8 | mg/m$^3$ | 2.1E-09 | (mg/m$^3$) | 9.0E-03 | (ug/m$^3$)$^{-1}$ | 1.9E-08 | 1.2E-08 | (mg/m$^3$) | 6.0E-06 | (mg/m$^3$) | 0.002 |
| | | | | LEAD | 2.1E-8 | mg/m$^3$ | 3.5E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.0E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | MERCURY | 5.6E-10 | mg/m$^3$ | 9.2E-11 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 5.3E-10 | (mg/m$^3$) | 3.0E-05 | (mg/m$^3$) | 0.00002 |
| | | | | NICKEL | 5.0E-8 | mg/m$^3$ | 8.2E-09 | (mg/m$^3$) | 2.6E-04 | (ug/m$^3$)$^{-1}$ | 2.1E-09 | 4.8E-08 | (mg/m$^3$) | 9.0E-05 | (mg/m$^3$) | 0.0005 |
| | | | | VANADIUM | 9.8E-9 | mg/m$^3$ | 1.6E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 9.4E-09 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | DIESEL RANGE ORGANICS | 2.4E-8 | mg/m$^3$ | 3.9E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 2.3E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | mg/m$^3$ | 6.7E-09 | (mg/m$^3$) | NA | (ug/m$^3$)$^{-1}$ | - - | 3.9E-08 | (mg/m$^3$) | NA | (mg/m$^3$) | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | mg/m$^3$ | 1.8E-10 | (mg/m$^3$) | 8.4E-02 | (ug/m$^3$)$^{-1}$ | 1.5E-08 | 3.9E-10 | (mg/m$^3$) | 1.0E-04 | (mg/m$^3$) | 0.000004 |
| | | | Exp. Route Total | | | | | | | | 3.9E-08 | | | | | 0.003 |
| | | Exposure Point Total | | | | | | | | | 3.9E-08 | | | | | 0.003 |
| | Exposure Medium Total | | | | | | | | | | 3.9E-08 | | | | | 0.003 |
| Medium Total | | | | | | | | | | | 4.8E-05 | | | | | 0.5 |
| Subsurface Soil | Subsurface Soil | Block G | Ingestion | NAPHTHALENE | 0.063 | mg/kg | 2.6E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.5E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000008 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 1.4E-06 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 1.0E-05 | 3.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 5.8E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 1.2E-08 | 3.4E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 1.5E-06 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 2.2E-06 | 8.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | COBALT | 31.0 | mg/kg | 1.3E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 7.4E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | IRON | 17,200 | mg/kg | 7.1E-03 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 4.1E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.06 |
| | | | | LEAD | 8.40 | mg/kg | 3.5E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 5.1E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.9E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.002 |
| | | | | MERCURY | 0.014 | mg/kg | 5.8E-09 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.4E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0001 |
| | | | | VANADIUM | 46.3 | mg/kg | 1.9E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 8.9E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 5.4E-05 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.2E-06 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)$^{-1}$ | 6.0E-07 | 2.6E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 1.3E-05 | | | | | 0.4 |
| | | | Dermal | NAPHTHALENE | 0.063 | mg/kg | 1.0E-08 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 5.9E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 5.6E-07 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)$^{-1}$ | 4.1E-06 | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 2.4E-09 | (mg/kg/day) | 2.0E+00 | (mg/kg/day)$^{-1}$ | 4.9E-09 | 1.4E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 1.3E-07 | (mg/kg/day) | 1.5E+00 | (mg/kg/day)$^{-1}$ | 2.0E-07 | 7.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 31.0 | mg/kg | 3.9E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 2.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.007 |
| | | | | IRON | 17,200 | mg/kg | 2.1E-04 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.2E-03 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 8.40 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 8.9E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00006 |
| | | | | MERCURY | 0.014 | mg/kg | 1.7E-10 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 1.0E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00005 |
| | | | | VANADIUM | 46.3 | mg/kg | 5.8E-07 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 3.4E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0007 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day)$^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 3.6E-08 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)$^{-1}$ | 7.3E-07 | 8.0E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 5.0E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 1.8E-05 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | | | | 1.8E-05 | | | | | 0.4 |

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block G | Inhalation | NAPHTHALENE | 9.8E-7 | $mg/m^3$ | 1.6E-07 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 5.5E-09 | 9.4E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.0E-10 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.9E-10 | 3.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 4.3E-12 | $mg/m^3$ | 7.1E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 4.1E-13 | 4.2E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 7.9E-10 | 1.1E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | COBALT | 9.6E-9 | $mg/m^3$ | 1.6E-09 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.4E-08 | 9.2E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.002 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 8.8E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 2.6E-9 | $mg/m^3$ | 4.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 3.8E-8 | $mg/m^3$ | 6.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.7E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0007 |
| | | | | MERCURY | 4.3E-12 | $mg/m^3$ | 7.1E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.2E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000001 |
| | | | | VANADIUM | 1.4E-8 | $mg/m^3$ | 2.4E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.7E-9 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.4E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 6.7E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 1.5E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.3E-08 | 3.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 3.3E-08 | | | | | 0.003 |
| | | Exposure Point Total | | | | | | | | | 3.3E-08 | | | | | 0.003 |
| | Exposure Medium Total | | | | | | | | | | 3.3E-08 | | | | | 0.003 |
| Medium Total | | | | | | | | | | | 1.8E-05 | | | | | 0.4 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 8.7E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 6.3E-06 | 5.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 2.8E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 5.6E-09 | 1.6E-08 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0008 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 6.1E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 1.2E-07 | 3.6E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 4.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.006 |
| | | | | ARSENIC | 7.90 | mg/kg | 1.9E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.8E-06 | 1.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | CADMIUM | 14.0 | mg/kg | 3.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 41.2 | mg/kg | 9.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | LEAD | 68.3 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 4.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | NICKEL | 161 | mg/kg | 3.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.01 |
| | | | | VANADIUM | 31.5 | mg/kg | 7.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.009 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 1.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 3.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 3.1E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 1.8E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0006 |
| | | | Exp. Route Total | | | | | | | | 9.4E-06 | | | | | 0.3 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 3.70 | mg/kg | 4.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.3E-06 | 2.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1254 | 0.012 | mg/kg | 1.6E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.1E-09 | 9.2E-09 | (mg/kg/day) | 2.0E-05 | (mg/kg/day) | 0.0005 |
| | | | | AROCLOR-1260 | 0.260 | mg/kg | 3.4E-08 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.8E-08 | 2.0E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 1.70 | mg/kg | 1.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.3E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 7.90 | mg/kg | 2.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.3E-07 | 1.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | CADMIUM | 14.0 | mg/kg | 1.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-08 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 41.2 | mg/kg | 3.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | LEAD | 68.3 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 1.80 | mg/kg | 1.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.8E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.005 |
| | | | | NICKEL | 161 | mg/kg | 1.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.8E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.01 |
| | | | | VANADIUM | 31.5 | mg/kg | 3.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 77.4 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.30 | mg/kg | 1.2E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.4E-07 | 7.1E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 3.9E-06 | | | | | 0.03 |
| | | Exposure Point Total | | | | | | | | | 1.3E-05 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | | | | 1.3E-05 | | | | | 0.3 |

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.1E-9 | $mg/m^3$ | 1.9E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.1E-10 | 1.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1254 | 3.7E-12 | $mg/m^3$ | 6.1E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 3.5E-13 | 3.6E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 8.0E-11 | $mg/m^3$ | 1.3E-11 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 7.5E-12 | 7.7E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 5.3E-10 | $mg/m^3$ | 8.7E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.0E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 2.4E-9 | $mg/m^3$ | 4.0E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.7E-09 | 2.3E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.0002 |
| | | | | CADMIUM | 4.3E-9 | $mg/m^3$ | 7.1E-10 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 1.3E-09 | 4.2E-09 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.0004 |
| | | | | COBALT | 1.3E-8 | $mg/m^3$ | 2.1E-09 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.9E-08 | 1.2E-08 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.002 |
| | | | | LEAD | 2.1E-8 | $mg/m^3$ | 3.5E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.6E-10 | $mg/m^3$ | 9.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.3E-10 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | NICKEL | 5.0E-8 | $mg/m^3$ | 8.2E-09 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 2.1E-09 | 4.8E-08 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.0005 |
| | | | | VANADIUM | 9.8E-9 | $mg/m^3$ | 1.6E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.4E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 2.4E-8 | $mg/m^3$ | 3.9E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.3E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 6.7E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 4.0E-10 | $mg/m^3$ | 6.6E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 5.6E-09 | 3.9E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000004 |
| | | | Exp. Route Total | | | | | | | | 3.0E-08 | | | | | 0.003 |
| | | Exposure Point Total | | | | | | | | | 3.0E-08 | | | | | 0.003 |
| | Exposure Medium Total | | | | | | | | | | 3.0E-08 | | | | | 0.003 |
| Medium Total | | | | | | | | | | | 1.3E-05 | | | | | 0.3 |
| Subsurface Soil | Subsurface Soil | Block G | Ingestion | NAPHTHALENE | 0.063 | mg/kg | 1.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.6E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000004 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 3.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.2E-06 | 1.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 3.3E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 6.6E-09 | 1.9E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 8.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.3E-06 | 4.9E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 31.0 | mg/kg | 7.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | IRON | 17,200 | mg/kg | 4.0E-03 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-02 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.03 |
| | | | | LEAD | 8.40 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 2.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-04 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.001 |
| | | | | MERCURY | 0.014 | mg/kg | 3.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.00006 |
| | | | | VANADIUM | 46.3 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 5.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 3.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 2.6E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.3E-07 | 1.5E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0005 |
| | | | Exp. Route Total | | | | | | | | 3.6E-06 | | | | | 0.2 |
| | | | Dermal | NAPHTHALENE | 0.063 | mg/kg | 7.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000002 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 1.30 | mg/kg | 1.6E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.2E-06 | 9.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | AROCLOR-1260 | 0.014 | mg/kg | 1.8E-09 | (mg/kg/day) | 2.0E+00 | $(mg/kg/day)^{-1}$ | 3.7E-09 | 1.1E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ARSENIC | 3.60 | mg/kg | 1.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 5.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 31.0 | mg/kg | 2.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | IRON | 17,200 | mg/kg | 1.6E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-04 | (mg/kg/day) | 7.0E-01 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 8.40 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MANGANESE | 123 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.7E-06 | (mg/kg/day) | 1.4E-01 | (mg/kg/day) | 0.00005 |
| | | | | MERCURY | 0.014 | mg/kg | 1.3E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-10 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00004 |
| | | | | VANADIUM | 46.3 | mg/kg | 4.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 21.7 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 131 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.0E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.1E-07 | 6.0E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 1.5E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 5.1E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 5.1E-06 | | | | | 0.2 |

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK G - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Air | Block G | Inhalation | NAPHTHALENE | 9.8E-7 | $mg/m^3$ | 1.6E-07 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 5.5E-09 | 9.4E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0003 |
| | | | | BENZO(A)PYRENE EQUIVALENTS | 4.0E-10 | $mg/m^3$ | 6.6E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 7.3E-11 | 3.9E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | AROCLOR-1260 | 4.3E-12 | $mg/m^3$ | 7.1E-13 | $(mg/m^3)$ | 5.7E-04 | $(ug/m^3)^{-1}$ | 4.1E-13 | 4.2E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 7.9E-10 | 1.1E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | COBALT | 9.6E-9 | $mg/m^3$ | 1.6E-09 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.4E-08 | 9.2E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.002 |
| | | | | IRON | 5.3E-6 | $mg/m^3$ | 8.8E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | LEAD | 2.6E-9 | $mg/m^3$ | 4.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MANGANESE | 3.8E-8 | $mg/m^3$ | 6.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.7E-08 | $(mg/m^3)$ | 5.0E-05 | $(mg/m^3)$ | 0.0007 |
| | | | | MERCURY | 4.3E-12 | $mg/m^3$ | 7.1E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.2E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000001 |
| | | | | VANADIUM | 1.4E-8 | $mg/m^3$ | 2.4E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.4E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 6.7E-9 | $mg/m^3$ | 1.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.4E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 4.1E-8 | $mg/m^3$ | 6.7E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 5.6E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 4.7E-09 | 3.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 2.5E-08 | | | | | 0.003 |
| | | Exposure Point Total | | | | | | | | | 2.5E-08 | | | | | 0.003 |
| | Exposure Medium Total | | | | | | | | | | 2.5E-08 | | | | | 0.003 |
| Medium Total | | | | | | | | | | | 5.2E-06 | | | | | 0.2 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 7.9E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.8E-06 | 5.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 5.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.010 |
| | | | | ARSENIC | 3.50 | mg/kg | 2.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.5E-07 | 1.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | CADMIUM | 0.200 | mg/kg | 1.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0009 |
| | | | | COBALT | 9.30 | mg/kg | 6.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 6.80 | mg/kg | 4.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 1.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 3.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | NICKEL | 10.9 | mg/kg | 7.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.1E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 27.2 | mg/kg | 1.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 8.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 7.4E-08 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 3.7E-08 | 5.2E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 6.2E-06 | | | | | 0.1 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 2.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.5E-06 | 1.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 1.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.001 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.4E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-08 | 1.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | CADMIUM | 0.200 | mg/kg | 2.8E-11 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00008 |
| | | | | COBALT | 9.30 | mg/kg | 1.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.0E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | LEAD | 6.80 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 2.6E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0009 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 6.2E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000009 |
| | | | | NICKEL | 10.9 | mg/kg | 1.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 27.2 | mg/kg | 3.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-06 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.5E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 3.0E-08 | 1.1E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 1.6E-06 | | | | | 0.009 |
| | | Exposure Point Total | | | | | | | | | 7.8E-06 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 7.8E-06 | | | | | 0.1 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 8.3E-6 | $mg/m^3$ | 2.7E-08 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.0E-08 | 1.9E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 5.7E-7 | $mg/m^3$ | 1.9E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 2.4E-6 | $mg/m^3$ | 8.0E-09 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.4E-08 | 5.6E-07 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.04 |
| | | | | CADMIUM | 1.4E-7 | $mg/m^3$ | 4.6E-10 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 8.2E-10 | 3.2E-08 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.003 |
| | | | | COBALT | 6.5E-6 | $mg/m^3$ | 2.1E-08 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.9E-07 | 1.5E-06 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.2 |
| | | | | LEAD | 4.8E-6 | $mg/m^3$ | 1.6E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 1.3E-7 | $mg/m^3$ | 4.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.0E-08 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.001 |
| | | | | MOLYBDENUM | 3.1E-7 | $mg/m^3$ | 1.0E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 7.6E-6 | $mg/m^3$ | 2.5E-08 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 6.5E-09 | 1.7E-06 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.02 |
| | | | | VANADIUM | 1.9E-5 | $mg/m^3$ | 6.2E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.3E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 1.7E-4 | $mg/m^3$ | 5.5E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-05 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 8.4E-6 | $mg/m^3$ | 2.7E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 7.7E-7 | $mg/m^3$ | 2.5E-09 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.1E-07 | 1.8E-07 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.002 |
| | | | Exp. Route Total | | | | | | | | 4.7E-07 | | | | | 0.3 |
| | | Exposure Point Total | | | | | | | | | 4.7E-07 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | | | | 4.7E-07 | | | | | 0.3 |
| Medium Total | | | | | | | | | | | 8.2E-06 | | | | | 0.4 |

TABLE 7.1.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 1.7E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.2E-07 | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 1.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00004 |
| | | | | ARSENIC | 3.60 | mg/kg | 2.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.6E-07 | 1.7E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | COBALT | 12.9 | mg/kg | 8.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 7.20 | mg/kg | 4.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 2.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 38.1 | mg/kg | 2.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-04 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 8.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 1.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 1.2E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 6.0E-08 | 8.5E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.003 |
| | | | Exp. Route Total | | | | | | | | 5.5E-07 | | | | | 0.10 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 4.5E-09 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.3E-08 | 3.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 2.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000009 |
| | | | | ARSENIC | 3.60 | mg/kg | 1.5E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-08 | 1.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 12.9 | mg/kg | 1.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | LEAD | 7.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 4.3E-11 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0001 |
| | | | | VANADIUM | 38.1 | mg/kg | 5.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-06 | (mg/kg/day) | 1.0E-02 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 2.5E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 5.0E-08 | 1.7E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.0E-07 | | | | | 0.007 |
| | | Exposure Point Total | | | | | | | | | 6.5E-07 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 6.5E-07 | | | | | 0.1 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 1.7E-7 | $mg/m^3$ | 5.7E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 6.3E-10 | 4.0E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 1.5E-5 | $mg/m^3$ | 4.8E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.6E-09 | 3.3E-06 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.001 |
| | | | | ARSENIC | 2.5E-6 | $mg/m^3$ | 8.2E-09 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.5E-08 | 5.7E-07 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.04 |
| | | | | COBALT | 9.0E-6 | $mg/m^3$ | 2.9E-08 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.6E-07 | 2.1E-06 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.3 |
| | | | | LEAD | 5.0E-6 | $mg/m^3$ | 1.6E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 2.2E-8 | $mg/m^3$ | 7.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.9E-09 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0002 |
| | | | | VANADIUM | 2.7E-5 | $mg/m^3$ | 8.7E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 6.1E-06 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 9.1E-5 | $mg/m^3$ | 3.0E-07 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.1E-05 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 1.8E-6 | $mg/m^3$ | 5.9E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.2E-07 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 1.3E-6 | $mg/m^3$ | 4.1E-09 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.4E-07 | 2.9E-07 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.003 |
| | | | Exp. Route Total | | | | | | | | 6.5E-07 | | | | | 0.4 |
| | | Exposure Point Total | | | | | | | | | 6.5E-07 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | | | | 6.5E-07 | | | | | 0.4 |
| Medium Total | | | | | | | | | | | 1.3E-06 | | | | | 0.5 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 2.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.5E-05 | 5.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.001 |
| | | | | ARSENIC | 3.50 | mg/kg | 6.1E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.2E-07 | 1.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | CADMIUM | 0.200 | mg/kg | 3.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.8E-08 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.00010 |
| | | | | COBALT | 9.30 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 6.80 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 3.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.3E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0003 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 7.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00004 |
| | | | | NICKEL | 10.9 | mg/kg | 1.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | VANADIUM | 27.2 | mg/kg | 4.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 4.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.9E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 9.6E-08 | 5.4E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 1.6E-05 | | | | | 0.03 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 3.5E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.6E-05 | 9.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0009 |
| | | | | ARSENIC | 3.50 | mg/kg | 2.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.6E-07 | 6.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 0.200 | mg/kg | 4.6E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00005 |
| | | | | COBALT | 9.30 | mg/kg | 2.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 6.80 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 4.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0006 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000006 |
| | | | | NICKEL | 10.9 | mg/kg | 2.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 27.2 | mg/kg | 6.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 2.5E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 5.1E-07 | 7.1E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 2.7E-05 | | | | | 0.008 |
| | | Exposure Point Total | | | | | | | | | 4.3E-05 | | | | | 0.03 |
| | Exposure Medium Total | | | | | | | | | | 4.3E-05 | | | | | 0.03 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 3.7E-9 | $mg/m^3$ | 3.0E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.3E-10 | 8.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 2.5E-10 | $mg/m^3$ | 2.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 8.8E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.8E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | CADMIUM | 6.2E-11 | $mg/m^3$ | 5.0E-12 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 9.1E-12 | 1.4E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000001 |
| | | | | COBALT | 2.9E-9 | $mg/m^3$ | 2.3E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.1E-09 | 6.6E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | LEAD | 2.1E-9 | $mg/m^3$ | 1.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.9E-11 | $mg/m^3$ | 4.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000004 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 2.8E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 7.2E-11 | 7.7E-10 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.000009 |
| | | | | VANADIUM | 8.4E-9 | $mg/m^3$ | 6.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.5E-8 | $mg/m^3$ | 6.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.7E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-9 | $mg/m^3$ | 3.0E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 2.8E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.3E-09 | 7.8E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000008 |
| | | | Exp. Route Total | | | | | | | | 5.2E-09 | | | | | 0.0001 |
| | | Exposure Point Total | | | | | | | | | 5.2E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | | | | 5.2E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | | | | 4.3E-05 | | | | | 0.03 |

TABLE 7.2.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 4.4E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.2E-07 | 1.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 2.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.3E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000004 |
| | | | | ARSENIC | 3.60 | mg/kg | 6.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.4E-07 | 1.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | COBALT | 12.9 | mg/kg | 2.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 7.20 | mg/kg | 1.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 5.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.00005 |
| | | | | VANADIUM | 38.1 | mg/kg | 6.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.004 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 2.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 4.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 3.1E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.6E-07 | 8.8E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0003 |
| | | | Exp. Route Total | | | | | | | | 1.4E-06 | | | | | 0.03 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 7.5E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.5E-07 | 2.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 4.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000006 |
| | | | | ARSENIC | 3.60 | mg/kg | 2.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.7E-07 | 7.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 12.9 | mg/kg | 3.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 7.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 7.1E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00010 |
| | | | | VANADIUM | 38.1 | mg/kg | 8.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 4.2E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 8.3E-07 | 1.2E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.8E-06 | | | | | 0.007 |
| | | Exposure Point Total | | | | | | | | | 3.2E-06 | | | | | 0.04 |
| | Exposure Medium Total | | | | | | | | | | 3.2E-06 | | | | | 0.04 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 7.7E-11 | $mg/m^3$ | 6.3E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 6.9E-12 | 1.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 2.3E-6 | $mg/m^3$ | 1.9E-07 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 6.5E-09 | 5.3E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0002 |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 9.1E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.9E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 4.0E-9 | $mg/m^3$ | 3.3E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.9E-09 | 9.1E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0002 |
| | | | | LEAD | 2.2E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 9.6E-12 | $mg/m^3$ | 7.8E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00000007 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 9.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 4.0E-8 | $mg/m^3$ | 3.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 8.0E-10 | $mg/m^3$ | 6.6E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 5.6E-10 | $mg/m^3$ | 4.5E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.8E-09 | 1.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000001 |
| | | | Exp. Route Total | | | | | | | | 1.4E-08 | | | | | 0.0003 |
| | | Exposure Point Total | | | | | | | | | 1.4E-08 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | | | | 1.4E-08 | | | | | 0.0003 |
| Medium Total | | | | | | | | | | | 3.2E-06 | | | | | 0.04 |
| | | | | | | | | | | Total of Receptor Risks Across All Media | 4.6E-05 | | | Total of Receptor Hazards Across All Media | | 0.07 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 2.6E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.9E-04 | 5.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 3.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.010 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.4E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-06 | 1.7E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | CADMIUM | 0.200 | mg/kg | 8.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.6E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0010 |
| | | | | COBALT | 9.30 | mg/kg | 3.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 6.80 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 7.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | NICKEL | 10.9 | mg/kg | 4.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 27.2 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.03 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 1.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 5.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 2.4E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.2E-06 | 5.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.9E-04 | | | | | 0.3 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 7.9E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.8E-05 | 1.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 8.0E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.3E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | CADMIUM | 0.200 | mg/kg | 1.9E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00009 |
| | | | | COBALT | 9.30 | mg/kg | 9.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | LEAD | 6.80 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 1.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.001 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 4.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.1E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00001 |
| | | | | NICKEL | 10.9 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.002 |
| | | | | VANADIUM | 27.2 | mg/kg | 2.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0006 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 5.7E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.1E-06 | 1.2E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 5.9E-05 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 2.5E-04 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | | | | 2.5E-04 | | | | | 0.3 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 3.7E-9 | $mg/m^3$ | 1.0E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.1E-10 | 2.2E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 2.5E-10 | $mg/m^3$ | 1.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 5.6E-12 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.4E-11 | 6.5E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000004 |
| | | | | CADMIUM | 6.2E-11 | $mg/m^3$ | 3.2E-13 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 5.8E-13 | 3.7E-12 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.0000004 |
| | | | | COBALT | 2.9E-9 | $mg/m^3$ | 1.5E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.3E-10 | 1.7E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00003 |
| | | | | LEAD | 2.1E-9 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.9E-11 | $mg/m^3$ | 3.0E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.5E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000001 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 7.2E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.4E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 1.7E-11 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 4.5E-12 | 2.0E-10 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | VANADIUM | 8.4E-9 | $mg/m^3$ | 4.4E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.5E-8 | $mg/m^3$ | 3.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-9 | $mg/m^3$ | 1.9E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 9.4E-12 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 7.9E-10 | 2.1E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000002 |
| | | | Exp. Route Total | | | | | | | | 1.1E-09 | | | | | 0.00004 |
| | | Exposure Point Total | | | | | | | | | 1.1E-09 | | | | | 0.00004 |
| | Exposure Medium Total | | | | | | | | | | 1.1E-09 | | | | | 0.00004 |
| Medium Total | | | | | | | | | | | 2.5E-04 | | | | | 0.3 |

TABLE 7.3.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 5.5E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.0E-06 | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 6.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.2E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00004 |
| | | | | ARSENIC | 3.60 | mg/kg | 1.5E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-06 | 1.7E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | COBALT | 12.9 | mg/kg | 5.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | LEAD | 7.20 | mg/kg | 3.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 1.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 38.1 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.04 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 5.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.3E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 4.0E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.0E-06 | 8.7E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.003 |
| | | | Exp. Route Total | | | | | | | | 8.2E-06 | | | | | 0.3 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 1.7E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.2E-06 | 3.7E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00001 |
| | | | | ARSENIC | 3.60 | mg/kg | 1.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.6E-07 | 1.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.004 |
| | | | | COBALT | 12.9 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.005 |
| | | | | LEAD | 7.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 3.0E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0002 |
| | | | | VANADIUM | 38.1 | mg/kg | 3.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0009 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 9.3E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.9E-06 | 2.0E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.003 |
| | | | Exp. Route Total | | | | | | | | 3.3E-06 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 1.1E-05 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | | | | 1.1E-05 | | | | | 0.3 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 7.7E-11 | $mg/m^3$ | 2.1E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.3E-12 | 4.7E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 2.3E-6 | $mg/m^3$ | 1.2E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 4.1E-10 | 1.4E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00005 |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 5.8E-12 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 2.5E-11 | 6.7E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000004 |
| | | | | COBALT | 4.0E-9 | $mg/m^3$ | 2.1E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.9E-10 | 2.4E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00004 |
| | | | | LEAD | 2.2E-9 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 9.6E-12 | $mg/m^3$ | 5.0E-14 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.8E-13 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00000002 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 6.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 4.0E-8 | $mg/m^3$ | 2.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 8.0E-10 | $mg/m^3$ | 4.2E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.9E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 5.6E-10 | $mg/m^3$ | 1.5E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.3E-09 | 3.4E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000003 |
| | | | Exp. Route Total | | | | | | | | 1.9E-09 | | | | | 0.00009 |
| | | Exposure Point Total | | | | | | | | | 1.9E-09 | | | | | 0.00009 |
| | Exposure Medium Total | | | | | | | | | | 1.9E-09 | | | | | 0.00009 |
| Medium Total | | | | | | | | | | | 1.1E-05 | | | | | 0.3 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 4.9E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.6E-05 | 1.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.4E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.50 | mg/kg | 5.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.1E-07 | 3.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 0.200 | mg/kg | 3.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | COBALT | 9.30 | mg/kg | 1.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | LEAD | 6.80 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.1E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 2.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0006 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 7.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00008 |
| | | | | NICKEL | 10.9 | mg/kg | 1.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.9E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 27.2 | mg/kg | 4.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.005 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 3.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 1.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 4.5E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.3E-07 | 9.9E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0003 |
| | | | Exp. Route Total | | | | | | | | 3.7E-05 | | | | | 0.05 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 5.5E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.0E-05 | 1.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 1.1E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.001 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.1E-07 | 8.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | CADMIUM | 0.200 | mg/kg | 2.7E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00006 |
| | | | | COBALT | 9.30 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 6.80 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 2.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0007 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 6.0E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000007 |
| | | | | NICKEL | 10.9 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.5E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 27.2 | mg/kg | 3.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 3.9E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 7.9E-07 | 8.6E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 4.1E-05 | | | | | 0.010 |
| | | Exposure Point Total | | | | | | | | | 7.8E-05 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | | | | 7.8E-05 | | | | | 0.06 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 3.7E-9 | $mg/m^3$ | 1.0E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.1E-10 | 2.2E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 2.5E-10 | $mg/m^3$ | 2.6E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.5E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 4.8E-11 | 6.5E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000004 |
| | | | | CADMIUM | 6.2E-11 | $mg/m^3$ | 6.4E-13 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 1.2E-12 | 3.7E-12 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.0000004 |
| | | | | COBALT | 2.9E-9 | $mg/m^3$ | 3.0E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.7E-10 | 1.7E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00003 |
| | | | | LEAD | 2.1E-9 | $mg/m^3$ | 2.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.9E-11 | $mg/m^3$ | 6.1E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.5E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000001 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 1.4E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.4E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 3.5E-11 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 9.1E-12 | 2.0E-10 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | VANADIUM | 8.4E-9 | $mg/m^3$ | 8.7E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.5E-8 | $mg/m^3$ | 7.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-9 | $mg/m^3$ | 3.8E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 9.4E-12 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 7.9E-10 | 2.1E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000002 |
| | | | Exp. Route Total | | | | | | | | 1.2E-09 | | | | | 0.00004 |
| | | Exposure Point Total | | | | | | | | | 1.2E-09 | | | | | 0.00004 |
| | Exposure Medium Total | | | | | | | | | | 1.2E-09 | | | | | 0.00004 |
| Medium Total | | | | | | | | | | | 7.8E-05 | | | | | 0.06 |

TABLE 7.4.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 1.0E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 7.5E-07 | 2.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 2.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000007 |
| | | | | ARSENIC | 3.60 | mg/kg | 5.6E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.4E-07 | 3.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 12.9 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | LEAD | 7.20 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 4.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.00009 |
| | | | | VANADIUM | 38.1 | mg/kg | 5.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.007 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 2.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 4.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 7.4E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 3.7E-07 | 1.6E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0005 |
| | | | Exp. Route Total | | | | | | | | 2.0E-06 | | | | | 0.06 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 1.2E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 8.5E-07 | 2.5E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 2.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000008 |
| | | | | ARSENIC | 3.60 | mg/kg | 1.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-07 | 8.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 12.9 | mg/kg | 1.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 7.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 4.2E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0001 |
| | | | | VANADIUM | 38.1 | mg/kg | 5.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0006 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 6.4E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.3E-06 | 1.4E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 2.3E-06 | | | | | 0.009 |
| | | Exposure Point Total | | | | | | | | | 4.3E-06 | | | | | 0.07 |
| | Exposure Medium Total | | | | | | | | | | 4.3E-06 | | | | | 0.07 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 7.7E-11 | $mg/m^3$ | 2.1E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 2.3E-12 | 4.7E-12 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 2.3E-6 | $mg/m^3$ | 2.4E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 8.2E-10 | 1.4E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.00005 |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 1.2E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 5.0E-11 | 6.7E-11 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.000004 |
| | | | | COBALT | 4.0E-9 | $mg/m^3$ | 4.1E-11 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 3.7E-10 | 2.4E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.00004 |
| | | | | LEAD | 2.2E-9 | $mg/m^3$ | 2.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 9.6E-12 | $mg/m^3$ | 9.9E-14 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.8E-13 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00000002 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 1.2E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 4.0E-8 | $mg/m^3$ | 4.2E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 8.0E-10 | $mg/m^3$ | 8.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.9E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 5.6E-10 | $mg/m^3$ | 1.5E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.3E-09 | 3.4E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000003 |
| | | | Exp. Route Total | | | | | | | | 2.5E-09 | | | | | 0.00009 |
| | | Exposure Point Total | | | | | | | | | 2.5E-09 | | | | | 0.00009 |
| | Exposure Medium Total | | | | | | | | | | 2.5E-09 | | | | | 0.00009 |
| Medium Total | | | | | | | | | | | 4.3E-06 | | | | | 0.07 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 2.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.5E-05 | 5.8E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.001 |
| | | | | ARSENIC | 3.50 | mg/kg | 6.1E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.2E-07 | 1.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | CADMIUM | 0.200 | mg/kg | 3.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.8E-08 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.00010 |
| | | | | COBALT | 9.30 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 6.80 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 3.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.3E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0003 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 7.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00004 |
| | | | | NICKEL | 10.9 | mg/kg | 1.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0003 |
| | | | | VANADIUM | 27.2 | mg/kg | 4.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 4.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.9E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 9.6E-08 | 5.4E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 1.6E-05 | | | | | 0.03 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 3.5E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.6E-05 | 9.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0009 |
| | | | | ARSENIC | 3.50 | mg/kg | 2.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.6E-07 | 6.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 0.200 | mg/kg | 4.6E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00005 |
| | | | | COBALT | 9.30 | mg/kg | 2.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 6.80 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 4.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0006 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000006 |
| | | | | NICKEL | 10.9 | mg/kg | 2.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 27.2 | mg/kg | 6.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 2.5E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 5.1E-07 | 7.1E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 2.7E-05 | | | | | 0.008 |
| | | Exposure Point Total | | | | | | | | | 4.3E-05 | | | | | 0.03 |
| | Exposure Medium Total | | | | | | | | | | 4.3E-05 | | | | | 0.03 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 3.7E-9 | $mg/m^3$ | 3.0E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.3E-10 | 8.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 2.5E-10 | $mg/m^3$ | 2.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 8.8E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.8E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | CADMIUM | 6.2E-11 | $mg/m^3$ | 5.0E-12 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 9.1E-12 | 1.4E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000001 |
| | | | | COBALT | 2.9E-9 | $mg/m^3$ | 2.3E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.1E-09 | 6.6E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | LEAD | 2.1E-9 | $mg/m^3$ | 1.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.9E-11 | $mg/m^3$ | 4.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000004 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 2.8E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 7.2E-11 | 7.7E-10 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.000009 |
| | | | | VANADIUM | 8.4E-9 | $mg/m^3$ | 6.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.5E-8 | $mg/m^3$ | 6.1E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.7E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-9 | $mg/m^3$ | 3.0E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 2.8E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.3E-09 | 7.8E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000008 |
| | | | Exp. Route Total | | | | | | | | 5.2E-09 | | | | | 0.0001 |
| | | Exposure Point Total | | | | | | | | | 5.2E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | | | | 5.2E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | | | | 4.3E-05 | | | | | 0.03 |

TABLE 7.5.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 4.4E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.2E-07 | 1.2E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 2.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.3E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000004 |
| | | | | ARSENIC | 3.60 | mg/kg | 6.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.4E-07 | 1.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | COBALT | 12.9 | mg/kg | 2.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 7.20 | mg/kg | 1.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 5.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.00005 |
| | | | | VANADIUM | 38.1 | mg/kg | 6.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.004 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 2.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 4.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 3.1E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.6E-07 | 8.8E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0003 |
| | | | Exp. Route Total | | | | | | | | 1.4E-06 | | | | | 0.03 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 7.5E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.5E-07 | 2.1E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 4.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000006 |
| | | | | ARSENIC | 3.60 | mg/kg | 2.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.7E-07 | 7.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 12.9 | mg/kg | 3.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 7.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 7.1E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00010 |
| | | | | VANADIUM | 38.1 | mg/kg | 8.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 4.2E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 8.3E-07 | 1.2E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 1.8E-06 | | | | | 0.007 |
| | | Exposure Point Total | | | | | | | | | 3.2E-06 | | | | | 0.04 |
| | Exposure Medium Total | | | | | | | | | | 3.2E-06 | | | | | 0.04 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 7.7E-11 | $mg/m^3$ | 6.3E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 6.9E-12 | 1.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 2.3E-6 | $mg/m^3$ | 1.9E-07 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 6.5E-09 | 5.3E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0002 |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 9.1E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.9E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 4.0E-9 | $mg/m^3$ | 3.3E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.9E-09 | 9.1E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0002 |
| | | | | LEAD | 2.2E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 9.6E-12 | $mg/m^3$ | 7.8E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00000007 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 9.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 4.0E-8 | $mg/m^3$ | 3.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 8.0E-10 | $mg/m^3$ | 6.6E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 5.6E-10 | $mg/m^3$ | 4.5E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.8E-09 | 1.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000001 |
| | | | Exp. Route Total | | | | | | | | 1.4E-08 | | | | | 0.0003 |
| | | Exposure Point Total | | | | | | | | | 1.4E-08 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | | | | 1.4E-08 | | | | | 0.0003 |
| Medium Total | | | | | | | | | | | 3.2E-06 | | | | | 0.04 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 4.9E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.6E-04 | 1.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 6.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.5E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.02 |
| | | | | ARSENIC | 3.50 | mg/kg | 2.7E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.1E-06 | 3.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | CADMIUM | 0.200 | mg/kg | 1.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 9.30 | mg/kg | 7.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.5E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.3 |
| | | | | LEAD | 6.80 | mg/kg | 5.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 1.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.006 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 3.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0008 |
| | | | | NICKEL | 10.9 | mg/kg | 8.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.005 |
| | | | | VANADIUM | 27.2 | mg/kg | 2.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.05 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 1.9E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 9.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 4.6E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.3E-06 | 1.0E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.003 |
| | | | Exp. Route Total | | | | | | | | 3.7E-04 | | | | | 0.5 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 1.8E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.3E-04 | 3.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 1.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.003 |
| | | | | ARSENIC | 3.50 | mg/kg | 2.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.5E-07 | 2.7E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.009 |
| | | | | CADMIUM | 0.200 | mg/kg | 4.4E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.1E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0002 |
| | | | | COBALT | 9.30 | mg/kg | 2.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | LEAD | 6.80 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 4.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.9E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.002 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 9.9E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00002 |
| | | | | NICKEL | 10.9 | mg/kg | 2.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.003 |
| | | | | VANADIUM | 27.2 | mg/kg | 6.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.001 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.3E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.6E-06 | 2.8E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.004 |
| | | | Exp. Route Total | | | | | | | | 1.3E-04 | | | | | 0.03 |
| | | Exposure Point Total | | | | | | | | | 5.0E-04 | | | | | 0.5 |
| | Exposure Medium Total | | | | | | | | | | 5.0E-04 | | | | | 0.5 |
| | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 3.7E-9 | $mg/m^3$ | 1.6E-09 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.8E-09 | 3.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 2.5E-10 | $mg/m^3$ | 2.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 8.9E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.8E-10 | 1.0E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | CADMIUM | 6.2E-11 | $mg/m^3$ | 5.1E-12 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 9.2E-12 | 5.9E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000006 |
| | | | | COBALT | 2.9E-9 | $mg/m^3$ | 2.4E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.1E-09 | 2.8E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0005 |
| | | | | LEAD | 2.1E-9 | $mg/m^3$ | 1.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.9E-11 | $mg/m^3$ | 4.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.6E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 2.8E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 7.2E-11 | 3.2E-09 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | VANADIUM | 8.4E-9 | $mg/m^3$ | 6.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.5E-8 | $mg/m^3$ | 6.2E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-9 | $mg/m^3$ | 3.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 1.5E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.3E-08 | 3.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 1.7E-08 | | | | | 0.0006 |
| | | Exposure Point Total | | | | | | | | | 1.7E-08 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | | | | 1.7E-08 | | | | | 0.0006 |
| Medium Total | | | | | | | | | | | 5.0E-04 | | | | | 0.5 |

TABLE 7.6.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block G | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 1.0E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 7.6E-06 | 2.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00007 |
| | | | | ARSENIC | 3.60 | mg/kg | 2.8E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.2E-06 | 3.3E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | COBALT | 12.9 | mg/kg | 1.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.4 |
| | | | | LEAD | 7.20 | mg/kg | 5.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.6E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 2.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 38.1 | mg/kg | 3.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.07 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 1.0E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 7.5E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 3.8E-06 | 1.6E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.005 |
| | | | Exp. Route Total | | | | | | | | 1.6E-05 | | | | | 0.6 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 3.8E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.8E-06 | 8.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 4.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.0E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00002 |
| | | | | ARSENIC | 3.60 | mg/kg | 2.4E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 3.6E-07 | 2.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.009 |
| | | | | COBALT | 12.9 | mg/kg | 2.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 7.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 6.8E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0004 |
| | | | | VANADIUM | 38.1 | mg/kg | 8.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.7E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 2.1E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 4.2E-06 | 4.6E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.006 |
| | | | Exp. Route Total | | | | | | | | 7.3E-06 | | | | | 0.03 |
| | | Exposure Point Total | | | | | | | | | 2.3E-05 | | | | | 0.6 |
| | Exposure Medium Total | | | | | | | | | | 2.3E-05 | | | | | 0.6 |
| | Air | Block G | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 7.7E-11 | $mg/m^3$ | 3.4E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.7E-11 | 7.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 2.3E-6 | $mg/m^3$ | 1.9E-07 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 6.5E-09 | 2.2E-06 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0007 |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 9.2E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.9E-10 | 1.1E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | COBALT | 4.0E-9 | $mg/m^3$ | 3.3E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 3.0E-09 | 3.8E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0006 |
| | | | | LEAD | 2.2E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 9.6E-12 | $mg/m^3$ | 7.9E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.2E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000003 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 9.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 4.0E-8 | $mg/m^3$ | 3.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 8.0E-10 | $mg/m^3$ | 6.6E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.7E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 5.6E-10 | $mg/m^3$ | 2.4E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.1E-08 | 5.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000005 |
| | | | Exp. Route Total | | | | | | | | 3.0E-08 | | | | | 0.001 |
| | | Exposure Point Total | | | | | | | | | 3.0E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | | | | 3.0E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | | | | 2.3E-05 | | | | | 0.6 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 9.2E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 6.7E-05 | 2.0E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 2.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.004 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.0E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.5E-06 | 6.0E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | CADMIUM | 0.200 | mg/kg | 5.9E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.4E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | COBALT | 9.30 | mg/kg | 2.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.05 |
| | | | | LEAD | 6.80 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 5.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.7E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | NICKEL | 10.9 | mg/kg | 3.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0009 |
| | | | | VANADIUM | 27.2 | mg/kg | 8.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.7E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.009 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 7.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 3.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 8.6E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 4.3E-07 | 1.9E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0006 |
| | | | Exp. Route Total | | | | | | | | 6.9E-05 | | | | | 0.09 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 3.6E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.7E-05 | 7.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 7.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0007 |
| | | | | ARSENIC | 3.50 | mg/kg | 9.3E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.4E-07 | 5.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 0.200 | mg/kg | 1.8E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00004 |
| | | | | COBALT | 9.30 | mg/kg | 8.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 6.80 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 1.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.8E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0005 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 4.0E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.3E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000005 |
| | | | | NICKEL | 10.9 | mg/kg | 9.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.6E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 27.2 | mg/kg | 2.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 2.6E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 5.2E-07 | 5.7E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 2.7E-05 | | | | | 0.006 |
| | | Exposure Point Total | | | | | | | | | 9.7E-05 | | | | | 0.10 |
| | Exposure Medium Total | | | | | | | | | | 9.7E-05 | | | | | 0.10 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 3.7E-9 | $mg/m^3$ | 3.8E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 4.2E-10 | 8.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 2.5E-10 | $mg/m^3$ | 9.9E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 4.2E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.8E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | CADMIUM | 6.2E-11 | $mg/m^3$ | 2.4E-12 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 4.4E-12 | 1.4E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000001 |
| | | | | COBALT | 2.9E-9 | $mg/m^3$ | 1.1E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.0E-09 | 6.6E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | LEAD | 2.1E-9 | $mg/m^3$ | 8.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.9E-11 | $mg/m^3$ | 2.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000004 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 5.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 3.4E-11 | 7.7E-10 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.000009 |
| | | | | VANADIUM | 8.4E-9 | $mg/m^3$ | 3.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.5E-8 | $mg/m^3$ | 2.9E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.7E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-9 | $mg/m^3$ | 1.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 3.6E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 3.0E-09 | 7.8E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000008 |
| | | | Exp. Route Total | | | | | | | | 4.6E-09 | | | | | 0.0001 |
| | | Exposure Point Total | | | | | | | | | 4.6E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | | | | 4.6E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | | | | 9.7E-05 | | | | | 0.10 |

TABLE 7.7.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 2.0E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.4E-06 | 4.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 4.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00001 |
| | | | | ARSENIC | 3.60 | mg/kg | 1.1E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.6E-06 | 6.2E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 12.9 | mg/kg | 3.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.07 |
| | | | | LEAD | 7.20 | mg/kg | 2.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 9.1E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.3E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0002 |
| | | | | VANADIUM | 38.1 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.5E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 3.8E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 7.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 1.4E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 7.0E-07 | 3.1E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 3.7E-06 | | | | | 0.1 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 7.7E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.6E-07 | 1.7E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 1.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000005 |
| | | | | ARSENIC | 3.60 | mg/kg | 9.6E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.4E-07 | 5.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 12.9 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.7E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 7.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 2.8E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00008 |
| | | | | VANADIUM | 38.1 | mg/kg | 3.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 4.3E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 8.5E-07 | 9.3E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 1.6E-06 | | | | | 0.006 |
| | | Exposure Point Total | | | | | | | | | 5.3E-06 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 5.3E-06 | | | | | 0.1 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 7.7E-11 | $mg/m^3$ | 8.1E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 8.9E-12 | 1.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 2.3E-6 | $mg/m^3$ | 9.2E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 3.1E-09 | 5.3E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0002 |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 4.4E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.9E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 4.0E-9 | $mg/m^3$ | 1.6E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.4E-09 | 9.1E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0002 |
| | | | | LEAD | 2.2E-9 | $mg/m^3$ | 8.7E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 9.6E-12 | $mg/m^3$ | 3.8E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00000007 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 4.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 4.0E-8 | $mg/m^3$ | 1.6E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 8.0E-10 | $mg/m^3$ | 3.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 5.6E-10 | $mg/m^3$ | 5.8E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 4.9E-09 | 1.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000001 |
| | | | Exp. Route Total | | | | | | | | 9.6E-09 | | | | | 0.0003 |
| | | Exposure Point Total | | | | | | | | | 9.6E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | | | | 9.6E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | | | | 5.3E-06 | | | | | 0.1 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 2.0E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.4E-05 | 1.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.0E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.002 |
| | | | | ARSENIC | 3.50 | mg/kg | 5.9E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 8.8E-07 | 3.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 0.200 | mg/kg | 3.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | COBALT | 9.30 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.1E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | LEAD | 6.80 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.7E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 3.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0006 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 7.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.4E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00009 |
| | | | | NICKEL | 10.9 | mg/kg | 1.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 27.2 | mg/kg | 4.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.005 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 4.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 2.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.8E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 9.2E-08 | 1.1E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0004 |
| | | | Exp. Route Total | | | | | | | | 1.5E-05 | | | | | 0.05 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 1.0E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 7.5E-06 | 6.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 5.5E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.2E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0005 |
| | | | | ARSENIC | 3.50 | mg/kg | 7.0E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.1E-07 | 4.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | CADMIUM | 0.200 | mg/kg | 1.3E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.8E-10 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00003 |
| | | | | COBALT | 9.30 | mg/kg | 6.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | LEAD | 6.80 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 1.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.4E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0004 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 3.0E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000004 |
| | | | | NICKEL | 10.9 | mg/kg | 7.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.3E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 27.2 | mg/kg | 1.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 7.4E-09 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 4.3E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0006 |
| | | | Exp. Route Total | | | | | | | | 7.7E-06 | | | | | 0.005 |
| | | Exposure Point Total | | | | | | | | | 2.3E-05 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | | | | 2.3E-05 | | | | | 0.06 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 3.7E-9 | $mg/m^3$ | 1.4E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.6E-10 | 8.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 2.5E-10 | $mg/m^3$ | 9.9E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 4.2E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.8E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | CADMIUM | 6.2E-11 | $mg/m^3$ | 2.4E-12 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 4.4E-12 | 1.4E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000001 |
| | | | | COBALT | 2.9E-9 | $mg/m^3$ | 1.1E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.0E-09 | 6.6E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0001 |
| | | | | LEAD | 2.1E-9 | $mg/m^3$ | 8.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 4.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.9E-11 | $mg/m^3$ | 2.3E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000004 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 5.5E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.2E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 3.4E-11 | 7.7E-10 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.000009 |
| | | | | VANADIUM | 8.4E-9 | $mg/m^3$ | 3.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.9E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.5E-8 | $mg/m^3$ | 2.9E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.7E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-9 | $mg/m^3$ | 1.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.5E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 1.3E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.1E-09 | 7.8E-11 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.0000008 |
| | | | Exp. Route Total | | | | | | | | 2.5E-09 | | | | | 0.0001 |
| | | Exposure Point Total | | | | | | | | | 2.5E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | | | | 2.5E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | | | | 2.3E-05 | | | | | 0.06 |

TABLE 7.8.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 4.2E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.1E-07 | 2.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 2.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000007 |
| | | | | ARSENIC | 3.60 | mg/kg | 6.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 9.1E-07 | 3.5E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 12.9 | mg/kg | 2.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | LEAD | 7.20 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 5.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.0E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0001 |
| | | | | VANADIUM | 38.1 | mg/kg | 6.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.007 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 2.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 4.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 3.0E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 1.8E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0006 |
| | | | Exp. Route Total | | | | | | | | 1.4E-06 | | | | | 0.06 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 2.2E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.6E-07 | 1.3E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 1.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.6E-08 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000004 |
| | | | | ARSENIC | 3.60 | mg/kg | 7.2E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.1E-07 | 4.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | COBALT | 12.9 | mg/kg | 8.6E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 7.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 2.1E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00006 |
| | | | | VANADIUM | 38.1 | mg/kg | 2.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 1.2E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.4E-07 | 7.0E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 5.1E-07 | | | | | 0.004 |
| | | Exposure Point Total | | | | | | | | | 1.9E-06 | | | | | 0.07 |
| | Exposure Medium Total | | | | | | | | | | 1.9E-06 | | | | | 0.07 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 7.7E-11 | $mg/m^3$ | 3.0E-12 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.3E-12 | 1.8E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 2.3E-6 | $mg/m^3$ | 9.2E-08 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 3.1E-09 | 5.3E-07 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0002 |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 4.4E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 1.9E-10 | 2.5E-10 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00002 |
| | | | | COBALT | 4.0E-9 | $mg/m^3$ | 1.6E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 1.4E-09 | 9.1E-10 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0002 |
| | | | | LEAD | 2.2E-9 | $mg/m^3$ | 8.7E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.1E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 9.6E-12 | $mg/m^3$ | 3.8E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.2E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.00000007 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 4.6E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.7E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 4.0E-8 | $mg/m^3$ | 1.6E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.2E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 8.0E-10 | $mg/m^3$ | 3.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.8E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 5.6E-10 | $mg/m^3$ | 2.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.8E-09 | 1.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000001 |
| | | | Exp. Route Total | | | | | | | | 6.5E-09 | | | | | 0.0003 |
| | | Exposure Point Total | | | | | | | | | 6.5E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | | | | 6.5E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | | | | 1.9E-06 | | | | | 0.07 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 6.9E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 5.0E-04 | 1.5E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 9.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-05 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.03 |
| | | | | ARSENIC | 3.50 | mg/kg | 3.8E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 5.8E-06 | 4.5E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | CADMIUM | 0.200 | mg/kg | 2.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-06 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 9.30 | mg/kg | 1.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.2E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.4 |
| | | | | LEAD | 6.80 | mg/kg | 7.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 8.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 2.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.008 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 4.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.001 |
| | | | | NICKEL | 10.9 | mg/kg | 1.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-04 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.007 |
| | | | | VANADIUM | 27.2 | mg/kg | 3.0E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.5E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.07 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 2.7E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 1.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 6.4E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 3.2E-06 | 1.4E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.005 |
| | | | Exp. Route Total | | | | | | | | 5.1E-04 | | | | | 0.7 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 2.5E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.8E-04 | 5.5E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 2.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-07 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.005 |
| | | | | ARSENIC | 3.50 | mg/kg | 3.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 4.8E-07 | 3.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | CADMIUM | 0.200 | mg/kg | 6.1E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.2E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.0003 |
| | | | | COBALT | 9.30 | mg/kg | 2.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | LEAD | 6.80 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 5.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.8E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.003 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00003 |
| | | | | NICKEL | 10.9 | mg/kg | 3.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.9E-06 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.005 |
| | | | | VANADIUM | 27.2 | mg/kg | 8.3E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.7E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.8E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 3.6E-06 | 3.9E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.005 |
| | | | Exp. Route Total | | | | | | | | 1.9E-04 | | | | | 0.04 |
| | | Exposure Point Total | | | | | | | | | 7.0E-04 | | | | | 0.7 |
| | Exposure Medium Total | | | | | | | | | | 7.0E-04 | | | | | 0.7 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 3.7E-9 | $mg/m^3$ | 1.6E-09 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.8E-09 | 3.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 2.5E-10 | $mg/m^3$ | 2.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 8.9E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.8E-10 | 1.0E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | CADMIUM | 6.2E-11 | $mg/m^3$ | 5.1E-12 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 9.2E-12 | 5.9E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000006 |
| | | | | COBALT | 2.9E-9 | $mg/m^3$ | 2.4E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 2.1E-09 | 2.8E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0005 |
| | | | | LEAD | 2.1E-9 | $mg/m^3$ | 1.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.9E-11 | $mg/m^3$ | 4.8E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.6E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 1.1E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 2.8E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 7.2E-11 | 3.2E-09 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | VANADIUM | 8.4E-9 | $mg/m^3$ | 6.9E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.5E-8 | $mg/m^3$ | 6.2E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-9 | $mg/m^3$ | 3.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 1.5E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.3E-08 | 3.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 1.7E-08 | | | | | 0.0006 |
| | | Exposure Point Total | | | | | | | | | 1.7E-08 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | | | | 1.7E-08 | | | | | 0.0006 |
| Medium Total | | | | | | | | | | | 7.0E-04 | | | | | 0.7 |

TABLE 7.9.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 1.5E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.1E-05 | 3.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 1.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.9E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00010 |
| | | | | ARSENIC | 3.60 | mg/kg | 3.9E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 5.9E-06 | 4.6E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.2 |
| | | | | COBALT | 12.9 | mg/kg | 1.4E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-04 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.5 |
| | | | | LEAD | 7.20 | mg/kg | 7.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.2E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 3.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.0E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 38.1 | mg/kg | 4.2E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.9E-04 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.10 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 1.4E-04 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-03 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 1.1E-05 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 5.3E-06 | 2.3E-05 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.008 |
| | | | Exp. Route Total | | | | | | | | 2.2E-05 | | | | | 0.8 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 5.3E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.9E-06 | 1.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 6.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.0E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00003 |
| | | | | ARSENIC | 3.60 | mg/kg | 3.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 5.0E-07 | 3.9E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | COBALT | 12.9 | mg/kg | 4.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | LEAD | 7.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 9.5E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0005 |
| | | | | VANADIUM | 38.1 | mg/kg | 1.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.003 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 2.9E-07 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 5.9E-06 | 6.4E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.009 |
| | | | Exp. Route Total | | | | | | | | 1.0E-05 | | | | | 0.04 |
| | | Exposure Point Total | | | | | | | | | 3.2E-05 | | | | | 0.8 |
| | Exposure Medium Total | | | | | | | | | | 3.2E-05 | | | | | 0.8 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 7.7E-11 | $mg/m^3$ | 3.4E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.7E-11 | 7.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 2.3E-6 | $mg/m^3$ | 1.9E-07 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 6.5E-09 | 2.2E-06 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0007 |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 9.2E-11 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 3.9E-10 | 1.1E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | COBALT | 4.0E-9 | $mg/m^3$ | 3.3E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 3.0E-09 | 3.8E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0006 |
| | | | | LEAD | 2.2E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 9.6E-12 | $mg/m^3$ | 7.9E-13 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.2E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000003 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 9.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 4.0E-8 | $mg/m^3$ | 3.3E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 8.0E-10 | $mg/m^3$ | 6.6E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.7E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 5.6E-10 | $mg/m^3$ | 2.4E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.1E-08 | 5.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000005 |
| | | | Exp. Route Total | | | | | | | | 3.0E-08 | | | | | 0.001 |
| | | Exposure Point Total | | | | | | | | | 3.0E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | | | | 3.0E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | | | | 3.2E-05 | | | | | 0.9 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 1.3E-05 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 9.4E-05 | 2.8E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 3.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.005 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.4E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-06 | 8.4E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | CADMIUM | 0.200 | mg/kg | 8.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.8E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0005 |
| | | | | COBALT | 9.30 | mg/kg | 3.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.07 |
| | | | | LEAD | 6.80 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 7.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.8E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0002 |
| | | | | NICKEL | 10.9 | mg/kg | 4.5E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.001 |
| | | | | VANADIUM | 27.2 | mg/kg | 1.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.5E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 9.9E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 4.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.9E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.2E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 6.0E-07 | 2.6E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0009 |
| | | | Exp. Route Total | | | | | | | | 9.7E-05 | | | | | 0.1 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 5.1E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 3.7E-05 | 1.1E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 1.0E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.9E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0010 |
| | | | | ARSENIC | 3.50 | mg/kg | 1.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.0E-07 | 7.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | CADMIUM | 0.200 | mg/kg | 2.5E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00006 |
| | | | | COBALT | 9.30 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.7E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 6.80 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 2.4E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0007 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 5.6E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000007 |
| | | | | NICKEL | 10.9 | mg/kg | 1.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.9E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0010 |
| | | | | VANADIUM | 27.2 | mg/kg | 3.4E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.0E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 3.6E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 7.3E-07 | 8.0E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 3.8E-05 | | | | | 0.009 |
| | | Exposure Point Total | | | | | | | | | 1.4E-04 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | | | | 1.4E-04 | | | | | 0.1 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 3.7E-9 | $mg/m^3$ | 1.6E-09 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.8E-09 | 3.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 2.5E-10 | $mg/m^3$ | 4.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 7.7E-10 | 1.0E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | CADMIUM | 6.2E-11 | $mg/m^3$ | 1.0E-11 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 1.8E-11 | 5.9E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000006 |
| | | | | COBALT | 2.9E-9 | $mg/m^3$ | 4.7E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 4.3E-09 | 2.8E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0005 |
| | | | | LEAD | 2.1E-9 | $mg/m^3$ | 3.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.9E-11 | $mg/m^3$ | 9.7E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.6E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 2.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 5.5E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 1.4E-10 | 3.2E-09 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | VANADIUM | 8.4E-9 | $mg/m^3$ | 1.4E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.5E-8 | $mg/m^3$ | 1.2E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-9 | $mg/m^3$ | 6.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 1.5E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 1.3E-08 | 3.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 1.9E-08 | | | | | 0.0006 |
| | | Exposure Point Total | | | | | | | | | 1.9E-08 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | | | | 1.9E-08 | | | | | 0.0006 |
| Medium Total | | | | | | | | | | | 1.4E-04 | | | | | 0.1 |

TABLE 7.10.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 2.7E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.0E-06 | 6.0E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 6.2E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00002 |
| | | | | ARSENIC | 3.60 | mg/kg | 1.5E-06 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.2E-06 | 8.6E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.03 |
| | | | | COBALT | 12.9 | mg/kg | 5.3E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.1 |
| | | | | LEAD | 7.20 | mg/kg | 3.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 1.3E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.4E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0002 |
| | | | | VANADIUM | 38.1 | mg/kg | 1.6E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.02 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 5.3E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.1E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 1.1E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 2.0E-06 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 9.9E-07 | 4.3E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 5.2E-06 | | | | | 0.2 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 1.1E-07 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 7.9E-07 | 2.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 2.4E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.4E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000007 |
| | | | | ARSENIC | 3.60 | mg/kg | 1.3E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 2.0E-07 | 7.8E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | COBALT | 12.9 | mg/kg | 1.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.4E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.003 |
| | | | | LEAD | 7.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 3.9E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.2E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0001 |
| | | | | VANADIUM | 38.1 | mg/kg | 4.7E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.8E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0006 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 6.0E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 1.2E-06 | 1.3E-07 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.002 |
| | | | Exp. Route Total | | | | | | | | 2.2E-06 | | | | | 0.008 |
| | | Exposure Point Total | | | | | | | | | 7.4E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | | | | 7.4E-06 | | | | | 0.2 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 7.7E-11 | $mg/m^3$ | 3.4E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.7E-11 | 7.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 2.3E-6 | $mg/m^3$ | 3.9E-07 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.3E-08 | 2.2E-06 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0007 |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 7.9E-10 | 1.1E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | COBALT | 4.0E-9 | $mg/m^3$ | 6.6E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 5.9E-09 | 3.8E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0006 |
| | | | | LEAD | 2.2E-9 | $mg/m^3$ | 3.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 9.6E-12 | $mg/m^3$ | 1.6E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.2E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000003 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 1.9E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 4.0E-8 | $mg/m^3$ | 6.6E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 8.0E-10 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.7E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 5.6E-10 | $mg/m^3$ | 2.4E-10 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.1E-08 | 5.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000005 |
| | | | Exp. Route Total | | | | | | | | 4.0E-08 | | | | | 0.001 |
| | | Exposure Point Total | | | | | | | | | 4.0E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | | | | 4.0E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | | | | 7.4E-06 | | | | | 0.2 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 2.8E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.0E-05 | 1.6E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 1.9E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-06 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.003 |
| | | | | ARSENIC | 3.50 | mg/kg | 8.2E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.2E-06 | 4.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | CADMIUM | 0.200 | mg/kg | 4.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.7E-07 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | COBALT | 9.30 | mg/kg | 2.2E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.3E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.04 |
| | | | | LEAD | 6.80 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.3E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 4.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.6E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0009 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.2E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0001 |
| | | | | NICKEL | 10.9 | mg/kg | 2.6E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-05 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 27.2 | mg/kg | 6.4E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.7E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.007 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 5.7E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.3E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 2.8E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.6E-05 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 2.6E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 1.3E-07 | 1.5E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0005 |
| | | | Exp. Route Total | | | | | | | | 2.2E-05 | | | | | 0.07 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 11.8 | mg/kg | 1.4E-06 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1.0E-05 | 8.4E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | ANTIMONY | 0.820 | mg/kg | 7.7E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.5E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0007 |
| | | | | ARSENIC | 3.50 | mg/kg | 9.8E-08 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 5.7E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | CADMIUM | 0.200 | mg/kg | 1.9E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-09 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00004 |
| | | | | COBALT | 9.30 | mg/kg | 8.7E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 6.80 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.190 | mg/kg | 1.8E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.0E-08 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0005 |
| | | | | MOLYBDENUM | 0.450 | mg/kg | 4.2E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.5E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000005 |
| | | | | NICKEL | 10.9 | mg/kg | 1.0E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 6.0E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0007 |
| | | | | VANADIUM | 27.2 | mg/kg | 2.5E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.5E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0003 |
| | | | | DIESEL RANGE ORGANICS | 242 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 12.0 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.10 | mg/kg | 1.0E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 2.1E-07 | 6.0E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 1.1E-05 | | | | | 0.007 |
| | | Exposure Point Total | | | | | | | | | 3.2E-05 | | | | | 0.08 |
| | Exposure Medium Total | | | | | | | | | | 3.2E-05 | | | | | 0.08 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 3.7E-9 | $mg/m^3$ | 6.0E-10 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 6.6E-10 | 3.5E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ANTIMONY | 2.5E-10 | $mg/m^3$ | 4.2E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.4E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 7.7E-10 | 1.0E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | CADMIUM | 6.2E-11 | $mg/m^3$ | 1.0E-11 | $(mg/m^3)$ | 1.8E-03 | $(ug/m^3)^{-1}$ | 1.8E-11 | 5.9E-11 | $(mg/m^3)$ | 1.0E-05 | $(mg/m^3)$ | 0.000006 |
| | | | | COBALT | 2.9E-9 | $mg/m^3$ | 4.7E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 4.3E-09 | 2.8E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0005 |
| | | | | LEAD | 2.1E-9 | $mg/m^3$ | 3.5E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.0E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 5.9E-11 | $mg/m^3$ | 9.7E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 5.6E-11 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.000002 |
| | | | | MOLYBDENUM | 1.4E-10 | $mg/m^3$ | 2.3E-11 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.3E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NICKEL | 3.4E-9 | $mg/m^3$ | 5.5E-10 | $(mg/m^3)$ | 2.6E-04 | $(ug/m^3)^{-1}$ | 1.4E-10 | 3.2E-09 | $(mg/m^3)$ | 9.0E-05 | $(mg/m^3)$ | 0.00004 |
| | | | | VANADIUM | 8.4E-9 | $mg/m^3$ | 1.4E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 8.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 7.5E-8 | $mg/m^3$ | 1.2E-08 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.2E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 3.7E-9 | $mg/m^3$ | 6.1E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.6E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 3.4E-10 | $mg/m^3$ | 5.6E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 4.7E-09 | 3.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000003 |
| | | | Exp. Route Total | | | | | | | | 1.1E-08 | | | | | 0.0006 |
| | | Exposure Point Total | | | | | | | | | 1.1E-08 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | | | | 1.1E-08 | | | | | 0.0006 |
| Medium Total | | | | | | | | | | | 3.2E-05 | | | | | 0.08 |

TABLE 7.11.RME

CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS - BLOCK H - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Subsurface Soil | Subsurface Soil | Block H | Ingestion | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 5.9E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 4.3E-07 | 3.4E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 3.5E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.00001 |
| | | | | ARSENIC | 3.60 | mg/kg | 8.5E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.3E-06 | 4.9E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.02 |
| | | | | COBALT | 12.9 | mg/kg | 3.0E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-05 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.06 |
| | | | | LEAD | 7.20 | mg/kg | 1.7E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 9.9E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 7.3E-09 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 4.2E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0001 |
| | | | | VANADIUM | 38.1 | mg/kg | 8.9E-06 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 5.2E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.01 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 3.1E-05 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.8E-04 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 6.1E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 3.6E-06 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 4.2E-07 | (mg/kg/day) | 5.0E-01 | $(mg/kg/day)^{-1}$ | 2.1E-07 | 2.5E-06 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0008 |
| | | | Exp. Route Total | | | | | | | | 1.9E-06 | | | | | 0.09 |
| | | | Dermal | BENZO(A)PYRENE EQUIVALENTS | 0.250 | mg/kg | 3.0E-08 | (mg/kg/day) | 7.3E+00 | $(mg/kg/day)^{-1}$ | 2.2E-07 | 1.8E-07 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | NAPHTHALENE | 0.150 | mg/kg | 1.8E-08 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.1E-07 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.000005 |
| | | | | ARSENIC | 3.60 | mg/kg | 1.0E-07 | (mg/kg/day) | 1.5E+00 | $(mg/kg/day)^{-1}$ | 1.5E-07 | 5.9E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | COBALT | 12.9 | mg/kg | 1.2E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 7.1E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.002 |
| | | | | LEAD | 7.20 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | MERCURY | 0.031 | mg/kg | 2.9E-10 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 1.7E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.00008 |
| | | | | VANADIUM | 38.1 | mg/kg | 3.6E-07 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 2.1E-06 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.0004 |
| | | | | DIESEL RANGE ORGANICS | 130 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | GASOLINE RANGE ORGANICS | 2.60 | mg/kg | 0.0E+00 | (mg/kg/day) | NA | $(mg/kg/day)^{-1}$ | - - | 0.0E+00 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | HEXAVALENT CHROMIUM | 1.80 | mg/kg | 1.7E-08 | (mg/kg/day) | 2.0E+01 | $(mg/kg/day)^{-1}$ | 3.4E-07 | 9.8E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.001 |
| | | | Exp. Route Total | | | | | | | | 7.1E-07 | | | | | 0.006 |
| | | Exposure Point Total | | | | | | | | | 2.6E-06 | | | | | 0.09 |
| | Exposure Medium Total | | | | | | | | | | 2.6E-06 | | | | | 0.09 |
| | Air | Block H | Inhalation | BENZO(A)PYRENE EQUIVALENTS | 7.7E-11 | $mg/m^3$ | 1.3E-11 | $(mg/m^3)$ | 1.1E-03 | $(ug/m^3)^{-1}$ | 1.4E-11 | 7.4E-11 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | NAPHTHALENE | 2.3E-6 | $mg/m^3$ | 3.9E-07 | $(mg/m^3)$ | 3.4E-05 | $(ug/m^3)^{-1}$ | 1.3E-08 | 2.2E-06 | $(mg/m^3)$ | 3.0E-03 | $(mg/m^3)$ | 0.0007 |
| | | | | ARSENIC | 1.1E-9 | $mg/m^3$ | 1.8E-10 | $(mg/m^3)$ | 4.3E-03 | $(ug/m^3)^{-1}$ | 7.9E-10 | 1.1E-09 | $(mg/m^3)$ | 1.5E-05 | $(mg/m^3)$ | 0.00007 |
| | | | | COBALT | 4.0E-9 | $mg/m^3$ | 6.6E-10 | $(mg/m^3)$ | 9.0E-03 | $(ug/m^3)^{-1}$ | 5.9E-09 | 3.8E-09 | $(mg/m^3)$ | 6.0E-06 | $(mg/m^3)$ | 0.0006 |
| | | | | LEAD | 2.2E-9 | $mg/m^3$ | 3.7E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 2.1E-09 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | MERCURY | 9.6E-12 | $mg/m^3$ | 1.6E-12 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 9.2E-12 | $(mg/m^3)$ | 3.0E-05 | $(mg/m^3)$ | 0.0000003 |
| | | | | VANADIUM | 1.2E-8 | $mg/m^3$ | 1.9E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 1.1E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | DIESEL RANGE ORGANICS | 4.0E-8 | $mg/m^3$ | 6.6E-09 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 3.9E-08 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | GASOLINE RANGE ORGANICS | 8.0E-10 | $mg/m^3$ | 1.3E-10 | $(mg/m^3)$ | NA | $(ug/m^3)^{-1}$ | - - | 7.7E-10 | $(mg/m^3)$ | NA | $(mg/m^3)$ | -- |
| | | | | HEXAVALENT CHROMIUM | 5.6E-10 | $mg/m^3$ | 9.2E-11 | $(mg/m^3)$ | 8.4E-02 | $(ug/m^3)^{-1}$ | 7.7E-09 | 5.3E-10 | $(mg/m^3)$ | 1.0E-04 | $(mg/m^3)$ | 0.000005 |
| | | | Exp. Route Total | | | | | | | | 2.8E-08 | | | | | 0.001 |
| | | Exposure Point Total | | | | | | | | | 2.8E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | | | | 2.8E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | | | | 2.6E-06 | | | | | 0.09 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

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**SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC**

| Table No. | REASONABLE MAXIMUM EXPOSURES |
|---|---|
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| 9.2.RME | Industrial Worker |
| 9.3.RME | Child Commercial Receptor |
| 9.4.RME | Adolescent Commercial Receptor |
| 9.5.RME | Lifelong Commercial Receptor |
| 9.6.RME | Adult Commercial Receptor |
| 9.7.RME | Child Recreational User |
| 9.8.RME | Adolescent Recreational User |
| 9.9.RME | Adult Recreational User |
| 9.10.RME | Lifelong Recreational User |
| 9.11.RME | Child Resident |
| 9.12.RME | Adolescent Resident |
| 9.13.RME | Adult Resident |
| 9.14.RME | Lifelong Resident |

Note: Tables are block-specific.

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 5E-07 | -- | 2E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 3E-09 | -- | 8E-10 | -- | 3E-09 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.006 | - - | 0.0008 | 0.006 |
| | | | ARSENIC | 4E-07 | -- | 2E-08 | -- | 4E-07 | Skin, CVS | 0.05 | - - | 0.003 | 0.06 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0007 | - - | 0.00006 | 0.0008 |
| | | | COBALT | - - | -- | - - | -- | - - | Thyroid | 0.02 | -- | 0.0003 | 0.02 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.1 | - - | 0.002 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.003 | - - | 0.00006 | 0.003 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.004 | - - | 0.001 | 0.005 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0004 | - - | 0.000009 | 0.0004 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.003 | - - | 0.002 | 0.005 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0002 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-08 | -- | 2E-08 | -- | 5E-08 | None Reported | 0.001 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 2E-06 | -- | 5E-07 | -- | 3E-06 | | 0.2 | -- | 0.01 | 0.2 |
| | | Exposure Point Total | | | | | | 3E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 3E-06 | | | | | 0.2 |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-08 | -- | -- | 1E-08 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-08 | -- | -- | 3E-08 | NA | - - | 0.04 | - - | 0.04 |
| | | | CADMIUM | -- | 6E-10 | -- | -- | 6E-10 | NA | - - | 0.002 | - - | 0.002 |
| | | | COBALT | -- | 2E-07 | -- | -- | 2E-07 | Lungs | - - | 0.3 | - - | 0.3 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.3 | - - | 0.3 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.001 | - - | 0.001 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 9E-09 | -- | -- | 9E-09 | Body Weight | - - | 0.03 | - - | 0.03 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-07 | -- | -- | 2E-07 | Lungs | - - | 0.001 | - - | 0.001 |
| | | | Chemical Total | -- | 4E-07 | -- | -- | 4E-07 | | - - | 0.6 | - - | 0.6 |
| | | Exposure Point Total | | | | | | 4E-07 | | | | | 0.6 |
| | Exposure Medium Total | | | | | | | 4E-07 | | | | | 0.6 |
| Medium Total | | | | | | | | 3E-06 | | | | | 0.9 |

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.0009 | - - | 0.0003 | 0.001 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 3E-07 | -- | 8E-08 | -- | 4E-07 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 3E-08 | -- | 9E-09 | -- | 4E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 5E-07 | -- | 3E-08 | -- | 5E-07 | Skin, CVS | 0.07 | - - | 0.004 | 0.08 |
| | | | COBALT | - - | -- | - - | -- | - - | Thyroid | 0.02 | -- | 0.0004 | 0.02 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.2 | - - | 0.004 | 0.2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.002 | - - | 0.00005 | 0.002 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.003 | - - | 0.0008 | 0.004 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0004 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 5E-08 | -- | 4E-08 | -- | 9E-08 | None Reported | 0.002 | - - | 0.002 | 0.004 |
| | | | Chemical Total | 9E-07 | -- | 2E-07 | -- | 1E-06 | | 0.3 | -- | 0.01 | 0.3 |
| | | Exposure Point Total | | | | | | 1E-06 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | 1E-06 | | | | | 0.3 |
| | Air | Block D | NAPHTHALENE | -- | 5E-08 | -- | -- | 5E-08 | Respiratory | - - | 0.03 | - - | 0.03 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-09 | -- | -- | 2E-09 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 5E-08 | -- | -- | 5E-08 | NA | - - | 0.05 | - - | 0.05 |
| | | | COBALT | -- | 2E-07 | -- | -- | 2E-07 | Lungs | - - | 0.3 | - - | 0.3 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.2 | - - | 0.2 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0010 | - - | 0.0010 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-07 | -- | -- | 3E-07 | Lungs | - - | 0.002 | - - | 0.002 |
| | | | Chemical Total | -- | 6E-07 | -- | -- | 6E-07 | | - - | 0.6 | - - | 0.6 |
| | | Exposure Point Total | | | | | | 6E-07 | | | | | 0.6 |
| | Exposure Medium Total | | | | | | | 6E-07 | | | | | 0.6 |
| Medium Total | | | | | | | | 2E-06 | | | | | 1.0 |
| Receptor Total | | | | | | | Receptor Risk Total | 5E-06 | | | | Receptor HI Total | 2 |

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Construction Worker

Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.009 |
| Total Blood HI | 0.006 |
| Total Body Weight HI | 0.03 |
| Total CNS HI | 0.5 |
| Total CVS HI | 0.1 |
| Total GS HI | 0.3 |
| Total Kidney HI | 0.03 |
| Total Lungs HI | 0.6 |
| Total None Reported HI | 0.006 |
| Total Skin HI | 0.1 |
| Total Respiratory HI | 0.03 |
| Total NA HI | 0.09 |
| Total Thyroid HI | 0.04 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 5E-06 | -- | 8E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 7E-09 | -- | 1E-08 | -- | 2E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.0006 | - - | 0.0005 | 0.001 |
| | | | ARSENIC | 9E-07 | -- | 4E-07 | -- | 1E-06 | Skin, CVS | 0.006 | - - | 0.002 | 0.008 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.00007 | - - | 0.00004 | 0.0001 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.002 | 0.02 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.01 | - - | 0.002 | 0.01 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0003 | - - | 0.00004 | 0.0004 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0004 | - - | 0.0008 | 0.001 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.00004 | - - | 0.000006 | 0.00005 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0004 | - - | 0.001 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.003 | - - | 0.0003 | 0.003 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 8E-08 | -- | 4E-07 | -- | 5E-07 | None Reported | 0.0001 | - - | 0.0007 | 0.0009 |
| | | | Chemical Total | 6E-06 | -- | 9E-06 | -- | 1E-05 | | 0.04 | -- | 0.010 | 0.05 |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | 0.05 |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | 0.05 |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-13 | -- | -- | 3E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | CADMIUM | -- | 7E-12 | -- | -- | 7E-12 | NA | - - | 0.000001 | - - | 0.000001 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0001 | - - | 0.0001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000006 | - - | 0.0000006 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 1E-10 | -- | -- | 1E-10 | Body Weight | - - | 0.00001 | - - | 0.00001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0000006 | - - | 0.0000006 |
| | | | Chemical Total | -- | 5E-09 | -- | -- | 5E-09 | | - - | 0.0003 | - - | 0.0003 |
| | | Exposure Point Total | | | | | | 5E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | 5E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | 1E-05 | | | | | 0.05 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00010 | - - | 0.0002 | 0.0003 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 8E-07 | -- | 1E-06 | -- | 2E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 8E-08 | -- | 2E-07 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 1E-06 | -- | 5E-07 | -- | 2E-06 | Skin, CVS | 0.008 | - - | 0.003 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.003 | 0.02 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.02 | - - | 0.003 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0002 | - - | 0.00003 | 0.0003 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0003 | - - | 0.0006 | 0.0008 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.004 | - - | 0.0005 | 0.005 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 6E-07 | -- | 8E-07 | None Reported | 0.0002 | - - | 0.001 | 0.001 |
| | | | Chemical Total | 2E-06 | -- | 3E-06 | -- | 5E-06 | | 0.05 | -- | 0.01 | 0.06 |
| | | Exposure Point Total | | | | | | 5E-06 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | 5E-06 | | | | | 0.06 |
| | Air | Block D | NAPHTHALENE | -- | 2E-07 | -- | -- | 2E-07 | Respiratory | - - | 0.005 | - - | 0.005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-12 | -- | -- | 3E-12 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 5E-10 | -- | -- | 5E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00010 | - - | 0.00010 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000004 | - - | 0.0000004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0000010 | - - | 0.0000010 |
| | | | Chemical Total | -- | 2E-07 | -- | -- | 2E-07 | | - - | 0.005 | - - | 0.005 |
| | | Exposure Point Total | | | | | | 2E-07 | | | | | 0.005 |
| | Exposure Medium Total | | | | | | | 2E-07 | | | | | 0.005 |
| Medium Total | | | | | | | | 5E-06 | | | | | 0.07 |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-05 | | | | Receptor HI Total | 0.1 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.002 |
| Total Blood HI | 0.04 |
| Total Body Weight HI | 0.002 |
| Total CNS HI | 0.0008 |
| Total CVS HI | 0.02 |
| Total GS HI | 0.04 |
| Total Kidney HI | 0.008 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.02 |
| Total Respiratory HI | 0.005 |
| Total NA HI | 0.00004 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 6E-05 | -- | 2E-05 | -- | 8E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 2E-08 | -- | 5E-09 | -- | 2E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.006 | - - | 0.0009 | 0.007 |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | Skin, CVS | 0.06 | - - | 0.004 | 0.06 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0007 | - - | 0.00007 | 0.0008 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.2 | - - | 0.004 | 0.2 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.1 | - - | 0.003 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.003 | - - | 0.00007 | 0.003 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.004 | - - | 0.001 | 0.005 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0004 | - - | 0.00001 | 0.0004 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.004 | - - | 0.002 | 0.006 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0006 | 0.03 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 9E-07 | -- | 2E-06 | None Reported | 0.001 | - - | 0.001 | 0.003 |
| | | | Chemical Total | 6E-05 | -- | 2E-05 | -- | 8E-05 | | 0.4 | -- | 0.02 | 0.4 |
| | | Exposure Point Total | | | | | | 8E-05 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | 8E-05 | | | | | 0.4 |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-14 | -- | -- | 2E-14 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | CADMIUM | -- | 4E-13 | -- | -- | 4E-13 | NA | - - | 0.0000003 | - - | 0.0000003 |
| | | | COBALT | -- | 2E-10 | -- | -- | 2E-10 | Lungs | - - | 0.00003 | - - | 0.00003 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00003 | - - | 0.00003 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000002 | - - | 0.0000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 6E-12 | -- | -- | 6E-12 | Body Weight | - - | 0.000003 | - - | 0.000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 6E-10 | -- | -- | 6E-10 | Lungs | - - | 0.0000002 | - - | 0.0000002 |
| | | | Chemical Total | -- | 8E-10 | -- | -- | 8E-10 | | - - | 0.00007 | - - | 0.00007 |
| | | Exposure Point Total | | | | | | 8E-10 | | | | | 0.00007 |
| | Exposure Medium Total | | | | | | | 8E-10 | | | | | 0.00007 |
| Medium Total | | | | | | | | 8E-05 | | | | | 0.4 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.0010 | - - | 0.0003 | 0.001 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 3E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 2E-07 | -- | 7E-08 | -- | 3E-07 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 3E-06 | -- | 2E-07 | -- | 3E-06 | Skin, CVS | 0.07 | - - | 0.005 | 0.08 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.2 | - - | 0.004 | 0.2 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.2 | - - | 0.005 | 0.2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.002 | - - | 0.00005 | 0.002 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.003 | - - | 0.0010 | 0.004 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.04 | - - | 0.0010 | 0.04 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-06 | -- | 1E-06 | -- | 3E-06 | None Reported | 0.002 | - - | 0.002 | 0.004 |
| | | | Chemical Total | 2E-05 | -- | 5E-06 | -- | 2E-05 | | 0.5 | -- | 0.02 | 0.5 |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | 0.5 |
| | Exposure Medium Total | | | | | | | 2E-05 | | | | | 0.5 |
| | Air | Block D | NAPHTHALENE | -- | 1E-08 | -- | -- | 1E-08 | Respiratory | - - | 0.001 | - - | 0.001 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-12 | -- | -- | 6E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-13 | -- | -- | 2E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | 0.000006 | - - | 0.000006 |
| | | | COBALT | -- | 2E-10 | -- | -- | 2E-10 | Lungs | - - | 0.00004 | - - | 0.00004 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00003 | - - | 0.00003 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000001 | - - | 0.0000001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000003 | - - | 0.0000003 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.001 | - - | 0.001 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | 2E-05 | | | | | 0.5 |
| Receptor Total | | | | | | | Receptor Risk Total | 1E-04 | | | | Receptor HI Total | 0.9 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.009 |
| Total Blood HI | 0.4 |
| Total Body Weight HI | 0.007 |
| Total CNS HI | 0.006 |
| Total CVS HI | 0.1 |
| Total GS HI | 0.3 |
| Total Kidney HI | 0.07 |
| Total Lungs HI | 0.00007 |
| Total None Reported HI | 0.007 |
| Total Skin HI | 0.1 |
| Total Respiratory HI | 0.001 |
| Total NA HI | 0.00001 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 1E-05 | -- | 2E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 6E-09 | -- | 7E-09 | -- | 1E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.001 | - - | 0.0006 | 0.002 |
| | | | ARSENIC | 8E-07 | -- | 2E-07 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.003 | 0.01 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0001 | - - | 0.00005 | 0.0002 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.03 | - - | 0.003 | 0.04 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.02 | - - | 0.002 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0006 | - - | 0.00005 | 0.0006 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0008 | - - | 0.0009 | 0.002 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.00008 | - - | 0.000007 | 0.00009 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0007 | - - | 0.001 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.005 | - - | 0.0004 | 0.005 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 6E-07 | -- | 8E-07 | None Reported | 0.0003 | - - | 0.0009 | 0.001 |
| | | | Chemical Total | 1E-05 | -- | 1E-05 | -- | 3E-05 | | 0.07 | -- | 0.01 | 0.08 |
| | | Exposure Point Total | | | | | | 3E-05 | | | | | 0.08 |
| | Exposure Medium Total | | | | | | | 3E-05 | | | | | 0.08 |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 4E-14 | -- | -- | 4E-14 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | CADMIUM | -- | 9E-13 | -- | -- | 9E-13 | NA | - - | 0.0000003 | - - | 0.0000003 |
| | | | COBALT | -- | 3E-10 | -- | -- | 3E-10 | Lungs | - - | 0.00003 | - - | 0.00003 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00003 | - - | 0.00003 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000002 | - - | 0.0000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 1E-11 | -- | -- | 1E-11 | Body Weight | - - | 0.000003 | - - | 0.000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 6E-10 | -- | -- | 6E-10 | Lungs | - - | 0.0000002 | - - | 0.0000002 |
| | | | Chemical Total | -- | 1E-09 | -- | -- | 1E-09 | | - - | 0.00007 | - - | 0.00007 |
| | | Exposure Point Total | | | | | | 1E-09 | | | | | 0.00007 |
| | Exposure Medium Total | | | | | | | 1E-09 | | | | | 0.00007 |
| Medium Total | | | | | | | | 3E-05 | | | | | 0.08 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.0002 | - - | 0.0002 | 0.0004 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 2E-06 | -- | 4E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 7E-08 | -- | 9E-08 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 1E-06 | -- | 3E-07 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.004 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.04 | - - | 0.003 | 0.04 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.04 | - - | 0.003 | 0.04 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0004 | - - | 0.00004 | 0.0005 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0005 | - - | 0.0007 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.008 | - - | 0.0007 | 0.008 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-07 | -- | 1E-06 | -- | 1E-06 | None Reported | 0.0004 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 3E-06 | -- | 4E-06 | -- | 7E-06 | | 0.10 | -- | 0.01 | 0.1 |
| | | Exposure Point Total | | | | | | 7E-06 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 7E-06 | | | | | 0.1 |
| | Air | Block D | NAPHTHALENE | -- | 2E-08 | -- | -- | 2E-08 | Respiratory | - - | 0.001 | - - | 0.001 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-12 | -- | -- | 6E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 4E-13 | -- | -- | 4E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 6E-11 | -- | -- | 6E-11 | NA | - - | 0.000006 | - - | 0.000006 |
| | | | COBALT | -- | 3E-10 | -- | -- | 3E-10 | Lungs | - - | 0.00004 | - - | 0.00004 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00003 | - - | 0.00003 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000001 | - - | 0.0000001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000003 | - - | 0.0000003 |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | - - | 0.001 | - - | 0.001 |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | 7E-06 | | | | | 0.1 |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-05 | | | | Receptor HI Total | 0.2 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Commercial Receptor

Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.003 |
| Total Blood HI | 0.08 |
| Total Body Weight HI | 0.002 |
| Total CNS HI | 0.001 |
| Total CVS HI | 0.03 |
| Total GS HI | 0.07 |
| Total Kidney HI | 0.01 |
| Total Lungs HI | 0.00007 |
| Total None Reported HI | 0.003 |
| Total Skin HI | 0.03 |
| Total Respiratory HI | 0.001 |
| Total NA HI | 0.00001 |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 7E-05 | -- | 3E-05 | -- | 1E-04 | | | | | |
| | | | AROCLOR-1260 | 2E-08 | -- | 1E-08 | -- | 4E-08 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 3E-06 | -- | 4E-07 | -- | 3E-06 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 2E-06 | -- | 3E-06 | | | | | |
| | | | Chemical Total | 8E-05 | -- | 3E-05 | -- | 1E-04 | | | | | |
| | | Exposure Point Total | | | | | | 1E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 1E-04 | | | | | |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 7E-11 | -- | -- | 7E-11 | | | | | |
| | | | AROCLOR-1260 | -- | 5E-14 | -- | -- | 5E-14 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 7E-11 | -- | -- | 7E-11 | | | | | |
| | | | CADMIUM | -- | 1E-12 | -- | -- | 1E-12 | | | | | |
| | | | COBALT | -- | 5E-10 | -- | -- | 5E-10 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 2E-11 | -- | -- | 2E-11 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | | | | | |
| | | | Chemical Total | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | Exposure Point Total | | | | | | 2E-09 | | | | | |
| | Exposure Medium Total | | | | | | | 2E-09 | | | | | |
| Medium Total | | | | | | | | 1E-04 | | | | | |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 5E-06 | -- | 2E-05 | | | | | |
| | | | AROCLOR-1260 | 3E-07 | -- | 2E-07 | -- | 4E-07 | | | | | |
| | | | ARSENIC | 4E-06 | -- | 5E-07 | -- | 4E-06 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 2E-06 | -- | 2E-06 | -- | 4E-06 | | | | | |
| | | | Chemical Total | 2E-05 | -- | 8E-06 | -- | 3E-05 | | | | | |
| | | Exposure Point Total | | | | | | 3E-05 | | | | | |
| | Exposure Medium Total | | | | | | | 3E-05 | | | | | |
| | Air | Block D | NAPHTHALENE | -- | 3E-08 | -- | -- | 3E-08 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-11 | -- | -- | 1E-11 | | | | | |
| | | | AROCLOR-1260 | -- | 7E-13 | -- | -- | 7E-13 | | | | | |
| | | | ARSENIC | -- | 9E-11 | -- | -- | 9E-11 | | | | | |
| | | | COBALT | -- | 5E-10 | -- | -- | 5E-10 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | Chemical Total | -- | 4E-08 | -- | -- | 4E-08 | | | | | |
| | | Exposure Point Total | | | | | | 4E-08 | | | | | |
| | Exposure Medium Total | | | | | | | 4E-08 | | | | | |
| Medium Total | | | | | | | | 3E-05 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 1E-04 | | | | | |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Commercial Receptor

Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 5E-06 | -- | 8E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 7E-09 | -- | 1E-08 | -- | 2E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.0006 | - - | 0.0005 | 0.001 |
| | | | ARSENIC | 9E-07 | -- | 4E-07 | -- | 1E-06 | Skin, CVS | 0.006 | - - | 0.002 | 0.008 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.00007 | - - | 0.00004 | 0.0001 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.002 | 0.02 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.01 | - - | 0.002 | 0.01 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0003 | - - | 0.00004 | 0.0004 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0004 | - - | 0.0008 | 0.001 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.00004 | - - | 0.000006 | 0.00005 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0004 | - - | 0.001 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.003 | - - | 0.0003 | 0.003 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 8E-08 | -- | 4E-07 | -- | 5E-07 | None Reported | 0.0001 | - - | 0.0007 | 0.0009 |
| | | | Chemical Total | 6E-06 | -- | 9E-06 | -- | 1E-05 | | 0.04 | -- | 0.010 | 0.05 |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | 0.05 |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | 0.05 |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-13 | -- | -- | 3E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | CADMIUM | -- | 7E-12 | -- | -- | 7E-12 | NA | - - | 0.000001 | - - | 0.000001 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0001 | - - | 0.0001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000006 | - - | 0.0000006 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 1E-10 | -- | -- | 1E-10 | Body Weight | - - | 0.00001 | - - | 0.00001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0000006 | - - | 0.0000006 |
| | | | Chemical Total | -- | 5E-09 | -- | -- | 5E-09 | | - - | 0.0003 | - - | 0.0003 |
| | | Exposure Point Total | | | | | | 5E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | 5E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | 1E-05 | | | | | 0.05 |

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00010 | - - | 0.0002 | 0.0003 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 8E-07 | -- | 1E-06 | -- | 2E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 8E-08 | -- | 2E-07 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 1E-06 | -- | 5E-07 | -- | 2E-06 | Skin, CVS | 0.008 | - - | 0.003 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.003 | 0.02 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.02 | - - | 0.003 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0002 | - - | 0.00003 | 0.0003 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0003 | - - | 0.0006 | 0.0008 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.004 | - - | 0.0005 | 0.005 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 6E-07 | -- | 8E-07 | None Reported | 0.0002 | - - | 0.001 | 0.001 |
| | | | Chemical Total | 2E-06 | -- | 3E-06 | -- | 5E-06 | | 0.05 | -- | 0.01 | 0.06 |
| | | Exposure Point Total | | | | | | 5E-06 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | 5E-06 | | | | | 0.06 |
| | Air | Block D | NAPHTHALENE | -- | 2E-07 | -- | -- | 2E-07 | Respiratory | - - | 0.005 | - - | 0.005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-12 | -- | -- | 3E-12 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 5E-10 | -- | -- | 5E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00010 | - - | 0.00010 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000004 | - - | 0.0000004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0000010 | - - | 0.0000010 |
| | | | Chemical Total | -- | 2E-07 | -- | -- | 2E-07 | | - - | 0.005 | - - | 0.005 |
| | | Exposure Point Total | | | | | | 2E-07 | | | | | 0.005 |
| | Exposure Medium Total | | | | | | | 2E-07 | | | | | 0.005 |
| Medium Total | | | | | | | | 5E-06 | | | | | 0.07 |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-05 | | | | Receptor HI Total | 0.1 |

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Commercial Receptor

Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.002 |
| Total Blood HI | 0.04 |
| Total Body Weight HI | 0.002 |
| Total CNS HI | 0.0008 |
| Total CVS HI | 0.02 |
| Total GS HI | 0.04 |
| Total Kidney HI | 0.008 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.02 |
| Total Respiratory HI | 0.005 |
| Total NA HI | 0.00004 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 1E-04 | -- | 4E-05 | -- | 2E-04 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 3E-08 | -- | 1E-08 | -- | 4E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.01 | - - | 0.002 | 0.01 |
| | | | ARSENIC | 4E-06 | -- | 3E-07 | -- | 4E-06 | Skin, CVS | 0.1 | - - | 0.009 | 0.1 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.001 | - - | 0.0002 | 0.002 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.3 | - - | 0.009 | 0.3 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.2 | - - | 0.006 | 0.2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.006 | - - | 0.0002 | 0.006 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.008 | - - | 0.003 | 0.01 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0008 | - - | 0.00002 | 0.0008 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.007 | - - | 0.005 | 0.01 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.05 | - - | 0.001 | 0.05 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-06 | -- | 2E-06 | -- | 4E-06 | None Reported | 0.003 | - - | 0.003 | 0.006 |
| | | | Chemical Total | 1E-04 | -- | 4E-05 | -- | 2E-04 | | 0.7 | -- | 0.04 | 0.8 |
| | | Exposure Point Total | | | | | | 2E-04 | | | | | 0.8 |
| | Exposure Medium Total | | | | | | | 2E-04 | | | | | 0.8 |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 7E-14 | -- | -- | 7E-14 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 9E-11 | -- | -- | 9E-11 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | CADMIUM | -- | 2E-12 | -- | -- | 2E-12 | NA | - - | 0.000001 | - - | 0.000001 |
| | | | COBALT | -- | 6E-10 | -- | -- | 6E-10 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0001 | - - | 0.0001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000006 | - - | 0.0000006 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 2E-11 | -- | -- | 2E-11 | Body Weight | - - | 0.00001 | - - | 0.00001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0000006 | - - | 0.0000006 |
| | | | Chemical Total | -- | 3E-09 | -- | -- | 3E-09 | | - - | 0.0003 | - - | 0.0003 |
| | | Exposure Point Total | | | | | | 3E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | 3E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | 2E-04 | | | | | 0.8 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.002 | - - | 0.0007 | 0.002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-05 | -- | 7E-06 | -- | 3E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 4E-07 | -- | 1E-07 | -- | 5E-07 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 5E-06 | -- | 5E-07 | -- | 6E-06 | Skin, CVS | 0.1 | - - | 0.01 | 0.2 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.4 | - - | 0.010 | 0.4 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.4 | - - | 0.01 | 0.4 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.004 | - - | 0.0001 | 0.005 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.005 | - - | 0.002 | 0.008 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.08 | - - | 0.002 | 0.08 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 3E-06 | -- | 6E-06 | None Reported | 0.004 | - - | 0.005 | 0.009 |
| | | | Chemical Total | 3E-05 | -- | 1E-05 | -- | 4E-05 | | 1.0 | -- | 0.04 | 1 |
| | | Exposure Point Total | | | | | | 4E-05 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 4E-05 | | | | | 1 |
| | Air | Block D | NAPHTHALENE | -- | 4E-08 | -- | -- | 4E-08 | Respiratory | - - | 0.005 | - - | 0.005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 8E-13 | -- | -- | 8E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 6E-10 | -- | -- | 6E-10 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00010 | - - | 0.00010 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000004 | - - | 0.0000004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0000010 | - - | 0.0000010 |
| | | | Chemical Total | -- | 5E-08 | -- | -- | 5E-08 | | - - | 0.005 | - - | 0.005 |
| | | Exposure Point Total | | | | | | 5E-08 | | | | | 0.005 |
| | Exposure Medium Total | | | | | | | 5E-08 | | | | | 0.005 |
| Medium Total | | | | | | | | 4E-05 | | | | | 1 |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-04 | | | | Receptor HI Total | 2 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Recreational User

Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.02 |
| Total Blood HI | 0.7 |
| Total Body Weight HI | 0.01 |
| Total CNS HI | 0.01 |
| Total CVS HI | 0.3 |
| Total GS HI | 0.6 |
| Total Kidney HI | 0.1 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.01 |
| Total Skin HI | 0.3 |
| Total Respiratory HI | 0.005 |
| Total NA HI | 0.00004 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 2E-05 | -- | 9E-06 | -- | 3E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 1E-08 | -- | 5E-09 | -- | 2E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.002 | - - | 0.0004 | 0.002 |
| | | | ARSENIC | 2E-06 | -- | 1E-07 | -- | 2E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.02 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0003 | - - | 0.00003 | 0.0003 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.06 | - - | 0.002 | 0.06 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.04 | - - | 0.001 | 0.04 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.001 | - - | 0.00003 | 0.001 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.001 | - - | 0.0006 | 0.002 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0002 | - - | 0.000005 | 0.0002 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.001 | - - | 0.0009 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.009 | - - | 0.0003 | 0.009 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-07 | -- | 4E-07 | -- | 8E-07 | None Reported | 0.0005 | - - | 0.0006 | 0.001 |
| | | | Chemical Total | 2E-05 | -- | 9E-06 | -- | 3E-05 | | 0.1 | -- | 0.008 | 0.1 |
| | | Exposure Point Total | | | | | | 3E-05 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 3E-05 | | | | | 0.1 |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-13 | -- | -- | 1E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | CADMIUM | -- | 3E-12 | -- | -- | 3E-12 | NA | - - | 0.000001 | - - | 0.000001 |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0001 | - - | 0.0001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000006 | - - | 0.0000006 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 5E-11 | -- | -- | 5E-11 | Body Weight | - - | 0.00001 | - - | 0.00001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0000006 | - - | 0.0000006 |
| | | | Chemical Total | -- | 4E-09 | -- | -- | 4E-09 | | - - | 0.0003 | - - | 0.0003 |
| | | Exposure Point Total | | | | | | 4E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | 4E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | 3E-05 | | | | | 0.1 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.0003 | - - | 0.0001 | 0.0005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 4E-06 | -- | 1E-06 | -- | 5E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 1E-07 | -- | 6E-08 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | Skin, CVS | 0.03 | - - | 0.002 | 0.03 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.07 | - - | 0.002 | 0.07 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.08 | - - | 0.002 | 0.08 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0008 | - - | 0.00003 | 0.0009 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.001 | - - | 0.0004 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0004 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 5E-07 | -- | 7E-07 | -- | 1E-06 | None Reported | 0.0008 | - - | 0.0010 | 0.002 |
| | | | Chemical Total | 6E-06 | -- | 2E-06 | -- | 9E-06 | | 0.2 | -- | 0.009 | 0.2 |
| | | Exposure Point Total | | | | | | 9E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 9E-06 | | | | | 0.2 |
| | Air | Block D | NAPHTHALENE | -- | 8E-08 | -- | -- | 8E-08 | Respiratory | - - | 0.005 | - - | 0.005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-12 | -- | -- | 2E-12 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00010 | - - | 0.00010 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000004 | - - | 0.0000004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0000010 | - - | 0.0000010 |
| | | | Chemical Total | -- | 9E-08 | -- | -- | 9E-08 | | - - | 0.005 | - - | 0.005 |
| | | Exposure Point Total | | | | | | 9E-08 | | | | | 0.005 |
| | Exposure Medium Total | | | | | | | 9E-08 | | | | | 0.005 |
| Medium Total | | | | | | | | 9E-06 | | | | | 0.2 |
| Receptor Total | | | | | | | Receptor Risk Total | 4E-05 | | | | Receptor HI Total | 0.3 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Recreational User

Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.004 |
| Total Blood HI | 0.1 |
| Total Body Weight HI | 0.003 |
| Total CNS HI | 0.002 |
| Total CVS HI | 0.05 |
| Total GS HI | 0.1 |
| Total Kidney HI | 0.02 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.003 |
| Total Skin HI | 0.05 |
| Total Respiratory HI | 0.005 |
| Total NA HI | 0.00004 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 5E-06 | -- | 2E-06 | -- | 7E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 7E-09 | -- | 4E-09 | -- | 1E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.001 | - - | 0.0003 | 0.001 |
| | | | ARSENIC | 9E-07 | -- | 1E-07 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.001 | 0.01 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0001 | - - | 0.00002 | 0.0002 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.03 | - - | 0.001 | 0.04 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.02 | - - | 0.0009 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0006 | - - | 0.00003 | 0.0007 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0008 | - - | 0.0005 | 0.001 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.00009 | - - | 0.000004 | 0.00009 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0007 | - - | 0.0007 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.005 | - - | 0.0002 | 0.005 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 7E-08 | -- | 1E-07 | -- | 2E-07 | None Reported | 0.0003 | - - | 0.0005 | 0.0007 |
| | | | Chemical Total | 6E-06 | -- | 3E-06 | -- | 8E-06 | | 0.08 | -- | 0.006 | 0.08 |
| | | Exposure Point Total | | | | | | 8E-06 | | | | | 0.08 |
| | Exposure Medium Total | | | | | | | 8E-06 | | | | | 0.08 |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-13 | -- | -- | 1E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | CADMIUM | -- | 3E-12 | -- | -- | 3E-12 | NA | - - | 0.000001 | - - | 0.000001 |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0001 | - - | 0.0001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000006 | - - | 0.0000006 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 5E-11 | -- | -- | 5E-11 | Body Weight | - - | 0.00001 | - - | 0.00001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 9E-10 | -- | -- | 9E-10 | Lungs | - - | 0.0000006 | - - | 0.0000006 |
| | | | Chemical Total | -- | 2E-09 | -- | -- | 2E-09 | | - - | 0.0003 | - - | 0.0003 |
| | | Exposure Point Total | | | | | | 2E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | 2E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | 8E-06 | | | | | 0.08 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.0002 | - - | 0.0001 | 0.0003 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 8E-07 | -- | 4E-07 | -- | 1E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 8E-08 | -- | 4E-08 | -- | 1E-07 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 1E-06 | -- | 1E-07 | -- | 1E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.04 | - - | 0.002 | 0.04 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.04 | - - | 0.002 | 0.04 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0005 | - - | 0.00002 | 0.0005 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0006 | - - | 0.0003 | 0.0009 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.008 | - - | 0.0003 | 0.009 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 2E-07 | -- | 3E-07 | None Reported | 0.0005 | - - | 0.0007 | 0.001 |
| | | | Chemical Total | 2E-06 | -- | 8E-07 | -- | 3E-06 | | 0.1 | -- | 0.007 | 0.1 |
| | | Exposure Point Total | | | | | | 3E-06 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 3E-06 | | | | | 0.1 |
| | Air | Block D | NAPHTHALENE | -- | 8E-08 | -- | -- | 8E-08 | Respiratory | - - | 0.005 | - - | 0.005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 9E-12 | -- | -- | 9E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-12 | -- | -- | 2E-12 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00010 | - - | 0.00010 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000004 | - - | 0.0000004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000010 | - - | 0.0000010 |
| | | | Chemical Total | -- | 9E-08 | -- | -- | 9E-08 | | - - | 0.005 | - - | 0.005 |
| | | Exposure Point Total | | | | | | 9E-08 | | | | | 0.005 |
| | Exposure Medium Total | | | | | | | 9E-08 | | | | | 0.005 |
| Medium Total | | | | | | | | 3E-06 | | | | | 0.1 |
| Receptor Total | | | | | | | Receptor Risk Total | 1E-05 | | | | Receptor HI Total | 0.2 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Recreational User

Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.002 |
| Total Blood HI | 0.08 |
| Total Body Weight HI | 0.002 |
| Total CNS HI | 0.001 |
| Total CVS HI | 0.03 |
| Total GS HI | 0.07 |
| Total Kidney HI | 0.01 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.03 |
| Total Respiratory HI | 0.005 |
| Total NA HI | 0.00004 |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 1E-04 | -- | 5E-05 | -- | 2E-04 | | | | | |
| | | | AROCLOR-1260 | 5E-08 | -- | 2E-08 | -- | 7E-08 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 7E-06 | -- | 6E-07 | -- | 7E-06 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 2E-06 | -- | 3E-06 | -- | 5E-06 | | | | | |
| | | | Chemical Total | 2E-04 | -- | 6E-05 | -- | 2E-04 | | | | | |
| | | Exposure Point Total | | | | | | 2E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 2E-04 | | | | | |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-10 | -- | -- | 3E-10 | | | | | |
| | | | AROCLOR-1260 | -- | 3E-13 | -- | -- | 3E-13 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 5E-10 | -- | -- | 5E-10 | | | | | |
| | | | CADMIUM | -- | 8E-12 | -- | -- | 8E-12 | | | | | |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 1E-10 | -- | -- | 1E-10 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 6E-09 | -- | -- | 6E-09 | | | | | |
| | | | Chemical Total | -- | 9E-09 | -- | -- | 9E-09 | | | | | |
| | | Exposure Point Total | | | | | | 9E-09 | | | | | |
| | Exposure Medium Total | | | | | | | 9E-09 | | | | | |
| Medium Total | | | | | | | | 2E-04 | | | | | |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-05 | -- | 9E-06 | -- | 3E-05 | | | | | |
| | | | AROCLOR-1260 | 6E-07 | -- | 3E-07 | -- | 8E-07 | | | | | |
| | | | ARSENIC | 9E-06 | -- | 8E-07 | -- | 9E-06 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 4E-06 | -- | 4E-06 | -- | 8E-06 | | | | | |
| | | | Chemical Total | 4E-05 | -- | 1E-05 | -- | 5E-05 | | | | | |
| | | Exposure Point Total | | | | | | 5E-05 | | | | | |
| | Exposure Medium Total | | | | | | | 5E-05 | | | | | |
| | Air | Block D | NAPHTHALENE | -- | 2E-07 | -- | -- | 2E-07 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-11 | -- | -- | 5E-11 | | | | | |
| | | | AROCLOR-1260 | -- | 4E-12 | -- | -- | 4E-12 | | | | | |
| | | | ARSENIC | -- | 6E-10 | -- | -- | 6E-10 | | | | | |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 9E-09 | -- | -- | 9E-09 | | | | | |
| | | | Chemical Total | -- | 2E-07 | -- | -- | 2E-07 | | | | | |
| | | Exposure Point Total | | | | | | 2E-07 | | | | | |
| | Exposure Medium Total | | | | | | | 2E-07 | | | | | |
| Medium Total | | | | | | | | 5E-05 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-04 | | | | | |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Recreational User

Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 2E-04 | -- | 6E-05 | -- | 2E-04 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 4E-08 | -- | 2E-08 | -- | 6E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.003 | 0.02 |
| | | | ARSENIC | 6E-06 | -- | 5E-07 | -- | 6E-06 | Skin, CVS | 0.1 | - - | 0.01 | 0.2 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.002 | - - | 0.0002 | 0.002 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.5 | - - | 0.01 | 0.5 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.3 | - - | 0.008 | 0.3 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.008 | - - | 0.0002 | 0.008 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.01 | - - | 0.004 | 0.01 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.001 | - - | 0.00003 | 0.001 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.009 | - - | 0.007 | 0.02 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.07 | - - | 0.002 | 0.07 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 3E-06 | -- | 5E-06 | None Reported | 0.004 | - - | 0.004 | 0.008 |
| | | | Chemical Total | 2E-04 | -- | 6E-05 | -- | 2E-04 | | 1 | -- | 0.05 | 1 |
| | | Exposure Point Total | | | | | | 2E-04 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 2E-04 | | | | | 1 |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-10 | -- | -- | 6E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-13 | -- | -- | 3E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | CADMIUM | -- | 7E-12 | -- | -- | 7E-12 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0005 | - - | 0.0005 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0005 | - - | 0.0005 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 1E-10 | -- | -- | 1E-10 | Body Weight | - - | 0.00005 | - - | 0.00005 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.001 | - - | 0.001 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | 2E-04 | | | | | 1 |

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.003 | - - | 0.0009 | 0.003 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 3E-05 | -- | 1E-05 | -- | 4E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 5E-07 | -- | 2E-07 | -- | 7E-07 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 8E-06 | -- | 6E-07 | -- | 8E-06 | Skin, CVS | 0.2 | - - | 0.02 | 0.2 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.5 | - - | 0.01 | 0.5 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.6 | - - | 0.02 | 0.6 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.006 | - - | 0.0002 | 0.006 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.008 | - - | 0.003 | 0.01 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.1 | - - | 0.003 | 0.1 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-06 | -- | 5E-06 | -- | 9E-06 | None Reported | 0.006 | - - | 0.007 | 0.01 |
| | | | Chemical Total | 4E-05 | -- | 2E-05 | -- | 6E-05 | | 1 | -- | 0.06 | 1 |
| | | Exposure Point Total | | | | | | 6E-05 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 6E-05 | | | | | 1 |
| | Air | Block D | NAPHTHALENE | -- | 2E-07 | -- | -- | 2E-07 | Respiratory | - - | 0.02 | - - | 0.02 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-12 | -- | -- | 3E-12 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 5E-10 | -- | -- | 5E-10 | NA | - - | 0.00009 | - - | 0.00009 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0006 | - - | 0.0006 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0004 | - - | 0.0004 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-08 | -- | -- | 2E-08 | Lungs | - - | 0.000004 | - - | 0.000004 |
| | | | Chemical Total | -- | 2E-07 | -- | -- | 2E-07 | | - - | 0.02 | - - | 0.02 |
| | | Exposure Point Total | | | | | | 2E-07 | | | | | 0.02 |
| | Exposure Medium Total | | | | | | | 2E-07 | | | | | 0.02 |
| Medium Total | | | | | | | | 6E-05 | | | | | 1 |

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.03 |
| Total Blood HI | 1.0 |
| Total Body Weight HI | 0.02 |
| Total CNS HI | 0.02 |
| Total CVS HI | 0.4 |
| Total GS HI | 0.9 |
| Total Kidney HI | 0.2 |
| Total Lungs HI | 0.001 |
| Total None Reported HI | 0.02 |
| Total Skin HI | 0.4 |
| Total Respiratory HI | 0.02 |
| Total NA HI | 0.0002 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 3E-05 | -- | 1E-05 | -- | 4E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 2E-08 | -- | 7E-09 | -- | 2E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.003 | - - | 0.0006 | 0.003 |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | Skin, CVS | 0.03 | - - | 0.003 | 0.03 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0004 | - - | 0.00004 | 0.0004 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.09 | - - | 0.003 | 0.09 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.06 | - - | 0.002 | 0.06 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.002 | - - | 0.00005 | 0.002 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.002 | - - | 0.0009 | 0.003 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0002 | - - | 0.000007 | 0.0002 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.002 | - - | 0.001 | 0.003 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0004 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 5E-07 | -- | 6E-07 | -- | 1E-06 | None Reported | 0.0007 | - - | 0.0008 | 0.002 |
| | | | Chemical Total | 3E-05 | -- | 1E-05 | -- | 5E-05 | | 0.2 | -- | 0.01 | 0.2 |
| | | Exposure Point Total | | | | | | 5E-05 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 5E-05 | | | | | 0.2 |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-10 | -- | -- | 6E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 6E-13 | -- | -- | 6E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 8E-10 | -- | -- | 8E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | CADMIUM | -- | 1E-11 | -- | -- | 1E-11 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | COBALT | -- | 5E-09 | -- | -- | 5E-09 | Lungs | - - | 0.0005 | - - | 0.0005 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0005 | - - | 0.0005 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 2E-10 | -- | -- | 2E-10 | Body Weight | - - | 0.00005 | - - | 0.00005 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | - - | 0.001 | - - | 0.001 |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | 5E-05 | | | | | 0.2 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.0005 | - - | 0.0002 | 0.0007 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 5E-06 | -- | 2E-06 | -- | 7E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 2E-07 | -- | 8E-08 | -- | 3E-07 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 3E-06 | -- | 3E-07 | -- | 3E-06 | Skin, CVS | 0.04 | - - | 0.003 | 0.04 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.09 | - - | 0.003 | 0.10 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.1 | - - | 0.003 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.001 | - - | 0.00004 | 0.001 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.001 | - - | 0.0006 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0006 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 8E-07 | -- | 9E-07 | -- | 2E-06 | None Reported | 0.001 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 9E-06 | -- | 3E-06 | -- | 1E-05 | | 0.3 | -- | 0.01 | 0.3 |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | 0.3 |
| | Air | Block D | NAPHTHALENE | -- | 3E-07 | -- | -- | 3E-07 | Respiratory | - - | 0.02 | - - | 0.02 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 7E-12 | -- | -- | 7E-12 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 1E-09 | -- | -- | 1E-09 | NA | - - | 0.00009 | - - | 0.00009 |
| | | | COBALT | -- | 5E-09 | -- | -- | 5E-09 | Lungs | - - | 0.0006 | - - | 0.0006 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0004 | - - | 0.0004 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-08 | -- | -- | 2E-08 | Lungs | - - | 0.000004 | - - | 0.000004 |
| | | | Chemical Total | -- | 4E-07 | -- | -- | 4E-07 | | - - | 0.02 | - - | 0.02 |
| | | Exposure Point Total | | | | | | 4E-07 | | | | | 0.02 |
| | Exposure Medium Total | | | | | | | 4E-07 | | | | | 0.02 |
| Medium Total | | | | | | | | 1E-05 | | | | | 0.3 |
| Receptor Total | | | | | | | Receptor Risk Total | 6E-05 | | | | Receptor HI Total | 0.5 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.005 |
| Total Blood HI | 0.2 |
| Total Body Weight HI | 0.004 |
| Total CNS HI | 0.004 |
| Total CVS HI | 0.07 |
| Total GS HI | 0.2 |
| Total Kidney HI | 0.03 |
| Total Lungs HI | 0.001 |
| Total None Reported HI | 0.004 |
| Total Skin HI | 0.07 |
| Total Respiratory HI | 0.02 |
| Total NA HI | 0.0002 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 7E-06 | -- | 3E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 9E-09 | -- | 5E-09 | -- | 1E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.002 | - - | 0.0004 | 0.002 |
| | | | ARSENIC | 1E-06 | -- | 1E-07 | -- | 1E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.02 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0002 | - - | 0.00003 | 0.0002 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.05 | - - | 0.002 | 0.05 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.03 | - - | 0.001 | 0.03 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0009 | - - | 0.00004 | 0.0009 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.001 | - - | 0.0007 | 0.002 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0001 | - - | 0.000005 | 0.0001 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0010 | - - | 0.0010 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.007 | - - | 0.0003 | 0.007 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 2E-07 | -- | 3E-07 | None Reported | 0.0004 | - - | 0.0006 | 0.001 |
| | | | Chemical Total | 8E-06 | -- | 4E-06 | -- | 1E-05 | | 0.1 | -- | 0.008 | 0.1 |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | 0.1 |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 6E-13 | -- | -- | 6E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 8E-10 | -- | -- | 8E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | CADMIUM | -- | 1E-11 | -- | -- | 1E-11 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | COBALT | -- | 5E-09 | -- | -- | 5E-09 | Lungs | - - | 0.0005 | - - | 0.0005 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0005 | - - | 0.0005 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 2E-10 | -- | -- | 2E-10 | Body Weight | - - | 0.00005 | - - | 0.00005 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.001 | - - | 0.001 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | 1E-05 | | | | | 0.1 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.0003 | - - | 0.0001 | 0.0004 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 1E-06 | -- | 6E-07 | -- | 2E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 1E-07 | -- | 6E-08 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | Skin, CVS | 0.02 | - - | 0.003 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.05 | - - | 0.002 | 0.06 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.06 | - - | 0.002 | 0.06 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0007 | - - | 0.00003 | 0.0007 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0008 | - - | 0.0005 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0005 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 3E-07 | -- | 4E-07 | None Reported | 0.0006 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 3E-06 | -- | 1E-06 | -- | 4E-06 | | 0.1 | -- | 0.009 | 0.2 |
| | | Exposure Point Total | | | | | | 4E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 4E-06 | | | | | 0.2 |
| | Air | Block D | NAPHTHALENE | -- | 3E-07 | -- | -- | 3E-07 | Respiratory | - - | 0.02 | - - | 0.02 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 7E-12 | -- | -- | 7E-12 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 1E-09 | -- | -- | 1E-09 | NA | - - | 0.00009 | - - | 0.00009 |
| | | | COBALT | -- | 5E-09 | -- | -- | 5E-09 | Lungs | - - | 0.0006 | - - | 0.0006 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0004 | - - | 0.0004 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 6E-09 | -- | -- | 6E-09 | Lungs | - - | 0.000004 | - - | 0.000004 |
| | | | Chemical Total | -- | 4E-07 | -- | -- | 4E-07 | | - - | 0.02 | - - | 0.02 |
| | | Exposure Point Total | | | | | | 4E-07 | | | | | 0.02 |
| | Exposure Medium Total | | | | | | | 4E-07 | | | | | 0.02 |
| Medium Total | | | | | | | | 4E-06 | | | | | 0.2 |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-05 | | | | Receptor HI Total | 0.3 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK D - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.003 |
| Total Blood HI | 0.1 |
| Total Body Weight HI | 0.002 |
| Total CNS HI | 0.003 |
| Total CVS HI | 0.04 |
| Total GS HI | 0.10 |
| Total Kidney HI | 0.02 |
| Total Lungs HI | 0.001 |
| Total None Reported HI | 0.003 |
| Total Skin HI | 0.04 |
| Total Respiratory HI | 0.02 |
| Total NA HI | 0.0002 |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block D | BENZO(A)PYRENE EQUIVALENTS | 2E-04 | -- | 7E-05 | -- | 3E-04 | | | | | |
| | | | AROCLOR-1260 | 7E-08 | -- | 3E-08 | -- | 1E-07 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 9E-06 | -- | 8E-07 | -- | 1E-05 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 4E-06 | -- | 7E-06 | | | | | |
| | | | Chemical Total | 2E-04 | -- | 8E-05 | -- | 3E-04 | | | | | |
| | | Exposure Point Total | | | | | | 3E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 3E-04 | | | | | |
| | Air | Block D | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-09 | -- | -- | 1E-09 | | | | | |
| | | | AROCLOR-1260 | -- | 1E-12 | -- | -- | 1E-12 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | CADMIUM | -- | 3E-11 | -- | -- | 3E-11 | | | | | |
| | | | COBALT | -- | 1E-08 | -- | -- | 1E-08 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 5E-10 | -- | -- | 5E-10 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 2E-08 | -- | -- | 2E-08 | | | | | |
| | | | Chemical Total | -- | 4E-08 | -- | -- | 4E-08 | | | | | |
| | | Exposure Point Total | | | | | | 4E-08 | | | | | |
| | Exposure Medium Total | | | | | | | 4E-08 | | | | | |
| Medium Total | | | | | | | | 3E-04 | | | | | |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block D | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 3E-05 | -- | 1E-05 | -- | 5E-05 | | | | | |
| | | | AROCLOR-1260 | 8E-07 | -- | 4E-07 | -- | 1E-06 | | | | | |
| | | | ARSENIC | 1E-05 | -- | 1E-06 | -- | 1E-05 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 5E-06 | -- | 6E-06 | -- | 1E-05 | | | | | |
| | | | Chemical Total | 5E-05 | -- | 2E-05 | -- | 7E-05 | | | | | |
| | | Exposure Point Total | | | | | | 7E-05 | | | | | |
| | Exposure Medium Total | | | | | | | 7E-05 | | | | | |
| | Air | Block D | NAPHTHALENE | -- | 9E-07 | -- | -- | 9E-07 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | | | | | |
| | | | AROCLOR-1260 | -- | 2E-11 | -- | -- | 2E-11 | | | | | |
| | | | ARSENIC | -- | 3E-09 | -- | -- | 3E-09 | | | | | |
| | | | COBALT | -- | 1E-08 | -- | -- | 1E-08 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 4E-08 | -- | -- | 4E-08 | | | | | |
| | | | Chemical Total | -- | 9E-07 | -- | -- | 9E-07 | | | | | |
| | | Exposure Point Total | | | | | | 9E-07 | | | | | |
| | Exposure Medium Total | | | | | | | 9E-07 | | | | | |
| Medium Total | | | | | | | | 7E-05 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 4E-04 | | | | | |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Body Weight | 0.01 | - - | 0.001 | 0.01 |
| | | | 1,2,4-TRICHLOROBENZENE | 2E-07 | -- | 9E-09 | -- | 2E-07 | Liver | 0.004 | -- | 0.0002 | 0.004 |
| | | | 1,4-DICHLOROBENZENE | 8E-11 | -- | 5E-12 | -- | 9E-11 | NA | 0.00002 | - - | 0.0000009 | 0.00002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 7E-07 | -- | 2E-07 | -- | 9E-07 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 5E-06 | -- | 1E-06 | -- | 6E-06 | Autoimmune | 8 | - - | 2 | 11 |
| | | | AROCLOR-1260 | 1E-05 | -- | 4E-06 | -- | 2E-05 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.004 | - - | 0.0006 | 0.005 |
| | | | ARSENIC | 2E-07 | -- | 1E-08 | -- | 2E-07 | Skin, CVS | 0.03 | - - | 0.002 | 0.04 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.001 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Thyroid | 0.02 | -- | 0.0004 | 0.02 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.1 | - - | 0.002 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.006 | - - | 0.0001 | 0.006 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.002 | - - | 0.0006 | 0.002 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0008 | - - | 0.00002 | 0.0008 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.003 | - - | 0.001 | 0.004 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0002 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-08 | -- | 4E-08 | -- | 8E-08 | None Reported | 0.002 | - - | 0.002 | 0.004 |
| | | | Chemical Total | 2E-05 | -- | 6E-06 | -- | 3E-05 | | 9 | -- | 2 | 11 |
| | | Exposure Point Total | | | | | | 3E-05 | | | | | 11 |
| | Exposure Medium Total | | | | | | | 3E-05 | | | | | 11 |

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Urinary Tract | - - | 0.1 | - - | 0.1 |
| | | | 1,4-DICHLOROBENZENE | -- | 4E-09 | -- | -- | 4E-09 | Liver | - - | 0.00002 | - - | 0.00002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-09 | -- | -- | 4E-09 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 5E-08 | -- | -- | 5E-08 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-07 | -- | -- | 1E-07 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-08 | -- | -- | 2E-08 | NA | - - | 0.02 | - - | 0.02 |
| | | | CADMIUM | -- | 1E-08 | -- | -- | 1E-08 | NA | - - | 0.04 | - - | 0.04 |
| | | | COBALT | -- | 2E-07 | -- | -- | 2E-07 | Lungs | - - | 0.3 | - - | 0.3 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.6 | - - | 0.6 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0006 | - - | 0.0006 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 6E-09 | -- | -- | 6E-09 | Body Weight | - - | 0.02 | - - | 0.02 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-07 | -- | -- | 2E-07 | Lungs | - - | 0.002 | - - | 0.002 |
| | | | Chemical Total | -- | 7E-07 | -- | -- | 7E-07 | | - - | 1 | - - | 1 |
| | | Exposure Point Total | | | | | | 7E-07 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 7E-07 | | | | | 1 |
| Medium Total | | | | | | | | 3E-05 | | | | | 12 |

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Body Weight | 0.1 | - - | 0.01 | 0.1 |
| | | | 1,2,4-TRICHLOROBENZENE | 1E-06 | -- | 9E-08 | -- | 1E-06 | Liver | 0.04 | -- | 0.002 | 0.04 |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | 1,4-DICHLOROBENZENE | 4E-09 | -- | 2E-10 | -- | 4E-09 | NA | 0.0007 | - - | 0.00004 | 0.0007 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 8E-07 | -- | 2E-07 | -- | 1E-06 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00002 | - - | 0.000005 | 0.00002 |
| | | | AROCLOR-1254 | 1E-06 | -- | 4E-07 | -- | 2E-06 | Autoimmune | 2 | - - | 0.7 | 3 |
| | | | AROCLOR-1260 | 1E-04 | -- | 3E-05 | -- | 1E-04 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 2E-07 | -- | 9E-09 | -- | 2E-07 | Skin, CVS | 0.02 | - - | 0.001 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Thyroid | 0.006 | - - | 0.0001 | 0.006 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.1 | - - | 0.002 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.003 | - - | 0.00006 | 0.003 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.005 | - - | 0.001 | 0.006 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.006 | - - | 0.0001 | 0.007 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-08 | -- | 1E-08 | -- | 3E-08 | None Reported | 0.0008 | - - | 0.0006 | 0.001 |
| | | | Chemical Total | 1E-04 | -- | 3E-05 | -- | 1E-04 | | 3 | -- | 0.7 | 3 |
| | | Exposure Point Total | | | | | | 1E-04 | | | | | 3 |
| | Exposure Medium Total | | | | | | | 1E-04 | | | | | 3 |

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.007 | - - | 0.007 |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,4-DICHLOROBENZENE | -- | 2E-07 | -- | -- | 2E-07 | Liver | - - | 0.0009 | - - | 0.0009 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-09 | -- | -- | 4E-09 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 8E-10 | -- | -- | 8E-10 | Respiratory | - - | 0.0005 | - - | 0.0005 |
| | | | AROCLOR-1254 | -- | 1E-08 | -- | -- | 1E-08 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 9E-07 | -- | -- | 9E-07 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 1E-08 | -- | -- | 1E-08 | NA | - - | 0.02 | - - | 0.02 |
| | | | COBALT | -- | 8E-08 | -- | -- | 8E-08 | Lungs | - - | 0.1 | - - | 0.1 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.3 | - - | 0.3 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.002 | - - | 0.002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 9E-08 | -- | -- | 9E-08 | Lungs | - - | 0.0008 | - - | 0.0008 |
| | | | Chemical Total | -- | 1E-06 | -- | -- | 1E-06 | | - - | 0.4 | - - | 0.4 |
| | | Exposure Point Total | | | | | | 1E-06 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | 1E-06 | | | | | 0.4 |
| Medium Total | | | | | | | | 1E-04 | | | | | 4 |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-04 | | | | Receptor HI Total | 16 |

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Adrenals HI | 0.007 |
| Total Autoimmune HI | 14 |
| Total Blood HI | 0.005 |
| Total Body Weight HI | 0.1 |
| Total CNS HI | 0.9 |
| Total CVS HI | 0.06 |
| Total GS HI | 0.2 |
| Total Kidney HI | 0.03 |
| Total Liver HI | 0.05 |
| Total Lungs HI | 0.4 |
| Total None Reported HI | 0.005 |
| Total Skin HI | 0.06 |
| Total Respiratory HI | 0.0005 |
| Total Urinary Tract HI | 0.1 |
| Total NA HI | 0.09 |
| Total Thyroid HI | 0.02 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.010 | - - | 0.004 | 0.01 |
| | | | 1,2,4-TRICHLOROBENZENE | 4E-07 | -- | 2E-07 | -- | 5E-07 | Adrenals | 0.004 | - - | 0.002 | 0.005 |
| | | | 1,4-DICHLOROBENZENE | 2E-10 | -- | 9E-11 | -- | 3E-10 | NA | 0.000002 | - - | 0.0000006 | 0.000002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 3E-06 | -- | 5E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 1E-05 | -- | 2E-05 | -- | 4E-05 | Autoimmune | 0.9 | - - | 2 | 3 |
| | | | AROCLOR-1260 | 4E-05 | -- | 7E-05 | -- | 1E-04 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.0005 | - - | 0.0004 | 0.0009 |
| | | | ARSENIC | 6E-07 | -- | 2E-07 | -- | 8E-07 | Skin, CVS | 0.004 | - - | 0.001 | 0.005 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.001 | - - | 0.0007 | 0.002 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.002 | 0.02 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.01 | - - | 0.002 | 0.01 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0006 | - - | 0.00008 | 0.0007 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0002 | - - | 0.0004 | 0.0006 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.00008 | - - | 0.00001 | 0.00009 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0003 | - - | 0.0009 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.002 | - - | 0.0003 | 0.003 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 6E-07 | -- | 7E-07 | None Reported | 0.0002 | - - | 0.001 | 0.001 |
| | | | Chemical Total | 5E-05 | -- | 1E-04 | -- | 2E-04 | | 0.9 | -- | 2 | 3 |
| | | Exposure Point Total | | | | | | 2E-04 | | | | | 3 |
| | Exposure Medium Total | | | | | | | 2E-04 | | | | | 3 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.2 | - - | 0.2 |
| | | | 1,4-DICHLOROBENZENE | -- | 1E-08 | -- | -- | 1E-08 | Liver | - - | 0.000005 | - - | 0.000005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 5E-10 | -- | -- | 5E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-09 | -- | -- | 2E-09 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | CADMIUM | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0002 | - - | 0.0002 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000003 | - - | 0.0000003 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 7E-11 | -- | -- | 7E-11 | Body Weight | - - | 0.000009 | - - | 0.000009 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0000009 | - - | 0.0000009 |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | - - | 0.2 | - - | 0.2 |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | 0.2 |
| Medium Total | | | | | | | | 2E-04 | | | | | 3 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.1 | - - | 0.04 | 0.1 |
| | | | 1,2,4-TRICHLOROBENZENE | 4E-06 | -- | 1E-06 | -- | 5E-06 | Adrenals | 0.04 | - - | 0.01 | 0.05 |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | 1,4-DICHLOROBENZENE | 1E-08 | -- | 4E-09 | -- | 1E-08 | NA | 0.00007 | - - | 0.00003 | 0.0001 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 4E-06 | -- | 6E-06 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000002 | - - | 0.000003 | 0.000005 |
| | | | AROCLOR-1254 | 3E-06 | -- | 6E-06 | -- | 1E-05 | Autoimmune | 0.2 | - - | 0.4 | 0.7 |
| | | | AROCLOR-1260 | 2E-04 | -- | 5E-04 | -- | 7E-04 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 4E-07 | -- | 2E-07 | -- | 5E-07 | Skin, CVS | 0.002 | - - | 0.0010 | 0.003 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.007 | - - | 0.0009 | 0.007 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.01 | - - | 0.002 | 0.01 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0003 | - - | 0.00004 | 0.0004 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0005 | - - | 0.0009 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.001 | - - | 0.0002 | 0.002 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-08 | -- | 2E-07 | -- | 3E-07 | None Reported | 0.00008 | - - | 0.0004 | 0.0005 |
| | | | Chemical Total | 3E-04 | -- | 5E-04 | -- | 7E-04 | | 0.4 | -- | 0.5 | 0.9 |
| | | Exposure Point Total | | | | | | 7E-04 | | | | | 0.9 |
| | Exposure Medium Total | | | | | | | 7E-04 | | | | | 0.9 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 1 | - - | 1 |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,4-DICHLOROBENZENE | -- | 7E-07 | -- | -- | 7E-07 | Liver | - - | 0.0002 | - - | 0.0002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 3E-09 | -- | -- | 3E-09 | Respiratory | - - | 0.00009 | - - | 0.00009 |
| | | | AROCLOR-1254 | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-08 | -- | -- | 1E-08 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.000007 | - - | 0.000007 |
| | | | COBALT | -- | 9E-10 | -- | -- | 9E-10 | Lungs | - - | 0.00005 | - - | 0.00005 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0001 | - - | 0.0001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000007 | - - | 0.0000007 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000003 | - - | 0.0000003 |
| | | | Chemical Total | -- | 7E-07 | -- | -- | 7E-07 | | - - | 1 | - - | 1 |
| | | Exposure Point Total | | | | | | 7E-07 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 7E-07 | | | | | 1 |
| Medium Total | | | | | | | | 7E-04 | | | | | 2 |
| Receptor Total | | | | | | | Receptor Risk Total | 9E-04 | | | | Receptor HI Total | 5 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Adrenals HI | 2 |
| Total Autoimmune HI | 3 |
| Total Blood HI | 0.03 |
| Total Body Weight HI | 0.001 |
| Total CNS HI | 0.001 |
| Total CVS HI | 0.008 |
| Total GS HI | 0.03 |
| Total Kidney HI | 0.006 |
| Total Liver HI | 0.0002 |
| Total Lungs HI | 0.0002 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.008 |
| Total Respiratory HI | 0.00009 |
| Total NA HI | 0.0001 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.10 | - - | 0.007 | 0.1 |
| | | | 1,2,4-TRICHLOROBENZENE | 9E-07 | -- | 7E-08 | -- | 1E-06 | Adrenals | 0.04 | - - | 0.003 | 0.04 |
| | | | 1,4-DICHLOROBENZENE | 5E-10 | -- | 4E-11 | -- | 5E-10 | NA | 0.00002 | - - | 0.000001 | 0.00002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-05 | -- | 7E-06 | -- | 3E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 3E-05 | -- | 1E-05 | -- | 4E-05 | Autoimmune | 9 | - - | 3 | 12 |
| | | | AROCLOR-1260 | 9E-05 | -- | 3E-05 | -- | 1E-04 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.004 | - - | 0.0007 | 0.005 |
| | | | ARSENIC | 1E-06 | -- | 1E-07 | -- | 1E-06 | Skin, CVS | 0.04 | - - | 0.002 | 0.04 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.001 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.2 | - - | 0.004 | 0.2 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.1 | - - | 0.003 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.006 | - - | 0.0001 | 0.006 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.002 | - - | 0.0006 | 0.003 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0008 | - - | 0.00002 | 0.0008 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.003 | - - | 0.002 | 0.004 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0005 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 1E-06 | -- | 3E-06 | None Reported | 0.002 | - - | 0.002 | 0.004 |
| | | | Chemical Total | 1E-04 | -- | 5E-05 | -- | 2E-04 | | 9 | -- | 3 | 12 |
| | | Exposure Point Total | | | | | | 2E-04 | | | | | 12 |
| | Exposure Medium Total | | | | | | | 2E-04 | | | | | 12 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.06 | - - | 0.06 |
| | | | 1,4-DICHLOROBENZENE | -- | 9E-10 | -- | -- | 9E-10 | Liver | - - | 0.000001 | - - | 0.000001 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-11 | -- | -- | 1E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | 0.000003 | - - | 0.000003 |
| | | | CADMIUM | -- | 8E-12 | -- | -- | 8E-12 | NA | - - | 0.000005 | - - | 0.000005 |
| | | | COBALT | -- | 2E-10 | -- | -- | 2E-10 | Lungs | - - | 0.00004 | - - | 0.00004 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00006 | - - | 0.00006 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000007 | - - | 0.00000007 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 5E-12 | -- | -- | 5E-12 | Body Weight | - - | 0.000002 | - - | 0.000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 9E-10 | -- | -- | 9E-10 | Lungs | - - | 0.0000002 | - - | 0.0000002 |
| | | | Chemical Total | -- | 2E-09 | -- | -- | 2E-09 | | - - | 0.06 | - - | 0.06 |
| | | Exposure Point Total | | | | | | 2E-09 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | 2E-09 | | | | | 0.06 |
| Medium Total | | | | | | | | 2E-04 | | | | | 12 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 1.0 | - - | 0.07 | 1 |
| | | | 1,2,4-TRICHLOROBENZENE | 9E-06 | -- | 6E-07 | -- | 9E-06 | Adrenals | 0.3 | - - | 0.02 | 0.4 |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | 1,4-DICHLOROBENZENE | 2E-08 | -- | 2E-09 | -- | 2E-08 | NA | 0.0007 | - - | 0.00005 | 0.0008 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 3E-05 | -- | 8E-06 | -- | 4E-05 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00002 | - - | 0.000005 | 0.00002 |
| | | | AROCLOR-1254 | 8E-06 | -- | 3E-06 | -- | 1E-05 | Autoimmune | 2 | - - | 0.8 | 3 |
| | | | AROCLOR-1260 | 6E-04 | -- | 2E-04 | -- | 8E-04 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 9E-07 | -- | 7E-08 | -- | 1E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.03 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.06 | - - | 0.002 | 0.07 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.1 | - - | 0.003 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.003 | - - | 0.00008 | 0.003 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.005 | - - | 0.002 | 0.006 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0003 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 5E-07 | -- | 5E-07 | -- | 1E-06 | None Reported | 0.0008 | - - | 0.0007 | 0.002 |
| | | | Chemical Total | 6E-04 | -- | 2E-04 | -- | 8E-04 | | 4 | -- | 0.9 | 5 |
| | | Exposure Point Total | | | | | | 8E-04 | | | | | 5 |
| | Exposure Medium Total | | | | | | | 8E-04 | | | | | 5 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.3 | - - | 0.3 |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,4-DICHLOROBENZENE | -- | 4E-08 | -- | -- | 4E-08 | Liver | - - | 0.00005 | - - | 0.00005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 2E-10 | -- | -- | 2E-10 | Respiratory | - - | 0.00002 | - - | 0.00002 |
| | | | AROCLOR-1254 | -- | 9E-12 | -- | -- | 9E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 6E-10 | -- | -- | 6E-10 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 1E-11 | -- | -- | 1E-11 | NA | - - | 0.000002 | - - | 0.000002 |
| | | | COBALT | -- | 6E-11 | -- | -- | 6E-11 | Lungs | - - | 0.00001 | - - | 0.00001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00004 | - - | 0.00004 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000002 | - - | 0.0000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 4E-10 | -- | -- | 4E-10 | Lungs | - - | 0.00000009 | - - | 0.00000009 |
| | | | Chemical Total | -- | 4E-08 | -- | -- | 4E-08 | | - - | 0.3 | - - | 0.3 |
| | | Exposure Point Total | | | | | | 4E-08 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | 4E-08 | | | | | 0.3 |
| Medium Total | | | | | | | | 8E-04 | | | | | 5 |
| Receptor Total | | | | | | | Receptor Risk Total | 1E-03 | | | | Receptor HI Total | 17 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Adrenals HI | 2 |
| Total Autoimmune HI | 15 |
| Total Blood HI | 0.3 |
| Total Body Weight HI | 0.004 |
| Total CNS HI | 0.010 |
| Total CVS HI | 0.06 |
| Total GS HI | 0.2 |
| Total Kidney HI | 0.05 |
| Total Liver HI | 0.00006 |
| Total Lungs HI | 0.00005 |
| Total None Reported HI | 0.006 |
| Total Skin HI | 0.06 |
| Total Respiratory HI | 0.00002 |
| Total NA HI | 0.0008 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.02 | - - | 0.005 | 0.02 |
| | | | 1,2,4-TRICHLOROBENZENE | 3E-07 | -- | 9E-08 | -- | 4E-07 | Adrenals | 0.007 | - - | 0.002 | 0.009 |
| | | | 1,4-DICHLOROBENZENE | 2E-10 | -- | 5E-11 | -- | 2E-10 | NA | 0.000003 | - - | 0.0000008 | 0.000004 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 5E-06 | -- | 5E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 1E-05 | -- | 1E-05 | -- | 2E-05 | Autoimmune | 2 | - - | 2 | 4 |
| | | | AROCLOR-1260 | 3E-05 | -- | 4E-05 | -- | 7E-05 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.0008 | - - | 0.0005 | 0.001 |
| | | | ARSENIC | 5E-07 | -- | 1E-07 | -- | 6E-07 | Skin, CVS | 0.007 | - - | 0.002 | 0.008 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.002 | - - | 0.0008 | 0.003 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.03 | - - | 0.003 | 0.04 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.02 | - - | 0.002 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.001 | - - | 0.00010 | 0.001 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0004 | - - | 0.0004 | 0.0008 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0002 | - - | 0.00001 | 0.0002 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0005 | - - | 0.001 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.004 | - - | 0.0004 | 0.005 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-07 | -- | 9E-07 | -- | 1E-06 | None Reported | 0.0004 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 5E-05 | -- | 6E-05 | -- | 1E-04 | | 2 | -- | 2 | 4 |
| | | Exposure Point Total | | | | | | 1E-04 | | | | | 4 |
| | Exposure Medium Total | | | | | | | 1E-04 | | | | | 4 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.06 | - - | 0.06 |
| | | | 1,4-DICHLOROBENZENE | -- | 2E-09 | -- | -- | 2E-09 | Liver | - - | 0.000001 | - - | 0.000001 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-11 | -- | -- | 1E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 7E-11 | -- | -- | 7E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | 0.000003 | - - | 0.000003 |
| | | | CADMIUM | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | 0.000005 | - - | 0.000005 |
| | | | COBALT | -- | 3E-10 | -- | -- | 3E-10 | Lungs | - - | 0.00004 | - - | 0.00004 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00006 | - - | 0.00006 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000007 | - - | 0.00000007 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 9E-12 | -- | -- | 9E-12 | Body Weight | - - | 0.000002 | - - | 0.000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 9E-10 | -- | -- | 9E-10 | Lungs | - - | 0.0000002 | - - | 0.0000002 |
| | | | Chemical Total | -- | 3E-09 | -- | -- | 3E-09 | | - - | 0.06 | - - | 0.06 |
| | | Exposure Point Total | | | | | | 3E-09 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | 3E-09 | | | | | 0.06 |
| Medium Total | | | | | | | | 1E-04 | | | | | 4 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.2 | - - | 0.05 | 0.2 |
| | | | 1,2,4-TRICHLOROBENZENE | 3E-06 | -- | 8E-07 | -- | 4E-06 | Adrenals | 0.07 | - - | 0.02 | 0.08 |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | 1,4-DICHLOROBENZENE | 9E-09 | -- | 2E-09 | -- | 1E-08 | NA | 0.0001 | - - | 0.00003 | 0.0002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 5E-06 | -- | 6E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000003 | - - | 0.000004 | 0.000007 |
| | | | AROCLOR-1254 | 3E-06 | -- | 4E-06 | -- | 7E-06 | Autoimmune | 0.4 | - - | 0.5 | 1.0 |
| | | | AROCLOR-1260 | 2E-04 | -- | 3E-04 | -- | 5E-04 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 3E-07 | -- | 9E-08 | -- | 4E-07 | Skin, CVS | 0.005 | - - | 0.001 | 0.006 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.01 | - - | 0.001 | 0.01 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.02 | - - | 0.002 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0006 | - - | 0.00005 | 0.0007 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0009 | - - | 0.001 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.002 | - - | 0.0002 | 0.003 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 3E-07 | -- | 5E-07 | None Reported | 0.0001 | - - | 0.0005 | 0.0007 |
| | | | Chemical Total | 2E-04 | -- | 3E-04 | -- | 5E-04 | | 0.7 | -- | 0.6 | 1 |
| | | Exposure Point Total | | | | | | 5E-04 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 5E-04 | | | | | 1 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.3 | - - | 0.3 |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,4-DICHLOROBENZENE | -- | 8E-08 | -- | -- | 8E-08 | Liver | - - | 0.00005 | - - | 0.00005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 4E-10 | -- | -- | 4E-10 | Respiratory | - - | 0.00002 | - - | 0.00002 |
| | | | AROCLOR-1254 | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-09 | -- | -- | 1E-09 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | 0.000002 | - - | 0.000002 |
| | | | COBALT | -- | 1E-10 | -- | -- | 1E-10 | Lungs | - - | 0.00001 | - - | 0.00001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00004 | - - | 0.00004 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000002 | - - | 0.0000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 4E-10 | -- | -- | 4E-10 | Lungs | - - | 0.00000009 | - - | 0.00000009 |
| | | | Chemical Total | -- | 8E-08 | -- | -- | 8E-08 | | - - | 0.3 | - - | 0.3 |
| | | Exposure Point Total | | | | | | 8E-08 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | 8E-08 | | | | | 0.3 |
| Medium Total | | | | | | | | 5E-04 | | | | | 2 |
| Receptor Total | | | | | | | Receptor Risk Total | 6E-04 | | | | Receptor HI Total | 5 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Adrenals HI | 0.7 |
| Total Autoimmune HI | 5 |
| Total Blood HI | 0.05 |
| Total Body Weight HI | 0.002 |
| Total CNS HI | 0.002 |
| Total CVS HI | 0.01 |
| Total GS HI | 0.05 |
| Total Kidney HI | 0.01 |
| Total Liver HI | 0.00006 |
| Total Lungs HI | 0.00005 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.01 |
| Total Respiratory HI | 0.00002 |
| Total NA HI | 0.0002 |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | | | | | |
| | | | 1,2,4-TRICHLOROBENZENE | 1E-06 | -- | 2E-07 | -- | 1E-06 | | | | | |
| | | | 1,4-DICHLOROBENZENE | 7E-10 | -- | 9E-11 | -- | 8E-10 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 3E-05 | -- | 1E-05 | -- | 4E-05 | | | | | |
| | | | AROCLOR-1254 | 4E-05 | -- | 2E-05 | -- | 6E-05 | | | | | |
| | | | AROCLOR-1260 | 1E-04 | -- | 7E-05 | -- | 2E-04 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 2E-06 | -- | 2E-06 | -- | 4E-06 | | | | | |
| | | | Chemical Total | 2E-04 | -- | 1E-04 | -- | 3E-04 | | | | | |
| | | Exposure Point Total | | | | | | 3E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 3E-04 | | | | | |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Commercial Receptor

Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,4-DICHLOROBENZENE | -- | 3E-09 | -- | -- | 3E-09 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-11 | -- | -- | 3E-11 | | | | | |
| | | | AROCLOR-1254 | -- | 1E-10 | -- | -- | 1E-10 | | | | | |
| | | | AROCLOR-1260 | -- | 3E-10 | -- | -- | 3E-10 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 5E-11 | -- | -- | 5E-11 | | | | | |
| | | | CADMIUM | -- | 2E-11 | -- | -- | 2E-11 | | | | | |
| | | | COBALT | -- | 5E-10 | -- | -- | 5E-10 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 1E-11 | -- | -- | 1E-11 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | Chemical Total | -- | 6E-09 | -- | -- | 6E-09 | | | | | |
| | | Exposure Point Total | | | | | | 6E-09 | | | | | |
| | Exposure Medium Total | | | | | | | 6E-09 | | | | | |
| Medium Total | | | | | | | | 3E-04 | | | | | |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | | | | | |
| | | | 1,2,4-TRICHLOROBENZENE | 1E-05 | -- | 1E-06 | -- | 1E-05 | | | | | |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | | | | | |
| | | | 1,4-DICHLOROBENZENE | 3E-08 | -- | 4E-09 | -- | 4E-08 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 3E-05 | -- | 1E-05 | -- | 5E-05 | | | | | |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | AROCLOR-1254 | 1E-05 | -- | 6E-06 | -- | 2E-05 | | | | | |
| | | | AROCLOR-1260 | 8E-04 | -- | 5E-04 | -- | 1E-03 | | | | | |
| | | | ARSENIC | 1E-06 | -- | 2E-07 | -- | 1E-06 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 6E-07 | -- | 9E-07 | -- | 1E-06 | | | | | |
| | | | Chemical Total | 9E-04 | -- | 5E-04 | -- | 1E-03 | | | | | |
| | | Exposure Point Total | | | | | | 1E-03 | | | | | |
| | Exposure Medium Total | | | | | | | 1E-03 | | | | | |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,4-DICHLOROBENZENE | -- | 1E-07 | -- | -- | 1E-07 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-11 | -- | -- | 3E-11 | | | | | |
| | | | NAPHTHALENE | -- | 6E-10 | -- | -- | 6E-10 | | | | | |
| | | | AROCLOR-1254 | -- | 3E-11 | -- | -- | 3E-11 | | | | | |
| | | | AROCLOR-1260 | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | ARSENIC | -- | 3E-11 | -- | -- | 3E-11 | | | | | |
| | | | COBALT | -- | 2E-10 | -- | -- | 2E-10 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 7E-10 | -- | -- | 7E-10 | | | | | |
| | | | Chemical Total | -- | 1E-07 | -- | -- | 1E-07 | | | | | |
| | | Exposure Point Total | | | | | | 1E-07 | | | | | |
| | Exposure Medium Total | | | | | | | 1E-07 | | | | | |
| Medium Total | | | | | | | | 1E-03 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-03 | | | | | |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.010 | - - | 0.004 | 0.01 |
| | | | 1,2,4-TRICHLOROBENZENE | 4E-07 | -- | 2E-07 | -- | 5E-07 | Adrenals | 0.004 | - - | 0.002 | 0.005 |
| | | | 1,4-DICHLOROBENZENE | 2E-10 | -- | 9E-11 | -- | 3E-10 | NA | 0.000002 | - - | 0.0000006 | 0.000002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 3E-06 | -- | 5E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 1E-05 | -- | 2E-05 | -- | 4E-05 | Autoimmune | 0.9 | - - | 2 | 3 |
| | | | AROCLOR-1260 | 4E-05 | -- | 7E-05 | -- | 1E-04 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.0005 | - - | 0.0004 | 0.0009 |
| | | | ARSENIC | 6E-07 | -- | 2E-07 | -- | 8E-07 | Skin, CVS | 0.004 | - - | 0.001 | 0.005 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.001 | - - | 0.0007 | 0.002 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.002 | 0.02 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.01 | - - | 0.002 | 0.01 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0006 | - - | 0.00008 | 0.0007 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0002 | - - | 0.0004 | 0.0006 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.00008 | - - | 0.00001 | 0.00009 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0003 | - - | 0.0009 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.002 | - - | 0.0003 | 0.003 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 6E-07 | -- | 7E-07 | None Reported | 0.0002 | - - | 0.001 | 0.001 |
| | | | Chemical Total | 5E-05 | -- | 1E-04 | -- | 2E-04 | | 0.9 | -- | 2 | 3 |
| | | Exposure Point Total | | | | | | 2E-04 | | | | | 3 |
| | Exposure Medium Total | | | | | | | 2E-04 | | | | | 3 |

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.2 | - - | 0.2 |
| | | | 1,4-DICHLOROBENZENE | -- | 1E-08 | -- | -- | 1E-08 | Liver | - - | 0.000005 | - - | 0.000005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 5E-10 | -- | -- | 5E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-09 | -- | -- | 2E-09 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | CADMIUM | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0002 | - - | 0.0002 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000003 | - - | 0.0000003 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 7E-11 | -- | -- | 7E-11 | Body Weight | - - | 0.000009 | - - | 0.000009 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0000009 | - - | 0.0000009 |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | - - | 0.2 | - - | 0.2 |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | 0.2 |
| Medium Total | | | | | | | | 2E-04 | | | | | 3 |

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.1 | - - | 0.04 | 0.1 |
| | | | 1,2,4-TRICHLOROBENZENE | 4E-06 | -- | 1E-06 | -- | 5E-06 | Adrenals | 0.04 | - - | 0.01 | 0.05 |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | 1,4-DICHLOROBENZENE | 1E-08 | -- | 4E-09 | -- | 1E-08 | NA | 0.00007 | - - | 0.00003 | 0.0001 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 4E-06 | -- | 6E-06 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000002 | - - | 0.000003 | 0.000005 |
| | | | AROCLOR-1254 | 3E-06 | -- | 6E-06 | -- | 1E-05 | Autoimmune | 0.2 | - - | 0.4 | 0.7 |
| | | | AROCLOR-1260 | 2E-04 | -- | 5E-04 | -- | 7E-04 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 4E-07 | -- | 2E-07 | -- | 5E-07 | Skin, CVS | 0.002 | - - | 0.0010 | 0.003 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.007 | - - | 0.0009 | 0.007 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.01 | - - | 0.002 | 0.01 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0003 | - - | 0.00004 | 0.0004 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0005 | - - | 0.0009 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.001 | - - | 0.0002 | 0.002 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-08 | -- | 2E-07 | -- | 3E-07 | None Reported | 0.00008 | - - | 0.0004 | 0.0005 |
| | | | Chemical Total | 3E-04 | -- | 5E-04 | -- | 7E-04 | | 0.4 | -- | 0.5 | 0.9 |
| | | Exposure Point Total | | | | | | 7E-04 | | | | | 0.9 |
| | Exposure Medium Total | | | | | | | 7E-04 | | | | | 0.9 |

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 1 | - - | 1 |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,4-DICHLOROBENZENE | -- | 7E-07 | -- | -- | 7E-07 | Liver | - - | 0.0002 | - - | 0.0002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 3E-09 | -- | -- | 3E-09 | Respiratory | - - | 0.00009 | - - | 0.00009 |
| | | | AROCLOR-1254 | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-08 | -- | -- | 1E-08 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.000007 | - - | 0.000007 |
| | | | COBALT | -- | 9E-10 | -- | -- | 9E-10 | Lungs | - - | 0.00005 | - - | 0.00005 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0001 | - - | 0.0001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000007 | - - | 0.0000007 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000003 | - - | 0.0000003 |
| | | | Chemical Total | -- | 7E-07 | -- | -- | 7E-07 | | - - | 1 | - - | 1 |
| | | Exposure Point Total | | | | | | 7E-07 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 7E-07 | | | | | 1 |
| Medium Total | | | | | | | | 7E-04 | | | | | 2 |
| Receptor Total | | | | | | | Receptor Risk Total | 9E-04 | | | | Receptor HI Total | 5 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Adrenals HI | 2 |
| Total Autoimmune HI | 3 |
| Total Blood HI | 0.03 |
| Total Body Weight HI | 0.001 |
| Total CNS HI | 0.001 |
| Total CVS HI | 0.008 |
| Total GS HI | 0.03 |
| Total Kidney HI | 0.006 |
| Total Liver HI | 0.0002 |
| Total Lungs HI | 0.0002 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.008 |
| Total Respiratory HI | 0.00009 |
| Total NA HI | 0.0001 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.2 | - - | 0.02 | 0.2 |
| | | | 1,2,4-TRICHLOROBENZENE | 2E-06 | -- | 1E-07 | -- | 2E-06 | Adrenals | 0.07 | - - | 0.006 | 0.08 |
| | | | 1,4-DICHLOROBENZENE | 1E-09 | -- | 8E-11 | -- | 1E-09 | NA | 0.00003 | - - | 0.000003 | 0.00003 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 5E-05 | -- | 2E-05 | -- | 6E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 6E-05 | -- | 2E-05 | -- | 8E-05 | Autoimmune | 16 | - - | 6 | 23 |
| | | | AROCLOR-1260 | 2E-04 | -- | 7E-05 | -- | 2E-04 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.008 | - - | 0.002 | 0.01 |
| | | | ARSENIC | 3E-06 | -- | 2E-07 | -- | 3E-06 | Skin, CVS | 0.07 | - - | 0.006 | 0.07 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.003 | 0.03 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.4 | - - | 0.010 | 0.4 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.2 | - - | 0.006 | 0.2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.01 | - - | 0.0003 | 0.01 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.004 | - - | 0.001 | 0.005 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.002 | - - | 0.00004 | 0.002 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.005 | - - | 0.003 | 0.008 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.04 | - - | 0.001 | 0.05 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 3E-06 | -- | 6E-06 | None Reported | 0.004 | - - | 0.004 | 0.008 |
| | | | Chemical Total | 3E-04 | -- | 1E-04 | -- | 4E-04 | | 17 | -- | 7 | 24 |
| | | Exposure Point Total | | | | | | 4E-04 | | | | | 24 |
| | Exposure Medium Total | | | | | | | 4E-04 | | | | | 24 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.2 | - - | 0.2 |
| | | | 1,4-DICHLOROBENZENE | -- | 3E-09 | -- | -- | 3E-09 | Liver | - - | 0.000005 | - - | 0.000005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 6E-11 | -- | -- | 6E-11 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | CADMIUM | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 6E-10 | -- | -- | 6E-10 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0002 | - - | 0.0002 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000003 | - - | 0.0000003 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 2E-11 | -- | -- | 2E-11 | Body Weight | - - | 0.000009 | - - | 0.000009 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0000009 | - - | 0.0000009 |
| | | | Chemical Total | -- | 8E-09 | -- | -- | 8E-09 | | - - | 0.2 | - - | 0.2 |
| | | Exposure Point Total | | | | | | 8E-09 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 8E-09 | | | | | 0.2 |
| Medium Total | | | | | | | | 4E-04 | | | | | 24 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 2 | - - | 0.2 | 2 |
| | | | 1,2,4-TRICHLOROBENZENE | 2E-05 | -- | 1E-06 | -- | 2E-05 | Adrenals | 0.7 | - - | 0.06 | 0.7 |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | 1,4-DICHLOROBENZENE | 4E-08 | -- | 4E-09 | -- | 5E-08 | NA | 0.001 | - - | 0.0001 | 0.001 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 5E-05 | -- | 2E-05 | -- | 7E-05 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00003 | - - | 0.00001 | 0.00004 |
| | | | AROCLOR-1254 | 2E-05 | -- | 6E-06 | -- | 2E-05 | Autoimmune | 4 | - - | 2 | 6 |
| | | | AROCLOR-1260 | 1E-03 | -- | 4E-04 | -- | 2E-03 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 2E-06 | -- | 1E-07 | -- | 2E-06 | Skin, CVS | 0.05 | - - | 0.004 | 0.05 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.1 | - - | 0.003 | 0.1 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.2 | - - | 0.006 | 0.2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.006 | - - | 0.0002 | 0.006 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.009 | - - | 0.004 | 0.01 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.03 | - - | 0.0007 | 0.03 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 1E-06 | -- | 2E-06 | None Reported | 0.001 | - - | 0.002 | 0.003 |
| | | | Chemical Total | 1E-03 | -- | 5E-04 | -- | 2E-03 | | 7 | -- | 2 | 9 |
| | | Exposure Point Total | | | | | | 2E-03 | | | | | 9 |
| | Exposure Medium Total | | | | | | | 2E-03 | | | | | 9 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 1 | - - | 1 |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,4-DICHLOROBENZENE | -- | 2E-07 | -- | -- | 2E-07 | Liver | - - | 0.0002 | - - | 0.0002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-11 | -- | -- | 6E-11 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 7E-10 | -- | -- | 7E-10 | Respiratory | - - | 0.00009 | - - | 0.00009 |
| | | | AROCLOR-1254 | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-09 | -- | -- | 2E-09 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | 0.000007 | - - | 0.000007 |
| | | | COBALT | -- | 2E-10 | -- | -- | 2E-10 | Lungs | - - | 0.00005 | - - | 0.00005 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0001 | - - | 0.0001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000007 | - - | 0.0000007 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000003 | - - | 0.0000003 |
| | | | Chemical Total | -- | 2E-07 | -- | -- | 2E-07 | | - - | 1 | - - | 1 |
| | | Exposure Point Total | | | | | | 2E-07 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 2E-07 | | | | | 1 |
| Medium Total | | | | | | | | 2E-03 | | | | | 11 |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-03 | | | | Receptor HI Total | 35 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Adrenals HI | 4 |
| Total Autoimmune HI | 29 |
| Total Blood HI | 0.5 |
| Total Body Weight HI | 0.009 |
| Total CNS HI | 0.02 |
| Total CVS HI | 0.1 |
| Total GS HI | 0.5 |
| Total Kidney HI | 0.10 |
| Total Liver HI | 0.0002 |
| Total Lungs HI | 0.0002 |
| Total None Reported HI | 0.01 |
| Total Skin HI | 0.1 |
| Total Respiratory HI | 0.00009 |
| Total NA HI | 0.002 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.03 | - - | 0.003 | 0.04 |
| | | | 1,2,4-TRICHLOROBENZENE | 7E-07 | -- | 6E-08 | -- | 7E-07 | Adrenals | 0.01 | - - | 0.001 | 0.01 |
| | | | 1,4-DICHLOROBENZENE | 4E-10 | -- | 3E-11 | -- | 4E-10 | NA | 0.000006 | - - | 0.0000005 | 0.000006 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 9E-06 | -- | 3E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 2E-05 | -- | 9E-06 | -- | 3E-05 | Autoimmune | 3 | - - | 1 | 4 |
| | | | AROCLOR-1260 | 6E-05 | -- | 3E-05 | -- | 9E-05 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.002 | - - | 0.0003 | 0.002 |
| | | | ARSENIC | 1E-06 | -- | 9E-08 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.001 | 0.01 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.005 | - - | 0.0006 | 0.005 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.07 | - - | 0.002 | 0.07 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.04 | - - | 0.001 | 0.04 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.002 | - - | 0.00006 | 0.002 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0007 | - - | 0.0003 | 0.0010 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0003 | - - | 0.000009 | 0.0003 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0009 | - - | 0.0007 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.008 | - - | 0.0002 | 0.008 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 5E-07 | -- | 6E-07 | -- | 1E-06 | None Reported | 0.0007 | - - | 0.0009 | 0.002 |
| | | | Chemical Total | 1E-04 | -- | 4E-05 | -- | 1E-04 | | 3 | -- | 1 | 5 |
| | | Exposure Point Total | | | | | | 1E-04 | | | | | 5 |
| | Exposure Medium Total | | | | | | | 1E-04 | | | | | 5 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.2 | - - | 0.2 |
| | | | 1,4-DICHLOROBENZENE | -- | 7E-09 | -- | -- | 7E-09 | Liver | - - | 0.000005 | - - | 0.000005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 7E-10 | -- | -- | 7E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | CADMIUM | -- | 6E-11 | -- | -- | 6E-11 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0002 | - - | 0.0002 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000003 | - - | 0.0000003 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 3E-11 | -- | -- | 3E-11 | Body Weight | - - | 0.000009 | - - | 0.000009 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0000009 | - - | 0.0000009 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.2 | - - | 0.2 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.2 |
| Medium Total | | | | | | | | 1E-04 | | | | | 5 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.4 | - - | 0.03 | 0.4 |
| | | | 1,2,4-TRICHLOROBENZENE | 6E-06 | -- | 6E-07 | -- | 7E-06 | Adrenals | 0.1 | - - | 0.01 | 0.1 |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | 1,4-DICHLOROBENZENE | 2E-08 | -- | 1E-09 | -- | 2E-08 | NA | 0.0003 | - - | 0.00002 | 0.0003 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 4E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000006 | - - | 0.000002 | 0.000009 |
| | | | AROCLOR-1254 | 6E-06 | -- | 2E-06 | -- | 8E-06 | Autoimmune | 0.8 | - - | 0.4 | 1 |
| | | | AROCLOR-1260 | 4E-04 | -- | 2E-04 | -- | 6E-04 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 7E-07 | -- | 6E-08 | -- | 7E-07 | Skin, CVS | 0.009 | - - | 0.0008 | 0.009 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.0007 | 0.02 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.04 | - - | 0.001 | 0.04 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.001 | - - | 0.00003 | 0.001 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.002 | - - | 0.0007 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.005 | - - | 0.0001 | 0.005 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 2E-07 | -- | 4E-07 | None Reported | 0.0003 | - - | 0.0003 | 0.0006 |
| | | | Chemical Total | 4E-04 | -- | 2E-04 | -- | 6E-04 | | 1 | -- | 0.4 | 2 |
| | | Exposure Point Total | | | | | | 6E-04 | | | | | 2 |
| | Exposure Medium Total | | | | | | | 6E-04 | | | | | 2 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 1 | - - | 1 |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,4-DICHLOROBENZENE | -- | 3E-07 | -- | -- | 3E-07 | Liver | - - | 0.0002 | - - | 0.0002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-11 | -- | -- | 6E-11 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 1E-09 | -- | -- | 1E-09 | Respiratory | - - | 0.00009 | - - | 0.00009 |
| | | | AROCLOR-1254 | -- | 7E-11 | -- | -- | 7E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 5E-09 | -- | -- | 5E-09 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 8E-11 | -- | -- | 8E-11 | NA | - - | 0.000007 | - - | 0.000007 |
| | | | COBALT | -- | 4E-10 | -- | -- | 4E-10 | Lungs | - - | 0.00005 | - - | 0.00005 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0001 | - - | 0.0001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000007 | - - | 0.0000007 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000003 | - - | 0.0000003 |
| | | | Chemical Total | -- | 3E-07 | -- | -- | 3E-07 | | - - | 1 | - - | 1 |
| | | Exposure Point Total | | | | | | 3E-07 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 3E-07 | | | | | 1 |
| Medium Total | | | | | | | | 6E-04 | | | | | 3 |
| Receptor Total | | | | | | | Receptor Risk Total | 8E-04 | | | | Receptor HI Total | 8 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Adrenals HI | 2 |
| Total Autoimmune HI | 6 |
| Total Blood HI | 0.09 |
| Total Body Weight HI | 0.002 |
| Total CNS HI | 0.004 |
| Total CVS HI | 0.02 |
| Total GS HI | 0.09 |
| Total Kidney HI | 0.02 |
| Total Liver HI | 0.0002 |
| Total Lungs HI | 0.0002 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.02 |
| Total Respiratory HI | 0.00009 |
| Total NA HI | 0.0003 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.02 | - - | 0.002 | 0.02 |
| | | | 1,2,4-TRICHLOROBENZENE | 4E-07 | -- | 5E-08 | -- | 4E-07 | Adrenals | 0.008 | - - | 0.0009 | 0.009 |
| | | | 1,4-DICHLOROBENZENE | 2E-10 | -- | 2E-11 | -- | 2E-10 | NA | 0.000003 | - - | 0.0000004 | 0.000004 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 1E-06 | -- | 3E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 1E-05 | -- | 7E-06 | -- | 2E-05 | Autoimmune | 2 | - - | 1.0 | 3 |
| | | | AROCLOR-1260 | 4E-05 | -- | 2E-05 | -- | 6E-05 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.0009 | - - | 0.0002 | 0.001 |
| | | | ARSENIC | 6E-07 | -- | 7E-08 | -- | 6E-07 | Skin, CVS | 0.007 | - - | 0.0009 | 0.008 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.003 | - - | 0.0004 | 0.003 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.04 | - - | 0.002 | 0.04 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.02 | - - | 0.0010 | 0.03 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.001 | - - | 0.00005 | 0.001 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0004 | - - | 0.0002 | 0.0006 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0002 | - - | 0.000006 | 0.0002 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0005 | - - | 0.0005 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.005 | - - | 0.0002 | 0.005 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 2E-07 | -- | 3E-07 | None Reported | 0.0004 | - - | 0.0007 | 0.001 |
| | | | Chemical Total | 5E-05 | -- | 3E-05 | -- | 8E-05 | | 2 | -- | 1.0 | 3 |
| | | Exposure Point Total | | | | | | 8E-05 | | | | | 3 |
| | Exposure Medium Total | | | | | | | 8E-05 | | | | | 3 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Recreational User

Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.2 | - - | 0.2 |
| | | | 1,4-DICHLOROBENZENE | -- | 7E-09 | -- | -- | 7E-09 | Liver | - - | 0.000005 | - - | 0.000005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 7E-10 | -- | -- | 7E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | CADMIUM | -- | 6E-11 | -- | -- | 6E-11 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0002 | - - | 0.0002 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000003 | - - | 0.0000003 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 3E-11 | -- | -- | 3E-11 | Body Weight | - - | 0.000009 | - - | 0.000009 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000009 | - - | 0.0000009 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.2 | - - | 0.2 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.2 |
| Medium Total | | | | | | | | 8E-05 | | | | | 3 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.2 | - - | 0.02 | 0.2 |
| | | | 1,2,4-TRICHLOROBENZENE | 4E-06 | -- | 4E-07 | -- | 4E-06 | Adrenals | 0.07 | - - | 0.008 | 0.08 |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | 1,4-DICHLOROBENZENE | 9E-09 | -- | 1E-09 | -- | 1E-08 | NA | 0.0001 | - - | 0.00002 | 0.0002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 1E-06 | -- | 3E-06 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000004 | - - | 0.000002 | 0.000005 |
| | | | AROCLOR-1254 | 3E-06 | -- | 2E-06 | -- | 5E-06 | Autoimmune | 0.5 | - - | 0.3 | 0.7 |
| | | | AROCLOR-1260 | 2E-04 | -- | 1E-04 | -- | 4E-04 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 4E-07 | -- | 5E-08 | -- | 4E-07 | Skin, CVS | 0.005 | - - | 0.0006 | 0.005 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.01 | - - | 0.0005 | 0.01 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.02 | - - | 0.0010 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0007 | - - | 0.00003 | 0.0007 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0009 | - - | 0.0005 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.003 | - - | 0.0001 | 0.003 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-08 | -- | 7E-08 | -- | 1E-07 | None Reported | 0.0002 | - - | 0.0003 | 0.0004 |
| | | | Chemical Total | 2E-04 | -- | 1E-04 | -- | 4E-04 | | 0.8 | -- | 0.3 | 1 |
| | | Exposure Point Total | | | | | | 4E-04 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 4E-04 | | | | | 1 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 1 | - - | 1 |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,4-DICHLOROBENZENE | -- | 3E-07 | -- | -- | 3E-07 | Liver | - - | 0.0002 | - - | 0.0002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 1E-09 | -- | -- | 1E-09 | Respiratory | - - | 0.00009 | - - | 0.00009 |
| | | | AROCLOR-1254 | -- | 7E-11 | -- | -- | 7E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 5E-09 | -- | -- | 5E-09 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 8E-11 | -- | -- | 8E-11 | NA | - - | 0.000007 | - - | 0.000007 |
| | | | COBALT | -- | 4E-10 | -- | -- | 4E-10 | Lungs | - - | 0.00005 | - - | 0.00005 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0001 | - - | 0.0001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000007 | - - | 0.0000007 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 5E-10 | -- | -- | 5E-10 | Lungs | - - | 0.0000003 | - - | 0.0000003 |
| | | | Chemical Total | -- | 3E-07 | -- | -- | 3E-07 | | - - | 1 | - - | 1 |
| | | Exposure Point Total | | | | | | 3E-07 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 3E-07 | | | | | 1 |
| Medium Total | | | | | | | | 4E-04 | | | | | 2 |
| Receptor Total | | | | | | | Receptor Risk Total | 5E-04 | | | | Receptor HI Total | 5 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Adrenals HI | 2 |
| Total Autoimmune HI | 3 |
| Total Blood HI | 0.05 |
| Total Body Weight HI | 0.001 |
| Total CNS HI | 0.002 |
| Total CVS HI | 0.01 |
| Total GS HI | 0.05 |
| Total Kidney HI | 0.01 |
| Total Liver HI | 0.0002 |
| Total Lungs HI | 0.0002 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.01 |
| Total Respiratory HI | 0.00009 |
| Total NA HI | 0.0002 |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | | | | | |
| | | | 1,2,4-TRICHLOROBENZENE | 3E-06 | -- | 3E-07 | -- | 3E-06 | | | | | |
| | | | 1,4-DICHLOROBENZENE | 2E-09 | -- | 1E-10 | -- | 2E-09 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 6E-05 | -- | 2E-05 | -- | 8E-05 | | | | | |
| | | | AROCLOR-1254 | 9E-05 | -- | 4E-05 | -- | 1E-04 | | | | | |
| | | | AROCLOR-1260 | 3E-04 | -- | 1E-04 | -- | 4E-04 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 4E-06 | -- | 4E-07 | -- | 4E-06 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 4E-06 | -- | 7E-06 | | | | | |
| | | | Chemical Total | 4E-04 | -- | 2E-04 | -- | 6E-04 | | | | | |
| | | Exposure Point Total | | | | | | 6E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 6E-04 | | | | | |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,4-DICHLOROBENZENE | -- | 2E-08 | -- | -- | 2E-08 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | | | | | |
| | | | AROCLOR-1254 | -- | 6E-10 | -- | -- | 6E-10 | | | | | |
| | | | AROCLOR-1260 | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 3E-10 | -- | -- | 3E-10 | | | | | |
| | | | CADMIUM | -- | 1E-10 | -- | -- | 1E-10 | | | | | |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 9E-11 | -- | -- | 9E-11 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 8E-09 | -- | -- | 8E-09 | | | | | |
| | | | Chemical Total | -- | 3E-08 | -- | -- | 3E-08 | | | | | |
| | | Exposure Point Total | | | | | | 3E-08 | | | | | |
| | Exposure Medium Total | | | | | | | 3E-08 | | | | | |
| Medium Total | | | | | | | | 6E-04 | | | | | |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | | | | | |
| | | | 1,2,4-TRICHLOROBENZENE | 3E-05 | -- | 2E-06 | -- | 3E-05 | | | | | |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | | | | | |
| | | | 1,4-DICHLOROBENZENE | 7E-08 | -- | 6E-09 | -- | 8E-08 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 6E-05 | -- | 2E-05 | -- | 9E-05 | | | | | |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | AROCLOR-1254 | 2E-05 | -- | 1E-05 | -- | 3E-05 | | | | | |
| | | | AROCLOR-1260 | 2E-03 | -- | 7E-04 | -- | 3E-03 | | | | | |
| | | | ARSENIC | 3E-06 | -- | 3E-07 | -- | 3E-06 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 1E-06 | -- | 3E-06 | | | | | |
| | | | Chemical Total | 2E-03 | -- | 8E-04 | -- | 3E-03 | | | | | |
| | | Exposure Point Total | | | | | | 3E-03 | | | | | |
| | Exposure Medium Total | | | | | | | 3E-03 | | | | | |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,4-DICHLOROBENZENE | -- | 8E-07 | -- | -- | 8E-07 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | | | | | |
| | | | NAPHTHALENE | -- | 4E-09 | -- | -- | 4E-09 | | | | | |
| | | | AROCLOR-1254 | -- | 2E-10 | -- | -- | 2E-10 | | | | | |
| | | | AROCLOR-1260 | -- | 1E-08 | -- | -- | 1E-08 | | | | | |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | | | | | |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | | | | | |
| | | | Chemical Total | -- | 8E-07 | -- | -- | 8E-07 | | | | | |
| | | Exposure Point Total | | | | | | 8E-07 | | | | | |
| | Exposure Medium Total | | | | | | | 8E-07 | | | | | |
| Medium Total | | | | | | | | 3E-03 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-03 | | | | | |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.3 | - - | 0.02 | 0.3 |
| | | | 1,2,4-TRICHLOROBENZENE | 2E-06 | -- | 2E-07 | -- | 3E-06 | Adrenals | 0.10 | - - | 0.008 | 0.1 |
| | | | 1,4-DICHLOROBENZENE | 1E-09 | -- | 1E-10 | -- | 1E-09 | NA | 0.00004 | - - | 0.000004 | 0.00005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 6E-05 | -- | 2E-05 | -- | 9E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 8E-05 | -- | 3E-05 | -- | 1E-04 | Autoimmune | 23 | - - | 9 | 32 |
| | | | AROCLOR-1260 | 2E-04 | -- | 9E-05 | -- | 3E-04 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.01 | - - | 0.002 | 0.01 |
| | | | ARSENIC | 4E-06 | -- | 3E-07 | -- | 4E-06 | Skin, CVS | 0.09 | - - | 0.008 | 0.1 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.03 | - - | 0.004 | 0.04 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.5 | - - | 0.01 | 0.5 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.3 | - - | 0.009 | 0.3 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.02 | - - | 0.0004 | 0.02 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.005 | - - | 0.002 | 0.007 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.002 | - - | 0.00006 | 0.002 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.007 | - - | 0.005 | 0.01 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.06 | - - | 0.002 | 0.06 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-06 | -- | 4E-06 | -- | 8E-06 | None Reported | 0.006 | - - | 0.006 | 0.01 |
| | | | Chemical Total | 4E-04 | -- | 2E-04 | -- | 5E-04 | | 24 | -- | 9 | 34 |
| | | Exposure Point Total | | | | | | 5E-04 | | | | | 34 |
| | Exposure Medium Total | | | | | | | 5E-04 | | | | | 34 |

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.9 | - - | 0.9 |
| | | | 1,4-DICHLOROBENZENE | -- | 1E-08 | -- | -- | 1E-08 | Liver | - - | 0.00002 | - - | 0.00002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 5E-10 | -- | -- | 5E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-09 | -- | -- | 2E-09 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00004 | - - | 0.00004 |
| | | | CADMIUM | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | 0.00008 | - - | 0.00008 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0006 | - - | 0.0006 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.001 | - - | 0.001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000001 | - - | 0.000001 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 7E-11 | -- | -- | 7E-11 | Body Weight | - - | 0.00004 | - - | 0.00004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000004 | - - | 0.000004 |
| | | | Chemical Total | -- | 3E-08 | -- | -- | 3E-08 | | - - | 0.9 | - - | 0.9 |
| | | Exposure Point Total | | | | | | 3E-08 | | | | | 0.9 |
| | Exposure Medium Total | | | | | | | 3E-08 | | | | | 0.9 |
| Medium Total | | | | | | | | 5E-04 | | | | | 34 |

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 3 | - - | 0.2 | 3 |
| | | | 1,2,4-TRICHLOROBENZENE | 2E-05 | -- | 2E-06 | -- | 2E-05 | Adrenals | 0.9 | - - | 0.08 | 1 |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | 1,4-DICHLOROBENZENE | 6E-08 | -- | 5E-09 | -- | 7E-08 | NA | 0.002 | - - | 0.0002 | 0.002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 7E-05 | -- | 3E-05 | -- | 1E-04 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00005 | - - | 0.00002 | 0.00006 |
| | | | AROCLOR-1254 | 2E-05 | -- | 8E-06 | -- | 3E-05 | Autoimmune | 6 | - - | 2 | 9 |
| | | | AROCLOR-1260 | 2E-03 | -- | 6E-04 | -- | 2E-03 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 3E-06 | Skin, CVS | 0.06 | - - | 0.005 | 0.07 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.2 | - - | 0.005 | 0.2 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.3 | - - | 0.009 | 0.3 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.009 | - - | 0.0002 | 0.009 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.01 | - - | 0.005 | 0.02 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.04 | - - | 0.0010 | 0.04 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 2E-06 | -- | 3E-06 | None Reported | 0.002 | - - | 0.002 | 0.004 |
| | | | Chemical Total | 2E-03 | -- | 6E-04 | -- | 2E-03 | | 10 | -- | 3 | 13 |
| | | Exposure Point Total | | | | | | 2E-03 | | | | | 13 |
| | Exposure Medium Total | | | | | | | 2E-03 | | | | | 13 |

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 5 | - - | 5 |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,4-DICHLOROBENZENE | -- | 7E-07 | -- | -- | 7E-07 | Liver | - - | 0.0009 | - - | 0.0009 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 3E-09 | -- | -- | 3E-09 | Respiratory | - - | 0.0004 | - - | 0.0004 |
| | | | AROCLOR-1254 | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-08 | -- | -- | 1E-08 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00003 | - - | 0.00003 |
| | | | COBALT | -- | 9E-10 | -- | -- | 9E-10 | Lungs | - - | 0.0002 | - - | 0.0002 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0006 | - - | 0.0006 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000003 | - - | 0.000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 6E-09 | -- | -- | 6E-09 | Lungs | - - | 0.000001 | - - | 0.000001 |
| | | | Chemical Total | -- | 7E-07 | -- | -- | 7E-07 | | - - | 5 | - - | 5 |
| | | Exposure Point Total | | | | | | 7E-07 | | | | | 5 |
| | Exposure Medium Total | | | | | | | 7E-07 | | | | | 5 |
| Medium Total | | | | | | | | 2E-03 | | | | | 18 |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-03 | | | | Receptor HI Total | 52 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Adrenals HI | 10 |
| Total Autoimmune HI | 41 |
| Total Blood HI | 0.7 |
| Total Body Weight HI | 0.01 |
| Total CNS HI | 0.03 |
| Total CVS HI | 0.2 |
| Total GS HI | 0.6 |
| Total Kidney HI | 0.1 |
| Total Liver HI | 0.0009 |
| Total Lungs HI | 0.0008 |
| Total None Reported HI | 0.02 |
| Total Skin HI | 0.2 |
| Total Respiratory HI | 0.0004 |
| Total NA HI | 0.002 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.05 | - - | 0.004 | 0.05 |
| | | | 1,2,4-TRICHLOROBENZENE | 9E-07 | -- | 8E-08 | -- | 1E-06 | Adrenals | 0.02 | - - | 0.002 | 0.02 |
| | | | 1,4-DICHLOROBENZENE | 5E-10 | -- | 5E-11 | -- | 6E-10 | NA | 0.000008 | - - | 0.0000007 | 0.000009 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 5E-06 | -- | 2E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 3E-05 | -- | 1E-05 | -- | 4E-05 | Autoimmune | 4 | - - | 2 | 6 |
| | | | AROCLOR-1260 | 9E-05 | -- | 4E-05 | -- | 1E-04 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.002 | - - | 0.0004 | 0.003 |
| | | | ARSENIC | 1E-06 | -- | 1E-07 | -- | 1E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.02 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.006 | - - | 0.0008 | 0.007 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.09 | - - | 0.003 | 0.10 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.06 | - - | 0.002 | 0.06 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.003 | - - | 0.00009 | 0.003 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0010 | - - | 0.0004 | 0.001 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0004 | - - | 0.00001 | 0.0004 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.001 | - - | 0.0010 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0003 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 7E-07 | -- | 9E-07 | -- | 2E-06 | None Reported | 0.001 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 1E-04 | -- | 6E-05 | -- | 2E-04 | | 5 | -- | 2 | 6 |
| | | Exposure Point Total | | | | | | 2E-04 | | | | | 6 |
| | Exposure Medium Total | | | | | | | 2E-04 | | | | | 6 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.9 | - - | 0.9 |
| | | | 1,4-DICHLOROBENZENE | -- | 3E-08 | -- | -- | 3E-08 | Liver | - - | 0.00002 | - - | 0.00002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 1E-09 | -- | -- | 1E-09 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-09 | -- | -- | 3E-09 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 5E-10 | -- | -- | 5E-10 | NA | - - | 0.00004 | - - | 0.00004 |
| | | | CADMIUM | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00008 | - - | 0.00008 |
| | | | COBALT | -- | 5E-09 | -- | -- | 5E-09 | Lungs | - - | 0.0006 | - - | 0.0006 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.001 | - - | 0.001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000001 | - - | 0.000001 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 1E-10 | -- | -- | 1E-10 | Body Weight | - - | 0.00004 | - - | 0.00004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000004 | - - | 0.000004 |
| | | | Chemical Total | -- | 5E-08 | -- | -- | 5E-08 | | - - | 0.9 | - - | 0.9 |
| | | Exposure Point Total | | | | | | 5E-08 | | | | | 0.9 |
| | Exposure Medium Total | | | | | | | 5E-08 | | | | | 0.9 |
| Medium Total | | | | | | | | 2E-04 | | | | | 7 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.5 | - - | 0.04 | 0.5 |
| | | | 1,2,4-TRICHLOROBENZENE | 9E-06 | -- | 8E-07 | -- | 9E-06 | Adrenals | 0.2 | - - | 0.02 | 0.2 |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | 1,4-DICHLOROBENZENE | 2E-08 | -- | 2E-09 | -- | 3E-08 | NA | 0.0004 | - - | 0.00003 | 0.0004 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 5E-06 | -- | 2E-05 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000009 | - - | 0.000003 | 0.00001 |
| | | | AROCLOR-1254 | 8E-06 | -- | 3E-06 | -- | 1E-05 | Autoimmune | 1 | - - | 0.5 | 2 |
| | | | AROCLOR-1260 | 6E-04 | -- | 2E-04 | -- | 8E-04 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 9E-07 | -- | 8E-08 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.001 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.03 | - - | 0.0010 | 0.03 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.06 | - - | 0.002 | 0.06 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.002 | - - | 0.00005 | 0.002 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.002 | - - | 0.001 | 0.003 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.007 | - - | 0.0002 | 0.007 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-07 | -- | 3E-07 | -- | 6E-07 | None Reported | 0.0004 | - - | 0.0005 | 0.0009 |
| | | | Chemical Total | 6E-04 | -- | 3E-04 | -- | 9E-04 | | 2 | -- | 0.6 | 3 |
| | | Exposure Point Total | | | | | | 9E-04 | | | | | 3 |
| | Exposure Medium Total | | | | | | | 9E-04 | | | | | 3 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 5 | - - | 5 |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,4-DICHLOROBENZENE | -- | 1E-06 | -- | -- | 1E-06 | Liver | - - | 0.0009 | - - | 0.0009 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 6E-09 | -- | -- | 6E-09 | Respiratory | - - | 0.0004 | - - | 0.0004 |
| | | | AROCLOR-1254 | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-08 | -- | -- | 2E-08 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | 0.00003 | - - | 0.00003 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0002 | - - | 0.0002 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0006 | - - | 0.0006 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000003 | - - | 0.000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 6E-09 | -- | -- | 6E-09 | Lungs | - - | 0.000001 | - - | 0.000001 |
| | | | Chemical Total | -- | 1E-06 | -- | -- | 1E-06 | | - - | 5 | - - | 5 |
| | | Exposure Point Total | | | | | | 1E-06 | | | | | 5 |
| | Exposure Medium Total | | | | | | | 1E-06 | | | | | 5 |
| Medium Total | | | | | | | | 9E-04 | | | | | 7 |
| Receptor Total | | | | | | | Receptor Risk Total | 1E-03 | | | | Receptor HI Total | 15 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Adrenals HI | 6 |
| Total Autoimmune HI | 8 |
| Total Blood HI | 0.1 |
| Total Body Weight HI | 0.002 |
| Total CNS HI | 0.006 |
| Total CVS HI | 0.03 |
| Total GS HI | 0.1 |
| Total Kidney HI | 0.03 |
| Total Liver HI | 0.0009 |
| Total Lungs HI | 0.0008 |
| Total None Reported HI | 0.003 |
| Total Skin HI | 0.03 |
| Total Respiratory HI | 0.0004 |
| Total NA HI | 0.0006 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.03 | - - | 0.003 | 0.03 |
| | | | 1,2,4-TRICHLOROBENZENE | 5E-07 | -- | 6E-08 | -- | 6E-07 | Adrenals | 0.01 | - - | 0.001 | 0.01 |
| | | | 1,4-DICHLOROBENZENE | 3E-10 | -- | 3E-11 | -- | 3E-10 | NA | 0.000005 | - - | 0.0000005 | 0.000005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 3E-06 | -- | 1E-06 | -- | 4E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 2E-05 | -- | 9E-06 | -- | 3E-05 | Autoimmune | 2 | - - | 1 | 4 |
| | | | AROCLOR-1260 | 5E-05 | -- | 3E-05 | -- | 8E-05 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.001 | - - | 0.0003 | 0.002 |
| | | | ARSENIC | 8E-07 | -- | 9E-08 | -- | 9E-07 | Skin, CVS | 0.01 | - - | 0.001 | 0.01 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.004 | - - | 0.0006 | 0.004 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.05 | - - | 0.002 | 0.06 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.03 | - - | 0.001 | 0.04 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.002 | - - | 0.00007 | 0.002 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0005 | - - | 0.0003 | 0.0009 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0002 | - - | 0.000009 | 0.0002 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0007 | - - | 0.0007 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.007 | - - | 0.0003 | 0.007 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 2E-07 | -- | 4E-07 | None Reported | 0.0006 | - - | 0.0009 | 0.002 |
| | | | Chemical Total | 7E-05 | -- | 4E-05 | -- | 1E-04 | | 3 | -- | 1 | 4 |
| | | Exposure Point Total | | | | | | 1E-04 | | | | | 4 |
| | Exposure Medium Total | | | | | | | 1E-04 | | | | | 4 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 0.9 | - - | 0.9 |
| | | | 1,4-DICHLOROBENZENE | -- | 3E-08 | -- | -- | 3E-08 | Liver | - - | 0.00002 | - - | 0.00002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 8E-11 | -- | -- | 8E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 1E-09 | -- | -- | 1E-09 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-09 | -- | -- | 3E-09 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 5E-10 | -- | -- | 5E-10 | NA | - - | 0.00004 | - - | 0.00004 |
| | | | CADMIUM | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00008 | - - | 0.00008 |
| | | | COBALT | -- | 5E-09 | -- | -- | 5E-09 | Lungs | - - | 0.0006 | - - | 0.0006 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.001 | - - | 0.001 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000001 | - - | 0.000001 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 1E-10 | -- | -- | 1E-10 | Body Weight | - - | 0.00004 | - - | 0.00004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 6E-09 | -- | -- | 6E-09 | Lungs | - - | 0.000004 | - - | 0.000004 |
| | | | Chemical Total | -- | 4E-08 | -- | -- | 4E-08 | | - - | 0.9 | - - | 0.9 |
| | | Exposure Point Total | | | | | | 4E-08 | | | | | 0.9 |
| | Exposure Medium Total | | | | | | | 4E-08 | | | | | 0.9 |
| Medium Total | | | | | | | | 1E-04 | | | | | 5 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | Adrenals | 0.3 | - - | 0.03 | 0.3 |
| | | | 1,2,4-TRICHLOROBENZENE | 5E-06 | -- | 6E-07 | -- | 6E-06 | Adrenals | 0.10 | - - | 0.01 | 0.1 |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | 1,4-DICHLOROBENZENE | 1E-08 | -- | 2E-09 | -- | 1E-08 | NA | 0.0002 | - - | 0.00002 | 0.0002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 3E-06 | -- | 2E-06 | -- | 4E-06 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000005 | - - | 0.000003 | 0.000007 |
| | | | AROCLOR-1254 | 5E-06 | -- | 3E-06 | -- | 7E-06 | Autoimmune | 0.7 | - - | 0.4 | 1 |
| | | | AROCLOR-1260 | 3E-04 | -- | 2E-04 | -- | 5E-04 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 5E-07 | -- | 6E-08 | -- | 6E-07 | Skin, CVS | 0.007 | - - | 0.0008 | 0.008 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.0007 | 0.02 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.03 | - - | 0.001 | 0.03 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0009 | - - | 0.00004 | 0.0010 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.001 | - - | 0.0008 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.004 | - - | 0.0002 | 0.004 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 6E-08 | -- | 9E-08 | -- | 1E-07 | None Reported | 0.0002 | - - | 0.0004 | 0.0006 |
| | | | Chemical Total | 3E-04 | -- | 2E-04 | -- | 5E-04 | | 1 | -- | 0.4 | 2 |
| | | Exposure Point Total | | | | | | 5E-04 | | | | | 2 |
| | Exposure Medium Total | | | | | | | 5E-04 | | | | | 2 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | Adrenals | - - | 5 | - - | 5 |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | 1,4-DICHLOROBENZENE | -- | 1E-06 | -- | -- | 1E-06 | Liver | - - | 0.0009 | - - | 0.0009 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 6E-09 | -- | -- | 6E-09 | Respiratory | - - | 0.0004 | - - | 0.0004 |
| | | | AROCLOR-1254 | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-08 | -- | -- | 2E-08 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | 0.00003 | - - | 0.00003 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0002 | - - | 0.0002 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0006 | - - | 0.0006 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000003 | - - | 0.000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.000001 | - - | 0.000001 |
| | | | Chemical Total | -- | 1E-06 | -- | -- | 1E-06 | | - - | 5 | - - | 5 |
| | | Exposure Point Total | | | | | | 1E-06 | | | | | 5 |
| | Exposure Medium Total | | | | | | | 1E-06 | | | | | 5 |
| Medium Total | | | | | | | | 5E-04 | | | | | 6 |
| Receptor Total | | | | | | | Receptor Risk Total | 6E-04 | | | | Receptor HI Total | 11 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Adrenals HI | 6 |
| Total Autoimmune HI | 5 |
| Total Blood HI | 0.08 |
| Total Body Weight HI | 0.002 |
| Total CNS HI | 0.004 |
| Total CVS HI | 0.02 |
| Total GS HI | 0.07 |
| Total Kidney HI | 0.02 |
| Total Liver HI | 0.0009 |
| Total Lungs HI | 0.0008 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.02 |
| Total Respiratory HI | 0.0004 |
| Total NA HI | 0.0004 |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | | | | | |
| | | | 1,2,4-TRICHLOROBENZENE | 4E-06 | -- | 4E-07 | -- | 4E-06 | | | | | |
| | | | 1,4-DICHLOROBENZENE | 2E-09 | -- | 2E-10 | -- | 2E-09 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 8E-05 | -- | 3E-05 | -- | 1E-04 | | | | | |
| | | | AROCLOR-1254 | 1E-04 | -- | 5E-05 | -- | 2E-04 | | | | | |
| | | | AROCLOR-1260 | 4E-04 | -- | 2E-04 | -- | 5E-04 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 6E-06 | -- | 5E-07 | -- | 6E-06 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 5E-06 | -- | 5E-06 | -- | 1E-05 | | | | | |
| | | | Chemical Total | 6E-04 | -- | 2E-04 | -- | 8E-04 | | | | | |
| | | Exposure Point Total | | | | | | 8E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 8E-04 | | | | | |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,4-DICHLOROBENZENE | -- | 7E-08 | -- | -- | 7E-08 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-10 | -- | -- | 5E-10 | | | | | |
| | | | AROCLOR-1254 | -- | 3E-09 | -- | -- | 3E-09 | | | | | |
| | | | AROCLOR-1260 | -- | 8E-09 | -- | -- | 8E-09 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 1E-09 | -- | -- | 1E-09 | | | | | |
| | | | CADMIUM | -- | 6E-10 | -- | -- | 6E-10 | | | | | |
| | | | COBALT | -- | 1E-08 | -- | -- | 1E-08 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 4E-10 | -- | -- | 4E-10 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 4E-08 | -- | -- | 4E-08 | | | | | |
| | | | Chemical Total | -- | 1E-07 | -- | -- | 1E-07 | | | | | |
| | | Exposure Point Total | | | | | | 1E-07 | | | | | |
| | Exposure Medium Total | | | | | | | 1E-07 | | | | | |
| Medium Total | | | | | | | | 8E-04 | | | | | |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block E | 1,2,3-TRICHLOROBENZENE | - - | -- | - - | -- | - - | | | | | |
| | | | 1,2,4-TRICHLOROBENZENE | 4E-05 | -- | 3E-06 | -- | 4E-05 | | | | | |
| | | | 1,3-DICHLOROBENZENE | - - | -- | - - | -- | - - | | | | | |
| | | | 1,4-DICHLOROBENZENE | 1E-07 | -- | 9E-09 | -- | 1E-07 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 9E-05 | -- | 3E-05 | -- | 1E-04 | | | | | |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | AROCLOR-1254 | 3E-05 | -- | 1E-05 | -- | 5E-05 | | | | | |
| | | | AROCLOR-1260 | 2E-03 | -- | 1E-03 | -- | 4E-03 | | | | | |
| | | | ARSENIC | 4E-06 | -- | 4E-07 | -- | 4E-06 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 2E-06 | -- | 2E-06 | -- | 4E-06 | | | | | |
| | | | Chemical Total | 3E-03 | -- | 1E-03 | -- | 4E-03 | | | | | |
| | | Exposure Point Total | | | | | | 4E-03 | | | | | |
| | Exposure Medium Total | | | | | | | 4E-03 | | | | | |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK E - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Air | Block E | 1,2,3-TRICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,2,4-TRICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,3-DICHLOROBENZENE | -- | - - | -- | -- | - - | | | | | |
| | | | 1,4-DICHLOROBENZENE | -- | 3E-06 | -- | -- | 3E-06 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-10 | -- | -- | 6E-10 | | | | | |
| | | | NAPHTHALENE | -- | 2E-08 | -- | -- | 2E-08 | | | | | |
| | | | AROCLOR-1254 | -- | 7E-10 | -- | -- | 7E-10 | | | | | |
| | | | AROCLOR-1260 | -- | 5E-08 | -- | -- | 5E-08 | | | | | |
| | | | ARSENIC | -- | 8E-10 | -- | -- | 8E-10 | | | | | |
| | | | COBALT | -- | 5E-09 | -- | -- | 5E-09 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | | | | | |
| | | | Chemical Total | -- | 3E-06 | -- | -- | 3E-06 | | | | | |
| | | Exposure Point Total | | | | | | 3E-06 | | | | | |
| | Exposure Medium Total | | | | | | | 3E-06 | | | | | |
| Medium Total | | | | | | | | 4E-03 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 5E-03 | | | | | |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 3E-06 | -- | 8E-07 | -- | 4E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 1E-08 | -- | 4E-09 | -- | 2E-08 | Autoimmune | 0.02 | - - | 0.006 | 0.03 |
| | | | AROCLOR-1260 | 2E-08 | -- | 6E-09 | -- | 3E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.002 | 0.02 |
| | | | ARSENIC | 3E-07 | -- | 2E-08 | -- | 3E-07 | Skin, CVS | 0.05 | - - | 0.003 | 0.05 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.006 | - - | 0.0005 | 0.006 |
| | | | COBALT | - - | -- | - - | -- | - - | Thyroid | 0.01 | -- | 0.0002 | 0.01 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.01 | - - | 0.004 | 0.02 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.06 | - - | 0.001 | 0.06 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.003 | - - | 0.001 | 0.004 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0003 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 9E-08 | -- | 7E-08 | -- | 2E-07 | None Reported | 0.004 | - - | 0.003 | 0.008 |
| | | | Chemical Total | 3E-06 | -- | 9E-07 | -- | 4E-06 | | 0.2 | -- | 0.02 | 0.2 |
| | | Exposure Point Total | | | | | | 4E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 4E-06 | | | | | 0.2 |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-08 | -- | -- | 2E-08 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-08 | -- | -- | 3E-08 | NA | - - | 0.03 | - - | 0.03 |
| | | | CADMIUM | -- | 5E-09 | -- | -- | 5E-09 | NA | - - | 0.02 | - - | 0.02 |
| | | | COBALT | -- | 1E-07 | -- | -- | 1E-07 | Lungs | - - | 0.2 | - - | 0.2 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.005 | - - | 0.005 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 7E-09 | -- | -- | 7E-09 | Body Weight | - - | 0.02 | - - | 0.02 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 5E-07 | -- | -- | 5E-07 | Lungs | - - | 0.004 | - - | 0.004 |
| | | | Chemical Total | -- | 7E-07 | -- | -- | 7E-07 | | - - | 0.3 | - - | 0.3 |
| | | Exposure Point Total | | | | | | 7E-07 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | 7E-07 | | | | | 0.3 |
| Medium Total | | | | | | | | 5E-06 | | | | | 0.5 |

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.04 | - - | 0.010 | 0.05 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 1E-07 | -- | 3E-08 | -- | 1E-07 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 2E-09 | -- | 7E-10 | -- | 3E-09 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 2E-07 | -- | 1E-08 | -- | 3E-07 | Skin, CVS | 0.04 | - - | 0.002 | 0.04 |
| | | | COBALT | - - | -- | - - | -- | - - | Thyroid | 0.03 | - - | 0.0006 | 0.03 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.004 | - - | 0.001 | 0.005 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0004 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-08 | -- | 3E-08 | -- | 6E-08 | None Reported | 0.002 | - - | 0.001 | 0.003 |
| | | | Chemical Total | 4E-07 | -- | 7E-08 | -- | 5E-07 | | 0.1 | -- | 0.02 | 0.1 |
| | | Exposure Point Total | | | | | | 5E-07 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 5E-07 | | | | | 0.1 |
| | Air | Block F | NAPHTHALENE | -- | 2E-06 | -- | -- | 2E-06 | Respiratory | - - | 1 | - - | 1 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-10 | -- | -- | 6E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-08 | -- | -- | 2E-08 | NA | - - | 0.03 | - - | 0.03 |
| | | | COBALT | -- | 4E-07 | -- | -- | 4E-07 | Lungs | - - | 0.5 | - - | 0.5 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.001 | - - | 0.001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-07 | -- | -- | 2E-07 | Lungs | - - | 0.002 | - - | 0.002 |
| | | | Chemical Total | -- | 2E-06 | -- | -- | 2E-06 | | - - | 2 | - - | 2 |
| | | Exposure Point Total | | | | | | 2E-06 | | | | | 2 |
| | Exposure Medium Total | | | | | | | 2E-06 | | | | | 2 |
| Medium Total | | | | | | | | 3E-06 | | | | | 2 |
| Receptor Total | | | | | | | Receptor Risk Total | 8E-06 | | | | Receptor HI Total | 2 |

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Construction Worker

Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.05 |
| Total Blood HI | 0.02 |
| Total Body Weight HI | 0.07 |
| Total CVS HI | 0.09 |
| Total Kidney HI | 0.04 |
| Total Lungs HI | 0.7 |
| Total None Reported HI | 0.01 |
| Total Skin HI | 0.09 |
| Total Respiratory HI | 1 |
| Total NA HI | 0.08 |
| Total Thyroid HI | 0.04 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 8E-06 | -- | 1E-05 | -- | 2E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 3E-08 | -- | 6E-08 | -- | 1E-07 | Autoimmune | 0.002 | - - | 0.004 | 0.007 |
| | | | AROCLOR-1260 | 6E-08 | -- | 1E-07 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.002 | - - | 0.002 | 0.003 |
| | | | ARSENIC | 8E-07 | -- | 3E-07 | -- | 1E-06 | Skin, CVS | 0.005 | - - | 0.002 | 0.007 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0006 | - - | 0.0003 | 0.0009 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.01 | - - | 0.002 | 0.01 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.001 | - - | 0.003 | 0.004 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.006 | - - | 0.0008 | 0.007 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0003 | - - | 0.001 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.003 | - - | 0.0005 | 0.004 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 1E-06 | -- | 1E-06 | None Reported | 0.0004 | - - | 0.002 | 0.003 |
| | | | Chemical Total | 9E-06 | -- | 2E-05 | -- | 2E-05 | | 0.03 | -- | 0.02 | 0.05 |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | 0.05 |
| | Exposure Medium Total | | | | | | | 2E-05 | | | | | 0.05 |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 1E-12 | -- | -- | 1E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-12 | -- | -- | 2E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | CADMIUM | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | 0.000008 | - - | 0.000008 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.00008 | - - | 0.00008 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 8E-11 | -- | -- | 8E-11 | Body Weight | - - | 0.000010 | - - | 0.000010 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 6E-09 | -- | -- | 6E-09 | Lungs | - - | 0.000002 | - - | 0.000002 |
| | | | Chemical Total | -- | 8E-09 | -- | -- | 8E-09 | | - - | 0.0001 | - - | 0.0001 |
| | | Exposure Point Total | | | | | | 8E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | 8E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | 2E-05 | | | | | 0.05 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.004 | - - | 0.007 | 0.01 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 3E-07 | -- | 5E-07 | -- | 8E-07 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 6E-09 | -- | 1E-08 | -- | 2E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 6E-07 | -- | 2E-07 | -- | 9E-07 | Skin, CVS | 0.004 | - - | 0.002 | 0.005 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.03 | - - | 0.004 | 0.03 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0004 | - - | 0.0008 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.004 | - - | 0.0005 | 0.004 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 9E-08 | -- | 5E-07 | -- | 5E-07 | None Reported | 0.0002 | - - | 0.0008 | 0.001 |
| | | | Chemical Total | 1E-06 | -- | 1E-06 | -- | 2E-06 | | 0.04 | -- | 0.01 | 0.06 |
| | | Exposure Point Total | | | | | | 2E-06 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | 2E-06 | | | | | 0.06 |
| | Air | Block F | NAPHTHALENE | -- | 7E-06 | -- | -- | 7E-06 | Respiratory | - - | 0.2 | - - | 0.2 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-12 | -- | -- | 6E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-13 | -- | -- | 2E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | COBALT | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0002 | - - | 0.0002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000006 | - - | 0.0000006 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0000007 | - - | 0.0000007 |
| | | | Chemical Total | -- | 7E-06 | -- | -- | 7E-06 | | - - | 0.2 | - - | 0.2 |
| | | Exposure Point Total | | | | | | 7E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 7E-06 | | | | | 0.2 |
| Medium Total | | | | | | | | 9E-06 | | | | | 0.2 |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-05 | | | | Receptor HI Total | 0.3 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Industrial Worker

Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.01 |
| Total Blood HI | 0.05 |
| Total Body Weight HI | 0.01 |
| Total CVS HI | 0.01 |
| Total Kidney HI | 0.009 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.004 |
| Total Skin HI | 0.01 |
| Total Respiratory HI | 0.2 |
| Total NA HI | 0.00004 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 1E-04 | -- | 3E-05 | -- | 1E-04 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 8E-08 | -- | 3E-08 | -- | 1E-07 | Autoimmune | 0.02 | - - | 0.008 | 0.03 |
| | | | AROCLOR-1260 | 1E-07 | -- | 4E-08 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.003 | 0.02 |
| | | | ARSENIC | 2E-06 | -- | 1E-07 | -- | 2E-06 | Skin, CVS | 0.05 | - - | 0.004 | 0.05 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.006 | - - | 0.0005 | 0.006 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.1 | - - | 0.003 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.01 | - - | 0.005 | 0.02 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.06 | - - | 0.001 | 0.06 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.003 | - - | 0.002 | 0.005 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.03 | - - | 0.0008 | 0.03 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 3E-06 | -- | 6E-06 | None Reported | 0.004 | - - | 0.004 | 0.008 |
| | | | Chemical Total | 1E-04 | -- | 3E-05 | -- | 1E-04 | | 0.3 | -- | 0.03 | 0.4 |
| | | Exposure Point Total | | | | | | 1E-04 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | 1E-04 | | | | | 0.4 |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-11 | -- | -- | 6E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 9E-14 | -- | -- | 9E-14 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-13 | -- | -- | 1E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | CADMIUM | -- | 3E-12 | -- | -- | 3E-12 | NA | - - | 0.000002 | - - | 0.000002 |
| | | | COBALT | -- | 1E-10 | -- | -- | 1E-10 | Lungs | - - | 0.00002 | - - | 0.00002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000005 | - - | 0.0000005 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 5E-12 | -- | -- | 5E-12 | Body Weight | - - | 0.000003 | - - | 0.000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0000005 | - - | 0.0000005 |
| | | | Chemical Total | -- | 2E-09 | -- | -- | 2E-09 | | - - | 0.00003 | - - | 0.00003 |
| | | Exposure Point Total | | | | | | 2E-09 | | | | | 0.00003 |
| | Exposure Medium Total | | | | | | | 2E-09 | | | | | 0.00003 |
| Medium Total | | | | | | | | 1E-04 | | | | | 0.4 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.04 | - - | 0.01 | 0.05 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 4E-06 | -- | 1E-06 | -- | 5E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 1E-08 | -- | 5E-09 | -- | 2E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 1E-06 | -- | 1E-07 | -- | 2E-06 | Skin, CVS | 0.04 | - - | 0.003 | 0.04 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.3 | - - | 0.007 | 0.3 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.004 | - - | 0.001 | 0.006 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.04 | - - | 0.0009 | 0.04 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 1E-06 | -- | 2E-06 | None Reported | 0.002 | - - | 0.001 | 0.003 |
| | | | Chemical Total | 6E-06 | -- | 2E-06 | -- | 8E-06 | | 0.4 | -- | 0.03 | 0.4 |
| | | Exposure Point Total | | | | | | 8E-06 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | 8E-06 | | | | | 0.4 |
| | Air | Block F | NAPHTHALENE | -- | 4E-07 | -- | -- | 4E-07 | Respiratory | - - | 0.05 | - - | 0.05 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-12 | -- | -- | 2E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-14 | -- | -- | 2E-14 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | 0.000003 | - - | 0.000003 |
| | | | COBALT | -- | 3E-10 | -- | -- | 3E-10 | Lungs | - - | 0.00006 | - - | 0.00006 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000002 | - - | 0.0000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 7E-10 | -- | -- | 7E-10 | Lungs | - - | 0.0000002 | - - | 0.0000002 |
| | | | Chemical Total | -- | 4E-07 | -- | -- | 4E-07 | | - - | 0.05 | - - | 0.05 |
| | | Exposure Point Total | | | | | | 4E-07 | | | | | 0.05 |
| | Exposure Medium Total | | | | | | | 4E-07 | | | | | 0.05 |
| Medium Total | | | | | | | | 9E-06 | | | | | 0.5 |
| Receptor Total | | | | | | | Receptor Risk Total | 1E-04 | | | | Receptor HI Total | 0.9 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Commercial Receptor

Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.06 |
| Total Blood HI | 0.4 |
| Total Body Weight HI | 0.05 |
| Total CVS HI | 0.09 |
| Total Kidney HI | 0.08 |
| Total Lungs HI | 0.00008 |
| Total None Reported HI | 0.01 |
| Total Skin HI | 0.09 |
| Total Respiratory HI | 0.05 |
| Total NA HI | 0.00001 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 2E-05 | -- | 2E-05 | -- | 4E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 3E-08 | -- | 4E-08 | -- | 7E-08 | Autoimmune | 0.004 | - - | 0.005 | 0.010 |
| | | | AROCLOR-1260 | 5E-08 | -- | 6E-08 | -- | 1E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.003 | - - | 0.002 | 0.005 |
| | | | ARSENIC | 7E-07 | -- | 2E-07 | -- | 9E-07 | Skin, CVS | 0.009 | - - | 0.002 | 0.01 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.001 | - - | 0.0004 | 0.001 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.002 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.003 | - - | 0.003 | 0.006 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.01 | - - | 0.0010 | 0.01 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0006 | - - | 0.001 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.006 | - - | 0.0005 | 0.007 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 6E-07 | -- | 2E-06 | -- | 2E-06 | None Reported | 0.0008 | - - | 0.003 | 0.004 |
| | | | Chemical Total | 2E-05 | -- | 2E-05 | -- | 4E-05 | | 0.06 | -- | 0.02 | 0.08 |
| | | Exposure Point Total | | | | | | 4E-05 | | | | | 0.08 |
| | Exposure Medium Total | | | | | | | 4E-05 | | | | | 0.08 |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-11 | -- | -- | 6E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 2E-13 | -- | -- | 2E-13 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-13 | -- | -- | 3E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | CADMIUM | -- | 7E-12 | -- | -- | 7E-12 | NA | - - | 0.000002 | - - | 0.000002 |
| | | | COBALT | -- | 2E-10 | -- | -- | 2E-10 | Lungs | - - | 0.00002 | - - | 0.00002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000005 | - - | 0.0000005 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 1E-11 | -- | -- | 1E-11 | Body Weight | - - | 0.000003 | - - | 0.000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0000005 | - - | 0.0000005 |
| | | | Chemical Total | -- | 2E-09 | -- | -- | 2E-09 | | - - | 0.00003 | - - | 0.00003 |
| | | Exposure Point Total | | | | | | 2E-09 | | | | | 0.00003 |
| | Exposure Medium Total | | | | | | | 2E-09 | | | | | 0.00003 |
| Medium Total | | | | | | | | 4E-05 | | | | | 0.08 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.007 | - - | 0.008 | 0.02 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 7E-07 | -- | 7E-07 | -- | 1E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 5E-09 | -- | 6E-09 | -- | 1E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 6E-07 | -- | 1E-07 | -- | 7E-07 | Skin, CVS | 0.007 | - - | 0.002 | 0.009 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.06 | - - | 0.005 | 0.06 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0008 | - - | 0.001 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.007 | - - | 0.0006 | 0.008 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 7E-07 | -- | 9E-07 | None Reported | 0.0003 | - - | 0.001 | 0.001 |
| | | | Chemical Total | 1E-06 | -- | 2E-06 | -- | 3E-06 | | 0.08 | -- | 0.02 | 0.10 |
| | | Exposure Point Total | | | | | | 3E-06 | | | | | 0.10 |
| | Exposure Medium Total | | | | | | | 3E-06 | | | | | 0.10 |
| | Air | Block F | NAPHTHALENE | -- | 9E-07 | -- | -- | 9E-07 | Respiratory | - - | 0.05 | - - | 0.05 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-12 | -- | -- | 2E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-14 | -- | -- | 3E-14 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | 0.000003 | - - | 0.000003 |
| | | | COBALT | -- | 5E-10 | -- | -- | 5E-10 | Lungs | - - | 0.00006 | - - | 0.00006 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000002 | - - | 0.0000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 7E-10 | -- | -- | 7E-10 | Lungs | - - | 0.0000002 | - - | 0.0000002 |
| | | | Chemical Total | -- | 9E-07 | -- | -- | 9E-07 | | - - | 0.05 | - - | 0.05 |
| | | Exposure Point Total | | | | | | 9E-07 | | | | | 0.05 |
| | Exposure Medium Total | | | | | | | 9E-07 | | | | | 0.05 |
| Medium Total | | | | | | | | 4E-06 | | | | | 0.1 |
| Receptor Total | | | | | | | Receptor Risk Total | 5E-05 | | | | Receptor HI Total | 0.2 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Commercial Receptor

Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.02 |
| Total Blood HI | 0.09 |
| Total Body Weight HI | 0.02 |
| Total CVS HI | 0.02 |
| Total Kidney HI | 0.02 |
| Total Lungs HI | 0.00008 |
| Total None Reported HI | 0.005 |
| Total Skin HI | 0.02 |
| Total Respiratory HI | 0.05 |
| Total NA HI | 0.00001 |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 1E-04 | -- | 5E-05 | -- | 2E-04 | | | | | |
| | | | AROCLOR-1254 | 1E-07 | -- | 6E-08 | -- | 2E-07 | | | | | |
| | | | AROCLOR-1260 | 2E-07 | -- | 1E-07 | -- | 3E-07 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 3E-06 | -- | 3E-07 | -- | 3E-06 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 4E-06 | -- | 5E-06 | -- | 8E-06 | | | | | |
| | | | Chemical Total | 1E-04 | -- | 6E-05 | -- | 2E-04 | | | | | |
| | | Exposure Point Total | | | | | | 2E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 2E-04 | | | | | |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | | | | | |
| | | | AROCLOR-1254 | -- | 3E-13 | -- | -- | 3E-13 | | | | | |
| | | | AROCLOR-1260 | -- | 4E-13 | -- | -- | 4E-13 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 6E-11 | -- | -- | 6E-11 | | | | | |
| | | | CADMIUM | -- | 1E-11 | -- | -- | 1E-11 | | | | | |
| | | | COBALT | -- | 3E-10 | -- | -- | 3E-10 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 2E-11 | -- | -- | 2E-11 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 4E-09 | -- | -- | 4E-09 | | | | | |
| | | | Chemical Total | -- | 4E-09 | -- | -- | 4E-09 | | | | | |
| | | Exposure Point Total | | | | | | 4E-09 | | | | | |
| | Exposure Medium Total | | | | | | | 4E-09 | | | | | |
| Medium Total | | | | | | | | 2E-04 | | | | | |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 4E-06 | -- | 2E-06 | -- | 6E-06 | | | | | |
| | | | AROCLOR-1260 | 2E-08 | -- | 1E-08 | -- | 3E-08 | | | | | |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 2E-06 | -- | 3E-06 | | | | | |
| | | | Chemical Total | 8E-06 | -- | 4E-06 | -- | 1E-05 | | | | | |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | |
| | Air | Block F | NAPHTHALENE | -- | 1E-06 | -- | -- | 1E-06 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-12 | -- | -- | 4E-12 | | | | | |
| | | | AROCLOR-1260 | -- | 5E-14 | -- | -- | 5E-14 | | | | | |
| | | | ARSENIC | -- | 5E-11 | -- | -- | 5E-11 | | | | | |
| | | | COBALT | -- | 8E-10 | -- | -- | 8E-10 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | | | | | |
| | | | Chemical Total | -- | 1E-06 | -- | -- | 1E-06 | | | | | |
| | | Exposure Point Total | | | | | | 1E-06 | | | | | |
| | Exposure Medium Total | | | | | | | 1E-06 | | | | | |
| Medium Total | | | | | | | | 1E-05 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-04 | | | | | |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Commercial Receptor

Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 8E-06 | -- | 1E-05 | -- | 2E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 3E-08 | -- | 6E-08 | -- | 1E-07 | Autoimmune | 0.002 | - - | 0.004 | 0.007 |
| | | | AROCLOR-1260 | 6E-08 | -- | 1E-07 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.002 | - - | 0.002 | 0.003 |
| | | | ARSENIC | 8E-07 | -- | 3E-07 | -- | 1E-06 | Skin, CVS | 0.005 | - - | 0.002 | 0.007 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0006 | - - | 0.0003 | 0.0009 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.01 | - - | 0.002 | 0.01 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.001 | - - | 0.003 | 0.004 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.006 | - - | 0.0008 | 0.007 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0003 | - - | 0.001 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.003 | - - | 0.0005 | 0.004 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 1E-06 | -- | 1E-06 | None Reported | 0.0004 | - - | 0.002 | 0.003 |
| | | | Chemical Total | 9E-06 | -- | 2E-05 | -- | 2E-05 | | 0.03 | -- | 0.02 | 0.05 |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | 0.05 |
| | Exposure Medium Total | | | | | | | 2E-05 | | | | | 0.05 |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 1E-12 | -- | -- | 1E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-12 | -- | -- | 2E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | CADMIUM | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | 0.000008 | - - | 0.000008 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.00008 | - - | 0.00008 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 8E-11 | -- | -- | 8E-11 | Body Weight | - - | 0.000010 | - - | 0.000010 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 6E-09 | -- | -- | 6E-09 | Lungs | - - | 0.000002 | - - | 0.000002 |
| | | | Chemical Total | -- | 8E-09 | -- | -- | 8E-09 | | - - | 0.0001 | - - | 0.0001 |
| | | Exposure Point Total | | | | | | 8E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | 8E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | 2E-05 | | | | | 0.05 |

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.004 | - - | 0.007 | 0.01 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 3E-07 | -- | 5E-07 | -- | 8E-07 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 6E-09 | -- | 1E-08 | -- | 2E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 6E-07 | -- | 2E-07 | -- | 9E-07 | Skin, CVS | 0.004 | - - | 0.002 | 0.005 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.03 | - - | 0.004 | 0.03 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0004 | - - | 0.0008 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.004 | - - | 0.0005 | 0.004 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 9E-08 | -- | 5E-07 | -- | 5E-07 | None Reported | 0.0002 | - - | 0.0008 | 0.001 |
| | | | Chemical Total | 1E-06 | -- | 1E-06 | -- | 2E-06 | | 0.04 | -- | 0.01 | 0.06 |
| | | Exposure Point Total | | | | | | 2E-06 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | 2E-06 | | | | | 0.06 |
| | Air | Block F | NAPHTHALENE | -- | 7E-06 | -- | -- | 7E-06 | Respiratory | - - | 0.2 | - - | 0.2 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-12 | -- | -- | 6E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-13 | -- | -- | 2E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | COBALT | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0002 | - - | 0.0002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000006 | - - | 0.0000006 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0000007 | - - | 0.0000007 |
| | | | Chemical Total | -- | 7E-06 | -- | -- | 7E-06 | | - - | 0.2 | - - | 0.2 |
| | | Exposure Point Total | | | | | | 7E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 7E-06 | | | | | 0.2 |
| Medium Total | | | | | | | | 9E-06 | | | | | 0.2 |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-05 | | | | Receptor HI Total | 0.3 |

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Commercial Receptor

Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.01 |
| Total Blood HI | 0.05 |
| Total Body Weight HI | 0.01 |
| Total CVS HI | 0.01 |
| Total Kidney HI | 0.009 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.004 |
| Total Skin HI | 0.01 |
| Total Respiratory HI | 0.2 |
| Total NA HI | 0.00004 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 2E-04 | -- | 7E-05 | -- | 3E-04 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 2E-07 | -- | 6E-08 | -- | 2E-07 | Autoimmune | 0.04 | - - | 0.02 | 0.06 |
| | | | AROCLOR-1260 | 3E-07 | -- | 1E-07 | -- | 3E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.03 | - - | 0.006 | 0.04 |
| | | | ARSENIC | 4E-06 | -- | 3E-07 | -- | 4E-06 | Skin, CVS | 0.09 | - - | 0.008 | 0.1 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.001 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.2 | - - | 0.006 | 0.2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.03 | - - | 0.01 | 0.04 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.1 | - - | 0.003 | 0.1 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.006 | - - | 0.004 | 0.010 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.06 | - - | 0.002 | 0.07 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 6E-06 | -- | 6E-06 | -- | 1E-05 | None Reported | 0.008 | - - | 0.009 | 0.02 |
| | | | Chemical Total | 2E-04 | -- | 7E-05 | -- | 3E-04 | | 0.6 | -- | 0.07 | 0.7 |
| | | Exposure Point Total | | | | | | 3E-04 | | | | | 0.7 |
| | Exposure Medium Total | | | | | | | 3E-04 | | | | | 0.7 |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 3E-13 | -- | -- | 3E-13 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 6E-13 | -- | -- | 6E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 8E-11 | -- | -- | 8E-11 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | CADMIUM | -- | 1E-11 | -- | -- | 1E-11 | NA | - - | 0.000008 | - - | 0.000008 |
| | | | COBALT | -- | 4E-10 | -- | -- | 4E-10 | Lungs | - - | 0.00008 | - - | 0.00008 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 2E-11 | -- | -- | 2E-11 | Body Weight | - - | 0.000010 | - - | 0.000010 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 7E-09 | -- | -- | 7E-09 | Lungs | - - | 0.000002 | - - | 0.000002 |
| | | | Chemical Total | -- | 8E-09 | -- | -- | 8E-09 | | - - | 0.0001 | - - | 0.0001 |
| | | Exposure Point Total | | | | | | 8E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | 8E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | 3E-04 | | | | | 0.7 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.07 | - - | 0.03 | 0.10 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 7E-06 | -- | 2E-06 | -- | 9E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 3E-08 | -- | 1E-08 | -- | 4E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 3E-06 | -- | 2E-07 | -- | 3E-06 | Skin, CVS | 0.07 | - - | 0.006 | 0.08 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.6 | - - | 0.02 | 0.6 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.008 | - - | 0.003 | 0.01 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.07 | - - | 0.002 | 0.07 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-06 | -- | 2E-06 | -- | 4E-06 | None Reported | 0.003 | - - | 0.003 | 0.006 |
| | | | Chemical Total | 1E-05 | -- | 5E-06 | -- | 2E-05 | | 0.8 | -- | 0.06 | 0.9 |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | 0.9 |
| | | Exposure Medium Total | | | | | | 2E-05 | | | | | 0.9 |
| | Air | Block F | NAPHTHALENE | -- | 2E-06 | -- | -- | 2E-06 | Respiratory | - - | 0.2 | - - | 0.2 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 8E-12 | -- | -- | 8E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 6E-14 | -- | -- | 6E-14 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 6E-11 | -- | -- | 6E-11 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0002 | - - | 0.0002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000006 | - - | 0.0000006 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0000007 | - - | 0.0000007 |
| | | | Chemical Total | -- | 2E-06 | -- | -- | 2E-06 | | - - | 0.2 | - - | 0.2 |
| | | Exposure Point Total | | | | | | 2E-06 | | | | | 0.2 |
| | | Exposure Medium Total | | | | | | 2E-06 | | | | | 0.2 |
| Medium Total | | | | | | | | 2E-05 | | | | | 1 |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-04 | | | | Receptor HI Total | 2 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.1 |
| Total Blood HI | 0.8 |
| Total Body Weight HI | 0.1 |
| Total CVS HI | 0.2 |
| Total Kidney HI | 0.2 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.02 |
| Total Skin HI | 0.2 |
| Total Respiratory HI | 0.2 |
| Total NA HI | 0.00004 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 3E-05 | -- | 1E-05 | -- | 5E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 6E-08 | -- | 2E-08 | -- | 8E-08 | Autoimmune | 0.008 | - - | 0.003 | 0.01 |
| | | | AROCLOR-1260 | 9E-08 | -- | 4E-08 | -- | 1E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.006 | - - | 0.001 | 0.007 |
| | | | ARSENIC | 1E-06 | -- | 1E-07 | -- | 1E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.02 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.002 | - - | 0.0002 | 0.002 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.04 | - - | 0.001 | 0.04 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.005 | - - | 0.002 | 0.007 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.02 | - - | 0.0007 | 0.02 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.001 | - - | 0.0008 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0004 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 1E-06 | -- | 2E-06 | None Reported | 0.002 | - - | 0.002 | 0.003 |
| | | | Chemical Total | 4E-05 | -- | 2E-05 | -- | 5E-05 | | 0.1 | -- | 0.01 | 0.1 |
| | | Exposure Point Total | | | | | | 5E-05 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 5E-05 | | | | | 0.1 |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 7E-13 | -- | -- | 7E-13 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-12 | -- | -- | 1E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | CADMIUM | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | 0.000008 | - - | 0.000008 |
| | | | COBALT | -- | 8E-10 | -- | -- | 8E-10 | Lungs | - - | 0.00008 | - - | 0.00008 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 4E-11 | -- | -- | 4E-11 | Body Weight | - - | 0.000010 | - - | 0.000010 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 7E-09 | -- | -- | 7E-09 | Lungs | - - | 0.000002 | - - | 0.000002 |
| | | | Chemical Total | -- | 9E-09 | -- | -- | 9E-09 | | - - | 0.0001 | - - | 0.0001 |
| | | Exposure Point Total | | | | | | 9E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | 9E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | 5E-05 | | | | | 0.1 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.01 | - - | 0.005 | 0.02 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 1E-06 | -- | 5E-07 | -- | 2E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 1E-08 | -- | 4E-09 | -- | 1E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 1E-06 | -- | 1E-07 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.001 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.1 | - - | 0.003 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.002 | - - | 0.0007 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0004 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-07 | -- | 5E-07 | -- | 8E-07 | None Reported | 0.0006 | - - | 0.0007 | 0.001 |
| | | | Chemical Total | 3E-06 | -- | 1E-06 | -- | 4E-06 | | 0.1 | -- | 0.01 | 0.2 |
| | | Exposure Point Total | | | | | | 4E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 4E-06 | | | | | 0.2 |
| | Air | Block F | NAPHTHALENE | -- | 3E-06 | -- | -- | 3E-06 | Respiratory | - - | 0.2 | - - | 0.2 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 8E-12 | -- | -- | 8E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-13 | -- | -- | 1E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0002 | - - | 0.0002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000006 | - - | 0.0000006 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0000007 | - - | 0.0000007 |
| | | | Chemical Total | -- | 3E-06 | -- | -- | 3E-06 | | - - | 0.2 | - - | 0.2 |
| | | Exposure Point Total | | | | | | 3E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 3E-06 | | | | | 0.2 |
| Medium Total | | | | | | | | 7E-06 | | | | | 0.4 |
| Receptor Total | | | | | | | Receptor Risk Total | 6E-05 | | | | Receptor HI Total | 0.5 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Recreational User

Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.02 |
| Total Blood HI | 0.2 |
| Total Body Weight HI | 0.02 |
| Total CVS HI | 0.03 |
| Total Kidney HI | 0.03 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.005 |
| Total Skin HI | 0.03 |
| Total Respiratory HI | 0.2 |
| Total NA HI | 0.00004 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 7E-06 | -- | 4E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 3E-08 | -- | 2E-08 | -- | 5E-08 | Autoimmune | 0.005 | - - | 0.003 | 0.007 |
| | | | AROCLOR-1260 | 5E-08 | -- | 3E-08 | -- | 8E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.003 | - - | 0.0009 | 0.004 |
| | | | ARSENIC | 8E-07 | -- | 9E-08 | -- | 9E-07 | Skin, CVS | 0.01 | - - | 0.001 | 0.01 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.001 | - - | 0.0002 | 0.001 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.0009 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.003 | - - | 0.002 | 0.004 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.01 | - - | 0.0005 | 0.01 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0006 | - - | 0.0006 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.007 | - - | 0.0003 | 0.007 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 4E-07 | -- | 6E-07 | None Reported | 0.0009 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 9E-06 | -- | 4E-06 | -- | 1E-05 | | 0.07 | -- | 0.01 | 0.08 |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | 0.08 |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | 0.08 |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 8E-11 | -- | -- | 8E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 7E-13 | -- | -- | 7E-13 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-12 | -- | -- | 1E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | CADMIUM | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | 0.000008 | - - | 0.000008 |
| | | | COBALT | -- | 8E-10 | -- | -- | 8E-10 | Lungs | - - | 0.00008 | - - | 0.00008 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 4E-11 | -- | -- | 4E-11 | Body Weight | - - | 0.000010 | - - | 0.000010 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.000002 | - - | 0.000002 |
| | | | Chemical Total | -- | 4E-09 | -- | -- | 4E-09 | | - - | 0.0001 | - - | 0.0001 |
| | | Exposure Point Total | | | | | | 4E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | 4E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | 1E-05 | | | | | 0.08 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.008 | - - | 0.004 | 0.01 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 3E-07 | -- | 1E-07 | -- | 4E-07 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 6E-09 | -- | 3E-09 | -- | 9E-09 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 6E-07 | -- | 7E-08 | -- | 7E-07 | Skin, CVS | 0.008 | - - | 0.0009 | 0.009 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.06 | - - | 0.002 | 0.06 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0009 | - - | 0.0005 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.008 | - - | 0.0003 | 0.008 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 8E-08 | -- | 1E-07 | -- | 2E-07 | None Reported | 0.0003 | - - | 0.0005 | 0.0008 |
| | | | Chemical Total | 1E-06 | -- | 3E-07 | -- | 1E-06 | | 0.09 | -- | 0.009 | 0.09 |
| | | Exposure Point Total | | | | | | 1E-06 | | | | | 0.09 |
| | Exposure Medium Total | | | | | | | 1E-06 | | | | | 0.09 |
| | Air | Block F | NAPHTHALENE | -- | 3E-06 | -- | -- | 3E-06 | Respiratory | - - | 0.2 | - - | 0.2 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-12 | -- | -- | 3E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-13 | -- | -- | 1E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | 0.00001 | - - | 0.00001 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0002 | - - | 0.0002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000006 | - - | 0.0000006 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000007 | - - | 0.0000007 |
| | | | Chemical Total | -- | 3E-06 | -- | -- | 3E-06 | | - - | 0.2 | - - | 0.2 |
| | | Exposure Point Total | | | | | | 3E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 3E-06 | | | | | 0.2 |
| Medium Total | | | | | | | | 5E-06 | | | | | 0.3 |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-05 | | | | Receptor HI Total | 0.4 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Recreational User

Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.01 |
| Total Blood HI | 0.09 |
| Total Body Weight HI | 0.01 |
| Total CVS HI | 0.02 |
| Total Kidney HI | 0.02 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.003 |
| Total Skin HI | 0.02 |
| Total Respiratory HI | 0.2 |
| Total NA HI | 0.00004 |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 2E-04 | -- | 9E-05 | -- | 3E-04 | | | | | |
| | | | AROCLOR-1254 | 2E-07 | -- | 1E-07 | -- | 3E-07 | | | | | |
| | | | AROCLOR-1260 | 4E-07 | -- | 2E-07 | -- | 6E-07 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 6E-06 | -- | 5E-07 | -- | 6E-06 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 7E-06 | -- | 8E-06 | -- | 1E-05 | | | | | |
| | | | Chemical Total | 2E-04 | -- | 9E-05 | -- | 3E-04 | | | | | |
| | | Exposure Point Total | | | | | | 3E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 3E-04 | | | | | |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-10 | -- | -- | 5E-10 | | | | | |
| | | | AROCLOR-1254 | -- | 2E-12 | -- | -- | 2E-12 | | | | | |
| | | | AROCLOR-1260 | -- | 3E-12 | -- | -- | 3E-12 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | | | | | |
| | | | CADMIUM | -- | 7E-11 | -- | -- | 7E-11 | | | | | |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 1E-10 | -- | -- | 1E-10 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 2E-08 | -- | -- | 2E-08 | | | | | |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | | | | |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | |
| Medium Total | | | | | | | | 3E-04 | | | | | |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 8E-06 | -- | 3E-06 | -- | 1E-05 | | | | | |
| | | | AROCLOR-1260 | 4E-08 | -- | 2E-08 | -- | 6E-08 | | | | | |
| | | | ARSENIC | 4E-06 | -- | 4E-07 | -- | 5E-06 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 3E-06 | -- | 5E-06 | | | | | |
| | | | Chemical Total | 2E-05 | -- | 6E-06 | -- | 2E-05 | | | | | |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | |
| | Exposure Medium Total | | | | | | | 2E-05 | | | | | |
| | Air | Block F | NAPHTHALENE | -- | 8E-06 | -- | -- | 8E-06 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-11 | -- | -- | 2E-11 | | | | | |
| | | | AROCLOR-1260 | -- | 3E-13 | -- | -- | 3E-13 | | | | | |
| | | | ARSENIC | -- | 3E-10 | -- | -- | 3E-10 | | | | | |
| | | | COBALT | -- | 5E-09 | -- | -- | 5E-09 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 6E-09 | -- | -- | 6E-09 | | | | | |
| | | | Chemical Total | -- | 8E-06 | -- | -- | 8E-06 | | | | | |
| | | Exposure Point Total | | | | | | 8E-06 | | | | | |
| | Exposure Medium Total | | | | | | | 8E-06 | | | | | |
| Medium Total | | | | | | | | 3E-05 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 4E-04 | | | | | |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Recreational User

Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 3E-04 | -- | 9E-05 | -- | 4E-04 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 2E-07 | -- | 8E-08 | -- | 3E-07 | Autoimmune | 0.06 | - - | 0.02 | 0.09 |
| | | | AROCLOR-1260 | 4E-07 | -- | 1E-07 | -- | 5E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.04 | - - | 0.008 | 0.05 |
| | | | ARSENIC | 5E-06 | -- | 4E-07 | -- | 6E-06 | Skin, CVS | 0.1 | - - | 0.01 | 0.1 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.002 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.3 | - - | 0.008 | 0.3 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.04 | - - | 0.01 | 0.05 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.2 | - - | 0.005 | 0.2 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.008 | - - | 0.006 | 0.01 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.09 | - - | 0.003 | 0.09 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 8E-06 | -- | 9E-06 | -- | 2E-05 | None Reported | 0.01 | - - | 0.01 | 0.02 |
| | | | Chemical Total | 3E-04 | -- | 1E-04 | -- | 4E-04 | | 0.9 | -- | 0.09 | 1.0 |
| | | Exposure Point Total | | | | | | 4E-04 | | | | | 1.0 |
| | Exposure Medium Total | | | | | | | 4E-04 | | | | | 1.0 |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 9E-10 | -- | -- | 9E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 1E-12 | -- | -- | 1E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-12 | -- | -- | 2E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | 0.00006 | - - | 0.00006 |
| | | | CADMIUM | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | 0.00004 | - - | 0.00004 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0003 | - - | 0.0003 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000009 | - - | 0.000009 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 8E-11 | -- | -- | 8E-11 | Body Weight | - - | 0.00004 | - - | 0.00004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-08 | -- | -- | 3E-08 | Lungs | - - | 0.000008 | - - | 0.000008 |
| | | | Chemical Total | -- | 3E-08 | -- | -- | 3E-08 | | - - | 0.0005 | - - | 0.0005 |
| | | Exposure Point Total | | | | | | 3E-08 | | | | | 0.0005 |
| | Exposure Medium Total | | | | | | | 3E-08 | | | | | 0.0005 |
| Medium Total | | | | | | | | 4E-04 | | | | | 1.0 |

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.1 | - - | 0.04 | 0.1 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 9E-06 | -- | 3E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 4E-08 | -- | 1E-08 | -- | 5E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 4E-06 | -- | 3E-07 | -- | 4E-06 | Skin, CVS | 0.1 | - - | 0.009 | 0.1 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.8 | - - | 0.02 | 0.8 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.01 | - - | 0.005 | 0.02 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.1 | - - | 0.003 | 0.1 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 3E-06 | -- | 6E-06 | None Reported | 0.004 | - - | 0.005 | 0.009 |
| | | | Chemical Total | 2E-05 | -- | 7E-06 | -- | 2E-05 | | 1 | -- | 0.08 | 1 |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 2E-05 | | | | | 1 |
| | Air | Block F | NAPHTHALENE | -- | 7E-06 | -- | -- | 7E-06 | Respiratory | - - | 0.8 | - - | 0.8 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-13 | -- | -- | 2E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | 0.00005 | - - | 0.00005 |
| | | | COBALT | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0009 | - - | 0.0009 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000003 | - - | 0.000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 7E-06 | -- | -- | 7E-06 | | - - | 0.8 | - - | 0.8 |
| | | Exposure Point Total | | | | | | 7E-06 | | | | | 0.8 |
| | Exposure Medium Total | | | | | | | 7E-06 | | | | | 0.8 |
| Medium Total | | | | | | | | 3E-05 | | | | | 2 |
| Receptor Total | | | | | | | Receptor Risk Total | 4E-04 | | | | Receptor HI Total | 3 |

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future

Receptor Population: Resident

Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.2 |
| Total Blood HI | 1 |
| Total Body Weight HI | 0.2 |
| Total CVS HI | 0.3 |
| Total Kidney HI | 0.2 |
| Total Lungs HI | 0.001 |
| Total None Reported HI | 0.03 |
| Total Skin HI | 0.3 |
| Total Respiratory HI | 0.8 |
| Total NA HI | 0.0002 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 5E-05 | -- | 2E-05 | -- | 7E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 8E-08 | -- | 3E-08 | -- | 1E-07 | Autoimmune | 0.01 | - - | 0.005 | 0.02 |
| | | | AROCLOR-1260 | 1E-07 | -- | 6E-08 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.008 | - - | 0.002 | 0.01 |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.03 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.003 | - - | 0.0003 | 0.003 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.06 | - - | 0.002 | 0.06 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.007 | - - | 0.003 | 0.010 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.03 | - - | 0.0009 | 0.03 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.001 | - - | 0.001 | 0.003 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0005 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 2E-06 | -- | 3E-06 | None Reported | 0.002 | - - | 0.003 | 0.005 |
| | | | Chemical Total | 5E-05 | -- | 2E-05 | -- | 7E-05 | | 0.2 | -- | 0.02 | 0.2 |
| | | Exposure Point Total | | | | | | 7E-05 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 7E-05 | | | | | 0.2 |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 9E-10 | -- | -- | 9E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 3E-12 | -- | -- | 3E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 5E-12 | -- | -- | 5E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 7E-10 | -- | -- | 7E-10 | NA | - - | 0.00006 | - - | 0.00006 |
| | | | CADMIUM | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | 0.00004 | - - | 0.00004 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0003 | - - | 0.0003 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000009 | - - | 0.000009 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 2E-10 | -- | -- | 2E-10 | Body Weight | - - | 0.00004 | - - | 0.00004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-08 | -- | -- | 3E-08 | Lungs | - - | 0.000008 | - - | 0.000008 |
| | | | Chemical Total | -- | 4E-08 | -- | -- | 4E-08 | | - - | 0.0005 | - - | 0.0005 |
| | | Exposure Point Total | | | | | | 4E-08 | | | | | 0.0005 |
| | Exposure Medium Total | | | | | | | 4E-08 | | | | | 0.0005 |
| Medium Total | | | | | | | | 7E-05 | | | | | 0.2 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.02 | - - | 0.007 | 0.03 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 7E-07 | -- | 2E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 1E-08 | -- | 6E-09 | -- | 2E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 1E-06 | -- | 1E-07 | -- | 2E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.1 | - - | 0.005 | 0.2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.002 | - - | 0.0009 | 0.003 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0006 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 5E-07 | -- | 6E-07 | -- | 1E-06 | None Reported | 0.0008 | - - | 0.0009 | 0.002 |
| | | | Chemical Total | 4E-06 | -- | 1E-06 | -- | 5E-06 | | 0.2 | -- | 0.02 | 0.2 |
| | | Exposure Point Total | | | | | | 5E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 5E-06 | | | | | 0.2 |
| | Air | Block F | NAPHTHALENE | -- | 1E-05 | -- | -- | 1E-05 | Respiratory | - - | 0.8 | - - | 0.8 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 5E-13 | -- | -- | 5E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 5E-10 | -- | -- | 5E-10 | NA | - - | 0.00005 | - - | 0.00005 |
| | | | COBALT | -- | 9E-09 | -- | -- | 9E-09 | Lungs | - - | 0.0009 | - - | 0.0009 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000003 | - - | 0.000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 1E-05 | -- | -- | 1E-05 | | - - | 0.8 | - - | 0.8 |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | 0.8 |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | 0.8 |
| Medium Total | | | | | | | | 2E-05 | | | | | 1 |
| Receptor Total | | | | | | | Receptor Risk Total | 9E-05 | | | | Receptor HI Total | 1 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.03 |
| Total Blood HI | 0.2 |
| Total Body Weight HI | 0.03 |
| Total CVS HI | 0.05 |
| Total Kidney HI | 0.04 |
| Total Lungs HI | 0.001 |
| Total None Reported HI | 0.006 |
| Total Skin HI | 0.05 |
| Total Respiratory HI | 0.8 |
| Total NA HI | 0.0002 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 5E-06 | -- | 2E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 5E-08 | -- | 3E-08 | -- | 7E-08 | Autoimmune | 0.007 | - - | 0.004 | 0.01 |
| | | | AROCLOR-1260 | 8E-08 | -- | 4E-08 | -- | 1E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.005 | - - | 0.001 | 0.006 |
| | | | ARSENIC | 1E-06 | -- | 1E-07 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.002 | 0.02 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.002 | - - | 0.0003 | 0.002 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.03 | - - | 0.001 | 0.03 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.004 | - - | 0.002 | 0.006 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.02 | - - | 0.0007 | 0.02 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0008 | - - | 0.0008 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.010 | - - | 0.0004 | 0.010 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-07 | -- | 5E-07 | -- | 8E-07 | None Reported | 0.001 | - - | 0.002 | 0.003 |
| | | | Chemical Total | 1E-05 | -- | 6E-06 | -- | 2E-05 | | 0.09 | -- | 0.01 | 0.1 |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 2E-05 | | | | | 0.1 |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 3E-12 | -- | -- | 3E-12 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 5E-12 | -- | -- | 5E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 7E-10 | -- | -- | 7E-10 | NA | - - | 0.00006 | - - | 0.00006 |
| | | | CADMIUM | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | 0.00004 | - - | 0.00004 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0003 | - - | 0.0003 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000009 | - - | 0.000009 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 2E-10 | -- | -- | 2E-10 | Body Weight | - - | 0.00004 | - - | 0.00004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000008 | - - | 0.000008 |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | - - | 0.0005 | - - | 0.0005 |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | 0.0005 |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | 0.0005 |
| Medium Total | | | | | | | | 2E-05 | | | | | 0.1 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.01 | - - | 0.006 | 0.02 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 4E-07 | -- | 2E-07 | -- | 6E-07 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 8E-09 | -- | 4E-09 | -- | 1E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 8E-07 | -- | 1E-07 | -- | 9E-07 | Skin, CVS | 0.01 | - - | 0.001 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.09 | - - | 0.003 | 0.09 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.001 | - - | 0.0007 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0004 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 2E-07 | -- | 3E-07 | None Reported | 0.0004 | - - | 0.0007 | 0.001 |
| | | | Chemical Total | 1E-06 | -- | 5E-07 | -- | 2E-06 | | 0.1 | -- | 0.01 | 0.1 |
| | | Exposure Point Total | | | | | | 2E-06 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 2E-06 | | | | | 0.1 |
| | Air | Block F | NAPHTHALENE | -- | 1E-05 | -- | -- | 1E-05 | Respiratory | - - | 0.8 | - - | 0.8 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-11 | -- | -- | 1E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 5E-13 | -- | -- | 5E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 5E-10 | -- | -- | 5E-10 | NA | - - | 0.00005 | - - | 0.00005 |
| | | | COBALT | -- | 9E-09 | -- | -- | 9E-09 | Lungs | - - | 0.0009 | - - | 0.0009 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000003 | - - | 0.000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 1E-05 | -- | -- | 1E-05 | | - - | 0.8 | - - | 0.8 |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | 0.8 |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | 0.8 |
| Medium Total | | | | | | | | 2E-05 | | | | | 0.9 |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-05 | | | | Receptor HI Total | 1 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.02 |
| Total Blood HI | 0.1 |
| Total Body Weight HI | 0.02 |
| Total CVS HI | 0.03 |
| Total Kidney HI | 0.02 |
| Total Lungs HI | 0.001 |
| Total None Reported HI | 0.004 |
| Total Skin HI | 0.03 |
| Total Respiratory HI | 0.8 |
| Total NA HI | 0.0002 |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block F | BENZO(A)PYRENE EQUIVALENTS | 3E-04 | -- | 1E-04 | -- | 4E-04 | | | | | |
| | | | AROCLOR-1254 | 3E-07 | -- | 1E-07 | -- | 5E-07 | | | | | |
| | | | AROCLOR-1260 | 6E-07 | -- | 2E-07 | -- | 8E-07 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 8E-06 | -- | 7E-07 | -- | 9E-06 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 1E-05 | -- | 1E-05 | -- | 2E-05 | | | | | |
| | | | Chemical Total | 3E-04 | -- | 1E-04 | -- | 5E-04 | | | | | |
| | | Exposure Point Total | | | | | | 5E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 5E-04 | | | | | |
| | Air | Block F | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | AROCLOR-1254 | -- | 7E-12 | -- | -- | 7E-12 | | | | | |
| | | | AROCLOR-1260 | -- | 1E-11 | -- | -- | 1E-11 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | CADMIUM | -- | 3E-10 | -- | -- | 3E-10 | | | | | |
| | | | COBALT | -- | 8E-09 | -- | -- | 8E-09 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 4E-10 | -- | -- | 4E-10 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 7E-08 | -- | -- | 7E-08 | | | | | |
| | | | Chemical Total | -- | 9E-08 | -- | -- | 9E-08 | | | | | |
| | | Exposure Point Total | | | | | | 9E-08 | | | | | |
| | Exposure Medium Total | | | | | | | 9E-08 | | | | | |
| Medium Total | | | | | | | | 5E-04 | | | | | |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block F | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 4E-06 | -- | 2E-05 | | | | | |
| | | | AROCLOR-1260 | 6E-08 | -- | 2E-08 | -- | 8E-08 | | | | | |
| | | | ARSENIC | 6E-06 | -- | 6E-07 | -- | 7E-06 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 4E-06 | -- | 4E-06 | -- | 8E-06 | | | | | |
| | | | Chemical Total | 2E-05 | -- | 9E-06 | -- | 3E-05 | | | | | |
| | | Exposure Point Total | | | | | | 3E-05 | | | | | |
| | Exposure Medium Total | | | | | | | 3E-05 | | | | | |
| | Air | Block F | NAPHTHALENE | -- | 3E-05 | -- | -- | 3E-05 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 8E-11 | -- | -- | 8E-11 | | | | | |
| | | | AROCLOR-1260 | -- | 1E-12 | -- | -- | 1E-12 | | | | | |
| | | | ARSENIC | -- | 1E-09 | -- | -- | 1E-09 | | | | | |
| | | | COBALT | -- | 2E-08 | -- | -- | 2E-08 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 3E-08 | -- | -- | 3E-08 | | | | | |
| | | | Chemical Total | -- | 3E-05 | -- | -- | 3E-05 | | | | | |
| | | Exposure Point Total | | | | | | 3E-05 | | | | | |
| | Exposure Medium Total | | | | | | | 3E-05 | | | | | |
| Medium Total | | | | | | | | 7E-05 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 5E-04 | | | | | |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK F - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 5E-07 | -- | 2E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 2E-09 | -- | 5E-10 | -- | 2E-09 | Autoimmune | 0.003 | - - | 0.0008 | 0.004 |
| | | | AROCLOR-1260 | 3E-08 | -- | 1E-08 | -- | 4E-08 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.003 | 0.02 |
| | | | ARSENIC | 8E-07 | -- | 5E-08 | -- | 8E-07 | Skin, CVS | 0.1 | - - | 0.008 | 0.1 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.07 | - - | 0.005 | 0.07 |
| | | | COBALT | - - | -- | - - | -- | - - | Thyroid | 0.06 | - - | 0.001 | 0.07 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.03 | - - | 0.008 | 0.04 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.04 | - - | 0.02 | 0.06 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0003 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-08 | -- | 4E-08 | -- | 8E-08 | None Reported | 0.002 | - - | 0.002 | 0.004 |
| | | | Chemical Total | 3E-06 | -- | 6E-07 | -- | 3E-06 | | 0.4 | -- | 0.05 | 0.4 |
| | | Exposure Point Total | | | | | | 3E-06 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | 3E-06 | | | | | 0.4 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 9E-09 | -- | -- | 9E-09 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 8E-08 | -- | -- | 8E-08 | NA | - - | 0.08 | - - | 0.08 |
| | | | CADMIUM | -- | 6E-08 | -- | -- | 6E-08 | NA | - - | 0.2 | - - | 0.2 |
| | | | COBALT | -- | 8E-07 | -- | -- | 8E-07 | Lungs | - - | 1 | - - | 1 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.010 | - - | 0.010 |
| | | | NICKEL | -- | 1E-07 | -- | -- | 1E-07 | Body Weight | - - | 0.3 | - - | 0.3 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-07 | -- | -- | 2E-07 | Lungs | - - | 0.002 | - - | 0.002 |
| | | | Chemical Total | -- | 1E-06 | -- | -- | 1E-06 | | - - | 2 | - - | 2 |
| | | Exposure Point Total | | | | | | 1E-06 | | | | | 2 |
| | Exposure Medium Total | | | | | | | 1E-06 | | | | | 2 |
| Medium Total | | | | | | | | 5E-06 | | | | | 2 |

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00001 | - - | 0.000004 | 0.00002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 6E-07 | -- | 2E-07 | -- | 8E-07 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 2E-09 | -- | 5E-10 | -- | 2E-09 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 4E-07 | -- | 2E-08 | -- | 4E-07 | Skin, CVS | 0.06 | - - | 0.003 | 0.06 |
| | | | COBALT | - - | -- | - - | -- | - - | Thyroid | 0.05 | - - | 0.0010 | 0.05 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.1 | - - | 0.002 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.004 | - - | 0.00008 | 0.004 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0002 | - - | 0.00006 | 0.0003 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0004 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-08 | -- | 3E-08 | -- | 7E-08 | None Reported | 0.002 | - - | 0.001 | 0.003 |
| | | | Chemical Total | 1E-06 | -- | 2E-07 | -- | 1E-06 | | 0.2 | -- | 0.009 | 0.3 |
| | | Exposure Point Total | | | | | | 1E-06 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | 1E-06 | | | | | 0.3 |
| | Air | Block G | NAPHTHALENE | -- | 7E-10 | -- | -- | 7E-10 | Respiratory | - - | 0.0005 | - - | 0.0005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-09 | -- | -- | 3E-09 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-08 | -- | -- | 4E-08 | NA | - - | 0.04 | - - | 0.04 |
| | | | COBALT | -- | 6E-07 | -- | -- | 6E-07 | Lungs | - - | 0.8 | - - | 0.8 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.4 | - - | 0.4 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00007 | - - | 0.00007 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-07 | -- | -- | 2E-07 | Lungs | - - | 0.002 | - - | 0.002 |
| | | | Chemical Total | -- | 9E-07 | -- | -- | 9E-07 | | - - | 1 | - - | 1 |
| | | Exposure Point Total | | | | | | 9E-07 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 9E-07 | | | | | 1 |
| Medium Total | | | | | | | | 2E-06 | | | | | 2 |
| Receptor Total | | | | | | | Receptor Risk Total | 7E-06 | | | | Receptor HI Total | 4 |

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Construction Worker

Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.04 |
| Total Blood HI | 0.02 |
| Total Body Weight HI | 0.3 |
| Total CNS HI | 0.4 |
| Total CVS HI | 0.2 |
| Total GS HI | 0.1 |
| Total Kidney HI | 0.1 |
| Total Lungs HI | 2 |
| Total None Reported HI | 0.007 |
| Total Skin HI | 0.2 |
| Total Respiratory HI | 0.0005 |
| Total NA HI | 0.4 |
| Total Thyroid HI | 0.1 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 5E-06 | -- | 8E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 4E-09 | -- | 8E-09 | -- | 1E-08 | Autoimmune | 0.0003 | - - | 0.0005 | 0.0008 |
| | | | AROCLOR-1260 | 9E-08 | -- | 2E-07 | -- | 3E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.002 | - - | 0.002 | 0.004 |
| | | | ARSENIC | 2E-06 | -- | 8E-07 | -- | 3E-06 | Skin, CVS | 0.01 | - - | 0.005 | 0.02 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.007 | - - | 0.004 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.07 | - - | 0.009 | 0.08 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.003 | - - | 0.006 | 0.008 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.004 | - - | 0.01 | 0.02 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.003 | - - | 0.0004 | 0.003 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 6E-07 | -- | 7E-07 | None Reported | 0.0002 | - - | 0.001 | 0.001 |
| | | | Chemical Total | 7E-06 | -- | 1E-05 | -- | 2E-05 | | 0.10 | -- | 0.04 | 0.1 |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 2E-05 | | | | | 0.1 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 2E-13 | -- | -- | 2E-13 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 4E-12 | -- | -- | 4E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 9E-10 | -- | -- | 9E-10 | NA | - - | 0.00004 | - - | 0.00004 |
| | | | CADMIUM | -- | 6E-10 | -- | -- | 6E-10 | NA | - - | 0.00010 | - - | 0.00010 |
| | | | COBALT | -- | 9E-09 | -- | -- | 9E-09 | Lungs | - - | 0.0005 | - - | 0.0005 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000004 | - - | 0.000004 |
| | | | NICKEL | -- | 1E-09 | -- | -- | 1E-09 | Body Weight | - - | 0.0001 | - - | 0.0001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0000009 | - - | 0.0000009 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.0008 | - - | 0.0008 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.0008 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.0008 |
| Medium Total | | | | | | | | 2E-05 | | | | | 0.1 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000002 | - - | 0.000003 | 0.000004 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 3E-06 | -- | 5E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 5E-09 | -- | 9E-09 | -- | 1E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 9E-07 | -- | 4E-07 | -- | 1E-06 | Skin, CVS | 0.006 | - - | 0.002 | 0.008 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.05 | - - | 0.007 | 0.06 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.01 | - - | 0.002 | 0.01 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0004 | - - | 0.00006 | 0.0005 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.00002 | - - | 0.00004 | 0.00007 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.005 | - - | 0.0006 | 0.005 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 5E-07 | -- | 6E-07 | None Reported | 0.0002 | - - | 0.0009 | 0.001 |
| | | | Chemical Total | 3E-06 | -- | 4E-06 | -- | 6E-06 | | 0.07 | -- | 0.01 | 0.09 |
| | | Exposure Point Total | | | | | | 6E-06 | | | | | 0.09 |
| | Exposure Medium Total | | | | | | | 6E-06 | | | | | 0.09 |
| | Air | Block G | NAPHTHALENE | -- | 3E-09 | -- | -- | 3E-09 | Respiratory | - - | 0.00007 | - - | 0.00007 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-13 | -- | -- | 2E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 7E-09 | -- | -- | 7E-09 | Lungs | - - | 0.0004 | - - | 0.0004 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0002 | - - | 0.0002 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000003 | - - | 0.00000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0000008 | - - | 0.0000008 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.0006 | - - | 0.0006 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.0006 |
| Medium Total | | | | | | | | 6E-06 | | | | | 0.09 |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-05 | | | | Receptor HI Total | 0.2 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.009 |
| Total Blood HI | 0.1 |
| Total Body Weight HI | 0.02 |
| Total CNS HI | 0.0007 |
| Total CVS HI | 0.03 |
| Total GS HI | 0.01 |
| Total Kidney HI | 0.02 |
| Total Lungs HI | 0.0009 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.03 |
| Total Respiratory HI | 0.00007 |
| Total NA HI | 0.0002 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 6E-05 | -- | 2E-05 | -- | 8E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 1E-08 | -- | 3E-09 | -- | 1E-08 | Autoimmune | 0.003 | - - | 0.0010 | 0.004 |
| | | | AROCLOR-1260 | 2E-07 | -- | 7E-08 | -- | 3E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.003 | 0.02 |
| | | | ARSENIC | 5E-06 | -- | 3E-07 | -- | 5E-06 | Skin, CVS | 0.1 | - - | 0.009 | 0.1 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.07 | - - | 0.006 | 0.07 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.7 | - - | 0.02 | 0.7 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.03 | - - | 0.010 | 0.04 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.04 | - - | 0.02 | 0.06 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.03 | - - | 0.0007 | 0.03 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 1E-06 | -- | 3E-06 | None Reported | 0.002 | - - | 0.002 | 0.004 |
| | | | Chemical Total | 7E-05 | -- | 2E-05 | -- | 9E-05 | | 1.0 | -- | 0.07 | 1 |
| | | Exposure Point Total | | | | | | 9E-05 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 9E-05 | | | | | 1 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 1E-14 | -- | -- | 1E-14 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-13 | -- | -- | 2E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | 0.000010 | - - | 0.000010 |
| | | | CADMIUM | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | 0.00003 | - - | 0.00003 |
| | | | COBALT | -- | 6E-10 | -- | -- | 6E-10 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000001 | - - | 0.000001 |
| | | | NICKEL | -- | 7E-11 | -- | -- | 7E-11 | Body Weight | - - | 0.00003 | - - | 0.00003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 9E-10 | -- | -- | 9E-10 | Lungs | - - | 0.0000002 | - - | 0.0000002 |
| | | | Chemical Total | -- | 2E-09 | -- | -- | 2E-09 | | - - | 0.0002 | - - | 0.0002 |
| | | Exposure Point Total | | | | | | 2E-09 | | | | | 0.0002 |
| | Exposure Medium Total | | | | | | | 2E-09 | | | | | 0.0002 |
| Medium Total | | | | | | | | 9E-05 | | | | | 1 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00002 | - - | 0.000005 | 0.00002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-05 | -- | 6E-06 | -- | 3E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 1E-08 | -- | 4E-09 | -- | 2E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | Skin, CVS | 0.06 | - - | 0.004 | 0.06 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.5 | - - | 0.01 | 0.5 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.1 | - - | 0.003 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.004 | - - | 0.00010 | 0.004 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0002 | - - | 0.00008 | 0.0003 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.04 | - - | 0.001 | 0.05 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 1E-06 | -- | 2E-06 | None Reported | 0.002 | - - | 0.002 | 0.003 |
| | | | Chemical Total | 2E-05 | -- | 8E-06 | -- | 3E-05 | | 0.7 | -- | 0.02 | 0.7 |
| | | Exposure Point Total | | | | | | 3E-05 | | | | | 0.7 |
| | Exposure Medium Total | | | | | | | 3E-05 | | | | | 0.7 |
| | Air | Block G | NAPHTHALENE | -- | 2E-10 | -- | -- | 2E-10 | Respiratory | - - | 0.00002 | - - | 0.00002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-11 | -- | -- | 1E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-14 | -- | -- | 1E-14 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | COBALT | -- | 4E-10 | -- | -- | 4E-10 | Lungs | - - | 0.00010 | - - | 0.00010 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00005 | - - | 0.00005 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 8.70831E-09 | - - | 8.70831E-09 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 8E-10 | -- | -- | 8E-10 | Lungs | - - | 0.0000002 | - - | 0.0000002 |
| | | | Chemical Total | -- | 1E-09 | -- | -- | 1E-09 | | - - | 0.0002 | - - | 0.0002 |
| | | Exposure Point Total | | | | | | 1E-09 | | | | | 0.0002 |
| | Exposure Medium Total | | | | | | | 1E-09 | | | | | 0.0002 |
| Medium Total | | | | | | | | 3E-05 | | | | | 0.7 |
| Receptor Total | | | | | | | Receptor Risk Total | 1E-04 | | | | Receptor HI Total | 2 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.04 |
| Total Blood HI | 1 |
| Total Body Weight HI | 0.06 |
| Total CNS HI | 0.004 |
| Total CVS HI | 0.2 |
| Total GS HI | 0.1 |
| Total Kidney HI | 0.2 |
| Total Lungs HI | 0.0002 |
| Total None Reported HI | 0.007 |
| Total Skin HI | 0.2 |
| Total Respiratory HI | 0.00002 |
| Total NA HI | 0.00004 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 1E-05 | -- | 2E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 4E-09 | -- | 4E-09 | -- | 8E-09 | Autoimmune | 0.0005 | - - | 0.0007 | 0.001 |
| | | | AROCLOR-1260 | 8E-08 | -- | 1E-07 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.004 | - - | 0.002 | 0.006 |
| | | | ARSENIC | 2E-06 | -- | 5E-07 | -- | 2E-06 | Skin, CVS | 0.02 | - - | 0.006 | 0.03 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.004 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.1 | - - | 0.01 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.005 | - - | 0.007 | 0.01 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.007 | - - | 0.02 | 0.02 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.006 | - - | 0.0005 | 0.006 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-07 | -- | 9E-07 | -- | 1E-06 | None Reported | 0.0004 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 1E-05 | -- | 1E-05 | -- | 3E-05 | | 0.2 | -- | 0.05 | 0.2 |
| | | Exposure Point Total | | | | | | 3E-05 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 3E-05 | | | | | 0.2 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-11 | -- | -- | 3E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 2E-14 | -- | -- | 2E-14 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 5E-13 | -- | -- | 5E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | 0.000010 | - - | 0.000010 |
| | | | CADMIUM | -- | 8E-11 | -- | -- | 8E-11 | NA | - - | 0.00003 | - - | 0.00003 |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000001 | - - | 0.000001 |
| | | | NICKEL | -- | 1E-10 | -- | -- | 1E-10 | Body Weight | - - | 0.00003 | - - | 0.00003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 9E-10 | -- | -- | 9E-10 | Lungs | - - | 0.0000002 | - - | 0.0000002 |
| | | | Chemical Total | -- | 2E-09 | -- | -- | 2E-09 | | - - | 0.0002 | - - | 0.0002 |
| | | Exposure Point Total | | | | | | 2E-09 | | | | | 0.0002 |
| | Exposure Medium Total | | | | | | | 2E-09 | | | | | 0.0002 |
| Medium Total | | | | | | | | 3E-05 | | | | | 0.2 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000003 | - - | 0.000003 | 0.000006 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 4E-06 | -- | 4E-06 | -- | 8E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 4E-09 | -- | 5E-09 | -- | 1E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 8E-07 | -- | 2E-07 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.003 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.09 | - - | 0.008 | 0.1 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.02 | - - | 0.002 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0008 | - - | 0.00007 | 0.0009 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.00004 | - - | 0.00005 | 0.00009 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.008 | - - | 0.0007 | 0.009 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 8E-07 | -- | 1E-06 | None Reported | 0.0003 | - - | 0.001 | 0.001 |
| | | | Chemical Total | 5E-06 | -- | 5E-06 | -- | 1E-05 | | 0.1 | -- | 0.01 | 0.2 |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | 0.2 |
| | Air | Block G | NAPHTHALENE | -- | 3E-10 | -- | -- | 3E-10 | Respiratory | - - | 0.00002 | - - | 0.00002 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-11 | -- | -- | 1E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 3E-14 | -- | -- | 3E-14 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | COBALT | -- | 9E-10 | -- | -- | 9E-10 | Lungs | - - | 0.00010 | - - | 0.00010 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.00005 | - - | 0.00005 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 8.70831E-09 | - - | 8.70831E-09 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 8E-10 | -- | -- | 8E-10 | Lungs | - - | 0.0000002 | - - | 0.0000002 |
| | | | Chemical Total | -- | 2E-09 | -- | -- | 2E-09 | | - - | 0.0002 | - - | 0.0002 |
| | | Exposure Point Total | | | | | | 2E-09 | | | | | 0.0002 |
| | Exposure Medium Total | | | | | | | 2E-09 | | | | | 0.0002 |
| Medium Total | | | | | | | | 1E-05 | | | | | 0.2 |
| Receptor Total | | | | | | | Receptor Risk Total | 4E-05 | | | | Receptor HI Total | 0.4 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.01 |
| Total Blood HI | 0.2 |
| Total Body Weight HI | 0.02 |
| Total CNS HI | 0.0009 |
| Total CVS HI | 0.04 |
| Total GS HI | 0.02 |
| Total Kidney HI | 0.03 |
| Total Lungs HI | 0.0002 |
| Total None Reported HI | 0.003 |
| Total Skin HI | 0.04 |
| Total Respiratory HI | 0.00002 |
| Total NA HI | 0.00004 |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 7E-05 | -- | 3E-05 | -- | 1E-04 | | | | | |
| | | | AROCLOR-1254 | 1E-08 | -- | 8E-09 | -- | 2E-08 | | | | | |
| | | | AROCLOR-1260 | 3E-07 | -- | 2E-07 | -- | 5E-07 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 7E-06 | -- | 8E-07 | -- | 8E-06 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 2E-06 | -- | 2E-06 | -- | 4E-06 | | | | | |
| | | | Chemical Total | 8E-05 | -- | 3E-05 | -- | 1E-04 | | | | | |
| | | Exposure Point Total | | | | | | 1E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 1E-04 | | | | | |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 7E-11 | -- | -- | 7E-11 | | | | | |
| | | | AROCLOR-1254 | -- | 3E-14 | -- | -- | 3E-14 | | | | | |
| | | | AROCLOR-1260 | -- | 7E-13 | -- | -- | 7E-13 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | | | | | |
| | | | CADMIUM | -- | 1E-10 | -- | -- | 1E-10 | | | | | |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 2E-10 | -- | -- | 2E-10 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | Chemical Total | -- | 4E-09 | -- | -- | 4E-09 | | | | | |
| | | Exposure Point Total | | | | | | 4E-09 | | | | | |
| | Exposure Medium Total | | | | | | | 4E-09 | | | | | |
| Medium Total | | | | | | | | 1E-04 | | | | | |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-05 | -- | 1E-05 | -- | 4E-05 | | | | | |
| | | | AROCLOR-1260 | 2E-08 | -- | 9E-09 | -- | 2E-08 | | | | | |
| | | | ARSENIC | 3E-06 | -- | 4E-07 | -- | 3E-06 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 2E-06 | -- | 3E-06 | | | | | |
| | | | Chemical Total | 3E-05 | -- | 1E-05 | -- | 4E-05 | | | | | |
| | | Exposure Point Total | | | | | | 4E-05 | | | | | |
| | Exposure Medium Total | | | | | | | 4E-05 | | | | | |
| | Air | Block G | NAPHTHALENE | -- | 5E-10 | -- | -- | 5E-10 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-11 | -- | -- | 2E-11 | | | | | |
| | | | AROCLOR-1260 | -- | 4E-14 | -- | -- | 4E-14 | | | | | |
| | | | ARSENIC | -- | 7E-11 | -- | -- | 7E-11 | | | | | |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | Chemical Total | -- | 4E-09 | -- | -- | 4E-09 | | | | | |
| | | Exposure Point Total | | | | | | 4E-09 | | | | | |
| | Exposure Medium Total | | | | | | | 4E-09 | | | | | |
| Medium Total | | | | | | | | 4E-05 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-04 | | | | | |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENT | 5E-06 | -- | 8E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 4E-09 | -- | 8E-09 | -- | 1E-08 | Autoimmune | 0.0003 | - - | 0.0005 | 0.0008 |
| | | | AROCLOR-1260 | 9E-08 | -- | 2E-07 | -- | 3E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.002 | - - | 0.002 | 0.004 |
| | | | ARSENIC | 2E-06 | -- | 8E-07 | -- | 3E-06 | Skin, CVS | 0.01 | - - | 0.005 | 0.02 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.007 | - - | 0.004 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.07 | - - | 0.009 | 0.08 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.003 | - - | 0.006 | 0.008 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.004 | - - | 0.01 | 0.02 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.003 | - - | 0.0004 | 0.003 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 6E-07 | -- | 7E-07 | None Reported | 0.0002 | - - | 0.001 | 0.001 |
| | | | Chemical Total | 7E-06 | -- | 1E-05 | -- | 2E-05 | | 0.10 | -- | 0.04 | 0.1 |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 2E-05 | | | | | 0.1 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENT | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 2E-13 | -- | -- | 2E-13 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 4E-12 | -- | -- | 4E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 9E-10 | -- | -- | 9E-10 | NA | - - | 0.00004 | - - | 0.00004 |
| | | | CADMIUM | -- | 6E-10 | -- | -- | 6E-10 | NA | - - | 0.00010 | - - | 0.00010 |
| | | | COBALT | -- | 9E-09 | -- | -- | 9E-09 | Lungs | - - | 0.0005 | - - | 0.0005 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000004 | - - | 0.000004 |
| | | | NICKEL | -- | 1E-09 | -- | -- | 1E-09 | Body Weight | - - | 0.0001 | - - | 0.0001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0000009 | - - | 0.0000009 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.0008 | - - | 0.0008 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.0008 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.0008 |
| Medium Total | | | | | | | | 2E-05 | | | | | 0.1 |

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000002 | - - | 0.000003 | 0.000004 |
| | | | BENZO(A)PYRENE EQUIVALENT | 2E-06 | -- | 3E-06 | -- | 5E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 5E-09 | -- | 9E-09 | -- | 1E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 9E-07 | -- | 4E-07 | -- | 1E-06 | Skin, CVS | 0.006 | - - | 0.002 | 0.008 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.05 | - - | 0.007 | 0.06 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.01 | - - | 0.002 | 0.01 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0004 | - - | 0.00006 | 0.0005 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.00002 | - - | 0.00004 | 0.00007 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.005 | - - | 0.0006 | 0.005 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 5E-07 | -- | 6E-07 | None Reported | 0.0002 | - - | 0.0009 | 0.001 |
| | | | Chemical Total | 3E-06 | -- | 4E-06 | -- | 6E-06 | | 0.07 | -- | 0.01 | 0.09 |
| | | Exposure Point Total | | | | | | 6E-06 | | | | | 0.09 |
| | Exposure Medium Total | | | | | | | 6E-06 | | | | | 0.09 |
| | Air | Block G | NAPHTHALENE | -- | 3E-09 | -- | -- | 3E-09 | Respiratory | - - | 0.00007 | - - | 0.00007 |
| | | | BENZO(A)PYRENE EQUIVALENT | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-13 | -- | -- | 2E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 7E-09 | -- | -- | 7E-09 | Lungs | - - | 0.0004 | - - | 0.0004 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0002 | - - | 0.0002 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000003 | - - | 0.00000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0000008 | - - | 0.0000008 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.0006 | - - | 0.0006 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.0006 |
| Medium Total | | | | | | | | 6E-06 | | | | | 0.09 |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-05 | | | | Receptor HI Total | 0.2 |

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Commercial Receptor

Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.009 |
| Total Blood HI | 0.1 |
| Total Body Weight HI | 0.02 |
| Total CNS HI | 0.0007 |
| Total CVS HI | 0.03 |
| Total GS HI | 0.01 |
| Total Kidney HI | 0.02 |
| Total Lungs HI | 0.0009 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.03 |
| Total Respiratory HI | 0.00007 |
| Total NA HI | 0.0002 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALE | 1E-04 | -- | 4E-05 | -- | 2E-04 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 2E-08 | -- | 7E-09 | -- | 3E-08 | Autoimmune | 0.005 | - - | 0.002 | 0.008 |
| | | | AROCLOR-1260 | 4E-07 | -- | 2E-07 | -- | 6E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.04 | - - | 0.007 | 0.05 |
| | | | ARSENIC | 9E-06 | -- | 8E-07 | -- | 1E-05 | Skin, CVS | 0.2 | - - | 0.02 | 0.3 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.1 | - - | 0.01 | 0.1 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 1 | - - | 0.04 | 1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.05 | - - | 0.02 | 0.08 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.07 | - - | 0.05 | 0.1 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.06 | - - | 0.002 | 0.06 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANIC | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 3E-06 | -- | 6E-06 | None Reported | 0.004 | - - | 0.004 | 0.008 |
| | | | Chemical Total | 1E-04 | -- | 5E-05 | -- | 2E-04 | | 2 | -- | 0.2 | 2 |
| | | Exposure Point Total | | | | | | 2E-04 | | | | | 2 |
| | Exposure Medium Total | | | | | | | 2E-04 | | | | | 2 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALE | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 4E-14 | -- | -- | 4E-14 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 9E-13 | -- | -- | 9E-13 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00004 | - - | 0.00004 |
| | | | CADMIUM | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00010 | - - | 0.00010 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0005 | - - | 0.0005 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000004 | - - | 0.000004 |
| | | | NICKEL | -- | 3E-10 | -- | -- | 3E-10 | Body Weight | - - | 0.0001 | - - | 0.0001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANIC | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0000009 | - - | 0.0000009 |
| | | | Chemical Total | -- | 7E-09 | -- | -- | 7E-09 | | - - | 0.0008 | - - | 0.0008 |
| | | Exposure Point Total | | | | | | 7E-09 | | | | | 0.0008 |
| | Exposure Medium Total | | | | | | | 7E-09 | | | | | 0.0008 |
| Medium Total | | | | | | | | 2E-04 | | | | | 2 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00003 | - - | 0.00001 | 0.00004 |
| | | | BENZO(A)PYRENE EQUIVALE | 4E-05 | -- | 1E-05 | -- | 5E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 2E-08 | -- | 9E-09 | -- | 3E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 4E-06 | -- | 4E-07 | -- | 5E-06 | Skin, CVS | 0.1 | - - | 0.009 | 0.1 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.9 | - - | 0.03 | 1.0 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.2 | - - | 0.006 | 0.2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.008 | - - | 0.0002 | 0.008 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0004 | - - | 0.0002 | 0.0006 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.08 | - - | 0.002 | 0.09 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANIC | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-06 | -- | 3E-06 | -- | 5E-06 | None Reported | 0.003 | - - | 0.004 | 0.007 |
| | | | Chemical Total | 5E-05 | -- | 2E-05 | -- | 6E-05 | | 1 | -- | 0.05 | 1 |
| | | Exposure Point Total | | | | | | 6E-05 | | | | | 1 |
| | Exposure Medium Total | | | | | | | 6E-05 | | | | | 1 |
| | Air | Block G | NAPHTHALENE | -- | 7E-10 | -- | -- | 7E-10 | Respiratory | - - | 0.00007 | - - | 0.00007 |
| | | | BENZO(A)PYRENE EQUIVALE | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 5E-14 | -- | -- | 5E-14 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 9E-11 | -- | -- | 9E-11 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0004 | - - | 0.0004 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0002 | - - | 0.0002 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000003 | - - | 0.00000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANIC | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0000008 | - - | 0.0000008 |
| | | | Chemical Total | -- | 5E-09 | -- | -- | 5E-09 | | - - | 0.0006 | - - | 0.0006 |
| | | Exposure Point Total | | | | | | 5E-09 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | 5E-09 | | | | | 0.0006 |
| Medium Total | | | | | | | | 6E-05 | | | | | 1 |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-04 | | | | Receptor HI Total | 3 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Recreational User

Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.08 |
| Total Blood HI | 2 |
| Total Body Weight HI | 0.1 |
| Total CNS HI | 0.008 |
| Total CVS HI | 0.4 |
| Total GS HI | 0.2 |
| Total Kidney HI | 0.3 |
| Total Lungs HI | 0.0009 |
| Total None Reported HI | 0.02 |
| Total Skin HI | 0.4 |
| Total Respiratory HI | 0.00007 |
| Total NA HI | 0.0002 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 2E-05 | -- | 8E-06 | -- | 3E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 7E-09 | -- | 3E-09 | -- | 1E-08 | Autoimmune | 0.001 | - - | 0.0004 | 0.001 |
| | | | AROCLOR-1260 | 2E-07 | -- | 6E-08 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.007 | - - | 0.001 | 0.009 |
| | | | ARSENIC | 3E-06 | -- | 3E-07 | -- | 4E-06 | Skin, CVS | 0.05 | - - | 0.004 | 0.05 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.003 | 0.03 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.2 | - - | 0.007 | 0.2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.01 | - - | 0.004 | 0.01 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.01 | - - | 0.01 | 0.02 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0003 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 5E-07 | -- | 6E-07 | -- | 1E-06 | None Reported | 0.0007 | - - | 0.0009 | 0.002 |
| | | | Chemical Total | 3E-05 | -- | 9E-06 | -- | 3E-05 | | 0.3 | -- | 0.03 | 0.4 |
| | | Exposure Point Total | | | | | | 3E-05 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | 3E-05 | | | | | 0.4 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 8E-14 | -- | -- | 8E-14 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-12 | -- | -- | 2E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00004 | - - | 0.00004 |
| | | | CADMIUM | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | 0.00010 | - - | 0.00010 |
| | | | COBALT | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0005 | - - | 0.0005 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000004 | - - | 0.000004 |
| | | | NICKEL | -- | 5E-10 | -- | -- | 5E-10 | Body Weight | - - | 0.0001 | - - | 0.0001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0000009 | - - | 0.0000009 |
| | | | Chemical Total | -- | 9E-09 | -- | -- | 9E-09 | | - - | 0.0008 | - - | 0.0008 |
| | | Exposure Point Total | | | | | | 9E-09 | | | | | 0.0008 |
| | Exposure Medium Total | | | | | | | 9E-09 | | | | | 0.0008 |
| Medium Total | | | | | | | | 3E-05 | | | | | 0.4 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000005 | - - | 0.000002 | 0.000008 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 7E-06 | -- | 3E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 8E-09 | -- | 3E-09 | -- | 1E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 2E-06 | -- | 1E-07 | -- | 2E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.2 | - - | 0.005 | 0.2 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.04 | - - | 0.001 | 0.04 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.002 | - - | 0.00005 | 0.002 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.00008 | - - | 0.00003 | 0.0001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0005 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-07 | -- | 5E-07 | -- | 1E-06 | None Reported | 0.0006 | - - | 0.0008 | 0.001 |
| | | | Chemical Total | 9E-06 | -- | 4E-06 | -- | 1E-05 | | 0.3 | -- | 0.010 | 0.3 |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | 0.3 |
| | Air | Block G | NAPHTHALENE | -- | 1E-09 | -- | -- | 1E-09 | Respiratory | - - | 0.00007 | - - | 0.00007 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-13 | -- | -- | 1E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0004 | - - | 0.0004 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0002 | - - | 0.0002 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000003 | - - | 0.00000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0000008 | - - | 0.0000008 |
| | | | Chemical Total | -- | 8E-09 | -- | -- | 8E-09 | | - - | 0.0006 | - - | 0.0006 |
| | | Exposure Point Total | | | | | | 8E-09 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | 8E-09 | | | | | 0.0006 |
| Medium Total | | | | | | | | 1E-05 | | | | | 0.3 |
| Receptor Total | | | | | | | Receptor Risk Total | 5E-05 | | | | Receptor HI Total | 0.6 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Recreational User

Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.02 |
| Total Blood HI | 0.4 |
| Total Body Weight HI | 0.02 |
| Total CNS HI | 0.002 |
| Total CVS HI | 0.07 |
| Total GS HI | 0.04 |
| Total Kidney HI | 0.05 |
| Total Lungs HI | 0.0009 |
| Total None Reported HI | 0.003 |
| Total Skin HI | 0.07 |
| Total Respiratory HI | 0.00007 |
| Total NA HI | 0.0002 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 5E-06 | -- | 2E-06 | -- | 7E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 4E-09 | -- | 2E-09 | -- | 6E-09 | Autoimmune | 0.0006 | - - | 0.0003 | 0.0009 |
| | | | AROCLOR-1260 | 9E-08 | -- | 5E-08 | -- | 1E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.004 | - - | 0.001 | 0.005 |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | Skin, CVS | 0.03 | - - | 0.003 | 0.03 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.002 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.1 | - - | 0.005 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.006 | - - | 0.003 | 0.009 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.008 | - - | 0.008 | 0.02 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.006 | - - | 0.0002 | 0.006 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 2E-07 | -- | 3E-07 | None Reported | 0.0004 | - - | 0.0007 | 0.001 |
| | | | Chemical Total | 7E-06 | -- | 3E-06 | -- | 1E-05 | | 0.2 | -- | 0.02 | 0.2 |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | 0.2 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 8E-14 | -- | -- | 8E-14 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-12 | -- | -- | 2E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00004 | - - | 0.00004 |
| | | | CADMIUM | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | 0.00010 | - - | 0.00010 |
| | | | COBALT | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0005 | - - | 0.0005 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000004 | - - | 0.000004 |
| | | | NICKEL | -- | 5E-10 | -- | -- | 5E-10 | Body Weight | - - | 0.0001 | - - | 0.0001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000009 | - - | 0.0000009 |
| | | | Chemical Total | -- | 7E-09 | -- | -- | 7E-09 | | - - | 0.0008 | - - | 0.0008 |
| | | Exposure Point Total | | | | | | 7E-09 | | | | | 0.0008 |
| | Exposure Medium Total | | | | | | | 7E-09 | | | | | 0.0008 |
| Medium Total | | | | | | | | 1E-05 | | | | | 0.2 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000003 | - - | 0.000002 | 0.000005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 8E-07 | -- | 2E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 5E-09 | -- | 3E-09 | -- | 7E-09 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 9E-07 | -- | 1E-07 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.001 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.1 | - - | 0.004 | 0.1 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.02 | - - | 0.0010 | 0.03 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.0009 | - - | 0.00003 | 0.0009 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.00005 | - - | 0.00003 | 0.00007 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.009 | - - | 0.0004 | 0.009 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 9E-08 | -- | 1E-07 | -- | 2E-07 | None Reported | 0.0004 | - - | 0.0006 | 0.0009 |
| | | | Chemical Total | 3E-06 | -- | 1E-06 | -- | 4E-06 | | 0.1 | -- | 0.007 | 0.2 |
| | | Exposure Point Total | | | | | | 4E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 4E-06 | | | | | 0.2 |
| | Air | Block G | NAPHTHALENE | -- | 1E-09 | -- | -- | 1E-09 | Respiratory | - - | 0.00007 | - - | 0.00007 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 1E-13 | -- | -- | 1E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0004 | - - | 0.0004 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0002 | - - | 0.0002 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000003 | - - | 0.00000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000008 | - - | 0.0000008 |
| | | | Chemical Total | -- | 6E-09 | -- | -- | 6E-09 | | - - | 0.0006 | - - | 0.0006 |
| | | Exposure Point Total | | | | | | 6E-09 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | 6E-09 | | | | | 0.0006 |
| Medium Total | | | | | | | | 4E-06 | | | | | 0.2 |
| Receptor Total | | | | | | | Receptor Risk Total | 1E-05 | | | | Receptor HI Total | 0.4 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.01 |
| Total Blood HI | 0.3 |
| Total Body Weight HI | 0.02 |
| Total CNS HI | 0.001 |
| Total CVS HI | 0.04 |
| Total GS HI | 0.03 |
| Total Kidney HI | 0.03 |
| Total Lungs HI | 0.0009 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.04 |
| Total Respiratory HI | 0.00007 |
| Total NA HI | 0.0002 |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 1E-04 | -- | 5E-05 | -- | 2E-04 | | | | | |
| | | | AROCLOR-1254 | 3E-08 | -- | 1E-08 | -- | 4E-08 | | | | | |
| | | | AROCLOR-1260 | 6E-07 | -- | 3E-07 | -- | 9E-07 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 1E-05 | -- | 1E-06 | -- | 2E-05 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 4E-06 | -- | 7E-06 | | | | | |
| | | | Chemical Total | 2E-04 | -- | 6E-05 | -- | 2E-04 | | | | | |
| | | Exposure Point Total | | | | | | 2E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 2E-04 | | | | | |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-10 | -- | -- | 3E-10 | | | | | |
| | | | AROCLOR-1254 | -- | 2E-13 | -- | -- | 2E-13 | | | | | |
| | | | AROCLOR-1260 | -- | 4E-12 | -- | -- | 4E-12 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 1E-09 | -- | -- | 1E-09 | | | | | |
| | | | CADMIUM | -- | 8E-10 | -- | -- | 8E-10 | | | | | |
| | | | COBALT | -- | 1E-08 | -- | -- | 1E-08 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 1E-09 | -- | -- | 1E-09 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 8E-09 | -- | -- | 8E-09 | | | | | |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | | | | |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | |
| Medium Total | | | | | | | | 2E-04 | | | | | |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 5E-05 | -- | 2E-05 | -- | 7E-05 | | | | | |
| | | | AROCLOR-1260 | 3E-08 | -- | 1E-08 | -- | 5E-08 | | | | | |
| | | | ARSENIC | 7E-06 | -- | 6E-07 | -- | 7E-06 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 3E-06 | -- | 6E-06 | | | | | |
| | | | Chemical Total | 6E-05 | -- | 2E-05 | -- | 8E-05 | | | | | |
| | | Exposure Point Total | | | | | | 8E-05 | | | | | |
| | Exposure Medium Total | | | | | | | 8E-05 | | | | | |
| | Air | Block G | NAPHTHALENE | -- | 3E-09 | -- | -- | 3E-09 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | | | | | |
| | | | AROCLOR-1260 | -- | 2E-13 | -- | -- | 2E-13 | | | | | |
| | | | ARSENIC | -- | 5E-10 | -- | -- | 5E-10 | | | | | |
| | | | COBALT | -- | 8E-09 | -- | -- | 8E-09 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 7E-09 | -- | -- | 7E-09 | | | | | |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | | | | |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | |
| Medium Total | | | | | | | | 8E-05 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-04 | | | | | |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - LIFELONG RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Recreational User

Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 2E-04 | -- | 6E-05 | -- | 2E-04 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 3E-08 | -- | 1E-08 | -- | 4E-08 | Autoimmune | 0.008 | - - | 0.003 | 0.01 |
| | | | AROCLOR-1260 | 6E-07 | -- | 2E-07 | -- | 8E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.05 | - - | 0.01 | 0.06 |
| | | | ARSENIC | 1E-05 | -- | 1E-06 | -- | 1E-05 | Skin, CVS | 0.3 | - - | 0.03 | 0.4 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.2 | - - | 0.02 | 0.2 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 2 | - - | 0.05 | 2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.08 | - - | 0.03 | 0.1 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.1 | - - | 0.07 | 0.2 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.08 | - - | 0.002 | 0.08 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-06 | -- | 4E-06 | -- | 8E-06 | None Reported | 0.006 | - - | 0.006 | 0.01 |
| | | | Chemical Total | 2E-04 | -- | 6E-05 | -- | 2E-04 | | 3 | -- | 0.2 | 3 |
| | | Exposure Point Total | | | | | | 2E-04 | | | | | 3 |
| | Exposure Medium Total | | | | | | | 2E-04 | | | | | 3 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-10 | -- | -- | 6E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 2E-13 | -- | -- | 2E-13 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 4E-12 | -- | -- | 4E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 9E-10 | -- | -- | 9E-10 | NA | - - | 0.0002 | - - | 0.0002 |
| | | | CADMIUM | -- | 6E-10 | -- | -- | 6E-10 | NA | - - | 0.0004 | - - | 0.0004 |
| | | | COBALT | -- | 9E-09 | -- | -- | 9E-09 | Lungs | - - | 0.002 | - - | 0.002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00002 | - - | 0.00002 |
| | | | NICKEL | -- | 1E-09 | -- | -- | 1E-09 | Body Weight | - - | 0.0005 | - - | 0.0005 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000004 | - - | 0.000004 |
| | | | Chemical Total | -- | 3E-08 | -- | -- | 3E-08 | | - - | 0.003 | - - | 0.003 |
| | | Exposure Point Total | | | | | | 3E-08 | | | | | 0.003 |
| | Exposure Medium Total | | | | | | | 3E-08 | | | | | 0.003 |
| Medium Total | | | | | | | | 2E-04 | | | | | 3 |

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00004 | - - | 0.00001 | 0.00005 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 6E-05 | -- | 2E-05 | -- | 8E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 3E-08 | -- | 1E-08 | -- | 4E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 6E-06 | -- | 5E-07 | -- | 6E-06 | Skin, CVS | 0.2 | - - | 0.01 | 0.2 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 1 | - - | 0.04 | 1 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.3 | - - | 0.009 | 0.3 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.01 | - - | 0.0003 | 0.01 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0006 | - - | 0.0002 | 0.0008 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.1 | - - | 0.003 | 0.1 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 4E-06 | -- | 7E-06 | None Reported | 0.005 | - - | 0.005 | 0.010 |
| | | | Chemical Total | 6E-05 | -- | 2E-05 | -- | 9E-05 | | 2 | -- | 0.07 | 2 |
| | | Exposure Point Total | | | | | | 9E-05 | | | | | 2 |
| | Exposure Medium Total | | | | | | | 9E-05 | | | | | 2 |
| | Air | Block G | NAPHTHALENE | -- | 3E-09 | -- | -- | 3E-09 | Respiratory | - - | 0.0003 | - - | 0.0003 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 2E-13 | -- | -- | 2E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | COBALT | -- | 7E-09 | -- | -- | 7E-09 | Lungs | - - | 0.002 | - - | 0.002 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0007 | - - | 0.0007 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000001 | - - | 0.0000001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | - - | 0.003 | - - | 0.003 |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | 0.003 |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | 0.003 |
| Medium Total | | | | | | | | 9E-05 | | | | | 2 |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-04 | | | | Receptor HI Total | 5 |

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.1 |
| Total Blood HI | 3 |
| Total Body Weight HI | 0.2 |
| Total CNS HI | 0.01 |
| Total CVS HI | 0.5 |
| Total GS HI | 0.3 |
| Total Kidney HI | 0.4 |
| Total Lungs HI | 0.004 |
| Total None Reported HI | 0.02 |
| Total Skin HI | 0.5 |
| Total Respiratory HI | 0.0003 |
| Total NA HI | 0.0007 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 3E-05 | -- | 1E-05 | -- | 4E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 1E-08 | -- | 4E-09 | -- | 1E-08 | Autoimmune | 0.001 | - - | 0.0006 | 0.002 |
| | | | AROCLOR-1260 | 2E-07 | -- | 9E-08 | -- | 3E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.01 | - - | 0.002 | 0.01 |
| | | | ARSENIC | 5E-06 | -- | 4E-07 | -- | 5E-06 | Skin, CVS | 0.06 | - - | 0.006 | 0.07 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.03 | - - | 0.004 | 0.04 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.3 | - - | 0.010 | 0.3 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.01 | - - | 0.006 | 0.02 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.02 | - - | 0.01 | 0.03 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0005 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 7E-07 | -- | 9E-07 | -- | 2E-06 | None Reported | 0.001 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 4E-05 | -- | 1E-05 | -- | 5E-05 | | 0.5 | -- | 0.04 | 0.5 |
| | | Exposure Point Total | | | | | | 5E-05 | | | | | 0.5 |
| | Exposure Medium Total | | | | | | | 5E-05 | | | | | 0.5 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-10 | -- | -- | 6E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 3E-13 | -- | -- | 3E-13 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 8E-12 | -- | -- | 8E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-09 | -- | -- | 2E-09 | NA | - - | 0.0002 | - - | 0.0002 |
| | | | CADMIUM | -- | 1E-09 | -- | -- | 1E-09 | NA | - - | 0.0004 | - - | 0.0004 |
| | | | COBALT | -- | 2E-08 | -- | -- | 2E-08 | Lungs | - - | 0.002 | - - | 0.002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00002 | - - | 0.00002 |
| | | | NICKEL | -- | 2E-09 | -- | -- | 2E-09 | Body Weight | - - | 0.0005 | - - | 0.0005 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000004 | - - | 0.000004 |
| | | | Chemical Total | -- | 4E-08 | -- | -- | 4E-08 | | - - | 0.003 | - - | 0.003 |
| | | Exposure Point Total | | | | | | 4E-08 | | | | | 0.003 |
| | Exposure Medium Total | | | | | | | 4E-08 | | | | | 0.003 |
| Medium Total | | | | | | | | 5E-05 | | | | | 0.5 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000008 | - - | 0.000003 | 0.00001 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 4E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 1E-08 | -- | 5E-09 | -- | 2E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | Skin, CVS | 0.03 | - - | 0.003 | 0.03 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.2 | - - | 0.007 | 0.3 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.06 | - - | 0.002 | 0.06 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.002 | - - | 0.00006 | 0.002 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0001 | - - | 0.00005 | 0.0002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0007 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 6E-07 | -- | 7E-07 | -- | 1E-06 | None Reported | 0.0009 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 1E-05 | -- | 5E-06 | -- | 2E-05 | | 0.4 | -- | 0.01 | 0.4 |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | 2E-05 | | | | | 0.4 |
| | Air | Block G | NAPHTHALENE | -- | 6E-09 | -- | -- | 6E-09 | Respiratory | - - | 0.0003 | - - | 0.0003 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 4E-13 | -- | -- | 4E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 8E-10 | -- | -- | 8E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | COBALT | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.002 | - - | 0.002 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0007 | - - | 0.0007 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000001 | - - | 0.0000001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 3E-08 | -- | -- | 3E-08 | | - - | 0.003 | - - | 0.003 |
| | | Exposure Point Total | | | | | | 3E-08 | | | | | 0.003 |
| | Exposure Medium Total | | | | | | | 3E-08 | | | | | 0.003 |
| Medium Total | | | | | | | | 2E-05 | | | | | 0.4 |
| Receptor Total | | | | | | | Receptor Risk Total | 7E-05 | | | | Receptor HI Total | 0.9 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future

Receptor Population: Resident

Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.02 |
| Total Blood HI | 0.6 |
| Total Body Weight HI | 0.03 |
| Total CNS HI | 0.003 |
| Total CVS HI | 0.1 |
| Total GS HI | 0.06 |
| Total Kidney HI | 0.08 |
| Total Lungs HI | 0.004 |
| Total None Reported HI | 0.004 |
| Total Skin HI | 0.1 |
| Total Respiratory HI | 0.0003 |
| Total NA HI | 0.0007 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 6E-06 | -- | 3E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1254 | 6E-09 | -- | 3E-09 | -- | 9E-09 | Autoimmune | 0.0008 | - - | 0.0005 | 0.001 |
| | | | AROCLOR-1260 | 1E-07 | -- | 7E-08 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.006 | - - | 0.002 | 0.007 |
| | | | ARSENIC | 3E-06 | -- | 3E-07 | -- | 3E-06 | Skin, CVS | 0.04 | - - | 0.004 | 0.04 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.003 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.2 | - - | 0.008 | 0.2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.008 | - - | 0.005 | 0.01 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.01 | - - | 0.01 | 0.02 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.009 | - - | 0.0003 | 0.009 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 2E-07 | -- | 4E-07 | None Reported | 0.0006 | - - | 0.0009 | 0.002 |
| | | | Chemical Total | 9E-06 | -- | 4E-06 | -- | 1E-05 | | 0.3 | -- | 0.03 | 0.3 |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | 0.3 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1254 | -- | 3E-13 | -- | -- | 3E-13 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 8E-12 | -- | -- | 8E-12 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-09 | -- | -- | 2E-09 | NA | - - | 0.0002 | - - | 0.0002 |
| | | | CADMIUM | -- | 1E-09 | -- | -- | 1E-09 | NA | - - | 0.0004 | - - | 0.0004 |
| | | | COBALT | -- | 2E-08 | -- | -- | 2E-08 | Lungs | - - | 0.002 | - - | 0.002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00002 | - - | 0.00002 |
| | | | NICKEL | -- | 2E-09 | -- | -- | 2E-09 | Body Weight | - - | 0.0005 | - - | 0.0005 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 6E-09 | -- | -- | 6E-09 | Lungs | - - | 0.000004 | - - | 0.000004 |
| | | | Chemical Total | -- | 3E-08 | -- | -- | 3E-08 | | - - | 0.003 | - - | 0.003 |
| | | Exposure Point Total | | | | | | 3E-08 | | | | | 0.003 |
| | Exposure Medium Total | | | | | | | 3E-08 | | | | | 0.003 |
| Medium Total | | | | | | | | 1E-05 | | | | | 0.3 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000004 | - - | 0.000002 | 0.000007 |
| | | | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 1E-06 | -- | 3E-06 | NA | -- | - - | -- | -- |
| | | | AROCLOR-1260 | 7E-09 | -- | 4E-09 | -- | 1E-08 | NA | -- | - - | -- | -- |
| | | | ARSENIC | 1E-06 | -- | 2E-07 | -- | 1E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.1 | - - | 0.006 | 0.1 |
| | | | IRON | - - | -- | - - | -- | - - | GS | 0.03 | - - | 0.001 | 0.04 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MANGANESE | - - | -- | - - | -- | - - | CNS | 0.001 | - - | 0.00005 | 0.001 |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.00006 | - - | 0.00004 | 0.0001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0005 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 2E-07 | -- | 3E-07 | None Reported | 0.0005 | - - | 0.0008 | 0.001 |
| | | | Chemical Total | 4E-06 | -- | 2E-06 | -- | 5E-06 | | 0.2 | -- | 0.01 | 0.2 |
| | | Exposure Point Total | | | | | | 5E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 5E-06 | | | | | 0.2 |
| | Air | Block G | NAPHTHALENE | -- | 6E-09 | -- | -- | 6E-09 | Respiratory | - - | 0.0003 | - - | 0.0003 |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 7E-11 | -- | -- | 7E-11 | NA | - - | -- | - - | -- |
| | | | AROCLOR-1260 | -- | 4E-13 | -- | -- | 4E-13 | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 8E-10 | -- | -- | 8E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | COBALT | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.002 | - - | 0.002 |
| | | | IRON | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MANGANESE | -- | - - | -- | -- | - - | CNS | - - | 0.0007 | - - | 0.0007 |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000001 | - - | 0.0000001 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 5E-09 | -- | -- | 5E-09 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 3E-08 | -- | -- | 3E-08 | | - - | 0.003 | - - | 0.003 |
| | | Exposure Point Total | | | | | | 3E-08 | | | | | 0.003 |
| | Exposure Medium Total | | | | | | | 3E-08 | | | | | 0.003 |
| Medium Total | | | | | | | | 5E-06 | | | | | 0.2 |
| Receptor Total | | | | | | | Receptor Risk Total | 2E-05 | | | | Receptor HI Total | 0.5 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future

Receptor Population: Resident

Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.01 |
| Total Blood HI | 0.4 |
| Total Body Weight HI | 0.02 |
| Total CNS HI | 0.002 |
| Total CVS HI | 0.06 |
| Total GS HI | 0.04 |
| Total Kidney HI | 0.04 |
| Total Lungs HI | 0.004 |
| Total None Reported HI | 0.003 |
| Total Skin HI | 0.06 |
| Total Respiratory HI | 0.0003 |
| Total NA HI | 0.0007 |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 2E-04 | -- | 7E-05 | -- | 3E-04 | | | | | |
| | | | AROCLOR-1254 | 4E-08 | -- | 2E-08 | -- | 6E-08 | | | | | |
| | | | AROCLOR-1260 | 9E-07 | -- | 4E-07 | -- | 1E-06 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 2E-05 | -- | 2E-06 | -- | 2E-05 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 5E-06 | -- | 5E-06 | -- | 1E-05 | | | | | |
| | | | Chemical Total | 2E-04 | -- | 8E-05 | -- | 3E-04 | | | | | |
| | | Exposure Point Total | | | | | | 3E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 3E-04 | | | | | |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-09 | -- | -- | 1E-09 | | | | | |
| | | | AROCLOR-1254 | -- | 9E-13 | -- | -- | 9E-13 | | | | | |
| | | | AROCLOR-1260 | -- | 2E-11 | -- | -- | 2E-11 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 4E-09 | -- | -- | 4E-09 | | | | | |
| | | | CADMIUM | -- | 3E-09 | -- | -- | 3E-09 | | | | | |
| | | | COBALT | -- | 5E-08 | -- | -- | 5E-08 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 5E-09 | -- | -- | 5E-09 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 4E-08 | -- | -- | 4E-08 | | | | | |
| | | | Chemical Total | -- | 1E-07 | -- | -- | 1E-07 | | | | | |
| | | Exposure Point Total | | | | | | 1E-07 | | | | | |
| | Exposure Medium Total | | | | | | | 1E-07 | | | | | |
| Medium Total | | | | | | | | 3E-04 | | | | | |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | 7E-05 | -- | 3E-05 | -- | 9E-05 | | | | | |
| | | | AROCLOR-1260 | 5E-08 | -- | 2E-08 | -- | 7E-08 | | | | | |
| | | | ARSENIC | 9E-06 | -- | 9E-07 | -- | 1E-05 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | IRON | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MANGANESE | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 4E-06 | -- | 5E-06 | -- | 8E-06 | | | | | |
| | | | Chemical Total | 8E-05 | -- | 3E-05 | -- | 1E-04 | | | | | |
| | | Exposure Point Total | | | | | | 1E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 1E-04 | | | | | |
| | Air | Block G | NAPHTHALENE | -- | 1E-08 | -- | -- | 1E-08 | | | | | |
| | | | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-10 | -- | -- | 5E-10 | | | | | |
| | | | AROCLOR-1260 | -- | 1E-12 | -- | -- | 1E-12 | | | | | |
| | | | ARSENIC | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | COBALT | -- | 4E-08 | -- | -- | 4E-08 | | | | | |
| | | | IRON | -- | - - | -- | -- | - - | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MANGANESE | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 3E-08 | -- | -- | 3E-08 | | | | | |
| | | | Chemical Total | -- | 8E-08 | -- | -- | 8E-08 | | | | | |
| | | Exposure Point Total | | | | | | 8E-08 | | | | | |
| | Exposure Medium Total | | | | | | | 8E-08 | | | | | |
| Medium Total | | | | | | | | 1E-04 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 4E-04 | | | | | |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK G - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future

Receptor Population: Resident

Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 6E-06 | -- | 2E-06 | -- | 7E-06 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.010 | - - | 0.001 | 0.01 |
| | | | ARSENIC | 4E-07 | -- | 2E-08 | -- | 4E-07 | Skin, CVS | 0.05 | - - | 0.003 | 0.06 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0009 | - - | 0.00008 | 0.001 |
| | | | COBALT | - - | -- | - - | -- | - - | Thyroid | 0.01 | - - | 0.0003 | 0.01 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.003 | - - | 0.0009 | 0.004 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0004 | - - | 0.000009 | 0.0004 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.003 | - - | 0.001 | 0.004 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0003 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-08 | -- | 3E-08 | -- | 7E-08 | None Reported | 0.002 | - - | 0.001 | 0.003 |
| | | | Chemical Total | 6E-06 | -- | 2E-06 | -- | 8E-06 | | 0.1 | -- | 0.009 | 0.1 |
| | | Exposure Point Total | | | | | | 8E-06 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 8E-06 | | | | | 0.1 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-08 | -- | -- | 3E-08 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 3E-08 | -- | -- | 3E-08 | NA | - - | 0.04 | - - | 0.04 |
| | | | CADMIUM | -- | 8E-10 | -- | -- | 8E-10 | NA | - - | 0.003 | - - | 0.003 |
| | | | COBALT | -- | 2E-07 | -- | -- | 2E-07 | Lungs | - - | 0.2 | - - | 0.2 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.001 | - - | 0.001 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 6E-09 | -- | -- | 6E-09 | Body Weight | - - | 0.02 | - - | 0.02 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-07 | -- | -- | 2E-07 | Lungs | - - | 0.002 | - - | 0.002 |
| | | | Chemical Total | -- | 5E-07 | -- | -- | 5E-07 | | - - | 0.3 | - - | 0.3 |
| | | Exposure Point Total | | | | | | 5E-07 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | 5E-07 | | | | | 0.3 |
| Medium Total | | | | | | | | 8E-06 | | | | | 0.4 |

TABLE 9.1.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - CONSTRUCTION WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Construction Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 1E-07 | -- | 3E-08 | -- | 2E-07 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00004 | - - | 0.000009 | 0.00004 |
| | | | ARSENIC | 4E-07 | -- | 2E-08 | -- | 4E-07 | Skin, CVS | 0.06 | - - | 0.003 | 0.06 |
| | | | COBALT | - - | -- | - - | -- | - - | Thyroid | 0.02 | - - | 0.0004 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0005 | - - | 0.0001 | 0.0006 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0004 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 6E-08 | -- | 5E-08 | -- | 1E-07 | None Reported | 0.003 | - - | 0.002 | 0.005 |
| | | | Chemical Total | 5E-07 | -- | 1E-07 | -- | 6E-07 | | 0.10 | -- | 0.007 | 0.1 |
| | | Exposure Point Total | | | | | | 6E-07 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 6E-07 | | | | | 0.1 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 6E-10 | -- | -- | 6E-10 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 2E-09 | -- | -- | 2E-09 | Respiratory | - - | 0.001 | - - | 0.001 |
| | | | ARSENIC | -- | 4E-08 | -- | -- | 4E-08 | NA | - - | 0.04 | - - | 0.04 |
| | | | COBALT | -- | 3E-07 | -- | -- | 3E-07 | Lungs | - - | 0.3 | - - | 0.3 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0002 | - - | 0.0002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-07 | -- | -- | 3E-07 | Lungs | - - | 0.003 | - - | 0.003 |
| | | | Chemical Total | -- | 6E-07 | -- | -- | 6E-07 | | - - | 0.4 | - - | 0.4 |
| | | Exposure Point Total | | | | | | 6E-07 | | | | | 0.4 |
| | Exposure Medium Total | | | | | | | 6E-07 | | | | | 0.4 |
| Medium Total | | | | | | | | 1E-06 | | | | | 0.5 |
| Receptor Total | | | | | | | Receptor Risk Total | 1E-05 | | | | Receptor HI Total | 0.9 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.004 |
| Total Blood HI | 0.01 |
| Total Body Weight HI | 0.02 |
| Total CVS HI | 0.1 |
| Total Kidney HI | 0.03 |
| Total Lungs HI | 0.6 |
| Total None Reported HI | 0.008 |
| Total Skin HI | 0.1 |
| Total Respiratory HI | 0.001 |
| Total NA HI | 0.08 |
| Total Thyroid HI | 0.04 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 2E-05 | -- | 3E-05 | -- | 4E-05 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.001 | - - | 0.0009 | 0.002 |
| | | | ARSENIC | 9E-07 | -- | 4E-07 | -- | 1E-06 | Skin, CVS | 0.006 | - - | 0.002 | 0.008 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.00010 | - - | 0.00005 | 0.0001 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.002 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0003 | - - | 0.0006 | 0.0009 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.00004 | - - | 0.000006 | 0.00005 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0003 | - - | 0.0009 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.003 | - - | 0.0004 | 0.003 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 5E-07 | -- | 6E-07 | None Reported | 0.0002 | - - | 0.0009 | 0.001 |
| | | | Chemical Total | 2E-05 | -- | 3E-05 | -- | 4E-05 | | 0.03 | -- | 0.008 | 0.03 |
| | | Exposure Point Total | | | | | | 4E-05 | | | | | 0.03 |
| | Exposure Medium Total | | | | | | | 4E-05 | | | | | 0.03 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | CADMIUM | -- | 9E-12 | -- | -- | 9E-12 | NA | - - | 0.000001 | - - | 0.000001 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000004 | - - | 0.0000004 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 7E-11 | -- | -- | 7E-11 | Body Weight | - - | 0.000009 | - - | 0.000009 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0000008 | - - | 0.0000008 |
| | | | Chemical Total | -- | 5E-09 | -- | -- | 5E-09 | | - - | 0.0001 | - - | 0.0001 |
| | | Exposure Point Total | | | | | | 5E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | 5E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | 4E-05 | | | | | 0.03 |

TABLE 9.2.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - INDUSTRIAL WORKER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Industrial Worker
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 3E-07 | -- | 5E-07 | -- | 9E-07 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000004 | - - | 0.000006 | 0.000010 |
| | | | ARSENIC | 9E-07 | -- | 4E-07 | -- | 1E-06 | Skin, CVS | 0.006 | - - | 0.002 | 0.008 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.003 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.00005 | - - | 0.00010 | 0.0001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.004 | - - | 0.0005 | 0.004 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 8E-07 | -- | 1E-06 | None Reported | 0.0003 | - - | 0.002 | 0.002 |
| | | | Chemical Total | 1E-06 | -- | 2E-06 | -- | 3E-06 | | 0.03 | -- | 0.007 | 0.04 |
| | | Exposure Point Total | | | | | | 3E-06 | | | | | 0.04 |
| | Exposure Medium Total | | | | | | | 3E-06 | | | | | 0.04 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 7E-12 | -- | -- | 7E-12 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 6E-09 | -- | -- | 6E-09 | Respiratory | - - | 0.0002 | - - | 0.0002 |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0002 | - - | 0.0002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000007 | - - | 0.00000007 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.000001 | - - | 0.000001 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.0003 | - - | 0.0003 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.0003 |
| Medium Total | | | | | | | | 3E-06 | | | | | 0.04 |
| Receptor Total | | | | | | | Receptor Risk Total | 5E-05 | | | | Receptor HI Total | 0.07 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.001 |
| Total Blood HI | 0.04 |
| Total Body Weight HI | 0.001 |
| Total CVS HI | 0.02 |
| Total Kidney HI | 0.007 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.003 |
| Total Skin HI | 0.02 |
| Total Respiratory HI | 0.0002 |
| Total NA HI | 0.00004 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 2E-04 | -- | 6E-05 | -- | 2E-04 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.010 | - - | 0.002 | 0.01 |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | Skin, CVS | 0.06 | - - | 0.004 | 0.06 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0010 | - - | 0.00009 | 0.001 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.1 | - - | 0.004 | 0.2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.003 | - - | 0.001 | 0.004 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0004 | - - | 0.00001 | 0.0004 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.003 | - - | 0.002 | 0.004 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.03 | - - | 0.0006 | 0.03 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 1E-06 | -- | 2E-06 | None Reported | 0.002 | - - | 0.002 | 0.003 |
| | | | Chemical Total | 2E-04 | -- | 6E-05 | -- | 3E-04 | | 0.3 | -- | 0.01 | 0.3 |
| | | Exposure Point Total | | | | | | 3E-04 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | 3E-04 | | | | | 0.3 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | CADMIUM | -- | 6E-13 | -- | -- | 6E-13 | NA | - - | 0.0000004 | - - | 0.0000004 |
| | | | COBALT | -- | 1E-10 | -- | -- | 1E-10 | Lungs | - - | 0.00003 | - - | 0.00003 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000001 | - - | 0.0000001 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 5E-12 | -- | -- | 5E-12 | Body Weight | - - | 0.000002 | - - | 0.000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 8E-10 | -- | -- | 8E-10 | Lungs | - - | 0.0000002 | - - | 0.0000002 |
| | | | Chemical Total | -- | 1E-09 | -- | -- | 1E-09 | | - - | 0.00004 | - - | 0.00004 |
| | | Exposure Point Total | | | | | | 1E-09 | | | | | 0.00004 |
| | Exposure Medium Total | | | | | | | 1E-09 | | | | | 0.00004 |
| Medium Total | | | | | | | | 3E-04 | | | | | 0.3 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 4E-06 | -- | 1E-06 | -- | 5E-06 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00004 | - - | 0.00001 | 0.00005 |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | Skin, CVS | 0.06 | - - | 0.004 | 0.06 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.2 | - - | 0.005 | 0.2 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0005 | - - | 0.0002 | 0.0007 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.04 | - - | 0.0009 | 0.04 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-06 | -- | 2E-06 | -- | 4E-06 | None Reported | 0.003 | - - | 0.003 | 0.006 |
| | | | Chemical Total | 8E-06 | -- | 3E-06 | -- | 1E-05 | | 0.3 | -- | 0.01 | 0.3 |
| | | Exposure Point Total | | | | | | 1E-05 | | | | | 0.3 |
| | Exposure Medium Total | | | | | | | 1E-05 | | | | | 0.3 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-12 | -- | -- | 2E-12 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 4E-10 | -- | -- | 4E-10 | Respiratory | - - | 0.00005 | - - | 0.00005 |
| | | | ARSENIC | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | COBALT | -- | 2E-10 | -- | -- | 2E-10 | Lungs | - - | 0.00004 | - - | 0.00004 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000002 | - - | 0.00000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000003 | - - | 0.0000003 |
| | | | Chemical Total | -- | 2E-09 | -- | -- | 2E-09 | | - - | 0.00009 | - - | 0.00009 |
| | | Exposure Point Total | | | | | | 2E-09 | | | | | 0.00009 |
| | Exposure Medium Total | | | | | | | 2E-09 | | | | | 0.00009 |
| Medium Total | | | | | | | | 1E-05 | | | | | 0.3 |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-04 | | | | Receptor HI Total | 0.6 |

TABLE 9.3.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - CHILD COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Commercial Receptor

Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.005 |
| Total Blood HI | 0.4 |
| Total Body Weight HI | 0.004 |
| Total CVS HI | 0.1 |
| Total Kidney HI | 0.07 |
| Total Lungs HI | 0.00007 |
| Total None Reported HI | 0.009 |
| Total Skin HI | 0.1 |
| Total Respiratory HI | 0.00005 |
| Total NA HI | 0.000009 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 4E-05 | -- | 4E-05 | -- | 8E-05 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.002 | - - | 0.001 | 0.003 |
| | | | ARSENIC | 8E-07 | -- | 2E-07 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.003 | 0.01 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0002 | - - | 0.00006 | 0.0002 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.03 | - - | 0.002 | 0.03 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0006 | - - | 0.0007 | 0.001 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.00008 | - - | 0.000007 | 0.00009 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0005 | - - | 0.001 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.005 | - - | 0.0004 | 0.005 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 8E-07 | -- | 1E-06 | None Reported | 0.0003 | - - | 0.001 | 0.001 |
| | | | Chemical Total | 4E-05 | -- | 4E-05 | -- | 8E-05 | | 0.05 | -- | 0.010 | 0.06 |
| | | Exposure Point Total | | | | | | 8E-05 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | 8E-05 | | | | | 0.06 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-10 | -- | -- | 1E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | CADMIUM | -- | 1E-12 | -- | -- | 1E-12 | NA | - - | 0.0000004 | - - | 0.0000004 |
| | | | COBALT | -- | 3E-10 | -- | -- | 3E-10 | Lungs | - - | 0.00003 | - - | 0.00003 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000001 | - - | 0.0000001 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 9E-12 | -- | -- | 9E-12 | Body Weight | - - | 0.000002 | - - | 0.000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 8E-10 | -- | -- | 8E-10 | Lungs | - - | 0.0000002 | - - | 0.0000002 |
| | | | Chemical Total | -- | 1E-09 | -- | -- | 1E-09 | | - - | 0.00004 | - - | 0.00004 |
| | | Exposure Point Total | | | | | | 1E-09 | | | | | 0.00004 |
| | Exposure Medium Total | | | | | | | 1E-09 | | | | | 0.00004 |
| Medium Total | | | | | | | | 8E-05 | | | | | 0.06 |

TABLE 9.4.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - ADOLESCENT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 8E-07 | -- | 8E-07 | -- | 2E-06 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000007 | - - | 0.000008 | 0.00001 |
| | | | ARSENIC | 8E-07 | -- | 2E-07 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.003 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.04 | - - | 0.003 | 0.04 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.00009 | - - | 0.0001 | 0.0002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.007 | - - | 0.0006 | 0.007 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-07 | -- | 1E-06 | -- | 2E-06 | None Reported | 0.0005 | - - | 0.002 | 0.002 |
| | | | Chemical Total | 2E-06 | -- | 2E-06 | -- | 4E-06 | | 0.06 | -- | 0.009 | 0.07 |
| | | Exposure Point Total | | | | | | 4E-06 | | | | | 0.07 |
| | Exposure Medium Total | | | | | | | 4E-06 | | | | | 0.07 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-12 | -- | -- | 2E-12 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 8E-10 | -- | -- | 8E-10 | Respiratory | - - | 0.00005 | - - | 0.00005 |
| | | | ARSENIC | -- | 5E-11 | -- | -- | 5E-11 | NA | - - | 0.000004 | - - | 0.000004 |
| | | | COBALT | -- | 4E-10 | -- | -- | 4E-10 | Lungs | - - | 0.00004 | - - | 0.00004 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000002 | - - | 0.00000002 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000003 | - - | 0.0000003 |
| | | | Chemical Total | -- | 3E-09 | -- | -- | 3E-09 | | - - | 0.00009 | - - | 0.00009 |
| | | Exposure Point Total | | | | | | 3E-09 | | | | | 0.00009 |
| | Exposure Medium Total | | | | | | | 3E-09 | | | | | 0.00009 |
| Medium Total | | | | | | | | 4E-06 | | | | | 0.07 |
| Receptor Total | | | | | | | Receptor Risk Total | 8E-05 | | | | Receptor HI Total | 0.1 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.001 |
| Total Blood HI | 0.08 |
| Total Body Weight HI | 0.002 |
| Total CVS HI | 0.03 |
| Total Kidney HI | 0.01 |
| Total Lungs HI | 0.00007 |
| Total None Reported HI | 0.004 |
| Total Skin HI | 0.03 |
| Total Respiratory HI | 0.00005 |
| Total NA HI | 0.000009 |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 2E-04 | -- | 1E-04 | -- | 3E-04 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 3E-06 | -- | 4E-07 | -- | 3E-06 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 2E-06 | -- | 3E-06 | | | | | |
| | | | Chemical Total | 2E-04 | -- | 1E-04 | -- | 3E-04 | | | | | |
| | | Exposure Point Total | | | | | | 3E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 3E-04 | | | | | |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 7E-11 | -- | -- | 7E-11 | | | | | |
| | | | CADMIUM | -- | 2E-12 | -- | -- | 2E-12 | | | | | |
| | | | COBALT | -- | 4E-10 | -- | -- | 4E-10 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 1E-11 | -- | -- | 1E-11 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | Chemical Total | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | Exposure Point Total | | | | | | 2E-09 | | | | | |
| | Exposure Medium Total | | | | | | | 2E-09 | | | | | |
| Medium Total | | | | | | | | 3E-04 | | | | | |

TABLE 9.5.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - LIFELONG COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Commercial Receptor

Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 5E-06 | -- | 2E-06 | -- | 7E-06 | | | | | |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 3E-06 | -- | 4E-07 | -- | 3E-06 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 2E-06 | -- | 3E-06 | -- | 6E-06 | | | | | |
| | | | Chemical Total | 1E-05 | -- | 6E-06 | -- | 2E-05 | | | | | |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | |
| | Exposure Medium Total | | | | | | | 2E-05 | | | | | |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-12 | -- | -- | 5E-12 | | | | | |
| | | | NAPHTHALENE | -- | 1E-09 | -- | -- | 1E-09 | | | | | |
| | | | ARSENIC | -- | 7E-11 | -- | -- | 7E-11 | | | | | |
| | | | COBALT | -- | 6E-10 | -- | -- | 6E-10 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | | | | | |
| | | | Chemical Total | -- | 4E-09 | -- | -- | 4E-09 | | | | | |
| | | Exposure Point Total | | | | | | 4E-09 | | | | | |
| | Exposure Medium Total | | | | | | | 4E-09 | | | | | |
| Medium Total | | | | | | | | 2E-05 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-04 | | | | | |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Commercial Receptor

Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 2E-05 | -- | 3E-05 | -- | 4E-05 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.001 | - - | 0.0009 | 0.002 |
| | | | ARSENIC | 9E-07 | -- | 4E-07 | -- | 1E-06 | Skin, CVS | 0.006 | - - | 0.002 | 0.008 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.00010 | - - | 0.00005 | 0.0001 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.002 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0003 | - - | 0.0006 | 0.0009 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.00004 | - - | 0.000006 | 0.00005 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0003 | - - | 0.0009 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.003 | - - | 0.0004 | 0.003 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 5E-07 | -- | 6E-07 | None Reported | 0.0002 | - - | 0.0009 | 0.001 |
| | | | Chemical Total | 2E-05 | -- | 3E-05 | -- | 4E-05 | | 0.03 | -- | 0.008 | 0.03 |
| | | Exposure Point Total | | | | | | 4E-05 | | | | | 0.03 |
| | Exposure Medium Total | | | | | | | 4E-05 | | | | | 0.03 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-10 | -- | -- | 3E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | CADMIUM | -- | 9E-12 | -- | -- | 9E-12 | NA | - - | 0.000001 | - - | 0.000001 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000004 | - - | 0.0000004 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 7E-11 | -- | -- | 7E-11 | Body Weight | - - | 0.000009 | - - | 0.000009 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0000008 | - - | 0.0000008 |
| | | | Chemical Total | -- | 5E-09 | -- | -- | 5E-09 | | - - | 0.0001 | - - | 0.0001 |
| | | Exposure Point Total | | | | | | 5E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | 5E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | 4E-05 | | | | | 0.03 |

TABLE 9.6.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - ADULT COMMERCIAL RECEPTOR

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Commercial Receptor
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 3E-07 | -- | 5E-07 | -- | 9E-07 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000004 | - - | 0.000006 | 0.000010 |
| | | | ARSENIC | 9E-07 | -- | 4E-07 | -- | 1E-06 | Skin, CVS | 0.006 | - - | 0.002 | 0.008 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.003 | 0.02 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.00005 | - - | 0.00010 | 0.0001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.004 | - - | 0.0005 | 0.004 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 8E-07 | -- | 1E-06 | None Reported | 0.0003 | - - | 0.002 | 0.002 |
| | | | Chemical Total | 1E-06 | -- | 2E-06 | -- | 3E-06 | | 0.03 | -- | 0.007 | 0.04 |
| | | Exposure Point Total | | | | | | 3E-06 | | | | | 0.04 |
| | Exposure Medium Total | | | | | | | 3E-06 | | | | | 0.04 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 7E-12 | -- | -- | 7E-12 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 6E-09 | -- | -- | 6E-09 | Respiratory | - - | 0.0002 | - - | 0.0002 |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0002 | - - | 0.0002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000007 | - - | 0.00000007 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.000001 | - - | 0.000001 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.0003 | - - | 0.0003 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.0003 |
| Medium Total | | | | | | | | 3E-06 | | | | | 0.04 |
| Receptor Total | | | | | | | Receptor Risk Total | 5E-05 | | | | Receptor HI Total | 0.07 |

Note: See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.001 |
| Total Blood HI | 0.04 |
| Total Body Weight HI | 0.001 |
| Total CVS HI | 0.02 |
| Total Kidney HI | 0.007 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.003 |
| Total Skin HI | 0.02 |
| Total Respiratory HI | 0.0002 |
| Total NA HI | 0.00004 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 4E-04 | -- | 1E-04 | -- | 5E-04 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.02 | - - | 0.003 | 0.02 |
| | | | ARSENIC | 4E-06 | -- | 3E-07 | -- | 4E-06 | Skin, CVS | 0.1 | - - | 0.009 | 0.1 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.002 | - - | 0.0002 | 0.002 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.3 | - - | 0.008 | 0.3 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.006 | - - | 0.002 | 0.008 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0008 | - - | 0.00002 | 0.0008 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.005 | - - | 0.003 | 0.008 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.05 | - - | 0.001 | 0.05 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-06 | -- | 3E-06 | -- | 5E-06 | None Reported | 0.003 | - - | 0.004 | 0.007 |
| | | | Chemical Total | 4E-04 | -- | 1E-04 | -- | 5E-04 | | 0.5 | -- | 0.03 | 0.5 |
| | | Exposure Point Total | | | | | | 5E-04 | | | | | 0.5 |
| | Exposure Medium Total | | | | | | | 5E-04 | | | | | 0.5 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-09 | -- | -- | 2E-09 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | CADMIUM | -- | 9E-12 | -- | -- | 9E-12 | NA | - - | 0.000006 | - - | 0.000006 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0005 | - - | 0.0005 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 7E-11 | -- | -- | 7E-11 | Body Weight | - - | 0.00004 | - - | 0.00004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | - - | 0.0006 | - - | 0.0006 |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | 0.0006 |
| Medium Total | | | | | | | | 5E-04 | | | | | 0.5 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block G | BENZO(A)PYRENE EQUIVALENTS | 8E-06 | -- | 3E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00007 | - - | 0.00002 | 0.00009 |
| | | | ARSENIC | 4E-06 | -- | 4E-07 | -- | 5E-06 | Skin, CVS | 0.1 | - - | 0.009 | 0.1 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.4 | - - | 0.01 | 0.4 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0009 | - - | 0.0004 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.07 | - - | 0.002 | 0.07 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-06 | -- | 4E-06 | -- | 8E-06 | None Reported | 0.005 | - - | 0.006 | 0.01 |
| | | | Chemical Total | 2E-05 | -- | 7E-06 | -- | 2E-05 | | 0.6 | -- | 0.03 | 0.6 |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | 0.6 |
| | Exposure Medium Total | | | | | | | 2E-05 | | | | | 0.6 |
| | Air | Block G | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 7E-09 | -- | -- | 7E-09 | Respiratory | - - | 0.0007 | - - | 0.0007 |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0006 | - - | 0.0006 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000003 | - - | 0.0000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-08 | -- | -- | 2E-08 | Lungs | - - | 0.000005 | - - | 0.000005 |
| | | | Chemical Total | -- | 3E-08 | -- | -- | 3E-08 | | - - | 0.001 | - - | 0.001 |
| | | Exposure Point Total | | | | | | 3E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | 3E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | 2E-05 | | | | | 0.6 |
| Receptor Total | | | | | | | Receptor Risk Total | 5E-04 | | | | Receptor HI Total | 1 |

TABLE 9.7.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - CHILD RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future

Receptor Population: Recreational User

Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.009 |
| Total Blood HI | 0.7 |
| Total Body Weight HI | 0.009 |
| Total CVS HI | 0.2 |
| Total Kidney HI | 0.1 |
| Total Lungs HI | 0.001 |
| Total None Reported HI | 0.02 |
| Total Skin HI | 0.2 |
| Total Respiratory HI | 0.0007 |
| Total NA HI | 0.0001 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 7E-05 | -- | 3E-05 | -- | 9E-05 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.004 | - - | 0.0007 | 0.004 |
| | | | ARSENIC | 2E-06 | -- | 1E-07 | -- | 2E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.02 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0003 | - - | 0.00004 | 0.0004 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.05 | - - | 0.002 | 0.05 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.001 | - - | 0.0005 | 0.002 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0002 | - - | 0.000005 | 0.0002 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0009 | - - | 0.0007 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.009 | - - | 0.0003 | 0.010 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 4E-07 | -- | 5E-07 | -- | 1E-06 | None Reported | 0.0006 | - - | 0.0008 | 0.001 |
| | | | Chemical Total | 7E-05 | -- | 3E-05 | -- | 1E-04 | | 0.09 | -- | 0.006 | 0.10 |
| | | Exposure Point Total | | | | | | 1E-04 | | | | | 0.10 |
| | Exposure Medium Total | | | | | | | 1E-04 | | | | | 0.10 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | CADMIUM | -- | 4E-12 | -- | -- | 4E-12 | NA | - - | 0.000001 | - - | 0.000001 |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000004 | - - | 0.0000004 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 3E-11 | -- | -- | 3E-11 | Body Weight | - - | 0.000009 | - - | 0.000009 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0000008 | - - | 0.0000008 |
| | | | Chemical Total | -- | 5E-09 | -- | -- | 5E-09 | | - - | 0.0001 | - - | 0.0001 |
| | | Exposure Point Total | | | | | | 5E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | 5E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | 1E-04 | | | | | 0.10 |

TABLE 9.8.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - ADOLESCENT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 1E-06 | -- | 6E-07 | -- | 2E-06 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00001 | - - | 0.000005 | 0.00002 |
| | | | ARSENIC | 2E-06 | -- | 1E-07 | -- | 2E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.07 | - - | 0.002 | 0.08 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0002 | - - | 0.00008 | 0.0003 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0004 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 7E-07 | -- | 9E-07 | -- | 2E-06 | None Reported | 0.001 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 4E-06 | -- | 2E-06 | -- | 5E-06 | | 0.1 | -- | 0.006 | 0.1 |
| | | Exposure Point Total | | | | | | 5E-06 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 5E-06 | | | | | 0.1 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 9E-12 | -- | -- | 9E-12 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 3E-09 | -- | -- | 3E-09 | Respiratory | - - | 0.0002 | - - | 0.0002 |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0002 | - - | 0.0002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000007 | - - | 0.00000007 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 5E-09 | -- | -- | 5E-09 | Lungs | - - | 0.000001 | - - | 0.000001 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.0003 | - - | 0.0003 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.0003 |
| Medium Total | | | | | | | | 5E-06 | | | | | 0.1 |
| Receptor Total | | | | | | | Receptor Risk Total | 1E-04 | | | | Receptor HI Total | 0.2 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.002 |
| Total Blood HI | 0.1 |
| Total Body Weight HI | 0.002 |
| Total CVS HI | 0.04 |
| Total Kidney HI | 0.02 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.004 |
| Total Skin HI | 0.04 |
| Total Respiratory HI | 0.0002 |
| Total NA HI | 0.00004 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 7E-06 | -- | 2E-05 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.002 | - - | 0.0005 | 0.003 |
| | | | ARSENIC | 9E-07 | -- | 1E-07 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.001 | 0.01 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0002 | - - | 0.00003 | 0.0002 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.03 | - - | 0.001 | 0.03 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0006 | - - | 0.0004 | 0.0010 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.00009 | - - | 0.000004 | 0.00009 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0005 | - - | 0.0005 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.005 | - - | 0.0002 | 0.006 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 9E-08 | -- | 1E-07 | -- | 2E-07 | None Reported | 0.0004 | - - | 0.0006 | 0.0009 |
| | | | Chemical Total | 2E-05 | -- | 8E-06 | -- | 2E-05 | | 0.05 | -- | 0.005 | 0.06 |
| | | Exposure Point Total | | | | | | 2E-05 | | | | | 0.06 |
| | Exposure Medium Total | | | | | | | 2E-05 | | | | | 0.06 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | CADMIUM | -- | 4E-12 | -- | -- | 4E-12 | NA | - - | 0.000001 | - - | 0.000001 |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0001 | - - | 0.0001 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000004 | - - | 0.0000004 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 3E-11 | -- | -- | 3E-11 | Body Weight | - - | 0.000009 | - - | 0.000009 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0000008 | - - | 0.0000008 |
| | | | Chemical Total | -- | 3E-09 | -- | -- | 3E-09 | | - - | 0.0001 | - - | 0.0001 |
| | | Exposure Point Total | | | | | | 3E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | 3E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | 2E-05 | | | | | 0.06 |

TABLE 9.9.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - ADULT RECREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 3E-07 | -- | 2E-07 | -- | 5E-07 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.000007 | - - | 0.000004 | 0.00001 |
| | | | ARSENIC | 9E-07 | -- | 1E-07 | -- | 1E-06 | Skin, CVS | 0.01 | - - | 0.001 | 0.01 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.04 | - - | 0.002 | 0.04 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0001 | - - | 0.00006 | 0.0002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.007 | - - | 0.0003 | 0.008 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 2E-07 | -- | 4E-07 | None Reported | 0.0006 | - - | 0.0009 | 0.002 |
| | | | Chemical Total | 1E-06 | -- | 5E-07 | -- | 2E-06 | | 0.06 | -- | 0.004 | 0.07 |
| | | Exposure Point Total | | | | | | 2E-06 | | | | | 0.07 |
| | Exposure Medium Total | | | | | | | 2E-06 | | | | | 0.07 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 3E-12 | -- | -- | 3E-12 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 3E-09 | -- | -- | 3E-09 | Respiratory | - - | 0.0002 | - - | 0.0002 |
| | | | ARSENIC | -- | 2E-10 | -- | -- | 2E-10 | NA | - - | 0.00002 | - - | 0.00002 |
| | | | COBALT | -- | 1E-09 | -- | -- | 1E-09 | Lungs | - - | 0.0002 | - - | 0.0002 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.00000007 | - - | 0.00000007 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.000001 | - - | 0.000001 |
| | | | Chemical Total | -- | 7E-09 | -- | -- | 7E-09 | | - - | 0.0003 | - - | 0.0003 |
| | | Exposure Point Total | | | | | | 7E-09 | | | | | 0.0003 |
| | Exposure Medium Total | | | | | | | 7E-09 | | | | | 0.0003 |
| Medium Total | | | | | | | | 2E-06 | | | | | 0.07 |
| Receptor Total | | | | | | | Receptor Risk Total | 3E-05 | | | | Receptor HI Total | 0.1 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.001 |
| Total Blood HI | 0.08 |
| Total Body Weight HI | 0.001 |
| Total CVS HI | 0.03 |
| Total Kidney HI | 0.01 |
| Total Lungs HI | 0.0003 |
| Total None Reported HI | 0.002 |
| Total Skin HI | 0.03 |
| Total Respiratory HI | 0.0002 |
| Total NA HI | 0.00004 |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - LIFELONG REREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 4E-04 | -- | 2E-04 | -- | 6E-04 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 7E-06 | -- | 6E-07 | -- | 7E-06 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 3E-06 | -- | 6E-06 | | | | | |
| | | | Chemical Total | 5E-04 | -- | 2E-04 | -- | 6E-04 | | | | | |
| | | Exposure Point Total | | | | | | 6E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 6E-04 | | | | | |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 7E-10 | -- | -- | 7E-10 | | | | | |
| | | | CADMIUM | -- | 2E-11 | -- | -- | 2E-11 | | | | | |
| | | | COBALT | -- | 4E-09 | -- | -- | 4E-09 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 1E-10 | -- | -- | 1E-10 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 2E-08 | -- | -- | 2E-08 | | | | | |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | | | | |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | |
| Medium Total | | | | | | | | 6E-04 | | | | | |

TABLE 9.10.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - LIFELONG REREATIONAL USER

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Current/Future
Receptor Population: Recreational User
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 9E-06 | -- | 3E-06 | -- | 1E-05 | | | | | |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 7E-06 | -- | 6E-07 | -- | 7E-06 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 5E-06 | -- | 5E-06 | -- | 1E-05 | | | | | |
| | | | Chemical Total | 2E-05 | -- | 9E-06 | -- | 3E-05 | | | | | |
| | | Exposure Point Total | | | | | | 3E-05 | | | | | |
| | Exposure Medium Total | | | | | | | 3E-05 | | | | | |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 5E-11 | -- | -- | 5E-11 | | | | | |
| | | | NAPHTHALENE | -- | 1E-08 | -- | -- | 1E-08 | | | | | |
| | | | ARSENIC | -- | 8E-10 | -- | -- | 8E-10 | | | | | |
| | | | COBALT | -- | 6E-09 | -- | -- | 6E-09 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 3E-08 | -- | -- | 3E-08 | | | | | |
| | | | Chemical Total | -- | 5E-08 | -- | -- | 5E-08 | | | | | |
| | | Exposure Point Total | | | | | | 5E-08 | | | | | |
| | Exposure Medium Total | | | | | | | 5E-08 | | | | | |
| Medium Total | | | | | | | | 3E-05 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 6E-04 | | | | | |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 5E-04 | -- | 2E-04 | -- | 7E-04 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.03 | - - | 0.005 | 0.03 |
| | | | ARSENIC | 6E-06 | -- | 5E-07 | -- | 6E-06 | Skin, CVS | 0.1 | - - | 0.01 | 0.2 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.003 | - - | 0.0003 | 0.003 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.4 | - - | 0.01 | 0.4 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.008 | - - | 0.003 | 0.01 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.001 | - - | 0.00003 | 0.001 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.007 | - - | 0.005 | 0.01 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.07 | - - | 0.002 | 0.07 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 3E-06 | -- | 4E-06 | -- | 7E-06 | None Reported | 0.005 | - - | 0.005 | 0.010 |
| | | | Chemical Total | 5E-04 | -- | 2E-04 | -- | 7E-04 | | 0.7 | -- | 0.04 | 0.7 |
| | | Exposure Point Total | | | | | | 7E-04 | | | | | 0.7 |
| | Exposure Medium Total | | | | | | | 7E-04 | | | | | 0.7 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-09 | -- | -- | 2E-09 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | CADMIUM | -- | 9E-12 | -- | -- | 9E-12 | NA | - - | 0.000006 | - - | 0.000006 |
| | | | COBALT | -- | 2E-09 | -- | -- | 2E-09 | Lungs | - - | 0.0005 | - - | 0.0005 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 7E-11 | -- | -- | 7E-11 | Body Weight | - - | 0.00004 | - - | 0.00004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | - - | 0.0006 | - - | 0.0006 |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | 0.0006 |
| Medium Total | | | | | | | | 7E-04 | | | | | 0.7 |

TABLE 9.11.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - CHILD RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Child

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 4E-06 | -- | 1E-05 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00010 | - - | 0.00003 | 0.0001 |
| | | | ARSENIC | 6E-06 | -- | 5E-07 | -- | 6E-06 | Skin, CVS | 0.2 | - - | 0.01 | 0.2 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.5 | - - | 0.02 | 0.6 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.001 | - - | 0.0005 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.10 | - - | 0.003 | 0.1 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 5E-06 | -- | 6E-06 | -- | 1E-05 | None Reported | 0.008 | - - | 0.009 | 0.02 |
| | | | Chemical Total | 2E-05 | -- | 1E-05 | -- | 3E-05 | | 0.8 | -- | 0.04 | 0.8 |
| | | Exposure Point Total | | | | | | 3E-05 | | | | | 0.8 |
| | Exposure Medium Total | | | | | | | 3E-05 | | | | | 0.8 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 7E-09 | -- | -- | 7E-09 | Respiratory | - - | 0.0007 | - - | 0.0007 |
| | | | ARSENIC | -- | 4E-10 | -- | -- | 4E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | COBALT | -- | 3E-09 | -- | -- | 3E-09 | Lungs | - - | 0.0006 | - - | 0.0006 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000003 | - - | 0.0000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-08 | -- | -- | 2E-08 | Lungs | - - | 0.000005 | - - | 0.000005 |
| | | | Chemical Total | -- | 3E-08 | -- | -- | 3E-08 | | - - | 0.001 | - - | 0.001 |
| | | Exposure Point Total | | | | | | 3E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | 3E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | 3E-05 | | | | | 0.9 |
| Receptor Total | | | | | | | Receptor Risk Total | 7E-04 | | | | Receptor HI Total | 2 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.01 |
| Total Blood HI | 1 |
| Total Body Weight HI | 0.01 |
| Total CVS HI | 0.3 |
| Total Kidney HI | 0.2 |
| Total Lungs HI | 0.001 |
| Total None Reported HI | 0.03 |
| Total Skin HI | 0.3 |
| Total Respiratory HI | 0.0007 |
| Total NA HI | 0.0001 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 9E-05 | -- | 4E-05 | -- | 1E-04 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.005 | - - | 0.0010 | 0.006 |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | Skin, CVS | 0.03 | - - | 0.003 | 0.03 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0005 | - - | 0.00006 | 0.0005 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.07 | - - | 0.002 | 0.08 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.002 | - - | 0.0007 | 0.002 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0002 | - - | 0.000007 | 0.0002 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.001 | - - | 0.0010 | 0.002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0004 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 6E-07 | -- | 7E-07 | -- | 1E-06 | None Reported | 0.0009 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 1E-04 | -- | 4E-05 | -- | 1E-04 | | 0.1 | -- | 0.009 | 0.1 |
| | | Exposure Point Total | | | | | | 1E-04 | | | | | 0.1 |
| | Exposure Medium Total | | | | | | | 1E-04 | | | | | 0.1 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 2E-09 | -- | -- | 2E-09 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 8E-10 | -- | -- | 8E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | CADMIUM | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | 0.000006 | - - | 0.000006 |
| | | | COBALT | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0005 | - - | 0.0005 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 1E-10 | -- | -- | 1E-10 | Body Weight | - - | 0.00004 | - - | 0.00004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 1E-08 | -- | -- | 1E-08 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 2E-08 | -- | -- | 2E-08 | | - - | 0.0006 | - - | 0.0006 |
| | | Exposure Point Total | | | | | | 2E-08 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | 2E-08 | | | | | 0.0006 |
| Medium Total | | | | | | | | 1E-04 | | | | | 0.1 |

TABLE 9.12.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - ADOLESCENT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adolescent

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 2E-06 | -- | 8E-07 | -- | 3E-06 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00002 | - - | 0.000007 | 0.00003 |
| | | | ARSENIC | 2E-06 | -- | 2E-07 | -- | 2E-06 | Skin, CVS | 0.03 | - - | 0.003 | 0.03 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.1 | - - | 0.003 | 0.1 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0002 | - - | 0.0001 | 0.0004 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.02 | - - | 0.0006 | 0.02 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-06 | -- | 1E-06 | -- | 2E-06 | None Reported | 0.001 | - - | 0.002 | 0.003 |
| | | | Chemical Total | 5E-06 | -- | 2E-06 | -- | 7E-06 | | 0.2 | -- | 0.008 | 0.2 |
| | | Exposure Point Total | | | | | | 7E-06 | | | | | 0.2 |
| | Exposure Medium Total | | | | | | | 7E-06 | | | | | 0.2 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-11 | -- | -- | 4E-11 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 1E-08 | -- | -- | 1E-08 | Respiratory | - - | 0.0007 | - - | 0.0007 |
| | | | ARSENIC | -- | 8E-10 | -- | -- | 8E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | COBALT | -- | 6E-09 | -- | -- | 6E-09 | Lungs | - - | 0.0006 | - - | 0.0006 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000003 | - - | 0.0000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 2E-08 | -- | -- | 2E-08 | Lungs | - - | 0.000005 | - - | 0.000005 |
| | | | Chemical Total | -- | 4E-08 | -- | -- | 4E-08 | | - - | 0.001 | - - | 0.001 |
| | | Exposure Point Total | | | | | | 4E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | 4E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | 7E-06 | | | | | 0.2 |
| Receptor Total | | | | | | | Receptor Risk Total | 1E-04 | | | | Receptor HI Total | 0.3 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.003 |
| Total Blood HI | 0.2 |
| Total Body Weight HI | 0.002 |
| Total CVS HI | 0.06 |
| Total Kidney HI | 0.03 |
| Total Lungs HI | 0.001 |
| Total None Reported HI | 0.005 |
| Total Skin HI | 0.06 |
| Total Respiratory HI | 0.0007 |
| Total NA HI | 0.0001 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 2E-05 | -- | 1E-05 | -- | 3E-05 | NA | -- | - - | -- | -- |
| | | | ANTIMONY | - - | -- | - - | -- | - - | Blood | 0.003 | - - | 0.0007 | 0.004 |
| | | | ARSENIC | 1E-06 | -- | 1E-07 | -- | 1E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.02 |
| | | | CADMIUM | - - | -- | - - | -- | - - | Kidney | 0.0003 | - - | 0.00004 | 0.0003 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.04 | - - | 0.002 | 0.04 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0009 | - - | 0.0005 | 0.001 |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | Gout | 0.0001 | - - | 0.000005 | 0.0001 |
| | | | NICKEL | - - | -- | - - | -- | - - | Body Weight | 0.0007 | - - | 0.0007 | 0.001 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.007 | - - | 0.0003 | 0.008 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 1E-07 | -- | 2E-07 | -- | 3E-07 | None Reported | 0.0005 | - - | 0.0008 | 0.001 |
| | | | Chemical Total | 2E-05 | -- | 1E-05 | -- | 3E-05 | | 0.07 | -- | 0.007 | 0.08 |
| | | Exposure Point Total | | | | | | 3E-05 | | | | | 0.08 |
| | Exposure Medium Total | | | | | | | 3E-05 | | | | | 0.08 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 7E-10 | -- | -- | 7E-10 | NA | - - | -- | - - | -- |
| | | | ANTIMONY | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | ARSENIC | -- | 8E-10 | -- | -- | 8E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | CADMIUM | -- | 2E-11 | -- | -- | 2E-11 | NA | - - | 0.000006 | - - | 0.000006 |
| | | | COBALT | -- | 4E-09 | -- | -- | 4E-09 | Lungs | - - | 0.0005 | - - | 0.0005 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.000002 | - - | 0.000002 |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | NICKEL | -- | 1E-10 | -- | -- | 1E-10 | Body Weight | - - | 0.00004 | - - | 0.00004 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 5E-09 | -- | -- | 5E-09 | Lungs | - - | 0.000003 | - - | 0.000003 |
| | | | Chemical Total | -- | 1E-08 | -- | -- | 1E-08 | | - - | 0.0006 | - - | 0.0006 |
| | | Exposure Point Total | | | | | | 1E-08 | | | | | 0.0006 |
| | Exposure Medium Total | | | | | | | 1E-08 | | | | | 0.0006 |
| Medium Total | | | | | | | | 3E-05 | | | | | 0.08 |

TABLE 9.13.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - ADULT RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 4E-07 | -- | 2E-07 | -- | 7E-07 | NA | -- | - - | -- | -- |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | Body Weight | 0.00001 | - - | 0.000005 | 0.00002 |
| | | | ARSENIC | 1E-06 | -- | 2E-07 | -- | 1E-06 | Skin, CVS | 0.02 | - - | 0.002 | 0.02 |
| | | | COBALT | - - | -- | - - | -- | - - | Blood | 0.06 | - - | 0.002 | 0.06 |
| | | | LEAD | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | MERCURY | - - | -- | - - | -- | - - | Autoimmune | 0.0001 | - - | 0.00008 | 0.0002 |
| | | | VANADIUM | - - | -- | - - | -- | - - | Kidney | 0.01 | - - | 0.0004 | 0.01 |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | NA | -- | - - | -- | -- |
| | | | HEXAVALENT CHROMIUM | 2E-07 | -- | 3E-07 | -- | 5E-07 | None Reported | 0.0008 | - - | 0.001 | 0.002 |
| | | | Chemical Total | 2E-06 | -- | 7E-07 | -- | 3E-06 | | 0.09 | -- | 0.006 | 0.09 |
| | | Exposure Point Total | | | | | | 3E-06 | | | | | 0.09 |
| | Exposure Medium Total | | | | | | | 3E-06 | | | | | 0.09 |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 1E-11 | -- | -- | 1E-11 | NA | - - | -- | - - | -- |
| | | | NAPHTHALENE | -- | 1E-08 | -- | -- | 1E-08 | Respiratory | - - | 0.0007 | - - | 0.0007 |
| | | | ARSENIC | -- | 8E-10 | -- | -- | 8E-10 | NA | - - | 0.00007 | - - | 0.00007 |
| | | | COBALT | -- | 6E-09 | -- | -- | 6E-09 | Lungs | - - | 0.0006 | - - | 0.0006 |
| | | | LEAD | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | MERCURY | -- | - - | -- | -- | - - | NA | - - | 0.0000003 | - - | 0.0000003 |
| | | | VANADIUM | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | NA | - - | -- | - - | -- |
| | | | HEXAVALENT CHROMIUM | -- | 8E-09 | -- | -- | 8E-09 | Lungs | - - | 0.000005 | - - | 0.000005 |
| | | | Chemical Total | -- | 3E-08 | -- | -- | 3E-08 | | - - | 0.001 | - - | 0.001 |
| | | Exposure Point Total | | | | | | 3E-08 | | | | | 0.001 |
| | Exposure Medium Total | | | | | | | 3E-08 | | | | | 0.001 |
| Medium Total | | | | | | | | 3E-06 | | | | | 0.09 |
| Receptor Total | | | | | | | Receptor Risk Total | 4E-05 | | | | Receptor HI Total | 0.2 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

| | |
|---|---|
| Total Autoimmune HI | 0.002 |
| Total Blood HI | 0.1 |
| Total Body Weight HI | 0.002 |
| Total CVS HI | 0.04 |
| Total Kidney HI | 0.02 |
| Total Lungs HI | 0.001 |
| Total None Reported HI | 0.003 |
| Total Skin HI | 0.04 |
| Total Respiratory HI | 0.0007 |
| Total NA HI | 0.0001 |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 6E-04 | -- | 2E-04 | -- | 8E-04 | | | | | |
| | | | ANTIMONY | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 9E-06 | -- | 8E-07 | -- | 1E-05 | | | | | |
| | | | CADMIUM | - - | -- | - - | -- | - - | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | MOLYBDENUM | - - | -- | - - | -- | - - | | | | | |
| | | | NICKEL | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 4E-06 | -- | 5E-06 | -- | 8E-06 | | | | | |
| | | | Chemical Total | 6E-04 | -- | 2E-04 | -- | 9E-04 | | | | | |
| | | Exposure Point Total | | | | | | 9E-04 | | | | | |
| | Exposure Medium Total | | | | | | | 9E-04 | | | | | |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 4E-09 | -- | -- | 4E-09 | | | | | |
| | | | ANTIMONY | -- | - - | -- | -- | - - | | | | | |
| | | | ARSENIC | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | CADMIUM | -- | 5E-11 | -- | -- | 5E-11 | | | | | |
| | | | COBALT | -- | 1E-08 | -- | -- | 1E-08 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | MOLYBDENUM | -- | - - | -- | -- | - - | | | | | |
| | | | NICKEL | -- | 4E-10 | -- | -- | 4E-10 | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 3E-08 | -- | -- | 3E-08 | | | | | |
| | | | Chemical Total | -- | 5E-08 | -- | -- | 5E-08 | | | | | |
| | | Exposure Point Total | | | | | | 5E-08 | | | | | |
| | Exposure Medium Total | | | | | | | 5E-08 | | | | | |
| Medium Total | | | | | | | | 9E-04 | | | | | |

TABLE 9.14.RME

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPC - BLOCK H - LIFELONG RESIDENT

REASONABLE MAXIMUM EXPOSURES

LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND



Scenario Timeframe: Future
Receptor Population: Resident
Receptor Age: Lifelong

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Subsurface Soil | Subsurface Soil | Block H | BENZO(A)PYRENE EQUIVALENTS | 1E-05 | -- | 5E-06 | -- | 2E-05 | | | | | |
| | | | NAPHTHALENE | - - | -- | - - | -- | - - | | | | | |
| | | | ARSENIC | 9E-06 | -- | 9E-07 | -- | 1E-05 | | | | | |
| | | | COBALT | - - | -- | - - | -- | - - | | | | | |
| | | | LEAD | - - | -- | - - | -- | - - | | | | | |
| | | | MERCURY | - - | -- | - - | -- | - - | | | | | |
| | | | VANADIUM | - - | -- | - - | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | - - | -- | - - | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | 6E-06 | -- | 7E-06 | -- | 1E-05 | | | | | |
| | | | Chemical Total | 3E-05 | -- | 1E-05 | -- | 4E-05 | | | | | |
| | | Exposure Point Total | | | | | | 4E-05 | | | | | |
| | Exposure Medium Total | | | | | | | 4E-05 | | | | | |
| | Air | Block H | BENZO(A)PYRENE EQUIVALENTS | -- | 9E-11 | -- | -- | 9E-11 | | | | | |
| | | | NAPHTHALENE | -- | 3E-08 | -- | -- | 3E-08 | | | | | |
| | | | ARSENIC | -- | 2E-09 | -- | -- | 2E-09 | | | | | |
| | | | COBALT | -- | 1E-08 | -- | -- | 1E-08 | | | | | |
| | | | LEAD | -- | - - | -- | -- | - - | | | | | |
| | | | MERCURY | -- | - - | -- | -- | - - | | | | | |
| | | | VANADIUM | -- | - - | -- | -- | - - | | | | | |
| | | | DIESEL RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | GASOLINE RANGE ORGANICS | -- | - - | -- | -- | - - | | | | | |
| | | | HEXAVALENT CHROMIUM | -- | 5E-08 | -- | -- | 5E-08 | | | | | |
| | | | Chemical Total | -- | 1E-07 | -- | -- | 1E-07 | | | | | |
| | | Exposure Point Total | | | | | | 1E-07 | | | | | |
| | Exposure Medium Total | | | | | | | 1E-07 | | | | | |
| Medium Total | | | | | | | | 4E-05 | | | | | |
| Receptor Total | | | | | | | Receptor Risk Total | 9E-04 | | | | | |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

2 - See Section 3 of the text for benzo(a)pyrene equivalents calculation methodology.

# APPENDIX D-2

# ProUCL OUTPUT

# Subsurface Soil

PROUCL OUTPUT - BLOCK D SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | BLOCK D.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**ARSENIC**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 89 | Number of Detected Data | 83 |
| Number of Distinct Detected Data | 54 | Number of Non-Detect Data | 6 |
| Number of Missing Values | 354 | Percent Non-Detects | 6.74% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.65 | Minimum Detected | -0.431 |
| Maximum Detected | 14.3 | Maximum Detected | 2.66 |
| Mean of Detected | 4.431 | Mean of Detected | 1.334 |
| SD of Detected | 2.341 | SD of Detected | 0.6 |
| Minimum Non-Detect | 0.51 | Minimum Non-Detect | -0.673 |
| Maximum Non-Detect | 3 | Maximum Non-Detect | 1.099 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 29 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 60 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 32.58% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.0745 | Lilliefors Test Statistic | 0.128 |
| 5% Lilliefors Critical Value | 0.0973 | 5% Lilliefors Critical Value | 0.0973 |
| **Data appear Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 4.166 | Mean | 1.181 |
| SD | 2.47 | SD | 0.829 |
| 95% DL/2 (t) UCL | 4.601 | 95% H-Stat (DL/2) UCL | 5.523 |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 4.048 | Mean in Log Scale | 1.25 |
| SD | 2.669 | SD in Log Scale | 0.661 |
| 95% MLE (t) UCL | 4.518 | Mean in Original Scale | 4.208 |
| 95% MLE (Tiku) UCL | 4.553 | SD in Original Scale | 2.409 |
| | | 95% t UCL | 4.633 |
| | | 95% Percentile Bootstrap UCL | 4.626 |
| | | 95% BCA Bootstrap UCL | 4.66 |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 3.273 | **Data appear Normal at 5% Significance Level** | |

| | | | |
|---|---|---|---|
| Theta Star | 1.354 | | |
| nu star | 543.3 | | |
| | | | |
| A-D Test Statistic | 0.465 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.758 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.758 | Mean | 4.187 |
| 5% K-S Critical Value | 0.0987 | SD | 2.426 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.259 |
| | | 95% KM (t) UCL | 4.617 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 4.613 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 4.612 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 4.652 |
| Maximum | 14.3 | 95% KM (BCA) UCL | 4.667 |
| Mean | 4.159 | 95% KM (Percentile Bootstrap) UCL | 4.616 |
| Median | 4 | 95% KM (Chebyshev) UCL | 5.315 |
| SD | 2.488 | 97.5% KM (Chebyshev) UCL | 5.804 |
| k star | 0.441 | 99% KM (Chebyshev) UCL | 6.763 |
| Theta star | 9.436 | | |
| Nu star | 78.45 | **Potential UCLs to Use** | |
| AppChi2 | 59.04 | 95% KM (t) UCL | 4.617 |
| 95% Gamma Approximate UCL | 5.526 | 95% KM (Percentile Bootstrap) UCL | 4.616 |
| 95% Adjusted Gamma UCL | 5.552 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**LEAD**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 90 | Number of Detected Data | 88 |
| Number of Distinct Detected Data | 66 | Number of Non-Detect Data | 2 |
| Number of Missing Values | 353 | Percent Non-Detects | 2.22% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 2.9 | Minimum Detected | 1.065 |
| Maximum Detected | 1010 | Maximum Detected | 6.918 |
| Mean of Detected | 23.38 | Mean of Detected | 2.198 |
| SD of Detected | 107.5 | SD of Detected | 0.884 |
| Minimum Non-Detect | 2.6 | Minimum Non-Detect | 0.956 |
| Maximum Non-Detect | 2.7 | Maximum Non-Detect | 0.993 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 2 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 88 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 2.22% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | **Lognormal Distribution Test with Detected Values Only** |
|---|---|

PROUCL OUTPUT - BLOCK D SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.424 | Lilliefors Test Statistic | 0.153 |
| 5% Lilliefors Critical Value | 0.0944 | 5% Lilliefors Critical Value | 0.0944 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 22.89 | Mean | 2.155 |
| SD | 106.3 | SD | 0.919 |
| 95% DL/2 (t) UCL | 41.52 | 95% H-Stat (DL/2) UCL | 16.26 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 21.16 | Mean in Log Scale | 2.152 |
| SD | 107.1 | SD in Log Scale | 0.926 |
| 95% MLE (t) UCL | 39.93 | Mean in Original Scale | 22.88 |
| 95% MLE (Tiku) UCL | 37.69 | SD in Original Scale | 106.3 |
| | | 95% t UCL | 41.51 |
| | | 95% Percentile Bootstrap UCL | 44.76 |
| | | 95% BCA Bootstrap UCL | 66.07 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.627 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 37.27 | | |
| nu star | 110.4 | | |
| | | | |
| A-D Test Statistic | 12.89 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.804 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.804 | Mean | 22.92 |
| 5% K-S Critical Value | 0.0998 | SD | 105.7 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 11.21 |
| | | 95% KM (t) UCL | 41.55 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 41.36 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 41.55 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 162 |
| Maximum | 1010 | 95% KM (BCA) UCL | 45.59 |
| Mean | 22.86 | 95% KM (Percentile Bootstrap) UCL | 45 |
| Median | 7.35 | 95% KM (Chebyshev) UCL | 71.78 |
| SD | 106.3 | 97.5% KM (Chebyshev) UCL | 92.93 |
| k star | 0.405 | 99% KM (Chebyshev) UCL | 134.5 |
| Theta star | 56.48 | | |
| Nu star | 72.84 | **Potential UCLs to Use** | |
| AppChi2 | 54.19 | 95% KM (BCA) UCL | 45.59 |
| 95% Gamma Approximate UCL | 30.72 | | |
| 95% Adjusted Gamma UCL | 30.87 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

| MERCURY | | | |
|---|---|---|---|
| | | | |
| **General Statistics** | | | |
| Number of Valid Data | 171 | Number of Detected Data | 57 |
| Number of Distinct Detected Data | 45 | Number of Non-Detect Data | 114 |
| Number of Missing Values | 272 | Percent Non-Detects | 66.67% |
| | | | |
| **Raw Statistics** | | **Log-transformed Statistics** | |
| Minimum Detected | 0.021 | Minimum Detected | -3.863 |
| Maximum Detected | 3.3 | Maximum Detected | 1.194 |
| Mean of Detected | 0.337 | Mean of Detected | -1.842 |
| SD of Detected | 0.511 | SD of Detected | 1.287 |
| Minimum Non-Detect | 0.002 | Minimum Non-Detect | -6.215 |
| Maximum Non-Detect | 0.15 | Maximum Non-Detect | -1.897 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 139 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 32 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 81.29% |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Lilliefors Test Statistic | 0.268 | Lilliefors Test Statistic | 0.119 |
| 5% Lilliefors Critical Value | 0.117 | 5% Lilliefors Critical Value | 0.117 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.128 | Mean | -3.35 |
| SD | 0.329 | SD | 1.485 |
| 95% DL/2 (t) UCL | 0.17 | 95% H-Stat (DL/2) UCL | 0.143 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -4.204 |
| | | SD in Log Scale | 2.059 |
| | | Mean in Original Scale | 0.118 |
| | | SD in Original Scale | 0.332 |
| | | 95% t UCL | 0.16 |
| | | 95% Percentile Bootstrap UCL | 0.163 |
| | | 95% BCA Bootstrap UCL | 0.172 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.757 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 0.446 | | |
| nu star | 86.34 | | |
| | | | |
| A-D Test Statistic | 1.089 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.791 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.791 | Mean | 0.128 |
| 5% K-S Critical Value | 0.122 | SD | 0.328 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.0253 |

| | | | |
|---|---|---|---|
| | | 95% KM (t) UCL | 0.169 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.169 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.169 |
| Minimum | 0.0144 | 95% KM (bootstrap t) UCL | 0.198 |
| Maximum | 3.3 | 95% KM (BCA) UCL | 0.18 |
| Mean | 0.36 | 95% KM (Percentile Bootstrap) UCL | 0.172 |
| Median | 0.33 | 95% KM (Chebyshev) UCL | 0.238 |
| SD | 0.34 | 97.5% KM (Chebyshev) UCL | 0.286 |
| k star | 1.347 | 99% KM (Chebyshev) UCL | 0.38 |
| Theta star | 0.268 | | |
| Nu star | 460.7 | **Potential UCLs to Use** | |
| AppChi2 | 411.9 | 95% KM (BCA) UCL | 0.18 |
| 95% Gamma Approximate UCL | 0.403 | | |
| 95% Adjusted Gamma UCL | 0.403 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**1,2,3-TRICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 84 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 84 |
| Number of Missing Values | 359 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,2,3-TRICHLOROBENZENE was not processed!**

**1,2,4-TRICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 84 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 84 |
| Number of Missing Values | 359 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,2,4-TRICHLOROBENZENE was not processed!**

1,3-DICHLOROBENZENE

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 84 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 84 |
| Number of Missing Values | 359 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,3-DICHLOROBENZENE was not processed!**

1,4-DICHLOROBENZENE

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 84 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 84 |
| Number of Missing Values | 359 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,4-DICHLOROBENZENE was not processed!**

OV_NAPHTHALENE

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 84 | Number of Detected Data | 3 |
| Number of Distinct Detected Data | 3 | Number of Non-Detect Data | 81 |
| Number of Missing Values | 359 | Percent Non-Detects | 96.43% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 16 | Minimum Detected | 2.773 |
| Maximum Detected | 4000 | Maximum Detected | 8.294 |
| Mean of Detected | 1972 | Mean of Detected | 6.205 |
| SD of Detected | 1993 | SD of Detected | 2.996 |
| Minimum Non-Detect | 0.13 | Minimum Non-Detect | -2.04 |
| Maximum Non-Detect | 7 | Maximum Non-Detect | 1.946 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 81 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 3 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 96.43% |

PROUCL OUTPUT - BLOCK D SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| **Warning: There are only 3 Distinct Detected Values in this data set** | | | |
| **The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.** | | | |
| **Those methods will return a 'N/A' value on your output display!** | | | |
| | | | |
| **It is necessary to have 4 or more Distinct Values for bootstrap methods.** | | | |
| **However, results obtained using 4 to 9 distinct values may not be reliable.** | | | |
| **It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.** | | | |
| | | | |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.999 | Shapiro Wilk Test Statistic | 0.849 |
| 5% Shapiro Wilk Critical Value | 0.767 | 5% Shapiro Wilk Critical Value | 0.767 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 71.62 | Mean | -0.3 |
| SD | 480.7 | SD | 1.899 |
| 95% DL/2 (t) UCL | 158.9 | 95% H-Stat (DL/2) UCL | 8.844 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -18.51 |
| | | SD in Log Scale | 8.425 |
| | | Mean in Original Scale | 70.43 |
| | | SD in Original Scale | 480.9 |
| | | 95% t UCL | 157.7 |
| | | 95% Percentile Bootstrap UCL | 165.7 |
| | | 95% BCA Bootstrap UCL | 238.1 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | N/A | **Data appear Normal at 5% Significance Level** | |
| Theta Star | N/A | | |
| nu star | N/A | | |
| | | | |
| A-D Test Statistic | N/A | **Nonparametric Statistics** | |
| 5% A-D Critical Value | N/A | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | N/A | Mean | 85.86 |
| 5% K-S Critical Value | N/A | SD | 475.7 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 63.57 |
| | | 95% KM (t) UCL | 191.6 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 190.4 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 1294 |
| Minimum | N/A | 95% KM (bootstrap t) UCL | 131.2 |
| Maximum | N/A | 95% KM (BCA) UCL | 4000 |
| Mean | N/A | 95% KM (Percentile Bootstrap) UCL | 4000 |
| Median | N/A | 95% KM (Chebyshev) UCL | 363 |
| SD | N/A | 97.5% KM (Chebyshev) UCL | 482.9 |
| k star | N/A | 99% KM (Chebyshev) UCL | 718.4 |
| Theta star | N/A | | |

| | | | |
|---|---|---|---|
| Nu star | N/A | **Potential UCLs to Use** | |
| AppChi2 | N/A | 95% KM (t) UCL | 191.6 |
| 95% Gamma Approximate UCL | N/A | 95% KM (Percentile Bootstrap) UCL | 4000 |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**PAH_NAPHTHALENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 157 | Number of Detected Data | 34 |
| Number of Distinct Detected Data | 30 | Number of Non-Detect Data | 123 |
| Number of Missing Values | 286 | Percent Non-Detects | 78.34% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 8.9 | Minimum Detected | 2.186 |
| Maximum Detected | 1600 | Maximum Detected | 7.378 |
| Mean of Detected | 150.9 | Mean of Detected | 3.86 |
| SD of Detected | 309.6 | SD of Detected | 1.436 |
| Minimum Non-Detect | 3.6 | Minimum Non-Detect | 1.281 |
| Maximum Non-Detect | 3900 | Maximum Non-Detect | 8.269 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 157 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 100.00% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.508 | Shapiro Wilk Test Statistic | 0.914 |
| 5% Shapiro Wilk Critical Value | 0.933 | 5% Shapiro Wilk Critical Value | 0.933 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 86.91 | Mean | 2.111 |
| SD | 266.6 | SD | 2.052 |
| 95% DL/2 (t) UCL | 122.1 | 95% H-Stat (DL/2) UCL | 117.8 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | 0.231 |
| | | SD in Log Scale | 2.574 |
| | | Mean in Original Scale | 33.86 |
| | | SD in Original Scale | 155.2 |
| | | 95% t UCL | 54.36 |
| | | 95% Percentile Bootstrap UCL | 56.36 |
| | | 95% BCA Bootstrap UCL | 65.6 |

| | | | |
|---|---|---|---|
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.514 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 293.4 | | |
| nu star | 34.97 | | |
| | | | |
| A-D Test Statistic | 2.205 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.808 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.808 | Mean | 42.02 |
| 5% K-S Critical Value | 0.159 | SD | 155.2 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 12.76 |
| | | 95% KM (t) UCL | 63.13 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 63.01 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 62.89 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 85.52 |
| Maximum | 1600 | 95% KM (BCA) UCL | 67.93 |
| Mean | 133.1 | 95% KM (Percentile Bootstrap) UCL | 65.11 |
| Median | 126.2 | 95% KM (Chebyshev) UCL | 97.63 |
| SD | 149.3 | 97.5% KM (Chebyshev) UCL | 121.7 |
| k star | 1.033 | 99% KM (Chebyshev) UCL | 169 |
| Theta star | 128.8 | | |
| Nu star | 324.4 | **Potential UCLs to Use** | |
| AppChi2 | 283.6 | 95% KM (BCA) UCL | 67.93 |
| 95% Gamma Approximate UCL | 152.2 | | |
| 95% Adjusted Gamma UCL | 152.4 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

AROCLOR-1254

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 96 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 96 |
| Number of Missing Values | 347 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable AROCLOR-1254 was not processed!**

AROCLOR-1260

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 96 | Number of Detected Data | 1 |
| Number of Distinct Detected Data | 1 | Number of Non-Detect Data | 95 |
| Number of Missing Values | 347 | Percent Non-Detects | 98.96% |

**Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!**

**It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable AROCLOR-1260 was not processed!**

DIESEL RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 84 | Number of Detected Data | 53 |
| Number of Distinct Detected Data | 43 | Number of Non-Detect Data | 31 |
| Number of Missing Values | 359 | Percent Non-Detects | 36.90% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 3400 | Minimum Detected | 8.132 |
| Maximum Detected | 230000 | Maximum Detected | 12.35 |
| Mean of Detected | 32626 | Mean of Detected | 9.741 |
| SD of Detected | 43875 | SD of Detected | 1.114 |
| Minimum Non-Detect | 3200 | Minimum Non-Detect | 8.071 |
| Maximum Non-Detect | 27000 | Maximum Non-Detect | 10.2 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 66 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 18 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 78.57% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.253 | Lilliefors Test Statistic | 0.151 |
| 5% Lilliefors Critical Value | 0.122 | 5% Lilliefors Critical Value | 0.122 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 22484 | Mean | 9.236 |
| SD | 37242 | SD | 1.169 |
| 95% DL/2 (t) UCL | 29243 | 95% H-Stat (DL/2) UCL | 27666 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 9.121 |
| | | SD in Log Scale | 1.302 |
| | | Mean in Original Scale | 22186 |
| | | SD in Original Scale | 37402 |
| | | 95% t UCL | 28974 |
| | | 95% Percentile Bootstrap UCL | 29494 |
| | | 95% BCA Bootstrap UCL | 31148 |

| | | | |
|---|---|---|---|
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.859 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 37986 | | |
| nu star | 91.04 | | |
| | | | |
| A-D Test Statistic | 2.256 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.785 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.785 | Mean | 22522 |
| 5% K-S Critical Value | 0.126 | SD | 36994 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 4079 |
| | | 95% KM (t) UCL | 29307 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 29231 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 29180 |
| Minimum | 3400 | 95% KM (bootstrap t) UCL | 31900 |
| Maximum | 230000 | 95% KM (BCA) UCL | 29627 |
| Mean | 30562 | 95% KM (Percentile Bootstrap) UCL | 29866 |
| Median | 17702 | 95% KM (Chebyshev) UCL | 40302 |
| SD | 35521 | 97.5% KM (Chebyshev) UCL | 47995 |
| k star | 1.22 | 99% KM (Chebyshev) UCL | 63106 |
| Theta star | 25060 | | |
| Nu star | 204.9 | **Potential UCLs to Use** | |
| AppChi2 | 172.8 | 95% KM (Chebyshev) UCL | 40302 |
| 95% Gamma Approximate UCL | 36244 | | |
| 95% Adjusted Gamma UCL | 36352 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**GASOLINE RANGE ORGANICS**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 84 | Number of Detected Data | 3 |
| Number of Distinct Detected Data | 3 | Number of Non-Detect Data | 81 |
| Number of Missing Values | 359 | Percent Non-Detects | 96.43% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 150 | Minimum Detected | 5.011 |
| Maximum Detected | 250 | Maximum Detected | 5.521 |
| Mean of Detected | 196.7 | Mean of Detected | 5.26 |
| SD of Detected | 50.33 | SD of Detected | 0.256 |
| Minimum Non-Detect | 51 | Minimum Non-Detect | 3.932 |
| Maximum Non-Detect | 150 | Maximum Non-Detect | 5.011 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 81 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 3 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 96.43% |

PROUCL OUTPUT - BLOCK D SUBSURFACE SOIL

**Warning: There are only 3 Distinct Detected Values in this data set**

**The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.**

**Those methods will return a 'N/A' value on your output display!**

**It is necessary to have 4 or more Distinct Values for bootstrap methods.**

**However, results obtained using 4 to 9 distinct values may not be reliable.**

**It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.987 | Shapiro Wilk Test Statistic | 0.998 |
| 5% Shapiro Wilk Critical Value | 0.767 | 5% Shapiro Wilk Critical Value | 0.767 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 43.67 | Mean | 3.623 |
| SD | 34.48 | SD | 0.487 |
| 95% DL/2 (t) UCL | 49.93 | 95% H-Stat (DL/2) UCL | 46.5 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 2.823 |
| | | SD in Log Scale | 0.918 |
| | | Mean in Original Scale | 27.01 |
| | | SD in Original Scale | 37.36 |
| | | 95% t UCL | 33.79 |
| | | 95% Percentile Bootstrap UCL | 33.73 |
| | | 95% BCA Bootstrap UCL | 35.65 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | N/A | **Data appear Normal at 5% Significance Level** | |
| Theta Star | N/A | | |
| nu star | N/A | | |
| | | | |
| A-D Test Statistic | N/A | **Nonparametric Statistics** | |
| 5% A-D Critical Value | N/A | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | N/A | Mean | 151.7 |
| 5% K-S Critical Value | N/A | SD | 11.63 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 1.554 |
| | | 95% KM (t) UCL | 154.3 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 154.2 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 177.3 |
| Minimum | N/A | 95% KM (bootstrap t) UCL | 153.1 |
| Maximum | N/A | 95% KM (BCA) UCL | N/A |
| Mean | N/A | 95% KM (Percentile Bootstrap) UCL | N/A |
| Median | N/A | 95% KM (Chebyshev) UCL | 158.4 |
| SD | N/A | 97.5% KM (Chebyshev) UCL | 161.4 |
| k star | N/A | 99% KM (Chebyshev) UCL | 167.1 |

| | | | |
|---|---|---|---|
| Theta star | N/A | | |
| Nu star | N/A | **Potential UCLs to Use** | |
| AppChi2 | N/A | 95% KM (t) UCL | 154.3 |
| 95% Gamma Approximate UCL | N/A | 95% KM (Percentile Bootstrap) UCL | N/A |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK D SUBSURFACE SOIL

| | General UCL Statistics for Full Data Sets |
|---|---|
| **User Selected Options** | |
| From File | Sheet1.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**COBALT**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 66 | Number of Distinct Observations | 56 |
| Number of Missing Values | 272 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 2 | Minimum of Log Data | 0.693 |
| Maximum | 33 | Maximum of Log Data | 3.497 |
| Mean | 10.06 | Mean of log Data | 2.09 |
| Median | 7.05 | SD of log Data | 0.652 |
| SD | 7.313 | | |
| Coefficient of Variation | 0.727 | | |
| Skewness | 1.524 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.191 | Lilliefors Test Statistic | 0.094 |
| Lilliefors Critical Value | 0.109 | Lilliefors Critical Value | 0.109 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 11.56 | 95% H-UCL | 11.73 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 13.75 |
| 95% Adjusted-CLT UCL (Chen-1995) | 11.72 | 97.5% Chebyshev (MVUE) UCL | 15.39 |
| 95% Modified-t UCL (Johnson-1978) | 11.59 | 99% Chebyshev (MVUE) UCL | 18.61 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 2.338 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 4.303 | | |
| MLE of Mean | 10.06 | | |
| MLE of Standard Deviation | 6.58 | | |
| nu star | 308.6 | | |
| Approximate Chi Square Value (.05) | 268.9 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0464 | 95% CLT UCL | 11.54 |
| Adjusted Chi Square Value | 268.1 | 95% Jackknife UCL | 11.56 |
| | | 95% Standard Bootstrap UCL | 11.54 |
| Anderson-Darling Test Statistic | 1.305 | 95% Bootstrap-t UCL | 11.81 |
| Anderson-Darling 5% Critical Value | 0.761 | 95% Hall's Bootstrap UCL | 11.81 |
| Kolmogorov-Smirnov Test Statistic | 0.131 | 95% Percentile Bootstrap UCL | 11.61 |
| Kolmogorov-Smirnov 5% Critical Value | 0.111 | 95% BCA Bootstrap UCL | 11.68 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 13.98 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 15.68 |

| | | | |
|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 19.02 |
| 95% Approximate Gamma UCL | 11.55 | | |
| 95% Adjusted Gamma UCL | 11.58 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% H-UCL | 11.73 |

**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**

**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**

**It is therefore recommended to avoid the use of H-statistic based 95% UCLs.**

**Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

**IRON**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 60 | Number of Distinct Observations | 58 |
| Number of Missing Values | 224 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 1420 | Minimum of Log Data | 7.258 |
| Maximum | 72900 | Maximum of Log Data | 11.2 |
| Mean | 27943 | Mean of log Data | 10.05 |
| Median | 28150 | SD of log Data | 0.742 |
| SD | 13883 | | |
| Coefficient of Variation | 0.497 | | |
| Skewness | 0.323 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.0623 | Lilliefors Test Statistic | 0.19 |
| Lilliefors Critical Value | 0.114 | Lilliefors Critical Value | 0.114 |
| **Data appear Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |

| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
|---|---|---|---|
| 95% Student's-t UCL | 30937 | 95% H-UCL | 37223 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 44287 |
| 95% Adjusted-CLT UCL (Chen-1995) | 30970 | 97.5% Chebyshev (MVUE) UCL | 50353 |
| 95% Modified-t UCL (Johnson-1978) | 30950 | 99% Chebyshev (MVUE) UCL | 62269 |

| **Gamma Distribution Test** | | **Data Distribution** | |
|---|---|---|---|
| k star (bias corrected) | 2.661 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 10500 | | |
| MLE of Mean | 27943 | | |
| MLE of Standard Deviation | 17128 | | |
| nu star | 319.4 | | |
| Approximate Chi Square Value (.05) | 279 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.046 | 95% CLT UCL | 30890 |

| | | | |
|---|---|---|---|
| Adjusted Chi Square Value | 278 | 95% Jackknife UCL | 30937 |
| | | 95% Standard Bootstrap UCL | 30810 |
| Anderson-Darling Test Statistic | 1.646 | 95% Bootstrap-t UCL | 31216 |
| Anderson-Darling 5% Critical Value | 0.759 | 95% Hall's Bootstrap UCL | 30956 |
| Kolmogorov-Smirnov Test Statistic | 0.139 | 95% Percentile Bootstrap UCL | 30895 |
| Kolmogorov-Smirnov 5% Critical Value | 0.116 | 95% BCA Bootstrap UCL | 31044 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 35755 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 39135 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 45775 |
| 95% Approximate Gamma UCL | 31990 | | |
| 95% Adjusted Gamma UCL | 32096 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 30937 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

**MANGANESE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 60 | Number of Distinct Observations | 59 |
| Number of Missing Values | 224 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 5.9 | Minimum of Log Data | 1.775 |
| Maximum | 326 | Maximum of Log Data | 5.787 |
| Mean | 56.92 | Mean of log Data | 3.733 |
| Median | 44.75 | SD of log Data | 0.822 |
| SD | 49.36 | | |
| Coefficient of Variation | 0.867 | | |
| Skewness | 2.959 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.151 | Lilliefors Test Statistic | 0.0972 |
| Lilliefors Critical Value | 0.114 | Lilliefors Critical Value | 0.114 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 67.56 | 95% H-UCL | 73.8 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 88.59 |
| 95% Adjusted-CLT UCL (Chen-1995) | 70 | 97.5% Chebyshev (MVUE) UCL | 101.8 |
| 95% Modified-t UCL (Johnson-1978) | 67.97 | 99% Chebyshev (MVUE) UCL | 127.6 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 1.694 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 33.6 | | |
| MLE of Mean | 56.92 | | |
| MLE of Standard Deviation | 43.73 | | |

| | | | |
|---|---|---|---|
| nu star | 203.2 | | |
| Approximate Chi Square Value (.05) | 171.3 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.046 | 95% CLT UCL | 67.4 |
| Adjusted Chi Square Value | 170.5 | 95% Jackknife UCL | 67.56 |
| | | 95% Standard Bootstrap UCL | 67.14 |
| Anderson-Darling Test Statistic | 0.374 | 95% Bootstrap-t UCL | 70.49 |
| Anderson-Darling 5% Critical Value | 0.766 | 95% Hall's Bootstrap UCL | 80.46 |
| Kolmogorov-Smirnov Test Statistic | 0.0605 | 95% Percentile Bootstrap UCL | 67.95 |
| Kolmogorov-Smirnov 5% Critical Value | 0.116 | 95% BCA Bootstrap UCL | 69.65 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 84.69 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 96.71 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 120.3 |
| 95% Approximate Gamma UCL | 67.55 | | |
| 95% Adjusted Gamma UCL | 67.83 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 67.55 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**
**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

VANADIUM

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 66 | Number of Distinct Observations | 61 |
| Number of Missing Values | 272 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 2.1 | Minimum of Log Data | 0.742 |
| Maximum | 90.5 | Maximum of Log Data | 4.505 |
| Mean | 38.64 | Mean of log Data | 3.524 |
| Median | 38.1 | SD of log Data | 0.593 |
| SD | 17.48 | | |
| Coefficient of Variation | 0.453 | | |
| Skewness | 0.661 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.0944 | Lilliefors Test Statistic | 0.155 |
| Lilliefors Critical Value | 0.109 | Lilliefors Critical Value | 0.109 |
| **Data appear Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 42.23 | 95% H-UCL | 46.57 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 54.03 |
| 95% Adjusted-CLT UCL (Chen-1995) | 42.36 | 97.5% Chebyshev (MVUE) UCL | 59.98 |
| 95% Modified-t UCL (Johnson-1978) | 42.26 | 99% Chebyshev (MVUE) UCL | 71.66 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 3.815 | **Data appear Normal at 5% Significance Level** | |

PROUCL OUTPUT - BLOCK D SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| Theta Star | 10.13 | | |
| MLE of Mean | 38.64 | | |
| MLE of Standard Deviation | 19.78 | | |
| nu star | 503.6 | | |
| Approximate Chi Square Value (.05) | 452.5 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0464 | 95% CLT UCL | 42.18 |
| Adjusted Chi Square Value | 451.4 | 95% Jackknife UCL | 42.23 |
| | | 95% Standard Bootstrap UCL | 42.07 |
| Anderson-Darling Test Statistic | 0.837 | 95% Bootstrap-t UCL | 42.5 |
| Anderson-Darling 5% Critical Value | 0.755 | 95% Hall's Bootstrap UCL | 42.71 |
| Kolmogorov-Smirnov Test Statistic | 0.114 | 95% Percentile Bootstrap UCL | 42.31 |
| Kolmogorov-Smirnov 5% Critical Value | 0.11 | 95% BCA Bootstrap UCL | 42.51 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 48.02 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 52.08 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 60.05 |
| 95% Approximate Gamma UCL | 43 | | |
| 95% Adjusted Gamma UCL | 43.1 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 42.23 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK D SUBSURFACE SOIL

| | General UCL Statistics for Full Data Sets |
|---|---|
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**5% OF TOTAL CHROMIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 90 | Number of Distinct Observations | 81 |
| Number of Missing Values | 1 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.11 | Minimum of Log Data | -2.207 |
| Maximum | 6 | Maximum of Log Data | 1.792 |
| Mean | 1.113 | Mean of log Data | -0.0254 |
| Median | 1.013 | SD of log Data | 0.528 |
| SD | 0.692 | | |
| Coefficient of Variation | 0.621 | | |
| Skewness | 4.287 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.191 | Lilliefors Test Statistic | 0.116 |
| Lilliefors Critical Value | 0.0934 | Lilliefors Critical Value | 0.0934 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 1.234 | 95% H-UCL | 1.244 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 1.407 |
| 95% Adjusted-CLT UCL (Chen-1995) | 1.268 | 97.5% Chebyshev (MVUE) UCL | 1.532 |
| 95% Modified-t UCL (Johnson-1978) | 1.24 | 99% Chebyshev (MVUE) UCL | 1.777 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 3.814 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 0.292 | | |
| MLE of Mean | 1.113 | | |
| MLE of Standard Deviation | 0.57 | | |
| nu star | 686.5 | | |
| Approximate Chi Square Value (.05) | 626.7 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0473 | 95% CLT UCL | 1.233 |
| Adjusted Chi Square Value | 625.8 | 95% Jackknife UCL | 1.234 |
| | | 95% Standard Bootstrap UCL | 1.23 |
| Anderson-Darling Test Statistic | 1.757 | 95% Bootstrap-t UCL | 1.297 |
| Anderson-Darling 5% Critical Value | 0.756 | 95% Hall's Bootstrap UCL | 1.761 |
| Kolmogorov-Smirnov Test Statistic | 0.112 | 95% Percentile Bootstrap UCL | 1.242 |
| Kolmogorov-Smirnov 5% Critical Value | 0.0945 | 95% BCA Bootstrap UCL | 1.264 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 1.431 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 1.568 |

PROUCL OUTPUT - BLOCK D SUBSURFACE SOIL

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | | | | | 1.838 |
| 95% Approximate Gamma UCL | 1.219 | | | | | | |
| 95% Adjusted Gamma UCL | 1.221 | | | | | | |
| | | | | | | | |
| **Potential UCL to Use** | | Use 95% Chebyshev (Mean, Sd) UCL | | | | | 1.431 |
| | | | | | | | |
| **Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.** | | | | | | | |
| **These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)** | | | | | | | |
| **and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.** | | | | | | | |
| | | | | | | | |

PROUCL OUTPUT - BLOCK D SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**BENZO(A)PYRENE EQUIVALENTS**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 418 | Number of Detected Data | 222 |
| Number of Distinct Detected Data | 212 | Number of Non-Detect Data | 196 |
| Number of Missing Values | 26 | Percent Non-Detects | 46.89% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 2.446 | Minimum Detected | 0.894 |
| Maximum Detected | 24437 | Maximum Detected | 10.1 |
| Mean of Detected | 436.3 | Mean of Detected | 4.28 |
| SD of Detected | 1843 | SD of Detected | 1.698 |
| Minimum Non-Detect | 1.4 | Minimum Non-Detect | 0.336 |
| Maximum Non-Detect | 4200 | Maximum Non-Detect | 8.343 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 411 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 7 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 98.33% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.407 | Lilliefors Test Statistic | 0.0617 |
| 5% Lilliefors Critical Value | 0.0595 | 5% Lilliefors Critical Value | 0.0595 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 247.4 | Mean | 2.625 |
| SD | 1361 | SD | 2.456 |
| 95% DL/2 (t) UCL | 357.1 | 95% H-Stat (DL/2) UCL | 437.1 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 2.424 |
| | | SD in Log Scale | 2.541 |
| | | Mean in Original Scale | 233.6 |
| | | SD in Original Scale | 1359 |
| | | 95% t UCL | 343.2 |
| | | 95% Percentile Bootstrap UCL | 353.9 |
| | | 95% BCA Bootstrap UCL | 418.2 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.369 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 1184 | | |

PROUCL OUTPUT - BLOCK D SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| nu star | 163.6 | | |
| | | | |
| A-D Test Statistic | 17.3 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.852 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.852 | Mean | 235 |
| 5% K-S Critical Value | 0.0658 | SD | 1357 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 66.54 |
| | | 95% KM (t) UCL | 344.7 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 344.5 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 344.6 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 483.2 |
| Maximum | 24437 | 95% KM (BCA) UCL | 368.4 |
| Mean | 421.2 | 95% KM (Percentile Bootstrap) UCL | 346.8 |
| Median | 45.63 | 95% KM (Chebyshev) UCL | 525.1 |
| SD | 1504 | 97.5% KM (Chebyshev) UCL | 650.6 |
| k star | 0.0874 | 99% KM (Chebyshev) UCL | 897.1 |
| Theta star | 4817 | | |
| Nu star | 73.11 | **Potential UCLs to Use** | |
| AppChi2 | 54.42 | 97.5% KM (Chebyshev) UCL | 650.6 |
| 95% Gamma Approximate UCL | 565.8 | | |
| 95% Adjusted Gamma UCL | 566.4 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**5% OF TOTAL CHROMIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 54 | Number of Detected Data | 45 |
| Number of Distinct Detected Data | 38 | Number of Non-Detect Data | 9 |
| Number of Missing Values | 1 | Percent Non-Detects | 16.67% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.075 | Minimum Detected | -2.59 |
| Maximum Detected | 1.35 | Maximum Detected | 0.3 |
| Mean of Detected | 0.473 | Mean of Detected | -0.902 |
| SD of Detected | 0.269 | SD of Detected | 0.588 |
| Minimum Non-Detect | 0.165 | Minimum Non-Detect | -1.802 |
| Maximum Non-Detect | 0.7 | Maximum Non-Detect | -0.357 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 50 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 4 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 92.59% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.868 | Shapiro Wilk Test Statistic | 0.957 |
| 5% Shapiro Wilk Critical Value | 0.945 | 5% Shapiro Wilk Critical Value | 0.945 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.424 | Mean | -1.065 |
| SD | 0.272 | SD | 0.684 |
| 95% DL/2 (t) UCL | 0.486 | 95% H-Stat (DL/2) UCL | 0.527 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 1.169 | Mean in Log Scale | -1.014 |
| SD | 0.222 | SD in Log Scale | 0.604 |
| 95% MLE (t) UCL | 1.22 | Mean in Original Scale | 0.431 |
| 95% MLE (Tiku) UCL | 1.354 | SD in Original Scale | 0.265 |
| | | 95% t UCL | 0.491 |
| | | 95% Percentile Bootstrap UCL | 0.489 |
| | | 95% BCA Bootstrap UCL | 0.497 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 3.186 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 0.149 | | |

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| nu star | 286.7 | | |
| | | | |
| A-D Test Statistic | 0.578 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.754 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.754 | Mean | 0.43 |
| 5% K-S Critical Value | 0.133 | SD | 0.267 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.0372 |
| | | 95% KM (t) UCL | 0.492 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.491 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.492 |
| Minimum | 0.075 | 95% KM (bootstrap t) UCL | 0.502 |
| Maximum | 1.35 | 95% KM (BCA) UCL | 0.493 |
| Mean | 0.442 | 95% KM (Percentile Bootstrap) UCL | 0.491 |
| Median | 0.422 | 95% KM (Chebyshev) UCL | 0.592 |
| SD | 0.263 | 97.5% KM (Chebyshev) UCL | 0.662 |
| k star | 2.939 | 99% KM (Chebyshev) UCL | 0.8 |
| Theta star | 0.15 | | |
| Nu star | 317.4 | **Potential UCLs to Use** | |
| AppChi2 | 277.2 | 95% KM (BCA) UCL | 0.493 |
| 95% Gamma Approximate UCL | 0.506 | | |
| 95% Adjusted Gamma UCL | 0.508 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | General UCL Statistics for Data Sets with Non-Detects |
|---|---|
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**LEAD**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 54 | Number of Detected Data | 47 |
| Number of Distinct Detected Data | 35 | Number of Non-Detect Data | 7 |
| Number of Missing Values | 216 | Percent Non-Detects | 12.96% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.71 | Minimum Detected | -0.342 |
| Maximum Detected | 14.4 | Maximum Detected | 2.667 |
| Mean of Detected | 3.923 | Mean of Detected | 1.194 |
| SD of Detected | 2.561 | SD of Detected | 0.593 |
| Minimum Non-Detect | 2.8 | Minimum Non-Detect | 1.03 |
| Maximum Non-Detect | 3.4 | Maximum Non-Detect | 1.224 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 30 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 24 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 55.56% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.827 | Shapiro Wilk Test Statistic | 0.988 |
| 5% Shapiro Wilk Critical Value | 0.946 | 5% Shapiro Wilk Critical Value | 0.946 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 3.623 | Mean | 1.101 |
| SD | 2.512 | SD | 0.604 |
| 95% DL/2 (t) UCL | 4.196 | 95% H-Stat (DL/2) UCL | 4.243 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 2.563 | Mean in Log Scale | 1.128 |
| SD | 3.616 | SD in Log Scale | 0.583 |
| 95% MLE (t) UCL | 3.387 | Mean in Original Scale | 3.674 |
| 95% MLE (Tiku) UCL | 3.662 | SD in Original Scale | 2.477 |
| | | 95% t UCL | 4.239 |
| | | 95% Percentile Bootstrap UCL | 4.255 |
| | | 95% BCA Bootstrap UCL | 4.318 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 2.873 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 1.365 | | |

| | | | |
|---|---|---|---|
| nu star | 270 | | |
| | | | |
| A-D Test Statistic | 0.562 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.756 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.756 | Mean | 3.683 |
| 5% K-S Critical Value | 0.13 | SD | 2.457 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.34 |
| | | 95% KM (t) UCL | 4.252 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 4.242 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 4.251 |
| Minimum | 0.71 | 95% KM (bootstrap t) UCL | 4.446 |
| Maximum | 14.4 | 95% KM (BCA) UCL | 4.251 |
| Mean | 3.763 | 95% KM (Percentile Bootstrap) UCL | 4.257 |
| Median | 3.3 | 95% KM (Chebyshev) UCL | 5.165 |
| SD | 2.444 | 97.5% KM (Chebyshev) UCL | 5.806 |
| k star | 2.995 | 99% KM (Chebyshev) UCL | 7.066 |
| Theta star | 1.256 | | |
| Nu star | 323.5 | **Potential UCLs to Use** | |
| AppChi2 | 282.8 | 95% KM (BCA) UCL | 4.251 |
| 95% Gamma Approximate UCL | 4.304 | | |
| 95% Adjusted Gamma UCL | 4.32 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**MERCURY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 54 | Number of Detected Data | 2 |
| Number of Distinct Detected Data | 2 | Number of Non-Detect Data | 52 |
| Number of Missing Values | 216 | Percent Non-Detects | 96.30% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.079 | Minimum Detected | -2.538 |
| Maximum Detected | 0.29 | Maximum Detected | -1.238 |
| Mean of Detected | 0.185 | Mean of Detected | -1.888 |
| SD of Detected | 0.149 | SD of Detected | 0.92 |
| Minimum Non-Detect | 0.019 | Minimum Non-Detect | -3.963 |
| Maximum Non-Detect | 0.14 | Maximum Non-Detect | -1.966 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 53 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 1 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 98.15% |

**Warning: Data set has only 2 Distinct Detected Values.**

**This may not be adequate enough to compute meaningful and reliable test statistics and estimates.**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

**Unless Data Quality Objectives (DQOs) have been met, it is suggested to collect additional observations.**

**The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.**

**Those methods will return a 'N/A' value on your output display!**

**It is necessary to have 4 or more Distinct Values for bootstrap methods.**

**However, results obtained using 4 to 9 distinct values may not be reliable.**

**It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | N/A | Shapiro Wilk Test Statistic | N/A |
| 5% Shapiro Wilk Critical Value | N/A | 5% Shapiro Wilk Critical Value | N/A |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.0305 | Mean | -4.031 |
| SD | 0.0439 | SD | 0.934 |
| 95% DL/2 (t) UCL | 0.0405 | 95% H-Stat (DL/2) UCL | 0.0367 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | N/A |
| | | SD in Log Scale | N/A |
| | | Mean in Original Scale | N/A |
| | | SD in Original Scale | N/A |
| | | 95% t UCL | N/A |
| | | 95% Percentile Bootstrap UCL | N/A |
| | | 95% BCA Bootstrap UCL | N/A |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | N/A | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | N/A | | |
| nu star | N/A | | |
| | | | |
| A-D Test Statistic | N/A | **Nonparametric Statistics** | |
| 5% A-D Critical Value | N/A | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | N/A | Mean | 0.0829 |
| 5% K-S Critical Value | N/A | SD | 0.0284 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.00547 |
| | | 95% KM (t) UCL | 0.0921 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.0919 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.22 |
| Minimum | N/A | 95% KM (bootstrap t) UCL | N/A |
| Maximum | N/A | 95% KM (BCA) UCL | 0.29 |
| Mean | N/A | 95% KM (Percentile Bootstrap) UCL | 0.29 |
| Median | N/A | 95% KM (Chebyshev) UCL | 0.107 |
| SD | N/A | 97.5% KM (Chebyshev) UCL | 0.117 |
| k star | N/A | 99% KM (Chebyshev) UCL | 0.137 |
| Theta star | N/A | | |

| | | | |
|---|---|---|---|
| Nu star | N/A | **Potential UCLs to Use** | |
| AppChi2 | N/A | 95% KM (t) UCL | 0.0921 |
| 95% Gamma Approximate UCL | N/A | 95% KM (% Bootstrap) UCL | 0.29 |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**1,2,3-TRICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 100 | Number of Detected Data | 32 |
| Number of Distinct Detected Data | 32 | Number of Non-Detect Data | 68 |
| Number of Missing Values | 170 | Percent Non-Detects | 68.00% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.6 | Minimum Detected | -0.511 |
| Maximum Detected | 2200000 | Maximum Detected | 14.6 |
| Mean of Detected | 80223 | Mean of Detected | 6.038 |
| SD of Detected | 387877 | SD of Detected | 3.803 |
| Minimum Non-Detect | 0.28 | Minimum Non-Detect | -1.273 |
| Maximum Non-Detect | 11 | Maximum Non-Detect | 2.398 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 75 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 25 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 75.00% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.217 | Shapiro Wilk Test Statistic | 0.968 |
| 5% Shapiro Wilk Critical Value | 0.93 | 5% Shapiro Wilk Critical Value | 0.93 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 25673 | Mean | 2.192 |
| SD | 220283 | SD | 3.562 |
| 95% DL/2 (t) UCL | 62248 | 95% H-Stat (DL/2) UCL | 37168 |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -1.21 |
| | | SD in Log Scale | 6.123 |
| | | Mean in Original Scale | 25672 |
| | | SD in Original Scale | 220283 |
| | | 95% t UCL | 62247 |
| | | 95% Percentile Bootstrap UCL | 69124 |
| | | 95% BCA Bootstrap UCL | 94461 |

| Gamma Distribution Test with Detected Values Only | | Data Distribution Test with Detected Values Only | |
|---|---|---|---|
| k star (bias corrected) | 0.154 | Data appear Lognormal at 5% Significance Level | |
| Theta Star | 521528 | | |
| nu star | 9.845 | | |
| | | | |
| A-D Test Statistic | 2.74 | Nonparametric Statistics | |
| 5% A-D Critical Value | 0.926 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.926 | Mean | 25672 |
| 5% K-S Critical Value | 0.174 | SD | 219179 |
| Data not Gamma Distributed at 5% Significance Level | | SE of Mean | 22269 |
| | | 95% KM (t) UCL | 62647 |
| Assuming Gamma Distribution | | 95% KM (z) UCL | 62301 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 62247 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 660745 |
| Maximum | 2200000 | 95% KM (BCA) UCL | 70106 |
| Mean | 84042 | 95% KM (Percentile Bootstrap) UCL | 69651 |
| Median | 92929 | 95% KM (Chebyshev) UCL | 122738 |
| SD | 217912 | 97.5% KM (Chebyshev) UCL | 164739 |
| k star | 0.315 | 99% KM (Chebyshev) UCL | 247242 |
| Theta star | 266695 | | |
| Nu star | 63.02 | Potential UCLs to Use | |
| AppChi2 | 45.76 | 97.5% KM (Chebyshev) UCL | 164739 |
| 95% Gamma Approximate UCL | 115743 | | |
| 95% Adjusted Gamma UCL | 116288 | | |

Note: DL/2 is not a recommended method.

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

For additional insight, the user may want to consult a statistician.

1,2,4-TRICHLOROBENZENE

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 100 | Number of Detected Data | 32 |
| Number of Distinct Detected Data | 31 | Number of Non-Detect Data | 68 |
| Number of Missing Values | 170 | Percent Non-Detects | 68.00% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 5.9 | Minimum Detected | 1.775 |
| Maximum Detected | 9600000 | Maximum Detected | 16.08 |
| Mean of Detected | 364319 | Mean of Detected | 7.616 |
| SD of Detected | 1693378 | SD of Detected | 3.817 |
| Minimum Non-Detect | 0.23 | Minimum Non-Detect | -1.47 |
| Maximum Non-Detect | 52 | Maximum Non-Detect | 3.951 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 75 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 25 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 75.00% |

UCL Statistics

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.228 | Shapiro Wilk Test Statistic | 0.956 |
| 5% Shapiro Wilk Critical Value | 0.93 | 5% Shapiro Wilk Critical Value | 0.93 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 116584 | Mean | 2.768 |
| SD | 962853 | SD | 4.071 |
| 95% DL/2 (t) UCL | 276455 | 95% H-Stat (DL/2) UCL | 825121 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -0.519 |
| | | SD in Log Scale | 6.546 |
| | | Mean in Original Scale | 116582 |
| | | SD in Original Scale | 962853 |
| | | 95% t UCL | 276454 |
| | | 95% Percentile Bootstrap UCL | 302016 |
| | | 95% BCA Bootstrap UCL | 406961 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.155 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 2346523 | | |
| nu star | 9.937 | | |
| | | | |
| A-D Test Statistic | 2.641 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.925 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.925 | Mean | 116586 |
| 5% K-S Critical Value | 0.174 | SD | 958026 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 97336 |
| | | 95% KM (t) UCL | 278201 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 276689 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 276456 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 2271910 |
| Maximum | 21134971 | 95% KM (BCA) UCL | 312538 |
| Mean | 1345729 | 95% KM (Percentile Bootstrap) UCL | 305381 |
| Median | 16.5 | 95% KM (Chebyshev) UCL | 540862 |
| SD | 3696300 | 97.5% KM (Chebyshev) UCL | 724447 |
| k star | 0.0475 | 99% KM (Chebyshev) UCL | 1085063 |
| Theta star | 28329884 | | |
| Nu star | 9.5 | **Potential UCLs to Use** | |
| AppChi2 | 3.632 | 97.5% KM (Chebyshev) UCL | 724447 |
| 95% Gamma Approximate UCL | 3520103 | | |
| 95% Adjusted Gamma UCL | 3572194 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

## 1,3-DICHLOROBENZENE

### General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 100 | Number of Detected Data | 14 |
| Number of Distinct Detected Data | 14 | Number of Non-Detect Data | 86 |
| Number of Missing Values | 170 | Percent Non-Detects | 86.00% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 0.39 | Minimum Detected | -0.942 |
| Maximum Detected | 38000 | Maximum Detected | 10.55 |
| Mean of Detected | 5795 | Mean of Detected | 3.653 |
| SD of Detected | 13475 | SD of Detected | 4.139 |
| Minimum Non-Detect | 0.25 | Minimum Non-Detect | -1.386 |
| Maximum Non-Detect | 12000 | Maximum Non-Detect | 9.393 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 98 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 2 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 98.00% |

### UCL Statistics

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.476 | Shapiro Wilk Test Statistic | 0.888 |
| 5% Shapiro Wilk Critical Value | 0.874 | 5% Shapiro Wilk Critical Value | 0.874 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 894.3 | Mean | 1.181 |
| SD | 5308 | SD | 2.579 |
| 95% DL/2 (t) UCL | 1776 | 95% H-Stat (DL/2) UCL | 268 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -7.08 |
| | | SD in Log Scale | 5.933 |
| | | Mean in Original Scale | 811.4 |
| | | SD in Original Scale | 5285 |
| | | 95% t UCL | 1689 |
| | | 95% Percentile Bootstrap UCL | 1900 |
| | | 95% BCA Bootstrap UCL | 2306 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.168 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 34542 | | |
| nu star | 4.698 | | |
| | | | |
| A-D Test Statistic | 1.249 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.889 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.889 | Mean | 812.8 |
| 5% K-S Critical Value | 0.255 | SD | 5258 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 545.7 |
| | | 95% KM (t) UCL | 1719 |

| Assuming Gamma Distribution | | 95% KM (z) UCL | 1710 |
|---|---|---|---|
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 1690 |
| Minimum | 0.39 | 95% KM (bootstrap t) UCL | 11831 |
| Maximum | 128506 | 95% KM (BCA) UCL | 1943 |
| Mean | 13559 | 95% KM (Percentile Bootstrap) UCL | 1637 |
| Median | 5055 | 95% KM (Chebyshev) UCL | 3191 |
| SD | 23754 | 97.5% KM (Chebyshev) UCL | 4221 |
| k star | 0.45 | 99% KM (Chebyshev) UCL | 6242 |
| Theta star | 30105 | | |
| Nu star | 90.08 | **Potential UCLs to Use** | |
| AppChi2 | 69.19 | 97.5% KM (Chebyshev) UCL | 4221 |
| 95% Gamma Approximate UCL | 17651 | | |
| 95% Adjusted Gamma UCL | 17719 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**1,4-DICHLOROBENZENE**

**General Statistics**

| Number of Valid Data | 100 | Number of Detected Data | 28 |
|---|---|---|---|
| Number of Distinct Detected Data | 27 | Number of Non-Detect Data | 72 |
| Number of Missing Values | 170 | Percent Non-Detects | 72.00% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 1.6 | Minimum Detected | 0.47 |
| Maximum Detected | 130000 | Maximum Detected | 11.78 |
| Mean of Detected | 6806 | Mean of Detected | 5.216 |
| SD of Detected | 24884 | SD of Detected | 2.742 |
| Minimum Non-Detect | 0.48 | Minimum Non-Detect | -0.734 |
| Maximum Non-Detect | 290 | Maximum Non-Detect | 5.67 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 91 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 9 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 91.00% |

**UCL Statistics**

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.305 | Shapiro Wilk Test Statistic | 0.943 |
| 5% Shapiro Wilk Critical Value | 0.924 | 5% Shapiro Wilk Critical Value | 0.924 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 1909 | Mean | 1.812 |
| SD | 13353 | SD | 2.767 |
| 95% DL/2 (t) UCL | 4126 | 95% H-Stat (DL/2) UCL | 970 |

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| | | | |
|---|---|---|---|
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -1.319 |
| | | SD in Log Scale | 4.907 |
| | | Mean in Original Scale | 1906 |
| | | SD in Original Scale | 13353 |
| | | 95% t UCL | 4123 |
| | | 95% Percentile Bootstrap UCL | 4360 |
| | | 95% BCA Bootstrap UCL | 6743 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.205 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 33140 | | |
| nu star | 11.5 | | |
| | | | |
| A-D Test Statistic | 2.921 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.896 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.896 | Mean | 1907 |
| 5% K-S Critical Value | 0.183 | SD | 13286 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 1353 |
| | | 95% KM (t) UCL | 4153 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 4132 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 4119 |
| Minimum | 1.6 | 95% KM (bootstrap t) UCL | 14786 |
| Maximum | 130000 | 95% KM (BCA) UCL | 4403 |
| Mean | 6695 | 95% KM (Percentile Bootstrap) UCL | 4300 |
| Median | 7006 | 95% KM (Chebyshev) UCL | 7804 |
| SD | 13088 | 97.5% KM (Chebyshev) UCL | 10356 |
| k star | 0.534 | 99% KM (Chebyshev) UCL | 15369 |
| Theta star | 12546 | | |
| Nu star | 106.7 | **Potential UCLs to Use** | |
| AppChi2 | 83.89 | 97.5% KM (Chebyshev) UCL | 10356 |
| 95% Gamma Approximate UCL | 8518 | | |
| 95% Adjusted Gamma UCL | 8548 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**BAP EQUIVALENT-HALFND**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 100 | Number of Detected Data | 19 |
| Number of Distinct Detected Data | 19 | Number of Non-Detect Data | 81 |
| Number of Missing Values | 170 | Percent Non-Detects | 81.00% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 60.21 | Minimum Detected | 4.098 |
| Maximum Detected | 39347 | Maximum Detected | 10.58 |
| Mean of Detected | 2455 | Mean of Detected | 5.97 |

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| SD of Detected | 8945 | SD of Detected | 1.315 |
| Minimum Non-Detect | 3.8 | Minimum Non-Detect | 1.335 |
| Maximum Non-Detect | 3800 | Maximum Non-Detect | 8.243 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 99 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 1 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 99.00% |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.271 | Shapiro Wilk Test Statistic | 0.711 |
| 5% Shapiro Wilk Critical Value | 0.901 | 5% Shapiro Wilk Critical Value | 0.901 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 567.7 | Mean | 3.737 |
| SD | 3928 | SD | 2.378 |
| 95% DL/2 (t) UCL | 1220 | 95% H-Stat (DL/2) UCL | 1809 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | 3.319 |
| | | SD in Log Scale | 1.766 |
| | | Mean in Original Scale | 489.1 |
| | | SD in Original Scale | 3932 |
| | | 95% t UCL | 1142 |
| | | 95% Percentile Bootstrap UCL | 1270 |
| | | 95% BCA Bootstrap UCL | 2044 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.342 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 7186 | | |
| nu star | 12.98 | | |
| | | | |
| A-D Test Statistic | 4.477 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.83 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.83 | Mean | 531.4 |
| 5% K-S Critical Value | 0.213 | SD | 3908 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 401.6 |
| | | 95% KM (t) UCL | 1198 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 1192 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 1133 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 14652 |
| Maximum | 39347 | 95% KM (BCA) UCL | 1737 |
| Mean | 2150 | 95% KM (Percentile Bootstrap) UCL | 1343 |
| Median | 1721 | 95% KM (Chebyshev) UCL | 2282 |
| SD | 4027 | 97.5% KM (Chebyshev) UCL | 3039 |
| k star | 0.113 | 99% KM (Chebyshev) UCL | 4527 |
| Theta star | 18968 | | |
| Nu star | 22.67 | **Potential UCLs to Use** | |
| AppChi2 | 12.84 | 95% KM (BCA) UCL | 1737 |

| | | | |
|---|---|---|---|
| 95% Gamma Approximate UCL | 3796 | | |
| 95% Adjusted Gamma UCL | 3828 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**PAH_NAPHTHALENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 100 | Number of Detected Data | 14 |
| Number of Distinct Detected Data | 13 | Number of Non-Detect Data | 86 |
| Number of Missing Values | 170 | Percent Non-Detects | 86.00% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 17 | Minimum Detected | 2.833 |
| Maximum Detected | 460 | Maximum Detected | 6.131 |
| Mean of Detected | 134.1 | Mean of Detected | 4.291 |
| SD of Detected | 145.3 | SD of Detected | 1.172 |
| Minimum Non-Detect | 3.8 | Minimum Non-Detect | 1.335 |
| Maximum Non-Detect | 11000 | Maximum Non-Detect | 9.306 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 100 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 100.00% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.793 | Shapiro Wilk Test Statistic | 0.899 |
| 5% Shapiro Wilk Critical Value | 0.874 | 5% Shapiro Wilk Critical Value | 0.874 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 194.8 | Mean | 3.833 |
| SD | 574.1 | SD | 2.062 |
| 95% DL/2 (t) UCL | 290.1 | 95% H-Stat (DL/2) UCL | 799.6 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | 1.943 |
| | | SD in Log Scale | 1.538 |
| | | Mean in Original Scale | 27.38 |
| | | SD in Original Scale | 69.65 |
| | | 95% t UCL | 38.94 |
| | | 95% Percentile Bootstrap UCL | 39.58 |
| | | 95% BCA Bootstrap UCL | 42.56 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.799 | **Data appear Lognormal at 5% Significance Level** | |

| | | | |
|---|---|---|---|
| Theta Star | 167.9 | | |
| nu star | 22.36 | | |
| | | | |
| A-D Test Statistic | 0.768 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.762 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.762 | Mean | 46.47 |
| 5% K-S Critical Value | 0.236 | SD | 82.05 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 11.39 |
| | | 95% KM (t) UCL | 65.38 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 65.21 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 63.82 |
| Minimum | 17 | 95% KM (bootstrap t) UCL | 71.72 |
| Maximum | 460 | 95% KM (BCA) UCL | 72.14 |
| Mean | 113.7 | 95% KM (Percentile Bootstrap) UCL | 67.35 |
| Median | 111.7 | 95% KM (Chebyshev) UCL | 96.13 |
| SD | 62.68 | 97.5% KM (Chebyshev) UCL | 117.6 |
| k star | 3.474 | 99% KM (Chebyshev) UCL | 159.8 |
| Theta star | 32.72 | | |
| Nu star | 694.7 | **Potential UCLs to Use** | |
| AppChi2 | 634.6 | 95% KM (BCA) UCL | 72.14 |
| 95% Gamma Approximate UCL | 124.4 | | |
| 95% Adjusted Gamma UCL | 124.6 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**AROCLOR-1254**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 255 | Number of Detected Data | 3 |
| Number of Distinct Detected Data | 3 | Number of Non-Detect Data | 252 |
| Number of Missing Values | 15 | Percent Non-Detects | 98.82% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 27 | Minimum Detected | 3.296 |
| Maximum Detected | 9800 | Maximum Detected | 9.19 |
| Mean of Detected | 3290 | Mean of Detected | 5.423 |
| SD of Detected | 5638 | SD of Detected | 3.271 |
| Minimum Non-Detect | 17.5 | Minimum Non-Detect | 2.862 |
| Maximum Non-Detect | 1100000 | Maximum Non-Detect | 13.91 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 255 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 100.00% |

**Warning: There are only 3 Distinct Detected Values in this data set**

**The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.**

**Those methods will return a 'N/A' value on your output display!**

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| It is necessary to have 4 or more Distinct Values for bootstrap methods. | | | |
| However, results obtained using 4 to 9 distinct values may not be reliable. | | | |
| It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates. | | | |
| | | | |
| | | | |
| UCL Statistics | | | |
| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
| Shapiro Wilk Test Statistic | 0.751 | Shapiro Wilk Test Statistic | 0.812 |
| 5% Shapiro Wilk Critical Value | 0.767 | 5% Shapiro Wilk Critical Value | 0.767 |
| Data not Normal at 5% Significance Level | | Data appear Lognormal at 5% Significance Level | |
| | | | |
| Assuming Normal Distribution | | Assuming Lognormal Distribution | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 3683 | Mean | 3.099 |
| SD | 35863 | SD | 1.857 |
| 95% DL/2 (t) UCL | 7391 | 95% H-Stat (DL/2) UCL | 175.7 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| MLE method failed to converge properly | | Mean in Log Scale | -20.42 |
| | | SD in Log Scale | 8.38 |
| | | Mean in Original Scale | 38.71 |
| | | SD in Original Scale | 613.7 |
| | | 95% t UCL | 102.2 |
| | | 95% Percentile Bootstrap UCL | 115.6 |
| | | 95% BCA Bootstrap UCL | 192.3 |
| | | | |
| Gamma Distribution Test with Detected Values Only | | Data Distribution Test with Detected Values Only | |
| k star (bias corrected) | N/A | Data appear Lognormal at 5% Significance Level | |
| Theta Star | N/A | | |
| nu star | N/A | | |
| | | | |
| A-D Test Statistic | N/A | Nonparametric Statistics | |
| 5% A-D Critical Value | N/A | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | N/A | Mean | 67.14 |
| 5% K-S Critical Value | N/A | SD | 624.4 |
| Data not Gamma Distributed at 5% Significance Level | | SE of Mean | 48.95 |
| | | 95% KM (t) UCL | 148 |
| Assuming Gamma Distribution | | 95% KM (z) UCL | 147.7 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 122.2 |
| Minimum | N/A | 95% KM (bootstrap t) UCL | 16492 |
| Maximum | N/A | 95% KM (BCA) UCL | 9800 |
| Mean | N/A | 95% KM (Percentile Bootstrap) UCL | 9800 |
| Median | N/A | 95% KM (Chebyshev) UCL | 280.5 |
| SD | N/A | 97.5% KM (Chebyshev) UCL | 372.9 |
| k star | N/A | 99% KM (Chebyshev) UCL | 554.2 |
| Theta star | N/A | | |
| Nu star | N/A | Potential UCLs to Use | |
| AppChi2 | N/A | 97.5% KM (Chebyshev) UCL | 372.9 |
| 95% Gamma Approximate UCL | N/A | | |
| 95% Adjusted Gamma UCL | N/A | | |

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

Note: DL/2 is not a recommended method.

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
For additional insight, the user may want to consult a statistician.

AROCLOR-1260

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 255 | Number of Detected Data | 93 |
| Number of Distinct Detected Data | 82 | Number of Non-Detect Data | 162 |
| Number of Missing Values | 15 | Percent Non-Detects | 63.53% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 15 | Minimum Detected | 2.708 |
| Maximum Detected | 24000000 | Maximum Detected | 16.99 |
| Mean of Detected | 319537 | Mean of Detected | 6.27 |
| SD of Detected | 2494665 | SD of Detected | 3.176 |
| Minimum Non-Detect | 17.5 | Minimum Non-Detect | 2.862 |
| Maximum Non-Detect | 300 | Maximum Non-Detect | 5.704 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 214 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 41 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 83.92% |

**UCL Statistics**

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.449 | Lilliefors Test Statistic | 0.193 |
| 5% Lilliefors Critical Value | 0.0919 | 5% Lilliefors Critical Value | 0.0919 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 116546 | Mean | 3.887 |
| SD | 1509263 | SD | 2.658 |
| 95% DL/2 (t) UCL | 272577 | 95% H-Stat (DL/2) UCL | 3184 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 1.411 |
| | | SD in Log Scale | 4.731 |
| | | Mean in Original Scale | 116538 |
| | | SD in Original Scale | 1509264 |
| | | 95% t UCL | 272569 |
| | | 95% Percentile Bootstrap UCL | 301123 |
| | | 95% BCA Bootstrap UCL | 480841 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.127 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 2525062 | | |
| nu star | 23.54 | | |

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| A-D Test Statistic | 17.17 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.99 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.99 | Mean | 116547 |
| 5% K-S Critical Value | 0.106 | SD | 1506301 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 94840 |
| | | 95% KM (t) UCL | 273116 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 272545 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 272578 |
| Minimum | 15 | 95% KM (bootstrap t) UCL | 2193606 |
| Maximum | 24000000 | 95% KM (BCA) UCL | 304415 |
| Mean | 352826 | 95% KM (Percentile Bootstrap) UCL | 300990 |
| Median | 253239 | 95% KM (Chebyshev) UCL | 529943 |
| SD | 1513112 | 97.5% KM (Chebyshev) UCL | 708820 |
| k star | 0.287 | 99% KM (Chebyshev) UCL | 1060189 |
| Theta star | 1229754 | | |
| Nu star | 146.3 | **Potential UCLs to Use** | |
| AppChi2 | 119.4 | 97.5% KM (Chebyshev) UCL | 708820 |
| 95% Gamma Approximate UCL | 432504 | | |
| 95% Adjusted Gamma UCL | 433001 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

DIESEL RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 41 | Number of Detected Data | 11 |
| Number of Distinct Detected Data | 11 | Number of Non-Detect Data | 30 |
| Number of Missing Values | 230 | Percent Non-Detects | 73.17% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 7300 | Minimum Detected | 8.896 |
| Maximum Detected | 28000000 | Maximum Detected | 17.15 |
| Mean of Detected | 3046445 | Mean of Detected | 12.63 |
| SD of Detected | 8298707 | SD of Detected | 2.4 |
| Minimum Non-Detect | 3300 | Minimum Non-Detect | 8.102 |
| Maximum Non-Detect | 29000 | Maximum Non-Detect | 10.28 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 32 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 9 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 78.05% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.405 | Shapiro Wilk Test Statistic | 0.94 |
| 5% Shapiro Wilk Critical Value | 0.85 | 5% Shapiro Wilk Critical Value | 0.85 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 826079 | Mean | 10.19 |
| SD | 4366922 | SD | 1.974 |
| 95% DL/2 (t) UCL | 1974463 | 95% H-Stat (DL/2) UCL | 575054 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 8.171 |
| | | SD in Log Scale | 3.535 |
| | | Mean in Original Scale | 820179 |
| | | SD in Original Scale | 4368054 |
| | | 95% t UCL | 1968861 |
| | | 95% Percentile Bootstrap UCL | 2174248 |
| | | 95% BCA Bootstrap UCL | 2949692 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.279 | **Data Follow Appr. Gamma Distribution at 5% Significance Level** | |
| Theta Star | 10931992 | | |
| nu star | 6.131 | | |
| | | | |
| A-D Test Statistic | 0.9 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.82 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.82 | Mean | 822732 |
| 5% K-S Critical Value | 0.276 | SD | 4313970 |
| **Data follow Appr. Gamma Distribution at 5% Significance Level** | | SE of Mean | 706613 |
| | | 95% KM (t) UCL | 2012562 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 1985006 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 1971140 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 13318178 |
| Maximum | 28000000 | 95% KM (BCA) UCL | 2243344 |
| Mean | 3139294 | 95% KM (Percentile Bootstrap) UCL | 2157239 |
| Median | 460000 | 95% KM (Chebyshev) UCL | 3902785 |
| SD | 5621340 | 97.5% KM (Chebyshev) UCL | 5235527 |
| k star | 0.0762 | 99% KM (Chebyshev) UCL | 7853440 |
| Theta star | 41181006 | | |
| Nu star | 6.251 | **Potential UCLs to Use** | |
| AppChi2 | 1.769 | 95% KM (t) UCL | 2012562 |
| 95% Gamma Approximate UCL | 11090321 | | |
| 95% Adjusted Gamma UCL | 11651629 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

GASOLINE RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 31 | Number of Detected Data | 15 |

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| Number of Distinct Detected Data | 14 | Number of Non-Detect Data | 16 |
| Number of Missing Values | 239 | Percent Non-Detects | 51.61% |
| | | | |
| **Raw Statistics** | | **Log-transformed Statistics** | |
| Minimum Detected | 56 | Minimum Detected | 4.025 |
| Maximum Detected | 170000 | Maximum Detected | 12.04 |
| Mean of Detected | 21525 | Mean of Detected | 6.436 |
| SD of Detected | 54509 | SD of Detected | 2.7 |
| Minimum Non-Detect | 55 | Minimum Non-Detect | 4.007 |
| Maximum Non-Detect | 280 | Maximum Non-Detect | 5.635 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 24 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 7 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 77.42% |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.445 | Shapiro Wilk Test Statistic | 0.821 |
| 5% Shapiro Wilk Critical Value | 0.881 | 5% Shapiro Wilk Critical Value | 0.881 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 10446 | Mean | 5.183 |
| SD | 38801 | SD | 2.242 |
| 95% DL/2 (t) UCL | 22274 | 95% H-Stat (DL/2) UCL | 12191 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 4.23 |
| | | SD in Log Scale | 3.13 |
| | | Mean in Original Scale | 10432 |
| | | SD in Original Scale | 38805 |
| | | 95% t UCL | 22261 |
| | | 95% Percentile Bootstrap UCL | 21840 |
| | | 95% BCA Bootstrap UCL | 26778 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.21 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 102567 | | |
| nu star | 6.296 | | |
| | | | |
| A-D Test Statistic | 2.149 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.874 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.874 | Mean | 10450 |
| 5% K-S Critical Value | 0.245 | SD | 38169 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 7096 |
| | | 95% KM (t) UCL | 22493 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 22122 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 22276 |
| Minimum | 56 | 95% KM (bootstrap t) UCL | 365483 |
| Maximum | 170000 | 95% KM (BCA) UCL | 22211 |

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| Mean | 23020 | 95% KM (Percentile Bootstrap) UCL | 23098 |
| Median | 18063 | 95% KM (Chebyshev) UCL | 41380 |
| SD | 37550 | 97.5% KM (Chebyshev) UCL | 54764 |
| k star | 0.364 | 99% KM (Chebyshev) UCL | 81053 |
| Theta star | 63279 | | |
| Nu star | 22.55 | **Potential UCLs to Use** | |
| AppChi2 | 12.75 | 99% KM (Chebyshev) UCL | 81053 |
| 95% Gamma Approximate UCL | 40706 | | |
| 95% Adjusted Gamma UCL | 42058 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Full Data Sets** |
| **User Selected Options** | |
| From File | Sheet1.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**ARSENIC**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 54 | Number of Distinct Observations | 37 |
| Number of Missing Values | 216 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.22 | Minimum of Log Data | -1.514 |
| Maximum | 5.5 | Maximum of Log Data | 1.705 |
| Mean | 1.277 | Mean of log Data | 0.0005547 |
| Median | 1.1 | SD of log Data | 0.711 |
| SD | 0.998 | | |
| Coefficient of Variation | 0.781 | | |
| Skewness | 2.362 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.158 | Lilliefors Test Statistic | 0.0984 |
| Lilliefors Critical Value | 0.121 | Lilliefors Critical Value | 0.121 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 1.505 | 95% H-UCL | 1.572 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 1.874 |
| 95% Adjusted-CLT UCL (Chen-1995) | 1.547 | 97.5% Chebyshev (MVUE) UCL | 2.13 |
| 95% Modified-t UCL (Johnson-1978) | 1.512 | 99% Chebyshev (MVUE) UCL | 2.635 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 2.089 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 0.611 | | |
| MLE of Mean | 1.277 | | |
| MLE of Standard Deviation | 0.884 | | |
| nu star | 225.6 | | |
| Approximate Chi Square Value (.05) | 191.9 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0456 | 95% CLT UCL | 1.501 |
| Adjusted Chi Square Value | 191 | 95% Jackknife UCL | 1.505 |
| | | 95% Standard Bootstrap UCL | 1.495 |
| Anderson-Darling Test Statistic | 0.419 | 95% Bootstrap-t UCL | 1.588 |
| Anderson-Darling 5% Critical Value | 0.762 | 95% Hall's Bootstrap UCL | 1.641 |
| Kolmogorov-Smirnov Test Statistic | 0.0789 | 95% Percentile Bootstrap UCL | 1.515 |
| Kolmogorov-Smirnov 5% Critical Value | 0.122 | 95% BCA Bootstrap UCL | 1.541 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 1.869 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 2.125 |

| | | | |
|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 2.629 |
| 95% Approximate Gamma UCL | 1.502 | | |
| 95% Adjusted Gamma UCL | 1.509 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 1.502 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**
**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

COBALT

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 40 | Number of Distinct Observations | 32 |
| Number of Missing Values | 185 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.18 | Minimum of Log Data | -1.715 |
| Maximum | 9.1 | Maximum of Log Data | 2.208 |
| Mean | 3.298 | Mean of log Data | 0.942 |
| Median | 2.9 | SD of log Data | 0.796 |
| SD | 2.17 | | |
| Coefficient of Variation | 0.658 | | |
| Skewness | 0.946 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.924 | Shapiro Wilk Test Statistic | 0.948 |
| Shapiro Wilk Critical Value | 0.94 | Shapiro Wilk Critical Value | 0.94 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 3.876 | 95% H-UCL | 4.653 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 5.612 |
| 95% Adjusted-CLT UCL (Chen-1995) | 3.917 | 97.5% Chebyshev (MVUE) UCL | 6.532 |
| 95% Modified-t UCL (Johnson-1978) | 3.884 | 99% Chebyshev (MVUE) UCL | 8.34 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 2.001 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 1.648 | | |
| MLE of Mean | 3.298 | | |
| MLE of Standard Deviation | 2.331 | | |
| nu star | 160.1 | | |
| Approximate Chi Square Value (.05) | 131.8 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.044 | 95% CLT UCL | 3.862 |
| Adjusted Chi Square Value | 130.8 | 95% Jackknife UCL | 3.876 |
| | | 95% Standard Bootstrap UCL | 3.854 |
| Anderson-Darling Test Statistic | 0.163 | 95% Bootstrap-t UCL | 3.973 |
| Anderson-Darling 5% Critical Value | 0.758 | 95% Hall's Bootstrap UCL | 3.933 |
| Kolmogorov-Smirnov Test Statistic | 0.0721 | 95% Percentile Bootstrap UCL | 3.867 |

| | | | |
|---|---|---|---|
| Kolmogorov-Smirnov 5% Critical Value | 0.141 | 95% BCA Bootstrap UCL | 3.926 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 4.793 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 5.44 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 6.711 |
| 95% Approximate Gamma UCL | 4.004 | | |
| 95% Adjusted Gamma UCL | 4.034 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 4.004 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

**IRON**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 40 | Number of Distinct Observations | 37 |
| Number of Missing Values | 185 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 1290 | Minimum of Log Data | 7.162 |
| Maximum | 42200 | Maximum of Log Data | 10.65 |
| Mean | 14125 | Mean of log Data | 9.307 |
| Median | 12200 | SD of log Data | 0.785 |
| SD | 9444 | | |
| Coefficient of Variation | 0.669 | | |
| Skewness | 1.213 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.905 | Shapiro Wilk Test Statistic | 0.946 |
| Shapiro Wilk Critical Value | 0.94 | Shapiro Wilk Critical Value | 0.94 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 16641 | 95% H-UCL | 19708 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 23760 |
| 95% Adjusted-CLT UCL (Chen-1995) | 16887 | 97.5% Chebyshev (MVUE) UCL | 27618 |
| 95% Modified-t UCL (Johnson-1978) | 16688 | 99% Chebyshev (MVUE) UCL | 35196 |

| **Gamma Distribution Test** | | **Data Distribution** | |
|---|---|---|---|
| k star (bias corrected) | 2.016 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 7007 | | |
| MLE of Mean | 14125 | | |
| MLE of Standard Deviation | 9948 | | |
| nu star | 161.3 | | |
| Approximate Chi Square Value (.05) | 132.9 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.044 | 95% CLT UCL | 16581 |
| Adjusted Chi Square Value | 131.9 | 95% Jackknife UCL | 16641 |
| | | 95% Standard Bootstrap UCL | 16557 |

| | | | |
|---|---|---|---|
| Anderson-Darling Test Statistic | 0.269 | 95% Bootstrap-t UCL | 16955 |
| Anderson-Darling 5% Critical Value | 0.758 | 95% Hall's Bootstrap UCL | 17167 |
| Kolmogorov-Smirnov Test Statistic | 0.103 | 95% Percentile Bootstrap UCL | 16543 |
| Kolmogorov-Smirnov 5% Critical Value | 0.141 | 95% BCA Bootstrap UCL | 16827 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 20634 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 23450 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 28983 |
| 95% Approximate Gamma UCL | 17138 | | |
| 95% Adjusted Gamma UCL | 17264 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 17138 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

**MANGANESE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 40 | Number of Distinct Observations | 39 |
| Number of Missing Values | 185 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 2.2 | Minimum of Log Data | 0.788 |
| Maximum | 280 | Maximum of Log Data | 5.635 |
| Mean | 57.95 | Mean of log Data | 3.56 |
| Median | 34 | SD of log Data | 1.06 |
| SD | 66.18 | | |
| Coefficient of Variation | 1.142 | | |
| Skewness | 2.327 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.688 | Shapiro Wilk Test Statistic | 0.959 |
| Shapiro Wilk Critical Value | 0.94 | Shapiro Wilk Critical Value | 0.94 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 75.58 | 95% H-UCL | 93.88 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 112.5 |
| 95% Adjusted-CLT UCL (Chen-1995) | 79.27 | 97.5% Chebyshev (MVUE) UCL | 135 |
| 95% Modified-t UCL (Johnson-1978) | 76.22 | 99% Chebyshev (MVUE) UCL | 179.3 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 1.069 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 54.19 | | |
| MLE of Mean | 57.95 | | |
| MLE of Standard Deviation | 56.04 | | |
| nu star | 85.55 | | |
| Approximate Chi Square Value (.05) | 65.23 | **Nonparametric Statistics** | |

| | | | |
|---|---|---|---|
| Adjusted Level of Significance | 0.044 | 95% CLT UCL | 75.16 |
| Adjusted Chi Square Value | 64.56 | 95% Jackknife UCL | 75.58 |
| | | 95% Standard Bootstrap UCL | 74.51 |
| Anderson-Darling Test Statistic | 1.011 | 95% Bootstrap-t UCL | 82.6 |
| Anderson-Darling 5% Critical Value | 0.775 | 95% Hall's Bootstrap UCL | 79.52 |
| Kolmogorov-Smirnov Test Statistic | 0.173 | 95% Percentile Bootstrap UCL | 75.76 |
| Kolmogorov-Smirnov 5% Critical Value | 0.143 | 95% BCA Bootstrap UCL | 79.62 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 103.6 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 123.3 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 162.1 |
| 95% Approximate Gamma UCL | 76 | | |
| 95% Adjusted Gamma UCL | 76.78 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% H-UCL | 93.88 |

**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**

**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**

**It is therefore recommended to avoid the use of H-statistic based 95% UCLs.**

**Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

VANADIUM

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 40 | Number of Distinct Observations | 38 |
| Number of Missing Values | 185 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 2.2 | Minimum of Log Data | 0.788 |
| Maximum | 21.1 | Maximum of Log Data | 3.049 |
| Mean | 12.4 | Mean of log Data | 2.393 |
| Median | 13.3 | SD of log Data | 0.568 |
| SD | 5.145 | | |
| Coefficient of Variation | 0.415 | | |
| Skewness | -0.39 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.948 | Shapiro Wilk Test Statistic | 0.849 |
| Shapiro Wilk Critical Value | 0.94 | Shapiro Wilk Critical Value | 0.94 |
| **Data appear Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 13.77 | 95% H-UCL | 15.39 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 18.12 |
| 95% Adjusted-CLT UCL (Chen-1995) | 13.68 | 97.5% Chebyshev (MVUE) UCL | 20.42 |
| 95% Modified-t UCL (Johnson-1978) | 13.76 | 99% Chebyshev (MVUE) UCL | 24.94 |

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 3.887 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 3.19 | | |
| MLE of Mean | 12.4 | | |
| MLE of Standard Deviation | 6.289 | | |
| nu star | 310.9 | | |
| Approximate Chi Square Value (.05) | 271.1 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.044 | 95% CLT UCL | 13.74 |
| Adjusted Chi Square Value | 269.7 | 95% Jackknife UCL | 13.77 |
| | | 95% Standard Bootstrap UCL | 13.74 |
| Anderson-Darling Test Statistic | 1.546 | 95% Bootstrap-t UCL | 13.67 |
| Anderson-Darling 5% Critical Value | 0.752 | 95% Hall's Bootstrap UCL | 13.7 |
| Kolmogorov-Smirnov Test Statistic | 0.184 | 95% Percentile Bootstrap UCL | 13.71 |
| Kolmogorov-Smirnov 5% Critical Value | 0.14 | 95% BCA Bootstrap UCL | 13.6 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 15.94 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 17.48 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 20.49 |
| 95% Approximate Gamma UCL | 14.22 | | |
| 95% Adjusted Gamma UCL | 14.29 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 13.77 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**OV_NAPHTHALENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 9 |
| Number of Distinct Detected Data | 9 | Number of Non-Detect Data | 13 |
| Number of Missing Values | 100 | Percent Non-Detects | 59.09% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.56 | Minimum Detected | -0.58 |
| Maximum Detected | 130 | Maximum Detected | 4.868 |
| Mean of Detected | 31.67 | Mean of Detected | 2.481 |
| SD of Detected | 42.49 | SD of Detected | 1.695 |
| Minimum Non-Detect | 2 | Minimum Non-Detect | 0.693 |
| Maximum Non-Detect | 6 | Maximum Non-Detect | 1.792 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 16 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 6 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 72.73% |

**Warning: There are only 9 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.758 | Shapiro Wilk Test Statistic | 0.977 |
| 5% Shapiro Wilk Critical Value | 0.829 | 5% Shapiro Wilk Critical Value | 0.829 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 14.29 | Mean | 1.427 |
| SD | 30.12 | SD | 1.435 |
| 95% DL/2 (t) UCL | 25.34 | 95% H-Stat (DL/2) UCL | 32.17 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 0.673 |
| | | SD in Log Scale | 2.068 |
| | | Mean in Original Scale | 13.57 |
| | | SD in Original Scale | 30.43 |

PROUCL OUTPUT - BLOCK E SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| | | 95% t UCL | 24.74 |
| | | 95% Percentile Bootstrap UCL | 24.44 |
| | | 95% BCA Bootstrap UCL | 30.59 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.494 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 64.13 | | |
| nu star | 8.89 | | |
| | | | |
| A-D Test Statistic | 0.203 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.761 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.761 | Mean | 13.6 |
| 5% K-S Critical Value | 0.292 | SD | 29.72 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 6.728 |
| | | 95% KM (t) UCL | 25.18 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 24.67 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 23.98 |
| Minimum | 0.56 | 95% KM (bootstrap t) UCL | 43.05 |
| Maximum | 130 | 95% KM (BCA) UCL | 29.89 |
| Mean | 31.46 | 95% KM (Percentile Bootstrap) UCL | 26.69 |
| Median | 29.03 | 95% KM (Chebyshev) UCL | 42.93 |
| SD | 26.42 | 97.5% KM (Chebyshev) UCL | 55.62 |
| k star | 1.225 | 99% KM (Chebyshev) UCL | 80.55 |
| Theta star | 25.68 | | |
| Nu star | 53.89 | **Potential UCLs to Use** | |
| AppChi2 | 38.03 | 95% KM (t) UCL | 25.18 |
| 95% Gamma Approximate UCL | 44.58 | | |
| 95% Adjusted Gamma UCL | 45.78 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

| | |
|---|---|
| | General UCL Statistics for Data Sets with Non-Detects SURFACE SOIL |
| **User Selected Options** | |
| From File | BLOCK F.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**ARSENIC**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 36 | Number of Detected Data | 25 |
| Number of Distinct Detected Data | 22 | Number of Non-Detect Data | 11 |
| Number of Missing Values | 307 | Percent Non-Detects | 30.56% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.58 | Minimum Detected | -0.545 |
| Maximum Detected | 7 | Maximum Detected | 1.946 |
| Mean of Detected | 2.522 | Mean of Detected | 0.751 |
| SD of Detected | 1.541 | SD of Detected | 0.616 |
| Minimum Non-Detect | 0.52 | Minimum Non-Detect | -0.654 |
| Maximum Non-Detect | 2 | Maximum Non-Detect | 0.693 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 21 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 15 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 58.33% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.893 | Shapiro Wilk Test Statistic | 0.977 |
| 5% Shapiro Wilk Critical Value | 0.918 | 5% Shapiro Wilk Critical Value | 0.918 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 1.858 | Mean | 0.171 |
| SD | 1.635 | SD | 1.043 |
| 95% DL/2 (t) UCL | 2.318 | 95% H-Stat (DL/2) UCL | 3.139 |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 1.482 | Mean in Log Scale | 0.335 |
| SD | 2.112 | SD in Log Scale | 0.825 |
| 95% MLE (t) UCL | 2.077 | Mean in Original Scale | 1.922 |
| 95% MLE (Tiku) UCL | 2.303 | SD in Original Scale | 1.573 |
| | | 95% t UCL | 2.365 |
| | | 95% Percentile Bootstrap UCL | 2.368 |
| | | 95% BCA Bootstrap UCL | 2.396 |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 2.687 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 0.939 | | |
| nu star | 134.3 | | |

| | | | |
|---|---|---|---|
| A-D Test Statistic | 1.25 | Nonparametric Statistics | |
| 5% A-D Critical Value | 0.751 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.751 | Mean | 1.937 |
| 5% K-S Critical Value | 0.176 | SD | 1.539 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.262 |
| | | 95% KM (t) UCL | 2.38 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 2.368 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 2.332 |
| Minimum | 0.282 | 95% KM (bootstrap t) UCL | 2.441 |
| Maximum | 7 | 95% KM (BCA) UCL | 2.492 |
| Mean | 2.138 | 95% KM (Percentile Bootstrap) UCL | 2.404 |
| Median | 1.837 | 95% KM (Chebyshev) UCL | 3.079 |
| SD | 1.443 | 97.5% KM (Chebyshev) UCL | 3.573 |
| k star | 2.329 | 99% KM (Chebyshev) UCL | 4.544 |
| Theta star | 0.918 | | |
| Nu star | 167.7 | **Potential UCLs to Use** | |
| AppChi2 | 138.7 | 95% KM (Percentile Bootstrap) UCL | 2.404 |
| 95% Gamma Approximate UCL | 2.584 | | |
| 95% Adjusted Gamma UCL | 2.606 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**COBALT**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 13 | Number of Detected Data | 12 |
| Number of Distinct Detected Data | 10 | Number of Non-Detect Data | 1 |
| Number of Missing Values | 226 | Percent Non-Detects | 7.69% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 5.3 | Minimum Detected | 1.668 |
| Maximum Detected | 32.3 | Maximum Detected | 3.475 |
| Mean of Detected | 10.34 | Mean of Detected | 2.195 |
| SD of Detected | 7.391 | SD of Detected | 0.496 |
| Minimum Non-Detect | 3.2 | Minimum Non-Detect | 1.163 |
| Maximum Non-Detect | 3.2 | Maximum Non-Detect | 1.163 |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.63 | Shapiro Wilk Test Statistic | 0.839 |
| 5% Shapiro Wilk Critical Value | 0.859 | 5% Shapiro Wilk Critical Value | 0.859 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 9.669 | Mean | 2.062 |
| SD | 7.48 | SD | 0.674 |
| 95% DL/2 (t) UCL | 13.37 | 95% H-Stat (DL/2) UCL | 15.53 |

| PROUCL OUTPUT - BLOCK F SUBSURFACE SOIL | | | |
|---|---|---|---|
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 9.469 | Mean in Log Scale | 2.107 |
| SD | 7.504 | SD in Log Scale | 0.569 |
| 95% MLE (t) UCL | 13.18 | Mean in Original Scale | 9.768 |
| 95% MLE (Tiku) UCL | 13.03 | SD in Original Scale | 7.372 |
| | | 95% t UCL | 13.41 |
| | | 95% Percentile Bootstrap UCL | 13.34 |
| | | 95% BCA Bootstrap UCL | 15.26 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 2.824 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 3.662 | | |
| nu star | 67.77 | | |
| | | | |
| A-D Test Statistic | 1.038 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.737 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.737 | Mean | 9.954 |
| 5% K-S Critical Value | 0.247 | SD | 6.93 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 2.008 |
| | | 95% KM (t) UCL | 13.53 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 13.26 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 13.49 |
| Minimum | 0.408 | 95% KM (bootstrap t) UCL | 21.16 |
| Maximum | 32.3 | 95% KM (BCA) UCL | 13.68 |
| Mean | 9.578 | 95% KM (Percentile Bootstrap) UCL | 13.49 |
| Median | 8 | 95% KM (Chebyshev) UCL | 18.7 |
| SD | 7.594 | 97.5% KM (Chebyshev) UCL | 22.49 |
| k star | 1.437 | 99% KM (Chebyshev) UCL | 29.93 |
| Theta star | 6.666 | | |
| Nu star | 37.36 | **Potential UCLs to Use** | |
| AppChi2 | 24.36 | 95% KM (Chebyshev) UCL | 18.7 |
| 95% Gamma Approximate UCL | 14.69 | | |
| 95% Adjusted Gamma UCL | 15.64 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**LEAD**

| General Statistics | | | |
|---|---|---|---|
| Number of Valid Data | 36 | Number of Detected Data | 32 |
| Number of Distinct Detected Data | 26 | Number of Non-Detect Data | 4 |
| Number of Missing Values | 307 | Percent Non-Detects | 11.11% |
| | | | |
| **Raw Statistics** | | **Log-transformed Statistics** | |
| Minimum Detected | 2.9 | Minimum Detected | 1.065 |
| Maximum Detected | 81 | Maximum Detected | 4.394 |
| Mean of Detected | 11.54 | Mean of Detected | 2.128 |
| SD of Detected | 14.72 | SD of Detected | 0.684 |

| | | | |
|---|---|---|---|
| Minimum Non-Detect | 2.6 | Minimum Non-Detect | 0.956 |
| Maximum Non-Detect | 3 | Maximum Non-Detect | 1.099 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 5 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 31 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 13.89% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.476 | Shapiro Wilk Test Statistic | 0.886 |
| 5% Shapiro Wilk Critical Value | 0.93 | 5% Shapiro Wilk Critical Value | 0.93 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 10.42 | Mean | 1.931 |
| SD | 14.22 | SD | 0.857 |
| 95% DL/2 (t) UCL | 14.42 | 95% H-Stat (DL/2) UCL | 13.75 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 9.163 | Mean in Log Scale | 1.965 |
| SD | 15.41 | SD in Log Scale | 0.796 |
| 95% MLE (t) UCL | 13.5 | Mean in Original Scale | 10.48 |
| 95% MLE (Tiku) UCL | 13.29 | SD in Original Scale | 14.18 |
| | | 95% t UCL | 14.47 |
| | | 95% Percentile Bootstrap UCL | 14.78 |
| | | 95% BCA Bootstrap UCL | 16.58 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 1.581 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 7.298 | | |
| nu star | 101.2 | | |
| | | | |
| A-D Test Statistic | 2.459 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.762 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.762 | Mean | 10.58 |
| 5% K-S Critical Value | 0.158 | SD | 13.92 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 2.358 |
| | | 95% KM (t) UCL | 14.56 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 14.46 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 14.53 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 23.56 |
| Maximum | 81 | 95% KM (BCA) UCL | 15.2 |
| Mean | 10.26 | 95% KM (Percentile Bootstrap) UCL | 14.82 |
| Median | 7.8 | 95% KM (Chebyshev) UCL | 20.86 |
| SD | 14.33 | 97.5% KM (Chebyshev) UCL | 25.3 |
| k star | 0.21 | 99% KM (Chebyshev) UCL | 34.04 |
| Theta star | 48.93 | | |
| Nu star | 15.1 | **Potential UCLs to Use** | |
| AppChi2 | 7.328 | 95% KM (Chebyshev) UCL | 20.86 |
| 95% Gamma Approximate UCL | 21.13 | | |
| 95% Adjusted Gamma UCL | 21.87 | | |

**Note: DL/2 is not a recommended method.**

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Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
For additional insight, the user may want to consult a statistician.

MERCURY

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 47 | Number of Detected Data | 17 |
| Number of Distinct Detected Data | 15 | Number of Non-Detect Data | 30 |
| Number of Missing Values | 296 | Percent Non-Detects | 63.83% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 0.01 | Minimum Detected | -4.605 |
| Maximum Detected | 1.8 | Maximum Detected | 0.588 |
| Mean of Detected | 0.461 | Mean of Detected | -1.794 |
| SD of Detected | 0.508 | SD of Detected | 1.804 |
| Minimum Non-Detect | 0.01 | Minimum Non-Detect | -4.605 |
| Maximum Non-Detect | 0.12 | Maximum Non-Detect | -2.12 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 37 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 10 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 78.72% |

**UCL Statistics**

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.829 | Shapiro Wilk Test Statistic | 0.886 |
| 5% Shapiro Wilk Critical Value | 0.892 | 5% Shapiro Wilk Critical Value | 0.892 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.194 | Mean | -2.908 |
| SD | 0.362 | SD | 1.609 |
| 95% DL/2 (t) UCL | 0.282 | 95% H-Stat (DL/2) UCL | 0.412 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -4.199 |
| | | SD in Log Scale | 2.494 |
| | | Mean in Original Scale | 0.174 |
| | | SD in Original Scale | 0.371 |
| | | 95% t UCL | 0.265 |
| | | 95% Percentile Bootstrap UCL | 0.259 |
| | | 95% BCA Bootstrap UCL | 0.282 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.538 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 0.856 | | |
| nu star | 18.29 | | |
| | | | |
| A-D Test Statistic | 0.604 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.789 | Kaplan-Meier (KM) Method | |

| | | | |
|---|---|---|---|
| K-S Test Statistic | 0.189 | Mean | 0.179 |
| 5% K-S Critical Value | 0.219 | SD | 0.365 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.055 |
| | | 95% KM (t) UCL | 0.271 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.27 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.27 |
| Minimum | 0.01 | 95% KM (bootstrap t) UCL | 0.308 |
| Maximum | 1.8 | 95% KM (BCA) UCL | 0.281 |
| Mean | 0.419 | 95% KM (Percentile Bootstrap) UCL | 0.272 |
| Median | 0.307 | 95% KM (Chebyshev) UCL | 0.419 |
| SD | 0.355 | 97.5% KM (Chebyshev) UCL | 0.523 |
| k star | 1.133 | 99% KM (Chebyshev) UCL | 0.726 |
| Theta star | 0.37 | | |
| Nu star | 106.5 | **Potential UCLs to Use** | |
| AppChi2 | 83.65 | 95% KM (t) UCL | 0.271 |
| 95% Gamma Approximate UCL | 0.533 | | |
| 95% Adjusted Gamma UCL | 0.537 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**1,2,3-TRICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 36 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 36 |
| Number of Missing Values | 307 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,2,3-TRICHLOROBENZENE was not processed!**

**1,2,4-TRICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 36 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 36 |
| Number of Missing Values | 307 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,2,4-TRICHLOROBENZENE was not processed!**

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1,3-DICHLOROBENZENE

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 36 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 36 |
| Number of Missing Values | 307 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,3-DICHLOROBENZENE was not processed!**

1,4-DICHLOROBENZENE

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 36 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 36 |
| Number of Missing Values | 307 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,4-DICHLOROBENZENE was not processed!**

PAH_NAPHTHALENE

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 38 | Number of Detected Data | 2 |
| Number of Distinct Detected Data | 2 | Number of Non-Detect Data | 36 |
| Number of Missing Values | 305 | Percent Non-Detects | 94.74% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 58 | Minimum Detected | 4.06 |
| Maximum Detected | 31000 | Maximum Detected | 10.34 |
| Mean of Detected | 15529 | Mean of Detected | 7.201 |
| SD of Detected | 21879 | SD of Detected | 4.442 |
| Minimum Non-Detect | 3.6 | Minimum Non-Detect | 1.281 |
| Maximum Non-Detect | 420 | Maximum Non-Detect | 6.04 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 37 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 1 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 97.37% |

**Warning: Data set has only 2 Distinct Detected Values.**

**This may not be adequate enough to compute meaningful and reliable test statistics and estimates.**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

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**Unless Data Quality Objectives (DQOs) have been met, it is suggested to collect additional observations.**

**The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.**

**Those methods will return a 'N/A' value on your output display!**

**It is necessary to have 4 or more Distinct Values for bootstrap methods.**

**However, results obtained using 4 to 9 distinct values may not be reliable.**

**It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | N/A | Shapiro Wilk Test Statistic | N/A |
| 5% Shapiro Wilk Critical Value | N/A | 5% Shapiro Wilk Critical Value | N/A |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 973.1 | Mean | 4.647 |
| SD | 5003 | SD | 1.962 |
| 95% DL/2 (t) UCL | 2342 | 95% H-Stat (DL/2) UCL | 2347 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | N/A |
| | | SD in Log Scale | N/A |
| | | Mean in Original Scale | N/A |
| | | SD in Original Scale | N/A |
| | | 95% t UCL | N/A |
| | | 95% Percentile Bootstrap UCL | N/A |
| | | 95% BCA Bootstrap UCL | N/A |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | N/A | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | N/A | | |
| nu star | N/A | | |
| | | | |
| A-D Test Statistic | N/A | **Nonparametric Statistics** | |
| 5% A-D Critical Value | N/A | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | N/A | Mean | 872.3 |
| 5% K-S Critical Value | N/A | SD | 4953 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 1136 |
| | | 95% KM (t) UCL | 2789 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 2741 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 21070 |
| Minimum | N/A | 95% KM (bootstrap t) UCL | 872.3 |
| Maximum | N/A | 95% KM (BCA) UCL | 31000 |
| Mean | N/A | 95% KM (Percentile Bootstrap) UCL | 31000 |
| Median | N/A | 95% KM (Chebyshev) UCL | 5825 |
| SD | N/A | 97.5% KM (Chebyshev) UCL | 7968 |
| k star | N/A | 99% KM (Chebyshev) UCL | 12178 |
| Theta star | N/A | | |
| Nu star | N/A | **Potential UCLs to Use** | |

| | | | |
|---|---|---|---|
| Approximate Gamma UCL | N/A | 99% KM (Chebyshev) UCL | 12178 |
| 95% Gamma Approximate UCL | N/A | | |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

## AROCLOR-1254

### General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 153 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 153 |
| Number of Missing Values | 190 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable AROCLOR-1254 was not processed!**

## AROCLOR-1260

### General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 153 | Number of Detected Data | 4 |
| Number of Distinct Detected Data | 4 | Number of Non-Detect Data | 149 |
| Number of Missing Values | 190 | Percent Non-Detects | 97.39% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 15 | Minimum Detected | 2.708 |
| Maximum Detected | 27 | Maximum Detected | 3.296 |
| Mean of Detected | 20.5 | Mean of Detected | 2.998 |
| SD of Detected | 5 | SD of Detected | 0.243 |
| Minimum Non-Detect | 19 | Minimum Non-Detect | 2.944 |
| Maximum Non-Detect | 310 | Maximum Non-Detect | 5.737 |

| | | |
|---|---|---|
| Note: Data have multiple DLs - Use of KM Method is recommended | Number treated as Non-Detect | 153 |
| For all methods (except KM, DL/2, and ROS Methods), | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | Single DL Non-Detect Percentage | 100.00% |

**Warning: There are only 4 Distinct Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

### UCL Statistics

| Normal Distribution Test with Detected Values Only | Lognormal Distribution Test with Detected Values Only |
|---|---|

| | | | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.982 | Shapiro Wilk Test Statistic | 0.995 |
| 5% Shapiro Wilk Critical Value | 0.748 | 5% Shapiro Wilk Critical Value | 0.748 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 27.59 | Mean | 2.979 |
| SD | 35.03 | SD | 0.673 |
| 95% DL/2 (t) UCL | 32.28 | 95% H-Stat (DL/2) UCL | 27.44 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | 2.728 |
| | | SD in Log Scale | 0.168 |
| | | Mean in Original Scale | 15.52 |
| | | SD in Original Scale | 2.666 |
| | | 95% t UCL | 15.87 |
| | | 95% Percentile Bootstrap UCL | 15.9 |
| | | 95% BCA Bootstrap UCL | 15.87 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 5.835 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 3.513 | | |
| nu star | 46.68 | | |
| | | | |
| A-D Test Statistic | 0.21 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.657 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.657 | Mean | 15.95 |
| 5% K-S Critical Value | 0.394 | SD | 2.302 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.665 |
| | | 95% KM (t) UCL | 17.05 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 17.04 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 18.29 |
| Minimum | 15 | 95% KM (bootstrap t) UCL | 17.01 |
| Maximum | 27 | 95% KM (BCA) UCL | 27 |
| Mean | 21.27 | 95% KM (Percentile Bootstrap) UCL | 21.49 |
| Median | 21.59 | 95% KM (Chebyshev) UCL | 18.85 |
| SD | 1.465 | 97.5% KM (Chebyshev) UCL | 20.1 |
| k star | 199.3 | 99% KM (Chebyshev) UCL | 22.57 |
| Theta star | 0.107 | | |
| Nu star | 60991 | **Potential UCLs to Use** | |
| AppChi2 | 60418 | 95% KM (t) UCL | 17.05 |
| 95% Gamma Approximate UCL | 21.47 | 95% KM (Percentile Bootstrap) UCL | 21.49 |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

DIESEL RANGE ORGANICS

**General Statistics**

**PROUCL OUTPUT - BLOCK F SUBSURFACE SOIL**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 3 |
| Number of Distinct Detected Data | 3 | Number of Non-Detect Data | 19 |
| Number of Missing Values | 321 | Percent Non-Detects | 86.36% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 12000 | Minimum Detected | 9.393 |
| Maximum Detected | 881000 | Maximum Detected | 13.69 |
| Mean of Detected | 303333 | Mean of Detected | 10.94 |
| SD of Detected | 500280 | SD of Detected | 2.386 |
| Minimum Non-Detect | 11000 | Minimum Non-Detect | 9.306 |
| Maximum Non-Detect | 25000 | Maximum Non-Detect | 10.13 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 21 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 1 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 95.45% |

**Warning: There are only 3 Distinct Detected Values in this data set**

**The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.**

**Those methods will return a 'N/A' value on your output display!**

**It is necessary to have 4 or more Distinct Values for bootstrap methods.**

**However, results obtained using 4 to 9 distinct values may not be reliable.**

**It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.**

**UCL Statistics**

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.754 | Shapiro Wilk Test Statistic | 0.81 |
| 5% Shapiro Wilk Critical Value | 0.767 | 5% Shapiro Wilk Critical Value | 0.767 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 48909 | Mean | 9.277 |
| SD | 185881 | SD | 1.054 |
| 95% DL/2 (t) UCL | 117102 | 95% H-Stat (DL/2) UCL | 34362 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | 4.36 |
| | | SD in Log Scale | 3.758 |
| | | Mean in Original Scale | 41640 |
| | | SD in Original Scale | 187523 |
| | | 95% t UCL | 110436 |
| | | 95% Percentile Bootstrap UCL | 121458 |
| | | 95% BCA Bootstrap UCL | 162515 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | N/A | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | N/A | | |
| nu star | N/A | | |
| | | | |
| A-D Test Statistic | N/A | **Nonparametric Statistics** | |
| 5% A-D Critical Value | N/A | Kaplan-Meier (KM) Method | |

**PROUCL OUTPUT - BLOCK F SUBSURFACE SOIL**

| | | | |
|---|---|---|---|
| K-S Test Statistic | N/A | Mean | 51898 |
| 5% K-S Critical Value | N/A | SD | 180930 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 47245 |
| | | 95% KM (t) UCL | 133194 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 129608 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 116419 |
| Minimum | N/A | 95% KM (bootstrap t) UCL | 4066300 |
| Maximum | N/A | 95% KM (BCA) UCL | 881000 |
| Mean | N/A | 95% KM (Percentile Bootstrap) UCL | N/A |
| Median | N/A | 95% KM (Chebyshev) UCL | 257833 |
| SD | N/A | 97.5% KM (Chebyshev) UCL | 346941 |
| k star | N/A | 99% KM (Chebyshev) UCL | 521977 |
| Theta star | N/A | | |
| Nu star | N/A | **Potential UCLs to Use** | |
| AppChi2 | N/A | 99% KM (Chebyshev) UCL | 521977 |
| 95% Gamma Approximate UCL | N/A | | |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

GASOLINE RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 36 | Number of Detected Data | 1 |
| Number of Distinct Detected Data | 1 | Number of Non-Detect Data | 35 |
| Number of Missing Values | 307 | Percent Non-Detects | 97.22% |

**Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!**

**It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable GASOLINE RANGE ORGANICS was not processed!**

PROUCL OUTPUT - BLOCK F SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Full Data Sets** |
| **User Selected Options** | |
| From File | Sheet1.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**VANADIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 13 | Number of Distinct Observations | 13 |
| Number of Missing Values | 226 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 20.7 | Minimum of Log Data | 3.03 |
| Maximum | 61.6 | Maximum of Log Data | 4.121 |
| Mean | 34.86 | Mean of log Data | 3.516 |
| Median | 32.8 | SD of log Data | 0.27 |
| SD | 10.26 | | |
| Coefficient of Variation | 0.294 | | |
| Skewness | 1.524 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.873 | Shapiro Wilk Test Statistic | 0.953 |
| Shapiro Wilk Critical Value | 0.866 | Shapiro Wilk Critical Value | 0.866 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 39.93 | 95% H-UCL | 40.41 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 46.24 |
| 95% Adjusted-CLT UCL (Chen-1995) | 40.83 | 97.5% Chebyshev (MVUE) UCL | 51.18 |
| 95% Modified-t UCL (Johnson-1978) | 40.13 | 99% Chebyshev (MVUE) UCL | 60.9 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 11.12 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 3.134 | | |
| MLE of Mean | 34.86 | | |
| MLE of Standard Deviation | 10.45 | | |
| nu star | 289.2 | | |
| Approximate Chi Square Value (.05) | 250.8 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0301 | 95% CLT UCL | 39.54 |
| Adjusted Chi Square Value | 245.7 | 95% Jackknife UCL | 39.93 |
| | | 95% Standard Bootstrap UCL | 39.51 |
| Anderson-Darling Test Statistic | 0.435 | 95% Bootstrap-t UCL | 42.76 |
| Anderson-Darling 5% Critical Value | 0.734 | 95% Hall's Bootstrap UCL | 68.58 |
| Kolmogorov-Smirnov Test Statistic | 0.215 | 95% Percentile Bootstrap UCL | 39.69 |
| Kolmogorov-Smirnov 5% Critical Value | 0.236 | 95% BCA Bootstrap UCL | 40.49 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 47.27 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 52.63 |

PROUCL OUTPUT - BLOCK F SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 63.17 |
| 95% Approximate Gamma UCL | 40.2 | | |
| 95% Adjusted Gamma UCL | 41.03 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 39.93 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK F SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**5% OF TOTAL CHROMIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 35 | Number of Detected Data | 34 |
| Number of Distinct Detected Data | 27 | Number of Non-Detect Data | 1 |
| Number of Missing Values | 1 | Percent Non-Detects | 2.86% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.265 | Minimum Detected | -1.328 |
| Maximum Detected | 1.97 | Maximum Detected | 0.678 |
| Mean of Detected | 0.883 | Mean of Detected | -0.22 |
| SD of Detected | 0.393 | SD of Detected | 0.456 |
| Minimum Non-Detect | 0.13 | Minimum Non-Detect | -2.04 |
| Maximum Non-Detect | 0.13 | Maximum Non-Detect | -2.04 |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.924 | Shapiro Wilk Test Statistic | 0.973 |
| 5% Shapiro Wilk Critical Value | 0.933 | 5% Shapiro Wilk Critical Value | 0.933 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.86 | Mean | -0.292 |
| SD | 0.411 | SD | 0.618 |
| 95% DL/2 (t) UCL | 0.977 | 95% H-Stat (DL/2) UCL | 1.123 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 0.857 | Mean in Log Scale | -0.253 |
| SD | 0.412 | SD in Log Scale | 0.489 |
| 95% MLE (t) UCL | 0.975 | Mean in Original Scale | 0.865 |
| 95% MLE (Tiku) UCL | 0.974 | SD in Original Scale | 0.401 |
| | | 95% t UCL | 0.98 |
| | | 95% Percentile Bootstrap UCL | 0.977 |
| | | 95% BCA Bootstrap UCL | 0.99 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 4.926 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 0.179 | | |
| nu star | 335 | | |
| | | | |
| A-D Test Statistic | 0.223 | **Nonparametric Statistics** | |

PROUCL OUTPUT - BLOCK F SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| 5% A-D Critical Value | 0.749 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.749 | Mean | 0.866 |
| 5% K-S Critical Value | 0.151 | SD | 0.395 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.0678 |
| | | 95% KM (t) UCL | 0.98 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.977 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.98 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 0.993 |
| Maximum | 1.97 | 95% KM (BCA) UCL | 0.977 |
| Mean | 0.858 | 95% KM (Percentile Bootstrap) UCL | 0.982 |
| Median | 0.8 | 95% KM (Chebyshev) UCL | 1.161 |
| SD | 0.415 | 97.5% KM (Chebyshev) UCL | 1.289 |
| k star | 0.668 | 99% KM (Chebyshev) UCL | 1.54 |
| Theta star | 1.285 | | |
| Nu star | 46.75 | **Potential UCLs to Use** | |
| AppChi2 | 32.06 | 95% KM (BCA) UCL | 0.977 |
| 95% Gamma Approximate UCL | 1.251 | | |
| 95% Adjusted Gamma UCL | 1.274 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK F SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**BENZO(A)PYRENE EQUIVALENTS**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 316 | Number of Detected Data | 85 |
| Number of Distinct Detected Data | 83 | Number of Non-Detect Data | 231 |
| Number of Missing Values | 24 | Percent Non-Detects | 73.10% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 2.285 | Minimum Detected | 0.826 |
| Maximum Detected | 7604 | Maximum Detected | 8.936 |
| Mean of Detected | 333.1 | Mean of Detected | 4.123 |
| SD of Detected | 948 | SD of Detected | 1.83 |
| Minimum Non-Detect | 1.4 | Minimum Non-Detect | 0.336 |
| Maximum Non-Detect | 410 | Maximum Non-Detect | 6.016 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 303 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 13 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 95.89% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.364 | Lilliefors Test Statistic | 0.0964 |
| 5% Lilliefors Critical Value | 0.0961 | 5% Lilliefors Critical Value | 0.0961 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 102.6 | Mean | 1.292 |
| SD | 511.4 | SD | 2.372 |
| 95% DL/2 (t) UCL | 150 | 95% H-Stat (DL/2) UCL | 96.85 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -0.0899 |
| | | SD in Log Scale | 3.388 |
| | | Mean in Original Scale | 90.51 |
| | | SD in Original Scale | 511.3 |
| | | 95% t UCL | 138 |
| | | 95% Percentile Bootstrap UCL | 144.7 |
| | | 95% BCA Bootstrap UCL | 171.5 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.386 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 863.8 | | |

PROUCL OUTPUT - BLOCK F SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| nu star | 65.57 | | |
| | | | |
| A-D Test Statistic | 4.341 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.845 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.845 | Mean | 92.51 |
| 5% K-S Critical Value | 0.104 | SD | 510.4 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 28.89 |
| | | 95% KM (t) UCL | 140.2 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 140 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 140 |
| Minimum | 2.285 | 95% KM (bootstrap t) UCL | 190.6 |
| Maximum | 7604 | 95% KM (BCA) UCL | 148.5 |
| Mean | 620.6 | 95% KM (Percentile Bootstrap) UCL | 144.2 |
| Median | 329.7 | 95% KM (Chebyshev) UCL | 218.5 |
| SD | 750.3 | 97.5% KM (Chebyshev) UCL | 273 |
| k star | 0.748 | 99% KM (Chebyshev) UCL | 380 |
| Theta star | 829.1 | | |
| Nu star | 473.1 | **Potential UCLs to Use** | |
| AppChi2 | 423.6 | 95% KM (Chebyshev) UCL | 218.5 |
| 95% Gamma Approximate UCL | 693 | | |
| 95% Adjusted Gamma UCL | 693.3 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK F SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Full Data Sets** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**VANADIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 13 | Number of Distinct Observations | 13 |
| Number of Missing Values | 227 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 20.7 | Minimum of Log Data | 3.03 |
| Maximum | 61.6 | Maximum of Log Data | 4.121 |
| Mean | 34.86 | Mean of log Data | 3.516 |
| Median | 32.8 | SD of log Data | 0.27 |
| SD | 10.26 | | |
| Coefficient of Variation | 0.294 | | |
| Skewness | 1.524 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.873 | Shapiro Wilk Test Statistic | 0.953 |
| Shapiro Wilk Critical Value | 0.866 | Shapiro Wilk Critical Value | 0.866 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 39.93 | 95% H-UCL | 40.41 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 46.24 |
| 95% Adjusted-CLT UCL (Chen-1995) | 40.83 | 97.5% Chebyshev (MVUE) UCL | 51.18 |
| 95% Modified-t UCL (Johnson-1978) | 40.13 | 99% Chebyshev (MVUE) UCL | 60.9 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 11.12 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 3.134 | | |
| MLE of Mean | 34.86 | | |
| MLE of Standard Deviation | 10.45 | | |
| nu star | 289.2 | | |
| Approximate Chi Square Value (.05) | 250.8 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0301 | 95% CLT UCL | 39.54 |
| Adjusted Chi Square Value | 245.7 | 95% Jackknife UCL | 39.93 |
| | | 95% Standard Bootstrap UCL | 39.41 |
| Anderson-Darling Test Statistic | 0.435 | 95% Bootstrap-t UCL | 42.88 |
| Anderson-Darling 5% Critical Value | 0.734 | 95% Hall's Bootstrap UCL | 67.61 |
| Kolmogorov-Smirnov Test Statistic | 0.215 | 95% Percentile Bootstrap UCL | 39.71 |
| Kolmogorov-Smirnov 5% Critical Value | 0.236 | 95% BCA Bootstrap UCL | 40.18 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 47.27 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 52.63 |

PROUCL OUTPUT - BLOCK F SUBSURFACE SOIL

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Assuming Gamma Distribution** | | | | | | 99% Chebyshev(Mean, Sd) UCL | 63.17 |
| 95% Approximate Gamma UCL | 40.2 | | | | | | |
| 95% Adjusted Gamma UCL | 41.03 | | | | | | |
| | | | | | | | |
| **Potential UCL to Use** | | | | | | Use 95% Student's-t UCL | 39.93 |
| | | | | | | | |
| **Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.** | | | | | | | |
| **These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)** | | | | | | | |
| **and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.** | | | | | | | |
| | | | | | | | |

PROUCL OUTPUT - BLOCK G SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | BLOCK G.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**ARSENIC**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 32 | Number of Detected Data | 25 |
| Number of Distinct Detected Data | 19 | Number of Non-Detect Data | 7 |
| Number of Missing Values | 839 | Percent Non-Detects | 21.88% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.61 | Minimum Detected | -0.494 |
| Maximum Detected | 8.3 | Maximum Detected | 2.116 |
| Mean of Detected | 3.46 | Mean of Detected | 1.04 |
| SD of Detected | 2.091 | SD of Detected | 0.69 |
| Minimum Non-Detect | 0.53 | Minimum Non-Detect | -0.635 |
| Maximum Non-Detect | 5 | Maximum Non-Detect | 1.609 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 24 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 8 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 75.00% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.935 | Shapiro Wilk Test Statistic | 0.959 |
| 5% Shapiro Wilk Critical Value | 0.918 | 5% Shapiro Wilk Critical Value | 0.918 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 2.93 | Mean | 0.769 |
| SD | 2.129 | SD | 0.867 |
| 95% DL/2 (t) UCL | 3.569 | 95% H-Stat (DL/2) UCL | 4.477 |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 3.627 | Mean in Log Scale | 0.805 |
| SD | 1.944 | SD in Log Scale | 0.782 |
| 95% MLE (t) UCL | 4.21 | Mean in Original Scale | 2.934 |
| 95% MLE (Tiku) UCL | 4.81 | SD in Original Scale | 2.109 |
| | | 95% t UCL | 3.566 |
| | | 95% Percentile Bootstrap UCL | 3.558 |
| | | 95% BCA Bootstrap UCL | 3.634 |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 2.342 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 1.477 | | |

| | | | |
|---|---|---|---|
| nu star | 117.1 | | |
| | | | |
| A-D Test Statistic | 0.239 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.753 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.753 | Mean | 2.937 |
| 5% K-S Critical Value | 0.176 | SD | 2.09 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.381 |
| | | 95% KM (t) UCL | 3.582 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 3.563 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 3.575 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 3.633 |
| Maximum | 8.3 | 95% KM (BCA) UCL | 3.609 |
| Mean | 3.11 | 95% KM (Percentile Bootstrap) UCL | 3.564 |
| Median | 2.677 | 95% KM (Chebyshev) UCL | 4.596 |
| SD | 2.047 | 97.5% KM (Chebyshev) UCL | 5.313 |
| k star | 0.545 | 99% KM (Chebyshev) UCL | 6.723 |
| Theta star | 5.701 | | |
| Nu star | 34.91 | **Potential UCLs to Use** | |
| AppChi2 | 22.39 | 95% KM (t) UCL | 3.582 |
| 95% Gamma Approximate UCL | 4.848 | 95% KM (Percentile Bootstrap) UCL | 3.564 |
| 95% Adjusted Gamma UCL | 4.967 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**COBALT**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 14 | Number of Detected Data | 13 |
| Number of Distinct Detected Data | 13 | Number of Non-Detect Data | 1 |
| Number of Missing Values | 653 | Percent Non-Detects | 7.14% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 2.6 | Minimum Detected | 0.956 |
| Maximum Detected | 68.1 | Maximum Detected | 4.221 |
| Mean of Detected | 11.78 | Mean of Detected | 1.978 |
| SD of Detected | 17.39 | SD of Detected | 0.892 |
| Minimum Non-Detect | 11 | Minimum Non-Detect | 2.398 |
| Maximum Non-Detect | 11 | Maximum Non-Detect | 2.398 |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.517 | Shapiro Wilk Test Statistic | 0.894 |
| 5% Shapiro Wilk Critical Value | 0.866 | 5% Shapiro Wilk Critical Value | 0.866 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |

PROUCL OUTPUT - BLOCK G SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 11.33 | Mean | 1.959 |
| SD | 16.79 | SD | 0.86 |
| 95% DL/2 (t) UCL | 19.28 | 95% H-Stat (DL/2) UCL | 18.96 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 1.951 |
| | | SD in Log Scale | 0.863 |
| | | Mean in Original Scale | 11.29 |
| | | SD in Original Scale | 16.81 |
| | | 95% t UCL | 19.24 |
| | | 95% Percentile Bootstrap UCL | 20.09 |
| | | 95% BCA Bootstrap UCL | 23.69 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.946 | **Data Follow Appr. Gamma Distribution at 5% Significance Level** | |
| Theta Star | 12.44 | | |
| nu star | 24.6 | | |
| | | | |
| A-D Test Statistic | 1.012 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.755 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.755 | Mean | 11.3 |
| 5% K-S Critical Value | 0.242 | SD | 16.2 |
| **Data follow Appr. Gamma Distribution at 5% Significance Level** | | SE of Mean | 4.51 |
| | | 95% KM (t) UCL | 19.28 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 18.72 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 19.26 |
| Minimum | 2.6 | 95% KM (bootstrap t) UCL | 38.05 |
| Maximum | 68.1 | 95% KM (BCA) UCL | 20.06 |
| Mean | 11.43 | 95% KM (Percentile Bootstrap) UCL | 19.78 |
| Median | 6.246 | 95% KM (Chebyshev) UCL | 30.96 |
| SD | 16.76 | 97.5% KM (Chebyshev) UCL | 39.46 |
| k star | 1.01 | 99% KM (Chebyshev) UCL | 56.17 |
| Theta star | 11.32 | | |
| Nu star | 28.27 | **Potential UCLs to Use** | |
| AppChi2 | 17.14 | 95% KM (Chebyshev) UCL | 30.96 |
| 95% Gamma Approximate UCL | 18.85 | | |
| 95% Adjusted Gamma UCL | 20.2 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**LEAD**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 24 | Number of Detected Data | 23 |
| Number of Distinct Detected Data | 19 | Number of Non-Detect Data | 1 |
| Number of Missing Values | 847 | Percent Non-Detects | 4.17% |

PROUCL OUTPUT - BLOCK G SUBSURFACE SOIL

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 2 | Minimum Detected | 0.693 |
| Maximum Detected | 18 | Maximum Detected | 2.89 |
| Mean of Detected | 7.322 | Mean of Detected | 1.864 |
| SD of Detected | 3.799 | SD of Detected | 0.522 |
| Minimum Non-Detect | 1 | Minimum Non-Detect | 0 |
| Maximum Non-Detect | 1 | Maximum Non-Detect | 0 |
| | | | |

**UCL Statistics**

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.899 | Shapiro Wilk Test Statistic | 0.959 |
| 5% Shapiro Wilk Critical Value | 0.914 | 5% Shapiro Wilk Critical Value | 0.914 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 7.038 | Mean | 1.757 |
| SD | 3.968 | SD | 0.73 |
| 95% DL/2 (t) UCL | 8.426 | 95% H-Stat (DL/2) UCL | 10.6 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 6.985 | Mean in Log Scale | 1.811 |
| SD | 3.992 | SD in Log Scale | 0.574 |
| 95% MLE (t) UCL | 8.382 | Mean in Original Scale | 7.091 |
| 95% MLE (Tiku) UCL | 8.371 | SD in Original Scale | 3.884 |
| | | 95% t UCL | 8.45 |
| | | 95% Percentile Bootstrap UCL | 8.333 |
| | | 95% BCA Bootstrap UCL | 8.495 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 3.595 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 2.037 | | |
| nu star | 165.4 | | |
| | | | |
| A-D Test Statistic | 0.597 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.749 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.749 | Mean | 7.1 |
| 5% K-S Critical Value | 0.182 | SD | 3.79 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.791 |
| | | 95% KM (t) UCL | 8.456 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 8.401 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 8.429 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 8.775 |
| Maximum | 18 | 95% KM (BCA) UCL | 8.417 |
| Mean | 7.017 | 95% KM (Percentile Bootstrap) UCL | 8.425 |
| Median | 5.75 | 95% KM (Chebyshev) UCL | 10.55 |
| SD | 4.005 | 97.5% KM (Chebyshev) UCL | 12.04 |
| k star | 0.453 | 99% KM (Chebyshev) UCL | 14.97 |
| Theta star | 15.49 | | |

| | | | |
|---|---|---|---|
| Nu star | 21.74 | **Potential UCLs to Use** | |
| AppChi2 | 12.14 | 95% KM (BCA) UCL | 8.417 |
| 95% Gamma Approximate UCL | 12.56 | | |
| 95% Adjusted Gamma UCL | 13.11 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**MERCURY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 24 | Number of Detected Data | 12 |
| Number of Distinct Detected Data | 6 | Number of Non-Detect Data | 12 |
| Number of Missing Values | 847 | Percent Non-Detects | 50.00% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.007 | Minimum Detected | -4.962 |
| Maximum Detected | 0.03 | Maximum Detected | -3.507 |
| Mean of Detected | 0.0114 | Mean of Detected | -4.579 |
| SD of Detected | 0.00678 | SD of Detected | 0.433 |
| Minimum Non-Detect | 0.019 | Minimum Non-Detect | -3.963 |
| Maximum Non-Detect | 0.12 | Maximum Non-Detect | -2.12 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 24 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 100.00% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.627 | Shapiro Wilk Test Statistic | 0.748 |
| 5% Shapiro Wilk Critical Value | 0.859 | 5% Shapiro Wilk Critical Value | 0.859 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.0294 | Mean | -3.885 |
| SD | 0.0227 | SD | 0.901 |
| 95% DL/2 (t) UCL | 0.0374 | 95% H-Stat (DL/2) UCL | 0.0485 |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -4.597 |
| | | SD in Log Scale | 0.345 |
| | | Mean in Original Scale | 0.0108 |
| | | SD in Original Scale | 0.00504 |
| | | 95% t UCL | 0.0126 |
| | | 95% Percentile Bootstrap UCL | 0.0125 |
| | | 95% BCA Bootstrap UCL | 0.0133 |

| Gamma Distribution Test with Detected Values Only | | Data Distribution Test with Detected Values Only | |
|---|---|---|---|
| k star (bias corrected) | 3.709 | Data do not follow a Discernable Distribution (0.05) | |
| Theta Star | 0.00308 | | |
| nu star | 89.01 | | |
| | | | |
| A-D Test Statistic | 1.596 | Nonparametric Statistics | |
| 5% A-D Critical Value | 0.732 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.732 | Mean | 0.011 |
| 5% K-S Critical Value | 0.246 | SD | 0.00609 |
| Data not Gamma Distributed at 5% Significance Level | | SE of Mean | 0.00171 |
| | | 95% KM (t) UCL | 0.014 |
| Assuming Gamma Distribution | | 95% KM (z) UCL | 0.0138 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.014 |
| Minimum | 0.007 | 95% KM (bootstrap t) UCL | 0.0238 |
| Maximum | 0.03 | 95% KM (BCA) UCL | 0.014 |
| Mean | 0.0116 | 95% KM (Percentile Bootstrap) UCL | 0.014 |
| Median | 0.0109 | 95% KM (Chebyshev) UCL | 0.0185 |
| SD | 0.00477 | 97.5% KM (Chebyshev) UCL | 0.0217 |
| k star | 8.006 | 99% KM (Chebyshev) UCL | 0.028 |
| Theta star | 0.00145 | | |
| Nu star | 384.3 | Potential UCLs to Use | |
| AppChi2 | 339.9 | 95% KM (t) UCL | 0.014 |
| 95% Gamma Approximate UCL | 0.0131 | 95% KM (% Bootstrap) UCL | 0.014 |
| 95% Adjusted Gamma UCL | 0.0133 | | |

Note: DL/2 is not a recommended method.

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

For additional insight, the user may want to consult a statistician.

1,2,3-TRICHLOROBENZENE

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 24 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 24 |
| Number of Missing Values | 847 | Percent Non-Detects | 100.00% |

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!

Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 1,2,3-TRICHLOROBENZENE was not processed!

1,2,4-TRICHLOROBENZENE

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 24 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 24 |

| | | | |
|---|---|---|---|
| Number of Missing Values | 847 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,2,4-TRICHLOROBENZENE was not processed!**

1,3-DICHLOROBENZENE

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 24 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 24 |
| Number of Missing Values | 847 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,3-DICHLOROBENZENE was not processed!**

1,4-DICHLOROBENZENE

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 24 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 24 |
| Number of Missing Values | 847 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,4-DICHLOROBENZENE was not processed!**

PAH_NAPHTHALENE

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 68 | Number of Detected Data | 6 |
| Number of Distinct Detected Data | 6 | Number of Non-Detect Data | 62 |
| Number of Missing Values | 803 | Percent Non-Detects | 91.18% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 8.4 | Minimum Detected | 2.128 |
| Maximum Detected | 510 | Maximum Detected | 6.234 |
| Mean of Detected | 147.9 | Mean of Detected | 4.167 |

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| | | | |
|---|---|---|---|
| SD of Detected | 193.4 | SD of Detected | 1.511 |
| Minimum Non-Detect | 3.6 | Minimum Non-Detect | 1.281 |
| Maximum Non-Detect | 410 | Maximum Non-Detect | 6.016 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 67 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 1 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 98.53% |

**Warning: There are only 6 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.781 | Shapiro Wilk Test Statistic | 0.986 |
| 5% Shapiro Wilk Critical Value | 0.788 | 5% Shapiro Wilk Critical Value | 0.788 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 50.93 | Mean | 2.274 |
| SD | 90.86 | SD | 1.906 |
| 95% DL/2 (t) UCL | 69.3 | 95% H-Stat (DL/2) UCL | 115.4 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -1.521 |
| | | SD in Log Scale | 2.42 |
| | | Mean in Original Scale | 13.39 |
| | | SD in Original Scale | 67.59 |
| | | 95% t UCL | 27.06 |
| | | 95% Percentile Bootstrap UCL | 28.2 |
| | | 95% BCA Bootstrap UCL | 41.61 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.474 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 312.3 | | |
| nu star | 5.683 | | |
| | | | |
| A-D Test Statistic | 0.238 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.722 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.722 | Mean | 21.85 |
| 5% K-S Critical Value | 0.344 | SD | 66.56 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 9.006 |
| | | 95% KM (t) UCL | 36.87 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 36.66 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 34.52 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 57.55 |
| Maximum | 510 | 95% KM (BCA) UCL | 220 |

| | | | |
|---|---|---|---|
| Mean | 124.1 | 95% KM (Percentile Bootstrap) UCL | 72.64 |
| Median | 125.9 | 95% KM (Chebyshev) UCL | 61.11 |
| SD | 88.42 | 97.5% KM (Chebyshev) UCL | 78.09 |
| k star | 0.212 | 99% KM (Chebyshev) UCL | 111.5 |
| Theta star | 586.1 | | |
| Nu star | 28.81 | **Potential UCLs to Use** | |
| AppChi2 | 17.56 | 95% KM (t) UCL | 36.87 |
| 95% Gamma Approximate UCL | 203.7 | | |
| 95% Adjusted Gamma UCL | 205.9 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**AROCLOR-1254**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 24 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 24 |
| Number of Missing Values | 847 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable AROCLOR-1254 was not processed!**

**AROCLOR-1260**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 24 | Number of Detected Data | 2 |
| Number of Distinct Detected Data | 2 | Number of Non-Detect Data | 22 |
| Number of Missing Values | 847 | Percent Non-Detects | 91.67% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 8.1 | Minimum Detected | 2.092 |
| Maximum Detected | 14 | Maximum Detected | 2.639 |
| Mean of Detected | 11.05 | Mean of Detected | 2.365 |
| SD of Detected | 4.172 | SD of Detected | 0.387 |
| Minimum Non-Detect | 36 | Minimum Non-Detect | 3.584 |
| Maximum Non-Detect | 300 | Maximum Non-Detect | 5.704 |

| | | | |
|---|---|---|---|
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 24 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 100.00% |

**Warning: Data set has only 2 Distinct Detected Values.**

| | | | |
|---|---|---|---|
| **This may not be adequate enough to compute meaningful and reliable test statistics and estimates.** | | | |
| **The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).** | | | |
| | | | |
| **Unless Data Quality Objectives (DQOs) have been met, it is suggested to collect additional observations.** | | | |
| | | | |
| **The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.** | | | |
| **Those methods will return a 'N/A' value on your output display!** | | | |
| | | | |
| **It is necessary to have 4 or more Distinct Values for bootstrap methods.** | | | |
| **However, results obtained using 4 to 9 distinct values may not be reliable.** | | | |
| **It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.** | | | |
| | | | |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | N/A | Shapiro Wilk Test Statistic | N/A |
| 5% Shapiro Wilk Critical Value | N/A | 5% Shapiro Wilk Critical Value | N/A |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 71.3 | Mean | 3.757 |
| SD | 64.16 | SD | 1.073 |
| 95% DL/2 (t) UCL | 93.74 | 95% H-Stat (DL/2) UCL | 137.3 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | N/A |
| | | SD in Log Scale | N/A |
| | | Mean in Original Scale | N/A |
| | | SD in Original Scale | N/A |
| | | 95% t UCL | N/A |
| | | 95% Percentile Bootstrap UCL | N/A |
| | | 95% BCA Bootstrap UCL | N/A |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | N/A | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | N/A | | |
| nu star | N/A | | |
| | | | |
| A-D Test Statistic | N/A | **Nonparametric Statistics** | |
| 5% A-D Critical Value | N/A | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | N/A | Mean | 11.05 |
| 5% K-S Critical Value | N/A | SD | 2.95 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 2.95 |
| | | 95% KM (t) UCL | 16.11 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 15.9 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 18.05 |
| Minimum | N/A | 95% KM (bootstrap t) UCL | N/A |
| Maximum | N/A | 95% KM (BCA) UCL | 14 |
| Mean | N/A | 95% KM (Percentile Bootstrap) UCL | N/A |
| Median | N/A | 95% KM (Chebyshev) UCL | 23.91 |

| | | | |
|---|---|---|---|
| SD | N/A | 97.5% KM (Chebyshev) UCL | 29.47 |
| k star | N/A | 99% KM (Chebyshev) UCL | 40.4 |
| Theta star | N/A | | |
| Nu star | N/A | **Potential UCLs to Use** | |
| AppChi2 | N/A | 95% KM (t) UCL | 16.11 |
| 95% Gamma Approximate UCL | N/A | 95% KM (% Bootstrap) UCL | N/A |
| 95% Adjusted Gamma UCL | N/A | | |

**Warning: Recommended UCL exceeds the maximum observation**

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**DIESEL RANGE ORGANICS**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 37 | Number of Detected Data | 14 |
| Number of Distinct Detected Data | 14 | Number of Non-Detect Data | 23 |
| Number of Missing Values | 834 | Percent Non-Detects | 62.16% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 840 | Minimum Detected | 6.733 |
| Maximum Detected | 105000 | Maximum Detected | 11.56 |
| Mean of Detected | 33046 | Mean of Detected | 9.724 |
| SD of Detected | 32993 | SD of Detected | 1.444 |
| Minimum Non-Detect | 11000 | Minimum Non-Detect | 9.306 |
| Maximum Non-Detect | 13000 | Maximum Non-Detect | 9.473 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 28 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 9 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 75.68% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.859 | Shapiro Wilk Test Statistic | 0.937 |
| 5% Shapiro Wilk Critical Value | 0.874 | 5% Shapiro Wilk Critical Value | 0.874 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 16220 | Mean | 9.085 |
| SD | 23879 | SD | 1.005 |
| 95% DL/2 (t) UCL | 22848 | 95% H-Stat (DL/2) UCL | 21811 |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 8.526 |
| | | SD in Log Scale | 1.516 |
| | | Mean in Original Scale | 14788 |
| | | SD in Original Scale | 24648 |

| | | | |
|---|---|---|---|
| | | 95% t UCL | 21630 |
| | | 95% Percentile Bootstrap UCL | 21982 |
| | | 95% BCA Bootstrap UCL | 23816 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.725 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 45555 | | |
| nu star | 20.31 | | |
| | | | |
| A-D Test Statistic | 0.187 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.766 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.766 | Mean | 14555 |
| 5% K-S Critical Value | 0.236 | SD | 24352 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 4210 |
| | | 95% KM (t) UCL | 21663 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 21480 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 21568 |
| Minimum | 840 | 95% KM (bootstrap t) UCL | 25801 |
| Maximum | 105000 | 95% KM (BCA) UCL | 22978 |
| Mean | 28828 | 95% KM (Percentile Bootstrap) UCL | 21951 |
| Median | 26638 | 95% KM (Chebyshev) UCL | 32908 |
| SD | 21911 | 97.5% KM (Chebyshev) UCL | 40849 |
| k star | 1.506 | 99% KM (Chebyshev) UCL | 56448 |
| Theta star | 19137 | | |
| Nu star | 111.5 | **Potential UCLs to Use** | |
| AppChi2 | 88.1 | 95% KM (t) UCL | 21663 |
| 95% Gamma Approximate UCL | 36475 | | |
| 95% Adjusted Gamma UCL | 36852 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

GASOLINE RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 46 | Number of Detected Data | 21 |
| Number of Distinct Detected Data | 21 | Number of Non-Detect Data | 25 |
| Number of Missing Values | 825 | Percent Non-Detects | 54.35% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 34 | Minimum Detected | 3.526 |
| Maximum Detected | 980000 | Maximum Detected | 13.8 |
| Mean of Detected | 174565 | Mean of Detected | 8.56 |
| SD of Detected | 278855 | SD of Detected | 4.089 |
| Minimum Non-Detect | 110 | Minimum Non-Detect | 4.7 |
| Maximum Non-Detect | 12800 | Maximum Non-Detect | 9.457 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 36 |

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| | | | |
|---|---|---|---|
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 10 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 78.26% |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.691 | Shapiro Wilk Test Statistic | 0.835 |
| 5% Shapiro Wilk Critical Value | 0.908 | 5% Shapiro Wilk Critical Value | 0.908 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 81771 | Mean | 7.806 |
| SD | 204835 | SD | 3.227 |
| 95% DL/2 (t) UCL | 132492 | 95% H-Stat (DL/2) UCL | 5914340 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 6.562 |
| | | SD in Log Scale | 3.45 |
| | | Mean in Original Scale | 79826 |
| | | SD in Original Scale | 205589 |
| | | 95% t UCL | 130734 |
| | | 95% Percentile Bootstrap UCL | 129702 |
| | | 95% BCA Bootstrap UCL | 141371 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.21 | **Data Follow Appr. Gamma Distribution at 5% Significance Level** | |
| Theta Star | 829992 | | |
| nu star | 8.833 | | |
| | | | |
| A-D Test Statistic | 1.134 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.887 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.887 | Mean | 79860 |
| 5% K-S Critical Value | 0.209 | SD | 203330 |
| **Data follow Appr. Gamma Distribution at 5% Significance Level** | | SE of Mean | 30720 |
| | | 95% KM (t) UCL | 131452 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 130390 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 130765 |
| Minimum | 34 | 95% KM (bootstrap t) UCL | 163382 |
| Maximum | 980000 | 95% KM (BCA) UCL | 131469 |
| Mean | 151730 | 95% KM (Percentile Bootstrap) UCL | 134082 |
| Median | 128370 | 95% KM (Chebyshev) UCL | 213765 |
| SD | 187730 | 97.5% KM (Chebyshev) UCL | 271706 |
| k star | 0.394 | 99% KM (Chebyshev) UCL | 385520 |
| Theta star | 385222 | | |
| Nu star | 36.24 | **Potential UCLs to Use** | |
| AppChi2 | 23.46 | 95% KM (t) UCL | 131452 |
| 95% Gamma Approximate UCL | 234371 | | |
| 95% Adjusted Gamma UCL | 237753 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

PROUCL OUTPUT - BLOCK G SUBSURFACE SOIL

| These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). |
|---|
| For additional insight, the user may want to consult a statistician. |
| |

| | |
|---|---|
| | **General UCL Statistics for Full Data Sets** |
| **User Selected Options** | |
| From File | Sheet1.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**IRON**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 2 | Number of Distinct Observations | 2 |
| Number of Missing Values | 642 | | |

**Warning: This data set only has 2 observations!**

**Data set is too small to compute reliable and meaningful statistics and estimates!**

**The data set for variable IRON was not processed!**

**It is suggested to collect at least 8 to 10 observations before using these statistical methods!**

**If possible, compute and collect Data Quality Objectives (DQO) based sample size and analytical results.**

**MANGANESE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 2 | Number of Distinct Observations | 2 |
| Number of Missing Values | 642 | | |

**Warning: This data set only has 2 observations!**

**Data set is too small to compute reliable and meaningful statistics and estimates!**

**The data set for variable MANGANESE was not processed!**

**It is suggested to collect at least 8 to 10 observations before using these statistical methods!**

**If possible, compute and collect Data Quality Objectives (DQO) based sample size and analytical results.**

**VANADIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 14 | Number of Distinct Observations | 14 |
| Number of Missing Values | 653 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 13.3 | Minimum of Log Data | 2.588 |
| Maximum | 72.7 | Maximum of Log Data | 4.286 |
| Mean | 36.63 | Mean of log Data | 3.445 |
| Median | 34.6 | SD of log Data | 0.594 |

| | | | |
|---|---|---|---|
| SD | 20.36 | | |
| Coefficient of Variation | 0.556 | | |
| Skewness | 0.519 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.916 | Shapiro Wilk Test Statistic | 0.933 |
| Shapiro Wilk Critical Value | 0.874 | Shapiro Wilk Critical Value | 0.874 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 46.26 | 95% H-UCL | 53.61 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 63.32 |
| 95% Adjusted-CLT UCL (Chen-1995) | 46.38 | 97.5% Chebyshev (MVUE) UCL | 74.77 |
| 95% Modified-t UCL (Johnson-1978) | 46.39 | 99% Chebyshev (MVUE) UCL | 97.27 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 2.695 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 13.59 | | |
| MLE of Mean | 36.63 | | |
| MLE of Standard Deviation | 22.31 | | |
| nu star | 75.47 | | |
| Approximate Chi Square Value (.05) | 56.46 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0312 | 95% CLT UCL | 45.58 |
| Adjusted Chi Square Value | 54.28 | 95% Jackknife UCL | 46.26 |
| | | 95% Standard Bootstrap UCL | 45.49 |
| Anderson-Darling Test Statistic | 0.335 | 95% Bootstrap-t UCL | 47.33 |
| Anderson-Darling 5% Critical Value | 0.742 | 95% Hall's Bootstrap UCL | 45.51 |
| Kolmogorov-Smirnov Test Statistic | 0.149 | 95% Percentile Bootstrap UCL | 45.2 |
| Kolmogorov-Smirnov 5% Critical Value | 0.23 | 95% BCA Bootstrap UCL | 45.62 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 60.34 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 70.6 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 90.76 |
| 95% Approximate Gamma UCL | 48.96 | | |
| 95% Adjusted Gamma UCL | 50.92 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 46.26 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK G SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Full Data Sets** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**5% OF TOTAL CHROMIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 24 | Number of Distinct Observations | 23 |
| Number of Missing Values | 1 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.345 | Minimum of Log Data | -1.064 |
| Maximum | 2 | Maximum of Log Data | 0.693 |
| Mean | 0.949 | Mean of log Data | -0.197 |
| Median | 0.858 | SD of log Data | 0.56 |
| SD | 0.503 | | |
| Coefficient of Variation | 0.53 | | |
| Skewness | 0.518 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.918 | Shapiro Wilk Test Statistic | 0.934 |
| Shapiro Wilk Critical Value | 0.916 | Shapiro Wilk Critical Value | 0.916 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 1.124 | 95% H-UCL | 1.218 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 1.452 |
| 95% Adjusted-CLT UCL (Chen-1995) | 1.129 | 97.5% Chebyshev (MVUE) UCL | 1.668 |
| 95% Modified-t UCL (Johnson-1978) | 1.126 | 99% Chebyshev (MVUE) UCL | 2.092 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 3.208 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 0.296 | | |
| MLE of Mean | 0.949 | | |
| MLE of Standard Deviation | 0.53 | | |
| nu star | 154 | | |
| Approximate Chi Square Value (.05) | 126.3 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0392 | 95% CLT UCL | 1.117 |
| Adjusted Chi Square Value | 124.5 | 95% Jackknife UCL | 1.124 |
| | | 95% Standard Bootstrap UCL | 1.11 |
| Anderson-Darling Test Statistic | 0.533 | 95% Bootstrap-t UCL | 1.137 |
| Anderson-Darling 5% Critical Value | 0.75 | 95% Hall's Bootstrap UCL | 1.127 |
| Kolmogorov-Smirnov Test Statistic | 0.13 | 95% Percentile Bootstrap UCL | 1.115 |
| Kolmogorov-Smirnov 5% Critical Value | 0.179 | 95% BCA Bootstrap UCL | 1.124 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 1.396 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 1.589 |

PROUCL OUTPUT - BLOCK G SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 1.969 |
| 95% Approximate Gamma UCL | 1.156 | | |
| 95% Adjusted Gamma UCL | 1.173 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 1.124 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK G SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**BENZO(A)PYRENE EQUIVALENTS**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 844 | Number of Detected Data | 414 |
| Number of Distinct Detected Data | 408 | Number of Non-Detect Data | 430 |
| Number of Missing Values | 28 | Percent Non-Detects | 50.95% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.06 | Minimum Detected | -2.813 |
| Maximum Detected | 57089 | Maximum Detected | 10.95 |
| Mean of Detected | 1322 | Mean of Detected | 4.595 |
| SD of Detected | 4487 | SD of Detected | 2.289 |
| Minimum Non-Detect | 1.4 | Minimum Non-Detect | 0.336 |
| Maximum Non-Detect | 410 | Maximum Non-Detect | 6.016 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 734 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 110 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 86.97% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.384 | Lilliefors Test Statistic | 0.0945 |
| 5% Lilliefors Critical Value | 0.0435 | 5% Lilliefors Critical Value | 0.0435 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 650.8 | Mean | 2.233 |
| SD | 3209 | SD | 2.885 |
| 95% DL/2 (t) UCL | 832.7 | 95% H-Stat (DL/2) UCL | 891.8 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 1.616 |
| | | SD in Log Scale | 3.663 |
| | | Mean in Original Scale | 648.9 |
| | | SD in Original Scale | 3209 |
| | | 95% t UCL | 830.8 |
| | | 95% Percentile Bootstrap UCL | 839.7 |
| | | 95% BCA Bootstrap UCL | 883.1 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.27 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 4891 | | |

PROUCL OUTPUT - BLOCK G SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| nu star | 223.7 | | |
| | | | |
| A-D Test Statistic | 31.06 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.885 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.885 | Mean | 649 |
| 5% K-S Critical Value | 0.0487 | SD | 3207 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 110.5 |
| | | 95% KM (t) UCL | 831 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 830.8 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 830.9 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 905.6 |
| Maximum | 57089 | 95% KM (BCA) UCL | 842.4 |
| Mean | 1286 | 95% KM (Percentile Bootstrap) UCL | 839.9 |
| Median | 105.8 | 95% KM (Chebyshev) UCL | 1131 |
| SD | 3397 | 97.5% KM (Chebyshev) UCL | 1339 |
| k star | 0.104 | 99% KM (Chebyshev) UCL | 1749 |
| Theta star | 12368 | | |
| Nu star | 175.4 | **Potential UCLs to Use** | |
| AppChi2 | 145.8 | 97.5% KM (Chebyshev) UCL | 1339 |
| 95% Gamma Approximate UCL | 1547 | | |
| 95% Adjusted Gamma UCL | 1547 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK G SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**OV_NAPHTHALENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 45 | Number of Detected Data | 9 |
| Number of Distinct Detected Data | 8 | Number of Non-Detect Data | 36 |
| Number of Missing Values | 827 | Percent Non-Detects | 80.00% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.62 | Minimum Detected | -0.478 |
| Maximum Detected | 620 | Maximum Detected | 6.43 |
| Mean of Detected | 152.8 | Mean of Detected | 3.38 |
| SD of Detected | 200.5 | SD of Detected | 2.575 |
| Minimum Non-Detect | 1 | Minimum Non-Detect | 0 |
| Maximum Non-Detect | 362 | Maximum Non-Detect | 5.892 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 44 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 1 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 97.78% |

**Warning: There are only 9 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.775 | Shapiro Wilk Test Statistic | 0.871 |
| 5% Shapiro Wilk Critical Value | 0.829 | 5% Shapiro Wilk Critical Value | 0.829 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 54.09 | Mean | 1.473 |
| SD | 114 | SD | 2.301 |
| 95% DL/2 (t) UCL | 82.64 | 95% H-Stat (DL/2) UCL | 257.5 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -0.179 |
| | | SD in Log Scale | 2.53 |
| | | Mean in Original Scale | 31.22 |
| | | SD in Original Scale | 105.3 |

PROUCL OUTPUT - BLOCK G SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| | | 95% t UCL | 57.59 |
| | | 95% Percentile Bootstrap UCL | 57.64 |
| | | 95% BCA Bootstrap UCL | 72.53 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.34 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 449 | | |
| nu star | 6.124 | | |
| | | | |
| A-D Test Statistic | 0.502 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.789 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.789 | Mean | 33.78 |
| 5% K-S Critical Value | 0.298 | SD | 105.8 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 17.12 |
| | | 95% KM (t) UCL | 62.54 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 61.93 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 60.4 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 92.12 |
| Maximum | 1523 | 95% KM (BCA) UCL | 72.03 |
| Mean | 325.5 | 95% KM (Percentile Bootstrap) UCL | 67.72 |
| Median | 262.5 | 95% KM (Chebyshev) UCL | 108.4 |
| SD | 340.4 | 97.5% KM (Chebyshev) UCL | 140.7 |
| k star | 0.238 | 99% KM (Chebyshev) UCL | 204.1 |
| Theta star | 1367 | | |
| Nu star | 21.43 | **Potential UCLs to Use** | |
| AppChi2 | 11.91 | 95% KM (t) UCL | 62.54 |
| 95% Gamma Approximate UCL | 585.5 | | |
| 95% Adjusted Gamma UCL | 597.3 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

| | General UCL Statistics for Data Sets with Non-Detects |
|---|---|
| **User Selected Options** | |
| From File | BLOCK H.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**ARSENIC**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 15 |
| Number of Distinct Detected Data | 12 | Number of Non-Detect Data | 7 |
| Number of Missing Values | 99 | Percent Non-Detects | 31.82% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 1 | Minimum Detected | 0 |
| Maximum Detected | 7.4 | Maximum Detected | 2.001 |
| Mean of Detected | 3.487 | Mean of Detected | 1.146 |
| SD of Detected | 1.586 | SD of Detected | 0.492 |
| Minimum Non-Detect | 0.54 | Minimum Non-Detect | -0.616 |
| Maximum Non-Detect | 5.3 | Maximum Non-Detect | 1.668 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 21 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 1 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 95.45% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.952 | Shapiro Wilk Test Statistic | 0.967 |
| 5% Shapiro Wilk Critical Value | 0.881 | 5% Shapiro Wilk Critical Value | 0.881 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 2.837 | Mean | 0.794 |
| SD | 1.719 | SD | 0.832 |
| 95% DL/2 (t) UCL | 3.467 | 95% H-Stat (DL/2) UCL | 4.803 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | 0.929 |
| | | SD in Log Scale | 0.552 |
| | | Mean in Original Scale | 2.913 |
| | | SD in Original Scale | 1.588 |
| | | 95% t UCL | 3.496 |
| | | 95% Percentile Bootstrap UCL | 3.459 |
| | | 95% BCA Bootstrap UCL | 3.542 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 4.045 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 0.862 | | |

| | | | |
|---|---|---|---|
| nu star | 121.4 | | |
| | | | |
| A-D Test Statistic | 0.177 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.739 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.739 | Mean | 2.915 |
| 5% K-S Critical Value | 0.222 | SD | 1.644 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.379 |
| | | 95% KM (t) UCL | 3.568 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 3.54 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 3.529 |
| Minimum | 1 | 95% KM (bootstrap t) UCL | 3.618 |
| Maximum | 7.4 | 95% KM (BCA) UCL | 3.755 |
| Mean | 3.215 | 95% KM (Percentile Bootstrap) UCL | 3.63 |
| Median | 3.2 | 95% KM (Chebyshev) UCL | 4.569 |
| SD | 1.529 | 97.5% KM (Chebyshev) UCL | 5.285 |
| k star | 3.884 | 99% KM (Chebyshev) UCL | 6.69 |
| Theta star | 0.828 | | |
| Nu star | 170.9 | **Potential UCLs to Use** | |
| AppChi2 | 141.7 | 95% KM (t) UCL | 3.568 |
| 95% Gamma Approximate UCL | 3.878 | 95% KM (Percentile Bootstrap) UCL | 3.63 |
| 95% Adjusted Gamma UCL | 3.933 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**LEAD**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 21 |
| Number of Distinct Detected Data | 18 | Number of Non-Detect Data | 1 |
| Number of Missing Values | 99 | Percent Non-Detects | 4.55% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 1.6 | Minimum Detected | 0.47 |
| Maximum Detected | 17 | Maximum Detected | 2.833 |
| Mean of Detected | 7.462 | Mean of Detected | 1.808 |
| SD of Detected | 4.672 | SD of Detected | 0.679 |
| Minimum Non-Detect | 4 | Minimum Non-Detect | 1.386 |
| Maximum Non-Detect | 4 | Maximum Non-Detect | 1.386 |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.911 | Shapiro Wilk Test Statistic | 0.967 |
| 5% Shapiro Wilk Critical Value | 0.908 | 5% Shapiro Wilk Critical Value | 0.908 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |

| | | | |
|---|---|---|---|
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 7.214 | Mean | 1.757 |
| SD | 4.706 | SD | 0.704 |
| 95% DL/2 (t) UCL | 8.94 | 95% H-Stat (DL/2) UCL | 10.43 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 6.445 | Mean in Log Scale | 1.773 |
| SD | 5.656 | SD in Log Scale | 0.683 |
| 95% MLE (t) UCL | 8.52 | Mean in Original Scale | 7.25 |
| 95% MLE (Tiku) UCL | 8.669 | SD in Original Scale | 4.666 |
| | | 95% t UCL | 8.962 |
| | | 95% Percentile Bootstrap UCL | 8.873 |
| | | 95% BCA Bootstrap UCL | 9.164 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 2.29 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 3.259 | | |
| nu star | 96.17 | | |
| | | | |
| A-D Test Statistic | 0.213 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.751 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.751 | Mean | 7.25 |
| 5% K-S Critical Value | 0.191 | SD | 4.563 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.998 |
| | | 95% KM (t) UCL | 8.967 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 8.891 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 8.966 |
| Minimum | 1.6 | 95% KM (bootstrap t) UCL | 9.123 |
| Maximum | 17 | 95% KM (BCA) UCL | 8.929 |
| Mean | 7.242 | 95% KM (Percentile Bootstrap) UCL | 8.868 |
| Median | 5.8 | 95% KM (Chebyshev) UCL | 11.6 |
| SD | 4.675 | 97.5% KM (Chebyshev) UCL | 13.48 |
| k star | 2.219 | 99% KM (Chebyshev) UCL | 17.18 |
| Theta star | 3.264 | | |
| Nu star | 97.62 | **Potential UCLs to Use** | |
| AppChi2 | 75.83 | 95% KM (t) UCL | 8.967 |
| 95% Gamma Approximate UCL | 9.323 | 95% KM (Percentile Bootstrap) UCL | 8.868 |
| 95% Adjusted Gamma UCL | 9.503 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**MERCURY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 128 | Number of Detected Data | 15 |
| Number of Distinct Detected Data | 11 | Number of Non-Detect Data | 113 |
| Number of Missing Values | 101 | Percent Non-Detects | 88.28% |

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 0.01 | Minimum Detected | -4.605 |
| Maximum Detected | 0.24 | Maximum Detected | -1.427 |
| Mean of Detected | 0.0787 | Mean of Detected | -3.114 |
| SD of Detected | 0.0843 | SD of Detected | 1.118 |
| Minimum Non-Detect | 0.01 | Minimum Non-Detect | -4.605 |
| Maximum Non-Detect | 0.022 | Maximum Non-Detect | -3.817 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 118 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 10 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 92.19% |

**UCL Statistics**

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.757 | Shapiro Wilk Test Statistic | 0.889 |
| 5% Shapiro Wilk Critical Value | 0.881 | 5% Shapiro Wilk Critical Value | 0.881 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.0175 | Mean | -4.503 |
| SD | 0.0359 | SD | 0.661 |
| 95% DL/2 (t) UCL | 0.0228 | 95% H-Stat (DL/2) UCL | 0.0154 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -7.2 |
| | | SD in Log Scale | 2.393 |
| | | Mean in Original Scale | 0.0108 |
| | | SD in Original Scale | 0.0375 |
| | | 95% t UCL | 0.0163 |
| | | 95% Percentile Bootstrap UCL | 0.0166 |
| | | 95% BCA Bootstrap UCL | 0.0181 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.851 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 0.0925 | | |
| nu star | 25.53 | | |
| | | | |
| A-D Test Statistic | 0.985 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.763 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.763 | Mean | 0.0181 |
| 5% K-S Critical Value | 0.228 | SD | 0.0356 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.00325 |
| | | 95% KM (t) UCL | 0.0235 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.0234 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.0233 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 0.0261 |
| Maximum | 0.24 | 95% KM (BCA) UCL | 0.0311 |
| Mean | 0.0792 | 95% KM (Percentile Bootstrap) UCL | 0.028 |
| Median | 0.0707 | 95% KM (Chebyshev) UCL | 0.0323 |

| | | | |
|---|---|---|---|
| SD | 0.0638 | 97.5% KM (Chebyshev) UCL | 0.0384 |
| k star | 0.228 | 99% KM (Chebyshev) UCL | 0.0505 |
| Theta star | 0.347 | | |
| Nu star | 58.41 | **Potential UCLs to Use** | |
| AppChi2 | 41.84 | 95% KM (BCA) UCL | 0.0311 |
| 95% Gamma Approximate UCL | 0.111 | | |
| 95% Adjusted Gamma UCL | 0.111 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**1,2,3-TRICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 22 |
| Number of Missing Values | 99 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,2,3-TRICHLOROBENZENE was not processed!**

**1,2,4-TRICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 22 |
| Number of Missing Values | 99 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,2,4-TRICHLOROBENZENE was not processed!**

**1,3-DICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 22 |
| Number of Missing Values | 99 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,3-DICHLOROBENZENE was not processed!**

**1,4-DICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 22 |
| Number of Missing Values | 99 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,4-DICHLOROBENZENE was not processed!**

**PAH_NAPHTHALENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 38 | Number of Detected Data | 6 |
| Number of Distinct Detected Data | 6 | Number of Non-Detect Data | 32 |
| Number of Missing Values | 83 | Percent Non-Detects | 84.21% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 28 | Minimum Detected | 3.332 |
| Maximum Detected | 1200 | Maximum Detected | 7.09 |
| Mean of Detected | 384.7 | Mean of Detected | 5.389 |
| SD of Detected | 425.9 | SD of Detected | 1.28 |
| Minimum Non-Detect | 3.5 | Minimum Non-Detect | 1.253 |
| Maximum Non-Detect | 440 | Maximum Non-Detect | 6.087 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 36 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 2 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 94.74% |

**Warning: There are only 6 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | **Lognormal Distribution Test with Detected Values Only** |
|---|---|

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.802 | Shapiro Wilk Test Statistic | 0.971 |
| 5% Shapiro Wilk Critical Value | 0.788 | 5% Shapiro Wilk Critical Value | 0.788 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 121.2 | Mean | 3.187 |
| SD | 210.6 | SD | 2.204 |
| 95% DL/2 (t) UCL | 178.9 | 95% H-Stat (DL/2) UCL | 1190 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | 1.758 |
| | | SD in Log Scale | 1.969 |
| | | Mean in Original Scale | 65.31 |
| | | SD in Original Scale | 210.2 |
| | | 95% t UCL | 122.8 |
| | | 95% Percentile Bootstrap UCL | 125.7 |
| | | 95% BCA Bootstrap UCL | 161.9 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.622 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 618.1 | | |
| nu star | 7.469 | | |
| | | | |
| A-D Test Statistic | 0.213 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.715 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.715 | Mean | 89.74 |
| 5% K-S Critical Value | 0.341 | SD | 203.1 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 36.69 |
| | | 95% KM (t) UCL | 151.6 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 150.1 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 152 |
| Minimum | 28 | 95% KM (bootstrap t) UCL | 187.7 |
| Maximum | 1200 | 95% KM (BCA) UCL | 337.2 |
| Mean | 385.1 | 95% KM (Percentile Bootstrap) UCL | 300 |
| Median | 384.9 | 95% KM (Chebyshev) UCL | 249.7 |
| SD | 156.6 | 97.5% KM (Chebyshev) UCL | 318.9 |
| k star | 5.346 | 99% KM (Chebyshev) UCL | 454.8 |
| Theta star | 72.03 | | |
| Nu star | 406.3 | **Potential UCLs to Use** | |
| AppChi2 | 360.6 | 95% KM (t) UCL | 151.6 |
| 95% Gamma Approximate UCL | 434 | 95% KM (Percentile Bootstrap) UCL | 300 |
| 95% Adjusted Gamma UCL | 436.1 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

AROCLOR-1254

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 22 |
| Number of Missing Values | 99 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable AROCLOR-1254 was not processed!**

AROCLOR-1260

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 22 |
| Number of Missing Values | 99 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable AROCLOR-1260 was not processed!**

DIESEL RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 8 | Number of Detected Data | 6 |
| Number of Distinct Detected Data | 6 | Number of Non-Detect Data | 2 |
| Number of Missing Values | 99 | Percent Non-Detects | 25.00% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 11100 | Minimum Detected | 9.315 |
| Maximum Detected | 173000 | Maximum Detected | 12.06 |
| Mean of Detected | 51233 | Mean of Detected | 10.32 |
| SD of Detected | 62884 | SD of Detected | 1.072 |
| Minimum Non-Detect | 2400 | Minimum Non-Detect | 7.783 |
| Maximum Non-Detect | 3800 | Maximum Non-Detect | 8.243 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 2 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 6 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 25.00% |

**Warning: There are only 6 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.726 | Shapiro Wilk Test Statistic | 0.898 |
| 5% Shapiro Wilk Critical Value | 0.788 | 5% Shapiro Wilk Critical Value | 0.788 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 38813 | Mean | 9.568 |
| SD | 57910 | SD | 1.662 |
| 95% DL/2 (t) UCL | 77603 | 95% H-Stat (DL/2) UCL | 1476804 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 28141 | Mean in Log Scale | 9.641 |
| SD | 66263 | SD in Log Scale | 1.545 |
| 95% MLE (t) UCL | 72526 | Mean in Original Scale | 38931 |
| 95% MLE (Tiku) UCL | 73262 | SD in Original Scale | 57823 |
| | | 95% t UCL | 77663 |
| | | 95% Percentile Bootstrap UCL | 74869 |
| | | 95% BCA Bootstrap UCL | 84241 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.654 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 78353 | | |
| nu star | 7.847 | | |
| | | | |
| A-D Test Statistic | 0.498 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.714 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.714 | Mean | 41200 |
| 5% K-S Critical Value | 0.34 | SD | 52664 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 20397 |
| | | 95% KM (t) UCL | 79843 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 74750 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 78642 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 266066 |
| Maximum | 173000 | 95% KM (BCA) UCL | 79788 |
| Mean | 38425 | 95% KM (Percentile Bootstrap) UCL | 77975 |
| Median | 14450 | 95% KM (Chebyshev) UCL | 130108 |
| SD | 58199 | 97.5% KM (Chebyshev) UCL | 168578 |
| k star | 0.137 | 99% KM (Chebyshev) UCL | 244146 |
| Theta star | 281397 | | |
| Nu star | 2.185 | **Potential UCLs to Use** | |
| AppChi2 | 0.179 | 95% KM (Chebyshev) UCL | 130108 |
| 95% Gamma Approximate UCL | 470147 | | |
| 95% Adjusted Gamma UCL | 739425 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**
**For additional insight, the user may want to consult a statistician.**

GASOLINE RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 23 | Number of Detected Data | 4 |
| Number of Distinct Detected Data | 4 | Number of Non-Detect Data | 19 |
| Number of Missing Values | 98 | Percent Non-Detects | 82.61% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 36 | Minimum Detected | 3.584 |
| Maximum Detected | 9000 | Maximum Detected | 9.105 |
| Mean of Detected | 4684 | Mean of Detected | 7.398 |
| SD of Detected | 3804 | SD of Detected | 2.571 |
| Minimum Non-Detect | 2700 | Minimum Non-Detect | 7.901 |
| Maximum Non-Detect | 15200 | Maximum Non-Detect | 9.629 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 23 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 100.00% |

**Warning: There are only 4 Distinct Detected Values in this data**
**Note: It should be noted that even though bootstrap may be performed on this data set**
**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.997 | Shapiro Wilk Test Statistic | 0.76 |
| 5% Shapiro Wilk Critical Value | 0.748 | 5% Shapiro Wilk Critical Value | 0.748 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 3493 | Mean | 7.761 |
| SD | 2574 | SD | 1.162 |
| 95% DL/2 (t) UCL | 4414 | 95% H-Stat (DL/2) UCL | 9105 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | 4.775 |
| | | SD in Log Scale | 1.871 |
| | | Mean in Original Scale | 903.1 |
| | | SD in Original Scale | 2264 |
| | | 95% t UCL | 1714 |
| | | 95% Percentile Bootstrap UCL | 1707 |
| | | 95% BCA Bootstrap UCL | 2083 |

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.314 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 14931 | | |
| nu star | 2.51 | | |
| | | | |
| A-D Test Statistic | 0.529 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.677 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.677 | Mean | 1241 |
| 5% K-S Critical Value | 0.408 | SD | 2624 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 768.6 |
| | | 95% KM (t) UCL | 2561 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 2505 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 3461 |
| Minimum | 36 | 95% KM (bootstrap t) UCL | 2142 |
| Maximum | 9000 | 95% KM (BCA) UCL | 9000 |
| Mean | 4444 | 95% KM (Percentile Bootstrap) UCL | 6487 |
| Median | 4322 | 95% KM (Chebyshev) UCL | 4591 |
| SD | 1470 | 97.5% KM (Chebyshev) UCL | 6041 |
| k star | 2.475 | 99% KM (Chebyshev) UCL | 8888 |
| Theta star | 1796 | | |
| Nu star | 113.8 | **Potential UCLs to Use** | |
| AppChi2 | 90.21 | 95% KM (t) UCL | 2561 |
| 95% Gamma Approximate UCL | 5608 | 95% KM (Percentile Bootstrap) UCL | 6487 |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Full Data Sets** |
| **User Selected Options** | |
| From File | Sheet1.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**COBALT**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 22 | Number of Distinct Observations | 18 |
| Number of Missing Values | 99 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 1.8 | Minimum of Log Data | 0.588 |
| Maximum | 30.8 | Maximum of Log Data | 3.428 |
| Mean | 9.427 | Mean of log Data | 1.918 |
| Median | 8.1 | SD of log Data | 0.844 |
| SD | 7.95 | | |
| Coefficient of Variation | 0.843 | | |
| Skewness | 1.479 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.828 | Shapiro Wilk Test Statistic | 0.95 |
| Shapiro Wilk Critical Value | 0.911 | Shapiro Wilk Critical Value | 0.911 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 12.34 | 95% H-UCL | 15.07 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 17.72 |
| 95% Adjusted-CLT UCL (Chen-1995) | 12.79 | 97.5% Chebyshev (MVUE) UCL | 21.27 |
| 95% Modified-t UCL (Johnson-1978) | 12.43 | 99% Chebyshev (MVUE) UCL | 28.23 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 1.484 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 6.354 | | |
| MLE of Mean | 9.427 | | |
| MLE of Standard Deviation | 7.74 | | |
| nu star | 65.28 | | |
| Approximate Chi Square Value (.05) | 47.69 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0386 | 95% CLT UCL | 12.22 |
| Adjusted Chi Square Value | 46.57 | 95% Jackknife UCL | 12.34 |
| | | 95% Standard Bootstrap UCL | 12.23 |
| Anderson-Darling Test Statistic | 0.492 | 95% Bootstrap-t UCL | 13.16 |
| Anderson-Darling 5% Critical Value | 0.758 | 95% Hall's Bootstrap UCL | 14.04 |
| Kolmogorov-Smirnov Test Statistic | 0.136 | 95% Percentile Bootstrap UCL | 12.28 |
| Kolmogorov-Smirnov 5% Critical Value | 0.188 | 95% BCA Bootstrap UCL | 12.65 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 16.82 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 20.01 |

| | | | |
|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 26.29 |
| 95% Approximate Gamma UCL | 12.9 | | |
| 95% Adjusted Gamma UCL | 13.22 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 12.9 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**
**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

VANADIUM

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 22 | Number of Distinct Observations | 21 |
| Number of Missing Values | 99 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 5.7 | Minimum of Log Data | 1.74 |
| Maximum | 52.9 | Maximum of Log Data | 3.968 |
| Mean | 33.45 | Mean of log Data | 3.411 |
| Median | 34.15 | SD of log Data | 0.516 |
| SD | 12.71 | | |
| Coefficient of Variation | 0.38 | | |
| Skewness | -0.332 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.975 | Shapiro Wilk Test Statistic | 0.849 |
| Shapiro Wilk Critical Value | 0.911 | Shapiro Wilk Critical Value | 0.911 |
| **Data appear Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 38.11 | 95% H-UCL | 43.41 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 51.54 |
| 95% Adjusted-CLT UCL (Chen-1995) | 37.7 | 97.5% Chebyshev (MVUE) UCL | 58.97 |
| 95% Modified-t UCL (Johnson-1978) | 38.08 | 99% Chebyshev (MVUE) UCL | 73.57 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 4.518 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 7.403 | | |
| MLE of Mean | 33.45 | | |
| MLE of Standard Deviation | 15.74 | | |
| nu star | 198.8 | | |
| Approximate Chi Square Value (.05) | 167.2 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0386 | 95% CLT UCL | 37.91 |
| Adjusted Chi Square Value | 165 | 95% Jackknife UCL | 38.11 |
| | | 95% Standard Bootstrap UCL | 37.75 |
| Anderson-Darling Test Statistic | 0.506 | 95% Bootstrap-t UCL | 37.9 |
| Anderson-Darling 5% Critical Value | 0.746 | 95% Hall's Bootstrap UCL | 37.72 |
| Kolmogorov-Smirnov Test Statistic | 0.121 | 95% Percentile Bootstrap UCL | 37.66 |

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| Kolmogorov-Smirnov 5% Critical Value | 0.186 | 95% BCA Bootstrap UCL | 37.21 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 45.26 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 50.37 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 60.41 |
| 95% Approximate Gamma UCL | 39.78 | | |
| 95% Adjusted Gamma UCL | 40.3 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 38.11 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Full Data Sets** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**5% OF TOTAL CHROMIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 22 | Number of Distinct Observations | 21 |
| Number of Missing Values | 1 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.375 | Minimum of Log Data | -0.981 |
| Maximum | 4.52 | Maximum of Log Data | 1.509 |
| Mean | 1.44 | Mean of log Data | 0.212 |
| Median | 1.35 | SD of log Data | 0.567 |
| SD | 0.889 | | |
| Coefficient of Variation | 0.617 | | |
| Skewness | 2.081 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.819 | Shapiro Wilk Test Statistic | 0.979 |
| Shapiro Wilk Critical Value | 0.911 | Shapiro Wilk Critical Value | 0.911 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 1.767 | 95% H-UCL | 1.874 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 2.236 |
| 95% Adjusted-CLT UCL (Chen-1995) | 1.842 | 97.5% Chebyshev (MVUE) UCL | 2.58 |
| 95% Modified-t UCL (Johnson-1978) | 1.781 | 99% Chebyshev (MVUE) UCL | 3.256 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 2.986 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 0.482 | | |
| MLE of Mean | 1.44 | | |
| MLE of Standard Deviation | 0.834 | | |
| nu star | 131.4 | | |
| Approximate Chi Square Value (.05) | 105.9 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0386 | 95% CLT UCL | 1.752 |
| Adjusted Chi Square Value | 104.2 | 95% Jackknife UCL | 1.767 |
| | | 95% Standard Bootstrap UCL | 1.747 |
| Anderson-Darling Test Statistic | 0.293 | 95% Bootstrap-t UCL | 1.944 |
| Anderson-Darling 5% Critical Value | 0.748 | 95% Hall's Bootstrap UCL | 3.315 |
| Kolmogorov-Smirnov Test Statistic | 0.125 | 95% Percentile Bootstrap UCL | 1.763 |
| Kolmogorov-Smirnov 5% Critical Value | 0.186 | 95% BCA Bootstrap UCL | 1.841 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 2.267 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 2.624 |

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | | | | | 3.327 |
| 95% Approximate Gamma UCL | 1.787 | | | | | | |
| 95% Adjusted Gamma UCL | 1.816 | | | | | | |
| | | | | | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | | | | | 1.787 |
| | | | | | | | |
| **Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.** | | | | | | | |
| **These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)** | | | | | | | |
| **and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.** | | | | | | | |
| | | | | | | | |

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

| | General UCL Statistics for Data Sets with Non-Detects |
|---|---|
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**BENZO(A)PYRENE EQUIVALENTS**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 228 | Number of Detected Data | 57 |
| Number of Distinct Detected Data | 57 | Number of Non-Detect Data | 171 |
| Number of Missing Values | 2 | Percent Non-Detects | 75.00% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 1.766 | Minimum Detected | 0.568 |
| Maximum Detected | 5337 | Maximum Detected | 8.582 |
| Mean of Detected | 428.6 | Mean of Detected | 4.512 |
| SD of Detected | 896.7 | SD of Detected | 1.893 |
| Minimum Non-Detect | 1.4 | Minimum Non-Detect | 0.336 |
| Maximum Non-Detect | 470 | Maximum Non-Detect | 6.153 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 213 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 15 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 93.42% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.317 | Lilliefors Test Statistic | 0.094 |
| 5% Lilliefors Critical Value | 0.117 | 5% Lilliefors Critical Value | 0.117 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 126.7 | Mean | 1.555 |
| SD | 481.7 | SD | 2.542 |
| 95% DL/2 (t) UCL | 179.4 | 95% H-Stat (DL/2) UCL | 227.2 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -0.00151 |
| | | SD in Log Scale | 3.472 |
| | | Mean in Original Scale | 108.2 |
| | | SD in Original Scale | 482.4 |
| | | 95% t UCL | 161 |
| | | 95% Percentile Bootstrap UCL | 165.2 |
| | | 95% BCA Bootstrap UCL | 193.1 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.411 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 1043 | | |

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| nu star | 46.85 | | |
| | | | |
| A-D Test Statistic | 2.023 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.834 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.834 | Mean | 110 |
| 5% K-S Critical Value | 0.126 | SD | 481.2 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 32.17 |
| | | 95% KM (t) UCL | 163.2 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 163 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 162.3 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 207.3 |
| Maximum | 5945 | 95% KM (BCA) UCL | 165.8 |
| Mean | 952.9 | 95% KM (Percentile Bootstrap) UCL | 166.4 |
| Median | 430.4 | 95% KM (Chebyshev) UCL | 250.3 |
| SD | 1208 | 97.5% KM (Chebyshev) UCL | 311 |
| k star | 0.114 | 99% KM (Chebyshev) UCL | 430.2 |
| Theta star | 8361 | | |
| Nu star | 51.97 | **Potential UCLs to Use** | |
| AppChi2 | 36.41 | 95% KM (Chebyshev) UCL | 250.3 |
| 95% Gamma Approximate UCL | 1360 | | |
| 95% Adjusted Gamma UCL | 1363 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**OV_NAPHTHALENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 9 |
| Number of Distinct Detected Data | 9 | Number of Non-Detect Data | 13 |
| Number of Missing Values | 100 | Percent Non-Detects | 59.09% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.56 | Minimum Detected | -0.58 |
| Maximum Detected | 130 | Maximum Detected | 4.868 |
| Mean of Detected | 31.67 | Mean of Detected | 2.481 |
| SD of Detected | 42.49 | SD of Detected | 1.695 |
| Minimum Non-Detect | 2 | Minimum Non-Detect | 0.693 |
| Maximum Non-Detect | 6 | Maximum Non-Detect | 1.792 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 16 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 6 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 72.73% |

**Warning: There are only 9 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.758 | Shapiro Wilk Test Statistic | 0.977 |
| 5% Shapiro Wilk Critical Value | 0.829 | 5% Shapiro Wilk Critical Value | 0.829 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 14.29 | Mean | 1.427 |
| SD | 30.12 | SD | 1.435 |
| 95% DL/2 (t) UCL | 25.34 | 95% H-Stat (DL/2) UCL | 32.17 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 0.673 |
| | | SD in Log Scale | 2.068 |
| | | Mean in Original Scale | 13.57 |
| | | SD in Original Scale | 30.43 |

PROUCL OUTPUT - BLOCK H SUBSURFACE SOIL

| | | | |
|---|---|---|---|
| | | 95% t UCL | 24.74 |
| | | 95% Percentile Bootstrap UCL | 25.83 |
| | | 95% BCA Bootstrap UCL | 30.9 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.494 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 64.13 | | |
| nu star | 8.89 | | |
| | | | |
| A-D Test Statistic | 0.203 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.761 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.761 | Mean | 13.6 |
| 5% K-S Critical Value | 0.292 | SD | 29.72 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 6.728 |
| | | 95% KM (t) UCL | 25.18 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 24.67 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 23.98 |
| Minimum | 0.56 | 95% KM (bootstrap t) UCL | 45.4 |
| Maximum | 130 | 95% KM (BCA) UCL | 29.89 |
| Mean | 31.46 | 95% KM (Percentile Bootstrap) UCL | 25.82 |
| Median | 29.03 | 95% KM (Chebyshev) UCL | 42.93 |
| SD | 26.42 | 97.5% KM (Chebyshev) UCL | 55.62 |
| k star | 1.225 | 99% KM (Chebyshev) UCL | 80.55 |
| Theta star | 25.68 | | |
| Nu star | 53.89 | **Potential UCLs to Use** | |
| AppChi2 | 38.03 | 95% KM (t) UCL | 25.18 |
| 95% Gamma Approximate UCL | 44.58 | | |
| 95% Adjusted Gamma UCL | 45.78 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

# Surface Soil

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| | General UCL Statistics for Full Data Sets |
|---|---|
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**5% OF TOTAL CROMIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 29 | Number of Distinct Observations | 27 |
| Number of Missing Values | 1 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.155 | Minimum of Log Data | -1.864 |
| Maximum | 1.8 | Maximum of Log Data | 0.588 |
| Mean | 0.752 | Mean of log Data | -0.401 |
| Median | 0.65 | SD of log Data | 0.508 |
| SD | 0.36 | | |
| Coefficient of Variation | 0.479 | | |
| Skewness | 0.915 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.94 | Shapiro Wilk Test Statistic | 0.966 |
| Shapiro Wilk Critical Value | 0.926 | Shapiro Wilk Critical Value | 0.926 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 0.866 | 95% H-UCL | 0.92 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 1.085 |
| 95% Adjusted-CLT UCL (Chen-1995) | 0.874 | 97.5% Chebyshev (MVUE) UCL | 1.226 |
| 95% Modified-t UCL (Johnson-1978) | 0.868 | 99% Chebyshev (MVUE) UCL | 1.503 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 4.053 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 0.186 | | |
| MLE of Mean | 0.752 | | |
| MLE of Standard Deviation | 0.374 | | |
| nu star | 235.1 | | |
| Approximate Chi Square Value (.05) | 200.6 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0407 | 95% CLT UCL | 0.862 |
| Adjusted Chi Square Value | 198.7 | 95% Jackknife UCL | 0.866 |
| | | 95% Standard Bootstrap UCL | 0.861 |
| Anderson-Darling Test Statistic | 0.272 | 95% Bootstrap-t UCL | 0.88 |
| Anderson-Darling 5% Critical Value | 0.749 | 95% Hall's Bootstrap UCL | 0.885 |
| Kolmogorov-Smirnov Test Statistic | 0.0877 | 95% Percentile Bootstrap UCL | 0.863 |
| Kolmogorov-Smirnov 5% Critical Value | 0.163 | 95% BCA Bootstrap UCL | 0.888 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 1.044 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 1.17 |

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| | | | |
|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 1.418 |
| 95% Approximate Gamma UCL | 0.881 | | |
| 95% Adjusted Gamma UCL | 0.89 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 0.866 |
| | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**BENZO(A)PYRENE EQUIVALENTS**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 117 | Number of Detected Data | 97 |
| Number of Distinct Detected Data | 97 | Number of Non-Detect Data | 20 |
| Number of Missing Values | 4 | Percent Non-Detects | 17.09% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.06 | Minimum Detected | -2.813 |
| Maximum Detected | 22517 | Maximum Detected | 10.02 |
| Mean of Detected | 1830 | Mean of Detected | 4.904 |
| SD of Detected | 4264 | SD of Detected | 2.501 |
| Minimum Non-Detect | 1.4 | Minimum Non-Detect | 0.336 |
| Maximum Non-Detect | 3700 | Maximum Non-Detect | 8.216 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 103 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 14 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 88.03% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.397 | Lilliefors Test Statistic | 0.133 |
| 5% Lilliefors Critical Value | 0.09 | 5% Lilliefors Critical Value | 0.09 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 1566 | Mean | 4.367 |
| SD | 3932 | SD | 2.817 |
| 95% DL/2 (t) UCL | 2168 | 95% H-Stat (DL/2) UCL | 13119 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 4.217 |
| | | SD in Log Scale | 2.816 |
| | | Mean in Original Scale | 1519 |
| | | SD in Original Scale | 3940 |
| | | 95% t UCL | 2123 |
| | | 95% Percentile Bootstrap UCL | 2111 |
| | | 95% BCA Bootstrap UCL | 2233 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.268 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 6836 | | |

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| | | | |
|---|---|---|---|
| nu star | 51.93 | | |
| | | | |
| A-D Test Statistic | 7.368 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.881 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.881 | Mean | 1524 |
| 5% K-S Critical Value | 0.0993 | SD | 3922 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 364.6 |
| | | 95% KM (t) UCL | 2129 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 2124 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 2128 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 2266 |
| Maximum | 22517 | 95% KM (BCA) UCL | 2150 |
| Mean | 1521 | 95% KM (Percentile Bootstrap) UCL | 2159 |
| Median | 72.36 | 95% KM (Chebyshev) UCL | 3113 |
| SD | 3939 | 97.5% KM (Chebyshev) UCL | 3801 |
| k star | 0.115 | 99% KM (Chebyshev) UCL | 5152 |
| Theta star | 13248 | | |
| Nu star | 26.87 | **Potential UCLs to Use** | |
| AppChi2 | 16.05 | 97.5% KM (Chebyshev) UCL | 3801 |
| 95% Gamma Approximate UCL | 2547 | | |
| 95% Adjusted Gamma UCL | 2564 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**ANTIMONY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 24 | Number of Detected Data | 9 |
| Number of Distinct Detected Data | 9 | Number of Non-Detect Data | 15 |
| Number of Missing Values | 96 | Percent Non-Detects | 62.50% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.034 | Minimum Detected | -3.381 |
| Maximum Detected | 3 | Maximum Detected | 1.099 |
| Mean of Detected | 0.501 | Mean of Detected | -1.645 |
| SD of Detected | 0.946 | SD of Detected | 1.343 |
| Minimum Non-Detect | 0.025 | Minimum Non-Detect | -3.689 |
| Maximum Non-Detect | 3.3 | Maximum Non-Detect | 1.194 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 24 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 100.00% |

**Warning: There are only 9 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.52 | Shapiro Wilk Test Statistic | 0.937 |
| 5% Shapiro Wilk Critical Value | 0.829 | 5% Shapiro Wilk Critical Value | 0.829 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.662 | Mean | -1.447 |
| SD | 0.786 | SD | 1.696 |
| 95% DL/2 (t) UCL | 0.937 | 95% H-Stat (DL/2) UCL | 3.523 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -2.646 |
| | | SD in Log Scale | 1.265 |
| | | Mean in Original Scale | 0.219 |
| | | SD in Original Scale | 0.602 |

| | | | |
|---|---|---|---|
| | | 95% t UCL | 0.429 |
| | | 95% Percentile Bootstrap UCL | 0.453 |
| | | 95% BCA Bootstrap UCL | 0.603 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.502 | **Data Follow Appr. Gamma Distribution at 5% Significance Level** | |
| Theta Star | 1 | | |
| nu star | 9.028 | | |
| | | | |
| A-D Test Statistic | 0.766 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.76 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.76 | Mean | 0.249 |
| 5% K-S Critical Value | 0.291 | SD | 0.599 |
| **Data follow Appr. Gamma Distribution at 5% Significance Level** | | SE of Mean | 0.134 |
| | | 95% KM (t) UCL | 0.479 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.469 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.466 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 1.024 |
| Maximum | 3 | 95% KM (BCA) UCL | 0.535 |
| Mean | 0.621 | 95% KM (Percentile Bootstrap) UCL | 0.495 |
| Median | 0.253 | 95% KM (Chebyshev) UCL | 0.833 |
| SD | 0.765 | 97.5% KM (Chebyshev) UCL | 1.085 |
| k star | 0.253 | 99% KM (Chebyshev) UCL | 1.58 |
| Theta star | 2.454 | | |
| Nu star | 12.16 | **Potential UCLs to Use** | |
| AppChi2 | 5.33 | 95% KM (t) UCL | 0.479 |
| 95% Gamma Approximate UCL | 1.417 | | |
| 95% Adjusted Gamma UCL | 1.506 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**ARSENIC**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 27 |
| Number of Distinct Detected Data | 23 | Number of Non-Detect Data | 2 |
| Number of Missing Values | 91 | Percent Non-Detects | 6.90% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.54 | Minimum Detected | -0.616 |
| Maximum Detected | 6 | Maximum Detected | 1.792 |
| Mean of Detected | 2.246 | Mean of Detected | 0.549 |
| SD of Detected | 1.646 | SD of Detected | 0.745 |
| Minimum Non-Detect | 0.48 | Minimum Non-Detect | -0.734 |
| Maximum Non-Detect | 0.56 | Maximum Non-Detect | -0.58 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 3 |

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| | | | |
|---|---|---|---|
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 26 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 10.34% |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.853 | Shapiro Wilk Test Statistic | 0.939 |
| 5% Shapiro Wilk Critical Value | 0.923 | 5% Shapiro Wilk Critical Value | 0.923 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 2.109 | Mean | 0.418 |
| SD | 1.667 | SD | 0.87 |
| 95% DL/2 (t) UCL | 2.635 | 95% H-Stat (DL/2) UCL | 3.24 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 2.028 | Mean in Log Scale | 0.432 |
| SD | 1.758 | SD in Log Scale | 0.842 |
| 95% MLE (t) UCL | 2.584 | Mean in Original Scale | 2.113 |
| 95% MLE (Tiku) UCL | 2.569 | SD in Original Scale | 1.662 |
| | | 95% t UCL | 2.638 |
| | | 95% Percentile Bootstrap UCL | 2.623 |
| | | 95% BCA Bootstrap UCL | 2.66 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 1.868 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 1.202 | | |
| nu star | 100.9 | | |
| | | | |
| A-D Test Statistic | 0.632 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.756 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.756 | Mean | 2.128 |
| 5% K-S Critical Value | 0.17 | SD | 1.618 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.306 |
| | | 95% KM (t) UCL | 2.649 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 2.631 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 2.644 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 2.716 |
| Maximum | 6 | 95% KM (BCA) UCL | 2.629 |
| Mean | 2.091 | 95% KM (Percentile Bootstrap) UCL | 2.626 |
| Median | 1.7 | 95% KM (Chebyshev) UCL | 3.462 |
| SD | 1.689 | 97.5% KM (Chebyshev) UCL | 4.04 |
| k star | 0.31 | 99% KM (Chebyshev) UCL | 5.174 |
| Theta star | 6.746 | | |
| Nu star | 17.98 | **Potential UCLs to Use** | |
| AppChi2 | 9.373 | 95% KM (Chebyshev) UCL | 3.462 |
| 95% Gamma Approximate UCL | 4.009 | | |
| 95% Adjusted Gamma UCL | 4.175 | | |
| **Note: DL/2 is not a recommended method.** | | | |
| | | | |
| **Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.** | | | |

PROUCL OUTPUT - BLOCK D SURFACE SOIL

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

For additional insight, the user may want to consult a statistician.

CADMIUM

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 5 |
| Number of Distinct Detected Data | 4 | Number of Non-Detect Data | 24 |
| Number of Missing Values | 91 | Percent Non-Detects | 82.76% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 0.053 | Minimum Detected | -2.937 |
| Maximum Detected | 0.4 | Maximum Detected | -0.916 |
| Mean of Detected | 0.183 | Mean of Detected | -1.939 |
| SD of Detected | 0.14 | SD of Detected | 0.782 |
| Minimum Non-Detect | 0.0082 | Minimum Non-Detect | -4.804 |
| Maximum Non-Detect | 3.3 | Maximum Non-Detect | 1.194 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 29 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 100.00% |

**Warning: There are only 4 Distinct Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.881 | Shapiro Wilk Test Statistic | 0.958 |
| 5% Shapiro Wilk Critical Value | 0.762 | 5% Shapiro Wilk Critical Value | 0.762 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.695 | Mean | -1.693 |
| SD | 0.659 | SD | 2.269 |
| 95% DL/2 (t) UCL | 0.903 | 95% H-Stat (DL/2) UCL | 15.5 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -3.375 |
| | | SD in Log Scale | 0.912 |
| | | Mean in Original Scale | 0.057 |
| | | SD in Original Scale | 0.0813 |
| | | 95% t UCL | 0.0827 |
| | | 95% Percentile Bootstrap UCL | 0.0834 |
| | | 95% BCA Bootstrap UCL | 0.0941 |

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| Gamma Distribution Test with Detected Values Only | | Data Distribution Test with Detected Values Only | |
|---|---|---|---|
| k star (bias corrected) | 1.032 | Data appear Normal at 5% Significance Level | |
| Theta Star | 0.177 | | |
| nu star | 10.32 | | |
| | | | |
| A-D Test Statistic | 0.305 | Nonparametric Statistics | |
| 5% A-D Critical Value | 0.684 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.684 | Mean | 0.0977 |
| 5% K-S Critical Value | 0.36 | SD | 0.0949 |
| Data appear Gamma Distributed at 5% Significance Level | | SE of Mean | 0.0277 |
| | | 95% KM (t) UCL | 0.145 |
| Assuming Gamma Distribution | | 95% KM (z) UCL | 0.143 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.143 |
| Minimum | 0.053 | 95% KM (bootstrap t) UCL | 0.185 |
| Maximum | 0.482 | 95% KM (BCA) UCL | 0.265 |
| Mean | 0.243 | 95% KM (Percentile Bootstrap) UCL | 0.193 |
| Median | 0.211 | 95% KM (Chebyshev) UCL | 0.218 |
| SD | 0.106 | 97.5% KM (Chebyshev) UCL | 0.271 |
| k star | 4.46 | 99% KM (Chebyshev) UCL | 0.373 |
| Theta star | 0.0545 | | |
| Nu star | 258.7 | Potential UCLs to Use | |
| AppChi2 | 222.5 | 95% KM (t) UCL | 0.145 |
| 95% Gamma Approximate UCL | 0.283 | 95% KM (Percentile Bootstrap) UCL | 0.193 |
| 95% Adjusted Gamma UCL | 0.285 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**MERCURY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 11 |
| Number of Distinct Detected Data | 11 | Number of Non-Detect Data | 18 |
| Number of Missing Values | 91 | Percent Non-Detects | 62.07% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 0.019 | Minimum Detected | -3.963 |
| Maximum Detected | 1.7 | Maximum Detected | 0.531 |
| Mean of Detected | 0.322 | Mean of Detected | -1.915 |
| SD of Detected | 0.491 | SD of Detected | 1.282 |
| Minimum Non-Detect | 0.016 | Minimum Non-Detect | -4.135 |
| Maximum Non-Detect | 0.13 | Maximum Non-Detect | -2.04 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 24 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 5 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 82.76% |

**UCL Statistics**

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.632 | Shapiro Wilk Test Statistic | 0.963 |
| 5% Shapiro Wilk Critical Value | 0.85 | 5% Shapiro Wilk Critical Value | 0.85 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.15 | Mean | -2.797 |
| SD | 0.324 | SD | 1.222 |
| 95% DL/2 (t) UCL | 0.252 | 95% H-Stat (DL/2) UCL | 0.243 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -3.191 |
| | | SD in Log Scale | 1.467 |
| | | Mean in Original Scale | 0.139 |
| | | SD in Original Scale | 0.328 |
| | | 95% t UCL | 0.243 |
| | | 95% Percentile Bootstrap UCL | 0.248 |
| | | 95% BCA Bootstrap UCL | 0.307 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.616 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 0.524 | | |
| nu star | 13.54 | | |
| | | | |
| A-D Test Statistic | 0.597 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.762 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.762 | Mean | 0.147 |
| 5% K-S Critical Value | 0.265 | SD | 0.32 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.0626 |
| | | 95% KM (t) UCL | 0.254 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.25 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.243 |
| Minimum | 0.019 | 95% KM (bootstrap t) UCL | 0.438 |
| Maximum | 1.7 | 95% KM (BCA) UCL | 0.272 |
| Mean | 0.297 | 95% KM (Percentile Bootstrap) UCL | 0.267 |
| Median | 0.223 | 95% KM (Chebyshev) UCL | 0.42 |
| SD | 0.305 | 97.5% KM (Chebyshev) UCL | 0.538 |
| k star | 1.486 | 99% KM (Chebyshev) UCL | 0.77 |
| Theta star | 0.2 | | |
| Nu star | 86.19 | **Potential UCLs to Use** | |
| AppChi2 | 65.79 | 95% KM (t) UCL | 0.254 |
| 95% Gamma Approximate UCL | 0.389 | | |
| 95% Adjusted Gamma UCL | 0.396 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| MOLYBDENUM | | | |
|---|---|---|---|
| **General Statistics** | | | |
| Number of Valid Data | 15 | Number of Detected Data | 14 |
| Number of Distinct Detected Data | 12 | Number of Non-Detect Data | 1 |
| Number of Missing Values | 68 | Percent Non-Detects | 6.67% |
| **Raw Statistics** | | **Log-transformed Statistics** | |
| Minimum Detected | 0.14 | Minimum Detected | -1.966 |
| Maximum Detected | 0.61 | Maximum Detected | -0.494 |
| Mean of Detected | 0.399 | Mean of Detected | -0.983 |
| SD of Detected | 0.133 | SD of Detected | 0.401 |
| Minimum Non-Detect | 0.14 | Minimum Non-Detect | -1.966 |
| Maximum Non-Detect | 0.14 | Maximum Non-Detect | -1.966 |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.979 | Shapiro Wilk Test Statistic | 0.91 |
| 5% Shapiro Wilk Critical Value | 0.874 | 5% Shapiro Wilk Critical Value | 0.874 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.377 | Mean | -1.095 |
| SD | 0.154 | SD | 0.58 |
| 95% DL/2 (t) UCL | 0.447 | 95% H-Stat (DL/2) UCL | 0.553 |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 0.378 | Mean in Log Scale | -1.045 |
| SD | 0.149 | SD in Log Scale | 0.455 |
| 95% MLE (t) UCL | 0.445 | Mean in Original Scale | 0.383 |
| 95% MLE (Tiku) UCL | 0.446 | SD in Original Scale | 0.144 |
| | | 95% t UCL | 0.448 |
| | | 95% Percentile Bootstrap UCL | 0.445 |
| | | 95% BCA Bootstrap UCL | 0.435 |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 6.218 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 0.0642 | | |
| nu star | 174.1 | | |
| A-D Test Statistic | 0.343 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.736 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.736 | Mean | 0.382 |
| 5% K-S Critical Value | 0.229 | SD | 0.14 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.0375 |
| | | 95% KM (t) UCL | 0.448 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.444 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.447 |
| Minimum | 0.0936 | 95% KM (bootstrap t) UCL | 0.443 |

| | | | |
|---|---|---|---|
| Maximum | 0.61 | 95% KM (BCA) UCL | 0.449 |
| Mean | 0.379 | 95% KM (Percentile Bootstrap) UCL | 0.443 |
| Median | 0.4 | 95% KM (Chebyshev) UCL | 0.545 |
| SD | 0.151 | 97.5% KM (Chebyshev) UCL | 0.616 |
| k star | 3.983 | 99% KM (Chebyshev) UCL | 0.755 |
| Theta star | 0.0951 | | |
| Nu star | 119.5 | **Potential UCLs to Use** | |
| AppChi2 | 95.24 | 95% KM (t) UCL | 0.448 |
| 95% Gamma Approximate UCL | 0.475 | 95% KM (Percentile Bootstrap) UCL | 0.443 |
| 95% Adjusted Gamma UCL | 0.489 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**1,2,3-TRICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 29 |
| Number of Missing Values | 91 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,2,3-TRICHLOROBENZENE was not processed!**

**1,2,4-TRICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 29 |
| Number of Missing Values | 91 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,2,4-TRICHLOROBENZENE was not processed!**

**1,4-DICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 0 |

| | | | |
|---|---|---|---|
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 29 |
| Number of Missing Values | 91 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,4-DICHLOROBENZENE was not processed!**

AROCLOR-1254

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 29 |
| Number of Missing Values | 91 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable AROCLOR-1254 was not processed!**

AROCLOR-1260

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 1 |
| Number of Distinct Detected Data | 1 | Number of Non-Detect Data | 28 |
| Number of Missing Values | 91 | Percent Non-Detects | 96.55% |

**Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!**

**It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable AROCLOR-1260 was not processed!**

DIESEL RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 22 |
| Number of Distinct Detected Data | 21 | Number of Non-Detect Data | 7 |
| Number of Missing Values | 91 | Percent Non-Detects | 24.14% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 8600 | Minimum Detected | 9.06 |

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| | | | |
|---|---|---|---|
| Maximum Detected | 1800000 | Maximum Detected | 14.4 |
| Mean of Detected | 180136 | Mean of Detected | 10.79 |
| SD of Detected | 401179 | SD of Detected | 1.481 |
| Minimum Non-Detect | 11000 | Minimum Non-Detect | 9.306 |
| Maximum Non-Detect | 18000 | Maximum Non-Detect | 9.798 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 13 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 16 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 44.83% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.474 | Shapiro Wilk Test Statistic | 0.897 |
| 5% Shapiro Wilk Critical Value | 0.911 | 5% Shapiro Wilk Critical Value | 0.911 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 138172 | Mean | 10.29 |
| SD | 355585 | SD | 1.567 |
| 95% DL/2 (t) UCL | 250499 | 95% H-Stat (DL/2) UCL | 263476 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 10.26 |
| | | SD in Log Scale | 1.615 |
| | | Mean in Original Scale | 138091 |
| | | SD in Original Scale | 355618 |
| | | 95% t UCL | 250428 |
| | | 95% Percentile Bootstrap UCL | 252324 |
| | | 95% BCA Bootstrap UCL | 315179 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.45 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 400361 | | |
| nu star | 19.8 | | |
| | | | |
| A-D Test Statistic | 2.096 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.807 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.807 | Mean | 138964 |
| 5% K-S Critical Value | 0.196 | SD | 349104 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 66353 |
| | | 95% KM (t) UCL | 251839 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 248105 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 251196 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 482625 |
| Maximum | 1800000 | 95% KM (BCA) UCL | 255114 |
| Mean | 136655 | 95% KM (Percentile Bootstrap) UCL | 256510 |
| Median | 24000 | 95% KM (Chebyshev) UCL | 428189 |
| SD | 356178 | 97.5% KM (Chebyshev) UCL | 553337 |
| k star | 0.0954 | 99% KM (Chebyshev) UCL | 799165 |
| Theta star | 1431845 | | |

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| | | | |
|---|---|---|---|
| Nu star | 5.536 | **Potential UCLs to Use** | |
| AppChi2 | 1.407 | 97.5% KM (Chebyshev) UCL | 553337 |
| 95% Gamma Approximate UCL | 537528 | | |
| 95% Adjusted Gamma UCL | 587299 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

GASOLINE RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 8 |
| Number of Distinct Detected Data | 8 | Number of Non-Detect Data | 21 |
| Number of Missing Values | 91 | Percent Non-Detects | 72.41% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 71 | Minimum Detected | 4.263 |
| Maximum Detected | 4800 | Maximum Detected | 8.476 |
| Mean of Detected | 1476 | Mean of Detected | 6.619 |
| SD of Detected | 1673 | SD of Detected | 1.379 |
| Minimum Non-Detect | 48 | Minimum Non-Detect | 3.871 |
| Maximum Non-Detect | 140 | Maximum Non-Detect | 4.942 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 22 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 7 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 75.86% |

**Warning: There are only 8 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.816 | Shapiro Wilk Test Statistic | 0.98 |
| 5% Shapiro Wilk Critical Value | 0.818 | 5% Shapiro Wilk Critical Value | 0.818 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 434.2 | Mean | 4.378 |
| SD | 1062 | SD | 1.608 |
| 95% DL/2 (t) UCL | 769.8 | 95% H-Stat (DL/2) UCL | 792.2 |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 3.007 |

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| | | | |
|---|---|---|---|
| | | SD in Log Scale | 2.605 |
| | | Mean in Original Scale | 414.4 |
| | | SD in Original Scale | 1070 |
| | | 95% t UCL | 752.4 |
| | | 95% Percentile Bootstrap UCL | 766.3 |
| | | 95% BCA Bootstrap UCL | 929.5 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.624 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 2364 | | |
| nu star | 9.991 | | |
| | | | |
| A-D Test Statistic | 0.187 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.741 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.741 | Mean | 458.7 |
| 5% K-S Critical Value | 0.303 | SD | 1034 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 205.3 |
| | | 95% KM (t) UCL | 808 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 796.5 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 740.9 |
| Minimum | 71 | 95% KM (bootstrap t) UCL | 1255 |
| Maximum | 4800 | 95% KM (BCA) UCL | 1286 |
| Mean | 1468 | 95% KM (Percentile Bootstrap) UCL | 955.5 |
| Median | 1477 | 95% KM (Chebyshev) UCL | 1354 |
| SD | 838.9 | 97.5% KM (Chebyshev) UCL | 1741 |
| k star | 2.545 | 99% KM (Chebyshev) UCL | 2502 |
| Theta star | 576.7 | | |
| Nu star | 147.6 | **Potential UCLs to Use** | |
| AppChi2 | 120.5 | 95% KM (t) UCL | 808 |
| 95% Gamma Approximate UCL | 1797 | | |
| 95% Adjusted Gamma UCL | 1819 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| | General UCL Statistics for Full Data Sets |
|---|---|
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**COBALT**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 15 | Number of Distinct Observations | 15 |
| Number of Missing Values | 68 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.5 | Minimum of Log Data | -0.693 |
| Maximum | 27.5 | Maximum of Log Data | 3.314 |
| Mean | 6.071 | Mean of log Data | 1.148 |
| Median | 3.2 | SD of log Data | 1.247 |
| SD | 7.266 | | |
| Coefficient of Variation | 1.197 | | |
| Skewness | 2.067 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.759 | Shapiro Wilk Test Statistic | 0.959 |
| Shapiro Wilk Critical Value | 0.881 | Shapiro Wilk Critical Value | 0.881 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 9.376 | 95% H-UCL | 19.66 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 16.27 |
| 95% Adjusted-CLT UCL (Chen-1995) | 10.23 | 97.5% Chebyshev (MVUE) UCL | 20.57 |
| 95% Modified-t UCL (Johnson-1978) | 9.542 | 99% Chebyshev (MVUE) UCL | 29.03 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 0.759 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 7.999 | | |
| MLE of Mean | 6.071 | | |
| MLE of Standard Deviation | 6.969 | | |
| nu star | 22.77 | | |
| Approximate Chi Square Value (.05) | 12.92 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0324 | 95% CLT UCL | 9.157 |
| Adjusted Chi Square Value | 12.01 | 95% Jackknife UCL | 9.376 |
| | | 95% Standard Bootstrap UCL | 9.043 |
| Anderson-Darling Test Statistic | 0.32 | 95% Bootstrap-t UCL | 12.2 |
| Anderson-Darling 5% Critical Value | 0.768 | 95% Hall's Bootstrap UCL | 21.09 |
| Kolmogorov-Smirnov Test Statistic | 0.161 | 95% Percentile Bootstrap UCL | 9.324 |
| Kolmogorov-Smirnov 5% Critical Value | 0.229 | 95% BCA Bootstrap UCL | 10.07 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 14.25 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 17.79 |

| | | | |
|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 24.74 |
| 95% Approximate Gamma UCL | 10.7 | | |
| 95% Adjusted Gamma UCL | 11.51 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 10.7 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**
**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

**IRON**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 15 | Number of Distinct Observations | 14 |
| Number of Missing Values | 68 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 3870 | Minimum of Log Data | 8.261 |
| Maximum | 25400 | Maximum of Log Data | 10.14 |
| Mean | 11700 | Mean of log Data | 9.146 |
| Median | 7620 | SD of log Data | 0.687 |
| SD | 8028 | | |
| Coefficient of Variation | 0.686 | | |
| Skewness | 0.693 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.806 | Shapiro Wilk Test Statistic | 0.873 |
| Shapiro Wilk Critical Value | 0.881 | Shapiro Wilk Critical Value | 0.881 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 15351 | 95% H-UCL | 18056 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 21114 |
| 95% Adjusted-CLT UCL (Chen-1995) | 15506 | 97.5% Chebyshev (MVUE) UCL | 25211 |
| 95% Modified-t UCL (Johnson-1978) | 15413 | 99% Chebyshev (MVUE) UCL | 33259 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 1.972 | **Data Follow Appr. Gamma Distribution at 5% Significance Level** | |
| Theta Star | 5934 | | |
| MLE of Mean | 11700 | | |
| MLE of Standard Deviation | 8332 | | |
| nu star | 59.15 | | |
| Approximate Chi Square Value (.05) | 42.47 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0324 | 95% CLT UCL | 15110 |
| Adjusted Chi Square Value | 40.73 | 95% Jackknife UCL | 15351 |
| | | 95% Standard Bootstrap UCL | 15061 |
| Anderson-Darling Test Statistic | 0.985 | 95% Bootstrap-t UCL | 16195 |
| Anderson-Darling 5% Critical Value | 0.746 | 95% Hall's Bootstrap UCL | 14715 |
| Kolmogorov-Smirnov Test Statistic | 0.206 | 95% Percentile Bootstrap UCL | 14979 |

| | | | |
|---|---|---|---|
| Kolmogorov-Smirnov 5% Critical Value | 0.224 | 95% BCA Bootstrap UCL | 15110 |
| **Data follow Appr. Gamma Distribution at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 20735 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 24645 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 32325 |
| 95% Approximate Gamma UCL | 16297 | | |
| 95% Adjusted Gamma UCL | 16992 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 16297 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**
**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

**LEAD**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 29 | Number of Distinct Observations | 26 |
| Number of Missing Values | 91 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.98 | Minimum of Log Data | -0.0202 |
| Maximum | 75 | Maximum of Log Data | 4.317 |
| Mean | 20.55 | Mean of log Data | 2.444 |
| Median | 15.8 | SD of log Data | 1.273 |
| SD | 19.13 | | |
| Coefficient of Variation | 0.931 | | |
| Skewness | 1.226 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.874 | Shapiro Wilk Test Statistic | 0.921 |
| Shapiro Wilk Critical Value | 0.926 | Shapiro Wilk Critical Value | 0.926 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 26.6 | 95% H-UCL | 51.15 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 55.54 |
| 95% Adjusted-CLT UCL (Chen-1995) | 27.26 | 97.5% Chebyshev (MVUE) UCL | 68.87 |
| 95% Modified-t UCL (Johnson-1978) | 26.73 | 99% Chebyshev (MVUE) UCL | 95.06 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 0.917 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 22.4 | | |
| MLE of Mean | 20.55 | | |
| MLE of Standard Deviation | 21.46 | | |
| nu star | 53.21 | | |
| Approximate Chi Square Value (.05) | 37.45 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0407 | 95% CLT UCL | 26.4 |
| Adjusted Chi Square Value | 36.66 | 95% Jackknife UCL | 26.6 |
| | | 95% Standard Bootstrap UCL | 26.26 |

| | | | |
|---|---|---|---|
| Anderson-Darling Test Statistic | 0.316 | 95% Bootstrap-t UCL | 27.92 |
| Anderson-Darling 5% Critical Value | 0.774 | 95% Hall's Bootstrap UCL | 27.84 |
| Kolmogorov-Smirnov Test Statistic | 0.114 | 95% Percentile Bootstrap UCL | 26.71 |
| Kolmogorov-Smirnov 5% Critical Value | 0.167 | 95% BCA Bootstrap UCL | 27 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 36.04 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 42.74 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 55.9 |
| 95% Approximate Gamma UCL | 29.2 | | |
| 95% Adjusted Gamma UCL | 29.83 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 29.2 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

MANGANESE

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 15 | Number of Distinct Observations | 13 |
| Number of Missing Values | 68 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 9.4 | Minimum of Log Data | 2.241 |
| Maximum | 183 | Maximum of Log Data | 5.209 |
| Mean | 56.3 | Mean of log Data | 3.589 |
| Median | 30.8 | SD of log Data | 1.011 |
| SD | 52.23 | | |
| Coefficient of Variation | 0.928 | | |
| Skewness | 1.177 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.846 | Shapiro Wilk Test Statistic | 0.927 |
| Shapiro Wilk Critical Value | 0.881 | Shapiro Wilk Critical Value | 0.881 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 80.05 | 95% H-UCL | 127.2 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 129.1 |
| 95% Adjusted-CLT UCL (Chen-1995) | 82.86 | 97.5% Chebyshev (MVUE) UCL | 160.1 |
| 95% Modified-t UCL (Johnson-1978) | 80.74 | 99% Chebyshev (MVUE) UCL | 221 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 1.063 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 52.98 | | |
| MLE of Mean | 56.3 | | |
| MLE of Standard Deviation | 54.62 | | |
| nu star | 31.88 | | |
| Approximate Chi Square Value (.05) | 19.98 | **Nonparametric Statistics** | |

| | | | |
|---|---|---|---|
| Adjusted Level of Significance | 0.0324 | 95% CLT UCL | 78.48 |
| Adjusted Chi Square Value | 18.82 | 95% Jackknife UCL | 80.05 |
| | | 95% Standard Bootstrap UCL | 77.49 |
| Anderson-Darling Test Statistic | 0.479 | 95% Bootstrap-t UCL | 86.2 |
| Anderson-Darling 5% Critical Value | 0.758 | 95% Hall's Bootstrap UCL | 84.34 |
| Kolmogorov-Smirnov Test Statistic | 0.154 | 95% Percentile Bootstrap UCL | 79.35 |
| Kolmogorov-Smirnov 5% Critical Value | 0.227 | 95% BCA Bootstrap UCL | 83.68 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 115.1 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 140.5 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 190.5 |
| 95% Approximate Gamma UCL | 89.85 | | |
| 95% Adjusted Gamma UCL | 95.36 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 89.85 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

NICKEL

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 29 | Number of Distinct Observations | 26 |
| Number of Missing Values | 91 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.64 | Minimum of Log Data | -0.446 |
| Maximum | 40.6 | Maximum of Log Data | 3.704 |
| Mean | 10.91 | Mean of log Data | 1.99 |
| Median | 8.4 | SD of log Data | 1.04 |
| SD | 9.021 | | |
| Coefficient of Variation | 0.827 | | |
| Skewness | 1.47 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.878 | Shapiro Wilk Test Statistic | 0.928 |
| Shapiro Wilk Critical Value | 0.926 | Shapiro Wilk Critical Value | 0.926 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 13.76 | 95% H-UCL | 20.61 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 24.13 |
| 95% Adjusted-CLT UCL (Chen-1995) | 14.16 | 97.5% Chebyshev (MVUE) UCL | 29.28 |
| 95% Modified-t UCL (Johnson-1978) | 13.84 | 99% Chebyshev (MVUE) UCL | 39.4 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 1.274 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 8.567 | | |
| MLE of Mean | 10.91 | | |

| | | | |
|---|---|---|---|
| MLE of Standard Deviation | 9.669 | | |
| nu star | 73.87 | | |
| Approximate Chi Square Value (.05) | 55.08 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0407 | 95% CLT UCL | 13.67 |
| Adjusted Chi Square Value | 54.11 | 95% Jackknife UCL | 13.76 |
| | | 95% Standard Bootstrap UCL | 13.63 |
| Anderson-Darling Test Statistic | 0.222 | 95% Bootstrap-t UCL | 14.42 |
| Anderson-Darling 5% Critical Value | 0.765 | 95% Hall's Bootstrap UCL | 14.77 |
| Kolmogorov-Smirnov Test Statistic | 0.0697 | 95% Percentile Bootstrap UCL | 13.76 |
| Kolmogorov-Smirnov 5% Critical Value | 0.166 | 95% BCA Bootstrap UCL | 14 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 18.21 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 21.37 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 27.58 |
| 95% Approximate Gamma UCL | 14.63 | | |
| 95% Adjusted Gamma UCL | 14.9 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 14.63 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

VANADIUM

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 15 | Number of Distinct Observations | 15 |
| Number of Missing Values | 68 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 10.9 | Minimum of Log Data | 2.389 |
| Maximum | 43.3 | Maximum of Log Data | 3.768 |
| Mean | 20.91 | Mean of log Data | 2.957 |
| Median | 17.4 | SD of log Data | 0.413 |
| SD | 9.375 | | |
| Coefficient of Variation | 0.448 | | |
| Skewness | 1.164 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.876 | Shapiro Wilk Test Statistic | 0.945 |
| Shapiro Wilk Critical Value | 0.881 | Shapiro Wilk Critical Value | 0.881 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 25.17 | 95% H-UCL | 26.05 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 30.68 |
| 95% Adjusted-CLT UCL (Chen-1995) | 25.67 | 97.5% Chebyshev (MVUE) UCL | 34.95 |
| 95% Modified-t UCL (Johnson-1978) | 25.29 | 99% Chebyshev (MVUE) UCL | 43.34 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |

PROUCL OUTPUT - BLOCK D SURFACE SOIL

| | | | |
|---|---|---|---|
| k star (bias corrected) | 4.97 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 4.207 | | |
| MLE of Mean | 20.91 | | |
| MLE of Standard Deviation | 9.378 | | |
| nu star | 149.1 | | |
| Approximate Chi Square Value (.05) | 121.9 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0324 | 95% CLT UCL | 24.89 |
| Adjusted Chi Square Value | 118.8 | 95% Jackknife UCL | 25.17 |
| | | 95% Standard Bootstrap UCL | 24.83 |
| Anderson-Darling Test Statistic | 0.481 | 95% Bootstrap-t UCL | 26.61 |
| Anderson-Darling 5% Critical Value | 0.738 | 95% Hall's Bootstrap UCL | 25.85 |
| Kolmogorov-Smirnov Test Statistic | 0.186 | 95% Percentile Bootstrap UCL | 24.79 |
| Kolmogorov-Smirnov 5% Critical Value | 0.222 | 95% BCA Bootstrap UCL | 25.52 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 31.46 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 36.02 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 44.99 |
| 95% Approximate Gamma UCL | 25.58 | | |
| 95% Adjusted Gamma UCL | 26.23 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 25.58 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK E SURFACE SOIL

| | General UCL Statistics for Full Data Sets |
|---|---|
| **User Selected Options** | |
| From File | WorkSheet_a.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**TOTAL CHROMIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 29 | Number of Distinct Observations | 26 |
| Number of Missing Values | 1 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.315 | Minimum of Log Data | -1.155 |
| Maximum | 4.185 | Maximum of Log Data | 1.432 |
| Mean | 0.761 | Mean of log Data | -0.447 |
| Median | 0.57 | SD of log Data | 0.504 |
| SD | 0.706 | | |
| Coefficient of Variation | 0.928 | | |
| Skewness | 4.375 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.482 | Shapiro Wilk Test Statistic | 0.845 |
| Shapiro Wilk Critical Value | 0.926 | Shapiro Wilk Critical Value | 0.926 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 0.984 | 95% H-UCL | 0.875 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 1.031 |
| 95% Adjusted-CLT UCL (Chen-1995) | 1.091 | 97.5% Chebyshev (MVUE) UCL | 1.164 |
| 95% Modified-t UCL (Johnson-1978) | 1.002 | 99% Chebyshev (MVUE) UCL | 1.426 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 2.739 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 0.278 | | |
| MLE of Mean | 0.761 | | |
| MLE of Standard Deviation | 0.46 | | |
| nu star | 158.8 | | |
| Approximate Chi Square Value (.05) | 130.7 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0407 | 95% CLT UCL | 0.977 |
| Adjusted Chi Square Value | 129.2 | 95% Jackknife UCL | 0.984 |
| | | 95% Standard Bootstrap UCL | 0.972 |
| Anderson-Darling Test Statistic | 2.274 | 95% Bootstrap-t UCL | 1.383 |
| Anderson-Darling 5% Critical Value | 0.753 | 95% Hall's Bootstrap UCL | 1.79 |
| Kolmogorov-Smirnov Test Statistic | 0.226 | 95% Percentile Bootstrap UCL | 0.995 |
| Kolmogorov-Smirnov 5% Critical Value | 0.164 | 95% BCA Bootstrap UCL | 1.105 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 1.333 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 1.58 |

PROUCL OUTPUT - BLOCK E SURFACE SOIL

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | | | | | 2.066 |
| 95% Approximate Gamma UCL | 0.925 | | | | | | |
| 95% Adjusted Gamma UCL | 0.936 | | | | | | |
| | | | | | | | |
| **Potential UCL to Use** | | Use 95% Chebyshev (Mean, Sd) UCL | | | | | 1.333 |
| | | | | | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK E SURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet_a.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**ANTIMONY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 15 |
| Number of Distinct Detected Data | 11 | Number of Non-Detect Data | 14 |
| Number of Missing Values | 191 | Percent Non-Detects | 48.28% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.031 | Minimum Detected | -3.474 |
| Maximum Detected | 1.345 | Maximum Detected | 0.296 |
| Mean of Detected | 0.328 | Mean of Detected | -1.526 |
| SD of Detected | 0.353 | SD of Detected | 0.932 |
| Minimum Non-Detect | 0.066 | Minimum Non-Detect | -2.718 |
| Maximum Non-Detect | 2.9 | Maximum Non-Detect | 1.065 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 29 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 100.00% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.706 | Shapiro Wilk Test Statistic | 0.961 |
| 5% Shapiro Wilk Critical Value | 0.881 | 5% Shapiro Wilk Critical Value | 0.881 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.558 | Mean | -1.3 |
| SD | 0.575 | SD | 1.324 |
| 95% DL/2 (t) UCL | 0.739 | 95% H-Stat (DL/2) UCL | 1.35 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -1.951 |
| | | SD in Log Scale | 0.915 |
| | | Mean in Original Scale | 0.223 |
| | | SD in Original Scale | 0.278 |
| | | 95% t UCL | 0.311 |
| | | 95% Percentile Bootstrap UCL | 0.311 |
| | | 95% BCA Bootstrap UCL | 0.34 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 1.131 | **Data Follow Appr. Gamma Distribution at 5% Significance Level** | |
| Theta Star | 0.29 | | |

| | | | |
|---|---|---|---|
| nu star | 33.94 | | |
| | | | |
| A-D Test Statistic | 0.662 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.756 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.756 | Mean | 0.25 |
| 5% K-S Critical Value | 0.226 | SD | 0.314 |
| **Data follow Appr. Gamma Distribution at 5% Significance Level** | | SE of Mean | 0.071 |
| | | 95% KM (t) UCL | 0.371 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.367 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.367 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 0.527 |
| Maximum | 1.345 | 95% KM (BCA) UCL | 0.385 |
| Mean | 0.335 | 95% KM (Percentile Bootstrap) UCL | 0.375 |
| Median | 0.22 | 95% KM (Chebyshev) UCL | 0.56 |
| SD | 0.308 | 97.5% KM (Chebyshev) UCL | 0.694 |
| k star | 0.488 | 99% KM (Chebyshev) UCL | 0.957 |
| Theta star | 0.687 | | |
| Nu star | 28.3 | **Potential UCLs to Use** | |
| AppChi2 | 17.16 | 95% KM (t) UCL | 0.371 |
| 95% Gamma Approximate UCL | 0.553 | | |
| 95% Adjusted Gamma UCL | 0.57 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**CADMIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 20 |
| Number of Distinct Detected Data | 17 | Number of Non-Detect Data | 9 |
| Number of Missing Values | 191 | Percent Non-Detects | 31.03% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.0125 | Minimum Detected | -4.382 |
| Maximum Detected | 6.4 | Maximum Detected | 1.856 |
| Mean of Detected | 0.526 | Mean of Detected | -2.089 |
| SD of Detected | 1.413 | SD of Detected | 1.569 |
| Minimum Non-Detect | 0.012 | Minimum Non-Detect | -4.423 |
| Maximum Non-Detect | 2.9 | Maximum Non-Detect | 1.065 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 28 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 1 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 96.55% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.378 | Shapiro Wilk Test Statistic | 0.955 |
| 5% Shapiro Wilk Critical Value | 0.905 | 5% Shapiro Wilk Critical Value | 0.905 |

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| Data not Normal at 5% Significance Level | | Data appear Lognormal at 5% Significance Level | |
|---|---|---|---|
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.739 | Mean | -1.533 |
| SD | 1.233 | SD | 1.822 |
| 95% DL/2 (t) UCL | 1.128 | 95% H-Stat (DL/2) UCL | 3.964 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -2.303 |
| | | SD in Log Scale | 1.509 |
| | | Mean in Original Scale | 0.394 |
| | | SD in Original Scale | 1.182 |
| | | 95% t UCL | 0.768 |
| | | 95% Percentile Bootstrap UCL | 0.817 |
| | | 95% BCA Bootstrap UCL | 1.111 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.413 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 1.274 | | |
| nu star | 16.52 | | |
| | | | |
| A-D Test Statistic | 1.535 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.814 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.814 | Mean | 0.42 |
| 5% K-S Critical Value | 0.206 | SD | 1.165 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.225 |
| | | 95% KM (t) UCL | 0.802 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.79 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.799 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 2.108 |
| Maximum | 6.4 | 95% KM (BCA) UCL | 0.888 |
| Mean | 0.463 | 95% KM (Percentile Bootstrap) UCL | 0.818 |
| Median | 0.16 | 95% KM (Chebyshev) UCL | 1.399 |
| SD | 1.19 | 97.5% KM (Chebyshev) UCL | 1.823 |
| k star | 0.2 | 99% KM (Chebyshev) UCL | 2.654 |
| Theta star | 2.318 | | |
| Nu star | 11.58 | **Potential UCLs to Use** | |
| AppChi2 | 4.952 | 99% KM (Chebyshev) UCL | 2.654 |
| 95% Gamma Approximate UCL | 1.082 | | |
| 95% Adjusted Gamma UCL | 1.142 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**LEAD**

**General Statistics**

PROUCL OUTPUT - BLOCK E SURFACE SOIL

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 27 |
| Number of Distinct Detected Data | 23 | Number of Non-Detect Data | 2 |
| Number of Missing Values | 191 | Percent Non-Detects | 6.90% |
| | | | |
| **Raw Statistics** | | **Log-transformed Statistics** | |
| Minimum Detected | 2 | Minimum Detected | 0.693 |
| Maximum Detected | 278 | Maximum Detected | 5.628 |
| Mean of Detected | 23.05 | Mean of Detected | 2.225 |
| SD of Detected | 53.92 | SD of Detected | 1.115 |
| Minimum Non-Detect | 2.8 | Minimum Non-Detect | 1.03 |
| Maximum Non-Detect | 2.9 | Maximum Non-Detect | 1.065 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 3 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 26 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 10.34% |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.393 | Shapiro Wilk Test Statistic | 0.882 |
| 5% Shapiro Wilk Critical Value | 0.923 | 5% Shapiro Wilk Critical Value | 0.923 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 21.56 | Mean | 2.096 |
| SD | 52.26 | SD | 1.178 |
| 95% DL/2 (t) UCL | 38.06 | 95% H-Stat (DL/2) UCL | 29.68 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 17.67 | Mean in Log Scale | 2.076 |
| SD | 54.95 | SD in Log Scale | 1.212 |
| 95% MLE (t) UCL | 35.02 | Mean in Original Scale | 21.53 |
| 95% MLE (Tiku) UCL | 33.7 | SD in Original Scale | 52.27 |
| | | 95% t UCL | 38.04 |
| | | 95% Percentile Bootstrap UCL | 38.57 |
| | | 95% BCA Bootstrap UCL | 50.68 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.618 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 37.32 | | |
| nu star | 33.35 | | |
| | | | |
| A-D Test Statistic | 2.878 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.792 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.792 | Mean | 21.6 |
| 5% K-S Critical Value | 0.176 | SD | 51.33 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 9.714 |
| | | 95% KM (t) UCL | 38.12 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 37.57 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 38.04 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 91.53 |

| | | | |
|---|---|---|---|
| Maximum | 278 | 95% KM (BCA) UCL | 39.96 |
| Mean | 21.46 | 95% KM (Percentile Bootstrap) UCL | 39.2 |
| Median | 6.8 | 95% KM (Chebyshev) UCL | 63.94 |
| SD | 52.3 | 97.5% KM (Chebyshev) UCL | 82.26 |
| k star | 0.243 | 99% KM (Chebyshev) UCL | 118.2 |
| Theta star | 88.23 | | |
| Nu star | 14.11 | **Potential UCLs to Use** | |
| AppChi2 | 6.644 | 97.5% KM (Chebyshev) UCL | 82.26 |
| 95% Gamma Approximate UCL | 45.56 | | |
| 95% Adjusted Gamma UCL | 47.75 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**MERCURY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 29 | Number of Detected Data | 8 |
| Number of Distinct Detected Data | 8 | Number of Non-Detect Data | 21 |
| Number of Missing Values | 191 | Percent Non-Detects | 72.41% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.061 | Minimum Detected | -2.797 |
| Maximum Detected | 0.41 | Maximum Detected | -0.892 |
| Mean of Detected | 0.175 | Mean of Detected | -1.928 |
| SD of Detected | 0.119 | SD of Detected | 0.647 |
| Minimum Non-Detect | 0.019 | Minimum Non-Detect | -3.963 |
| Maximum Non-Detect | 0.12 | Maximum Non-Detect | -2.12 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 23 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 6 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 79.31% |

**Warning: There are only 8 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.86 | Shapiro Wilk Test Statistic | 0.955 |
| 5% Shapiro Wilk Critical Value | 0.818 | 5% Shapiro Wilk Critical Value | 0.818 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |

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| | | | |
|---|---|---|---|
| Mean | 0.0661 | Mean | -3.475 |
| SD | 0.0927 | SD | 1.243 |
| 95% DL/2 (t) UCL | 0.0954 | 95% H-Stat (DL/2) UCL | 0.129 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -3.593 |
| | | SD in Log Scale | 1.256 |
| | | Mean in Original Scale | 0.0615 |
| | | SD in Original Scale | 0.0936 |
| | | 95% t UCL | 0.0911 |
| | | 95% Percentile Bootstrap UCL | 0.092 |
| | | 95% BCA Bootstrap UCL | 0.1 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 1.855 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 0.0945 | | |
| nu star | 29.69 | | |
| | | | |
| A-D Test Statistic | 0.321 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.722 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.722 | Mean | 0.0927 |
| 5% K-S Critical Value | 0.296 | SD | 0.0777 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.0154 |
| | | 95% KM (t) UCL | 0.119 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.118 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.114 |
| Minimum | 0.00667 | 95% KM (bootstrap t) UCL | 0.136 |
| Maximum | 0.41 | 95% KM (BCA) UCL | 0.158 |
| Mean | 0.211 | 95% KM (Percentile Bootstrap) UCL | 0.146 |
| Median | 0.225 | 95% KM (Chebyshev) UCL | 0.16 |
| SD | 0.105 | 97.5% KM (Chebyshev) UCL | 0.189 |
| k star | 2.344 | 99% KM (Chebyshev) UCL | 0.246 |
| Theta star | 0.0901 | | |
| Nu star | 135.9 | **Potential UCLs to Use** | |
| AppChi2 | 110 | 95% KM (t) UCL | 0.119 |
| 95% Gamma Approximate UCL | 0.261 | 95% KM (Percentile Bootstrap) UCL | 0.146 |
| 95% Adjusted Gamma UCL | 0.264 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**MOLYBDENUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 21 | Number of Detected Data | 4 |
| Number of Distinct Detected Data | 4 | Number of Non-Detect Data | 17 |
| Number of Missing Values | 77 | Percent Non-Detects | 80.95% |

PROUCL OUTPUT - BLOCK E SURFACE SOIL

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 0.378 | Minimum Detected | -0.974 |
| Maximum Detected | 3.2 | Maximum Detected | 1.163 |
| Mean of Detected | 1.354 | Mean of Detected | -0.0187 |
| SD of Detected | 1.277 | SD of Detected | 0.919 |
| Minimum Non-Detect | 0.077 | Minimum Non-Detect | -2.564 |
| Maximum Non-Detect | 0.78 | Maximum Non-Detect | -0.248 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 19 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 2 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 90.48% |

**Warning: There are only 4 Distinct Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.845 | Shapiro Wilk Test Statistic | 0.978 |
| 5% Shapiro Wilk Critical Value | 0.748 | 5% Shapiro Wilk Critical Value | 0.748 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.359 | Mean | -1.876 |
| SD | 0.705 | SD | 1.162 |
| 95% DL/2 (t) UCL | 0.624 | 95% H-Stat (DL/2) UCL | 0.622 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -2.988 |
| | | SD in Log Scale | 1.541 |
| | | Mean in Original Scale | 0.279 |
| | | SD in Original Scale | 0.728 |
| | | 95% t UCL | 0.553 |
| | | 95% Percentile Bootstrap UCL | 0.571 |
| | | 95% BCA Bootstrap UCL | 0.704 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.592 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 2.289 | | |
| nu star | 4.733 | | |
| | | | |
| A-D Test Statistic | 0.285 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.662 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.662 | Mean | 0.564 |
| 5% K-S Critical Value | 0.399 | SD | 0.617 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.155 |
| | | 95% KM (t) UCL | 0.832 |

| Assuming Gamma Distribution | | 95% KM (z) UCL | 0.82 |
|---|---|---|---|
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.802 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 1.02 |
| Maximum | 3.2 | 95% KM (BCA) UCL | 3.2 |
| Mean | 0.258 | 95% KM (Percentile Bootstrap) UCL | 1.425 |
| Median | 1E-12 | 95% KM (Chebyshev) UCL | 1.242 |
| SD | 0.736 | 97.5% KM (Chebyshev) UCL | 1.535 |
| k star | 0.068 | 99% KM (Chebyshev) UCL | 2.11 |
| Theta star | 3.796 | | |
| Nu star | 2.854 | **Potential UCLs to Use** | |
| AppChi2 | 0.331 | 95% KM (t) UCL | 0.832 |
| 95% Gamma Approximate UCL | 2.227 | 95% KM (Percentile Bootstrap) UCL | 1.425 |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**1,2,3-TRICHLOROBENZENE**

**General Statistics**

| Number of Valid Data | 42 | Number of Detected Data | 8 |
|---|---|---|---|
| Number of Distinct Detected Data | 8 | Number of Non-Detect Data | 34 |
| Number of Missing Values | 178 | Percent Non-Detects | 80.95% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 11 | Minimum Detected | 2.398 |
| Maximum Detected | 43000 | Maximum Detected | 10.67 |
| Mean of Detected | 10353 | Mean of Detected | 5.947 |
| SD of Detected | 18946 | SD of Detected | 3.08 |
| Minimum Non-Detect | 0.29 | Minimum Non-Detect | -1.238 |
| Maximum Non-Detect | 6.2 | Maximum Non-Detect | 1.825 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 34 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 8 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 80.95% |

**Warning: There are only 8 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.587 | Shapiro Wilk Test Statistic | 0.849 |
| 5% Shapiro Wilk Critical Value | 0.818 | 5% Shapiro Wilk Critical Value | 0.818 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |

| | | | |
|---|---|---|---|
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 1974 | Mean | 1.533 |
| SD | 8844 | SD | 2.718 |
| 95% DL/2 (t) UCL | 4270 | 95% H-Stat (DL/2) UCL | 1372 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -4.818 |
| | | SD in Log Scale | 6.39 |
| | | Mean in Original Scale | 1972 |
| | | SD in Original Scale | 8844 |
| | | 95% t UCL | 4269 |
| | | 95% Percentile Bootstrap UCL | 4651 |
| | | 95% BCA Bootstrap UCL | 5790 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.221 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 46902 | | |
| nu star | 3.532 | | |
| | | | |
| A-D Test Statistic | 1.071 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.828 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.828 | Mean | 1981 |
| 5% K-S Critical Value | 0.322 | SD | 8736 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 1441 |
| | | 95% KM (t) UCL | 4406 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 4351 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 4251 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 285630 |
| Maximum | 43000 | 95% KM (BCA) UCL | 4940 |
| Mean | 9638 | 95% KM (Percentile Bootstrap) UCL | 4762 |
| Median | 11253 | 95% KM (Chebyshev) UCL | 8262 |
| SD | 8689 | 97.5% KM (Chebyshev) UCL | 10980 |
| k star | 0.223 | 99% KM (Chebyshev) UCL | 16319 |
| Theta star | 43208 | | |
| Nu star | 18.74 | **Potential UCLs to Use** | |
| AppChi2 | 9.926 | 99% KM (Chebyshev) UCL | 16319 |
| 95% Gamma Approximate UCL | 18194 | | |
| 95% Adjusted Gamma UCL | 18624 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**1,2,4-TRICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 42 | Number of Detected Data | 8 |

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| | | | |
|---|---|---|---|
| Number of Distinct Detected Data | 7 | Number of Non-Detect Data | 34 |
| Number of Missing Values | 178 | Percent Non-Detects | 80.95% |
| | | | |
| **Raw Statistics** | | **Log-transformed Statistics** | |
| Minimum Detected | 47 | Minimum Detected | 3.85 |
| Maximum Detected | 210000 | Maximum Detected | 12.25 |
| Mean of Detected | 49173 | Mean of Detected | 7.265 |
| SD of Detected | 90364 | SD of Detected | 3.245 |
| Minimum Non-Detect | 0.22 | Minimum Non-Detect | -1.514 |
| Maximum Non-Detect | 6.2 | Maximum Non-Detect | 1.825 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 34 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 8 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 80.95% |

**Warning: There are only 8 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| | | | |
|---|---|---|---|
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.594 | Shapiro Wilk Test Statistic | 0.839 |
| 5% Shapiro Wilk Critical Value | 0.818 | 5% Shapiro Wilk Critical Value | 0.818 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 9368 | Mean | 1.842 |
| SD | 42143 | SD | 3.104 |
| 95% DL/2 (t) UCL | 20312 | 95% H-Stat (DL/2) UCL | 10143 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -4.126 |
| | | SD in Log Scale | 6.669 |
| | | Mean in Original Scale | 9366 |
| | | SD in Original Scale | 42144 |
| | | 95% t UCL | 20310 |
| | | 95% Percentile Bootstrap UCL | 19407 |
| | | 95% BCA Bootstrap UCL | 24432 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.213 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 231258 | | |
| nu star | 3.402 | | |
| | | | |
| A-D Test Statistic | 1.048 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.833 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.833 | Mean | 9404 |

| | | | |
|---|---|---|---|
| 5% K-S Critical Value | 0.323 | SD | 41630 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 6867 |
| | | 95% KM (t) UCL | 20961 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 20700 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 20276 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 1334864 |
| Maximum | 768733 | 95% KM (BCA) UCL | 23682 |
| Mean | 96139 | 95% KM (Percentile Bootstrap) UCL | 20167 |
| Median | 36759 | 95% KM (Chebyshev) UCL | 39338 |
| SD | 164901 | 97.5% KM (Chebyshev) UCL | 52290 |
| k star | 0.0978 | 99% KM (Chebyshev) UCL | 77732 |
| Theta star | 983211 | | |
| Nu star | 8.214 | **Potential UCLs to Use** | |
| AppChi2 | 2.859 | 99% KM (Chebyshev) UCL | 77732 |
| 95% Gamma Approximate UCL | 276166 | | |
| 95% Adjusted Gamma UCL | 287386 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**1,4-DICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 42 | Number of Detected Data | 7 |
| Number of Distinct Detected Data | 6 | Number of Non-Detect Data | 35 |
| Number of Missing Values | 178 | Percent Non-Detects | 83.33% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 1.3 | Minimum Detected | 0.262 |
| Maximum Detected | 2700 | Maximum Detected | 7.901 |
| Mean of Detected | 615 | Mean of Detected | 3.975 |
| SD of Detected | 1072 | SD of Detected | 2.737 |
| Minimum Non-Detect | 0.5 | Minimum Non-Detect | -0.693 |
| Maximum Non-Detect | 6.2 | Maximum Non-Detect | 1.825 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 36 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 6 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 85.71% |

**Warning: There are only 7 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | **Lognormal Distribution Test with Detected Values Only** |
|---|---|

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| | | | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.662 | Shapiro Wilk Test Statistic | 0.911 |
| 5% Shapiro Wilk Critical Value | 0.803 | 5% Shapiro Wilk Critical Value | 0.803 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 104.6 | Mean | 1.221 |
| SD | 470.7 | SD | 1.82 |
| 95% DL/2 (t) UCL | 226.8 | 95% H-Stat (DL/2) UCL | 46.72 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -5.221 |
| | | SD in Log Scale | 5.267 |
| | | Mean in Original Scale | 102.5 |
| | | SD in Original Scale | 471.2 |
| | | 95% t UCL | 224.9 |
| | | 95% Percentile Bootstrap UCL | 231.3 |
| | | 95% BCA Bootstrap UCL | 333.7 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.258 | **Data Follow Appr. Gamma Distribution at 5% Significance Level** | |
| Theta Star | 2387 | | |
| nu star | 3.607 | | |
| | | | |
| A-D Test Statistic | 0.686 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.79 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.79 | Mean | 103.6 |
| 5% K-S Critical Value | 0.336 | SD | 465.3 |
| **Data follow Appr. Gamma Distribution at 5% Significance Level** | | SE of Mean | 77.55 |
| | | 95% KM (t) UCL | 234.1 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 231.1 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 218.4 |
| Minimum | 1.3 | 95% KM (bootstrap t) UCL | 5543 |
| Maximum | 2700 | 95% KM (BCA) UCL | 275.5 |
| Mean | 543.6 | 95% KM (Percentile Bootstrap) UCL | 240.8 |
| Median | 332.2 | 95% KM (Chebyshev) UCL | 441.6 |
| SD | 655.8 | 97.5% KM (Chebyshev) UCL | 587.9 |
| k star | 0.737 | 99% KM (Chebyshev) UCL | 875.2 |
| Theta star | 738.1 | | |
| Nu star | 61.87 | **Potential UCLs to Use** | |
| AppChi2 | 44.78 | 95% KM (t) UCL | 234.1 |
| 95% Gamma Approximate UCL | 751.1 | | |
| 95% Adjusted Gamma UCL | 759.9 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

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AROCLOR-1254

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 220 | Number of Detected Data | 3 |
| Number of Distinct Detected Data | 3 | Number of Non-Detect Data | 217 |
| | | Percent Non-Detects | 98.64% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 51 | Minimum Detected | 3.932 |
| Maximum Detected | 36000 | Maximum Detected | 10.49 |
| Mean of Detected | 13617 | Mean of Detected | 7.633 |
| SD of Detected | 19529 | SD of Detected | 3.36 |
| Minimum Non-Detect | 17 | Minimum Non-Detect | 2.833 |
| Maximum Non-Detect | 740000 | Maximum Non-Detect | 13.51 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 220 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 100.00% |

**Warning: There are only 3 Distinct Detected Values in this data set**

**The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.**

**Those methods will return a 'N/A' value on your output display!**

**It is necessary to have 4 or more Distinct Values for bootstrap methods.**

**However, results obtained using 4 to 9 distinct values may not be reliable.**

**It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.**

**UCL Statistics**

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.847 | Shapiro Wilk Test Statistic | 0.953 |
| 5% Shapiro Wilk Critical Value | 0.767 | 5% Shapiro Wilk Critical Value | 0.767 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 3746 | Mean | 4.031 |
| SD | 26318 | SD | 2.528 |
| 95% DL/2 (t) UCL | 6677 | 95% H-Stat (DL/2) UCL | 2623 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -17.71 |
| | | SD in Log Scale | 7.585 |
| | | Mean in Original Scale | 185.7 |
| | | SD in Original Scale | 2447 |
| | | 95% t UCL | 458.2 |
| | | 95% Percentile Bootstrap UCL | 512.7 |
| | | 95% BCA Bootstrap UCL | 840 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |

| | | | |
|---|---|---|---|
| k star (bias corrected) | N/A | **Data appear Normal at 5% Significance Level** | |
| Theta Star | N/A | | |
| nu star | N/A | | |
| | | | |
| A-D Test Statistic | N/A | **Nonparametric Statistics** | |
| 5% A-D Critical Value | N/A | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | N/A | Mean | 244.8 |
| 5% K-S Critical Value | N/A | SD | 2485 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 209.2 |
| | | 95% KM (t) UCL | 590.3 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 588.8 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 3303 |
| Minimum | N/A | 95% KM (bootstrap t) UCL | 1038 |
| Maximum | N/A | 95% KM (BCA) UCL | 36000 |
| Mean | N/A | 95% KM (Percentile Bootstrap) UCL | N/A |
| Median | N/A | 95% KM (Chebyshev) UCL | 1157 |
| SD | N/A | 97.5% KM (Chebyshev) UCL | 1551 |
| k star | N/A | 99% KM (Chebyshev) UCL | 2326 |
| Theta star | N/A | | |
| Nu star | N/A | **Potential UCLs to Use** | |
| AppChi2 | N/A | 95% KM (t) UCL | 590.3 |
| 95% Gamma Approximate UCL | N/A | 95% KM (Percentile Bootstrap) UCL | N/A |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**AROCLOR-1260**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 220 | Number of Detected Data | 129 |
| Number of Distinct Detected Data | 109 | Number of Non-Detect Data | 91 |
| | | Percent Non-Detects | 41.36% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 4.3 | Minimum Detected | 1.459 |
| Maximum Detected | 1800000 | Maximum Detected | 14.4 |
| Mean of Detected | 58917 | Mean of Detected | 7.031 |
| SD of Detected | 225692 | SD of Detected | 3.373 |
| Minimum Non-Detect | 17 | Minimum Non-Detect | 2.833 |
| Maximum Non-Detect | 290 | Maximum Non-Detect | 5.67 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 144 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 76 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 65.45% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | **Lognormal Distribution Test with Detected Values Only** |
|---|---|

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| | | | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.397 | Lilliefors Test Statistic | 0.104 |
| 5% Lilliefors Critical Value | 0.078 | 5% Lilliefors Critical Value | 0.078 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 34555 | Mean | 5.167 |
| SD | 174976 | SD | 3.435 |
| 95% DL/2 (t) UCL | 54041 | 95% H-Stat (DL/2) UCL | 199443 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 4.629 |
| | | SD in Log Scale | 4.072 |
| | | Mean in Original Scale | 34552 |
| | | SD in Original Scale | 174977 |
| | | 95% t UCL | 54038 |
| | | 95% Percentile Bootstrap UCL | 54450 |
| | | 95% BCA Bootstrap UCL | 64730 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.189 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 312082 | | |
| nu star | 48.71 | | |
| | | | |
| A-D Test Statistic | 6.73 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.929 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.929 | Mean | 34551 |
| 5% K-S Critical Value | 0.0913 | SD | 174579 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 11816 |
| | | 95% KM (t) UCL | 54069 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 53987 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 54038 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 74918 |
| Maximum | 1800000 | 95% KM (BCA) UCL | 53883 |
| Mean | 38546 | 95% KM (Percentile Bootstrap) UCL | 55071 |
| Median | 71.5 | 95% KM (Chebyshev) UCL | 86056 |
| SD | 175143 | 97.5% KM (Chebyshev) UCL | 108342 |
| k star | 0.0607 | 99% KM (Chebyshev) UCL | 152119 |
| Theta star | 635322 | | |
| Nu star | 26.7 | **Potential UCLs to Use** | |
| AppChi2 | 15.92 | 97.5% KM (Chebyshev) UCL | 108342 |
| 95% Gamma Approximate UCL | 64652 | | |
| 95% Adjusted Gamma UCL | 64876 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

DIESEL RANGE ORGANICS

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| General Statistics | | | |
|---|---|---|---|
| Number of Valid Data | 12 | Number of Detected Data | 6 |
| Number of Distinct Detected Data | 6 | Number of Non-Detect Data | 6 |
| Number of Missing Values | 208 | Percent Non-Detects | 50.00% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 13000 | Minimum Detected | 9.473 |
| Maximum Detected | 8900000 | Maximum Detected | 16 |
| Mean of Detected | 1905500 | Mean of Detected | 12.94 |
| SD of Detected | 3461953 | SD of Detected | 2.198 |
| Minimum Non-Detect | 11000 | Minimum Non-Detect | 9.306 |
| Maximum Non-Detect | 12000 | Maximum Non-Detect | 9.393 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 6 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 6 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 50.00% |

**Warning: There are only 6 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.62 | Shapiro Wilk Test Statistic | 0.988 |
| 5% Shapiro Wilk Critical Value | 0.788 | 5% Shapiro Wilk Critical Value | 0.788 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 955542 | Mean | 10.78 |
| SD | 2536186 | SD | 2.695 |
| 95% DL/2 (t) UCL | 2270370 | 95% H-Stat (DL/2) UCL | 357900000 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 9.668 |
| | | SD in Log Scale | 3.923 |
| | | Mean in Original Scale | 953576 |
| | | SD in Original Scale | 2536991 |
| | | 95% t UCL | 2268821 |
| | | 95% Percentile Bootstrap UCL | 2374839 |
| | | 95% BCA Bootstrap UCL | 3162259 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.325 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 5866751 | | |
| nu star | 3.898 | | |
| | | | |

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| | | | |
|---|---|---|---|
| A-D Test Statistic | 0.291 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.747 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.747 | Mean | 959250 |
| 5% K-S Critical Value | 0.352 | SD | 2426765 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 767410 |
| | | 95% KM (t) UCL | 2337431 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 2221528 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 2224862 |
| Minimum | 13000 | 95% KM (bootstrap t) UCL | 11643868 |
| Maximum | 8900000 | 95% KM (BCA) UCL | 2650000 |
| Mean | 1905500 | 95% KM (Percentile Bootstrap) UCL | 2429000 |
| Median | 1822302 | 95% KM (Chebyshev) UCL | 4304315 |
| SD | 2334571 | 97.5% KM (Chebyshev) UCL | 5751727 |
| k star | 0.641 | 99% KM (Chebyshev) UCL | 8594888 |
| Theta star | 2970387 | | |
| Nu star | 15.4 | **Potential UCLs to Use** | |
| AppChi2 | 7.538 | 95% KM (t) UCL | 2337431 |
| 95% Gamma Approximate UCL | 3891991 | | |
| 95% Adjusted Gamma UCL | 4368848 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

GASOLINE RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 13 | Number of Detected Data | 5 |
| Number of Distinct Detected Data | 5 | Number of Non-Detect Data | 8 |
| Number of Missing Values | 207 | Percent Non-Detects | 61.54% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 64 | Minimum Detected | 4.159 |
| Maximum Detected | 1400 | Maximum Detected | 7.244 |
| Mean of Detected | 580.8 | Mean of Detected | 5.869 |
| SD of Detected | 545.2 | SD of Detected | 1.238 |
| Minimum Non-Detect | 55 | Minimum Non-Detect | 4.007 |
| Maximum Non-Detect | 120 | Maximum Non-Detect | 4.787 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 9 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 4 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 69.23% |

**Warning: There are only 5 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

PROUCL OUTPUT - BLOCK E SURFACE SOIL

| UCL Statistics | | | |
|---|---|---|---|
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.922 | Shapiro Wilk Test Statistic | 0.966 |
| 5% Shapiro Wilk Critical Value | 0.762 | 5% Shapiro Wilk Critical Value | 0.762 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 254.2 | Mean | 4.638 |
| SD | 414 | SD | 1.266 |
| 95% DL/2 (t) UCL | 458.8 | 95% H-Stat (DL/2) UCL | 779 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 3.788 |
| | | SD in Log Scale | 1.997 |
| | | Mean in Original Scale | 234.6 |
| | | SD in Original Scale | 424.8 |
| | | 95% t UCL | 444.5 |
| | | 95% Percentile Bootstrap UCL | 436.3 |
| | | 95% BCA Bootstrap UCL | 523.6 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.593 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 980.1 | | |
| nu star | 5.926 | | |
| | | | |
| A-D Test Statistic | 0.191 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.69 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.69 | Mean | 262.8 |
| 5% K-S Critical Value | 0.364 | SD | 393.3 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 121.9 |
| | | 95% KM (t) UCL | 480.1 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 463.4 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 445.2 |
| Minimum | 64 | 95% KM (bootstrap t) UCL | 529.2 |
| Maximum | 1400 | 95% KM (BCA) UCL | 917.7 |
| Mean | 581 | 95% KM (Percentile Bootstrap) UCL | 617.7 |
| Median | 566.3 | 95% KM (Chebyshev) UCL | 794.3 |
| SD | 315.3 | 97.5% KM (Chebyshev) UCL | 1024 |
| k star | 2.187 | 99% KM (Chebyshev) UCL | 1476 |
| Theta star | 265.7 | | |
| Nu star | 56.85 | **Potential UCLs to Use** | |
| AppChi2 | 40.52 | 95% KM (t) UCL | 480.1 |
| 95% Gamma Approximate UCL | 815.2 | 95% KM (Percentile Bootstrap) UCL | 617.7 |
| 95% Adjusted Gamma UCL | 856.6 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK E SURFACE SOIL

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| | |
|---|---|
| | **General UCL Statistics for Full Data Sets** |
| **User Selected Options** | |
| From File | Sheet1.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**ARSENIC**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 29 | Number of Distinct Observations | 22 |
| Number of Missing Values | 191 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.52 | Minimum of Log Data | -0.654 |
| Maximum | 9.6 | Maximum of Log Data | 2.262 |
| Mean | 1.838 | Mean of log Data | 0.409 |
| Median | 1.5 | SD of log Data | 0.58 |
| SD | 1.659 | | |
| Coefficient of Variation | 0.903 | | |
| Skewness | 3.92 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.572 | Shapiro Wilk Test Statistic | 0.935 |
| Shapiro Wilk Critical Value | 0.926 | Shapiro Wilk Critical Value | 0.926 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 2.362 | 95% H-UCL | 2.221 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 2.648 |
| 95% Adjusted-CLT UCL (Chen-1995) | 2.584 | 97.5% Chebyshev (MVUE) UCL | 3.028 |
| 95% Modified-t UCL (Johnson-1978) | 2.399 | 99% Chebyshev (MVUE) UCL | 3.774 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 2.405 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 0.764 | | |
| MLE of Mean | 1.838 | | |
| MLE of Standard Deviation | 1.185 | | |
| nu star | 139.5 | | |
| Approximate Chi Square Value (.05) | 113.2 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0407 | 95% CLT UCL | 2.345 |
| Adjusted Chi Square Value | 111.8 | 95% Jackknife UCL | 2.362 |
| | | 95% Standard Bootstrap UCL | 2.339 |
| Anderson-Darling Test Statistic | 1.211 | 95% Bootstrap-t UCL | 3.014 |
| Anderson-Darling 5% Critical Value | 0.754 | 95% Hall's Bootstrap UCL | 4.405 |
| Kolmogorov-Smirnov Test Statistic | 0.19 | 95% Percentile Bootstrap UCL | 2.399 |
| Kolmogorov-Smirnov 5% Critical Value | 0.164 | 95% BCA Bootstrap UCL | 2.64 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 3.181 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 3.762 |

| | | | |
|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 4.903 |
| 95% Approximate Gamma UCL | 2.265 | | |
| 95% Adjusted Gamma UCL | 2.293 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% H-UCL | 2.221 |

**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**

**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**

**It is therefore recommended to avoid the use of H-statistic based 95% UCLs.**

**Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

COBALT

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 21 | Number of Distinct Observations | 17 |
| Number of Missing Values | 77 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 2.2 | Minimum of Log Data | 0.788 |
| Maximum | 27.2 | Maximum of Log Data | 3.303 |
| Mean | 5.933 | Mean of log Data | 1.536 |
| Median | 4 | SD of log Data | 0.615 |
| SD | 5.925 | | |
| Coefficient of Variation | 0.999 | | |
| Skewness | 2.93 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.546 | Shapiro Wilk Test Statistic | 0.781 |
| Shapiro Wilk Critical Value | 0.908 | Shapiro Wilk Critical Value | 0.908 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |

| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
|---|---|---|---|
| 95% Student's-t UCL | 8.163 | 95% H-UCL | 7.485 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 8.974 |
| 95% Adjusted-CLT UCL (Chen-1995) | 8.943 | 97.5% Chebyshev (MVUE) UCL | 10.46 |
| 95% Modified-t UCL (Johnson-1978) | 8.301 | 99% Chebyshev (MVUE) UCL | 13.36 |

| **Gamma Distribution Test** | | **Data Distribution** | |
|---|---|---|---|
| k star (bias corrected) | 1.911 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 3.104 | | |
| MLE of Mean | 5.933 | | |
| MLE of Standard Deviation | 4.292 | | |
| nu star | 80.27 | | |
| Approximate Chi Square Value (.05) | 60.63 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0383 | 95% CLT UCL | 8.06 |

| | | | |
|---|---|---|---|
| Adjusted Chi Square Value | 59.32 | 95% Jackknife UCL | 8.163 |
| | | 95% Standard Bootstrap UCL | 8.027 |
| Anderson-Darling Test Statistic | 2.694 | 95% Bootstrap-t UCL | 12.25 |
| Anderson-Darling 5% Critical Value | 0.753 | 95% Hall's Bootstrap UCL | 15.19 |
| Kolmogorov-Smirnov Test Statistic | 0.338 | 95% Percentile Bootstrap UCL | 8.162 |
| Kolmogorov-Smirnov 5% Critical Value | 0.192 | 95% BCA Bootstrap UCL | 8.914 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 11.57 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 14.01 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 18.8 |
| 95% Approximate Gamma UCL | 7.856 | | |
| 95% Adjusted Gamma UCL | 8.029 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Chebyshev (Mean, Sd) UCL | 11.57 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**
**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

**IRON**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 21 | Number of Distinct Observations | 18 |
| Number of Missing Values | 77 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 5610 | Minimum of Log Data | 8.632 |
| Maximum | 29900 | Maximum of Log Data | 10.31 |
| Mean | 15185 | Mean of log Data | 9.569 |
| Median | 13800 | SD of log Data | 0.359 |
| SD | 5416 | | |
| Coefficient of Variation | 0.357 | | |
| Skewness | 1.015 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.933 | Shapiro Wilk Test Statistic | 0.965 |
| Shapiro Wilk Critical Value | 0.908 | Shapiro Wilk Critical Value | 0.908 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 17224 | 95% H-UCL | 17740 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 20513 |
| 95% Adjusted-CLT UCL (Chen-1995) | 17409 | 97.5% Chebyshev (MVUE) UCL | 22806 |
| 95% Modified-t UCL (Johnson-1978) | 17268 | 99% Chebyshev (MVUE) UCL | 27312 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 7.377 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 2058 | | |
| MLE of Mean | 15185 | | |
| MLE of Standard Deviation | 5591 | | |

| | | | |
|---|---|---|---|
| nu star | 309.8 | | |
| Approximate Chi Square Value (.05) | 270.1 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0383 | 95% CLT UCL | 17130 |
| Adjusted Chi Square Value | 267.2 | 95% Jackknife UCL | 17224 |
| | | 95% Standard Bootstrap UCL | 17124 |
| Anderson-Darling Test Statistic | 0.325 | 95% Bootstrap-t UCL | 17621 |
| Anderson-Darling 5% Critical Value | 0.743 | 95% Hall's Bootstrap UCL | 17867 |
| Kolmogorov-Smirnov Test Statistic | 0.135 | 95% Percentile Bootstrap UCL | 17200 |
| Kolmogorov-Smirnov 5% Critical Value | 0.19 | 95% BCA Bootstrap UCL | 17415 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 20338 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 22567 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 26946 |
| 95% Approximate Gamma UCL | 17422 | | |
| 95% Adjusted Gamma UCL | 17608 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 17224 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**
**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

**MANGANESE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 21 | Number of Distinct Observations | 21 |
| Number of Missing Values | 77 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 11.2 | Minimum of Log Data | 2.416 |
| Maximum | 787.5 | Maximum of Log Data | 6.669 |
| Mean | 117.8 | Mean of log Data | 4.365 |
| Median | 74.9 | SD of log Data | 0.839 |
| SD | 161.3 | | |
| Coefficient of Variation | 1.369 | | |
| Skewness | 3.919 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.493 | Shapiro Wilk Test Statistic | 0.94 |
| Shapiro Wilk Critical Value | 0.908 | Shapiro Wilk Critical Value | 0.908 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 178.5 | 95% H-UCL | 174.1 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 205.1 |
| 95% Adjusted-CLT UCL (Chen-1995) | 207.9 | 97.5% Chebyshev (MVUE) UCL | 246.5 |
| 95% Modified-t UCL (Johnson-1978) | 183.5 | 99% Chebyshev (MVUE) UCL | 327.8 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 1.216 | **Data appear Lognormal at 5% Significance Level** | |

| | | | |
|---|---|---|---|
| Theta Star | 96.9 | | |
| MLE of Mean | 117.8 | | |
| MLE of Standard Deviation | 106.8 | | |
| nu star | 51.07 | | |
| Approximate Chi Square Value (.05) | 35.66 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0383 | 95% CLT UCL | 175.7 |
| Adjusted Chi Square Value | 34.67 | 95% Jackknife UCL | 178.5 |
| | | 95% Standard Bootstrap UCL | 174.8 |
| Anderson-Darling Test Statistic | 1.152 | 95% Bootstrap-t UCL | 310.2 |
| Anderson-Darling 5% Critical Value | 0.761 | 95% Hall's Bootstrap UCL | 413.5 |
| Kolmogorov-Smirnov Test Statistic | 0.195 | 95% Percentile Bootstrap UCL | 183.1 |
| Kolmogorov-Smirnov 5% Critical Value | 0.193 | 95% BCA Bootstrap UCL | 225.8 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 271.2 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 337.6 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 468 |
| 95% Approximate Gamma UCL | 168.7 | | |
| 95% Adjusted Gamma UCL | 173.6 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% H-UCL | 174.1 |

**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**

**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**

**It is therefore recommended to avoid the use of H-statistic based 95% UCLs.**

**Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

**NICKEL**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 29 | Number of Distinct Observations | 28 |
| Number of Missing Values | 191 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 3.2 | Minimum of Log Data | 1.163 |
| Maximum | 20 | Maximum of Log Data | 2.996 |
| Mean | 9.488 | Mean of log Data | 2.139 |
| Median | 8.7 | SD of log Data | 0.487 |
| SD | 4.522 | | |
| Coefficient of Variation | 0.477 | | |
| Skewness | 0.738 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.936 | Shapiro Wilk Test Statistic | 0.98 |
| Shapiro Wilk Critical Value | 0.926 | Shapiro Wilk Critical Value | 0.926 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |

| Assuming Normal Distribution | | Assuming Lognormal Distribution | |
|---|---|---|---|
| 95% Student's-t UCL | 10.92 | 95% H-UCL | 11.43 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 13.43 |
| 95% Adjusted-CLT UCL (Chen-1995) | 10.99 | 97.5% Chebyshev (MVUE) UCL | 15.12 |
| 95% Modified-t UCL (Johnson-1978) | 10.94 | 99% Chebyshev (MVUE) UCL | 18.44 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 4.201 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 2.258 | | |
| MLE of Mean | 9.488 | | |
| MLE of Standard Deviation | 4.629 | | |
| nu star | 243.7 | | |
| Approximate Chi Square Value (.05) | 208.5 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0407 | 95% CLT UCL | 10.87 |
| Adjusted Chi Square Value | 206.6 | 95% Jackknife UCL | 10.92 |
| | | 95% Standard Bootstrap UCL | 10.85 |
| Anderson-Darling Test Statistic | 0.185 | 95% Bootstrap-t UCL | 11.05 |
| Anderson-Darling 5% Critical Value | 0.748 | 95% Hall's Bootstrap UCL | 11 |
| Kolmogorov-Smirnov Test Statistic | 0.0778 | 95% Percentile Bootstrap UCL | 10.96 |
| Kolmogorov-Smirnov 5% Critical Value | 0.163 | 95% BCA Bootstrap UCL | 10.89 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 13.15 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 14.73 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 17.84 |
| 95% Approximate Gamma UCL | 11.09 | | |
| 95% Adjusted Gamma UCL | 11.19 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 10.92 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

VANADIUM

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 21 | Number of Distinct Observations | 21 |
| Number of Missing Values | 77 | | |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum | 8.5 | Minimum of Log Data | 2.14 |
| Maximum | 60.7 | Maximum of Log Data | 4.106 |
| Mean | 19.27 | Mean of log Data | 2.845 |
| Median | 15.9 | SD of log Data | 0.444 |
| SD | 11.78 | | |
| Coefficient of Variation | 0.611 | | |
| Skewness | 2.712 | | |

**Relevant UCL Statistics**

| Normal Distribution Test | | Lognormal Distribution Test | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.663 | Shapiro Wilk Test Statistic | 0.89 |

PROUCL OUTPUT - BLOCK E SURFACE SOIL

| | | | |
|---|---|---|---|
| Shapiro Wilk Critical Value | 0.908 | Shapiro Wilk Critical Value | 0.908 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 23.7 | 95% H-UCL | 23.03 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 27.12 |
| 95% Adjusted-CLT UCL (Chen-1995) | 25.12 | 97.5% Chebyshev (MVUE) UCL | 30.68 |
| 95% Modified-t UCL (Johnson-1978) | 23.96 | 99% Chebyshev (MVUE) UCL | 37.67 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 3.957 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 4.87 | | |
| MLE of Mean | 19.27 | | |
| MLE of Standard Deviation | 9.688 | | |
| nu star | 166.2 | | |
| Approximate Chi Square Value (.05) | 137.4 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0383 | 95% CLT UCL | 23.5 |
| Adjusted Chi Square Value | 135.4 | 95% Jackknife UCL | 23.7 |
| | | 95% Standard Bootstrap UCL | 23.37 |
| Anderson-Darling Test Statistic | 1.253 | 95% Bootstrap-t UCL | 29.62 |
| Anderson-Darling 5% Critical Value | 0.746 | 95% Hall's Bootstrap UCL | 46.76 |
| Kolmogorov-Smirnov Test Statistic | 0.227 | 95% Percentile Bootstrap UCL | 23.89 |
| Kolmogorov-Smirnov 5% Critical Value | 0.19 | 95% BCA Bootstrap UCL | 25.3 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 30.47 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 35.32 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 44.84 |
| 95% Approximate Gamma UCL | 23.31 | | |
| 95% Adjusted Gamma UCL | 23.66 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 23.7 |
| | | or 95% Modified-t UCL | 23.96 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

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| | General UCL Statistics for Full Data Sets |
|---|---|
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**5% OF TOTAL CHROMIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 32 | Number of Distinct Observations | 26 |
| Number of Missing Values | 1 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.405 | Minimum of Log Data | -0.904 |
| Maximum | 9.25 | Maximum of Log Data | 2.225 |
| Mean | 1.348 | Mean of log Data | -0.0257 |
| Median | 0.805 | SD of log Data | 0.679 |
| SD | 1.72 | | |
| Coefficient of Variation | 1.275 | | |
| Skewness | 3.795 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.492 | Shapiro Wilk Test Statistic | 0.849 |
| Shapiro Wilk Critical Value | 0.93 | Shapiro Wilk Critical Value | 0.93 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 1.864 | 95% H-UCL | 1.583 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 1.904 |
| 95% Adjusted-CLT UCL (Chen-1995) | 2.066 | 97.5% Chebyshev (MVUE) UCL | 2.201 |
| 95% Modified-t UCL (Johnson-1978) | 1.898 | 99% Chebyshev (MVUE) UCL | 2.785 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 1.55 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 0.87 | | |
| MLE of Mean | 1.348 | | |
| MLE of Standard Deviation | 1.083 | | |
| nu star | 99.22 | | |
| Approximate Chi Square Value (.05) | 77.24 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0416 | 95% CLT UCL | 1.849 |
| Adjusted Chi Square Value | 76.2 | 95% Jackknife UCL | 1.864 |
| | | 95% Standard Bootstrap UCL | 1.835 |
| Anderson-Darling Test Statistic | 2.96 | 95% Bootstrap-t UCL | 2.834 |
| Anderson-Darling 5% Critical Value | 0.762 | 95% Hall's Bootstrap UCL | 3.963 |
| Kolmogorov-Smirnov Test Statistic | 0.242 | 95% Percentile Bootstrap UCL | 1.907 |
| Kolmogorov-Smirnov 5% Critical Value | 0.158 | 95% BCA Bootstrap UCL | 2.124 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 2.674 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 3.247 |

PROUCL OUTPUT - BLOCK F SURFACE SOIL

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Assuming Gamma Distribution** | | | | | | 99% Chebyshev(Mean, Sd) UCL | 4.374 |
| 95% Approximate Gamma UCL | 1.732 | | | | | | |
| 95% Adjusted Gamma UCL | 1.756 | | | | | | |
| | | | | | | | |
| **Potential UCL to Use** | | | | | | Use 95% Chebyshev (Mean, Sd) UCL | 2.674 |
| | | | | | | | |
| **Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.** | | | | | | | |
| **These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)** | | | | | | | |
| **and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.** | | | | | | | |
| | | | | | | | |

PROUCL OUTPUT - BLOCK F SURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**BENZO(A)PYRENE EQUIVALENTS**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 107 | Number of Detected Data | 85 |
| Number of Distinct Detected Data | 84 | Number of Non-Detect Data | 22 |
| Number of Missing Values | 30 | Percent Non-Detects | 20.56% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 1.737 | Minimum Detected | 0.552 |
| Maximum Detected | 50001 | Maximum Detected | 10.82 |
| Mean of Detected | 2499 | Mean of Detected | 5.591 |
| SD of Detected | 7587 | SD of Detected | 2.198 |
| Minimum Non-Detect | 1.4 | Minimum Non-Detect | 0.336 |
| Maximum Non-Detect | 430 | Maximum Non-Detect | 6.064 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 76 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 31 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 71.03% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.371 | Lilliefors Test Statistic | 0.0555 |
| 5% Lilliefors Critical Value | 0.0961 | 5% Lilliefors Critical Value | 0.0961 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 1991 | Mean | 4.59 |
| SD | 6828 | SD | 2.928 |
| 95% DL/2 (t) UCL | 3086 | 95% H-Stat (DL/2) UCL | 25709 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 4.678 |
| | | SD in Log Scale | 2.721 |
| | | Mean in Original Scale | 1987 |
| | | SD in Original Scale | 6829 |
| | | 95% t UCL | 3082 |
| | | 95% Percentile Bootstrap UCL | 3224 |
| | | 95% BCA Bootstrap UCL | 3580 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.305 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 8203 | | |

PROUCL OUTPUT - BLOCK F SURFACE SOIL

| | | | |
|---|---|---|---|
| nu star | 51.78 | | |
| | | | |
| A-D Test Statistic | 4.732 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.865 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.865 | Mean | 1988 |
| 5% K-S Critical Value | 0.105 | SD | 6797 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 661 |
| | | 95% KM (t) UCL | 3085 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 3075 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 3083 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 4108 |
| Maximum | 50001 | 95% KM (BCA) UCL | 3323 |
| Mean | 1985 | 95% KM (Percentile Bootstrap) UCL | 3125 |
| Median | 130 | 95% KM (Chebyshev) UCL | 4869 |
| SD | 6829 | 97.5% KM (Chebyshev) UCL | 6116 |
| k star | 0.0964 | 99% KM (Chebyshev) UCL | 8565 |
| Theta star | 20586 | | |
| Nu star | 20.64 | **Potential UCLs to Use** | |
| AppChi2 | 11.32 | 97.5% KM (Chebyshev) UCL | 6116 |
| 95% Gamma Approximate UCL | 3618 | | |
| 95% Adjusted Gamma UCL | 3649 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK F SURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**ANTIMONY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 25 | Number of Detected Data | 19 |
| Number of Distinct Detected Data | 9 | Number of Non-Detect Data | 6 |
| Number of Missing Values | 106 | Percent Non-Detects | 24.00% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.4 | Minimum Detected | -0.916 |
| Maximum Detected | 4 | Maximum Detected | 1.386 |
| Mean of Detected | 1.111 | Mean of Detected | -0.0555 |
| SD of Detected | 0.816 | SD of Detected | 0.534 |
| Minimum Non-Detect | 0.3 | Minimum Non-Detect | -1.204 |
| Maximum Non-Detect | 3 | Maximum Non-Detect | 1.099 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 24 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 1 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 96.00% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.647 | Shapiro Wilk Test Statistic | 0.886 |
| 5% Shapiro Wilk Critical Value | 0.901 | 5% Shapiro Wilk Critical Value | 0.901 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 1.12 | Mean | -0.0586 |
| SD | 0.743 | SD | 0.618 |
| 95% DL/2 (t) UCL | 1.374 | 95% H-Stat (DL/2) UCL | 1.482 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -0.124 |
| | | SD in Log Scale | 0.522 |
| | | Mean in Original Scale | 1.026 |
| | | SD in Original Scale | 0.731 |
| | | 95% t UCL | 1.276 |
| | | 95% Percentile Bootstrap UCL | 1.283 |
| | | 95% BCA Bootstrap UCL | 1.389 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 2.794 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 0.398 | | |

| | | | |
|---|---|---|---|
| nu star | 106.2 | | |
| | | | |
| A-D Test Statistic | 1.386 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.747 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.747 | Mean | 1.044 |
| 5% K-S Critical Value | 0.2 | SD | 0.734 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.157 |
| | | 95% KM (t) UCL | 1.313 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 1.303 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 1.309 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 1.492 |
| Maximum | 4 | 95% KM (BCA) UCL | 1.355 |
| Mean | 1.085 | 95% KM (Percentile Bootstrap) UCL | 1.317 |
| Median | 1 | 95% KM (Chebyshev) UCL | 1.729 |
| SD | 0.743 | 97.5% KM (Chebyshev) UCL | 2.025 |
| k star | 0.492 | 99% KM (Chebyshev) UCL | 2.607 |
| Theta star | 2.206 | | |
| Nu star | 24.59 | **Potential UCLs to Use** | |
| AppChi2 | 14.3 | 95% KM (BCA) UCL | 1.355 |
| 95% Gamma Approximate UCL | 1.865 | | |
| 95% Adjusted Gamma UCL | 1.938 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**ARSENIC**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 32 | Number of Detected Data | 22 |
| Number of Distinct Detected Data | 15 | Number of Non-Detect Data | 10 |
| Number of Missing Values | 105 | Percent Non-Detects | 31.25% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.6 | Minimum Detected | -0.511 |
| Maximum Detected | 6 | Maximum Detected | 1.792 |
| Mean of Detected | 3.105 | Mean of Detected | 1.011 |
| SD of Detected | 1.435 | SD of Detected | 0.543 |
| Minimum Non-Detect | 1 | Minimum Non-Detect | 0 |
| Maximum Non-Detect | 3 | Maximum Non-Detect | 1.099 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 20 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 12 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 62.50% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.956 | Shapiro Wilk Test Statistic | 0.933 |
| 5% Shapiro Wilk Critical Value | 0.911 | 5% Shapiro Wilk Critical Value | 0.911 |

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| Data appear Normal at 5% Significance Level | | Data appear Lognormal at 5% Significance Level | |
|---|---|---|---|
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 2.556 | Mean | 0.775 |
| SD | 1.453 | SD | 0.603 |
| 95% DL/2 (t) UCL | 2.992 | 95% H-Stat (DL/2) UCL | 3.238 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 2.431 | Mean in Log Scale | 0.814 |
| SD | 1.706 | SD in Log Scale | 0.57 |
| 95% MLE (t) UCL | 2.943 | Mean in Original Scale | 2.618 |
| 95% MLE (Tiku) UCL | 3.188 | SD in Original Scale | 1.42 |
| | | 95% t UCL | 3.043 |
| | | 95% Percentile Bootstrap UCL | 3.032 |
| | | 95% BCA Bootstrap UCL | 3.054 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 3.714 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 0.836 | | |
| nu star | 163.4 | | |
| | | | |
| A-D Test Statistic | 0.303 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.747 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.747 | Mean | 2.616 |
| 5% K-S Critical Value | 0.186 | SD | 1.428 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.272 |
| | | 95% KM (t) UCL | 3.076 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 3.063 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 3.066 |
| Minimum | 0.6 | 95% KM (bootstrap t) UCL | 3.086 |
| Maximum | 6 | 95% KM (BCA) UCL | 3.115 |
| Mean | 2.998 | 95% KM (Percentile Bootstrap) UCL | 3.081 |
| Median | 2.99 | 95% KM (Chebyshev) UCL | 3.8 |
| SD | 1.295 | 97.5% KM (Chebyshev) UCL | 4.313 |
| k star | 4.534 | 99% KM (Chebyshev) UCL | 5.32 |
| Theta star | 0.661 | | |
| Nu star | 290.2 | **Potential UCLs to Use** | |
| AppChi2 | 251.7 | 95% KM (t) UCL | 3.076 |
| 95% Gamma Approximate UCL | 3.456 | 95% KM (Percentile Bootstrap) UCL | 3.081 |
| 95% Adjusted Gamma UCL | 3.483 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**CADMIUM**

**General Statistics**

PROUCL OUTPUT - BLOCK F SURFACE SOIL

| | | | |
|---|---|---|---|
| Number of Valid Data | 32 | Number of Detected Data | 14 |
| Number of Distinct Detected Data | 10 | Number of Non-Detect Data | 18 |
| Number of Missing Values | 105 | Percent Non-Detects | 56.25% |
| | | | |
| **Raw Statistics** | | **Log-transformed Statistics** | |
| Minimum Detected | 0.3 | Minimum Detected | -1.204 |
| Maximum Detected | 4.5 | Maximum Detected | 1.504 |
| Mean of Detected | 1.386 | Mean of Detected | -0.105 |
| SD of Detected | 1.373 | SD of Detected | 0.948 |
| Minimum Non-Detect | 0.09 | Minimum Non-Detect | -2.408 |
| Maximum Non-Detect | 4 | Maximum Non-Detect | 1.386 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 31 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 1 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 96.88% |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.784 | Shapiro Wilk Test Statistic | 0.892 |
| 5% Shapiro Wilk Critical Value | 0.874 | 5% Shapiro Wilk Critical Value | 0.874 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 1.078 | Mean | -0.566 |
| SD | 1.069 | SD | 1.337 |
| 95% DL/2 (t) UCL | 1.398 | 95% H-Stat (DL/2) UCL | 2.76 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -0.972 |
| | | SD in Log Scale | 1.112 |
| | | Mean in Original Scale | 0.74 |
| | | SD in Original Scale | 1.067 |
| | | 95% t UCL | 1.06 |
| | | 95% Percentile Bootstrap UCL | 1.068 |
| | | 95% BCA Bootstrap UCL | 1.174 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 1.07 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 1.295 | | |
| nu star | 29.96 | | |
| | | | |
| A-D Test Statistic | 0.833 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.754 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.754 | Mean | 0.864 |
| 5% K-S Critical Value | 0.234 | SD | 1.037 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.201 |
| | | 95% KM (t) UCL | 1.205 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 1.195 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 1.2 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 1.361 |

| | | | |
|---|---|---|---|
| Maximum | 4.5 | 95% KM (BCA) UCL | 1.173 |
| Mean | 1.399 | 95% KM (Percentile Bootstrap) UCL | 1.211 |
| Median | 0.83 | 95% KM (Chebyshev) UCL | 1.741 |
| SD | 1.196 | 97.5% KM (Chebyshev) UCL | 2.12 |
| k star | 0.469 | 99% KM (Chebyshev) UCL | 2.865 |
| Theta star | 2.984 | | |
| Nu star | 30 | **Potential UCLs to Use** | |
| AppChi2 | 18.49 | 95% KM (t) UCL | 1.205 |
| 95% Gamma Approximate UCL | 2.269 | 95% KM (% Bootstrap) UCL | 1.211 |
| 95% Adjusted Gamma UCL | 2.33 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**LEAD**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 32 | Number of Detected Data | 25 |
| Number of Distinct Detected Data | 25 | Number of Non-Detect Data | 7 |
| Number of Missing Values | 105 | Percent Non-Detects | 21.88% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 3.2 | Minimum Detected | 1.163 |
| Maximum Detected | 447 | Maximum Detected | 6.103 |
| Mean of Detected | 74.61 | Mean of Detected | 3.511 |
| SD of Detected | 113.8 | SD of Detected | 1.331 |
| Minimum Non-Detect | 3 | Minimum Non-Detect | 1.099 |
| Maximum Non-Detect | 8 | Maximum Non-Detect | 2.079 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 12 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 20 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 37.50% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.583 | Shapiro Wilk Test Statistic | 0.957 |
| 5% Shapiro Wilk Critical Value | 0.918 | 5% Shapiro Wilk Critical Value | 0.918 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 58.93 | Mean | 2.969 |
| SD | 104.6 | SD | 1.573 |
| 95% DL/2 (t) UCL | 90.28 | 95% H-Stat (DL/2) UCL | 165.5 |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 19.61 | Mean in Log Scale | 2.967 |
| SD | 141.8 | SD in Log Scale | 1.593 |

| | | | |
|---|---|---|---|
| 95% MLE (t) UCL | 62.12 | Mean in Original Scale | 58.99 |
| 95% MLE (Tiku) UCL | 66.37 | SD in Original Scale | 104.5 |
| | | 95% t UCL | 90.33 |
| | | 95% Percentile Bootstrap UCL | 90.65 |
| | | 95% BCA Bootstrap UCL | 102.5 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.684 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 109 | | |
| nu star | 34.22 | | |
| | | | |
| A-D Test Statistic | 0.737 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.784 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.784 | Mean | 59.17 |
| 5% K-S Critical Value | 0.181 | SD | 102.8 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 18.55 |
| | | 95% KM (t) UCL | 90.61 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 89.67 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 90.36 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 142.9 |
| Maximum | 447 | 95% KM (BCA) UCL | 89.73 |
| Mean | 58.74 | 95% KM (Percentile Bootstrap) UCL | 91.42 |
| Median | 25 | 95% KM (Chebyshev) UCL | 140 |
| SD | 104.7 | 97.5% KM (Chebyshev) UCL | 175 |
| k star | 0.132 | 99% KM (Chebyshev) UCL | 243.7 |
| Theta star | 444.1 | | |
| Nu star | 8.465 | **Potential UCLs to Use** | |
| AppChi2 | 3.007 | 95% KM (Chebyshev) UCL | 140 |
| 95% Gamma Approximate UCL | 165.3 | | |
| 95% Adjusted Gamma UCL | 175.4 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**MERCURY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 47 | Number of Detected Data | 39 |
| Number of Distinct Detected Data | 32 | Number of Non-Detect Data | 8 |
| Number of Missing Values | 90 | Percent Non-Detects | 17.02% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.01 | Minimum Detected | -4.605 |
| Maximum Detected | 2.7 | Maximum Detected | 0.993 |
| Mean of Detected | 0.542 | Mean of Detected | -1.47 |
| SD of Detected | 0.673 | SD of Detected | 1.476 |
| Minimum Non-Detect | 0.02 | Minimum Non-Detect | -3.912 |
| Maximum Non-Detect | 0.16 | Maximum Non-Detect | -1.833 |

PROUCL OUTPUT - BLOCK F SURFACE SOIL

| | | | |
|---|---|---|---|
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 23 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 24 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 48.94% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.761 | Shapiro Wilk Test Statistic | 0.961 |
| 5% Shapiro Wilk Critical Value | 0.939 | 5% Shapiro Wilk Critical Value | 0.939 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.459 | Mean | -1.74 |
| SD | 0.64 | SD | 1.492 |
| 95% DL/2 (t) UCL | 0.616 | 95% H-Stat (DL/2) UCL | 1.013 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 0.116 | Mean in Log Scale | -1.779 |
| SD | 0.989 | SD in Log Scale | 1.537 |
| 95% MLE (t) UCL | 0.358 | Mean in Original Scale | 0.458 |
| 95% MLE (Tiku) UCL | 0.411 | SD in Original Scale | 0.64 |
| | | 95% t UCL | 0.615 |
| | | 95% Percentile Bootstrap UCL | 0.622 |
| | | 95% BCA Bootstrap UCL | 0.645 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.667 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 0.814 | | |
| nu star | 51.99 | | |
| | | | |
| A-D Test Statistic | 0.505 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.793 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.793 | Mean | 0.457 |
| 5% K-S Critical Value | 0.147 | SD | 0.634 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.0937 |
| | | 95% KM (t) UCL | 0.615 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.611 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.614 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 0.657 |
| Maximum | 2.7 | 95% KM (BCA) UCL | 0.618 |
| Mean | 0.463 | 95% KM (Percentile Bootstrap) UCL | 0.604 |
| Median | 0.21 | 95% KM (Chebyshev) UCL | 0.866 |
| SD | 0.638 | 97.5% KM (Chebyshev) UCL | 1.042 |
| k star | 0.277 | 99% KM (Chebyshev) UCL | 1.39 |
| Theta star | 1.67 | | |
| Nu star | 26.06 | **Potential UCLs to Use** | |
| AppChi2 | 15.42 | 95% KM (Chebyshev) UCL | 0.866 |
| 95% Gamma Approximate UCL | 0.782 | | |
| 95% Adjusted Gamma UCL | 0.795 | | |

**Note: DL/2 is not a recommended method.**

| | | | | | | |
|---|---|---|---|---|---|---|
| **Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.** | | | | | | |
| **These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).** | | | | | | |
| **For additional insight, the user may want to consult a statistician.** | | | | | | |

**MOLYBDENUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 20 | Number of Detected Data | 1 |
| Number of Distinct Detected Data | 1 | Number of Non-Detect Data | 19 |
| Number of Missing Values | 80 | Percent Non-Detects | 95.00% |

**Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!**

**It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable MOLYBDENUM was not processed!**

**NICKEL**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 32 | Number of Detected Data | 25 |
| Number of Distinct Detected Data | 18 | Number of Non-Detect Data | 7 |
| Number of Missing Values | 105 | Percent Non-Detects | 21.88% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 4.5 | Minimum Detected | 1.504 |
| Maximum Detected | 27 | Maximum Detected | 3.296 |
| Mean of Detected | 12.13 | Mean of Detected | 2.385 |
| SD of Detected | 5.807 | SD of Detected | 0.489 |
| Minimum Non-Detect | 5 | Minimum Non-Detect | 1.609 |
| Maximum Non-Detect | 9 | Maximum Non-Detect | 2.197 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 15 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 17 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 46.88% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.928 | Shapiro Wilk Test Statistic | 0.965 |
| 5% Shapiro Wilk Critical Value | 0.918 | 5% Shapiro Wilk Critical Value | 0.918 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 10.23 | Mean | 2.129 |
| SD | 6.291 | SD | 0.661 |
| 95% DL/2 (t) UCL | 12.11 | 95% H-Stat (DL/2) UCL | 13.36 |

| | | | |
|---|---|---|---|
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 9.367 | Mean in Log Scale | 2.22 |
| SD | 7.454 | SD in Log Scale | 0.54 |
| 95% MLE (t) UCL | 11.6 | Mean in Original Scale | 10.61 |
| 95% MLE (Tiku) UCL | 12.03 | SD in Original Scale | 5.899 |
| | | 95% t UCL | 12.38 |
| | | 95% Percentile Bootstrap UCL | 12.32 |
| | | 95% BCA Bootstrap UCL | 12.52 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 4.14 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 2.931 | | |
| nu star | 207 | | |
| | | | |
| A-D Test Statistic | 0.274 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.748 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.748 | Mean | 10.57 |
| 5% K-S Critical Value | 0.175 | SD | 5.843 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 1.057 |
| | | 95% KM (t) UCL | 12.36 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 12.31 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 12.36 |
| Minimum | 3.848 | 95% KM (bootstrap t) UCL | 12.72 |
| Maximum | 27 | 95% KM (BCA) UCL | 12.58 |
| Mean | 11.07 | 95% KM (Percentile Bootstrap) UCL | 12.38 |
| Median | 9.819 | 95% KM (Chebyshev) UCL | 15.18 |
| SD | 5.614 | 97.5% KM (Chebyshev) UCL | 17.17 |
| k star | 3.952 | 99% KM (Chebyshev) UCL | 21.08 |
| Theta star | 2.801 | | |
| Nu star | 252.9 | **Potential UCLs to Use** | |
| AppChi2 | 217.1 | 95% KM (t) UCL | 12.36 |
| 95% Gamma Approximate UCL | 12.89 | 95% KM (Percentile Bootstrap) UCL | 12.38 |
| 95% Adjusted Gamma UCL | 13 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

1,2,3-TRICHLOROBENZENE

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 13 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 13 |
| Number of Missing Values | 124 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

The data set for variable 1,2,3-TRICHLOROBENZENE was not processed!

1,2,4-TRICHLOROBENZENE

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 13 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 13 |
| Number of Missing Values | 124 | Percent Non-Detects | 100.00% |

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!

Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 1,2,4-TRICHLOROBENZENE was not processed!

1,4-DICHLOROBENZENE

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 13 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 13 |
| Number of Missing Values | 124 | Percent Non-Detects | 100.00% |

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!

Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 1,4-DICHLOROBENZENE was not processed!

AROCLOR-1254

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 59 | Number of Detected Data | 1 |
| Number of Distinct Detected Data | 1 | Number of Non-Detect Data | 58 |
| Number of Missing Values | 78 | Percent Non-Detects | 98.31% |

Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!

It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable AROCLOR-1254 was not processed!

AROCLOR-1260

PROUCL OUTPUT - BLOCK F SURFACE SOIL

| | | | |
|---|---|---|---|
| **General Statistics** | | | |
| Number of Valid Data | 59 | Number of Detected Data | 12 |
| Number of Distinct Detected Data | 12 | Number of Non-Detect Data | 47 |
| Number of Missing Values | 78 | Percent Non-Detects | 79.66% |
| | | | |
| **Raw Statistics** | | **Log-transformed Statistics** | |
| Minimum Detected | 22 | Minimum Detected | 3.091 |
| Maximum Detected | 1400 | Maximum Detected | 7.244 |
| Mean of Detected | 305.4 | Mean of Detected | 4.844 |
| SD of Detected | 439.6 | SD of Detected | 1.357 |
| Minimum Non-Detect | 18 | Minimum Non-Detect | 2.89 |
| Maximum Non-Detect | 410 | Maximum Non-Detect | 6.016 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 56 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 3 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 94.92% |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.677 | Shapiro Wilk Test Statistic | 0.913 |
| 5% Shapiro Wilk Critical Value | 0.859 | 5% Shapiro Wilk Critical Value | 0.859 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 95.86 | Mean | 3.534 |
| SD | 224.5 | SD | 1.218 |
| 95% DL/2 (t) UCL | 144.7 | 95% H-Stat (DL/2) UCL | 111.6 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 1.761 |
| | | SD in Log Scale | 1.989 |
| | | Mean in Original Scale | 66 |
| | | SD in Original Scale | 227.1 |
| | | 95% t UCL | 115.4 |
| | | 95% Percentile Bootstrap UCL | 120.4 |
| | | 95% BCA Bootstrap UCL | 142.6 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.573 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 532.8 | | |
| nu star | 13.76 | | |
| | | | |
| A-D Test Statistic | 0.911 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.77 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.77 | Mean | 82.13 |
| 5% K-S Critical Value | 0.256 | SD | 221.1 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 30.13 |
| | | 95% KM (t) UCL | 132.5 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 131.7 |

| | | | |
|---|---|---|---|
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 127 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 170 |
| Maximum | 1400 | 95% KM (BCA) UCL | 156.3 |
| Mean | 327.5 | 95% KM (Percentile Bootstrap) UCL | 139.4 |
| Median | 221.2 | 95% KM (Chebyshev) UCL | 213.4 |
| SD | 312.1 | 97.5% KM (Chebyshev) UCL | 270.3 |
| k star | 0.199 | 99% KM (Chebyshev) UCL | 381.9 |
| Theta star | 1646 | | |
| Nu star | 23.49 | **Potential UCLs to Use** | |
| AppChi2 | 13.46 | 95% KM (BCA) UCL | 156.3 |
| 95% Gamma Approximate UCL | 571.6 | | |
| 95% Adjusted Gamma UCL | 579.8 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

DIESEL RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 13 | Number of Detected Data | 5 |
| Number of Distinct Detected Data | 5 | Number of Non-Detect Data | 8 |
| Number of Missing Values | 124 | Percent Non-Detects | 61.54% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 13000 | Minimum Detected | 9.473 |
| Maximum Detected | 271000 | Maximum Detected | 12.51 |
| Mean of Detected | 111340 | Mean of Detected | 11.19 |
| SD of Detected | 102126 | SD of Detected | 1.151 |
| Minimum Non-Detect | 10000 | Minimum Non-Detect | 9.21 |
| Maximum Non-Detect | 17000 | Maximum Non-Detect | 9.741 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 9 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 4 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 69.23% |

**Warning: There are only 5 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.904 | Shapiro Wilk Test Statistic | 0.962 |
| 5% Shapiro Wilk Critical Value | 0.762 | 5% Shapiro Wilk Critical Value | 0.762 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |

PROUCL OUTPUT - BLOCK F SURFACE SOIL

| Assuming Normal Distribution | | Assuming Lognormal Distribution | |
|---|---|---|---|
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 46592 | Mean | 9.662 |
| SD | 79471 | SD | 1.426 |
| 95% DL/2 (t) UCL | 85876 | 95% H-Stat (DL/2) UCL | 193957 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 150522 | Mean in Log Scale | 8.935 |
| SD | 86067 | SD in Log Scale | 2.051 |
| 95% MLE (t) UCL | 193066 | Mean in Original Scale | 44240 |
| 95% MLE (Tiku) UCL | 225228 | SD in Original Scale | 80786 |
| | | 95% t UCL | 84174 |
| | | 95% Percentile Bootstrap UCL | 82406 |
| | | 95% BCA Bootstrap UCL | 97660 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.653 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 170578 | | |
| nu star | 6.527 | | |
| | | | |
| A-D Test Statistic | 0.206 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.688 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.688 | Mean | 50823 |
| 5% K-S Critical Value | 0.363 | SD | 74149 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 22993 |
| | | 95% KM (t) UCL | 91802 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 88643 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 89160 |
| Minimum | 13000 | 95% KM (bootstrap t) UCL | 126327 |
| Maximum | 271000 | 95% KM (BCA) UCL | 159308 |
| Mean | 108350 | 95% KM (Percentile Bootstrap) UCL | 120462 |
| Median | 108280 | 95% KM (Chebyshev) UCL | 151045 |
| SD | 59903 | 97.5% KM (Chebyshev) UCL | 194412 |
| k star | 2.423 | 99% KM (Chebyshev) UCL | 279596 |
| Theta star | 44719 | | |
| Nu star | 63 | **Potential UCLs to Use** | |
| AppChi2 | 45.74 | 95% KM (t) UCL | 91802 |
| 95% Gamma Approximate UCL | 149233 | 95% KM (Percentile Bootstrap) UCL | 120462 |
| 95% Adjusted Gamma UCL | 156377 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

GASOLINE RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 13 | Number of Detected Data | 1 |
| Number of Distinct Detected Data | 1 | Number of Non-Detect Data | 12 |

PROUCL OUTPUT - BLOCK F SURFACE SOIL

| | | | |
|---|---|---|---|
| Number of Missing Values | 124 | Percent Non-Detects | 92.31% |
| | | | |
| Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set! | | | |
| It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV). | | | |
| | | | |
| The data set for variable GASOLINE RANGE ORGANICS was not processed! | | | |
| | | | |
| | | | |

PROUCL OUTPUT - BLOCK F SURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Full Data Sets** |
| **User Selected Options** | |
| From File | Sheet1.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**COBALT**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 20 | Number of Distinct Observations | 19 |
| Number of Missing Values | 80 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 2.8 | Minimum of Log Data | 1.03 |
| Maximum | 11.7 | Maximum of Log Data | 2.46 |
| Mean | 6.14 | Mean of log Data | 1.76 |
| Median | 5.85 | SD of log Data | 0.345 |
| SD | 2.1 | | |
| Coefficient of Variation | 0.342 | | |
| Skewness | 0.842 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.947 | Shapiro Wilk Test Statistic | 0.977 |
| Shapiro Wilk Critical Value | 0.905 | Shapiro Wilk Critical Value | 0.905 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 6.952 | 95% H-UCL | 7.156 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 8.248 |
| 95% Adjusted-CLT UCL (Chen-1995) | 7.007 | 97.5% Chebyshev (MVUE) UCL | 9.158 |
| 95% Modified-t UCL (Johnson-1978) | 6.967 | 99% Chebyshev (MVUE) UCL | 10.94 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 7.882 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 0.779 | | |
| MLE of Mean | 6.14 | | |
| MLE of Standard Deviation | 2.187 | | |
| nu star | 315.3 | | |
| Approximate Chi Square Value (.05) | 275.1 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.038 | 95% CLT UCL | 6.912 |
| Adjusted Chi Square Value | 272.2 | 95% Jackknife UCL | 6.952 |
| | | 95% Standard Bootstrap UCL | 6.882 |
| Anderson-Darling Test Statistic | 0.258 | 95% Bootstrap-t UCL | 7.042 |
| Anderson-Darling 5% Critical Value | 0.742 | 95% Hall's Bootstrap UCL | 7.149 |
| Kolmogorov-Smirnov Test Statistic | 0.0932 | 95% Percentile Bootstrap UCL | 6.89 |
| Kolmogorov-Smirnov 5% Critical Value | 0.194 | 95% BCA Bootstrap UCL | 6.975 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 8.187 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 9.072 |

| | | | |
|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 10.81 |
| 95% Approximate Gamma UCL | 7.036 | | |
| 95% Adjusted Gamma UCL | 7.112 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 6.952 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

VANADIUM

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 20 | Number of Distinct Observations | 19 |
| Number of Missing Values | 80 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 20.3 | Minimum of Log Data | 3.011 |
| Maximum | 49 | Maximum of Log Data | 3.892 |
| Mean | 31.8 | Mean of log Data | 3.428 |
| Median | 30.45 | SD of log Data | 0.257 |
| SD | 8.293 | | |
| Coefficient of Variation | 0.261 | | |
| Skewness | 0.58 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.948 | Shapiro Wilk Test Statistic | 0.97 |
| Shapiro Wilk Critical Value | 0.905 | Shapiro Wilk Critical Value | 0.905 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 35.01 | 95% H-UCL | 35.47 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 39.85 |
| 95% Adjusted-CLT UCL (Chen-1995) | 35.11 | 97.5% Chebyshev (MVUE) UCL | 43.34 |
| 95% Modified-t UCL (Johnson-1978) | 35.05 | 99% Chebyshev (MVUE) UCL | 50.19 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 13.62 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 2.334 | | |
| MLE of Mean | 31.8 | | |
| MLE of Standard Deviation | 8.616 | | |
| nu star | 544.9 | | |
| Approximate Chi Square Value (.05) | 491.8 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.038 | 95% CLT UCL | 34.85 |
| Adjusted Chi Square Value | 487.8 | 95% Jackknife UCL | 35.01 |
| | | 95% Standard Bootstrap UCL | 34.75 |
| Anderson-Darling Test Statistic | 0.23 | 95% Bootstrap-t UCL | 35.54 |
| Anderson-Darling 5% Critical Value | 0.741 | 95% Hall's Bootstrap UCL | 35.18 |
| Kolmogorov-Smirnov Test Statistic | 0.107 | 95% Percentile Bootstrap UCL | 34.74 |

PROUCL OUTPUT - BLOCK F SURFACE SOIL

| | | | |
|---|---|---|---|
| Kolmogorov-Smirnov 5% Critical Value | 0.194 | 95% BCA Bootstrap UCL | 35.1 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 39.88 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 43.38 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 50.25 |
| 95% Approximate Gamma UCL | 35.24 | | |
| 95% Adjusted Gamma UCL | 35.52 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 35.01 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

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| | |
|---|---|
| | **General UCL Statistics for Full Data Sets** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**5% OF TOTAL CHROMIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 14 | Number of Distinct Observations | 13 |
| Number of Missing Values | 1 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.56 | Minimum of Log Data | -0.58 |
| Maximum | 2.4 | Maximum of Log Data | 0.875 |
| Mean | 1.061 | Mean of log Data | -0.0329 |
| Median | 0.97 | SD of log Data | 0.43 |
| SD | 0.515 | | |
| Coefficient of Variation | 0.485 | | |
| Skewness | 1.531 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.851 | Shapiro Wilk Test Statistic | 0.946 |
| Shapiro Wilk Critical Value | 0.874 | Shapiro Wilk Critical Value | 0.874 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 1.304 | 95% H-UCL | 1.347 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 1.593 |
| 95% Adjusted-CLT UCL (Chen-1995) | 1.347 | 97.5% Chebyshev (MVUE) UCL | 1.826 |
| 95% Modified-t UCL (Johnson-1978) | 1.314 | 99% Chebyshev (MVUE) UCL | 2.284 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 4.451 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 0.238 | | |
| MLE of Mean | 1.061 | | |
| MLE of Standard Deviation | 0.503 | | |
| nu star | 124.6 | | |
| Approximate Chi Square Value (.05) | 99.86 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0312 | 95% CLT UCL | 1.287 |
| Adjusted Chi Square Value | 96.92 | 95% Jackknife UCL | 1.304 |
| | | 95% Standard Bootstrap UCL | 1.28 |
| Anderson-Darling Test Statistic | 0.407 | 95% Bootstrap-t UCL | 1.431 |
| Anderson-Darling 5% Critical Value | 0.738 | 95% Hall's Bootstrap UCL | 1.489 |
| Kolmogorov-Smirnov Test Statistic | 0.168 | 95% Percentile Bootstrap UCL | 1.292 |
| Kolmogorov-Smirnov 5% Critical Value | 0.229 | 95% BCA Bootstrap UCL | 1.333 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 1.66 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 1.92 |

PROUCL OUTPUT - BLOCK G SURFACE SOIL

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | | | | | 2.43 |
| 95% Approximate Gamma UCL | 1.324 | | | | | | |
| 95% Adjusted Gamma UCL | 1.364 | | | | | | |
| | | | | | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | | | | | 1.324 |
| | | | | | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK G SURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**BENZO(A)PYRENE EQUIVALENTS**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 236 | Number of Detected Data | 195 |
| Number of Distinct Detected Data | 191 | Number of Non-Detect Data | 41 |
| Number of Missing Values | 16 | Percent Non-Detects | 17.37% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 1.625 | Minimum Detected | 0.485 |
| Maximum Detected | 38666 | Maximum Detected | 10.56 |
| Mean of Detected | 1769 | Mean of Detected | 5.046 |
| SD of Detected | 6085 | SD of Detected | 2.082 |
| Minimum Non-Detect | 1.4 | Minimum Non-Detect | 0.336 |
| Maximum Non-Detect | 2100 | Maximum Non-Detect | 7.65 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 214 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 22 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 90.68% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Lilliefors Test Statistic | 0.386 | Lilliefors Test Statistic | 0.0696 |
| 5% Lilliefors Critical Value | 0.0634 | 5% Lilliefors Critical Value | 0.0634 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 1468 | Mean | 4.286 |
| SD | 5568 | SD | 2.625 |
| 95% DL/2 (t) UCL | 2067 | 95% H-Stat (DL/2) UCL | 4458 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 4.315 |
| | | SD in Log Scale | 2.529 |
| | | Mean in Original Scale | 1463 |
| | | SD in Original Scale | 5569 |
| | | 95% t UCL | 2061 |
| | | 95% Percentile Bootstrap UCL | 2095 |
| | | 95% BCA Bootstrap UCL | 2281 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.285 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 6212 | | |

PROUCL OUTPUT - BLOCK G SURFACE SOIL

| | | | |
|---|---|---|---|
| nu star | 111.1 | | |
| | | | |
| A-D Test Statistic | 17.02 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.875 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.875 | Mean | 1464 |
| 5% K-S Critical Value | 0.0707 | SD | 5557 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 362.6 |
| | | 95% KM (t) UCL | 2063 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 2060 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 2062 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 2304 |
| Maximum | 38666 | 95% KM (BCA) UCL | 2043 |
| Mean | 1463 | 95% KM (Percentile Bootstrap) UCL | 2091 |
| Median | 71.49 | 95% KM (Chebyshev) UCL | 3045 |
| SD | 5569 | 97.5% KM (Chebyshev) UCL | 3729 |
| k star | 0.105 | 99% KM (Chebyshev) UCL | 5072 |
| Theta star | 13880 | | |
| Nu star | 49.76 | **Potential UCLs to Use** | |
| AppChi2 | 34.56 | 97.5% KM (Chebyshev) UCL | 3729 |
| 95% Gamma Approximate UCL | 2106 | | |
| 95% Adjusted Gamma UCL | 2111 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | BLOCK G.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**ANTIMONY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 14 | Number of Detected Data | 7 |
| Number of Distinct Detected Data | 6 | Number of Non-Detect Data | 7 |
| Number of Missing Values | 237 | Percent Non-Detects | 50.00% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.6 | Minimum Detected | -0.511 |
| Maximum Detected | 3.9 | Maximum Detected | 1.361 |
| Mean of Detected | 1.443 | Mean of Detected | 0.154 |
| SD of Detected | 1.176 | SD of Detected | 0.654 |
| Minimum Non-Detect | 2.5 | Minimum Non-Detect | 0.916 |
| Maximum Non-Detect | 3.2 | Maximum Non-Detect | 1.163 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 13 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 1 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 92.86% |

**Warning: There are only 7 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.732 | Shapiro Wilk Test Statistic | 0.877 |
| 5% Shapiro Wilk Critical Value | 0.803 | 5% Shapiro Wilk Critical Value | 0.803 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 1.396 | Mean | 0.226 |
| SD | 0.805 | SD | 0.454 |
| 95% DL/2 (t) UCL | 1.777 | 95% H-Stat (DL/2) UCL | 1.788 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | 0.0714 |
| | | SD in Log Scale | 0.475 |
| | | Mean in Original Scale | 1.225 |
| | | SD in Original Scale | 0.843 |

| | | | |
|---|---|---|---|
| | | 95% t UCL | 1.624 |
| | | 95% Percentile Bootstrap UCL | 1.615 |
| | | 95% BCA Bootstrap UCL | 1.829 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 1.53 | **Data Follow Appr. Gamma Distribution at 5% Significance Level** | |
| Theta Star | 0.943 | | |
| nu star | 21.42 | | |
| | | | |
| A-D Test Statistic | 0.642 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.714 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.714 | Mean | 1.238 |
| 5% K-S Critical Value | 0.314 | SD | 0.86 |
| **Data follow Appr. Gamma Distribution at 5% Significance Level** | | SE of Mean | 0.284 |
| | | 95% KM (t) UCL | 1.74 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 1.705 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 1.744 |
| Minimum | 0.6 | 95% KM (bootstrap t) UCL | 3.109 |
| Maximum | 3.9 | 95% KM (BCA) UCL | 1.764 |
| Mean | 1.452 | 95% KM (Percentile Bootstrap) UCL | 1.72 |
| Median | 1.421 | 95% KM (Chebyshev) UCL | 2.474 |
| SD | 0.8 | 97.5% KM (Chebyshev) UCL | 3.009 |
| k star | 3.862 | 99% KM (Chebyshev) UCL | 4.06 |
| Theta star | 0.376 | | |
| Nu star | 108.1 | **Potential UCLs to Use** | |
| AppChi2 | 85.13 | 95% KM (t) UCL | 1.74 |
| 95% Gamma Approximate UCL | 1.844 | | |
| 95% Adjusted Gamma UCL | 1.904 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**ARSENIC**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 32 | Number of Detected Data | 27 |
| Number of Distinct Detected Data | 25 | Number of Non-Detect Data | 5 |
| Number of Missing Values | 219 | Percent Non-Detects | 15.63% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.8 | Minimum Detected | -0.223 |
| Maximum Detected | 37 | Maximum Detected | 3.611 |
| Mean of Detected | 3.403 | Mean of Detected | 0.71 |
| SD of Detected | 6.822 | SD of Detected | 0.792 |
| Minimum Non-Detect | 1 | Minimum Non-Detect | 0 |
| Maximum Non-Detect | 3 | Maximum Non-Detect | 1.099 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 25 |

PROUCL OUTPUT - BLOCK G SURFACE SOIL

| | | | |
|---|---|---|---|
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 7 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 78.13% |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.338 | Shapiro Wilk Test Statistic | 0.844 |
| 5% Shapiro Wilk Critical Value | 0.923 | 5% Shapiro Wilk Critical Value | 0.923 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 3.027 | Mean | 0.59 |
| SD | 6.311 | SD | 0.791 |
| 95% DL/2 (t) UCL | 4.919 | 95% H-Stat (DL/2) UCL | 3.374 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 0.621 |
| | | SD in Log Scale | 0.764 |
| | | Mean in Original Scale | 3.058 |
| | | SD in Original Scale | 6.301 |
| | | 95% t UCL | 4.947 |
| | | 95% Percentile Bootstrap UCL | 5.199 |
| | | 95% BCA Bootstrap UCL | 6.55 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 1.011 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 3.367 | | |
| nu star | 54.57 | | |
| | | | |
| A-D Test Statistic | 2.693 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.771 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.771 | Mean | 3.06 |
| 5% K-S Critical Value | 0.173 | SD | 6.202 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 1.118 |
| | | 95% KM (t) UCL | 4.956 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 4.899 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 4.95 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 11.31 |
| Maximum | 37 | 95% KM (BCA) UCL | 5.394 |
| Mean | 3.13 | 95% KM (Percentile Bootstrap) UCL | 5.163 |
| Median | 1.85 | 95% KM (Chebyshev) UCL | 7.932 |
| SD | 6.309 | 97.5% KM (Chebyshev) UCL | 10.04 |
| k star | 0.306 | 99% KM (Chebyshev) UCL | 14.18 |
| Theta star | 10.24 | | |
| Nu star | 19.56 | **Potential UCLs to Use** | |
| AppChi2 | 10.53 | 95% KM (Chebyshev) UCL | 7.932 |
| 95% Gamma Approximate UCL | 5.816 | | |
| 95% Adjusted Gamma UCL | 6.019 | | |
| **Note: DL/2 is not a recommended method.** | | | |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

PROUCL OUTPUT - BLOCK G SURFACE SOIL

These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).

For additional insight, the user may want to consult a statistician.

CADMIUM

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 14 | Number of Detected Data | 2 |
| Number of Distinct Detected Data | 2 | Number of Non-Detect Data | 12 |
| Number of Missing Values | 237 | Percent Non-Detects | 85.71% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 5.7 | Minimum Detected | 1.74 |
| Maximum Detected | 14 | Maximum Detected | 2.639 |
| Mean of Detected | 9.85 | Mean of Detected | 2.19 |
| SD of Detected | 5.869 | SD of Detected | 0.635 |
| Minimum Non-Detect | 0.1 | Minimum Non-Detect | -2.303 |
| Maximum Non-Detect | 3.2 | Maximum Non-Detect | 1.163 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 12 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 2 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 85.71% |

Warning: Data set has only 2 Distinct Detected Values.

This may not be adequate enough to compute meaningful and reliable test statistics and estimates.

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

Unless Data Quality Objectives (DQOs) have been met, it is suggested to collect additional observations.

The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.

Those methods will return a 'N/A' value on your output display!

It is necessary to have 4 or more Distinct Values for bootstrap methods.

However, results obtained using 4 to 9 distinct values may not be reliable.

It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.

UCL Statistics

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | N/A | Shapiro Wilk Test Statistic | N/A |
| 5% Shapiro Wilk Critical Value | N/A | 5% Shapiro Wilk Critical Value | N/A |
| Data not Normal at 5% Significance Level | | Data not Lognormal at 5% Significance Level | |
| | | | |
| Assuming Normal Distribution | | Assuming Lognormal Distribution | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 2.029 | Mean | -0.614 |
| SD | 3.743 | SD | 1.814 |
| 95% DL/2 (t) UCL | 3.8 | 95% H-Stat (DL/2) UCL | 24.38 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| MLE method failed to converge properly | | Mean in Log Scale | N/A |

| | | | |
|---|---|---|---|
| | | SD in Log Scale | N/A |
| | | Mean in Original Scale | N/A |
| | | SD in Original Scale | N/A |
| | | 95% t UCL | N/A |
| | | 95% Percentile Bootstrap UCL | N/A |
| | | 95% BCA Bootstrap UCL | N/A |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | N/A | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | N/A | | |
| nu star | N/A | | |
| | | | |
| A-D Test Statistic | N/A | **Nonparametric Statistics** | |
| 5% A-D Critical Value | N/A | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | N/A | Mean | 6.293 |
| 5% K-S Critical Value | N/A | SD | 2.138 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.808 |
| | | 95% KM (t) UCL | 7.724 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 7.622 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 11.9 |
| Minimum | N/A | 95% KM (bootstrap t) UCL | N/A |
| Maximum | N/A | 95% KM (BCA) UCL | 14 |
| Mean | N/A | 95% KM (Percentile Bootstrap) UCL | 14 |
| Median | N/A | 95% KM (Chebyshev) UCL | 9.815 |
| SD | N/A | 97.5% KM (Chebyshev) UCL | 11.34 |
| k star | N/A | 99% KM (Chebyshev) UCL | 14.33 |
| Theta star | N/A | | |
| Nu star | N/A | **Potential UCLs to Use** | |
| AppChi2 | N/A | 95% KM (t) UCL | 7.724 |
| 95% Gamma Approximate UCL | N/A | 95% KM (% Bootstrap) UCL | 14 |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**MERCURY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 14 | Number of Detected Data | 11 |
| Number of Distinct Detected Data | 7 | Number of Non-Detect Data | 3 |
| Number of Missing Values | 237 | Percent Non-Detects | 21.43% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.02 | Minimum Detected | -3.912 |
| Maximum Detected | 4.2 | Maximum Detected | 1.435 |
| Mean of Detected | 0.6 | Mean of Detected | -2.262 |
| SD of Detected | 1.261 | SD of Detected | 1.95 |
| Minimum Non-Detect | 0.1 | Minimum Non-Detect | -2.303 |

PROUCL OUTPUT - BLOCK G SURFACE SOIL

| | | | |
|---|---|---|---|
| Maximum Non-Detect | 0.11 | Maximum Non-Detect | -2.207 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 9 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 5 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 64.29% |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.54 | Shapiro Wilk Test Statistic | 0.825 |
| 5% Shapiro Wilk Critical Value | 0.85 | 5% Shapiro Wilk Critical Value | 0.85 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.483 | Mean | -2.406 |
| SD | 1.131 | SD | 1.734 |
| 95% DL/2 (t) UCL | 1.018 | 95% H-Stat (DL/2) UCL | 2.974 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -2.533 |
| | | SD in Log Scale | 1.808 |
| | | Mean in Original Scale | 0.479 |
| | | SD in Original Scale | 1.132 |
| | | 95% t UCL | 1.015 |
| | | 95% Percentile Bootstrap UCL | 1.022 |
| | | 95% BCA Bootstrap UCL | 1.343 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.336 | **Data Follow Appr. Gamma Distribution at 5% Significance Level** | |
| Theta Star | 1.784 | | |
| nu star | 7.398 | | |
| | | | |
| A-D Test Statistic | 1.086 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.805 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.805 | Mean | 0.476 |
| 5% K-S Critical Value | 0.273 | SD | 1.092 |
| **Data follow Appr. Gamma Distribution at 5% Significance Level** | | SE of Mean | 0.306 |
| | | 95% KM (t) UCL | 1.019 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.98 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 1.013 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 4.214 |
| Maximum | 4.2 | 95% KM (BCA) UCL | 1.045 |
| Mean | 0.496 | 95% KM (Percentile Bootstrap) UCL | 1.018 |
| Median | 0.03 | 95% KM (Chebyshev) UCL | 1.811 |
| SD | 1.128 | 97.5% KM (Chebyshev) UCL | 2.388 |
| k star | 0.208 | 99% KM (Chebyshev) UCL | 3.522 |
| Theta star | 2.389 | | |
| Nu star | 5.814 | **Potential UCLs to Use** | |
| AppChi2 | 1.545 | 95% KM (Chebyshev) UCL | 1.811 |
| 95% Gamma Approximate UCL | 1.866 | | |
| 95% Adjusted Gamma UCL | 2.264 | | |

Note: DL/2 is not a recommended method.

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).
For additional insight, the user may want to consult a statistician.

MOLYBDENUM

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 6 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 6 |
| Number of Missing Values | 150 | Percent Non-Detects | 100.00% |

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable MOLYBDENUM was not processed!

1,2,3-TRICHLOROBENZENE

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 14 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 14 |
| Number of Missing Values | 237 | Percent Non-Detects | 100.00% |

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 1,2,3-TRICHLOROBENZENE was not processed!

1,2,4-TRICHLOROBENZENE

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 14 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 14 |
| Number of Missing Values | 237 | Percent Non-Detects | 100.00% |

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!
Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!
The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 1,2,4-TRICHLOROBENZENE was not processed!

1,4-DICHLOROBENZENE

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 14 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 14 |
| Number of Missing Values | 237 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,4-DICHLOROBENZENE was not processed!**

AROCLOR-1254

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 1 |
| Number of Distinct Detected Data | 1 | Number of Non-Detect Data | 21 |
| Number of Missing Values | 229 | Percent Non-Detects | 95.45% |

**Warning: Only one distinct data value was detected! ProUCL (or any other software) should not be used on such a data set!**

**It is suggested to use alternative site specific values determined by the Project Team to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable AROCLOR-1254 was not processed!**

AROCLOR-1260

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 22 | Number of Detected Data | 9 |
| Number of Distinct Detected Data | 9 | Number of Non-Detect Data | 13 |
| Number of Missing Values | 229 | Percent Non-Detects | 59.09% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 8.2 | Minimum Detected | 2.104 |
| Maximum Detected | 1190 | Maximum Detected | 7.082 |
| Mean of Detected | 323.2 | Mean of Detected | 4.474 |
| SD of Detected | 419.2 | SD of Detected | 2.006 |
| Minimum Non-Detect | 36 | Minimum Non-Detect | 3.584 |
| Maximum Non-Detect | 330 | Maximum Non-Detect | 5.799 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 18 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 4 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 81.82% |

PROUCL OUTPUT - BLOCK G SURFACE SOIL

**Warning: There are only 9 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.796 | Shapiro Wilk Test Statistic | 0.867 |
| 5% Shapiro Wilk Critical Value | 0.829 | 5% Shapiro Wilk Critical Value | 0.829 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 178.2 | Mean | 4.122 |
| SD | 291.1 | SD | 1.508 |
| 95% DL/2 (t) UCL | 285 | 95% H-Stat (DL/2) UCL | 580.6 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 3.485 |
| | | SD in Log Scale | 1.558 |
| | | Mean in Original Scale | 143.4 |
| | | SD in Original Scale | 300.8 |
| | | 95% t UCL | 253.8 |
| | | 95% Percentile Bootstrap UCL | 248.9 |
| | | 95% BCA Bootstrap UCL | 286.9 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.4 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 808.5 | | |
| nu star | 7.197 | | |
| | | | |
| A-D Test Statistic | 0.532 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.773 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.773 | Mean | 141.7 |
| 5% K-S Critical Value | 0.294 | SD | 294.8 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 66.77 |
| | | 95% KM (t) UCL | 256.6 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 251.5 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 252.6 |
| Minimum | 8.2 | 95% KM (bootstrap t) UCL | 382 |
| Maximum | 1190 | 95% KM (BCA) UCL | 260 |
| Mean | 321.8 | 95% KM (Percentile Bootstrap) UCL | 259.6 |
| Median | 321 | 95% KM (Chebyshev) UCL | 432.7 |
| SD | 259.7 | 97.5% KM (Chebyshev) UCL | 558.7 |
| k star | 0.953 | 99% KM (Chebyshev) UCL | 806 |
| Theta star | 337.6 | | |
| Nu star | 41.94 | **Potential UCLs to Use** | |
| AppChi2 | 28.1 | 95% KM (t) UCL | 256.6 |
| 95% Gamma Approximate UCL | 480.4 | | |

| | | | |
|---|---|---|---|
| 95% Adjusted Gamma UCL | 495.3 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**DIESEL RANGE ORGANICS**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 15 | Number of Detected Data | 10 |
| Number of Distinct Detected Data | 9 | Number of Non-Detect Data | 5 |
| Number of Missing Values | 236 | Percent Non-Detects | 33.33% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 12000 | Minimum Detected | 9.393 |
| Maximum Detected | 163000 | Maximum Detected | 12 |
| Mean of Detected | 72200 | Mean of Detected | 10.79 |
| SD of Detected | 57588 | SD of Detected | 1.012 |
| Minimum Non-Detect | 11000 | Minimum Non-Detect | 9.306 |
| Maximum Non-Detect | 12000 | Maximum Non-Detect | 9.393 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 5 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 10 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 33.33% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.872 | Shapiro Wilk Test Statistic | 0.886 |
| 5% Shapiro Wilk Critical Value | 0.842 | 5% Shapiro Wilk Critical Value | 0.842 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 50100 | Mean | 10.09 |
| SD | 56379 | SD | 1.312 |
| 95% DL/2 (t) UCL | 75739 | 95% H-Stat (DL/2) UCL | 179362 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 35562 | Mean in Log Scale | 9.967 |
| SD | 72044 | SD in Log Scale | 1.486 |
| 95% MLE (t) UCL | 68326 | Mean in Original Scale | 49644 |
| 95% MLE (Tiku) UCL | 70786 | SD in Original Scale | 56776 |
| | | 95% t UCL | 75464 |
| | | 95% Percentile Bootstrap UCL | 73707 |
| | | 95% BCA Bootstrap UCL | 76939 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 1.057 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 68275 | | |

| | | | |
|---|---|---|---|
| nu star | 21.15 | | |
| | | | |
| A-D Test Statistic | 0.522 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.741 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.741 | Mean | 52133 |
| 5% K-S Critical Value | 0.272 | SD | 52869 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 14389 |
| | | 95% KM (t) UCL | 77477 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 75801 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 77021 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 84659 |
| Maximum | 163000 | 95% KM (BCA) UCL | 77427 |
| Mean | 56263 | 95% KM (Percentile Bootstrap) UCL | 76387 |
| Median | 32200 | 95% KM (Chebyshev) UCL | 114855 |
| SD | 52780 | 97.5% KM (Chebyshev) UCL | 141994 |
| k star | 0.243 | 99% KM (Chebyshev) UCL | 195304 |
| Theta star | 231268 | | |
| Nu star | 7.298 | **Potential UCLs to Use** | |
| AppChi2 | 2.336 | 95% KM (t) UCL | 77477 |
| 95% Gamma Approximate UCL | 175800 | 95% KM (Percentile Bootstrap) UCL | 76387 |
| 95% Adjusted Gamma UCL | 204774 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

GASOLINE RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 19 | Number of Detected Data | 7 |
| Number of Distinct Detected Data | 7 | Number of Non-Detect Data | 12 |
| Number of Missing Values | 232 | Percent Non-Detects | 63.16% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 31 | Minimum Detected | 3.434 |
| Maximum Detected | 810000 | Maximum Detected | 13.6 |
| Mean of Detected | 142206 | Mean of Detected | 7.388 |
| SD of Detected | 301017 | SD of Detected | 4.323 |
| Minimum Non-Detect | 110 | Minimum Non-Detect | 4.7 |
| Maximum Non-Detect | 12500 | Maximum Non-Detect | 9.433 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 16 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 3 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 84.21% |

**Warning: There are only 7 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

PROUCL OUTPUT - BLOCK G SURFACE SOIL

| | | | |
|---|---|---|---|
| **It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.** | | | |
| | | | |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.574 | Shapiro Wilk Test Statistic | 0.849 |
| 5% Shapiro Wilk Critical Value | 0.803 | 5% Shapiro Wilk Critical Value | 0.803 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 54121 | Mean | 6.728 |
| SD | 187046 | SD | 3.143 |
| 95% DL/2 (t) UCL | 128532 | 95% H-Stat (DL/2) UCL | 12812689 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 5.161 |
| | | SD in Log Scale | 3.194 |
| | | Mean in Original Scale | 52444 |
| | | SD in Original Scale | 187523 |
| | | 95% t UCL | 127045 |
| | | 95% Percentile Bootstrap UCL | 136914 |
| | | 95% BCA Bootstrap UCL | 181137 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.192 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 742012 | | |
| nu star | 2.683 | | |
| | | | |
| A-D Test Statistic | 0.604 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.833 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.833 | Mean | 52423 |
| 5% K-S Critical Value | 0.344 | SD | 182527 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 45230 |
| | | 95% KM (t) UCL | 130855 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 126820 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 127026 |
| Minimum | 31 | 95% KM (bootstrap t) UCL | 2833725 |
| Maximum | 810000 | 95% KM (BCA) UCL | 137681 |
| Mean | 143350 | 95% KM (Percentile Bootstrap) UCL | 136892 |
| Median | 141400 | 95% KM (Chebyshev) UCL | 249576 |
| SD | 174219 | 97.5% KM (Chebyshev) UCL | 334883 |
| k star | 0.371 | 99% KM (Chebyshev) UCL | 502454 |
| Theta star | 386732 | | |
| Nu star | 14.09 | **Potential UCLs to Use** | |
| AppChi2 | 6.63 | 95% KM (t) UCL | 130855 |
| 95% Gamma Approximate UCL | 304552 | | |
| 95% Adjusted Gamma UCL | 326385 | | |
| **Note: DL/2 is not a recommended method.** | | | |
| | | | |
| **Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.** | | | |

| |
|---|
| These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006). |
| For additional insight, the user may want to consult a statistician. |
| |

| | |
|---|---|
| | **General UCL Statistics for Full Data Sets** |
| **User Selected Options** | |
| From File | Sheet1.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**COBALT**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 6 | Number of Distinct Observations | 6 |
| Number of Missing Values | 150 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 3.2 | Minimum of Log Data | 1.163 |
| Maximum | 51.2 | Maximum of Log Data | 3.936 |
| Mean | 15.13 | Mean of log Data | 2.27 |
| Median | 7.4 | SD of log Data | 0.964 |
| SD | 18.17 | | |
| Coefficient of Variation | 1.201 | | |
| Skewness | 2.175 | | |

**Warning: A sample size of 'n' = 6 may not adequate enough to compute meaningful and reliable test statistics and estimates!**

**It is suggested to collect at least 8 to 10 observations using these statistical methods!**

**If possible compute and collect Data Quality Objectives (DQO) based sample size and analytical results.**

**Warning: There are only 6 Values in this data**

**Note: It should be noted that even though bootstrap methods may be performed on this data set,**

**the resulting calculations may not be reliable enough to draw conclusions**

**The literature suggests to use bootstrap methods on data sets having more than 10-15 observations.**

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.689 | Shapiro Wilk Test Statistic | 0.921 |
| Shapiro Wilk Critical Value | 0.788 | Shapiro Wilk Critical Value | 0.788 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 30.08 | 95% H-UCL | 86.11 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 37.62 |
| 95% Adjusted-CLT UCL (Chen-1995) | 34.37 | 97.5% Chebyshev (MVUE) UCL | 47.85 |
| 95% Modified-t UCL (Johnson-1978) | 31.18 | 99% Chebyshev (MVUE) UCL | 67.95 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 0.741 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 20.43 | | |

| | | | |
|---|---|---|---|
| MLE of Mean | 15.13 | | |
| MLE of Standard Deviation | 17.59 | | |
| nu star | 8.887 | | |
| Approximate Chi Square Value (.05) | 3.259 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0122 | 95% CLT UCL | 27.33 |
| Adjusted Chi Square Value | 2.157 | 95% Jackknife UCL | 30.08 |
| | | 95% Standard Bootstrap UCL | 26.17 |
| Anderson-Darling Test Statistic | 0.552 | 95% Bootstrap-t UCL | 107.6 |
| Anderson-Darling 5% Critical Value | 0.711 | 95% Hall's Bootstrap UCL | 136.5 |
| Kolmogorov-Smirnov Test Statistic | 0.315 | 95% Percentile Bootstrap UCL | 28.3 |
| Kolmogorov-Smirnov 5% Critical Value | 0.339 | 95% BCA Bootstrap UCL | 30.77 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 47.46 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 61.45 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 88.93 |
| 95% Approximate Gamma UCL | 41.27 | | |
| 95% Adjusted Gamma UCL | 62.35 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 41.27 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**
**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

LEAD

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 14 | Number of Distinct Observations | 13 |
| Number of Missing Values | 237 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 4 | Minimum of Log Data | 1.386 |
| Maximum | 340 | Maximum of Log Data | 5.829 |
| Mean | 68.25 | Mean of log Data | 3.26 |
| Median | 28 | SD of log Data | 1.505 |
| SD | 97.41 | | |
| Coefficient of Variation | 1.427 | | |
| Skewness | 2.077 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.709 | Shapiro Wilk Test Statistic | 0.917 |
| Shapiro Wilk Critical Value | 0.874 | Shapiro Wilk Critical Value | 0.874 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 114.4 | 95% H-UCL | 378.9 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 208.2 |
| 95% Adjusted-CLT UCL (Chen-1995) | 126.5 | 97.5% Chebyshev (MVUE) UCL | 268.1 |
| 95% Modified-t UCL (Johnson-1978) | 116.8 | 99% Chebyshev (MVUE) UCL | 385.6 |

| Gamma Distribution Test | | Data Distribution | |
|---|---|---|---|
| k star (bias corrected) | 0.547 | Data appear Gamma Distributed at 5% Significance Level | |
| Theta Star | 124.7 | | |
| MLE of Mean | 68.25 | | |
| MLE of Standard Deviation | 92.26 | | |
| nu star | 15.32 | | |
| Approximate Chi Square Value (.05) | 7.485 | Nonparametric Statistics | |
| Adjusted Level of Significance | 0.0312 | 95% CLT UCL | 111.1 |
| Adjusted Chi Square Value | 6.77 | 95% Jackknife UCL | 114.4 |
| | | 95% Standard Bootstrap UCL | 109.8 |
| Anderson-Darling Test Statistic | 0.608 | 95% Bootstrap-t UCL | 172.5 |
| Anderson-Darling 5% Critical Value | 0.781 | 95% Hall's Bootstrap UCL | 298.8 |
| Kolmogorov-Smirnov Test Statistic | 0.222 | 95% Percentile Bootstrap UCL | 112.1 |
| Kolmogorov-Smirnov 5% Critical Value | 0.239 | 95% BCA Bootstrap UCL | 128.9 |
| Data appear Gamma Distributed at 5% Significance Level | | 95% Chebyshev(Mean, Sd) UCL | 181.7 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 230.8 |
| Assuming Gamma Distribution | | 99% Chebyshev(Mean, Sd) UCL | 327.3 |
| 95% Approximate Gamma UCL | 139.7 | | |
| 95% Adjusted Gamma UCL | 154.5 | | |
| | | | |
| Potential UCL to Use | | Use 95% Approximate Gamma UCL | 139.7 |

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)
and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.

NICKEL

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Observations | 14 | Number of Distinct Observations | 12 |
| Number of Missing Values | 237 | | |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum | 5 | Minimum of Log Data | 1.609 |
| Maximum | 280 | Maximum of Log Data | 5.635 |
| Mean | 49.28 | Mean of log Data | 2.84 |
| Median | 12.5 | SD of log Data | 1.239 |
| SD | 95.75 | | |
| Coefficient of Variation | 1.943 | | |
| Skewness | 2.287 | | |

Relevant UCL Statistics

| Normal Distribution Test | | Lognormal Distribution Test | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.474 | Shapiro Wilk Test Statistic | 0.726 |
| Shapiro Wilk Critical Value | 0.874 | Shapiro Wilk Critical Value | 0.874 |
| Data not Normal at 5% Significance Level | | Data not Lognormal at 5% Significance Level | |
| | | | |
| Assuming Normal Distribution | | Assuming Lognormal Distribution | |
| 95% Student's-t UCL | 94.6 | 95% H-UCL | 111.1 |
| 95% UCLs (Adjusted for Skewness) | | 95% Chebyshev (MVUE) UCL | 88.15 |

| | | | |
|---|---|---|---|
| 95% Adjusted-CLT UCL (Chen-1995) | 108.1 | 97.5% Chebyshev (MVUE) UCL | 111.6 |
| 95% Modified-t UCL (Johnson-1978) | 97.2 | 99% Chebyshev (MVUE) UCL | 157.8 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 0.508 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 96.93 | | |
| MLE of Mean | 49.28 | | |
| MLE of Standard Deviation | 69.11 | | |
| nu star | 14.24 | | |
| Approximate Chi Square Value (.05) | 6.733 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0312 | 95% CLT UCL | 91.37 |
| Adjusted Chi Square Value | 6.06 | 95% Jackknife UCL | 94.6 |
| | | 95% Standard Bootstrap UCL | 90.58 |
| Anderson-Darling Test Statistic | 2.645 | 95% Bootstrap-t UCL | 882.9 |
| Anderson-Darling 5% Critical Value | 0.785 | 95% Hall's Bootstrap UCL | 452.6 |
| Kolmogorov-Smirnov Test Statistic | 0.403 | 95% Percentile Bootstrap UCL | 88.93 |
| Kolmogorov-Smirnov 5% Critical Value | 0.24 | 95% BCA Bootstrap UCL | 106.4 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 160.8 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 209.1 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 303.9 |
| 95% Approximate Gamma UCL | 104.2 | | |
| 95% Adjusted Gamma UCL | 115.8 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Chebyshev (Mean, Sd) UCL | 160.8 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

VANADIUM

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 6 | Number of Distinct Observations | 6 |
| Number of Missing Values | 150 | | |
| | | | |
| **Raw Statistics** | | **Log-transformed Statistics** | |
| Minimum | 20.2 | Minimum of Log Data | 3.006 |
| Maximum | 39.2 | Maximum of Log Data | 3.669 |
| Mean | 25.73 | Mean of log Data | 3.221 |
| Median | 23.95 | SD of log Data | 0.244 |
| SD | 7.043 | | |
| Coefficient of Variation | 0.274 | | |
| Skewness | 1.817 | | |

**Warning: A sample size of 'n' = 6 may not adequate enough to compute meaningful and reliable test statistics and estimates!**

**It is suggested to collect at least 8 to 10 observations using these statistical methods!**

**If possible compute and collect Data Quality Objectives (DQO) based sample size and analytical results.**

PROUCL OUTPUT - BLOCK G SURFACE SOIL

**Warning: There are only 6 Values in this data**

**Note: It should be noted that even though bootstrap methods may be performed on this data set, the resulting calculations may not be reliable enough to draw conclusions**

**The literature suggests to use bootstrap methods on data sets having more than 10-15 observations.**

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.792 | Shapiro Wilk Test Statistic | 0.851 |
| Shapiro Wilk Critical Value | 0.788 | Shapiro Wilk Critical Value | 0.788 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 31.53 | 95% H-UCL | 32.57 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 36.82 |
| 95% Adjusted-CLT UCL (Chen-1995) | 32.74 | 97.5% Chebyshev (MVUE) UCL | 41.63 |
| 95% Modified-t UCL (Johnson-1978) | 31.88 | 99% Chebyshev (MVUE) UCL | 51.1 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 9.553 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 2.694 | | |
| MLE of Mean | 25.73 | | |
| MLE of Standard Deviation | 8.326 | | |
| nu star | 114.6 | | |
| Approximate Chi Square Value (.05) | 90.92 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0122 | 95% CLT UCL | 30.46 |
| Adjusted Chi Square Value | 83.3 | 95% Jackknife UCL | 31.53 |
| | | 95% Standard Bootstrap UCL | 30.13 |
| Anderson-Darling Test Statistic | 0.539 | 95% Bootstrap-t UCL | 37.99 |
| Anderson-Darling 5% Critical Value | 0.697 | 95% Hall's Bootstrap UCL | 47.96 |
| Kolmogorov-Smirnov Test Statistic | 0.272 | 95% Percentile Bootstrap UCL | 30.7 |
| Kolmogorov-Smirnov 5% Critical Value | 0.332 | 95% BCA Bootstrap UCL | 32.03 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 38.27 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 43.69 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 54.34 |
| 95% Approximate Gamma UCL | 32.45 | | |
| 95% Adjusted Gamma UCL | 35.41 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 31.53 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK H SURFACE SOIL

| | General UCL Statistics for Full Data Sets |
|---|---|
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**5% OF TOTAL CHROMIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 11 | Number of Distinct Observations | 11 |
| Number of Missing Values | 1 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 0.39 | Minimum of Log Data | -0.942 |
| Maximum | 1.535 | Maximum of Log Data | 0.429 |
| Mean | 0.788 | Mean of log Data | -0.349 |
| Median | 0.585 | SD of log Data | 0.487 |
| SD | 0.402 | | |
| Coefficient of Variation | 0.51 | | |
| Skewness | 0.805 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.832 | Shapiro Wilk Test Statistic | 0.875 |
| Shapiro Wilk Critical Value | 0.85 | Shapiro Wilk Critical Value | 0.85 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 1.008 | 95% H-UCL | 1.107 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 1.296 |
| 95% Adjusted-CLT UCL (Chen-1995) | 1.019 | 97.5% Chebyshev (MVUE) UCL | 1.518 |
| 95% Modified-t UCL (Johnson-1978) | 1.013 | 99% Chebyshev (MVUE) UCL | 1.953 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 3.439 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 0.229 | | |
| MLE of Mean | 0.788 | | |
| MLE of Standard Deviation | 0.425 | | |
| nu star | 75.67 | | |
| Approximate Chi Square Value (.05) | 56.63 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0278 | 95% CLT UCL | 0.988 |
| Adjusted Chi Square Value | 53.95 | 95% Jackknife UCL | 1.008 |
| | | 95% Standard Bootstrap UCL | 0.976 |
| Anderson-Darling Test Statistic | 0.799 | 95% Bootstrap-t UCL | 1.055 |
| Anderson-Darling 5% Critical Value | 0.732 | 95% Hall's Bootstrap UCL | 0.961 |
| Kolmogorov-Smirnov Test Statistic | 0.287 | 95% Percentile Bootstrap UCL | 0.987 |
| Kolmogorov-Smirnov 5% Critical Value | 0.256 | 95% BCA Bootstrap UCL | 1.001 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 1.317 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 1.545 |

PROUCL OUTPUT - BLOCK H SURFACE SOIL

| | | | |
|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 1.994 |
| 95% Approximate Gamma UCL | 1.053 | | |
| 95% Adjusted Gamma UCL | 1.105 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 1.008 |
| | | or 95% Modified-t UCL | 1.013 |
| | | or 95% H-UCL | 1.107 |

**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**

**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**

**It is therefore recommended to avoid the use of H-statistic based 95% UCLs.**

**Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK H SURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | WorkSheet.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**BENZO(A)PYRENE EQUIVALENTS**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 55 | Number of Detected Data | 33 |
| Number of Distinct Detected Data | 32 | Number of Non-Detect Data | 22 |
| Number of Missing Values | 12 | Percent Non-Detects | 40.00% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 9 | Minimum Detected | 2.197 |
| Maximum Detected | 45883 | Maximum Detected | 10.73 |
| Mean of Detected | 2871 | Mean of Detected | 4.472 |
| SD of Detected | 9472 | SD of Detected | 2.212 |
| Minimum Non-Detect | 1.4 | Minimum Non-Detect | 0.336 |
| Maximum Non-Detect | 400 | Maximum Non-Detect | 5.991 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 48 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 7 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 87.27% |

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.349 | Shapiro Wilk Test Statistic | 0.804 |
| 5% Shapiro Wilk Critical Value | 0.931 | 5% Shapiro Wilk Critical Value | 0.931 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 1744 | Mean | 3.291 |
| SD | 7424 | SD | 2.723 |
| 95% DL/2 (t) UCL | 3419 | 95% H-Stat (DL/2) UCL | 6677 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | 2.857 |
| | | SD in Log Scale | 2.815 |
| | | Mean in Original Scale | 1725 |
| | | SD in Original Scale | 7428 |
| | | 95% t UCL | 3401 |
| | | 95% Percentile Bootstrap UCL | 3462 |
| | | 95% BCA Bootstrap UCL | 4244 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.211 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 13639 | | |

PROUCL OUTPUT - BLOCK H SURFACE SOIL

| | | | |
|---|---|---|---|
| nu star | 13.89 | | |
| | | | |
| A-D Test Statistic | 6.126 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.895 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.895 | Mean | 1729 |
| 5% K-S Critical Value | 0.169 | SD | 7359 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 1008 |
| | | 95% KM (t) UCL | 3416 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 3387 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 3405 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 71220 |
| Maximum | 45883 | 95% KM (BCA) UCL | 3436 |
| Mean | 2269 | 95% KM (Percentile Bootstrap) UCL | 3429 |
| Median | 24 | 95% KM (Chebyshev) UCL | 6122 |
| SD | 7819 | 97.5% KM (Chebyshev) UCL | 8022 |
| k star | 0.0721 | 99% KM (Chebyshev) UCL | 11756 |
| Theta star | 31492 | | |
| Nu star | 7.926 | **Potential UCLs to Use** | |
| AppChi2 | 2.692 | 99% KM (Chebyshev) UCL | 11756 |
| 95% Gamma Approximate UCL | 6680 | | |
| 95% Adjusted Gamma UCL | 6889 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK H SURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Data Sets with Non-Detects** |
| **User Selected Options** | |
| From File | BLOCK H.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**ANTIMONY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 10 | Number of Detected Data | 4 |
| Number of Distinct Detected Data | 3 | Number of Non-Detect Data | 6 |
| Number of Missing Values | 29 | Percent Non-Detects | 60.00% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.6 | Minimum Detected | -0.511 |
| Maximum Detected | 1 | Maximum Detected | 0 |
| Mean of Detected | 0.875 | Mean of Detected | -0.154 |
| SD of Detected | 0.189 | SD of Detected | 0.243 |
| Minimum Non-Detect | 0.34 | Minimum Non-Detect | -1.079 |
| Maximum Non-Detect | 0.71 | Maximum Non-Detect | -0.342 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 7 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 3 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 70.00% |

**Warning: There are only 3 Distinct Detected Values in this data set**

**The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.**

**Those methods will return a 'N/A' value on your output display!**

**It is necessary to have 4 or more Distinct Values for bootstrap methods.**

**However, results obtained using 4 to 9 distinct values may not be reliable.**

**It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.791 | Shapiro Wilk Test Statistic | 0.768 |
| 5% Shapiro Wilk Critical Value | 0.748 | 5% Shapiro Wilk Critical Value | 0.748 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.479 | Mean | -1.007 |
| SD | 0.362 | SD | 0.775 |
| 95% DL/2 (t) UCL | 0.688 | 95% H-Stat (DL/2) UCL | 0.981 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | | Log ROS Method | |
| Mean | 0.967 | Mean in Log Scale | -0.551 |
| SD | 0.0471 | SD in Log Scale | 0.37 |

| | | | |
|---|---|---|---|
| 95% MLE (t) UCL | 0.994 | Mean in Original Scale | 0.615 |
| 95% MLE (Tiku) UCL | 1.017 | SD in Original Scale | 0.249 |
| | | 95% t UCL | 0.76 |
| | | 95% Percentile Bootstrap UCL | 0.744 |
| | | 95% BCA Bootstrap UCL | 0.771 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 6.301 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 0.139 | | |
| nu star | 50.41 | | |
| | | | |
| A-D Test Statistic | 0.605 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.657 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.657 | Mean | 0.71 |
| 5% K-S Critical Value | 0.394 | SD | 0.17 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.0621 |
| | | 95% KM (t) UCL | 0.824 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.812 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.897 |
| Minimum | 1E-12 | 95% KM (bootstrap t) UCL | 0.76 |
| Maximum | 1 | 95% KM (BCA) UCL | 1 |
| Mean | 0.35 | 95% KM (Percentile Bootstrap) UCL | 1 |
| Median | 1E-12 | 95% KM (Chebyshev) UCL | 0.981 |
| SD | 0.465 | 97.5% KM (Chebyshev) UCL | 1.098 |
| k star | 0.106 | 99% KM (Chebyshev) UCL | 1.328 |
| Theta star | 3.315 | | |
| Nu star | 2.112 | **Potential UCLs to Use** | |
| AppChi2 | 0.167 | 95% KM (t) UCL | 0.824 |
| 95% Gamma Approximate UCL | 4.434 | 95% KM (Percentile Bootstrap) UCL | 1 |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**ARSENIC**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 11 | Number of Detected Data | 6 |
| Number of Distinct Detected Data | 6 | Number of Non-Detect Data | 5 |
| Number of Missing Values | 28 | Percent Non-Detects | 45.45% |
| | | | |
| **Raw Statistics** | | **Log-transformed Statistics** | |
| Minimum Detected | 0.7 | Minimum Detected | -0.357 |
| Maximum Detected | 6.1 | Maximum Detected | 1.808 |
| Mean of Detected | 2.917 | Mean of Detected | 0.745 |
| SD of Detected | 2.472 | SD of Detected | 0.899 |
| Minimum Non-Detect | 0.7 | Minimum Non-Detect | -0.357 |
| Maximum Non-Detect | 4.8 | Maximum Non-Detect | 1.569 |

PROUCL OUTPUT - BLOCK H SURFACE SOIL

| | | | |
|---|---|---|---|
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 9 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 2 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 81.82% |

**Warning: There are only 6 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.787 | Shapiro Wilk Test Statistic | 0.901 |
| 5% Shapiro Wilk Critical Value | 0.788 | 5% Shapiro Wilk Critical Value | 0.788 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 2.114 | Mean | 0.374 |
| SD | 2.041 | SD | 0.898 |
| 95% DL/2 (t) UCL | 3.229 | 95% H-Stat (DL/2) UCL | 4.832 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | 0.197 |
| | | SD in Log Scale | 0.951 |
| | | Mean in Original Scale | 1.904 |
| | | SD in Original Scale | 2.106 |
| | | 95% t UCL | 3.055 |
| | | 95% Percentile Bootstrap UCL | 2.916 |
| | | 95% BCA Bootstrap UCL | 3.234 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.952 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 3.064 | | |
| nu star | 11.42 | | |
| | | | |
| A-D Test Statistic | 0.469 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.706 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.706 | Mean | 2.021 |
| 5% K-S Critical Value | 0.337 | SD | 1.953 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.653 |
| | | 95% KM (t) UCL | 3.204 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 3.095 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 3.13 |
| Minimum | 0.585 | 95% KM (bootstrap t) UCL | 4.851 |
| Maximum | 6.1 | 95% KM (BCA) UCL | 3.482 |
| Mean | 2.735 | 95% KM (Percentile Bootstrap) UCL | 3.282 |
| Median | 2.242 | 95% KM (Chebyshev) UCL | 4.866 |
| SD | 1.913 | 97.5% KM (Chebyshev) UCL | 6.097 |

| | | | |
|---|---|---|---|
| k star | 1.599 | 99% KM (Chebyshev) UCL | 8.515 |
| Theta star | 1.71 | | |
| Nu star | 35.18 | **Potential UCLs to Use** | |
| AppChi2 | 22.61 | 95% KM (BCA) UCL | 3.482 |
| 95% Gamma Approximate UCL | 4.255 | | |
| 95% Adjusted Gamma UCL | 4.586 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**CADMIUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 11 | Number of Detected Data | 4 |
| Number of Distinct Detected Data | 4 | Number of Non-Detect Data | 7 |
| Number of Missing Values | 28 | Percent Non-Detects | 63.64% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.06 | Minimum Detected | -2.813 |
| Maximum Detected | 0.5 | Maximum Detected | -0.693 |
| Mean of Detected | 0.213 | Mean of Detected | -1.881 |
| SD of Detected | 0.201 | SD of Detected | 0.937 |
| Minimum Non-Detect | 0.03 | Minimum Non-Detect | -3.507 |
| Maximum Non-Detect | 0.42 | Maximum Non-Detect | -0.868 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 10 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 1 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 90.91% |

**Warning: There are only 4 Distinct Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.85 | Shapiro Wilk Test Statistic | 0.962 |
| 5% Shapiro Wilk Critical Value | 0.748 | 5% Shapiro Wilk Critical Value | 0.748 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.123 | Mean | -2.735 |
| SD | 0.147 | SD | 1.21 |
| 95% DL/2 (t) UCL | 0.203 | 95% H-Stat (DL/2) UCL | 0.499 |

PROUCL OUTPUT - BLOCK H SURFACE SOIL

| | | | |
|---|---|---|---|
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -3.241 |
| | | SD in Log Scale | 1.268 |
| | | Mean in Original Scale | 0.0901 |
| | | SD in Original Scale | 0.147 |
| | | 95% t UCL | 0.17 |
| | | 95% Percentile Bootstrap UCL | 0.165 |
| | | 95% BCA Bootstrap UCL | 0.211 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.58 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 0.367 | | |
| nu star | 4.638 | | |
| | | | |
| A-D Test Statistic | 0.3 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.662 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.662 | Mean | 0.119 |
| 5% K-S Critical Value | 0.399 | SD | 0.128 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.0452 |
| | | 95% KM (t) UCL | 0.201 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.194 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.188 |
| Minimum | 0.016 | 95% KM (bootstrap t) UCL | 0.251 |
| Maximum | 0.551 | 95% KM (BCA) UCL | 0.5 |
| Mean | 0.283 | 95% KM (Percentile Bootstrap) UCL | 0.255 |
| Median | 0.2 | 95% KM (Chebyshev) UCL | 0.317 |
| SD | 0.2 | 97.5% KM (Chebyshev) UCL | 0.402 |
| k star | 1.111 | 99% KM (Chebyshev) UCL | 0.57 |
| Theta star | 0.255 | | |
| Nu star | 24.44 | **Potential UCLs to Use** | |
| AppChi2 | 14.18 | 95% KM (t) UCL | 0.201 |
| 95% Gamma Approximate UCL | 0.488 | 95% KM (Percentile Bootstrap) UCL | 0.255 |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**MERCURY**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 48 | Number of Detected Data | 25 |
| Number of Distinct Detected Data | 20 | Number of Non-Detect Data | 23 |
| Number of Missing Values | 18 | Percent Non-Detects | 47.92% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.01 | Minimum Detected | -4.605 |
| Maximum Detected | 1.14 | Maximum Detected | 0.131 |
| Mean of Detected | 0.128 | Mean of Detected | -2.975 |

PROUCL OUTPUT - BLOCK H SURFACE SOIL

| | | | |
|---|---|---|---|
| SD of Detected | 0.244 | SD of Detected | 1.215 |
| Minimum Non-Detect | 0.01 | Minimum Non-Detect | -4.605 |
| Maximum Non-Detect | 0.021 | Maximum Non-Detect | -3.863 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 27 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 21 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 56.25% |
| | | | |
| **UCL Statistics** | | | |
| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
| Shapiro Wilk Test Statistic | 0.507 | Shapiro Wilk Test Statistic | 0.887 |
| 5% Shapiro Wilk Critical Value | 0.918 | 5% Shapiro Wilk Critical Value | 0.918 |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.0709 | Mean | -3.805 |
| SD | 0.185 | SD | 1.239 |
| 95% DL/2 (t) UCL | 0.116 | 95% H-Stat (DL/2) UCL | 0.0768 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE yields a negative mean** | | Mean in Log Scale | -4.26 |
| | | SD in Log Scale | 1.735 |
| | | Mean in Original Scale | 0.0689 |
| | | SD in Original Scale | 0.185 |
| | | 95% t UCL | 0.114 |
| | | 95% Percentile Bootstrap UCL | 0.116 |
| | | 95% BCA Bootstrap UCL | 0.139 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 0.611 | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | 0.209 | | |
| nu star | 30.54 | | |
| | | | |
| A-D Test Statistic | 2.472 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.792 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.792 | Mean | 0.0713 |
| 5% K-S Critical Value | 0.182 | SD | 0.183 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.0269 |
| | | 95% KM (t) UCL | 0.116 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.116 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.116 |
| Minimum | 0.01 | 95% KM (bootstrap t) UCL | 0.171 |
| Maximum | 1.14 | 95% KM (BCA) UCL | 0.129 |
| Mean | 0.124 | 95% KM (Percentile Bootstrap) UCL | 0.118 |
| Median | 0.0613 | 95% KM (Chebyshev) UCL | 0.189 |
| SD | 0.181 | 97.5% KM (Chebyshev) UCL | 0.239 |
| k star | 0.966 | 99% KM (Chebyshev) UCL | 0.339 |
| Theta star | 0.129 | | |
| Nu star | 92.7 | **Potential UCLs to Use** | |
| AppChi2 | 71.5 | 95% KM (Chebyshev) UCL | 0.189 |

| | | | |
|---|---|---|---|
| 95% Gamma Approximate UCL | 0.161 | | |
| 95% Adjusted Gamma UCL | 0.162 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**MOLYBDENUM**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 11 | Number of Detected Data | 6 |
| Number of Distinct Detected Data | 6 | Number of Non-Detect Data | 5 |
| Number of Missing Values | 28 | Percent Non-Detects | 45.45% |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum Detected | 0.2 | Minimum Detected | -1.609 |
| Maximum Detected | 0.55 | Maximum Detected | -0.598 |
| Mean of Detected | 0.385 | Mean of Detected | -1.012 |
| SD of Detected | 0.138 | SD of Detected | 0.382 |
| Minimum Non-Detect | 0.4 | Minimum Non-Detect | -0.916 |
| Maximum Non-Detect | 0.9 | Maximum Non-Detect | -0.105 |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 11 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 100.00% |

**Warning: There are only 6 Detected Values in this data**

**Note: It should be noted that even though bootstrap may be performed on this data set**

**the resulting calculations may not be reliable enough to draw conclusions**

**It is recommended to have 10-15 or more distinct observations for accurate and meaningful results.**

**UCL Statistics**

| **Normal Distribution Test with Detected Values Only** | | **Lognormal Distribution Test with Detected Values Only** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.924 | Shapiro Wilk Test Statistic | 0.935 |
| 5% Shapiro Wilk Critical Value | 0.788 | 5% Shapiro Wilk Critical Value | 0.788 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 0.346 | Mean | -1.116 |
| SD | 0.122 | SD | 0.35 |
| 95% DL/2 (t) UCL | 0.413 | 95% H-Stat (DL/2) UCL | 0.435 |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | -1.065 |
| | | SD in Log Scale | 0.291 |
| | | Mean in Original Scale | 0.359 |

| | | | |
|---|---|---|---|
| | | SD in Original Scale | 0.107 |
| | | 95% t UCL | 0.417 |
| | | 95% Percentile Bootstrap UCL | 0.41 |
| | | 95% BCA Bootstrap UCL | 0.416 |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | 4.519 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 0.0852 | | |
| nu star | 54.22 | | |
| | | | |
| A-D Test Statistic | 0.281 | **Nonparametric Statistics** | |
| 5% A-D Critical Value | 0.698 | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | 0.698 | Mean | 0.365 |
| 5% K-S Critical Value | 0.333 | SD | 0.119 |
| **Data appear Gamma Distributed at 5% Significance Level** | | SE of Mean | 0.0487 |
| | | 95% KM (t) UCL | 0.453 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 0.445 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 0.456 |
| Minimum | 0.2 | 95% KM (bootstrap t) UCL | 0.471 |
| Maximum | 0.55 | 95% KM (BCA) UCL | 0.44 |
| Mean | 0.401 | 95% KM (Percentile Bootstrap) UCL | 0.444 |
| Median | 0.393 | 95% KM (Chebyshev) UCL | 0.577 |
| SD | 0.104 | 97.5% KM (Chebyshev) UCL | 0.669 |
| k star | 10.6 | 99% KM (Chebyshev) UCL | 0.85 |
| Theta star | 0.0378 | | |
| Nu star | 233.2 | **Potential UCLs to Use** | |
| AppChi2 | 198.9 | 95% KM (t) UCL | 0.453 |
| 95% Gamma Approximate UCL | 0.47 | 95% KM (Percentile Bootstrap) UCL | 0.444 |
| 95% Adjusted Gamma UCL | 0.482 | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

**1,2,3-TRICHLOROBENZENE**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 11 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 11 |
| Number of Missing Values | 28 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable 1,2,3-TRICHLOROBENZENE was not processed!**

1,2,4-TRICHLOROBENZENE

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 11 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 11 |
| Number of Missing Values | 28 | Percent Non-Detects | 100.00% |

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!

Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 1,2,4-TRICHLOROBENZENE was not processed!

1,4-DICHLOROBENZENE

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 11 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 11 |
| Number of Missing Values | 28 | Percent Non-Detects | 100.00% |

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!

Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable 1,4-DICHLOROBENZENE was not processed!

AROCLOR-1254

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 11 | Number of Detected Data | 0 |
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 11 |
| Number of Missing Values | 28 | Percent Non-Detects | 100.00% |

Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!

Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!

The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).

The data set for variable AROCLOR-1254 was not processed!

AROCLOR-1260

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Data | 11 | Number of Detected Data | 0 |

| | | | |
|---|---|---|---|
| Number of Distinct Detected Data | 0 | Number of Non-Detect Data | 11 |
| Number of Missing Values | 28 | Percent Non-Detects | 100.00% |

**Warning: All observations are Non-Detects (NDs), therefore all statistics and estimates should also be NDs!**

**Specifically, sample mean, UCLs, UPLs, and other statistics are also NDs lying below the largest detection limit!**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**The data set for variable AROCLOR-1260 was not processed!**

GASOLINE RANGE ORGANICS

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Data | 11 | Number of Detected Data | 2 |
| Number of Distinct Detected Data | 2 | Number of Non-Detect Data | 9 |
| Number of Missing Values | 28 | Percent Non-Detects | 81.82% |

| Raw Statistics | | Log-transformed Statistics | |
|---|---|---|---|
| Minimum Detected | 3200 | Minimum Detected | 8.071 |
| Maximum Detected | 12000 | Maximum Detected | 9.393 |
| Mean of Detected | 7600 | Mean of Detected | 8.732 |
| SD of Detected | 6223 | SD of Detected | 0.935 |
| Minimum Non-Detect | 2600 | Minimum Non-Detect | 7.863 |
| Maximum Non-Detect | 13300 | Maximum Non-Detect | 9.496 |
| | | | |
| Note: Data have multiple DLs - Use of KM Method is recommended | | Number treated as Non-Detect | 11 |
| For all methods (except KM, DL/2, and ROS Methods), | | Number treated as Detected | 0 |
| Observations < Largest ND are treated as NDs | | Single DL Non-Detect Percentage | 100.00% |

**Warning: Data set has only 2 Distinct Detected Values.**

**This may not be adequate enough to compute meaningful and reliable test statistics and estimates.**

**The Project Team may decide to use alternative site specific values to estimate environmental parameters (e.g., EPC, BTV).**

**Unless Data Quality Objectives (DQOs) have been met, it is suggested to collect additional observations.**

**The number of detected data may not be adequate enough to perform GOF tests, bootstrap, and ROS methods.**

**Those methods will return a 'N/A' value on your output display!**

**It is necessary to have 4 or more Distinct Values for bootstrap methods.**

**However, results obtained using 4 to 9 distinct values may not be reliable.**

**It is recommended to have 10 to 15 or more observations for accurate and meaningful results and estimates.**

**UCL Statistics**

| Normal Distribution Test with Detected Values Only | | Lognormal Distribution Test with Detected Values Only | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | N/A | Shapiro Wilk Test Statistic | N/A |
| 5% Shapiro Wilk Critical Value | N/A | 5% Shapiro Wilk Critical Value | N/A |
| **Data not Normal at 5% Significance Level** | | **Data not Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |

PROUCL OUTPUT - BLOCK H SURFACE SOIL

| | | | |
|---|---|---|---|
| DL/2 Substitution Method | | DL/2 Substitution Method | |
| Mean | 3710 | Mean | 7.925 |
| SD | 3310 | SD | 0.771 |
| 95% DL/2 (t) UCL | 5519 | 95% H-Stat (DL/2) UCL | 6990 |
| | | | |
| Maximum Likelihood Estimate(MLE) Method | N/A | Log ROS Method | |
| **MLE method failed to converge properly** | | Mean in Log Scale | N/A |
| | | SD in Log Scale | N/A |
| | | Mean in Original Scale | N/A |
| | | SD in Original Scale | N/A |
| | | 95% t UCL | N/A |
| | | 95% Percentile Bootstrap UCL | N/A |
| | | 95% BCA Bootstrap UCL | N/A |
| | | | |
| **Gamma Distribution Test with Detected Values Only** | | **Data Distribution Test with Detected Values Only** | |
| k star (bias corrected) | N/A | **Data do not follow a Discernable Distribution (0.05)** | |
| Theta Star | N/A | | |
| nu star | N/A | | |
| | | | |
| A-D Test Statistic | N/A | **Nonparametric Statistics** | |
| 5% A-D Critical Value | N/A | Kaplan-Meier (KM) Method | |
| K-S Test Statistic | N/A | Mean | 4080 |
| 5% K-S Critical Value | N/A | SD | 2640 |
| **Data not Gamma Distributed at 5% Significance Level** | | SE of Mean | 1181 |
| | | 95% KM (t) UCL | 6220 |
| **Assuming Gamma Distribution** | | 95% KM (z) UCL | 6022 |
| Gamma ROS Statistics using Extrapolated Data | | 95% KM (jackknife) UCL | 10131 |
| Minimum | N/A | 95% KM (bootstrap t) UCL | N/A |
| Maximum | N/A | 95% KM (BCA) UCL | 12000 |
| Mean | N/A | 95% KM (Percentile Bootstrap) UCL | N/A |
| Median | N/A | 95% KM (Chebyshev) UCL | 9226 |
| SD | N/A | 97.5% KM (Chebyshev) UCL | 11453 |
| k star | N/A | 99% KM (Chebyshev) UCL | 15827 |
| Theta star | N/A | | |
| Nu star | N/A | **Potential UCLs to Use** | |
| AppChi2 | N/A | 95% KM (t) UCL | 6220 |
| 95% Gamma Approximate UCL | N/A | 95% KM (% Bootstrap) UCL | N/A |
| 95% Adjusted Gamma UCL | N/A | | |

**Note: DL/2 is not a recommended method.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Maichle, and Lee (2006).**

**For additional insight, the user may want to consult a statistician.**

PROUCL OUTPUT - BLOCK H SURFACE SOIL

| | |
|---|---|
| | **General UCL Statistics for Full Data Sets** |
| **User Selected Options** | |
| From File | Sheet1.wst |
| Full Precision | OFF |
| Confidence Coefficient | 95% |
| Number of Bootstrap Operations | 2000 |

**COBALT**

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 11 | Number of Distinct Observations | 11 |
| Number of Missing Values | 28 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 2.8 | Minimum of Log Data | 1.03 |
| Maximum | 19.7 | Maximum of Log Data | 2.981 |
| Mean | 6.5 | Mean of log Data | 1.706 |
| Median | 5.4 | SD of log Data | 0.562 |
| SD | 4.752 | | |
| Coefficient of Variation | 0.731 | | |
| Skewness | 2.46 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.711 | Shapiro Wilk Test Statistic | 0.924 |
| Shapiro Wilk Critical Value | 0.85 | Shapiro Wilk Critical Value | 0.85 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 9.097 | 95% H-UCL | 9.638 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 11.16 |
| 95% Adjusted-CLT UCL (Chen-1995) | 9.992 | 97.5% Chebyshev (MVUE) UCL | 13.24 |
| 95% Modified-t UCL (Johnson-1978) | 9.274 | 99% Chebyshev (MVUE) UCL | 17.33 |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 2.362 | **Data appear Gamma Distributed at 5% Significance Level** | |
| Theta Star | 2.752 | | |
| MLE of Mean | 6.5 | | |
| MLE of Standard Deviation | 4.229 | | |
| nu star | 51.97 | | |
| Approximate Chi Square Value (.05) | 36.41 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0278 | 95% CLT UCL | 8.857 |
| Adjusted Chi Square Value | 34.3 | 95% Jackknife UCL | 9.097 |
| | | 95% Standard Bootstrap UCL | 8.77 |
| Anderson-Darling Test Statistic | 0.515 | 95% Bootstrap-t UCL | 12.36 |
| Anderson-Darling 5% Critical Value | 0.733 | 95% Hall's Bootstrap UCL | 18.81 |
| Kolmogorov-Smirnov Test Statistic | 0.156 | 95% Percentile Bootstrap UCL | 8.927 |
| Kolmogorov-Smirnov 5% Critical Value | 0.257 | 95% BCA Bootstrap UCL | 9.9 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 12.75 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 15.45 |

| | | | |
|---|---|---|---|
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 20.76 |
| 95% Approximate Gamma UCL | 9.277 | | |
| 95% Adjusted Gamma UCL | 9.849 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Approximate Gamma UCL | 9.277 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**
**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

LEAD

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 11 | Number of Distinct Observations | 10 |
| Number of Missing Values | 28 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 3.4 | Minimum of Log Data | 1.224 |
| Maximum | 18 | Maximum of Log Data | 2.89 |
| Mean | 6.809 | Mean of log Data | 1.817 |
| Median | 6 | SD of log Data | 0.434 |
| SD | 3.936 | | |
| Coefficient of Variation | 0.578 | | |
| Skewness | 2.654 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.671 | Shapiro Wilk Test Statistic | 0.878 |
| Shapiro Wilk Critical Value | 0.85 | Shapiro Wilk Critical Value | 0.85 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 8.96 | 95% H-UCL | 9.009 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 10.58 |
| 95% Adjusted-CLT UCL (Chen-1995) | 9.776 | 97.5% Chebyshev (MVUE) UCL | 12.26 |
| 95% Modified-t UCL (Johnson-1978) | 9.118 | 99% Chebyshev (MVUE) UCL | 15.56 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 3.764 | **Data appear Lognormal at 5% Significance Level** | |
| Theta Star | 1.809 | | |
| MLE of Mean | 6.809 | | |
| MLE of Standard Deviation | 3.509 | | |
| nu star | 82.82 | | |
| Approximate Chi Square Value (.05) | 62.84 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0278 | 95% CLT UCL | 8.761 |
| Adjusted Chi Square Value | 60.01 | 95% Jackknife UCL | 8.96 |
| | | 95% Standard Bootstrap UCL | 8.676 |
| Anderson-Darling Test Statistic | 0.794 | 95% Bootstrap-t UCL | 11.61 |
| Anderson-Darling 5% Critical Value | 0.731 | 95% Hall's Bootstrap UCL | 16.97 |
| Kolmogorov-Smirnov Test Statistic | 0.265 | 95% Percentile Bootstrap UCL | 8.945 |

| | | | |
|---|---|---|---|
| Kolmogorov-Smirnov 5% Critical Value | 0.256 | 95% BCA Bootstrap UCL | 9.518 |
| **Data not Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 11.98 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 14.22 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 18.62 |
| 95% Approximate Gamma UCL | 8.973 | | |
| 95% Adjusted Gamma UCL | 9.396 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 8.96 |
| | | or 95% Modified-t UCL | 9.118 |
| | | or 95% H-UCL | 9.009 |

**ProUCL computes and outputs H-statistic based UCLs for historical reasons only.**

**H-statistic often results in unstable (both high and low) values of UCL95 as shown in examples in the Technical Guide.**

**It is therefore recommended to avoid the use of H-statistic based 95% UCLs.**

**Use of nonparametric methods are preferred to compute UCL95 for skewed data sets which do not follow a gamma distribution.**

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**

**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**

**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

NICKEL

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 11 | Number of Distinct Observations | 10 |
| Number of Missing Values | 28 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 5.1 | Minimum of Log Data | 1.629 |
| Maximum | 15 | Maximum of Log Data | 2.708 |
| Mean | 9.145 | Mean of log Data | 2.161 |
| Median | 8.1 | SD of log Data | 0.338 |
| SD | 3.129 | | |
| Coefficient of Variation | 0.342 | | |
| Skewness | 0.624 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.942 | Shapiro Wilk Test Statistic | 0.971 |
| Shapiro Wilk Critical Value | 0.85 | Shapiro Wilk Critical Value | 0.85 |
| **Data appear Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 10.86 | 95% H-UCL | 11.37 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 13.25 |
| 95% Adjusted-CLT UCL (Chen-1995) | 10.89 | 97.5% Chebyshev (MVUE) UCL | 15.03 |
| 95% Modified-t UCL (Johnson-1978) | 10.88 | 99% Chebyshev (MVUE) UCL | 18.52 |
| | | | |
| **Gamma Distribution Test** | | **Data Distribution** | |
| k star (bias corrected) | 7.144 | **Data appear Normal at 5% Significance Level** | |
| Theta Star | 1.28 | | |

| | | | |
|---|---|---|---|
| MLE of Mean | 9.145 | | |
| MLE of Standard Deviation | 3.422 | | |
| nu star | 157.2 | | |
| Approximate Chi Square Value (.05) | 129.2 | **Nonparametric Statistics** | |
| Adjusted Level of Significance | 0.0278 | 95% CLT UCL | 10.7 |
| Adjusted Chi Square Value | 125.1 | 95% Jackknife UCL | 10.86 |
| | | 95% Standard Bootstrap UCL | 10.62 |
| Anderson-Darling Test Statistic | 0.246 | 95% Bootstrap-t UCL | 11.25 |
| Anderson-Darling 5% Critical Value | 0.729 | 95% Hall's Bootstrap UCL | 10.83 |
| Kolmogorov-Smirnov Test Statistic | 0.149 | 95% Percentile Bootstrap UCL | 10.7 |
| Kolmogorov-Smirnov 5% Critical Value | 0.255 | 95% BCA Bootstrap UCL | 10.75 |
| **Data appear Gamma Distributed at 5% Significance Level** | | 95% Chebyshev(Mean, Sd) UCL | 13.26 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 15.04 |
| **Assuming Gamma Distribution** | | 99% Chebyshev(Mean, Sd) UCL | 18.53 |
| 95% Approximate Gamma UCL | 11.13 | | |
| 95% Adjusted Gamma UCL | 11.49 | | |
| | | | |
| **Potential UCL to Use** | | Use 95% Student's-t UCL | 10.86 |

**Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.**
**These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)**
**and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.**

VANADIUM

**General Statistics**

| | | | |
|---|---|---|---|
| Number of Valid Observations | 11 | Number of Distinct Observations | 11 |
| Number of Missing Values | 28 | | |

| **Raw Statistics** | | **Log-transformed Statistics** | |
|---|---|---|---|
| Minimum | 13.1 | Minimum of Log Data | 2.573 |
| Maximum | 37.9 | Maximum of Log Data | 3.635 |
| Mean | 21.7 | Mean of log Data | 3.008 |
| Median | 18.7 | SD of log Data | 0.379 |
| SD | 8.987 | | |
| Coefficient of Variation | 0.414 | | |
| Skewness | 1.018 | | |

**Relevant UCL Statistics**

| **Normal Distribution Test** | | **Lognormal Distribution Test** | |
|---|---|---|---|
| Shapiro Wilk Test Statistic | 0.813 | Shapiro Wilk Test Statistic | 0.872 |
| Shapiro Wilk Critical Value | 0.85 | Shapiro Wilk Critical Value | 0.85 |
| **Data not Normal at 5% Significance Level** | | **Data appear Lognormal at 5% Significance Level** | |
| | | | |
| **Assuming Normal Distribution** | | **Assuming Lognormal Distribution** | |
| 95% Student's-t UCL | 26.61 | 95% H-UCL | 27.76 |
| **95% UCLs (Adjusted for Skewness)** | | 95% Chebyshev (MVUE) UCL | 32.51 |
| 95% Adjusted-CLT UCL (Chen-1995) | 27.05 | 97.5% Chebyshev (MVUE) UCL | 37.23 |
| 95% Modified-t UCL (Johnson-1978) | 26.75 | 99% Chebyshev (MVUE) UCL | 46.51 |
| | | | |

PROUCL OUTPUT - BLOCK H SURFACE SOIL

| Gamma Distribution Test | | Data Distribution | |
|---|---|---|---|
| k star (bias corrected) | 5.414 | Data Follow Appr. Gamma Distribution at 5% Significance Level | |
| Theta Star | 4.008 | | |
| MLE of Mean | 21.7 | | |
| MLE of Standard Deviation | 9.326 | | |
| nu star | 119.1 | | |
| Approximate Chi Square Value (.05) | 94.92 | Nonparametric Statistics | |
| Adjusted Level of Significance | 0.0278 | 95% CLT UCL | 26.16 |
| Adjusted Chi Square Value | 91.4 | 95% Jackknife UCL | 26.61 |
| | | 95% Standard Bootstrap UCL | 25.92 |
| Anderson-Darling Test Statistic | 0.771 | 95% Bootstrap-t UCL | 27.87 |
| Anderson-Darling 5% Critical Value | 0.73 | 95% Hall's Bootstrap UCL | 25.58 |
| Kolmogorov-Smirnov Test Statistic | 0.244 | 95% Percentile Bootstrap UCL | 26.26 |
| Kolmogorov-Smirnov 5% Critical Value | 0.256 | 95% BCA Bootstrap UCL | 26.76 |
| Data follow Appr. Gamma Distribution at 5% Significance Level | | 95% Chebyshev(Mean, Sd) UCL | 33.51 |
| | | 97.5% Chebyshev(Mean, Sd) UCL | 38.62 |
| Assuming Gamma Distribution | | 99% Chebyshev(Mean, Sd) UCL | 48.66 |
| 95% Approximate Gamma UCL | 27.23 | | |
| 95% Adjusted Gamma UCL | 28.28 | | |
| | | | |
| Potential UCL to Use | | Use 95% Approximate Gamma UCL | 27.23 |

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.

These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002) and Singh and Singh (2003). For additional insight, the user may want to consult a statistician.

DIESEL RANGE ORGANICS

General Statistics

| | | | |
|---|---|---|---|
| Number of Valid Observations | 4 | Number of Distinct Observations | 4 |
| Number of Missing Values | 28 | | |

Warning: This data set only has 4 observations!

Data set is too small to compute reliable and meaningful statistics and estimates!

The data set for variable DIESEL RANGE ORGANICS was not processed!

It is suggested to collect at least 8 to 10 observations before using these statistical methods!

If possible, compute and collect Data Quality Objectives (DQO) based sample size and analytical results.

# APPENDIX D-3

# SAMPLE CALCULATIONS

**CALCULATION WORKSHEET** 

| **CLIENT:** LOCKHEED MARTIN, MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
|---|---|---|
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SOIL CONSTRUCTION WORKERS | | |
| **BASED ON:** USEPA, DECEMBER 1989 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**PURPOSE:** To estimate intake, carcinogenic and noncarcinogenic risks from incidental ingestion of surface soil at Block E.

**EQUATION:**

$$IEX = \frac{CS \times IR \times EF \times ED \times FI \times CF}{BW \times AT}$$

Where:

| | | |
|---|---|---|
| IEX | = | estimated exposure intake (mg/kg/day) |
| Cs | = | exposure point concentration in soil (mg/kg) |
| IR | = | incidental ingestion rate (mg/day) |
| EF | = | exposure frequency (days/year) |
| ED | = | exposure duration (years) |
| FI | = | fraction ingested from contaminated source (unitless) |
| CF | = | conversion factor (1.0E-6 kg/mg) |
| BW | = | body weight (kg) |
| AT | = | averaging time (days) |
| CSFo | = | oral carcinogenic slope factor ($(mg/kg/day)^{-1}$) |
| RfDo | = | oral noncarcinogenic reference dose (mg/kg/day) |

**RISKS:**

ILCR (Carcinogens) = Intake (mg/kg/day) x CSFo (mg/kg/day)-1
HQ (Noncarcinogens) = Intake (mg/kg/day) / RFDo (mg/kg/day)

**ASSUMPTIONS:**

| | | | | |
|---|---|---|---|---|
| Cs | = | 36 | mg/kg | Chemical: Aroclor-1254 |
| IR | = | 480 | mg/day | |
| EF | = | 250 | days/year | |
| ED | = | 1 | years | |
| FI | = | 1 | | |
| CF | = | 1.0E-06 | kg/mg | |
| BW | = | 70 | kg | |
| ATc | = | 25550 | days | |
| ATnc | = | 365 | days | |
| CSFo | = | 2.0E+00 | $(mg/kg/day)^{-1}$ | |
| RfDo | = | 2.0E-05 | (mg/kg/day) | |

| **CLIENT:** LOCKHEED MARTIN, MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
|---|---|---|
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SOIL CONSTRUCTION WORKERS | | |
| **BASED ON:** USEPA, DECEMBER 1989 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**EXAMPLE CARCINOGENIC CALCULATION**

$$IEXc = \frac{36\ mg/kg \times 480\ mg/day \times 250\ days/year \times 1\ years \times 1 \times 1.0E\text{-}06\ kg/mg}{70\ kg \times 25550\ days}$$

IEXc = 2.42E-06 mg/kg/day

ILCR = 2.42E-06 mg/kg/day x 2.00E+00 (mg/kg/day)-1 = Incremental Lifetime Cancer Risk

**ILCR = 4.8E-06**

**EXAMPLE NONCARCINOGENIC CALCULATION**

$$IEXnc = \frac{36\ mg/kg \times 480\ mg/day \times 250\ days/year \times 1\ years \times 1 \times 1.0E\text{-}06\ kg/mg}{70\ kg \times 365\ days}$$

IEXnc = 1.69E-04 mg/kg/day

HQ = 1.69E-04 mg/kg/day / 2.00E-05 (mg/kg/day) = Hazard Quotient

**HQ = 8.5E+00**

**CALCULATION WORKSHEET** 

| **CLIENT:** LOCKHEED MARTIN, MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
|---|---|---|
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SOIL CONSTRUCTION WORKERS | | |
| **BASED ON:** USEPA, JULY 2004 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**PURPOSE:** To estimate intake, carcinogenic and noncarcinogenic risks from dermal contact with surface soil at Block E.

**EQUATION:**

$$DEX = \frac{Cs \times CF \times SA \times AF \times ABS \times EF \times ED}{BW \times AT}$$

Where:

| | | |
|---|---|---|
| DEX | = | estimated exposure intake (mg/kg/day) |
| Cs | = | exposure point concentration in soil (mg/kg) |
| CF | = | conversion factor (1.0E-6 kg/mg) |
| SA | = | skin surface available for contact ($cm^2$/day) |
| ABS | = | absorption factor (unitless) |
| AF | = | adherence factor ($mg/cm^2$) |
| EF | = | exposure frequency (days/year) |
| ED | = | exposure duration (years) |
| BW | = | body weight (kg) |
| AT | = | averaging time (days) |
| CSFd | = | dermal carcinogenic slope factor ($(mg/kg/day)^{-1}$) |
| RfDd | = | dermal noncarcinogenic reference dose (mg/kg/day) |

**RISKS:**

ILCR (Carcinogens) = Intake (mg/kg/day) x CSFd (mg/kg/day)-1
HQ (Noncarcinogens) = Intake (mg/kg/day) / RFDd (mg/kg/day)

**ASSUMPTIONS:**

| | | | | |
|---|---|---|---|---|
| Cs | = | 36 | mg/kg | Chemical: Aroclor-1254 |
| CF | = | 1.0E-06 | kg/mg | |
| SA | = | 3280 | $cm^2$/day | |
| AF | = | 0.3 | $mg/cm^2$ | |
| ABS | = | 0.14 | | |
| EF | = | 250 | days/year | |
| ED | = | 1 | years | |
| BW | = | 70 | kg | |
| ATc | = | 25550 | days | |
| ATnc | = | 365 | days | |
| CSFd | = | 2.0E+00 | $(mg/kg/day)^{-1}$ | |
| RfDd | = | 2.0E-05 | (mg/kg/day) | |

| | | |
|---|---|---|
| **CLIENT:** LOCKHEED MARTIN, MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SOIL CONSTRUCTION WORKERS | | |
| **BASED ON:** USEPA, JULY 2004 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**EXAMPLE CARCINOGENIC CALCULATION**

$$DEXc = \frac{36\ mg/kg \times 1.0E\text{-}06\ kg/mg \times 3280\ cm2/day \times 0.3\ mg/cm2 \times 0.14 \times 250\ days/year \times 1\ years}{70\ kg \times 25550\ days}$$

DEXc = 6.93E-07 mg/kg/day

ILCR = 6.93E-07 mg/kg/day x 2.00E+00 (mg/kg/day)-1 = Incremental Lifetime Cancer Risk

**ILCR = 1.4E-06**

**EXAMPLE NONCARCINOGENIC CALCULATION**

$$DEXnc = \frac{36\ mg/kg \times 1.0E\text{-}06\ kg/mg \times 3280\ cm2/day \times 0.3\ mg/cm2 \times 0.14 \times 250\ days/year \times 1\ years}{70\ kg \times 365\ days}$$

DEXnc = 4.85E-05 mg/kg/day

HQ = 4.85E-05 mg/kg/day / 2.00E-05 (mg/kg/day) = Hazard Quotient

**HQ = 2.4E+00**

| **CLIENT:** LOCKHEED MARTIN, MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
|---|---|---|
| **SUBJECT:** CALCULATION OF PARTICUALATE EMISSION FACTOR FOR CONSTRUCTION WORKERS | | |
| **BASED ON:** Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (USEPA, December 2002) | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

Equation 5-5
Derivation of the Particulate Emission Factor
Construction Scenario - Construction Worker

$$PEF_{sc} = Q/C_{sr} \times \frac{1}{F_D} \times \left[ \frac{T \times A_R}{556 \times (W/3)^{0.4} \times \frac{(365d/yr - p)}{365d/yr} \times \Sigma VKT} \right]$$

| Parameter/Definition (units) | Default |
|---|---|
| $PEF_{sc}$/subchronic road particulate emission factor ($m^3/kg$) | site-specific |
| $Q/C_{sr}$/ inverse of the ratio of the 1-h geometric mean air concentration to the emission flux along a straight road segment bisecting a square site ($g/m^2$-s per $kg/m^3$) | 23.02[a] (Equation 5-6) |
| $F_D$/dispersion correction factor (unitless) | 0.185 (Appendix E) |
| T/total time over which construction occurs (s) | site-specific |
| $A_R$/surface area of contaminated road segment ($m^2$) $L_R$/length of road segment (ft) $W_R$/width of road segment (ft) | 274.213 ($A_R = L_R \times W_R \times 0.092903 m^2/ft^2$) |
| W/mean vehicle weight (tons) | site-specific |
| p/number of days with at least 0.01 inches of precipitation (days/year) | site-specific (Exhibit 5-2) |
| ΣVKT/sum of fleet vehicle kilometers traveled during the exposure duration (km) | site-specific |

[a] Assumes a 0.5 acre site

## Calculation of PEF for Construction Workers

| | | | |
|---|---|---|---|
| Q/C | 23.02 | $(g/m^2$-s per $kg/m^3)$ | |
| Fd | 0.185 | dispersion correction factor (unitless) | |
| T | 7.20E+06 | sec | 3600 sec/hr x 8hr/day x 250 days/yr |
| Area (A) | 274.213 | $m^2$ | |
| W | 8 | tons | |
| p | 140 | day/year | |
| VKT | 337.5 | km | 30 vehicles x 0.045 km/day x 250 days |

**PEF = 1.43E+06 $m^3/kg$**

**CALCULATION WORKSHEET** 

| | | |
|---|---|---|
| **CLIENT:** LOCKHEED MARTIN, MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM INHALATION OF FUGITIVE DUST EMISSIONS CONSTRUCTION WORKERS | | |
| **BASED ON:** USEPA, JANUARY 2009 | | |
| **BY:** L.CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**PURPOSE:** To estimate intake, carcinogenic and noncarcinogenic risks from inhalation of subsurface soil at Block F.

**EQUATION:**

$$EC = \frac{Ca \times ET \times EF \times ED}{AT \times 24\ hours/day}$$

Where:

| | | |
|---|---|---|
| EC | = | exposure concentration ($mg/m^3$) |
| Ca | = | exposure point concentration in air ($mg/m^3$) |
| | = | Cs x [1/PEF + 1/VF] |
| Cs | = | exposure point concentration in soil (mg/kg) |
| PEF | = | particulate emission factor ($m^3/kg$) |
| ET | = | exposure time (hrs/day) |
| EF | = | exposure frequency (days/year) |
| ED | = | exposure duration (years) |
| AT | = | averaging time (hours) |
| IURi | = | inhalation unit risk ($(ug/m^3)^{-1}$) |
| RfCi | = | inhalation reference concentration ($mg/m^3$) |

**RISKS:**

ILCR (Carcinogens) = Exposure Concentration ($mg/m^3$) x IURi $(ug/m^3)^{-1}$ x 1000 ug/mg

HQ (Noncarcinogens) = Exposure Concentration ($mg/m^3$) / RfCi ($mg/m^3$)

**ASSUMPTIONS:**

| | | | | |
|---|---|---|---|---|
| Cs | = | 159 | mg/kg | Chemical: Naphthalene |
| PEF | = | 1.43E+06 | m3/kg | |
| VF | = | 5.42E+02 | m3/kg | |
| Ca | = | 2.94E-01 | mg/m3 | |
| ET | = | 8 | hours | |
| EF | = | 250 | days/year | |
| ED | = | 1 | years | |
| ATc | = | 25550 | days | |
| ATnc | = | 365 | days | |
| IURi | = | 3.4E-05 | $(ug/m3)^{-1}$ | |
| RfCi | = | 3.0E-03 | (mg/m3) | |

| | | |
|---|---|---|
| **CLIENT:** LOCKHEED MARTIN, MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM INHALATION OF FUGITIVE DUST EMISSIONS CONSTRUCTION WORKERS | | |
| **BASED ON:** USEPA, JANUARY 2009 | | |
| **BY:** L.CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**EXAMPLE CARCINOGENIC CALCULATION**

$$ECc = \frac{2.94E\text{-}01\ mg/m3 \times 8\ hours \times 250\ days/year \times 1\ years}{25550\ days \times 24\ hours/day}$$

ECc = 9.59E-04 mg/m3

ILCR = 9.59E-04 mg/m3 x 3.40E-05 (ug/m3)-1 x 1000 ug/mg = Incremental Lifetime Cancer Risk

**ILCR = 3.3E-05**

**EXAMPLE NONCARCINOGENIC CALCULATION**

$$ECnc = \frac{2.94E\text{-}01\ mg/m3 \times 8\ hours \times 250\ days/year \times 1\ years}{365\ days \times 24\ hours/day}$$

ECnc = 6.71E-02 mg/m3

HQ = 6.71E-02 mg/m3 / 3.00E-03 (mg/m3) = Hazard Quotient

HQ **2.2E+01**

**CALCULATION WORKSHEET** 

| **CLIENT:** LOCKHEED MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
|---|---|---|
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SOIL FOR MUTAGENIC CHEMICALS - HYPOTHETICAL CHILD RESIDENTS EXPOSED TO FUTURE SUBSURFACE SOIL | | |
| **BASED ON:** U.S. EPA, DECEMBER 1989 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**PURPOSE:** To estimate intake and cancer risks for mutagenic chemicals from incidental ingestion of subsurface soil at Block E.

**EQUATION:**

$$IEX = \frac{CS \times IR \times EF \times ED \times FI \times CF}{BW \times AT} \times ADAF$$

Where:

| | | |
|---|---|---|
| IEX | = | estimated exposure intake (mg/kg/day) |
| Cs | = | exposure point concentration in soil (mg/kg) |
| IR | = | incidental ingestion rate (mg/day) |
| EF | = | exposure frequency (days/year) |
| ED | = | exposure duration (years) |
| FI | = | fraction ingested from contaminated source (unitless) |
| CF | = | conversion factor (1.0E-6 kg/mg) |
| BW | = | body weight (kg) |
| AT | = | averaging time (days) |
| ADAF | = | age-dependent adjustment factor |
| CSFo | = | oral carcinogenic slope factor ($(mg/kg/day)^{-1}$) |

**RISKS:**

ILCR (Carcinogens) = Intake (mg/kg/day) x CSFo (mg/kg/day)-1

**ASSUMPTIONS:**

| | | | | |
|---|---|---|---|---|
| Cs | = | 1.7 | mg/kg | Chemical: Benzo(a)pyrene Equivalents |
| IR | = | 200 | mg/day | |
| EF | = | 350 | days/year | |
| $ED_1$ | = | 2 | years | |
| $ED_2$ | = | 4 | years | |
| FI | = | 1 | | |
| CF | = | 1.0E-06 | kg/mg | |
| BW | = | 15 | kg | |
| AT | = | 25550 | days | |
| CSFo | = | 7.3E+00 | $(mg/kg/day)^{-1}$ | |
| $ADAF_1$ | = | 10 | | |
| $ADAF_2$ | = | 3 | | |

| | | |
|---|---|---|
| **CLIENT:** LOCKHEED MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SOIL FOR MUTAGENIC CHEMICALS - HYPOTHETICAL CHILD RESIDENTS EXPOSED TO FUTURE SUBSURFACE SOIL | | |
| **BASED ON:** U.S. EPA, DECEMBER 1989 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**EXAMPLE CARCINOGENIC CALCULATION**

$$IEX_1 = \frac{1.7 \text{ mg/kg} \times 200 \text{ mg/day} \times 350 \text{ days/year} \times 2 \text{ years} \times 1 \times 1.0E\text{-}06 \text{ kg/mg}}{15 \text{ kg} \times 25550 \text{ days}} \times 10$$

$IEX_1$ = 6.21E-06 mg/kg/day

$$IEX_2 = \frac{1.7 \text{ mg/kg} \times 200 \text{ mg/day} \times 350 \text{ days/year} \times 4 \text{ years} \times 1 \times 1.0E\text{-}06 \text{ kg/mg}}{15 \text{ kg} \times 25550 \text{ days}} \times 3$$

$IEX_2$ = 3.73E-06 mg/kg/day

ILCR = (6.21E-06 mg/kg/day + 3.73E-06 mg/kg/day) x 7.30E+00 (mg/kg/day)-1

**ILCR = 7.3E-05**

**CALCULATION WORKSHEET** 

| | | |
|---|---|---|
| **CLIENT:** LOCKHEED MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SOIL FOR MUTAGENIC CHEMICALS HYPOTHETICAL CHILD RESIDENTS EXPOSED TO FUTURE SUBSURFACE SOIL | | |
| **BASED ON:** U.S. EPA, JULY 2004 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**PURPOSE:** To estimate intake and cancer risks for mutagenic chemicals from dermal contact with subsurface soil at Block E.

**EQUATION:**

$$DEX = \frac{Cs \times CF \times SA \times AF \times ABS \times EF \times ED}{BW \times AT} \times ADAF$$

Where:

| | | |
|---|---|---|
| DEX | = | estimated exposure intake (mg/kg/day) |
| Cs | = | exposure point concentration in soil (mg/kg) |
| CF | = | conversion factor (1.0E-6 kg/mg) |
| SA | = | skin surface available for contact ($cm^2$/day) |
| ABS | = | absorption factor (unitless) |
| AF | = | adherence factor ($mg/cm^2$) |
| EF | = | exposure frequency (days/year) |
| ED | = | exposure duration (years) |
| BW | = | body weight (kg) |
| AT | = | averaging time (days) |
| ADAF | = | age-dependent adjustment factor |
| CSFd | = | dermal carcinogenic slope factor ($(mg/kg/day)^{-1}$) |

**RISKS:**

ILCR (Carcinogens) = Intake (mg/kg/day) x CSFd (mg/kg/day)-1

**ASSUMPTIONS:**

| | | | | |
|---|---|---|---|---|
| Cs | = | 1.7 | mg/kg | Chemical: Benzo(a)pyrene Equivalents |
| CF | = | 1.0E-06 | kg/mg | |
| SA | = | 2800 | $cm^2$/day | |
| AF | = | 0.2 | $mg/cm^2$ | |
| ABS | = | 0.13 | | |
| EF | = | 350 | days/year | |
| $ED_1$ | = | 2 | years | |
| $ED_2$ | = | 4 | years | |
| BW | = | 15 | kg | |
| AT | = | 25550 | days | |
| CSFd | = | 7.3E+00 | $(mg/kg/day)^{-1}$ | |
| $ADAF_1$ | = | 10 | | |
| $ADAF_2$ | = | 3 | | |

| | | |
|---|---|---|
| **CLIENT:** LOCKHEED MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SOIL FOR MUTAGENIC CHEMICALS HYPOTHETICAL CHILD RESIDENTS EXPOSED TO FUTURE SUBSURFACE SOIL | | |
| **BASED ON:** U.S. EPA, JULY 2004 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**EXAMPLE CARCINOGENIC CALCULATION**

$$DEXc = \frac{1.7\ mg/kg \times 1.0E\text{-}06\ kg/mg \times 2800\ cm2/day \times 0.2\ mg/cm2 \times 0.13 \times 350\ days/year \times 2\ years}{15\ kg \times 25550\ days} \times 10$$

DEXc = 2.26E-06 mg/kg/day

$$DEXc = \frac{1.7\ mg/kg \times 1.0E\text{-}06\ kg/mg \times 2800\ cm2/day \times 0.2\ mg/cm2 \times 0.13 \times 350\ days/year \times 4\ years}{15\ kg \times 25550\ days} \times 3$$

DEXc = 1.36E-06 mg/kg/day

ILCR = (2.26E-06 mg/kg/day + 1.36E-06 mg/kg/day) x 7.30E+00 (mg/kg/day)-1

**ILCR = 2.6E-05**

| **CLIENT:** LOCKHEED MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
|---|---|---|
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SOIL FOR MUTAGENIC CHEMICALS - HYPOTHETICAL ADULT RESIDENTS EXPOSED TO SUBSURFACE SOIL | | |
| **BASED ON:** U.S. EPA, DECEMBER 1989 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**PURPOSE:** To estimate intake and cancer risks for mutagenic chemicals from incidental ingestion of subsurface soil at Block E.

**EQUATION:**

$$IEX = \frac{CS \times IR \times EF \times ED \times FI \times CF}{BW \times AT} \times ADAF$$

Where:

| | | |
|---|---|---|
| IEX | = | estimated exposure intake (mg/kg/day) |
| Cs | = | exposure point concentration in soil (mg/kg) |
| IR | = | incidental ingestion rate (mg/day) |
| EF | = | exposure frequency (days/year) |
| ED | = | exposure duration (years) |
| FI | = | fraction ingested from contaminated source (unitless) |
| CF | = | conversion factor (1.0E-6 kg/mg) |
| BW | = | body weight (kg) |
| AT | = | averaging time (days) |
| ADAF | = | age-dependent adjustment factor |
| CSFo | = | oral carcinogenic slope factor ($(mg/kg/day)^{-1}$) |

**RISKS:**

ILCR (Carcinogens) = Intake (mg/kg/day) x CSFo (mg/kg/day)-1

**ASSUMPTIONS:**

| | | | | |
|---|---|---|---|---|
| Cs | = | 1.7 | mg/kg | Chemical: Benzo(a)pyrene Equivalents |
| IR | = | 100 | mg/day | |
| EF | = | 350 | days/year | |
| ED | = | 12 | years | |
| FI | = | 1 | | |
| CF | = | 1.0E-06 | kg/mg | |
| BW | = | 70 | kg | |
| AT | = | 25550 | days | |
| CSFo | = | 7.3E+00 | $(mg/kg/day)^{-1}$ | |
| ADAF | = | 1 | | |

| | | |
|---|---|---|
| **CLIENT:** LOCKHEED MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM INCIDENTAL INGESTION OF SOIL FOR MUTAGENIC CHEMICALS - HYPOTHETICAL ADULT RESIDENTS EXPOSED TO SUBSURFACE SOIL | | |
| **BASED ON:** U.S. EPA, DECEMBER 1989 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**EXAMPLE CARCINOGENIC CALCULATION**

$$IEX_2 = \frac{1.7 \text{ mg/kg} \times 100 \text{ mg/day} \times 350 \text{ days/year} \times 12 \text{ years} \times 1 \times 1.0E\text{-}06 \text{ kg/mg}}{70 \text{ kg} \times 25550 \text{ days}} \times 1$$

$IEX_2$ = 3.99E-07 mg/kg/day

ILCR = (0.00E+00 mg/kg/day + 3.99E-07 mg/kg/day) x 7.30E+00 (mg/kg/day)-1

**ILCR = 2.9E-06**

**CALCULATION WORKSHEET** 

| | | |
|---|---|---|
| **CLIENT:** LOCKHEED MARTIN, MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SOIL FOR MUTAGENIC CHEMICALS HYPOTHETICAL ADULT RESIDENTS EXPOSED TO FUTURE SURFACE SOIL | | |
| **BASED ON:** U.S. EPA, JULY 2004 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**PURPOSE:** To estimate intake and cancer risks for mutagenic chemicals from dermal contact with subsurface soil at Block E.

**EQUATION:**

$$DEX = \frac{Cs \times CF \times SA \times AF \times ABS \times EF \times ED}{BW \times AT} \times ADAF$$

Where:

| | | |
|---|---|---|
| DEX | = | estimated exposure intake (mg/kg/day) |
| Cs | = | exposure point concentration in soil (mg/kg) |
| CF | = | conversion factor (1.0E-6 kg/mg) |
| SA | = | skin surface available for contact ($cm^2$/day) |
| ABS | = | absorption factor (unitless) |
| AF | = | adherence factor ($mg/cm^2$) |
| EF | = | exposure frequency (days/year) |
| ED | = | exposure duration (years) |
| BW | = | body weight (kg) |
| AT | = | averaging time (days) |
| ADAF | = | age-dependent adjustment factor |
| CSFd | = | dermal carcinogenic slope factor ($(mg/kg/day)^{-1}$) |

**RISKS:**

ILCR (Carcinogens) = Intake (mg/kg/day) x CSFd (mg/kg/day)-1

**ASSUMPTIONS:**

| | | | | |
|---|---|---|---|---|
| Cs | = | 1.7 | mg/kg | Chemical: Benzo(a)pyrene Equivalents |
| CF | = | 1.0E-06 | kg/mg | |
| SA | = | 5700 | $cm^2$/day | |
| AF | = | 0.07 | $mg/cm^2$ | |
| ABS | = | 0.13 | | |
| EF | = | 350 | days/year | |
| ED | = | 12 | years | |
| BW | = | 70 | kg | |
| AT | = | 25550 | days | |
| CSFd | = | 7.3E+00 | $(mg/kg/day)^{-1}$ | |
| ADAF | = | 1 | | |

| | | |
|---|---|---|
| **CLIENT:** LOCKHEED MARTIN, MRC, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 112IC03214 |
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM DERMAL CONTACT WITH SOIL FOR MUTAGENIC CHEMICALS HYPOTHETICAL ADULT RESIDENTS EXPOSED TO FUTURE SURFACE SOIL | | |
| **BASED ON:** U.S. EPA, JULY 2004 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 01/04/11 |

**EXAMPLE CARCINOGENIC CALCULATION**

$$DEXc = \frac{1.7\ mg/kg \times 1.0E\text{-}06\ kg/mg \times 5700\ cm2/day \times 0.07\ mg/cm2 \times 0.13 \times 350\ days/year \times 12\ years}{70\ kg \times 25550\ days} \times 1$$

DEXc = 2.07E-07 mg/kg/day

$$DEXc = \frac{1.7\ mg/kg \times 1.0E\text{-}06\ kg/mg \times 5700\ cm2/day \times 0.07\ mg/cm2 \times 0.13 \times 350\ days/year \times 0\ years}{70\ kg \times 25550\ days} \times 1$$

DEXc = 0.00E+00 mg/kg/day

ILCR = (2.07E-07 mg/kg/day + 0.00E+00 mg/kg/day) x 7.30E+00 (mg/kg/day)-1

**ILCR = 1.5E-06**

**CALCULATION WORKSHEET**



| | | |
|---|---|---|
| **CLIENT:** LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND | | **JOB NUMBER:** 03214 |
| **SUBJECT:** ESTIMATION OF AMBIENT AIR CONCENTRATIONS RESULTING FROM FUGITIVE DUST EMISSIONS AND VOLATILIZATION FROM SOIL FOR CONSTRUCTION WORKERS | | |
| **BASED ON:** U.S. EPA 2002 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 2/8/2011 |

**PURPOSE:** To calculate ambient air concentrations resulting from fugitive dust and volatilization from soil at Block F.

**RELEVANT EQUATIONS:**

$$Cair = Cs \times (1/PEF + 1/VF)$$

$$VF = \frac{Q/C \times (3.14 \times DA \times T)^{1/2} \times 10^{-4}\ m^2/cm^2}{2 \times pb \times DA} \times \frac{1}{F_D}$$

$$DA = \frac{(\theta a^{10/3} \times Di \times H + \theta w^{10/3} \times Dw)/\theta_T^{\,2}}{pb \times Kd + \theta w + \theta a \times H}$$

$$Csat = S/pb \times (Kd \times pb + \theta w + H \times \theta a)$$

Where:

| | | |
|---|---|---|
| Cair | = | Chemical concentration in air ($mg/m^3$) |
| Cs | = | Chemical concentration in soil (mg/kg) |
| PEF | = | Particulate emission factor ($m^3/kg$) |
| $VF_{sc}$ | = | Subchronic volatilization factor ($m^3/kg$) |
| $Q/C_{sa}$ | = | Inverse of mean conc. at center of source ($g/m^2$-s per $kg/m^3$). |
| $F_D$ | = | Dispersion correction factor (unitless) |
| T | = | Total time over which construction occurs (seconds). |
| pb | = | Dry soil bulk density ($g/cm^3$). |
| ps | = | soil particle density ($g/cm^3$). |
| n | = | Total soil porosity (Lpore/Lsoil). |
| θw | = | Water-filled soil porosity (Lpore/Lsoil). |
| θa | = | Air-filled soil porosity (Lair/Lsoil). |
| Di | = | Diffusivity in air ($cm^2/sec$). |
| H | = | Dimensionless Henry's Law Constant. |
| S | = | Solubility limit (mg/L) |
| Dw | = | Diffusivity in water ($cm^2/sec$). |
| DA | = | Apparent diffusivity ($cm^2/sec$). |
| Kd | = | Soil-water partition coefficient ($cm^3/g$). |
| Koc | = | Soil organic carbon partition coefficient ($cm^3/g$). |
| foc | = | Fraction organic carbon in soil (g/g). |

| CLIENT: LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND | | JOB NUMBER: 03214 |
|---|---|---|
| SUBJECT: ESTIMATION OF AMBIENT AIR CONCENTRATIONS RESULTING FROM FUGITIVE DUST EMISSIONS AND VOLATILIZATION FROM SOIL FOR CONSTRUCTION WORKERS | | |
| BASED ON: U.S. EPA 2002 | | |
| BY: L. CIOFANI | CHECKED BY: | DATE: 2/8/2011 |

**ASSUMPTIONS:**

| | | | | |
|---|---|---|---|---|
| Cs | = | 159 | mg/kg | Chemical: Naphthalene |
| PEF | = | 1.43E+06 | m3/kg | |
| Q/C | = | 14.31 | g/m2-s per kg/m3 | |
| $F_D$ | = | 0.185 | | |
| T | = | 3.15E+07 | sec | |
| pb | = | 1.5 | g/cm3 | |
| ps | = | 2.65 | g/cm3 | |
| $\theta_T$ | = | 0.434 | Lpore/Lsoil | |
| θw | = | 0.15 | Lpore/Lsoil | |
| θa | = | 0.284 | Lair/Lsoil | |
| Di | = | 6.00E-02 | cm2/sec | |
| H | = | 1.80E-02 | Uniltess | |
| S | = | 3.10E+01 | mg/L | |
| Dw | = | 8.40E-06 | cm2/sec | |
| Koc | = | 1.54E+03 | cm3/g | |
| foc | = | 0.006 | g/g | |
| Kd | = | 9.264 | cm3/g | |

**EXAMPLE CALCULATIONS**

$$DA = \frac{[(0.284^{10/3}) \times (0.06\ cm2/sec) \times (1.80E\text{-}02) + (0.15^{10/3}) \times (8.40E\text{-}06\ cm2/sec)]/(0.434^2)}{(1.5\ g/cm3 \times 9.264\ cm3/g) + (0.15 + 0.284 \times 0.018)}$$

DA = 6.15E-06 $cm^2/sec$ ✓

$$VF = \frac{(14.31\ g/m2\text{-}s\ per\ kg/m3) \times [(3.14) \times (6.15E\text{-}06\ cm2/sec) \times (3.15E+07\ sec)]^{1/2} \times (1E\text{-}4\ m2/cm2)}{2 \times 1.5 g/cm3 \times 6.15E\text{-}06\ cm2/sec} \times \frac{1}{0.185}$$

VF = 1.03E+04 $m^3/kg$ ✓

Csat = (3.10E+01 mg/L)/(1.5 g/cm3) x [(9.264 cm3/g) x (1.5 g/cm3) + (0.15 + 1.80E-02 x 0.284)]

Csat = 2.90E+02 mg/kg ✓

Csat is greater than Cs, therfore use Cs in calculation of air concentration.

Cair = 159 mg/kg x [(1/1.43E+06 m3/kg) + (1/1.03E+04 m3/kg)]

Cair = 1.55E-02 $mg/m^3$ ✓

**CALCULATION WORKSHEET** 

| **CLIENT:** LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MD | | **JOB NUMBER:** 03214 |
|---|---|---|
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM INHALATION OF FUGATIVE DUST EMISSIONS FOR MUTAGENIC CHEMICALS - HYPOTHETICAL ADULT RESIDENTS | | |
| **BASED ON:** USEPA, DECEMBER 1989, MARCH 2005 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 3/8/2011 |

**PURPOSE:** To estimate intake, carcinogenic risks for mutagenic chemicals from inhalation of surface soil at Block E.

**EQUATION:**

$$EC = \frac{Ca \times ET \times EF \times ED}{AT \times 24\ hours/day} \times ADAF$$

Where:

| | | |
|---|---|---|
| EC | = | estimated exposure intake (mg/kg/day) |
| Ca | = | exposure point concentration in air (mg/m3) |
| | = | Cs x 1/PEF |
| Cs | = | exposure point concentration in soil (mg/kg) |
| PEF | = | particulate emission factor (m3/kg) |
| IR | = | inhlation rate (m3/hr) |
| ET | = | exposure time (hrs/day) |
| EF | = | exposure frequency (days/year) |
| ED | = | exposure duration (years) |
| BW | = | body weight (kg) |
| AT | = | averaging time (days) |
| ADAF | = | age-dependent adjustment factor |
| IURi | = | inhalation unit risk($(ug/mg)^{-1}$) |

**RISKS:**

ILCR = Exposure concentration (mg/m3) x IUR (ug/m3)-1 x 1000 ug/mg

**ASSUMPTIONS:**

| | | | | |
|---|---|---|---|---|
| Cs | = | 1.5 | mg/kg | Chemical: Benzo(a)pyrene |
| PEF | = | 3.23E+09 | m3/kg | |
| Ca | = | 4.64E-10 | mg/m3 | |
| ET | = | 24 | hr/day | |
| EF | = | 350 | days/year | |
| ED | = | 12 | years | |
| ATc | = | 25550 | days | |
| IUR | = | 1.1E-03 | $(ug/m3)^{-1}$ | |
| ADAF | = | 1 | | |

| | | |
|---|---|---|
| **CLIENT:** LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MD | | **JOB NUMBER:** 03214 |
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM INHALATION OF FUGATIVE DUST EMISSIONS FOR MUTAGENIC CHEMICALS - HYPOTHETICAL ADULT RESIDENTS | | |
| **BASED ON:** USEPA, DECEMBER 1989, MARCH 2005 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 3/8/2011 |

**EXAMPLE CARCINOGENIC CALCULATION**

$$EC = \frac{4.64E\text{-}10\ mg/m3 \times 24\ hr/day \times 350\ days/year \times 12\ years}{25550\ days \times 24\ hours/day} \times 1$$

EC = 7.63E-11 mg/m3 ✓

ILCR = (7.63E-11 mg/m3) x 1.10E-03 (ug/m3)-1 x 1000 ug/mg

**ILCR = 8.4E-11** ✓

**CALCULATION WORKSHEET** 

| **CLIENT:** LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MD | | **JOB NUMBER:** 03214 |
|---|---|---|
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM INHALATION OF FUGATIVE DUST EMISSIONS FOR MUTAGENIC CHEMICALS - HYPOTHETICAL CHILD RESIDENTS | | |
| **BASED ON:** USEPA, DECEMBER 1989, MARCH 2005 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 3/8/2011 |

**PURPOSE:** To estimate intake, carcinogenic risks for mutagenic chemicals from inhalation of surface soil at Block E.

**EQUATION:**

$$EC = \frac{Ca \times ET \times EF \times ED}{AT \times 24\ hours/day} \times ADAF$$

Where:

| | | |
|---|---|---|
| EC | = | estimated exposure concentration (mg/m3) |
| Ca | = | exposure point concentration in air (mg/m3) |
| | = | Cs x 1/PEF |
| Cs | = | exposure point concentration in soil (mg/kg) |
| PEF | = | particulate emission factor (m3/kg) |
| ET | = | exposure time (hrs/day) |
| EF | = | exposure frequency (days/year) |
| ED | = | exposure duration (years) |
| AT | = | averaging time (days) |
| ADAF | = | age-dependent adjustment factor |
| IUR | = | inhalation unit risk($(ug/mg)^{-1}$) |

**RISKS:**

ILCR = Exposure concentration (mg/m3) x IURi (ug/m3)-1 x 1000 ug/mg

**ASSUMPTIONS:**

| | | | | |
|---|---|---|---|---|
| Cs | = | 1.5 | mg/kg | Chemical: Benzo(a)pyrene |
| PEF | = | 3.23E+09 | m3/kg | |
| Ca | = | 4.64E-10 | mg/m3 | |
| ET | = | 24 | hr/day | |
| EF | = | 350 | days/year | |
| $ED_1$ | = | 2 | years | |
| $ED_2$ | = | 4 | years | |
| ATc | = | 25550 | days | |
| IUR | = | 1.1E-03 | $(ug/m3)^{-1}$ | |
| $ADAF_1$ | = | 10 | | |
| $ADAF_2$ | = | 3 | | |

| | | |
|---|---|---|
| **CLIENT:** LOCKHEED MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MD | | **JOB NUMBER:** 03214 |
| **SUBJECT:** CALCULATION OF INTAKE/RISK FROM INHALATION OF FUGATIVE DUST EMISSIONS FOR MUTAGENIC CHEMICALS - HYPOTHETICAL CHILD RESIDENTS | | |
| **BASED ON:** USEPA, DECEMBER 1989, MARCH 2005 | | |
| **BY:** L. CIOFANI | **CHECKED BY:** | **DATE:** 3/8/2011 |

**EXAMPLE CARCINOGENIC CALCULATION**

$$EC = \frac{4.64E\text{-}10\ mg/m3 \times 24\ hr/day \times 350\ days/year \times 2\ years}{25550\ days \times 24\ hours/day} \times 10$$

EC = 1.27E-10 mg/m3 ✓

$$EC = \frac{4.64E\text{-}10\ mg/m3 \times 24\ hr/day \times 350\ days/year \times 4\ years}{25550\ days \times 24\ hours/day} \times 3$$

EC = 7.63E-11 mg/m3 ✓

ILCR = (1.27E-10 mg/m3 + 7.63E-11 mg/m3) x 1.10E-03 (ug/m3)-1 x 1000 ug/mg

**ILCR = 2.2E-10** ✓

# APPENDIX D-4

# HISTORICAL FILTERED GROUNDWATER SAMPLES

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW35A-072308 | MRC-MW39A-072308 | MRC-MW40A-072208 | MRC-MW30A-072908 | MRC-MW31A-072908 | MRC-MW32A-072808 | MRC-MW34A-072808 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A8G240158005 | A8G240158009 | A8G230110006 | A8G300192019 | A8G300192017 | A8G300192003 | A8G300192005 |
| SAMPLE DATE: | 7/23/2008 | 7/23/2008 | 7/22/2008 | 7/29/2008 | 7/29/2008 | 7/28/2008 | 7/28/2008 |
| LOCATION: | MW35A | MW39A | MW40A | MW30A | MW31A | MW32A | MW34A |
| BLOCK: | D | D | D | E | E | E | E |
| **INORGANICS (ug/L)** | | | | | | | |
| ANTIMONY | 0.72 | 2 U | 2 U | 1.1 | 0.035 U | 0.035 U | 0.035 U |
| ARSENIC | 36 | 1.6 | 0.18 B | 0.97 | 0.6 | 0.32 | 0.13 U |
| BARIUM | 71.6 | 37.9 | 25.4 | 147 | 109 | 31.6 | 49.3 |
| BERYLLIUM | 0.022 B | 0.18 | 4.4 | 0.27 | 8.6 | 1.6 | 0.037 |
| CADMIUM | 1 U | 1 U | 0.04 B | 0.032 B | 0.056 B | 0.029 B | 0.029 B |
| CHROMIUM | 1.5 | 0.15 | 1.5 | 1.6 | 1.1 | 0.069 U | 0.5 |
| COBALT | 3.7 | 5 | 21.2 | 1.9 | 59.2 | 5.6 | 0.77 |
| COPPER | 0.3 | 0.11 B | 7 | 1.8 K | 36.8 | 5.1 | 0.35 B |
| IRON | 76500 | 21300 | 97.7 | 1.1 U | 642 | 63.5 B | 36.1 B |
| LEAD | 0.23 B | 0.021 B | 0.093 B | 0.053 B | 0.79 B | 0.21 B | 0.1 B |
| MANGANESE | 332 | 180 | 37.5 | 9.1 B | 31.2 | 2.8 B | 2.3 B |
| MERCURY | 0.2 U | 0.2 U | 0.2 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| MOLYBDENUM | 0.34 B | 2 U | 2 U | 0.48 B | 0.12 U | 0.12 U | 0.12 U |
| NICKEL | 0.65 | 6.2 | 29.2 | 6.4 | 122 | 8.8 | 0.77 B |
| SELENIUM | 0.52 B | 5 U | 5 U | 1.6 | 0.48 B | 0.24 B | 2.1 |
| SILVER | 1 U | 1 U | 0.008 B | 0.0026 U | 0.009 B | 0.0026 U | 0.0026 U |
| THALLIUM | 1 U | 1 U | 1 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U |
| VANADIUM | 1.8 B | 20 U | 0.56 | 20 | 2.2 | 1.9 | 0.46 U |
| ZINC | 4.2 B | 4.3 B | 63.9 | 29.7 | 128 | 17.9 B | 2.3 B |

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW35A-072308 | MRC-MW39A-072308 | MRC-MW40A-072208 | MRC-MW30A-072908 | MRC-MW31A-072908 | MRC-MW32A-072808 | MRC-MW34A-072808 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A8G240158005 | A8G240158009 | A8G230110006 | A8G300192019 | A8G300192017 | A8G300192003 | A8G300192005 |
| SAMPLE DATE: | 7/23/2008 | 7/23/2008 | 7/22/2008 | 7/29/2008 | 7/29/2008 | 7/28/2008 | 7/28/2008 |
| LOCATION: | MW35A | MW39A | MW40A | MW30A | MW31A | MW32A | MW34A |
| **INORGANICS FILTERED (ug/L)** | | | | | | | |
| ANTIMONY | 0.63 | 2 U | 0.12 B | 1 | 0.035 U | 0.035 U | 0.035 U |
| ARSENIC | 37 | 1.8 | 5 U | 0.99 | 0.68 | 0.24 | 0.13 U |
| BARIUM | 73.9 | 38.3 | 26.3 | 146 | 112 | 31.5 | 49.8 |
| BERYLLIUM | 0.023 B | 0.15 | 4.4 | 0.22 | 8.3 | 1.5 | 0.056 |
| CADMIUM | 1 U | 1 U | 0.059 B | 0.036 B | 0.038 B | 0.017 B | 0.034 B |
| CHROMIUM | 1.5 | 0.2 | 1.4 | 1.5 | 0.92 | 0.069 U | 0.91 |
| COBALT | 3.9 | 5 | 21.7 | 1.8 | 59.1 | 5.7 | 0.74 |
| COPPER | 0.1 B | 2 U | 7.5 | 1.9 K | 36.9 | 5.1 | 0.32 B |
| IRON | 80000 | 20700 | 7.6 B | 1.1 U | 534 | 1.1 U | 1.1 U |
| LEAD | 0.45 B | 0.026 B | 0.12 B | 0.023 B | 0.76 B | 0.18 B | 0.074 B |
| MANGANESE | 303 | 190 | 33.6 | 6.2 B | 30.8 | 2.6 B | 2.2 B |
| MERCURY | 0.2 U | 0.2 U | 0.2 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| MOLYBDENUM | 0.23 B | 0.19 B | 0.16 B | 0.54 B | 0.12 U | 0.12 U | 0.12 U |
| NICKEL | 0.51 | 6.5 | 29 | 6.5 | 123 | 8.6 | 0.91 B |
| SELENIUM | 0.46 B | 5 U | 5 U | 1.5 | 0.55 B | 0.24 B | 2.1 |
| SILVER | 1 U | 1 U | 0.046 B | 0.0026 U | 0.0026 U | 0.0026 U | 0.0026 U |
| THALLIUM | 1 U | 1 U | 0.27 B | 0.11 U | 0.11 U | 0.11 U | 0.11 U |
| VANADIUM | 1.5 B | 20 U | 20 U | 19.6 | 2 | 1.3 | 0.46 U |
| ZINC | 3.3 B | 4.8 B | 62.1 | 31.2 | 127 | 17.8 B | 2.7 B |

Only samples from Blocks D, E, F, G, and H are presented.

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW34B-073108 | MRC-MW34C-073108 | MRC-MW36A-073108 | MRC-MW43A-073108 | MRC-MW44A-073108 | MRC-MW62A-073108 | MRC-MW62C-073108 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A8H010122003 | A8H010122006 | A8H010122007 | A8H010122012 | A8H010122009 | A8H010122010 | A8H010122013 |
| SAMPLE DATE: | 7/31/2008 | 7/31/2008 | 7/31/2008 | 7/31/2008 | 7/31/2008 | 7/31/2008 | 7/31/2008 |
| LOCATION: | MW34B | MW34C | MW36A | MW43A | MW44A | MW62A | MW62C |
| BLOCK: | E | E | E | E | E | E | E |
| **INORGANICS (ug/L)** | | | | | | | |
| ANTIMONY | 0.077 B | 0.11 B | 0.059 B | 0.19 B | 0.07 B | 0.048 B | 0.13 B |
| ARSENIC | 0.67 B | 0.87 B | 0.47 B | 0.53 B | 3.2 K | 1.4 K | 1.2 K |
| BARIUM | 148 | 17.4 | 25.8 | 28 | 91.4 | 22.2 | 144 |
| BERYLLIUM | 10.4 | 0.045 B | 2.6 | 1.4 B | 0.061 B | 5.8 | 0.095 B |
| CADMIUM | 0.46 B | 0.017 B | 0.072 B | 0.086 B | 0.009 B | 0.037 B | 0.045 B |
| CHROMIUM | 0.34 B | 0.8 B | 1.4 B | 0.76 B | 1.5 B | 0.28 B | 4.7 |
| COBALT | 128 | 0.34 B | 30.4 | 32.4 | 1 | 12.8 | 30.1 |
| COPPER | 39.6 | 0.41 B | 2.8 B | 0.27 B | 0.35 B | 0.6 B | 0.77 B |
| IRON | 128 B | 306 | 1180 | 5180 | 36800 | 718 | 22900 |
| LEAD | 0.13 B | 0.21 B | 0.49 B | 0.22 B | 0.23 B | 0.2 B | 0.67 B |
| MANGANESE | 473 | 11.3 | 43.4 | 722 | 449 | 157 | 1280 |
| MERCURY | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| MOLYBDENUM | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.14 B | 0.12 U | 0.12 U |
| NICKEL | 172 | 1.4 B | 41.5 | 31.4 | 0.79 B | 82.5 | 49.8 |
| SELENIUM | 1.1 | 0.14 U | 0.3 B | 0.3 B | 0.2 B | 0.14 U | 0.14 U |
| SILVER | 0.025 B | 0.0026 U | 0.0026 U | 0.059 B | 0.005 B | 0.012 B | 0.021 B |
| THALLIUM | 0.38 B | 0.11 U | 0.11 U | 0.17 B | 0.11 U | 0.11 U | 0.16 B |
| VANADIUM | 1.3 | 12 | 2.7 | 0.68 | 0.79 | 0.46 U | 0.46 U |
| ZINC | 338 | 3.6 B | 73.6 | 47.9 | 83.2 | 65.6 | 22.4 B |

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW34B-073108 | MRC-MW34C-073108 | MRC-MW36A-073108 | MRC-MW43A-073108 | MRC-MW44A-073108 | MRC-MW62A-073108 | MRC-MW62C-073108 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A8H010122003 | A8H010122006 | A8H010122007 | A8H010122012 | A8H010122009 | A8H010122010 | A8H010122013 |
| SAMPLE DATE: | 7/31/2008 | 7/31/2008 | 7/31/2008 | 7/31/2008 | 7/31/2008 | 7/31/2008 | 7/31/2008 |
| LOCATION: | MW34B | MW34C | MW36A | MW43A | MW44A | MW62A | MW62C |
| **INORGANICS FILTERED (ug/L)** | | | | | | | |
| ANTIMONY | 0.068 B | 0.094 B | 0.055 B | 0.13 B | 0.041 B | 0.036 B | 0.12 B |
| ARSENIC | 0.72 B | 0.88 B | 0.44 B | 0.64 B | 3.2 B | 1.4 B | 0.58 B |
| BARIUM | 149 | 16.7 | 25.4 | 28.5 | 88 | 21.8 | 89.8 |
| BERYLLIUM | 10.9 | 0.014 B | 2.8 | 1.3 B | 0.053 B | 5.5 | 0.025 B |
| CADMIUM | 0.45 B | 0.0061 U | 0.093 B | 0.062 B | 0.0061 UL | 0.039 B | 0.02 B |
| CHROMIUM | 0.27 B | 0.25 B | 0.36 B | 0.47 B | 1.2 B | 0.41 B | 0.14 B |
| COBALT | 124 | 0.13 B | 33.6 | 33 | 1 | 12.4 | 14.5 |
| COPPER | 39 | 0.051 U | 2 K | 0.36 B | 0.11 B | 0.13 B | 0.051 U |
| IRON | 81.6 B | 1.1 U | 13.6 B | 3730 | 36600 | 684 | 10700 |
| LEAD | 0.11 B | 0.071 B | 0.22 B | 0.087 B | 0.12 B | 0.1 B | 0.066 B |
| MANGANESE | 452 | 9.7 | 49.3 | 762 | 426 | 153 | 674 |
| MERCURY | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| MOLYBDENUM | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.12 U |
| NICKEL | 168 | 0.64 B | 47 | 30.8 | 0.78 B | 81.6 | 23.8 |
| SELENIUM | 0.87 B | 0.19 B | 0.24 B | 0.16 B | 0.17 B | 0.14 U | 0.14 U |
| SILVER | 0.003 B | 0.0026 U | 0.0026 U | 0.015 B | 0.0026 U | 0.0026 U | 0.019 B |
| THALLIUM | 0.36 B | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U |
| VANADIUM | 1.4 | 10 | 0.69 | 1 | 0.58 | 0.5 | 0.46 U |
| ZINC | 340 | 1.9 B | 79.2 | 46.8 | 21.4 B | 65 | 4.8 B |

Only samples from Blocks D, E, F, G, and H are pre

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW72A-073008 | MRC-MW72B-073008 | MRC-MW73A-073008 | MRC-MW73B-073108 | MRC-MW74A-073008 | MRC-MW74B-073108 | MRC-MW45A-072108 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A8G310150002 | A8G310150005 | A8G310150007 | A8H010122004 | A8G310150004 | A8H010122011 | A8G220182009 |
| SAMPLE DATE: | 7/30/2008 | 7/30/2008 | 7/30/2008 | 7/31/2008 | 7/30/2008 | 7/31/2008 | 7/21/2008 |
| LOCATION: | MW72A | MW72B | MW73A | MW73B | MW74A | MW74B | MW45A |
| BLOCK: | E | E | E | E | E | E | F |
| **INORGANICS (ug/L)** | | | | | | | |
| ANTIMONY | 2 U | 2 U | 2 U | 0.07 B | 2 U | 0.043 B | 0.25 B |
| ARSENIC | 0.3 | 5 U | 0.35 | 0.4 B | 0.71 | 0.46 B | 0.6 |
| BARIUM | 56.9 | 11.4 | 32.6 | 26.4 | 46.3 | 38.2 | 21.2 |
| BERYLLIUM | 0.02 B | 0.62 | 2 | 1.9 | 1.4 | 0.47 B | 0.45 |
| CADMIUM | 0.02 B | 0.012 B | 0.35 | 0.088 B | 0.12 B | 0.14 B | 0.091 B |
| CHROMIUM | 0.27 B | 0.25 B | 2.2 | 0.62 B | 0.34 B | 0.34 B | 3.2 |
| COBALT | 1.4 | 8.9 | 17.2 | 17.2 | 31.8 | 53.7 | 2.4 |
| COPPER | 0.56 B | 1.5 B | 3.7 B | 4.7 | 5.9 | 0.67 B | 10.4 |
| IRON | 218 | 19.3 B | 3170 | 174 | 231 | 195 | 2420 |
| LEAD | 0.14 B | 1 U | 0.6 B | 0.19 B | 0.098 B | 0.19 B | 4.9 |
| MANGANESE | 37.1 | 64.2 | 114 | 91 | 1030 | 667 | 73 |
| MERCURY | 0.2 U | 0.2 U | 0.2 U | 0.1 U | 0.2 U | 0.1 U | 0.2 U |
| MOLYBDENUM | 2 U | 2 U | 2 U | 0.12 U | 2 U | 0.12 U | 0.21 B |
| NICKEL | 2.7 L | 10.1 L | 42.9 L | 19.4 | 10.5 L | 29.2 | 33 |
| SELENIUM | 0.5 B | 5 U | 0.35 B | 0.33 B | 0.76 B | 0.14 U | 0.51 B |
| SILVER | 1 U | 1 U | 1 U | 0.0026 U | 1 U | 0.0026 U | 0.033 B |
| THALLIUM | 1 U | 1 U | 1 U | 0.15 B | 1 U | 0.11 U | 1 U |
| VANADIUM | 20 U | 20 U | 3.1 | 0.57 | 20 U | 1 | 4.3 |
| ZINC | 8.4 B | 20.2 B | 64.6 | 45.1 | 41.5 | 626 | 7560 |

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW72A-073008 | MRC-MW72B-073008 | MRC-MW73A-073008 | MRC-MW73B-073108 | MRC-MW74A-073008 | MRC-MW74B-073108 | MRC-MW45A-072108 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A8G310150002 | A8G310150005 | A8G310150007 | A8H010122004 | A8G310150004 | A8H010122011 | A8G220182009 |
| SAMPLE DATE: | 7/30/2008 | 7/30/2008 | 7/30/2008 | 7/31/2008 | 7/30/2008 | 7/31/2008 | 7/21/2008 |
| LOCATION: | MW72A | MW72B | MW73A | MW73B | MW74A | MW74B | MW45A |
| **INORGANICS FILTERED (ug/L)** | | | | | | | |
| ANTIMONY | 2 U | 2 U | 2 U | 0.053 B | 2 U | 0.035 U | 0.17 B |
| ARSENIC | 0.2 | 0.18 | 0.27 | 0.41 B | 0.89 | 0.42 B | 0.36 |
| BARIUM | 57 | 12 | 35.9 | 25.8 | 45.4 | 39.1 | 15.2 |
| BERYLLIUM | 0.017 B | 0.6 B | 2 | 1.8 | 1.4 | 0.45 B | 0.031 B |
| CADMIUM | 0.01 B | 0.014 B | 0.35 | 0.061 B | 0.1 B | 0.11 B | 0.12 B |
| CHROMIUM | 0.087 B | 0.42 B | 0.24 B | 0.34 B | 0.47 B | 0.38 B | 0.56 B |
| COBALT | 1.3 | 8.8 | 19.5 | 16.3 | 30.3 | 54 | 1.8 |
| COPPER | 0.41 B | 1.6 B | 2.3 B | 4.3 | 5.5 | 0.7 B | 4.5 |
| IRON | 146 | 50 U | 367 | 14.6 B | 332 | 47.5 B | 49.5 B |
| LEAD | 0.054 B | 1 U | 1 U | 0.12 B | 0.1 B | 0.099 B | 0.18 B |
| MANGANESE | 36.4 | 62.5 | 121 | 88.4 | 1040 | 689 | 60.6 |
| MERCURY | 0.2 U | 0.2 U | 0.2 U | 0.1 U | 0.2 U | 0.1 U | 0.2 U |
| MOLYBDENUM | 2 U | 2 U | 2 U | 0.12 U | 2 U | 0.12 U | 0.14 B |
| NICKEL | 2.5 | 9.9 | 48.2 | 18.6 | 9.8 | 29.6 | 32.9 |
| SELENIUM | 0.33 B | 5 U | 0.61 B | 0.32 B | 0.78 B | 0.18 B | 0.37 B |
| SILVER | 1 U | 1 U | 1 U | 0.0026 U | 1 U | 0.0026 U | 1 U |
| THALLIUM | 1 U | 1 U | 1 U | 0.11 U | 1 U | 0.11 U | 1 U |
| VANADIUM | 0.55 | 0.67 | 20 U | 0.46 U | 0.88 | 0.63 | 0.89 B |
| ZINC | 6.9 B | 23.8 B | 69.8 | 38.2 | 38.8 | 648 | 7640 |

Only samples from Blocks D, E, F, G, and H are pre

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW46a-071708 | MRC-MW47A-071808 | MRC-MW65A-071708 | MRC-MW66A-071708 | MRC-MW09A-071508 | MRC-MW10A-071508 | MRC-MW11A-071508 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A8G180185002 | A8G190121003 | A8G180185005 | A8G180185006 | A8G160196008 | A8G160196012 | A8G170178003 |
| SAMPLE DATE: | 7/17/2008 | 7/18/2008 | 7/17/2008 | 7/17/2008 | 7/15/2008 | 7/15/2008 | 7/15/2008 |
| LOCATION: | MW46A | MW47A | MW65A | MW66A | MW09A | MW10A | MW11A |
| BLOCK: | F | F | F | F | G | G | G |
| **INORGANICS (ug/L)** | | | | | | | |
| ANTIMONY | 2.7 | 0.3 B | 0.16 B | 0.035 U | 0.56 | 0.2 B | 0.12 B |
| ARSENIC | 1.4 | 13.6 | 0.34 | 0.73 | 2.5 | 4.2 | 1.1 K |
| BARIUM | 79.6 | 216 | 21.2 | 85.2 | 88.7 | 157 | 38.7 |
| BERYLLIUM | 4.2 | 0.54 | 0.041 B | 0.25 K | 0.12 B | 1.3 | 0.013 B |
| CADMIUM | 0.22 K | 0.042 B | 0.013 B | 0.064 B | 0.12 B | 0.085 B | 0.04 B |
| CHROMIUM | 0.97 B | 9.1 | 0.33 B | 0.069 U | 3.6 | 11.8 | 0.069 U |
| COBALT | 24.8 | 5 | 1 | 6.4 | 0.57 | 142 | 88.6 |
| COPPER | 10.9 | 6.2 | 0.39 B | 0.48 B | 2.1 B | 8.3 | 0.21 B |
| IRON | 404 | 74200 | 65.3 B | 8.7 B | 9720 | 70200 | 82900 |
| LEAD | 0.86 | 8.1 | 0.049 B | 0.071 B | 1 B | 6.8 | 0.071 B |
| MANGANESE | 276 | 534 | 3.2 | 90.7 | 891 | 8120 | 7180 |
| MERCURY | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.11 B |
| MOLYBDENUM | 0.92 | 1.1 K | 0.12 U | 0.12 U | 0.59 | 0.22 | 0.12 U |
| NICKEL | 30.5 | 6.8 K | 0.88 K | 1.9 K | 1.6 | 79.5 | 30.2 K |
| SELENIUM | 0.3 B | 0.91 | 0.29 B | 2.2 L | 0.6 | 0.79 | 0.14 U |
| SILVER | 0.017 B | 0.065 B | 0.0026 U | 0.017 B | 0.0026 U | 0.011 B | 0.009 B |
| THALLIUM | 0.11 U | 0.12 B | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U |
| VANADIUM | 2.8 B | 15 | 0.66 B | 0.46 U | 3.5 | 17.6 | 0.46 UL |
| ZINC | 1160 | 58.8 K | 3.6 B | 4.6 B | 12.6 B | 97.4 | 75.7 |

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW46a-071708 | MRC-MW47A-071808 | MRC-MW65A-071708 | MRC-MW66A-071708 | MRC-MW09A-071508 | MRC-MW10A-071508 | MRC-MW11A-071508 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A8G180185002 | A8G190121003 | A8G180185005 | A8G180185006 | A8G160196008 | A8G160196012 | A8G170178003 |
| SAMPLE DATE: | 7/17/2008 | 7/18/2008 | 7/17/2008 | 7/17/2008 | 7/15/2008 | 7/15/2008 | 7/15/2008 |
| LOCATION: | MW46A | MW47A | MW65A | MW66A | MW09A | MW10A | MW11A |
| **INORGANICS FILTERED (ug/L)** | | | | | | | |
| ANTIMONY | 2.7 | 0.14 B | 0.051 B | 0.035 U | 0.58 | 0.035 U | 0.061 B |
| ARSENIC | 1.2 | 9.7 | 0.4 | 0.8 | 2.5 | 1.7 K | 1.1 K |
| BARIUM | 80 | 180 | 20.8 | 88.4 | 94.6 | 146 | 40.1 |
| BERYLLIUM | 3.7 | 0.087 B | 0.036 B | 0.23 K | 0.017 B | 0.088 B | 0.013 B |
| CADMIUM | 0.3 K | 0.013 B | 0.022 B | 0.025 B | 0.0061 U | 0.0061 U | 0.048 B |
| CHROMIUM | 0.2 B | 0.64 B | 0.2 B | 0.069 U | 0.54 | 0.069 U | 0.069 U |
| COBALT | 24.2 | 2.7 | 0.91 | 6.7 | 0.21 B | 152 | 95.4 |
| COPPER | 10.3 | 0.098 K | 0.43 B | 0.49 B | 0.31 B | 0.051 U | 0.1 B |
| IRON | 5 B | 63600 | 1.1 U | 53.5 B | 9230 | 59200 | 83300 |
| LEAD | 0.29 | 0.033 B | 0.018 U | 0.052 B | 0.039 B | 0.052 B | 0.018 U |
| MANGANESE | 286 | 495 | 2.5 B | 95.2 | 970 | 8890 | 7400 |
| MERCURY | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.16 B |
| MOLYBDENUM | 0.77 | 0.65 B | 0.12 U | 0.12 U | 0.64 | 0.12 U | 0.12 U |
| NICKEL | 28.8 | 0.95 K | 1 K | 1.9 K | 0.74 B | 83.6 | 33 K |
| SELENIUM | 0.14 B | 0.64 | 0.25 B | 2.4 K | 0.35 | 0.14 U | 0.14 U |
| SILVER | 0.0026 U | 0.014 B | 0.0026 U | 0.016 B | 0.0026 U | 0.0026 U | 0.0026 U |
| THALLIUM | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U |
| VANADIUM | 2.3 B | 1.4 B | 0.46 U | 0.53 B | 1.5 | 0.46 U | 0.46 UL |
| ZINC | 1160 | 2.7 K | 8.3 K | 4.4 K | 2 B | 27.6 | 68.9 |

Only samples from Blocks D, E, F, G, and H are pre

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW11C-072508 | MRC-MW12A-071808 | MRC-MW12b-071708 | MRC-MW12C-072408 | MRC-MW13A-071808 | MRC-MW14A-071608 | MRC-MW14B-071608 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A8G260121003 | A8G190121002 | A8G180185007 | A8G250140010 | A8G190121005 | A8G170178006 | A8G170178007 |
| SAMPLE DATE: | 7/25/2008 | 7/18/2008 | 7/17/2008 | 7/24/2008 | 7/18/2008 | 7/16/2008 | 7/16/2008 |
| LOCATION: | MW11C | MW12A | MW12b | MW12C | MW13A | MW14A | MW14B |
| BLOCK: | G | G | G | G | G | G | G |
| **INORGANICS (ug/L)** | | | | | | | |
| ANTIMONY | 0.2 J | 0.29 B | 1.7 B | 0.042 B | 0.035 U | 0.058 B | 0.17 B |
| ARSENIC | 1.5 | 0.78 K | 35 | 0.2 B | 1.4 | 2.1 K | 7.6 K |
| BARIUM | 45.9 | 90.8 | 357 | 16.6 | 140 | 77 | 27.8 K |
| BERYLLIUM | 1.2 | 0.13 B | 12.1 | 0.39 | 0.029 B | 0.079 B | 263 L |
| CADMIUM | 0.11 B | 0.016 B | 0.3 J | 0.024 B | 0.0061 U | 0.024 B | 0.78 |
| CHROMIUM | 7.6 | 0.53 K | 151 | 3.2 | 0.16 B | 0.94 K | 298 |
| COBALT | 23.6 | 41.7 | 96.2 | 6.3 | 0.58 | 75.6 | 926 |
| COPPER | 14.5 | 0.82 K | 111 | 4.4 | 0.059 B | 0.61 B | 2850 |
| IRON | 6120 | 36300 | 162000 | 2270 | 1950 | 64900 | 270000 |
| LEAD | 7.9 | 0.36 K | 94.4 | 1.4 | 0.033 B | 0.38 B | 22.1 |
| MANGANESE | 120 | 2320 | 2850 | 46.2 | 1560 | 3300 | 17800 |
| MERCURY | 0.2 U | 0.1 U | 4.6 | 0.2 U | 0.1 U | 0.1 U | 0.14 B |
| MOLYBDENUM | 0.12 B | 0.31 B | 2.5 K | 2 U | 0.15 B | 0.12 U | 1.7 |
| NICKEL | 31.4 L | 70.3 | 233 | 10.1 | 0.76 | 73.5 | 1700 |
| SELENIUM | 0.42 B | 0.14 UL | 5.7 L | 5 U | 0.14 U | 0.14 U | 12 |
| SILVER | 0.038 B | 0.0026 U | 0.3 B | 1 U | 0.0026 U | 0.0026 U | 1.1 K |
| THALLIUM | 0.14 B | 0.17 B | 0.83 B | 1 U | 0.11 U | 0.11 U | 1.4 |
| VANADIUM | 9.1 | 1.7 B | 218 | 4.3 | 0.46 U | 0.46 UL | 75.2 L |
| ZINC | 79 | 69.8 K | 618 | 26.2 B | 3.9 K | 43.6 | 4900 |

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW11C-072508 | MRC-MW12A-071808 | MRC-MW12b-071708 | MRC-MW12C-072408 | MRC-MW13A-071808 | MRC-MW14A-071608 | MRC-MW14B-071608 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A8G260121003 | A8G190121002 | A8G180185007 | A8G250140010 | A8G190121005 | A8G170178006 | A8G170178007 |
| SAMPLE DATE: | 7/25/2008 | 7/18/2008 | 7/17/2008 | 7/24/2008 | 7/18/2008 | 7/16/2008 | 7/16/2008 |
| LOCATION: | MW11C | MW12A | MW12b | MW12C | MW13A | MW14A | MW14B |
| **INORGANICS FILTERED (ug/L)** | | | | | | | |
| ANTIMONY | 0.06 B | 0.11 B | 0.058 B | 2 U | 0.035 U | 0.04 B | 0.054 B |
| ARSENIC | 5 U | 1.1 K | 1.8 | 5 U | 1.3 | 1.9 K | 5.4 K |
| BARIUM | 9.3 | 61 | 84.9 | 5.8 | 142 | 81.7 | 8.2 K |
| BERYLLIUM | 0.2 B | 0.11 B | 0.18 K | 0.16 | 0.04 B | 0.031 B | 290 L |
| CADMIUM | 0.047 B | 0.029 B | 0.027 B | 0.019 B | 0.0061 U | 0.021 B | 0.77 |
| CHROMIUM | 0.91 B | 0.21 B | 1.2 B | 2 U | 0.069 U | 0.069 U | 308 |
| COBALT | 8 | 43.7 | 29 | 5.2 | 0.56 | 63.6 | 1020 |
| COPPER | 2.4 B | 0.13 K | 1 | 1.2 B | 0.12 B | 0.053 B | 3160 |
| IRON | 527 | 30900 | 19700 | 10.6 B | 1840 | 67700 | 286000 |
| LEAD | 0.86 | 0.083 B | 0.75 | 0.11 B | 0.018 U | 0.026 B | 18.8 |
| MANGANESE | 40.5 | 2190 | 2340 | 30.8 | 1620 | 3070 | 20500 |
| MERCURY | 0.2 U | 0.1 U | 0.14 | 0.2 U | 0.1 U | 0.18 B | 0.1 U |
| MOLYBDENUM | 2 U | 0.2 B | 0.12 U | 2 U | 0.18 B | 0.12 U | 0.74 |
| NICKEL | 10.6 | 94.4 | 61.5 | 8 | 0.87 | 61.9 | 1880 |
| SELENIUM | 5 U | 0.14 U | 0.14 UL | 5 U | 0.14 U | 0.14 U | 12.3 |
| SILVER | 0.004 B | 0.018 B | 0.0026 U | 1 U | 0.0026 U | 0.0026 U | 1.3 K |
| THALLIUM | 1 U | 0.15 B | 0.11 U | 1 U | 0.11 U | 0.11 U | 0.65 B |
| VANADIUM | 0.91 | 0.46 U | 2.2 B | 20 U | 0.46 U | 0.46 UL | 51.6 L |
| ZINC | 26 B | 92 | 109 | 19.2 B | 4.3 K | 31.4 K | 11700 |

Only samples from Blocks D, E, F, G, and H are pre

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW14C-072408 | MRC-MW15A-071508 | MRC-MW16A-071508 | MRC-MW54A-071408 | MRC-MW63A-071608 | MRC-MW70A-080108 | MRC-MW70B-080108 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A8G250140005 | A8G170178002 | A8G160196010 | A8G160196007 | A8G170178010 | A8H020123003 | A8H020123004 |
| SAMPLE DATE: | 7/24/2008 | 7/15/2008 | 7/15/2008 | 7/15/2008 | 7/16/2008 | 8/1/2008 | 8/1/2008 |
| LOCATION: | MW14C | MW15A | MW16A | MW54A | MW63A | MW70A | MW70B |
| BLOCK: | G | G | G | G | G | G | G |
| **INORGANICS (ug/L)** | | | | | | | |
| ANTIMONY | 0.13 B | 0.12 B | 0.089 B | 0.063 B | 0.062 B | 0.14 B | 0.1 B |
| ARSENIC | 1.4 | 1.7 | 0.39 | 0.13 U | 0.13 U | 4.2 K | 1.5 K |
| BARIUM | 52.7 | 102 | 295 | 24 | 137 | 113 | 288 |
| BERYLLIUM | 0.16 | 0.53 L | 7.5 | 0.31 | 0.26 L | 1 | 0.048 B |
| CADMIUM | 0.039 B | 0.12 B | 1.8 | 0.01 B | 0.15 B | 0.058 B | 0.01 B |
| CHROMIUM | 3.2 | 0.069 U | 1.5 | 0.18 | 0.39 K | 5.9 K | 1.9 |
| COBALT | 10.4 | 66.6 | 222 | 0.4 B | 187 | 58.1 | 0.25 B |
| COPPER | 4.8 | 0.4 B | 6.8 | 0.23 B | 0.33 B | 6 | 0.5 B |
| IRON | 17100 | 11700 | 2220 | 268 | 15800 | 63800 | 595 |
| LEAD | 1.7 | 0.48 B | 1 B | 0.16 B | 0.018 U | 2.5 | 0.44 B |
| MANGANESE | 1170 | 5640 | 4360 | 49.9 | 1040 | 2570 | 10.9 |
| MERCURY | 0.2 U | 0.1 U | 0.1 U | 0.2 | 0.1 U | 0.1 U | 0.1 U |
| MOLYBDENUM | 0.24 | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 1.1 B |
| NICKEL | 17.9 | 18 | 266 | 2.5 | 276 | 69.2 | 2.3 K |
| SELENIUM | 5 U | 0.73 | 0.27 | 0.14 U | 0.14 U | 0.57 B | 0.14 U |
| SILVER | 0.009 B | 0.0026 U | 0.021 B | 0.0026 U | 0.0026 U | 0.025 B | 0.0026 U |
| THALLIUM | 1 U | 0.42 B | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U |
| VANADIUM | 4 B | 0.46 UL | 1.6 | 0.46 U | 0.46 U | 11.2 | 2.6 |
| ZINC | 23.2 B | 13.4 K | 439 | 3.6 B | 153 | 72.2 | 90.4 |

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW14C-072408 | MRC-MW15A-071508 | MRC-MW16A-071508 | MRC-MW54A-071408 | MRC-MW63A-071608 | MRC-MW70A-080108 | MRC-MW70B-080108 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A8G250140005 | A8G170178002 | A8G160196010 | A8G160196007 | A8G170178010 | A8H020123003 | A8H020123004 |
| SAMPLE DATE: | 7/24/2008 | 7/15/2008 | 7/15/2008 | 7/15/2008 | 7/16/2008 | 8/1/2008 | 8/1/2008 |
| LOCATION: | MW14C | MW15A | MW16A | MW54A | MW63A | MW70A | MW70B |
| **INORGANICS FILTERED (ug/L)** | | | | | | | |
| ANTIMONY | 0.057 B | 0.055 B | 0.04 B | 0.048 B | 0.068 B | 0.06 B | 0.13 B |
| ARSENIC | 0.98 | 1.1 K | 0.21 | 0.13 U | 0.13 U | 3.2 K | 1.5 |
| BARIUM | 52.6 | 99.4 | 333 | 24.4 | 138 | 129 | 277 |
| BERYLLIUM | 1 U | 0.47 L | 8.1 | 0.28 | 0.24 L | 0.56 | 0.016 B |
| CADMIUM | 1 U | 0.061 B | 1.9 | 0.008 B | 0.16 B | 0.0061 UL | 0.0061 U |
| CHROMIUM | 2 U | 0.069 U | 0.32 | 0.069 U | 0.069 U | 0.14 B | 0.29 B |
| COBALT | 8.4 | 66.7 | 261 | 0.25 B | 188 | 66.1 | 0.057 B |
| COPPER | 0.085 B | 0.45 B | 6 | 0.18 B | 0.32 B | 0.13 B | 0.17 B |
| IRON | 17000 | 11500 | 1620 | 1.1 U | 15700 | 69900 | 11 B |
| LEAD | 0.098 B | 0.19 B | 0.72 B | 0.071 B | 0.018 U | 0.11 B | 0.11 B |
| MANGANESE | 1290 | 5680 | 4940 | 47.1 | 991 | 2940 | 1.1 K |
| MERCURY | 0.2 U | 0.14 B | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| MOLYBDENUM | 0.27 | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 1.1 B |
| NICKEL | 13.6 | 17.8 | 304 | 2.6 | 274 | 75.4 | 2 K |
| SELENIUM | 5 U | 0.62 | 0.31 | 0.14 U | 0.14 U | 0.2 B | 0.14 U |
| SILVER | 1 U | 0.0026 U | 0.0026 U | 0.0026 U | 0.0026 U | 0.0026 U | 0.0026 U |
| THALLIUM | 1 U | 0.31 B | 0.11 U | 0.11 U | 0.11 U | 0.11 U | 0.11 U |
| VANADIUM | 20 U | 0.46 UL | 0.46 U | 0.46 U | 0.46 U | 0.46 U | 0.56 |
| ZINC | 5.1 B | 11.6 K | 487 | 4.3 B | 144 | 32.5 | 16.4 B |

Only samples from Blocks D, E, F, G, and H are pre

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW71A-071608 | MRC-MW71B-071608 | MRC-MW08A-071408 | MRC-MW51A-071408 | MRC-MW52A-071408 | MRC-MW53A-071408 |
|---|---|---|---|---|---|---|
| LABORATORY ID: | A8G170178008 | A8G170178004 | A8G160196003 | A8G160196006 | A8G160196004 | A8G160196002 |
| SAMPLE DATE: | 7/16/2008 | 7/16/2008 | 7/14/2008 | 7/14/2008 | 7/14/2008 | 7/14/2008 |
| LOCATION: | MW71A | MW71B | MW08A | MW51A | MW52A | MW53A |
| BLOCK: | G | G | H | H | H | H |
| **INORGANICS (ug/L)** | | | | | | |
| ANTIMONY | 0.07 | 0.035 U | 0.054 B | 0.051 B | 0.088 B | 0.035 U |
| ARSENIC | 0.59 | 0.13 U | 0.58 J | 0.45 K | 3.5 | 0.14 L |
| BARIUM | 40.5 | 63.4 | 144 | 91.3 | 978 | 222 |
| BERYLLIUM | 83.1 J | 0.042 B | 0.45 | 35.9 | 80.5 | 10.2 |
| CADMIUM | 4.8 | 0.012 B | 0.073 B | 0.56 | 3.7 | 0.42 |
| CHROMIUM | 3.9 | 0.22 K | 0.72 K | 0.48 K | 0.2 K | 0.73 |
| COBALT | 83.1 | 63.8 | 135 | 444 | 2270 | 114 |
| COPPER | 7 | 0.28 B | 0.85 B | 16.2 | 174 | 11.6 |
| IRON | 5010 | 47800 | 34800 L | 10700 | 20900 | 104 |
| LEAD | 2.1 | 0.077 B | 0.46 B | 1.5 | 4.4 | 0.36 B |
| MANGANESE | 2000 | 3250 | 34700 | 573 | 34400 | 740 |
| MERCURY | 0.28 B | 0.15 B | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| MOLYBDENUM | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.12 U |
| NICKEL | 183 | 79.9 | 249 | 825 | 1700 | 171 |
| SELENIUM | 1.1 | 0.14 U | 0.14 U | 0.65 | 6 | 0.16 |
| SILVER | 0.02 B | 0.0026 U | 0.0026 U | 0.008 B | 0.38 K | 0.009 B |
| THALLIUM | 0.11 U | 0.11 U | 0.11 B | 0.12 B | 1.6 | 0.12 B |
| VANADIUM | 4.3 L | 0.46 UL | 0.46 UL | 0.46 U | 0.87 | 0.46 UL |
| ZINC | 232 | 111 | 108 | 970 | 2920 | 281 |

**TABLE D-1**
**ANALYTICAL RESULTS FOR GROUNDWATER SAMPLES, JULY-AUGUST 2008**
**LOCKHEED MARTIN MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| SAMPLE ID: | MRC-MW71A-071608 | MRC-MW71B-071608 | MRC-MW08A-071408 | MRC-MW51A-071408 | MRC-MW52A-071408 | MRC-MW53A-071408 |
|---|---|---|---|---|---|---|
| LABORATORY ID: | A8G170178008 | A8G170178004 | A8G160196003 | A8G160196006 | A8G160196004 | A8G160196002 |
| SAMPLE DATE: | 7/16/2008 | 7/16/2008 | 7/14/2008 | 7/14/2008 | 7/14/2008 | 7/14/2008 |
| LOCATION: | MW71A | MW71B | MW08A | MW51A | MW52A | MW53A |
| **INORGANICS FILTERED (ug/L)** | | | | | | |
| ANTIMONY | 0.1 B | 0.035 U | 0.035 U | 0.051 B | 0.053 B | 0.035 U |
| ARSENIC | 0.36 | 0.13 U | 0.45 J | 0.46 K | 3.5 | 0.21 L |
| BARIUM | 42.3 | 64.7 | 143 | 96 | 950 | 230 |
| BERYLLIUM | 14.1 L | 0.031 B | 0.42 | 35.9 | 77.8 | 10.3 |
| CADMIUM | 4.4 | 0.014 B | 0.087 B | 0.52 | 3.4 | 0.44 |
| CHROMIUM | 0.18 | 0.069 U | 0.069 U | 0.26 K | 0.11 K | 0.75 |
| COBALT | 104 | 64 | 138 | 455 | 2220 | 114 |
| COPPER | 3.6 | 0.2 B | 0.083 B | 13.7 | 173 | 11 |
| IRON | 918 | 48400 | 33400 | 10400 | 20900 | 61.4 |
| LEAD | 0.67 B | 0.018 B | 0.026 B | 1.5 | 4.2 | 0.34 B |
| MANGANESE | 2270 | 3270 | 36400 | 585 | 33200 | 756 |
| MERCURY | 0.13 B | 0.14 B | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| MOLYBDENUM | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.12 U |
| NICKEL | 218 | 79.9 | 254 | 851 | 1660 | 170 |
| SELENIUM | 0.6 | 0.14 U | 0.21 | 0.64 | 7 | 0.27 |
| SILVER | 0.02 B | 0.0026 U | 0.0026 U | 0.0026 U | 0.24 B | 0.0026 U |
| THALLIUM | 0.21 B | 0.11 U | 0.11 U | 0.17 B | 1.4 | 0.14 B |
| VANADIUM | 0.46 UL | 0.46 UL | 0.46 UL | 0.46 U | 0.47 | 0.46 UL |
| ZINC | 240 | 114 | 110 | 984 | 2880 | 279 |

Only samples from Blocks D, E, F, G, and H are pre

**Table D-2**

**Analytical Chemical Results for Groundwater Samples, July-August 2009**
**Lockheed Martin Middle River Complex, Middle River, Maryland**


| SAMPLE ID: | MRC-MW30A-080409 | MRC-MW34A-082509 | MRC-MW34B-082509 | MRC-MW36A-082609 | MRC-MW43A-082109 | MRC-MW44A-080509 | MRC-MW72B-080709 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A9H050300007 | A9H260250003 | A9H260250002 | A9H270200003 | A9H220139007 | A9H070192003 | A9H080141004 |
| SAMPLE DATE: | 8/4/2009 | 8/25/2009 | 8/25/2009 | 8/26/2009 | 8/21/2009 | 8/5/2009 | 8/7/2009 |
| LOCATION: | MRC-MW30A | MRC-MW34A | MRC-MW34B | MRC-MW36A | MRC-MW43A | MRC-MW44A | MRC-MW72B |
| BLOCK: | E | E | E | E | E | E | E |
| **INORGANICS (ug/L)** | | | | | | | |
| ANTIMONY | 0.23 B | 0.055 U | 0.055 U | 0.088 B | 0.055 U | 0.15 | 0.055 U |
| ARSENIC | 0.35 K | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 1.1 K | 0.21 U |
| BARIUM | 129 | 41.5 | 145 | 33.5 | 31.3 | 133 | 13.5 |
| BERYLLIUM | 0.56 K | 0.048 B | 9.9 | 3.6 | 0.7 | 0.047 | 0.72 |
| CADMIUM | 0.15 B | 0.027 U | 0.42 B | 0.08 B | 0.065 B | 0.027 B | 0.027 U |
| CHROMIUM | 0.26 B | 0.91 B | 0.89 B | 0.24 B | 0.22 B | 0.77 | 0.12 B |
| COBALT | 6.6 | 0.66 | 123 | 46.1 | 39.8 | 0.51 B | 9.8 |
| COPPER | 0.99 B | 0.3 B | 38 | 2.9 B | 0.28 B | 0.19 K | 1.6 K |
| IRON | 11 U | 120 B | 1180 | 215 | 8570 | 16700 | 74.3 |
| LEAD | 0.088 B | 0.16 B | 0.4 | 0.21 B | 0.12 B | 0.16 B | 0.056 B |
| MANGANESE | 68.4 | 2.8 B | 474 | 42.1 | 942 | 264 | 58.8 |
| MERCURY | 0.1 U | 0.1 UL | 0.1 UL | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| MOLYBDENUM | 0.2 U | 0.2 U | 0.2 U | 0.39 B | 0.2 U | 0.2 U | 0.2 U |
| NICKEL | 15.1 | 0.84 B | 163 | 56.5 | 38.9 | 0.34 K | 11.1 |
| POTASSIUM | | 7880 | 6980 | 966 K | 5590 | | |
| SELENIUM | 1.5 K | 2.1 | 0.66 | 0.26 | 0.14 U | 0.16 K | 0.14 U |
| SILVER | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U |
| THALLIUM | 0.12 U | 0.12 U | 0.14 B | 0.12 U | 0.12 U | 0.19 B | 0.12 U |
| VANADIUM | 5.7 | 0.6 U | 6.1 | 0.6 U | 0.6 U | 0.98 | 0.6 U |
| ZINC | 45 | 5.2 B | 335 | 88.5 | 58.2 | 19 K | 27.5 B |

**Table D-2**

**Analytical Chemical Results for Groundwater Samples, July-August 2009**
**Lockheed Martin Middle River Complex, Middle River, Maryland**


| SAMPLE ID: | MRC-MW30A-080409 | MRC-MW34A-082509 | MRC-MW34B-082509 | MRC-MW36A-082609 | MRC-MW43A-082109 | MRC-MW44A-080509 | MRC-MW72B-080709 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A9H050300007 | A9H260250003 | A9H260250002 | A9H270200003 | A9H220139007 | A9H070192003 | A9H080141004 |
| SAMPLE DATE: | 8/4/2009 | 8/25/2009 | 8/25/2009 | 8/26/2009 | 8/21/2009 | 8/5/2009 | 8/7/2009 |
| LOCATION: | MRC-MW30A | MRC-MW34A | MRC-MW34B | MRC-MW36A | MRC-MW43A | MRC-MW44A | MRC-MW72B |
| **INORGANICS FILTERED (ug/L)** | | | | | | | |
| ANTIMONY | 0.23 B | 0.055 U | 0.055 U | 0.06 B | 0.055 U | 0.13 B | 0.055 U |
| ARSENIC | 0.47 K | 0.21 U | 0.21 U | 0.21 U | 0.21 U | 1.1 K | 0.21 U |
| BARIUM | 132 | 41 | 146 | 30.6 | 29.5 | 134 | 13.4 |
| BERYLLIUM | 0.64 K | 0.054 B | 9.8 | 3.4 | 0.77 | 0.051 | 0.66 |
| CADMIUM | 0.1 B | 0.032 B | 0.4 B | 0.074 B | 0.049 B | 0.027 B | 0.027 U |
| CHROMIUM | 0.61 B | 0.78 B | 0.12 B | 0.32 B | 0.095 B | 0.67 | 0.066 U |
| COBALT | 7.5 | 0.64 | 122 | 41.5 | 36.6 | 0.47 B | 9.3 |
| COPPER | 1.3 B | 0.3 B | 36.8 | 3.2 B | 0.56 B | 0.11 K | 1.8 K |
| IRON | 11 U | 26.7 B | 54.2 B | 121 B | 4950 | 16700 | 11 U |
| LEAD | 0.087 B | 0.055 B | 0.12 B | 0.19 B | 0.074 B | 0.12 B | 0.062 B |
| MANGANESE | 65.1 | 2.1 B | 469 | 43.6 | 830 | 268 | 57.6 |
| MERCURY | 0.1 U | 0.1 UL | 0.1 UL | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| MOLYBDENUM | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.2 U |
| NICKEL | 18.4 | 0.74 B | 159 | 53.2 | 34.6 | 0.37 B | 10.9 |
| SELENIUM | 1.6 K | 1.9 | 0.56 | 0.28 | 0.14 U | 0.26 K | 0.14 U |
| SILVER | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U |
| THALLIUM | 0.12 U | 0.12 U | 0.14 B | 0.12 U | 0.12 U | 0.12 U | 0.12 U |
| VANADIUM | 5.7 B | 0.6 U | 0.85 | 0.6 U | 0.6 U | 0.65 | 0.6 U |
| ZINC | 56 | 2.4 B | 331 | 83.9 | 52.5 | 3.6 B | 23.4 B |

Only samples from Blocks E, G, and H are presented.

**Table D-2**

**Analytical Chemical Results for Groundwater Samples, July-August 2009**
**Lockheed Martin Middle River Complex, Middle River, Maryland**


| SAMPLE ID: | MRC-MW73B-081109 | MRC-MW74A-081409 | MRC-74B-081709 | MRC-MW12A-073009 | MRC-MW12B-073009 | MRC-MW14A-073009 | MRC-MW14B-082709 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A9H130253004 | A9H150168006 | A9H190214003 | A9G310180003 | A9G310180002 | A9G310180004 | A9H280125002 |
| SAMPLE DATE: | 8/11/2009 | 8/14/2009 | 8/17/2009 | 7/30/2009 | 7/30/2009 | 7/30/2009 | 8/27/2009 |
| LOCATION: | MRC-MW73B | MRC-MW74A | MRC-74B | MRC-MW12A | MRC-MW12B | MRC-MW14A | MRC-MW14B |
| BLOCK: | E | E | E | G | G | G | G |
| **INORGANICS (ug/L)** | | | | | | | |
| ANTIMONY | 0.086 B | 0.055 U | 0.055 U | 0.24 | 2 U | 2 U | 0.8 |
| ARSENIC | 0.21 B | 1.1 | 0.21 U | 0.94 | 5 U | 1 | 0.21 U |
| BARIUM | 30.5 | 48.3 | 33.1 | 87.1 | 89.6 | 58.8 | 79.4 |
| BERYLLIUM | 2.1 | 0.72 | 0.34 | 0.14 K | 0.063 K | 0.041 K | 0.35 B |
| CADMIUM | 0.063 B | 0.26 B | 0.1 B | 0.07 B | 0.04 B | 1 U | 0.48 |
| CHROMIUM | 0.32 B | 0.77 | 0.26 B | 0.92 | 0.19 | 2 U | 4.2 |
| COBALT | 17.8 | 18.9 | 32.2 | 34.2 | 26.9 | 62.5 | 34.2 |
| COPPER | 4.8 | 2.1 K | 0.88 K | 1.2 K | 0.22 B | 0.1 B | 12.2 |
| IRON | 67.2 B | 314 | 292 | 31700 | 5180 | 46400 | 54200 |
| LEAD | 0.069 B | 0.21 B | 0.11 B | 0.84 K | 0.1 B | 0.045 B | 3 |
| MANGANESE | 89.5 | 1850 | 437 | 2010 | 2150 | 3190 | 1260 |
| MERCURY | 0.1 U | 0.1 U | 0.1 U | 0.2 U | 0.2 U | 0.2 U | 0.1 U |
| MOLYBDENUM | 0.2 U | 0.2 U | 0.28 B | 0.37 | 2 U | 2 U | 0.9 B |
| NICKEL | 24.2 | 4.6 | 21.7 | 66.9 | 56.2 | 45.2 | 58.9 |
| POTASSIUM | | | | | | | 4980 |
| SELENIUM | 0.28 B | 1.9 | 0.14 U | 0.23 B | 5 U | 0.25 B | 0.44 |
| SILVER | 0.033 U | 0.033 U | 0.033 U | 1 U | 1 U | 1 U | 0.41 |
| THALLIUM | 0.12 U | 0.12 U | 0.21 B | 1 U | 1 U | 1 U | 0.12 U |
| VANADIUM | 0.6 U | 0.6 U | 0.6 U | 1.3 B | 20 U | 20 U | 8.1 |
| ZINC | 73.7 | 35.6 K | 318 | 191 | 91.6 | 26.7 | 59.2 |

**Table D-2**

**Analytical Chemical Results for Groundwater Samples, July-August 2009**
**Lockheed Martin Middle River Complex, Middle River, Maryland**


| SAMPLE ID: | MRC-MW73B-081109 | MRC-MW74A-081409 | MRC-74B-081709 | MRC-MW12A-073009 | MRC-MW12B-073009 | MRC-MW14A-073009 | MRC-MW14B-082709 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A9H130253004 | A9H150168006 | A9H190214003 | A9G310180003 | A9G310180002 | A9G310180004 | A9H280125002 |
| SAMPLE DATE: | 8/11/2009 | 8/14/2009 | 8/17/2009 | 7/30/2009 | 7/30/2009 | 7/30/2009 | 8/27/2009 |
| LOCATION: | MRC-MW73B | MRC-MW74A | MRC-74B | MRC-MW12A | MRC-MW12B | MRC-MW14A | MRC-MW14B |
| **INORGANICS FILTERED (ug/L)** | | | | | | | |
| ANTIMONY | 0.12 B | 0.08 B | 0.055 U | 0.11 | 2 U | 2 U | 0.18 B |
| ARSENIC | 0.21 U | 1.1 | 0.21 U | 0.62 | 5 U | 1.2 | 0.21 U |
| BARIUM | 30 | 48.8 | 32.4 | 83.2 | 83.6 | 56.7 | 93.4 |
| BERYLLIUM | 2 | 0.7 | 0.3 B | 0.063 K | 0.039 K | 0.072 K | 0.16 B |
| CADMIUM | 0.045 B | 0.094 B | 0.13 B | 0.061 B | 0.05 B | 1 U | 0.21 B |
| CHROMIUM | 0.16 B | 0.066 U | 0.12 B | 2 U | 2 U | 2 U | 0.68 B |
| COBALT | 17.5 | 19.4 | 31 | 38 | 24.2 | 67.3 | 68 |
| COPPER | 4.7 | 2.2 K | 0.74 K | 0.28 B | 0.3 B | 0.33 B | 0.74 B |
| IRON | 11 U | 123 | 16.7 B | 37700 | 6320 | 45300 | 106000 |
| LEAD | 0.064 B | 0.05 B | 0.056 B | 0.092 B | 1 U | 0.068 B | 0.14 B |
| MANGANESE | 83.8 | 1880 | 418 | 2110 | 2080 | 3380 | 2400 |
| MERCURY | 0.1 U | 0.1 U | 0.1 U | 0.2 U | 0.2 U | 0.2 U | 0.1 U |
| MOLYBDENUM | 0.2 U | 0.2 U | 0.2 U | 2 U | 2 U | 2 U | 0.2 U |
| NICKEL | 21.4 | 4.2 | 21.5 | 73.5 | 56 | 49.3 | 124 |
| SELENIUM | 0.38 B | 1.8 | 0.24 | 0.16 B | 5 U | 0.37 B | 0.14 U |
| SILVER | 0.033 U | 0.033 U | 0.033 U | 1 U | 1 U | 1 U | 0.033 U |
| THALLIUM | 0.12 U | 0.12 U | 0.12 U | 0.17 B | 1 U | 1 U | 0.12 U |
| VANADIUM | 0.64 | 0.6 U | 0.6 U | 20 U | 20 U | 20 U | 0.73 |
| ZINC | 70.3 | 32.1 K | 306 | 193 | 98.6 | 32.4 | 98.3 |

Only samples from Blocks E, G, and H are presente

**Table D-2**

**Analytical Chemical Results for Groundwater Samples, July-August 2009**
**Lockheed Martin Middle River Complex, Middle River, Maryland**


| SAMPLE ID: | MRC-MW14C-083109 | MRC-MW15A-082709 | MRC-MW16A-082709 | MRC-MW63A-080509 | MRC-MW70A-080709 | MRC-MW70B-080709 | MRC-MW71A-082709 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A9I030309002 | A9H280125006 | A9H280125007 | A9H070192004 | A9H080141002 | A9H080141003 | A9H280125005 |
| SAMPLE DATE: | 8/31/2009 | 8/27/2009 | 8/27/2009 | 8/5/2009 | 8/7/2009 | 8/7/2009 | 8/27/2009 |
| LOCATION: | MRC-MW14C | MRC-MW15A | MRC-MW16A | MRC-MW63A | MRC-MW70A | MRC-MW70B | MRC-MW71A |
| BLOCK: | G | G | G | G | G | G | G |
| **INORGANICS (ug/L)** | | | | | | | |
| ANTIMONY | 0.1 B | 0.055 U | 0.055 U | 0.1 | 0.074 K | 0.12 B | 0.95 |
| ARSENIC | 0.88 | 0.6 | 0.86 | 1.4 K | 3.6 | 1.1 | 0.21 U |
| BARIUM | 70.3 | 120 | 382 | 157 | 109 | 683 | 76.5 |
| BERYLLIUM | 0.34 B | 0.07 B | 7.6 | 0.21 B | 1.6 | 0.037 U | 3.5 |
| CADMIUM | 0.033 B | 0.027 U | 1.1 | 0.063 B | 0.027 U | 0.031 | 3.2 |
| CHROMIUM | 6.7 | 0.19 B | 0.37 B | 0.066 U | 0.45 B | 3.2 | 0.88 B |
| COBALT | 15.2 | 44 | 266 | 165 | 58 | 0.28 B | 57.3 |
| COPPER | 7.4 | 0.35 B | 7.9 | 0.43 K | 0.65 K | 0.82 | 1.6 B |
| IRON | 18700 | 16400 | 6340 | 22400 | 64000 | 479 | 485 |
| LEAD | 2.5 | 0.14 B | 1.2 | 0.28 B | 0.28 B | 0.32 B | 0.7 |
| MANGANESE | 1220 | 5370 | 6160 | 754 | 2770 | 8.7 | 1430 |
| MERCURY | 0.11 B | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| MOLYBDENUM | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.39 B | 2.6 | 0.2 U |
| NICKEL | 27.6 | 11.3 | 271 | 234 | 57.8 | 5.1 | 115 |
| POTASSIUM | | | | | | | |
| SELENIUM | 0.21 B | 0.19 | 0.28 | 0.27 K | 2 K | 0.14 U | 0.3 |
| SILVER | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.035 B | 0.033 U |
| THALLIUM | 0.12 U | 0.13 B | 0.12 U | 0.12 U | 0.18 B | 0.17 B | 0.12 U |
| VANADIUM | 8.9 | 0.6 U | 0.6 U | 0.6 U | 0.73 | 3 U G | 1.5 |
| ZINC | 64.8 | 13.1 | 411 | 87.9 | 30.8 B | 24.6 B | 675 |

**Table D-2**

**Analytical Chemical Results for Groundwater Samples, July-August 2009**
**Lockheed Martin Middle River Complex, Middle River, Maryland**


| SAMPLE ID: | MRC-MW14C-083109 | MRC-MW15A-082709 | MRC-MW16A-082709 | MRC-MW63A-080509 | MRC-MW70A-080709 | MRC-MW70B-080709 | MRC-MW71A-082709 |
|---|---|---|---|---|---|---|---|
| LABORATORY ID: | A9I030309002 | A9H280125006 | A9H280125007 | A9H070192004 | A9H080141002 | A9H080141003 | A9H280125005 |
| SAMPLE DATE: | 8/31/2009 | 8/27/2009 | 8/27/2009 | 8/5/2009 | 8/7/2009 | 8/7/2009 | 8/27/2009 |
| LOCATION: | MRC-MW14C | MRC-MW15A | MRC-MW16A | MRC-MW63A | MRC-MW70A | MRC-MW70B | MRC-MW71A |
| **INORGANICS FILTERED (ug/L)** | | | | | | | |
| ANTIMONY | 0.055 U | 0.055 U | 0.055 U | 0.071 B | 0.096 K | 0.055 U | 0.93 |
| ARSENIC | 0.3 | 0.7 | 0.21 U | 1.2 K | 2.5 B | 1 B | 0.21 U |
| BARIUM | 52.2 | 120 | 480 | 156 | 91.9 | 654 | 76.9 |
| BERYLLIUM | 0.089 B | 0.1 B | 11.9 | 0.15 B | 1.3 | 0.037 U | 3.7 |
| CADMIUM | 0.027 U | 0.027 U | 1.8 | 0.097 B | 0.035 | 0.027 U | 3 |
| CHROMIUM | 1.4 | 0.066 U | 0.33 B | 0.066 U | 0.069 B | 0.066 U | 0.49 B |
| COBALT | 8.9 | 47 | 350 | 164 | 51.1 | 0.073 B | 57 |
| COPPER | 1.7 B | 0.38 B | 11.3 | 0.58 K | 0.13 B | 0.67 B | 1.6 B |
| IRON | 14100 | 15400 | 4140 | 19800 | 56200 | 11 U | 147 B |
| LEAD | 0.39 | 0.086 B | 1.2 | 0.17 B | 0.12 B | 0.12 B | 0.41 |
| MANGANESE | 1070 | 5390 | 5970 | 737 | 2440 | 0.62 B | 1460 |
| MERCURY | 0.17 B | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U | 0.1 U |
| MOLYBDENUM | 0.2 U | 0.2 U | 0.2 U | 0.2 U | 0.51 B | 2.1 | 0.2 U |
| NICKEL | 17.5 | 11.8 | 374 | 232 | 51.9 | 4.3 | 115 |
| SELENIUM | 0.18 B | 0.31 | 0.14 | 0.26 K | 1.3 B | 0.14 U | 0.28 |
| SILVER | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U |
| THALLIUM | 0.12 U | 0.12 U | 0.12 U | 0.12 U | 0.17 B | 0.12 U | 0.12 U |
| VANADIUM | 1.2 | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.6 U | 0.93 |
| ZINC | 43.4 | 10.3 B | 621 | 84 | 11.7 B | 10 B | 632 |

Only samples from Blocks E, G, and H are presente

**Table D-2**

**Analytical Chemical Results for Groundwater Samples, July-August 2009**
**Lockheed Martin Middle River Complex, Middle River, Maryland**


| SAMPLE ID: | MRC-MW71B-082709 | MRC-MW08A-072809 | MRC-MW52A-072809 | MRC-MW53A-072809 |
|---|---|---|---|---|
| LABORATORY ID: | A9H280125003 | A9G290200002 | A9G290200003 | A9G290200004 |
| SAMPLE DATE: | 8/27/2009 | 7/28/2009 | 7/28/2009 | 7/28/2009 |
| LOCATION: | MRC-MW71B | MRC-MW08A | MRC-MW52A | MRC-MW53A |
| BLOCK: | G | H | H | H |
| **INORGANICS (ug/L)** | | | | |
| ANTIMONY | 5.6 | 2 U | 0.19 | 0.087 |
| ARSENIC | 0.21 U | 0.4 | 1.8 | 5 U |
| BARIUM | 92.3 | 148 | 868 | 83.6 |
| BERYLLIUM | 0.037 U | 0.58 | 63.8 | 7 |
| CADMIUM | 0.043 B | 0.088 B | 3.3 | 0.23 B |
| CHROMIUM | 1.6 B | 0.96 | 0.36 | 0.96 |
| COBALT | 13.4 | 120 | 2380 | 43.7 |
| COPPER | 3.9 B | 0.77 B | 83.5 | 10.4 |
| IRON | 3660 | 37200 | 16200 | 27.9 B |
| LEAD | 0.47 | 0.43 | 1.4 | 0.31 |
| MANGANESE | 1060 | 40700 | 35800 | 187 |
| MERCURY | 0.1 U | 0.2 U | 0.2 U | 0.2 U |
| MOLYBDENUM | 3.3 | 2 U | 2 U | 2 U |
| NICKEL | 19.7 | 262 | 1550 | 81.9 |
| POTASSIUM | | | | |
| SELENIUM | 0.89 | 0.29 | 4.1 | 5 U |
| SILVER | 0.033 U | 1 U | 0.095 B | 1 U |
| THALLIUM | 0.14 B | 1 U | 1.4 | 1 U |
| VANADIUM | 2.2 | 0.72 B | 1.1 B | 20 U |
| ZINC | 75.1 | 116 | 2880 | 141 |

**Table D-2**

**Analytical Chemical Results for Groundwater Samples, July-August 2009**
**Lockheed Martin Middle River Complex, Middle River, Maryland**


| SAMPLE ID: | MRC-MW71B-082709 | MRC-MW08A-072809 | MRC-MW52A-072809 | MRC-MW53A-072809 |
|---|---|---|---|---|
| LABORATORY ID: | A9H280125003 | A9G290200002 | A9G290200003 | A9G290200004 |
| SAMPLE DATE: | 8/27/2009 | 7/28/2009 | 7/28/2009 | 7/28/2009 |
| LOCATION: | MRC-MW71B | MRC-MW08A | MRC-MW52A | MRC-MW53A |
| **INORGANICS FILTERED (ug/L)** | | | | |
| ANTIMONY | 5.2 | 2 U | 0.21 | 0.074 |
| ARSENIC | 0.21 U | 0.27 | 2.2 | 5 U |
| BARIUM | 77.4 | 140 | 864 | 83.8 |
| BERYLLIUM | 0.037 U | 0.49 | 62.6 | 7 |
| CADMIUM | 0.045 B | 0.083 B | 3.2 | 0.16 B |
| CHROMIUM | 0.41 B | 2 U | 0.11 | 0.85 |
| COBALT | 10.3 | 114 | 2410 | 44.5 |
| COPPER | 3.8 B | 0.38 B | 79.6 | 10.7 |
| IRON | 462 | 34300 | 16100 | 17.7 B |
| LEAD | 0.077 B | 0.099 B | 1.4 | 0.27 B |
| MANGANESE | 858 | 39900 | 35900 | 187 |
| MERCURY | 0.1 U | 0.2 U | 0.2 U | 0.2 U |
| MOLYBDENUM | 2.8 | 2 U | 2 U | 2 U |
| NICKEL | 14.1 | 243 | 1590 | 82.6 |
| SELENIUM | 0.92 | 0.2 | 4.6 | 0.14 |
| SILVER | 0.033 U | 1 U | 1 U | 1 U |
| THALLIUM | 0.12 U | 1 U | 1.4 | 1 U |
| VANADIUM | 0.6 U | 20 U | 0.87 | 20 U |
| ZINC | 73.9 | 105 | 2910 | 147 |

Only samples from Blocks E, G, and H are presente

# APPENDIX D-5

# REFINED RISK EVALUATION FOR DRO/GRO

| CLIENT | JOB NUMBER | | |
|---|---|---|---|
| Lockheed | | | |
| SUBJECT: MRC - Calculation of Risk-based Concentrations for TPH (GRO/DRO) | | | |
| BASED ON: MDE/State of Massachusetts Methods. | | DRAWING NUMBER | |
| BY: L. A. SINAGOGA | CHECKED BY: RJF | APPROVED BY | DATE |

$C_{soil}$ = Risk based concentration for non-carcinogenic hazard index of 1.

$C_{soil}$ : Residential (Small child)

$$= \frac{1 \times 3E\text{-}2\ mg/Kg/d \times 15\ Kg \times 365\ d/yr \times 6\ yr}{200\ mg/d \times 10^{-6}\ \frac{Kg}{mg} \times 350\ \frac{d}{yr} \times 6\ yr}$$

$= 2{,}300\ mg/Kg$

$C_{soil}$ : Commercial (Small child)

$$= \frac{1 \times 3E\text{-}2\ mg/Kg/d \times 15\ Kg \times 365\ d/yr \times 6\ yr}{200\ mg/d \times 10^{-6}\ \frac{Kg}{mg} \times 132\ \frac{d}{yr} \times 6\ yr}$$

$= 6{,}200\ mg/Kg$

$C_{soil}$ : Industrial (Adult)

$$= \frac{1 \times 3E\text{-}02\ mg/Kg/d \times 70\ Kg \times 365\ d/yr \times 25\ yr}{50\ mg/d \times 10^{-6}\ Kg/mg \times 250\ d/yr \times 25\ yr}$$

$= 61{,}000\ mg/Kg$

$C_{soil}$ recreational (Small child)

$$= \frac{1 \times 3E\text{-}02\ mg/Kg/d \times 15\ Kg \times 365\ d/yr \times 6\ yr}{200\ mg/d \times 10^{-6}\ Kg/mg \times 250\ d/yr \times 6\ yr}$$

$= 3{,}300\ mg/Kg$

- See attached State of Maryland, Department of the Environment, Clean-up Standards for Soil and Groundwater, June 2008, Interim Final Guidance, Update No. 2.1. (selected pages)
- Toxicity criteria recommended (3E-2 mg/Kg/d) by State of Massachusetts, Final Policy Document # WSC-02-411. (10.31.2002)

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# STATE OF MARYLAND

# DEPARTMENT OF THE ENVIRONMENT

# CLEANUP STANDARDS FOR SOIL AND GROUNDWATER

## JUNE 2008

## INTERIM FINAL GUIDANCE

(UPDATE No. 2.1)

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## Appendix 1. Risk Assessment Equations and Tables

**Groundwater Ingestion:**

Noncarcinogenic:

$$C_{water}\,(mg/l) = \frac{HI \times RfD_o \times BW \times AT_n}{IR_{dw} \times EF \times ED} \quad (1)$$

Carcinogenic (age adjusted):

$$C_{water}\,(mg/l) = \frac{CR \times AT_c}{IF_{dw} \times EF \times CSF_o} \quad (2)$$

Carcinogenic:

$$C_{water}\,(mg/l) = \frac{CR \times BW \times AT_c}{IR_{dw} \times EF \times ED \times CSF_o} \quad (3)$$

**Inhalation of Volatiles in Groundwater:**

Noncarcinogenic:

$$C_{water}\,(mg/l) = \frac{HI \times RfD_i \times BW \times AT_n}{InhR \times EF \times ED \times ET \times VF} \quad (4)$$

Carcinogenic (age adjusted):

$$C_{water}\,(mg/l) = \frac{CR \times AT_c}{IF_{inh} \times EF \times CSF_i \times VF} \quad (5)$$

Carcinogenic:

$$C_{water}\,(mg/l) = \frac{CR \times BW \times AT_c}{InhR \times EF \times ED \times ET \times CSF_i \times VF} \quad (6)$$

**Soil Ingestion:**

Noncarcinogenic:

$$C_{soil}\,(mg/kg) = \frac{HI \times RfD_o \times BW \times AT_n}{IR_{soil} \times CF \times EF \times ED} \quad (7)$$

Carcinogenic (age adjusted):

$$C_{soil}\,(mg/kg) = \frac{CR \times AT_c}{CF \times IF_{soil} \times EF \times CSF_o} \quad (8)$$

Carcinogenic:

$$C_{soil}\,(mg/kg) = \frac{CR \times BW \times AT_c}{CF \times IR_{soil} \times EF \times ED \times CSF_o} \quad (9)$$

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Appendix 1 - Table 3. Default ingestion parameters used to calculate the risk based concentrations for soil.

| | Parameter | Ingestion - Residential | | | | |
|---|---|---|---|---|---|---|
| | | Adult | Youth (>6 - <18 Years) | Child (<6 Years) | Construction Worker | Age-Adjusted Resident |
| $IR_{soil}$ | Ingestion Rate/Soil (mg/day) | 100[a, b, c, d] | 100[a, b, c, d] | 200[a, b] | 480[c] | |
| $IF_{soil}$ | Age-Adjusted Ingestion Factor (mg-yr/kg-day) | | | | | 127[e] |
| CF | Conversion Factor (kg/mg) | 1E-06 [b] | 1E-06[b] | 1E-06[b] | 1E-06[b] | 1E-06[b] |
| EF | Exposure Frequency (days/year) | 350[d, f] | 350[d, f] | 350[d, f] | 250[c, d] | 350[d, f] |
| ED | Exposure Duration (years) | 30[a, b] | 12[a] | 6[a, b] | 1[c] | |
| | | Ingestion - Commercial | | | | |
| $IR_{soil}$ | Ingestion Rate/Soil (mg/day) | 50[c, d] | 100[a, b, c, d] | 200[a, b] | 480[c] | |
| $IF_{soil}$ | Age-Adjusted Ingestion Factor (mg-yr/kg-day) | | | | | 110 [e] |
| EF | Exposure Frequency (days/year) | 250[c, d] | 132[b, g] | 132[b, g] | 250[c, d] | 132[b, g] |
| ED | Exposure Duration (years) | 25[c, d] | 12[a] | 6[a, b] | 1[c] | |
| | | Ingestion - Industrial | | | | |
| $IR_{soil}$ | Ingestion Rate/Soil (mg/day) | 50[c, d] | 100[a, b, c, d] | | 480[c] | |
| CF | Conversion Factor (kg/mg) | 1E-06[b] | 1E-06[b] | | 1E-06[b] | |
| FI | Fraction Ingested (unitless) | 1 | 1 | | 1 | |
| EF | Exposure Frequency (days/year) | 250[c, d] | 132[b, g] | | 250[c, d] | |
| ED | Exposure Duration (years) | 25[c] | 12[a] | | 1[c] | |

Note: The following body weight values were used in deriving the standards; 70 kg for the adult and construction worker; 40 kg for youths, and 15 kg for the child population.

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## 11.2 Recreational Use Soil Cleanup Requirement

Property that has a recreational land use or has a similar projected future land use shall utilize the residential soils Cleanup Standards to evaluate risk. To evaluate risk at such properties, the person undertaking the environmental action at the property shall use a residential scenario or select one of the three recreational scenarios in the site-specific risk assessment process:

Level 1: Public Recreational Areas (High Frequency Use)
*Definition*: A high frequency public recreational area is any area that is available for recreational use by all populations at the highest potential exposure frequency (youth, child, adult, senior, etc.). Examples may include, but are not limited to, playgrounds, day care facilities, schools, golf courses, and picnic areas.

*Frequency*: The frequency of visits by all populations is 250 days per year or less.

Level 2: Public Recreational Areas (Moderate Frequency Use)
*Definition*: A moderate frequency use public recreational area is any area that is available for recreational use by all populations but the frequency of use is less than a high frequency use public recreational area. Such areas may be restricted through the use of fencing, permitting requirements, or other similar restrictions that prevent or hinder unimpeded access to the recreational area. Examples include, but are not limited to, outdoor aquatic facilities, athletic facilities, dog parks, and limited access parks.

*Frequency*: The frequency of visits by all populations is 182 days per year or less.

Level 3: Open Space Public Recreational Area (Low Frequency Use)
*Definition*: An open space public recreational use area is defined as any area where access and use is restricted by a combination of:

a) Covenants or other legal restrictions that prohibit the use of the property where such use may impair the flora and fauna in the open space; and
b) Physical environmental barriers impede the use of the open space, including but not limited to swamps, marshes, dense vegetation, and areas with steep inclines that limit the use of open space.

*Frequency*: The frequency of visits by all populations is 52 days per year or less.

## 11.3 Industrial Use Soil Cleanup Requirements

a) Tier 2A Commerical Unrestricted
Properties that have commercial unrestricted use or projected commercial unrestricted use are required to remedy hazardous substances in the soil to the applicable non-residential soil standard. Use of either treatment technologies or removal of the hazardous substances in the soil to the applicable soil standard is required for this land use. Attainment of the soil standard must be demonstrated following remedial action. The non-residential soil standard extends to a depth of 15 feet or the zone of saturation. Demonstration of attainment of the soil cleanup standard must also include evaluation of temporal variations in the depth of the zone of saturation.

b) Tier 2B Commercial Restricted
Properties that have commercial restricted use or projected commercial restricted use are required to remedy hazardous substances in the surface soil to the applicable non-residential soil standard. Use of either treatment technologies or removal of the hazardous substances in the soil to the

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| Parameter | Definition (units) | Default Value |
|---|---|---|
| $SFS_{adj}$ | Age-adjusted dermal exposure factor – ($cm^2$- event/kg) | 3084000 |
| $SSA_{1-6}$ | Skin surface area available for contact during ages 1-6 ($cm^2$) | 6,600 |
| $SSA_{7-31}$ | Skin surface area available for contact during ages 7-31 ($cm^2$) | 18,000 |
| $EF_{1-6}$ | Exposure Frequency ages 1-6 (days/years) | 350 |
| $EF_{7-31}$ | Exposure Frequency ages 7-31 (days/years) | 350 |
| $EV_{1-6}$ | Exposure Event ages 1-6 (event/day) | 1 |
| $EV_{7-31}$ | Exposure Event ages 7-31 (event/day) | 1 |
| $ED_{1-6}$ | Exposure duration during ages 1-6 (years) | 6 |
| $ED_{7-31}$ | Exposure duration during ages 7-31 (years) | 24 |
| $BW_{1-6}$ | Average Body weight during ages 1-6 (kg) | 15 |
| $BW_{7-31}$ | Average Body weight during ages 7-31 (kg) | 70 |

**Age-Adjusted Dermal Exposure Factor ($SFS_{adj}$) for Soil[r]**

$$SFS_{adj} = \frac{(SSA_{1-6})(AF_{1-6})(ED_{1-6})}{(BW_{1-6})} + \frac{(SSA_{7-31})(AF_{7-31})(ED_{7-31})}{(BW_{7-31})}$$

| Parameter | Definition (units) | Default Value |
|---|---|---|
| $SFS_{adj}$ | Age-adjusted dermal exposure factor – (mg-yrs/kg-events) | 360 |
| $AF_{1-6}$ | Adherence factor of soil to skin for a child (1-6 years) (mg/$cm^2$-event) (Referred to as contact rate in RAGS, Part A | 0.2 (EFH, EPA 1997a |
| $AF_{7-31}$ | Adherence factor of soil to skin for an adult (7-31 years) (mg/$cm^2$-event) (Referred to as contact rate in RAGS, Part A) | 0.07 (EFH, EPA 1997a) |
| $SSA_{1-6}$ | Skin surface area available for contact during ages 1-6 ($cm^2$) | 2,800 |
| $SSA_{7-31}$ | Skin surface area available for contact during ages 7-31 ($cm^2$) | 5,700 |
| $ED_{1-6}$ | Exposure duration during ages 1-6 (years) | 6 |
| $ED_{7-31}$ | Exposure duration during ages 7-31 (years) | 24 |
| $BW_{1-6}$ | Average Body weight during ages 1-6 (kg) | 15 |
| $BW_{7-31}$ | Average Body weight during ages 7-31 (kg) | 70 |

Default exposure parameters for groundwater and soil pathways are presented in Tables 1 – 6.

Small child and adult receptor body weight.

# APPENDIX E—RISK CHARACTERIZATION TABLES

**APPENDIX E.1**

**BLOCK D**

## TABLES


E-1.1 Cancer Risks for Individual Sample Locations – Surface Soil - Block D

E-1.2 Hazard Indices for Individual Sample Locations – Surface Soil - Block D

E-1.3 Cancer Risks for Individual Sample Locations – Subsurface Soil - Block D

E-1.4 Hazard Indices for Individual Sample Locations – Subsurface Soil - Block D

E-1.5 Cancer Risks for Individual Sample Locations – Saturated Soil - Block D

E-1.6 Hazard Indices for Individual Sample Locations – Saturated Soil - Block D


## FIGURES


E-1.1 Cancer Risk Estimates for Industrial Use – Block D – Surface Soil

E-1.2 Hazard Indices Estimates for Industrial Use – Block D – Surface Soil

E-1.3 Cancer Risk Estimates for Residential Use – Block D – Surface Soil

E-1.4 Hazard Indices Estimates for Residential Use – Block D – Surface Soil

E-1.5 Cancer Risk Estimates for Industrial Use – Block D – Subsurface Soil

E-1.6 Hazard Indices Estimates for Industrial Use – Block D – Subsurface Soil

E-1.7 Cancer Risk Estimates for Residential Use – Block D – Subsurface Soil

E-1.8 Hazard Indices Estimates for Residential Use – Block D – Subsurface Soil

E-1.9 Cancer Risk Estimates for Industrial Use – Block D – Saturated Soil

E-1.10 Hazard Indices Estimates for Industrial Use – Block D – Saturated Soil

E-1.11 Cancer Risk Estimates for Residential Use – Block D – Saturated Soil

E-1.12 Hazard Indices Estimates for Residential Use – Block D – Saturated Soil

**TABLE E-1.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | | | | | SB-058 | | | SB-058A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31A-SS | SB-32A-SS | SB-33A-SS | F-SB-57RE-1 | F-SB-57RE-2 | F-SB-57RE-2- | F-SB-57RE-2- | SB-57-SS | F-SB-58RE-1 | F-SB-58RE-2 | SB-58-SS | F-SB-58REA- |
| SAMPLE DATE | 20040913 | 20040924 | 20040917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 | 20090917 | 20090917 | 20040913 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SB | SB | SB | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | | | | 1 | 2 | 2 | 2 | | 1 | 2 | | 2 |
| BOTTOM DEPTH | | | | 1 | 2 | 2 | 2 | | 1 | 2 | | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.4E-07 | 6.4E-06 | 6.2E-06 | 7.1E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.1E-10 | 2.5E-06 | 3.0E-05 | | 1.2E-07 |
| AROCLOR-1260 | 1.3E-07 | 1.3E-07 | 1.3E-07 | | | | | 1.6E-07 | | | 1.3E-07 | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 6.6E-07 | 8.8E-08 | 3.7E-07 | | | | | 8.1E-07 | | | 5.5E-07 | |
| CADMIUM | 5.9E-11 | 5.5E-11 | 5.5E-11 | | | | | 7.0E-11 | | | 5.9E-11 | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 2.4E-11 | 9.2E-11 | 1.6E-10 | | | | | 4.9E-11 | | | 5.5E-11 | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.2E-07 | 3.9E-07 | 2.0E-07 | | | | | 3.0E-07 | | | 6.6E-07 | |
| TOTAL CANCER RISK | 1.7E-06 | 7.0E-06 | 6.9E-06 | 7.1E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.3E-06 | 2.5E-06 | 3.0E-05 | 1.3E-06 | 1.2E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-05 | 1.4E-04 | 1.4E-04 | 1.5E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 4.5E-09 | 5.4E-05 | 6.5E-04 | | 2.6E-06 |
| AROCLOR-1260 | 6.7E-07 | 6.7E-07 | 6.7E-07 | | | | | 8.2E-07 | | | 6.4E-07 | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 5.1E-06 | 6.8E-07 | 2.8E-06 | | | | | 6.3E-06 | | | 4.3E-06 | |
| CADMIUM | 1.2E-10 | 1.1E-10 | 1.1E-10 | | | | | 1.4E-10 | | | 1.2E-10 | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 4.8E-11 | 1.9E-10 | 3.3E-10 | | | | | 9.8E-11 | | | 1.1E-10 | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.3E-06 | 5.8E-06 | 2.9E-06 | | | | | 4.5E-06 | | | 9.9E-06 | |
| TOTAL CANCER RISK | 2.3E-05 | 1.5E-04 | 1.4E-04 | 1.5E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.2E-05 | 5.4E-05 | 6.5E-04 | 1.5E-05 | 2.6E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-058A | | SB-058B | SB-058C | SB-058D | SB-059 | SB-060 | | | SB-060A | SB-060B | SB-060C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REA- | F-SB-58REA- | F-SB-58REB- | F-SB-58REC- | F-SB-58RED- | SB-59-SS | D-SB-60RE-1 | D-SB-60RE-2 | SB-60-SS | D-SB-60REA- | D-SB-60REB- | D-SB-60REC- |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20040923 | 20090915 | 20090915 | 20040924 | 20091012 | 20091013 | 20091013 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SS | SB | SB | SS | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | | 1 | 2 | | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | | 1 | 2 | | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.2E-07 | 7.2E-07 | 1.0E-05 | 2.2E-05 | 4.5E-07 | 6.1E-06 | 7.8E-05 | 1.6E-07 | 1.5E-07 | 6.2E-05 | 8.2E-08 | 2.2E-06 |
| AROCLOR-1260 | | | | | | 1.3E-07 | | | 1.4E-07 | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | 6.2E-07 | | | 2.3E-07 | | | |
| CADMIUM | | | | | | 5.7E-11 | | | 6.1E-11 | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | 3.7E-11 | | | 1.1E-10 | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 2.6E-07 | | | 3.6E-07 | | | |
| TOTAL CANCER RISK | 4.2E-07 | 7.2E-07 | 1.0E-05 | 2.2E-05 | 4.5E-07 | 7.1E-06 | 7.8E-05 | 1.6E-07 | 8.8E-07 | 6.2E-05 | 8.2E-08 | 2.2E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.1E-06 | 1.6E-05 | 2.3E-04 | 4.8E-04 | 9.8E-06 | 1.3E-04 | 1.7E-03 | 3.5E-06 | 3.3E-06 | 1.4E-03 | 1.8E-06 | 4.8E-05 |
| AROCLOR-1260 | | | | | | 6.4E-07 | | | 6.9E-07 | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | 4.8E-06 | | | 1.8E-06 | | | |
| CADMIUM | | | | | | 1.1E-10 | | | 1.2E-10 | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | 7.4E-11 | | | 2.1E-10 | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 3.9E-06 | | | 5.4E-06 | | | |
| TOTAL CANCER RISK | 9.1E-06 | 1.6E-05 | 2.3E-04 | 4.8E-04 | 9.8E-06 | 1.4E-04 | 1.7E-03 | 3.5E-06 | 1.1E-05 | 1.4E-03 | 1.8E-06 | 4.8E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-060D | SB-061 | | | | | SB-061A | SB-061B | SB-061C | SB-061D | SB-062 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RED-20091013 | D-SB-61RE-1 20090916 | D-SB-61RE-2 20090916 | D-SB-61RE-2-20090916 | D-SB-61RE-2-20090916 | SB-61-SS 20040924 | D-SB-61REA-20091012 | D-SB-61REB-20091012 | D-SB-61REC-20091012 | D-SB-61RED-20091012 | D-SB-62RE-1 20090914 | D-SB-62RE-2 20090914 |
| SAMPLE DATE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE CODE | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| MATRIX | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | SB | SB | SB | SB | SB | SS | SB | SB | SB | SB | SB | SB |
| SUBMATRIX | 1 | 1 | 2 | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 2 |
| TOP DEPTH | 1 | 1 | 2 | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 2 |
| BOTTOM DEPTH | | | | | | | | | | | | |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.4E-05 | 6.0E-08 | 2.8E-09 | 2.0E-08 | 3.8E-08 | | 5.3E-07 | 8.0E-08 | 1.3E-06 | 2.8E-07 | 2.2E-05 | 3.7E-06 |
| AROCLOR-1260 | | | | | | 1.5E-07 | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | 1.0E-07 | | | | | | |
| CADMIUM | | | | | | 6.4E-11 | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | 5.3E-11 | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 5.0E-07 | | | | | | |
| TOTAL CANCER RISK | 3.4E-05 | 6.0E-08 | 2.8E-09 | 2.0E-08 | 3.8E-08 | 7.5E-07 | 5.3E-07 | 8.0E-08 | 1.3E-06 | 2.8E-07 | 2.2E-05 | 3.7E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.3E-04 | 1.3E-06 | 6.0E-08 | 4.4E-07 | 8.3E-07 | | 1.1E-05 | 1.7E-06 | 2.9E-05 | 6.1E-06 | 4.8E-04 | 8.0E-05 |
| AROCLOR-1260 | | | | | | 7.7E-07 | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | 8.0E-07 | | | | | | |
| CADMIUM | | | | | | 1.3E-10 | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | 1.1E-10 | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 7.4E-06 | | | | | | |
| TOTAL CANCER RISK | 7.3E-04 | 1.3E-06 | 6.0E-08 | 4.4E-07 | 8.3E-07 | 9.0E-06 | 1.1E-05 | 1.7E-06 | 2.9E-05 | 6.1E-06 | 4.8E-04 | 8.0E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-062 | SB-062A | SB-062B | SB-062C | SB-062D | SB-063 | | | | | SB-063A | SB-063B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-62-SS | D-SB-62REA- | D-SB-62REB- | D-SB-62REC- | D-SB-62RED- | D-SB-63RE-1 | D-SB-63RE-2 | D-SB-63RE-2- | D-SB-63RE-2- | SB-63-SS | D-SB-63REA- | D-SB-63REB- |
| SAMPLE DATE | 20040923 | 20091015 | 20091015 | 20091015 | 20091014 | 20090915 | 20090915 | 20090915 | 20090915 | 20040924 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB | SB | SB | SB | SS | SB | SB |
| TOP DEPTH | | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | | 2 | 2 |
| BOTTOM DEPTH | | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-05 | 1.6E-07 | 1.9E-06 | 9.0E-06 | 5.8E-05 | 4.8E-07 | 3.7E-07 | 2.3E-07 | 9.4E-08 | 1.8E-09 | 6.0E-08 | 2.6E-09 |
| AROCLOR-1260 | 1.3E-07 | | | | | | | | | 1.7E-07 | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 2.3E-07 | | | | | | | | | 3.4E-07 | | |
| CADMIUM | 5.7E-11 | | | | | | | | | 7.5E-11 | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 6.6E-11 | | | | | | | | | 8.5E-11 | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.6E-07 | | | | | | | | | 6.9E-07 | | |
| TOTAL CANCER RISK | 2.7E-05 | 1.6E-07 | 1.9E-06 | 9.0E-06 | 5.8E-05 | 4.8E-07 | 3.7E-07 | 2.3E-07 | 9.4E-08 | 1.2E-06 | 6.0E-08 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.7E-04 | 3.4E-06 | 4.1E-05 | 1.9E-04 | 1.3E-03 | 1.0E-05 | 8.0E-06 | 5.0E-06 | 2.0E-06 | 4.0E-08 | 1.3E-06 | 5.6E-08 |
| AROCLOR-1260 | 6.7E-07 | | | | | | | | | 8.7E-07 | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 1.8E-06 | | | | | | | | | 2.7E-06 | | |
| CADMIUM | 1.1E-10 | | | | | | | | | 1.5E-10 | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 1.3E-10 | | | | | | | | | 1.7E-10 | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 5.4E-06 | | | | | | | | | 1.0E-05 | | |
| TOTAL CANCER RISK | 5.8E-04 | 3.4E-06 | 4.1E-05 | 1.9E-04 | 1.3E-03 | 1.0E-05 | 8.0E-06 | 5.0E-06 | 2.0E-06 | 1.4E-05 | 1.3E-06 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-063C | SB-063D | SB-064 | SB-065 | | | SB-066 | | | SB-066A | SB-066B | SB-066C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63REC-20091013 | D-SB-63RED-20091013 | SB-64-SS 20040924 | D-SB-65RE-1 20090916 | D-SB-65RE-2 20090916 | SB-65-SS 20040917 | D-SB-66RE-1 20090914 | D-SB-66RE-2 20090914 | SB-66-SS 20040923 | D-SB-66REA-20091014 | D-SB-66REB-20091014 | D-SB-66REC-20091014 |
| SAMPLE DATE | | | | | | | | | | | | |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SS | SB | SB | SS | SB | SB | SB |
| TOP DEPTH | 2 | 2 | | 1 | 2 | | 1 | 2 | | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | | 1 | 2 | | 1 | 2 | | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.5E-09 | 2.8E-09 | 1.5E-05 | 2.4E-09 | 6.4E-08 | | 1.8E-07 | 5.1E-06 | 2.2E-09 | 6.0E-08 | 9.0E-09 | 1.3E-07 |
| AROCLOR-1260 | | | 1.6E-07 | | | 1.3E-07 | | | 1.5E-07 | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | 2.7E-07 | | | 2.0E-07 | | | 1.8E-06 | | | |
| CADMIUM | | | 6.8E-11 | | | 5.9E-11 | | | 6.4E-11 | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | 9.8E-11 | | | 6.3E-11 | | | 5.6E-11 | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 5.0E-07 | | | 8.5E-08 | | | 9.9E-07 | | | |
| TOTAL CANCER RISK | 9.5E-09 | 2.8E-09 | 1.5E-05 | 2.4E-09 | 6.4E-08 | 4.2E-07 | 1.8E-07 | 5.1E-06 | 2.9E-06 | 6.0E-08 | 9.0E-09 | 1.3E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.1E-07 | 6.0E-08 | 3.2E-04 | 5.3E-08 | 1.4E-06 | | 4.0E-06 | 1.1E-04 | 4.8E-08 | 1.3E-06 | 1.9E-07 | 2.9E-06 |
| AROCLOR-1260 | | | 7.9E-07 | | | 6.7E-07 | | | 7.4E-07 | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | 2.1E-06 | | | 1.5E-06 | | | 1.4E-05 | | | |
| CADMIUM | | | 1.4E-10 | | | 1.2E-10 | | | 1.3E-10 | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | 2.0E-10 | | | 1.3E-10 | | | 1.1E-10 | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 7.4E-06 | | | 1.3E-06 | | | 1.5E-05 | | | |
| TOTAL CANCER RISK | 2.1E-07 | 6.0E-08 | 3.3E-04 | 5.3E-08 | 1.4E-06 | 3.5E-06 | 4.0E-06 | 1.1E-04 | 3.0E-05 | 1.3E-06 | 1.9E-07 | 2.9E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-1.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-066D | SB-067 | SB-239 | | | | | | SB-240 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RED-20091014 | SB-67-SS 20040927 | D-SB-239RE-20090914 | D-SB-239RE-20090914 | D-SB-239RE-20090914 | SB-239-20050607 | SB-239-20050607 | SB-239-SS[6] 20050607 | D-SB-240RE-20090914 | D-SB-240RE-20090914 | SB-240-20050607 | SB-240-20050607 |
| SAMPLE DATE | | | | | | | | | | | | |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SB | SB | SB | SS | SB | SB | SB | SB |
| TOP DEPTH | 2 | | 2 | 2 | 2 | 1 | 1.5 | 0.5 | 1 | 2 | 1 | 1.5 |
| BOTTOM DEPTH | 2 | | 2 | 2 | 2 | 1 | 1.5 | 0.5 | 1 | 2 | 1 | 1.5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 3.3E-05 | 1.0E-06 | 5.5E-07 | 6.5E-08 | 1.2E-06 | 1.9E-06 | 4.5E-07 | 8.2E-06 | 2.6E-09 | 2.9E-07 | 6.1E-07 |
| AROCLOR-1260 | | 1.3E-07 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | 4.0E-07 | | | | | | | | | | |
| CADMIUM | | 5.9E-11 | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | 9.8E-11 | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | 5.8E-07 | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 3.4E-05 | 1.0E-06 | 5.5E-07 | 6.5E-08 | 1.2E-06 | 1.9E-06 | 4.5E-07 | 8.2E-06 | 2.6E-09 | 2.9E-07 | 6.1E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 7.1E-04 | 2.2E-05 | 1.2E-05 | 1.4E-06 | 2.6E-05 | 4.0E-05 | 9.7E-06 | 1.8E-04 | 5.6E-08 | 6.2E-06 | 1.3E-05 |
| AROCLOR-1260 | | 6.4E-07 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | 3.1E-06 | | | | | | | | | | |
| CADMIUM | | 1.2E-10 | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | 2.0E-10 | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | 8.7E-06 | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 7.2E-04 | 2.2E-05 | 1.2E-05 | 1.4E-06 | 2.6E-05 | 4.0E-05 | 9.7E-06 | 1.8E-04 | 5.6E-08 | 6.2E-06 | 1.3E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-240 | SB-240A | SB-240B | SB-240C | SB-240D | SB-241 | | | SB-242 | | | SB-243 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-240-SS[6] | D-SB-20091014 | D-SB-20091013 | D-SB-20091013 | D-SB-20091013 | SB-241-20050607 | SB-241-20050607 | SB-241-SS[6] 20050607 | SB-242-20050607 | SB-242-20050607 | SB-242-SS[6] 20050607 | D-SB-243RE-20090915 |
| SAMPLE DATE | 20050607 | | | | | | | | | | | |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| BOTTOM DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.5E-07 | 1.3E-06 | 4.7E-05 | 1.5E-07 | 1.5E-07 | 5.4E-07 | 4.7E-07 | 5.7E-07 | 5.3E-07 | 2.8E-07 | 6.3E-07 | 1.1E-05 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.5E-07 | 1.3E-06 | 4.7E-05 | 1.5E-07 | 1.5E-07 | 5.4E-07 | 4.7E-07 | 5.7E-07 | 5.3E-07 | 2.8E-07 | 6.3E-07 | 1.1E-05 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.4E-06 | 2.8E-05 | 1.0E-03 | 3.3E-06 | 3.4E-06 | 1.2E-05 | 1.0E-05 | 1.2E-05 | 1.1E-05 | 6.0E-06 | 1.4E-05 | 2.5E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.4E-06 | 2.8E-05 | 1.0E-03 | 3.3E-06 | 3.4E-06 | 1.2E-05 | 1.0E-05 | 1.2E-05 | 1.1E-05 | 6.0E-06 | 1.4E-05 | 2.5E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-243 | | | | SB-243A | SB-243B | SB-243C | SB-243D | SB-592 | SB-592A | SB-592B | SB-592D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-20090915 | SB-243-20050607 | SB-243-20050607 | SB-243-SS[6]20050607 | D-SB-20091012 | D-SB-20091012 | D-SB-20091012 | D-SB-20091012 | D-SB-592-220090914 | D-SB-592A-220091015 | D-SB-592B-220091016 | D-SB-592D-220091016 |
| SAMPLE DATE | | | | | | | | | | | | |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SS | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 1 | 1.5 | 0.5 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 1 | 1.5 | 0.5 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.1E-08 | 5.6E-07 | 3.1E-07 | 2.9E-07 | 4.7E-07 | 2.8E-09 | 5.0E-08 | 5.5E-08 | 1.3E-07 | 2.4E-08 | 1.1E-07 | 1.8E-07 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.1E-08 | 5.6E-07 | 3.1E-07 | 2.9E-07 | 4.7E-07 | 2.8E-09 | 5.0E-08 | 5.5E-08 | 1.3E-07 | 2.4E-08 | 1.1E-07 | 1.8E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-06 | 1.2E-05 | 6.8E-06 | 6.4E-06 | 1.0E-05 | 6.0E-08 | 1.1E-06 | 1.2E-06 | 2.8E-06 | 5.3E-07 | 2.4E-06 | 4.0E-06 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-06 | 1.2E-05 | 6.8E-06 | 6.4E-06 | 1.0E-05 | 6.0E-08 | 1.1E-06 | 1.2E-06 | 2.8E-06 | 5.3E-07 | 2.4E-06 | 4.0E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-593 | SB-594 | SB-595 | SB-766 | SB-767 | SB-768 | SB-769 | SB-770 | SB-771 | SB-772 | SB-773 | SB-774 | SB-775 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-593-2 | D-SB-594-2 | D-SB-595-2 | D-SB-766- | D-SS-767- | D-SS-768- | D-SS-769- | D-SS-770- | D-SB-771- | D-SS-772- | D-SS-773- | D-SB-774- | D-SS-775- |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 | 20100830 | 20100831 | 20100910 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 2 | 2 | 2 | | | | | | | | | | |
| BOTTOM DEPTH | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-07 | 3.2E-07 | 3.0E-07 | 6.2E-09 | 1.1E-07 | 2.7E-07 | 1.4E-07 | 6.2E-08 | 3.9E-05 | 1.6E-07 | 6.8E-09 | 3.9E-05 | 6.9E-09 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-07 | 3.2E-07 | 3.0E-07 | 6.2E-09 | 1.1E-07 | 2.7E-07 | 1.4E-07 | 6.2E-08 | 3.9E-05 | 1.6E-07 | 6.8E-09 | 3.9E-05 | 6.9E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.4E-06 | 6.9E-06 | 6.4E-06 | 1.4E-07 | 2.4E-06 | 5.9E-06 | 2.9E-06 | 1.3E-06 | 8.5E-04 | 3.4E-06 | 1.5E-07 | 8.5E-04 | 1.5E-07 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.4E-06 | 6.9E-06 | 6.4E-06 | 1.4E-07 | 2.4E-06 | 5.9E-06 | 2.9E-06 | 1.3E-06 | 8.5E-04 | 3.4E-06 | 1.5E-07 | 8.5E-04 | 1.5E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-776 | SB-777 | SB-778 | SB-779 | SB-780 | SB-781 | SB-782 | SB-783 | SB-784 | SB-785 | SB-786 | SB-787 | SB-788 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SS-776-20100831 | D-SB-777-20100910 | D-SS-778-20100831 | D-SS-779-20100901 | D-SS-780-20100901 | D-SS-781-20100901 | D-SS-782-20100902 | D-SS-783-20100902 | D-SS-784-20100902 | D-SS-785-20100903 | D-SS-786-20100903 | D-SS-787-20100903 | D-SB-788-20100908 |
| SAMPLE DATE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE CODE | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| MATRIX | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| SUBMATRIX | | | | | | | | | | | | | |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.9E-09 | 1.6E-06 | 6.6E-09 | 1.8E-08 | 6.9E-09 | 2.9E-05 | 4.5E-07 | 7.5E-07 | 1.4E-07 | 6.2E-09 | 2.0E-06 | 2.5E-07 | 3.7E-07 |
| AROCLOR-1260 | | | | | | | 9.0E-09 | 9.5E-09 | 9.5E-09 | 9.0E-09 | 1.0E-08 | 1.0E-08 | 9.0E-09 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | 8.1E-07 | 8.8E-07 | 1.0E-06 | 5.9E-07 | 2.2E-06 | 1.9E-06 | 3.5E-07 |
| CADMIUM | | | | | | | 1.1E-11 | 5.0E-12 | 1.0E-12 | 1.9E-13 | 5.0E-12 | 1.8E-11 | 1.9E-13 |
| COBALT | | | | | | | 4.5E-10 | 7.3E-10 | 1.5E-09 | 1.5E-10 | 2.0E-09 | 6.2E-09 | 3.4E-10 |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | 3.3E-11 | 3.4E-11 | 3.7E-11 | 5.5E-12 | 1.4E-10 | 2.7E-10 | 2.2E-11 |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | 2.5E-07 | 2.5E-07 | 2.3E-07 | 3.9E-07 | 5.7E-07 | 5.1E-07 | 3.4E-07 |
| TOTAL CANCER RISK | 6.9E-09 | 1.6E-06 | 6.6E-09 | 1.8E-08 | 6.9E-09 | 2.9E-05 | 1.5E-06 | 1.9E-06 | 1.4E-06 | 9.9E-07 | 4.8E-06 | 2.7E-06 | 1.1E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 3.5E-05 | 1.4E-07 | 3.9E-07 | 1.5E-07 | 6.2E-04 | 9.8E-06 | 1.6E-05 | 3.0E-06 | 1.4E-07 | 4.3E-05 | 5.4E-06 | 7.9E-06 |
| AROCLOR-1260 | | | | | | | 4.5E-08 | 4.7E-08 | 4.7E-08 | 4.5E-08 | 5.0E-08 | 5.0E-08 | 4.5E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | 6.3E-06 | 6.8E-06 | 8.0E-06 | 4.6E-06 | 1.7E-05 | 1.5E-05 | 2.7E-06 |
| CADMIUM | | | | | | | 2.2E-11 | 1.0E-11 | 2.1E-12 | 3.8E-13 | 1.0E-11 | 3.7E-11 | 3.8E-13 |
| COBALT | | | | | | | 9.2E-10 | 1.5E-09 | 2.9E-09 | 3.0E-10 | 4.1E-09 | 1.3E-08 | 6.9E-10 |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | 6.7E-11 | 6.9E-11 | 7.4E-11 | 1.1E-11 | 2.7E-10 | 5.4E-10 | 4.4E-11 |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | 3.7E-06 | 3.7E-06 | 3.5E-06 | 5.9E-06 | 8.6E-06 | 7.7E-06 | 5.1E-06 |
| TOTAL CANCER RISK | 1.5E-07 | 3.5E-05 | 1.4E-07 | 3.9E-07 | 1.5E-07 | 6.2E-04 | 2.0E-05 | 2.7E-05 | 1.5E-05 | 1.1E-05 | 6.9E-05 | 2.8E-05 | 1.6E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-789 | SB-790 | SB-791 | SB-792 | SB-793 | SB-794 | SB-795 | SB-796 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-789-20100908 | D-SB-790-20100908 | D-SB-791-20100909 | D-SB-792-20100909 | D-SB-793-20100909 | D-SB-794-20100909 | D-SB-795-20100909 | D-SB-796-20100910 |
| SAMPLE DATE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE CODE | SO | SO | SO | SO | SO | SO | SO | SO |
| MATRIX | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | SS | SS | SS | SS | SS | SS | SS | SS |
| SUBMATRIX | | | | | | | | |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | | | | | |
| **INDUSTRIAL** | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.7E-08 | 6.4E-08 | 6.1E-09 | 1.4E-08 | 5.8E-08 | 2.5E-06 | 1.3E-07 | 2.7E-07 |
| AROCLOR-1260 | 9.0E-09 | 9.0E-09 | 9.0E-09 | 9.0E-09 | 9.5E-09 | 2.0E-08 | 9.5E-09 | 1.0E-08 |
| ANTIMONY | | | | | | | | |
| ARSENIC | 6.2E-07 | 2.6E-07 | 2.6E-07 | 8.4E-07 | 1.6E-06 | 1.6E-06 | 9.5E-07 | 1.8E-06 |
| CADMIUM | 5.5E-13 | 1.9E-13 | 1.9E-13 | 1.8E-12 | 2.1E-12 | 6.1E-12 | 2.5E-13 | 2.4E-12 |
| COBALT | 4.1E-10 | 1.2E-10 | 1.1E-10 | 9.1E-10 | 1.7E-09 | 3.2E-09 | 3.2E-10 | 2.5E-09 |
| IRON | | | | | | | | |
| LEAD | | | | | | | | |
| MANGANESE | | | | | | | | |
| MERCURY | | | | | | | | |
| MOLYBDENUM | | | | | | | | |
| NICKEL | 2.0E-11 | 4.2E-12 | 5.0E-12 | 5.1E-11 | 9.8E-11 | 1.4E-10 | 1.8E-11 | 1.6E-10 |
| VANADIUM | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.1E-07 | 2.3E-07 | 2.4E-07 | 3.2E-07 | 5.9E-07 | 4.5E-07 | 7.2E-07 | 5.3E-07 |
| TOTAL CANCER RISK | 1.0E-06 | 5.6E-07 | 5.2E-07 | 1.2E-06 | 2.3E-06 | 4.5E-06 | 1.8E-06 | 2.6E-06 |
| **RESIDENTIAL** | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-06 | 1.4E-06 | 1.3E-07 | 3.1E-07 | 1.3E-06 | 5.4E-05 | 2.9E-06 | 6.0E-06 |
| AROCLOR-1260 | 4.5E-08 | 4.5E-08 | 4.5E-08 | 4.5E-08 | 4.7E-08 | 9.9E-08 | 4.7E-08 | 5.0E-08 |
| ANTIMONY | | | | | | | | |
| ARSENIC | 4.8E-06 | 2.0E-06 | 2.1E-06 | 6.6E-06 | 1.3E-05 | 1.2E-05 | 7.4E-06 | 1.4E-05 |
| CADMIUM | 1.1E-12 | 3.8E-13 | 3.8E-13 | 3.7E-12 | 4.3E-12 | 1.2E-11 | 5.0E-13 | 4.9E-12 |
| COBALT | 8.2E-10 | 2.4E-10 | 2.3E-10 | 1.8E-09 | 3.5E-09 | 6.5E-09 | 6.4E-10 | 5.0E-09 |
| IRON | | | | | | | | |
| LEAD | | | | | | | | |
| MANGANESE | | | | | | | | |
| MERCURY | | | | | | | | |
| MOLYBDENUM | | | | | | | | |
| NICKEL | 4.1E-11 | 8.5E-12 | 1.0E-11 | 1.0E-10 | 2.0E-10 | 2.8E-10 | 3.6E-11 | 3.3E-10 |
| VANADIUM | | | | | | | | |
| HEXAVALENT CHROMIUM | 4.7E-06 | 3.4E-06 | 3.5E-06 | 4.8E-06 | 8.9E-06 | 6.7E-06 | 1.1E-05 | 8.0E-06 |
| TOTAL CANCER RISK | 1.1E-05 | 6.8E-06 | 5.8E-06 | 1.2E-05 | 2.3E-05 | 7.3E-05 | 2.1E-05 | 2.8E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | SB-058 | SB-059 | SB-060 | SB-061 | SB-062 | SB-063 | SB-064 | SB-065 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31A-SS | SB-32A-SS | SB-33A-SS | SB-57-SS | SB-58-SS | SB-59-SS | SB-60-SS | SB-61-SS | SB-62-SS | SB-63-SS | SB-64-SS | SB-65-SS |
| SAMPLE DATE | 20040913 | 20040924 | 20040917 | 20040913 | 20040913 | 20040923 | 20040924 | 20040924 | 20040923 | 20040924 | 20040924 | 20040917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | | | | | | | | | | | | |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | 2.8E-03 | | | | 2.9E-03 | 3.1E-03 | 3.2E-03 | 2.9E-03 | 3.8E-03 | 3.4E-03 | |
| ARSENIC | 4.1E-03 | 5.5E-04 | 2.3E-03 | 5.0E-03 | 3.4E-03 | 3.9E-03 | 1.4E-03 | 6.4E-04 | 1.4E-03 | 2.1E-03 | 1.7E-03 | 1.2E-03 |
| CADMIUM | 1.6E-03 | 1.5E-03 | 1.5E-03 | 1.9E-03 | 1.6E-03 | 1.6E-03 | 1.7E-03 | 1.7E-03 | 1.6E-03 | 2.1E-03 | 1.9E-03 | 1.6E-03 |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | 2.6E-04 | 2.3E-04 | 2.3E-04 | 3.1E-04 | 2.4E-04 | 2.3E-04 | 2.6E-04 | 2.6E-04 | 2.4E-04 | 3.1E-04 | 2.8E-04 | 2.6E-04 |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 3.8E-04 | 1.5E-03 | 2.6E-03 | 7.8E-04 | 8.9E-04 | 5.9E-04 | 1.7E-03 | 8.6E-04 | 1.1E-03 | 1.4E-03 | 1.6E-03 | 1.0E-03 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 4.0E-04 | 7.2E-04 | 3.6E-04 | 5.6E-04 | 1.2E-03 | 4.8E-04 | 6.7E-04 | 9.2E-04 | 6.7E-04 | 1.3E-03 | 9.2E-04 | 1.6E-04 |
| TOTAL HAZARD INDEX | 6.8E-03 | 7.2E-03 | 7.0E-03 | 8.6E-03 | 7.4E-03 | 9.6E-03 | 8.8E-03 | 7.6E-03 | 7.8E-03 | 1.1E-02 | 9.8E-03 | 4.3E-03 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | 4.6E-02 | | | | 4.7E-02 | 5.1E-02 | 5.3E-02 | 4.7E-02 | 6.3E-02 | 5.7E-02 | |
| ARSENIC | 8.3E-02 | 1.1E-02 | 4.6E-02 | 1.0E-01 | 6.9E-02 | 7.9E-02 | 2.9E-02 | 1.3E-02 | 2.9E-02 | 4.3E-02 | 3.4E-02 | 2.5E-02 |
| CADMIUM | 3.5E-02 | 3.2E-02 | 3.2E-02 | 4.2E-02 | 3.5E-02 | 3.4E-02 | 3.6E-02 | 3.8E-02 | 3.4E-02 | 4.5E-02 | 4.1E-02 | 3.5E-02 |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | 3.3E-03 | 2.9E-03 | 2.9E-03 | 3.9E-03 | 3.0E-03 | 3.0E-03 | 3.3E-03 | 3.3E-03 | 3.0E-03 | 3.9E-03 | 3.6E-03 | 3.3E-03 |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 3.9E-03 | 1.5E-02 | 2.7E-02 | 8.1E-03 | 9.2E-03 | 6.1E-03 | 1.7E-02 | 8.8E-03 | 1.1E-02 | 1.4E-02 | 1.6E-02 | 1.0E-02 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.6E-03 | 6.3E-03 | 3.2E-03 | 5.0E-03 | 1.1E-02 | 4.2E-03 | 5.9E-03 | 8.1E-03 | 5.9E-03 | 1.1E-02 | 8.1E-03 | 1.4E-03 |
| TOTAL HAZARD INDEX | 1.3E-01 | 1.1E-01 | 1.1E-01 | 1.6E-01 | 1.3E-01 | 1.7E-01 | 1.4E-01 | 1.2E-01 | 1.3E-01 | 1.8E-01 | 1.6E-01 | 7.5E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-066 | SB-067 | SB-782 | SB-783 | SB-784 | SB-785 | SB-786 | SB-787 | SB-788 | SB-789 | SB-790 | SB-791 | SB-792 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-66-SS | SB-67-SS | D-SS-782-20100902 | D-SS-783-20100902 | D-SS-784-20100902 | D-SS-785-20100903 | D-SS-786-20100903 | D-SS-787-20100903 | D-SB-788-20100908 | D-SB-789-20100908 | D-SB-790-20100908 | D-SB-791-20100909 | D-SB-792-20100909 |
| SAMPLE DATE | 20040923 | 20040927 | | | | | | | | | | | |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | | | | | | | | | | | | | |
| BOTTOM DEPTH | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | 3.2E-03 | 6.9E-03 | 3.4E-04 | 2.9E-04 | 8.7E-05 | 1.4E-04 | 5.5E-04 | 4.4E-04 | 7.8E-05 | 1.3E-04 | 3.0E-05 | 2.9E-05 | 1.3E-04 |
| ARSENIC | 1.1E-02 | 2.5E-03 | 5.0E-03 | 5.5E-03 | 6.4E-03 | 3.7E-03 | 1.4E-02 | 1.2E-02 | 2.2E-03 | 3.9E-03 | 1.6E-03 | 1.6E-03 | 5.2E-03 |
| CADMIUM | 1.7E-03 | 1.6E-03 | 3.0E-04 | 1.4E-04 | 2.9E-05 | 5.2E-06 | 1.4E-04 | 5.0E-04 | 5.2E-06 | 1.5E-05 | 5.2E-06 | 5.1E-06 | 5.0E-05 |
| COBALT | | | 3.7E-03 | 5.9E-03 | 1.2E-02 | 1.2E-03 | 1.7E-02 | 5.1E-02 | 2.8E-03 | 3.3E-03 | 9.7E-04 | 9.3E-04 | 7.4E-03 |
| IRON | | | 6.0E-03 | 4.8E-03 | 4.0E-03 | 5.2E-03 | 2.0E-02 | 1.7E-02 | 4.3E-03 | 3.7E-03 | 3.1E-03 | 3.5E-03 | 7.8E-03 |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | 9.1E-03 | 2.7E-03 | 2.2E-03 | 8.4E-04 | 9.1E-03 | 6.3E-03 | 2.5E-03 | 9.6E-04 | 1.2E-03 | 8.4E-04 | 1.1E-02 |
| MERCURY | 2.6E-04 | 2.6E-04 | 3.8E-04 | 3.6E-04 | 2.4E-04 | 3.8E-05 | 1.2E-03 | 2.3E-03 | 3.8E-05 | 8.9E-05 | 3.8E-05 | 3.8E-05 | 8.0E-04 |
| MOLYBDENUM | | | 5.0E-05 | 4.2E-05 | 3.7E-05 | 4.4E-05 | 6.2E-05 | 5.0E-05 | 2.5E-05 | 3.4E-05 | 1.6E-05 | 7.8E-06 | 5.5E-05 |
| NICKEL | 9.1E-04 | 1.6E-03 | 5.4E-04 | 5.5E-04 | 5.9E-04 | 8.9E-05 | 2.2E-03 | 4.3E-03 | 3.5E-04 | 3.3E-04 | 6.8E-05 | 8.1E-05 | 8.2E-04 |
| VANADIUM | | | 1.6E-03 | 1.7E-03 | 1.7E-03 | 2.1E-03 | 3.8E-03 | 3.2E-03 | 1.3E-03 | 1.9E-03 | 1.2E-03 | 1.4E-03 | 1.8E-03 |
| HEXAVALENT CHROMIUM | 1.8E-03 | 1.1E-03 | 4.6E-04 | 4.7E-04 | 4.4E-04 | 7.3E-04 | 1.1E-03 | 9.5E-04 | 6.4E-04 | 5.8E-04 | 4.2E-04 | 4.4E-04 | 5.9E-04 |
| TOTAL HAZARD INDEX | 1.9E-02 | 1.4E-02 | 2.7E-02 | 2.3E-02 | 2.8E-02 | 1.4E-02 | 6.8E-02 | 9.8E-02 | 1.4E-02 | 1.5E-02 | 8.7E-03 | 8.9E-03 | 3.6E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | 5.3E-02 | 1.1E-01 | 5.7E-03 | 4.7E-03 | 1.4E-03 | 2.4E-03 | 9.1E-03 | 7.2E-03 | 1.3E-03 | 2.1E-03 | 4.9E-04 | 4.7E-04 | 2.1E-03 |
| ARSENIC | 2.3E-01 | 5.1E-02 | 1.0E-01 | 1.1E-01 | 1.3E-01 | 7.4E-02 | 2.8E-01 | 2.4E-01 | 4.4E-02 | 7.9E-02 | 3.3E-02 | 3.3E-02 | 1.1E-01 |
| CADMIUM | 3.8E-02 | 3.5E-02 | 6.5E-03 | 3.0E-03 | 6.2E-04 | 1.1E-04 | 3.0E-03 | 1.1E-02 | 1.1E-04 | 3.2E-04 | 1.1E-04 | 1.1E-04 | 1.1E-03 |
| COBALT | | | 8.8E-02 | 1.4E-01 | 2.8E-01 | 2.9E-02 | 3.9E-01 | 1.2E+00 | 6.6E-02 | 7.9E-02 | 2.3E-02 | 2.2E-02 | 1.8E-01 |
| IRON | | | 1.4E-01 | 1.1E-01 | 9.6E-02 | 1.2E-01 | 4.8E-01 | 4.0E-01 | 1.0E-01 | 8.8E-02 | 7.3E-02 | 8.4E-02 | 1.9E-01 |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | 9.3E-02 | 2.8E-02 | 2.3E-02 | 8.6E-03 | 9.3E-02 | 6.4E-02 | 2.6E-02 | 9.8E-03 | 1.3E-02 | 8.6E-03 | 1.1E-01 |
| MERCURY | 3.3E-03 | 3.3E-03 | 4.8E-03 | 4.6E-03 | 3.0E-03 | 4.8E-04 | 1.5E-02 | 2.9E-02 | 4.8E-04 | 1.1E-03 | 4.8E-04 | 4.8E-04 | 1.0E-02 |
| MOLYBDENUM | | | 1.2E-03 | 1.0E-03 | 8.7E-04 | 1.1E-03 | 1.5E-03 | 1.2E-03 | 6.0E-04 | 8.1E-04 | 3.7E-04 | 1.8E-04 | 1.3E-03 |
| NICKEL | 9.4E-03 | 1.6E-02 | 5.6E-03 | 5.7E-03 | 6.1E-03 | 9.2E-04 | 2.3E-02 | 4.4E-02 | 3.6E-03 | 3.4E-03 | 7.0E-04 | 8.3E-04 | 8.4E-03 |
| VANADIUM | | | 3.7E-02 | 4.1E-02 | 4.0E-02 | 4.9E-02 | 9.0E-02 | 7.7E-02 | 3.2E-02 | 4.6E-02 | 2.9E-02 | 3.2E-02 | 4.4E-02 |
| HEXAVALENT CHROMIUM | 1.6E-02 | 9.5E-03 | 4.1E-03 | 4.1E-03 | 3.8E-03 | 6.4E-03 | 9.4E-03 | 8.4E-03 | 5.6E-03 | 5.1E-03 | 3.7E-03 | 3.9E-03 | 5.2E-03 |
| TOTAL HAZARD INDEX | 3.5E-01 | 2.3E-01 | 4.9E-01 | 4.6E-01 | 5.8E-01 | 3.0E-01 | 1.4E+00 | 2.1E+00 | 2.8E-01 | 3.1E-01 | 1.8E-01 | 1.9E-01 | 6.5E-01 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-1.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-793 | SB-794 | SB-795 | SB-796 |
|---|---|---|---|---|
| SAMPLE ID | D-SB-793-20100909 | D-SB-794-20100909 | D-SB-795-20100909 | D-SB-796-20100910 |
| SAMPLE DATE | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE CODE | SO | SO | SO | SO |
| MATRIX | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | SS | SS | SS | SS |
| SUBMATRIX | | | | |
| TOP DEPTH | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | |
| **INDUSTRIAL** | | | | |
| BAP EQUIVALENT-HALFND | | | | |
| AROCLOR-1260 | | | | |
| ANTIMONY | 2.3E-04 | 9.4E-04 | 9.8E-05 | 8.5E-04 |
| ARSENIC | 1.0E-02 | 9.8E-03 | 5.9E-03 | 1.1E-02 |
| CADMIUM | 5.8E-05 | 1.7E-04 | 6.8E-06 | 6.6E-05 |
| COBALT | 1.4E-02 | 2.6E-02 | 2.6E-03 | 2.0E-02 |
| IRON | 1.7E-02 | 1.6E-02 | 8.1E-03 | 1.8E-02 |
| LEAD | | | | |
| MANGANESE | 3.5E-03 | 1.6E-02 | 1.4E-03 | 7.1E-03 |
| MERCURY | 3.2E-04 | 8.0E-03 | 4.3E-04 | 2.6E-03 |
| MOLYBDENUM | 5.0E-05 | 5.8E-05 | 2.9E-05 | 6.8E-05 |
| NICKEL | 1.6E-03 | 2.3E-03 | 2.9E-04 | 2.6E-03 |
| VANADIUM | 4.8E-03 | 2.9E-03 | 2.1E-03 | 3.2E-03 |
| HEXAVALENT CHROMIUM | 1.1E-03 | 8.3E-04 | 1.3E-03 | 9.9E-04 |
| TOTAL HAZARD INDEX | 5.3E-02 | 8.3E-02 | 2.2E-02 | 6.7E-02 |
| **RESIDENTIAL** | | | | |
| BAP EQUIVALENT-HALFND | | | | |
| AROCLOR-1260 | | | | |
| ANTIMONY | 3.8E-03 | 1.6E-02 | 1.6E-03 | 1.4E-02 |
| ARSENIC | 2.1E-01 | 2.0E-01 | 1.2E-01 | 2.3E-01 |
| CADMIUM | 1.3E-03 | 3.6E-03 | 1.5E-04 | 1.4E-03 |
| COBALT | 3.4E-01 | 6.2E-01 | 6.1E-02 | 4.8E-01 |
| IRON | 4.0E-01 | 3.8E-01 | 1.9E-01 | 4.3E-01 |
| LEAD | | | | |
| MANGANESE | 3.6E-02 | 1.7E-01 | 1.4E-02 | 7.3E-02 |
| MERCURY | 4.1E-03 | 1.0E-01 | 5.4E-03 | 3.3E-02 |
| MOLYBDENUM | 1.2E-03 | 1.4E-03 | 6.8E-04 | 1.6E-03 |
| NICKEL | 1.6E-02 | 2.3E-02 | 2.9E-03 | 2.7E-02 |
| VANADIUM | 1.1E-01 | 6.8E-02 | 5.1E-02 | 7.6E-02 |
| HEXAVALENT CHROMIUM | 9.8E-03 | 7.3E-03 | 1.2E-02 | 8.7E-03 |
| TOTAL HAZARD INDEX | 1.1E+00 | 1.6E+00 | 4.6E-01 | 1.4E+00 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31-05 | SB-32-05 | SB-33-05 | F-SB-57RE-10 | F-SB-57RE-3 | F-SB-57RE-4 | F-SB-57RE-5 | F-SB-57RE-6 | F-SB-57RE-7 | F-SB-57RE-8 | F-SB-57RE-9 | SB-57-05 | SB-57-10 |
| SAMPLE DATE | 20031118 | 20031121 | 20031121 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 | 20040913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 10 |
| BOTTOM DEPTH | 5 | 5 | 5 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.9E-07 | 1.5E-06 | 3.3E-06 | 2.9E-09 | 2.4E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | | |
| NAPHTHALENE | 1.3E-10 | 4.1E-09 | 1.5E-10 | | | | | | | | | 1.3E-10 | 1.3E-10 |
| AROCLOR-1260 | 2.9E-08 | 3.3E-08 | 3.4E-08 | | | | | | | | | 1.4E-07 | 1.6E-07 |
| ARSENIC | | 9.1E-07 | 1.8E-06 | | | | | | | | | 2.4E-07 | 6.6E-07 |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 7.4E-07 | 5.0E-07 | 6.3E-07 | | | | | | | | | 2.4E-07 | 2.6E-07 |
| TOTAL CANCER RISK | 1.5E-06 | 3.0E-06 | 5.7E-06 | 2.9E-09 | 2.4E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 6.1E-07 | 1.1E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-05 | 3.3E-05 | 7.1E-05 | 6.4E-08 | 5.3E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | | |
| NAPHTHALENE | 6.5E-10 | | 7.6E-10 | | | | | | | | | 6.5E-10 | 6.5E-10 |
| AROCLOR-1260 | 1.5E-07 | 1.7E-07 | 1.7E-07 | | | | | | | | | 6.9E-07 | 7.9E-07 |
| ARSENIC | | 7.1E-06 | 1.4E-05 | | | | | | | | | 1.9E-06 | 5.1E-06 |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.1E-05 | 7.4E-06 | 9.5E-06 | | | | | | | | | 3.6E-06 | 3.9E-06 |
| TOTAL CANCER RISK | 2.6E-05 | 4.8E-05 | 9.5E-05 | 6.4E-08 | 5.3E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.1E-06 | 9.8E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-058 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58RE-10 | F-SB-58RE-3 | F-SB-58RE-4 | F-SB-58RE-5 | F-SB-58RE-6 | F-SB-58RE-7 | F-SB-58RE-8 | F-SB-58RE-8-AVG | F-SB-58RE-8-D | F-SB-58RE-9 | SB-58-05 |
| SAMPLE DATE | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 5 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 5.5E-07 | 2.8E-09 | 2.2E-08 | 4.0E-08 | 1.5E-06 | 3.5E-07 |
| NAPHTHALENE | | | | | | | | | | | 1.3E-10 |
| AROCLOR-1260 | | | | | | | | | | | 1.5E-07 |
| ARSENIC | | | | | | | | | | | 8.4E-07 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | 5.2E-07 |
| TOTAL CANCER RISK | 1.4E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 5.5E-07 | 2.8E-09 | 2.2E-08 | 4.0E-08 | 1.5E-06 | 1.9E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.1E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.2E-05 | 6.0E-08 | 4.7E-07 | 8.7E-07 | 3.3E-05 | 7.5E-06 |
| NAPHTHALENE | | | | | | | | | | | 6.5E-10 |
| AROCLOR-1260 | | | | | | | | | | | 7.7E-07 |
| ARSENIC | | | | | | | | | | | 6.6E-06 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | 7.9E-06 |
| TOTAL CANCER RISK | 3.1E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.2E-05 | 6.0E-08 | 4.7E-07 | 8.7E-07 | 3.3E-05 | 2.3E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-058A | | | | SB-058B | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-58-10 | F-SB-58REA-10 | F-SB-58REA-4 | F-SB-58REA-6 | F-SB-58REA-8 | F-SB-58REB-10 | F-SB-58REB-4 | F-SB-58REB-4-AVG | F-SB-58REB-4-D | F-SB-58REB-6 |
| SAMPLE DATE | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 4 | 6 | 8 | 10 | 4 | 4 | 4 | 6 |
| BOTTOM DEPTH | 10 | 10 | 4 | 6 | 8 | 10 | 4 | 4 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | 9.4E-08 | 5.5E-08 | 4.2E-07 | 1.0E-07 | 5.4E-08 | 1.4E-07 | 1.0E-07 | 6.6E-08 | 2.9E-07 |
| NAPHTHALENE | 1.3E-10 | | | | | | | | | |
| AROCLOR-1260 | 1.5E-07 | | | | | | | | | |
| ARSENIC | 1.5E-06 | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 4.1E-07 | | | | | | | | | |
| TOTAL CANCER RISK | 2.1E-06 | 9.4E-08 | 5.5E-08 | 4.2E-07 | 1.0E-07 | 5.4E-08 | 1.4E-07 | 1.0E-07 | 6.6E-08 | 2.9E-07 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | 2.0E-06 | 1.2E-06 | 9.1E-06 | 2.2E-06 | 1.2E-06 | 3.0E-06 | 2.2E-06 | 1.4E-06 | 6.4E-06 |
| NAPHTHALENE | 6.5E-10 | | | | | | | | | |
| AROCLOR-1260 | 7.7E-07 | | | | | | | | | |
| ARSENIC | 1.2E-05 | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 6.2E-06 | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-05 | 2.0E-06 | 1.2E-06 | 9.1E-06 | 2.2E-06 | 1.2E-06 | 3.0E-06 | 2.2E-06 | 1.4E-06 | 6.4E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-058C | | | | SB-058D | | | | SB-059 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-58REB-8 | F-SB-58REC-10 | F-SB-58REC-4 | F-SB-58REC-6 | F-SB-58REC-8 | F-SB-58RED-10 | F-SB-58RED-4 | F-SB-58RED-6 | F-SB-58RED-8 | SB-59-05 | SB-59-10 |
| SAMPLE DATE | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20040923 | 20040923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 10 | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 5 | 10 |
| BOTTOM DEPTH | 8 | 10 | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 5 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.2E-09 | 5.8E-08 | 8.6E-08 | 1.5E-07 | 1.7E-08 | 5.8E-08 | 3.2E-07 | 1.6E-06 | 1.3E-07 | 1.1E-05 | 1.0E-05 |
| NAPHTHALENE | | | | | | | | | | 1.3E-10 | 1.3E-10 |
| AROCLOR-1260 | | | | | | | | | | 1.4E-07 | 1.4E-07 |
| ARSENIC | | | | | | | | | | 1.4E-06 | 9.1E-07 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | 8.3E-07 | 3.9E-07 |
| TOTAL CANCER RISK | 9.2E-09 | 5.8E-08 | 8.6E-08 | 1.5E-07 | 1.7E-08 | 5.8E-08 | 3.2E-07 | 1.6E-06 | 1.3E-07 | 1.3E-05 | 1.2E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.0E-07 | 1.3E-06 | 1.9E-06 | 3.3E-06 | 3.6E-07 | 1.3E-06 | 7.0E-06 | 3.6E-05 | 2.9E-06 | 2.3E-04 | 2.2E-04 |
| NAPHTHALENE | | | | | | | | | | 6.5E-10 | 6.5E-10 |
| AROCLOR-1260 | | | | | | | | | | 6.9E-07 | 7.2E-07 |
| ARSENIC | | | | | | | | | | 1.1E-05 | 7.1E-06 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | 1.2E-05 | 5.8E-06 |
| TOTAL CANCER RISK | 2.0E-07 | 1.3E-06 | 1.9E-06 | 3.3E-06 | 3.6E-07 | 1.3E-06 | 7.0E-06 | 3.6E-05 | 2.9E-06 | 2.6E-04 | 2.3E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-060 | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-10 | D-SB-60RE-3 | D-SB-60RE-4 | D-SB-60RE-5 | D-SB-60RE-6 | D-SB-60RE-7 | D-SB-60RE-8 | D-SB-60RE-8-AVG | D-SB-60RE-8-D | D-SB-60RE-9 | SB-60-05 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20040924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 5 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 8 | 9 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 1.2E-08 | 9.4E-08 | 7.0E-06 | 2.8E-09 | 2.9E-09 | 2.9E-09 | 2.9E-09 | 2.8E-09 | 2.6E-09 | |
| NAPHTHALENE | | | | | | | | | | | 1.3E-10 |
| AROCLOR-1260 | | | | | | | | | | | 1.5E-07 |
| ARSENIC | | | | | | | | | | | 3.7E-07 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | 1.7E-06 |
| TOTAL CANCER RISK | 2.6E-09 | 1.2E-08 | 9.4E-08 | 7.0E-06 | 2.8E-09 | 2.9E-09 | 2.9E-09 | 2.9E-09 | 2.8E-09 | 2.6E-09 | 2.2E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 2.6E-07 | 2.0E-06 | 1.5E-04 | 6.0E-08 | 6.4E-08 | 6.4E-08 | 6.2E-08 | 6.0E-08 | 5.6E-08 | |
| NAPHTHALENE | | | | | | | | | | | 6.5E-10 |
| AROCLOR-1260 | | | | | | | | | | | 7.4E-07 |
| ARSENIC | | | | | | | | | | | 2.8E-06 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | 2.5E-05 |
| TOTAL CANCER RISK | 5.6E-08 | 2.6E-07 | 2.0E-06 | 1.5E-04 | 6.0E-08 | 6.4E-08 | 6.4E-08 | 6.2E-08 | 6.0E-08 | 5.6E-08 | 2.8E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-060A | | | | | SB-060B | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-60-10 | D-SB-60REA-3 | D-SB-60REA-3-AVG | D-SB-60REA-3-D | D-SB-60REA-5 | D-SB-60REA-7 | D-SB-60REB-3 | D-SB-60REB-5 | D-SB-60REB-7 | D-SB-60REC-3 |
| SAMPLE DATE | 20040924 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 10 | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 7 | 3 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | 1.2E-06 | 3.0E-06 | 4.7E-06 | 6.9E-08 | 2.6E-09 | 2.6E-09 | 1.6E-07 | 1.1E-07 | 2.8E-09 |
| NAPHTHALENE | 1.3E-10 | | | | | | | | | |
| AROCLOR-1260 | 1.4E-07 | | | | | | | | | |
| ARSENIC | 8.8E-07 | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.3E-06 | | | | | | | | | |
| TOTAL CANCER RISK | 4.3E-06 | 1.2E-06 | 3.0E-06 | 4.7E-06 | 6.9E-08 | 2.6E-09 | 2.6E-09 | 1.6E-07 | 1.1E-07 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | 2.7E-05 | 6.4E-05 | 1.0E-04 | 1.5E-06 | 5.6E-08 | 5.6E-08 | 3.4E-06 | 2.5E-06 | 6.0E-08 |
| NAPHTHALENE | 6.5E-10 | | | | | | | | | |
| AROCLOR-1260 | 7.2E-07 | | | | | | | | | |
| ARSENIC | 6.8E-06 | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 5.0E-05 | | | | | | | | | |
| TOTAL CANCER RISK | 5.7E-05 | 2.7E-05 | 6.4E-05 | 1.0E-04 | 1.5E-06 | 5.6E-08 | 5.6E-08 | 3.4E-06 | 2.5E-06 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-060C | | SB-060D | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60REC-5 | D-SB-60REC-7 | D-SB-60RED-3 | D-SB-60RED-5 | D-SB-60RED-7 | D-SB-60RED-7-AVG | D-SB-60RED-7-D | D-SB-61RE-10 | D-SB-61RE-3 | D-SB-61RE-4 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 10 | 3 | 4 |
| BOTTOM DEPTH | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 10 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.8E-08 | 2.6E-09 | 7.0E-07 | 1.5E-07 | 2.8E-09 | 2.7E-09 | 2.6E-09 | 1.2E-06 | 1.0E-08 | 1.1E-08 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 4.8E-08 | 2.6E-09 | 7.0E-07 | 1.5E-07 | 2.8E-09 | 2.7E-09 | 2.6E-09 | 1.2E-06 | 1.0E-08 | 1.1E-08 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.0E-06 | 5.6E-08 | 1.5E-05 | 3.2E-06 | 6.0E-08 | 5.8E-08 | 5.6E-08 | 2.6E-05 | 2.2E-07 | 2.4E-07 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.0E-06 | 5.6E-08 | 1.5E-05 | 3.2E-06 | 6.0E-08 | 5.8E-08 | 5.6E-08 | 2.6E-05 | 2.2E-07 | 2.4E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-061 | | | | | | | SB-061A | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61RE-5 | D-SB-61RE-6 | D-SB-61RE-7 | D-SB-61RE-8 | D-SB-61RE-9 | SB-61-05 | SB-61-10 | D-SB-61REA-3 | D-SB-61REA-3-AVG | D-SB-61REA-3-D | D-SB-61REA-5 |
| SAMPLE DATE | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20040924 | 20040924 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 5 | 10 | 3 | 3 | 3 | 5 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 5 | 10 | 3 | 3 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.5E-07 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | | | 2.6E-09 | 2.7E-09 | 2.8E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | 1.5E-10 | 1.3E-10 | | | | |
| AROCLOR-1260 | | | | | | 1.6E-07 | 1.4E-07 | | | | |
| ARSENIC | | | | | | 6.6E-07 | 9.3E-08 | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 5.2E-07 | 3.3E-07 | | | | |
| TOTAL CANCER RISK | 3.5E-07 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 1.3E-06 | 5.7E-07 | 2.6E-09 | 2.7E-09 | 2.8E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.6E-06 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | | | 5.6E-08 | 5.8E-08 | 6.0E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | 7.6E-10 | 6.5E-10 | | | | |
| AROCLOR-1260 | | | | | | 8.2E-07 | 7.2E-07 | | | | |
| ARSENIC | | | | | | 5.1E-06 | 7.3E-07 | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 7.9E-06 | 5.0E-06 | | | | |
| TOTAL CANCER RISK | 7.6E-06 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 1.4E-05 | 6.4E-06 | 5.6E-08 | 5.8E-08 | 6.0E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | | SB-061B | | | | SB-061C | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-7 | D-SB-61REA-9 | D-SB-61REB-3 | D-SB-61REB-5 | D-SB-61REB-7 | D-SB-61REB-9 | D-SB-61REC-3 | D-SB-61REC-5 | D-SB-61REC-7 | D-SB-61REC-9 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 1.7E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 8.9E-07 | 2.6E-09 | 4.9E-08 | 2.6E-09 | 2.3E-06 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 1.7E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 8.9E-07 | 2.6E-09 | 4.9E-08 | 2.6E-09 | 2.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 3.6E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.9E-05 | 5.6E-08 | 1.1E-06 | 5.6E-08 | 4.9E-05 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 3.6E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.9E-05 | 5.6E-08 | 1.1E-06 | 5.6E-08 | 4.9E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-061D | | | | SB-062 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61RED-3 | D-SB-61RED-5 | D-SB-61RED-7 | D-SB-61RED-9 | D-SB-62RE-10 | D-SB-62RE-3 | D-SB-62RE-4 | D-SB-62RE-5 | D-SB-62RE-6 | D-SB-62RE-7 | D-SB-62RE-8 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 3.6E-08 | 2.6E-09 | 1.1E-07 | 2.6E-09 | 1.5E-07 | 2.4E-07 | 5.3E-07 | 7.4E-07 | 2.7E-07 | 2.3E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 3.6E-08 | 2.6E-09 | 1.1E-07 | 2.6E-09 | 1.5E-07 | 2.4E-07 | 5.3E-07 | 7.4E-07 | 2.7E-07 | 2.3E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 7.8E-07 | 5.6E-08 | 2.3E-06 | 5.6E-08 | 3.3E-06 | 5.2E-06 | 1.1E-05 | 1.6E-05 | 5.8E-06 | 4.9E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 7.8E-07 | 5.6E-08 | 2.3E-06 | 5.6E-08 | 3.3E-06 | 5.2E-06 | 1.1E-05 | 1.6E-05 | 5.8E-06 | 4.9E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | | | SB-062A | | | | SB-062B | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62RE-9 | SB-62-05 | SB-62-10 | D-SB-62REA-3 | D-SB-62REA-5 | D-SB-62REA-7 | D-SB-62REA-9 | D-SB-62REB-3 | D-SB-62REB-5 | D-SB-62REB-7 | D-SB-62REB-7-AVG |
| SAMPLE DATE | 20090914 | 20040923 | 20040923 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 10 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 |
| BOTTOM DEPTH | 9 | 5 | 10 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.7E-06 | | | 2.1E-07 | 1.5E-05 | 8.3E-07 | 1.7E-05 | 2.2E-07 | 9.8E-07 | 1.5E-06 | 9.2E-07 |
| NAPHTHALENE | | 1.3E-10 | 1.3E-10 | | | | | | | | |
| AROCLOR-1260 | | 1.4E-07 | 1.4E-07 | | | | | | | | |
| ARSENIC | | 6.2E-07 | 9.7E-08 | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | 4.4E-07 | 9.9E-08 | | | | | | | | |
| TOTAL CANCER RISK | 4.7E-06 | 1.2E-06 | 3.4E-07 | 2.1E-07 | 1.5E-05 | 8.3E-07 | 1.7E-05 | 2.2E-07 | 9.8E-07 | 1.5E-06 | 9.2E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.0E-04 | | | 4.6E-06 | 3.2E-04 | 1.8E-05 | 3.7E-04 | 4.7E-06 | 2.1E-05 | 3.3E-05 | 2.0E-05 |
| NAPHTHALENE | | 6.5E-10 | 6.5E-10 | | | | | | | | |
| AROCLOR-1260 | | 7.2E-07 | 7.2E-07 | | | | | | | | |
| ARSENIC | | 4.8E-06 | 7.6E-07 | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | 6.6E-06 | 1.5E-06 | | | | | | | | |
| TOTAL CANCER RISK | 1.0E-04 | 1.2E-05 | 3.0E-06 | 4.6E-06 | 3.2E-04 | 1.8E-05 | 3.7E-04 | 4.7E-06 | 2.1E-05 | 3.3E-05 | 2.0E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | | SB-062C | | | | SB-062D | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REB-7-D | D-SB-62REB-9 | D-SB-62REC-3 | D-SB-62REC-5 | D-SB-62REC-7 | D-SB-62REC-9 | D-SB-62RED-5 | D-SB-62RED-7 | D-SB-62RED-9 | D-SB-63RE-10 |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091014 | 20091014 | 20091014 | 20090915 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 7 | 9 | 10 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 7 | 9 | 10 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.3E-07 | 2.6E-09 | 6.0E-07 | 1.6E-07 | 4.5E-07 | 2.6E-09 | 2.0E-07 | 9.2E-08 | 2.6E-09 | 2.9E-09 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 3.3E-07 | 2.6E-09 | 6.0E-07 | 1.6E-07 | 4.5E-07 | 2.6E-09 | 2.0E-07 | 9.2E-08 | 2.6E-09 | 2.9E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.1E-06 | 5.6E-08 | 1.3E-05 | 3.4E-06 | 9.8E-06 | 5.6E-08 | 4.4E-06 | 2.0E-06 | 5.6E-08 | 6.4E-08 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 7.1E-06 | 5.6E-08 | 1.3E-05 | 3.4E-06 | 9.8E-06 | 5.6E-08 | 4.4E-06 | 2.0E-06 | 5.6E-08 | 6.4E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-063 | | | | | | | | | SB-063A | | SB-( |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-3 | D-SB-63RE-4 | D-SB-63RE-5 | D-SB-63RE-6 | D-SB-63RE-7 | D-SB-63RE-8 | D-SB-63RE-9 | SB-63-05 | SB-63-10 | D-SB-63REA-4 | D-SB-63REA-6 | D-SB-63REB-4 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20040924 | 20040924 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 10 | 4 | 6 | 4 |
| BOTTOM DEPTH | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 10 | 4 | 6 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.3E-06 | 5.4E-07 | 3.3E-08 | 2.9E-09 | 1.4E-07 | 7.2E-08 | 2.9E-09 | 5.2E-07 | | 4.0E-08 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | 1.3E-10 | 1.5E-10 | | | |
| AROCLOR-1260 | | | | | | | | 1.5E-07 | 1.6E-07 | | | |
| ARSENIC | | | | | | | | 4.4E-07 | 1.2E-07 | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | 6.1E-07 | 6.1E-07 | | | |
| TOTAL CANCER RISK | 1.3E-06 | 5.4E-07 | 3.3E-08 | 2.9E-09 | 1.4E-07 | 7.2E-08 | 2.9E-09 | 1.7E-06 | 8.9E-07 | 4.0E-08 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-05 | 1.2E-05 | 7.1E-07 | 6.4E-08 | 3.0E-06 | 1.6E-06 | 6.4E-08 | 1.1E-05 | | 8.6E-07 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | 6.5E-10 | 7.6E-10 | | | |
| AROCLOR-1260 | | | | | | | | 7.4E-07 | 8.2E-07 | | | |
| ARSENIC | | | | | | | | 3.4E-06 | 9.3E-07 | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | 9.1E-06 | 9.1E-06 | | | |
| TOTAL CANCER RISK | 2.8E-05 | 1.2E-05 | 7.1E-07 | 6.4E-08 | 3.0E-06 | 1.6E-06 | 6.4E-08 | 2.4E-05 | 1.1E-05 | 8.6E-07 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | )63B | SB-063C | | SB-063D | | SB-064 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63REB-6 | D-SB-63REC-4 | D-SB-63REC-6 | D-SB-63RED-4 | D-SB-63RED-6 | SB-64-05 | D-SB-65RE-10 | D-SB-65RE-3 | D-SB-65RE-5 | D-SB-65RE-5-AVG |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20040924 | 20090916 | 20090916 | 20090916 | 20090916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 4 | 6 | 4 | 6 | 5 | 10 | 3 | 5 | 5 |
| BOTTOM DEPTH | 6 | 4 | 6 | 4 | 6 | 5 | 10 | 3 | 5 | 5 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 1.6E-07 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 7.1E-07 | 2.6E-09 | 5.2E-08 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | 1.3E-10 | | | | |
| AROCLOR-1260 | | | | | | 1.5E-07 | | | | |
| ARSENIC | | | | | | 2.9E-07 | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 7.2E-07 | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 1.6E-07 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 1.9E-06 | 2.6E-09 | 5.2E-08 | 2.8E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 3.5E-06 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 1.5E-05 | 5.6E-08 | 1.1E-06 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | 6.5E-10 | | | | |
| AROCLOR-1260 | | | | | | 7.4E-07 | | | | |
| ARSENIC | | | | | | 2.3E-06 | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 1.1E-05 | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 3.5E-06 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 2.9E-05 | 5.6E-08 | 1.1E-06 | 6.0E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-065 | | | | | | | | | | | SB |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-65RE-5-D | D-SB-65RE-6 | D-SB-65RE-7 | D-SB-65RE-8 | D-SB-65RE-9 | SB-65-05 | SB-65-10 | D-SB-66RE-3 | D-SB-66RE-4 | D-SB-66RE-5 | D-SB-66RE-6 | D-SB-66RE-7 |
| SAMPLE DATE | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20040917 | 20040917 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 5 | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 5 | 10 | 3 | 4 | 5 | 6 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | | | 2.6E-09 | 2.6E-09 | 1.6E-07 | 1.6E-07 | 2.8E-09 |
| NAPHTHALENE | | | | | | 1.3E-10 | 1.3E-10 | | | | | |
| AROCLOR-1260 | | | | | | 1.5E-07 | 1.4E-07 | | | | | |
| ARSENIC | | | | | | 7.3E-07 | 1.1E-07 | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 9.6E-07 | 4.4E-07 | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 1.9E-06 | 6.9E-07 | 2.6E-09 | 2.6E-09 | 1.6E-07 | 1.6E-07 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | | | 5.6E-08 | 5.6E-08 | 3.5E-06 | 3.4E-06 | 6.0E-08 |
| NAPHTHALENE | | | | | | 6.5E-10 | 6.5E-10 | | | | | |
| AROCLOR-1260 | | | | | | 7.7E-07 | 7.2E-07 | | | | | |
| ARSENIC | | | | | | 5.7E-06 | 8.3E-07 | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 1.4E-05 | 6.6E-06 | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 2.1E-05 | 8.2E-06 | 5.6E-08 | 5.6E-08 | 3.5E-06 | 3.4E-06 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | -066 | | | | | SB-066A | SB-066B | SB-066C | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RE-8 | D-SB-66RE-8-AVG | D-SB-66RE-8-D | SB-66-05 | SB-66-10 | D-SB-66REA-4 | D-SB-66REB-4 | D-SB-66REC-4 | D-SB-66RED-3 | D-SB-66RED-4 |
| SAMPLE DATE | 20090914 | 20090914 | 20090914 | 20040923 | 20040923 | 20091014 | 20091014 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 8 | 5 | 10 | 4 | 4 | 4 | 3 | 4 |
| BOTTOM DEPTH | 8 | 8 | 8 | 5 | 10 | 4 | 4 | 4 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.7E-09 | 2.8E-09 | | 1.4E-06 | 2.6E-09 | 1.2E-08 | 2.6E-09 | 2.2E-07 | 2.6E-09 |
| NAPHTHALENE | | | | 1.3E-10 | 1.3E-10 | | | | | |
| AROCLOR-1260 | | | | 1.4E-07 | 1.4E-07 | | | | | |
| ARSENIC | | | | 5.1E-07 | 5.5E-07 | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | 6.1E-07 | 3.0E-07 | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.7E-09 | 2.8E-09 | 1.3E-06 | 2.4E-06 | 2.6E-09 | 1.2E-08 | 2.6E-09 | 2.2E-07 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.8E-08 | 6.0E-08 | | 3.0E-05 | 5.6E-08 | 2.5E-07 | 5.6E-08 | 4.7E-06 | 5.6E-08 |
| NAPHTHALENE | | | | 6.5E-10 | 6.5E-10 | | | | | |
| AROCLOR-1260 | | | | 7.2E-07 | 7.2E-07 | | | | | |
| ARSENIC | | | | 4.0E-06 | 4.3E-06 | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | 9.1E-06 | 4.5E-06 | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.8E-08 | 6.0E-08 | 1.4E-05 | 4.0E-05 | 5.6E-08 | 2.5E-07 | 5.6E-08 | 4.7E-06 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-066D | | SB-067 | | SB-239 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RED-4-AVG | D-SB-66RED-4-D | SB-67-05 | SB-67-10 | D-SB-239RE-10 | D-SB-239RE-3 | D-SB-239RE-4 | D-SB-239RE-5 | D-SB-239RE-6 | D-SB-239RE-7 |
| SAMPLE DATE | 20091014 | 20091014 | 20040927 | 20040927 | 20091006 | 20090914 | 20090914 | 20090914 | 20090914 | 20091006 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 5 | 10 | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 4 | 4 | 5 | 10 | 10 | 3 | 4 | 5 | 6 | 7 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.9E-08 | 5.5E-08 | 8.5E-07 | 7.1E-07 | 9.1E-08 | 1.1E-08 | 9.1E-08 | 8.2E-08 | 7.2E-07 | 1.4E-06 |
| NAPHTHALENE | | | 1.5E-10 | 1.3E-10 | | | | | | |
| AROCLOR-1260 | | | 1.8E-07 | 1.5E-07 | | | | | | |
| ARSENIC | | | 4.4E-07 | 4.4E-07 | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 1.1E-06 | 3.6E-07 | | | | | | |
| TOTAL CANCER RISK | 2.9E-08 | 5.5E-08 | 2.6E-06 | 1.7E-06 | 9.1E-08 | 1.1E-08 | 9.1E-08 | 8.2E-08 | 7.2E-07 | 1.4E-06 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.3E-07 | 1.2E-06 | 1.8E-05 | 1.5E-05 | 2.0E-06 | 2.5E-07 | 2.0E-06 | 1.8E-06 | 1.6E-05 | 3.1E-05 |
| NAPHTHALENE | | | 7.6E-10 | 6.5E-10 | | | | | | |
| AROCLOR-1260 | | | 8.9E-07 | 7.4E-07 | | | | | | |
| ARSENIC | | | 3.4E-06 | 3.4E-06 | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 1.7E-05 | 5.4E-06 | | | | | | |
| TOTAL CANCER RISK | 6.3E-07 | 1.2E-06 | 4.0E-05 | 2.5E-05 | 2.0E-06 | 2.5E-07 | 2.0E-06 | 1.8E-06 | 1.6E-05 | 3.1E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | | SB-240 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-239RE-8 | D-SB-239RE-9 | D-SB-240RE-10 | D-SB-240RE-3 | D-SB-240RE-4 | D-SB-240RE-6 | D-SB-240RE-7 | D-SB-240RE-8 | D-SB-240RE-8-AVG | D-SB-240RE-8-D |
| SAMPLE DATE | 20091006 | 20091006 | 20090915 | 20090914 | 20090914 | 20090915 | 20090914 | 20090914 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 10 | 3 | 4 | 6 | 7 | 8 | 8 | 8 |
| BOTTOM DEPTH | 8 | 9 | 10 | 3 | 4 | 6 | 7 | 8 | 8 | 8 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.3E-06 | 6.2E-06 | 3.9E-07 | 7.0E-07 | 4.7E-07 | 6.5E-07 | 1.9E-05 | 9.5E-09 | 5.4E-08 | 9.8E-08 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.3E-06 | 6.2E-06 | 3.9E-07 | 7.0E-07 | 4.7E-07 | 6.5E-07 | 1.9E-05 | 9.5E-09 | 5.4E-08 | 9.8E-08 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-05 | 1.4E-04 | 8.4E-06 | 1.5E-05 | 1.0E-05 | 1.4E-05 | 4.1E-04 | 2.1E-07 | 1.2E-06 | 2.1E-06 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-05 | 1.4E-04 | 8.4E-06 | 1.5E-05 | 1.0E-05 | 1.4E-05 | 4.1E-04 | 2.1E-07 | 1.2E-06 | 2.1E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-240A | | | | | | SB-240B | | |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REA-3 | D-SB-240REA-5 | D-SB-240REA-7 | D-SB-240REA-7-AVG | D-SB-240REA-7-D | D-SB-240REA-9 | D-SB-240REB-3 | D-SB-240REB-5 | D-SB-240REB-7 |
| SAMPLE DATE | 20091014 | 20091014 | 20091014 | 20091014 | 20091014 | 20091014 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.6E-07 | 1.1E-06 | 1.6E-08 | 3.4E-08 | 5.3E-08 | 1.2E-08 | 1.3E-07 | 8.5E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | |
| ARSENIC | | | | | | | | | |
| COBALT | | | | | | | | | |
| IRON | | | | | | | | | |
| LEAD | | | | | | | | | |
| MANGANESE | | | | | | | | | |
| MERCURY | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 1.6E-07 | 1.1E-06 | 1.6E-08 | 3.4E-08 | 5.3E-08 | 1.2E-08 | 1.3E-07 | 8.5E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.5E-06 | 2.5E-05 | 3.5E-07 | 7.5E-07 | 1.2E-06 | 2.5E-07 | 2.8E-06 | 1.8E-07 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | |
| ARSENIC | | | | | | | | | |
| COBALT | | | | | | | | | |
| IRON | | | | | | | | | |
| LEAD | | | | | | | | | |
| MANGANESE | | | | | | | | | |
| MERCURY | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 3.5E-06 | 2.5E-05 | 3.5E-07 | 7.5E-07 | 1.2E-06 | 2.5E-07 | 2.8E-06 | 1.8E-07 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-240C | | | | | | | SB-2 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REB-9 | D-SB-240REC-3 | D-SB-240REC-3-AVG | D-SB-240REC-3-D | D-SB-240REC-5 | D-SB-240REC-7 | D-SB-240REC-9 | D-SB-240RED-3 | D-SB-240RED-5 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 3.7E-07 | 2.3E-07 | 9.2E-08 | 1.7E-05 | 2.6E-09 | 5.9E-08 | 1.7E-07 | 2.0E-05 |
| NAPHTHALENE | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | |
| ARSENIC | | | | | | | | | |
| COBALT | | | | | | | | | |
| IRON | | | | | | | | | |
| LEAD | | | | | | | | | |
| MANGANESE | | | | | | | | | |
| MERCURY | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 3.7E-07 | 2.3E-07 | 9.2E-08 | 1.7E-05 | 2.6E-09 | 5.9E-08 | 1.7E-07 | 2.0E-05 |
| **RESIDENTIAL** | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 8.1E-06 | 5.1E-06 | 2.0E-06 | 3.7E-04 | 5.6E-08 | 1.3E-06 | 3.7E-06 | 4.3E-04 |
| NAPHTHALENE | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | |
| ARSENIC | | | | | | | | | |
| COBALT | | | | | | | | | |
| IRON | | | | | | | | | |
| LEAD | | | | | | | | | |
| MANGANESE | | | | | | | | | |
| MERCURY | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 8.1E-06 | 5.1E-06 | 2.0E-06 | 3.7E-04 | 5.6E-08 | 1.3E-06 | 3.7E-06 | 4.3E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | 240D | | SB-243 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240RED-7 | D-SB-240RED-9 | D-SB-243RE-10 | D-SB-243RE-3 | D-SB-243RE-4 | D-SB-243RE-5 | D-SB-243RE-6 | D-SB-243RE-7 | D-SB-243RE-8 | D-SB-243RE-8-AVG |
| SAMPLE DATE | 20091013 | 20091013 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 8 |
| BOTTOM DEPTH | 7 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 8 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.9E-08 | 2.8E-06 | 2.8E-09 | 2.1E-07 | 7.5E-08 | 7.1E-08 | 1.1E-07 | 5.3E-08 | 2.8E-09 | 8.7E-09 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 4.9E-08 | 2.8E-06 | 2.8E-09 | 2.1E-07 | 7.5E-08 | 7.1E-08 | 1.1E-07 | 5.3E-08 | 2.8E-09 | 8.7E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-06 | 6.1E-05 | 6.0E-08 | 4.6E-06 | 1.6E-06 | 1.5E-06 | 2.4E-06 | 1.2E-06 | 6.0E-08 | 1.9E-07 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-06 | 6.1E-05 | 6.0E-08 | 4.6E-06 | 1.6E-06 | 1.5E-06 | 2.4E-06 | 1.2E-06 | 6.0E-08 | 1.9E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | | SB-243A | SB-243B | SB-243C | SB-243D | | | SB-244 | |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-243RE-8-D | D-SB-243RE-9 | D-SB-243REA-4 | D-SB-243REB-4 | D-SB-243REC-4 | D-SB-243RED-4 | D-SB-243RED-4-AVG | D-SB-243RED-4-D | SB-244-05 | SB-244-10 |
| SAMPLE DATE | 20090915 | 20090915 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20050607 | 20050607 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 10 |
| BOTTOM DEPTH | 8 | 9 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 10 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-08 | 2.9E-09 | 3.0E-07 | 9.1E-09 | 2.9E-09 | 8.9E-08 | 7.5E-08 | 6.1E-08 | | |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | 1.9E-08 | 1.9E-08 |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-08 | 2.9E-09 | 3.0E-07 | 9.1E-09 | 2.9E-09 | 8.9E-08 | 7.5E-08 | 6.1E-08 | 1.9E-08 | 1.9E-08 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.2E-07 | 6.4E-08 | 6.4E-06 | 2.0E-07 | 6.4E-08 | 1.9E-06 | 1.6E-06 | 1.3E-06 | | |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | 9.4E-08 | 9.4E-08 |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 3.2E-07 | 6.4E-08 | 6.4E-06 | 2.0E-07 | 6.4E-08 | 1.9E-06 | 1.6E-06 | 1.3E-06 | 9.4E-08 | 9.4E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-245 | | SB-246 | | SB-247 | | SB-248 | | SB-249 | | SB-318 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-245-05 | SB-245-10 | SB-246-05 | SB-246-10 | SB-247-05 | SB-247-10 | SB-248-05 | SB-248-10 | SB-249-05 | SB-249-10 | SB-318-0203 | SB-318-0506 | SB-318-0809 |
| SAMPLE DATE | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 2 | 5 | 8 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 | 6 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1260 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 2.0E-08 | 2.1E-08 | 2.0E-08 | 1.9E-08 | 2.0E-08 | 1.9E-08 | | | |
| ARSENIC | | | | | 1.5E-06 | 1.5E-07 | 2.2E-06 | 2.9E-06 | 5.5E-07 | 2.6E-06 | | | |
| COBALT | | | | | 2.4E-09 | 1.4E-09 | 2.6E-09 | 6.8E-09 | 4.5E-09 | 7.7E-10 | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 6.1E-07 | 5.6E-07 | 6.8E-07 | 1.0E-06 | 5.0E-07 | 1.4E-06 | | | |
| TOTAL CANCER RISK | 1.9E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 2.1E-06 | 7.3E-07 | 2.9E-06 | 4.0E-06 | 1.1E-06 | 3.9E-06 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | 5.6E-08 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1260 | 9.7E-08 | 9.4E-08 | 9.4E-08 | 9.9E-08 | 9.9E-08 | 1.0E-07 | 9.9E-08 | 9.4E-08 | 9.9E-08 | 9.7E-08 | | | |
| ARSENIC | | | | | 1.1E-05 | 1.1E-06 | 1.7E-05 | 2.3E-05 | 4.3E-06 | 2.0E-05 | | | |
| COBALT | | | | | 1.2E-08 | 7.1E-09 | 1.3E-08 | 3.4E-08 | 2.2E-08 | 3.9E-09 | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 9.1E-06 | 8.4E-06 | 1.0E-05 | 1.5E-05 | 7.4E-06 | 2.0E-05 | | | |
| TOTAL CANCER RISK | 9.7E-08 | 9.4E-08 | 9.4E-08 | 9.9E-08 | 2.1E-05 | 9.7E-06 | 2.7E-05 | 3.8E-05 | 1.2E-05 | 4.0E-05 | 5.6E-08 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-319 | | | SB-320 | | | SB-321 | | | SB-322 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-319-0203 | SB-319-0506 | SB-319-0809 | SB-320-0203 | SB-320-0506 | SB-320-0809 | SB-321-0203 | SB-321-0506 | SB-321-0809 | SB-322-0203 | SB-322-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.2E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 3.3E-06 | 2.6E-09 | 2.6E-09 | 4.5E-08 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.2E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 3.3E-06 | 2.6E-09 | 2.6E-09 | 4.5E-08 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 7.1E-05 | 5.6E-08 | 5.6E-08 | 9.8E-07 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 7.1E-05 | 5.6E-08 | 5.6E-08 | 9.8E-07 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-323 | | | SB-324 | | | SB-325 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-322-0809 | SB-323-0203 | SB-323-0506 | SB-323-0809 | SB-324-0203 | SB-324-0506 | SB-324-0809 | SB-325-0203 | SB-325-0506 | SB-325-0809 | SB-326-0203 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.5E-07 | 2.6E-09 | 2.6E-09 | 8.7E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.5E-07 | 2.6E-09 | 2.6E-09 | 8.7E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.4E-06 | 5.6E-08 | 5.6E-08 | 1.9E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.4E-06 | 5.6E-08 | 5.6E-08 | 1.9E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-326 | | SB-327 | | | SB-328 | | | SB-329 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-326-0506 | SB-326-0809 | SB-327-0203 | SB-327-0506 | SB-327-0809 | SB-328-0203 | SB-328-0506 | SB-328-0809 | SB-329-0203 | SB-329-0506 | SB-329-0809 |
| SAMPLE DATE | 20071031 | 20071031 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 3.8E-07 | 4.5E-07 | 6.6E-07 | 6.8E-07 | 5.9E-07 | 6.9E-07 | 1.2E-07 | 9.4E-08 | 7.1E-07 | 6.8E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 3.8E-07 | 4.5E-07 | 6.6E-07 | 6.8E-07 | 5.9E-07 | 6.9E-07 | 1.2E-07 | 9.4E-08 | 7.1E-07 | 6.8E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 8.3E-06 | 9.8E-06 | 1.4E-05 | 1.5E-05 | 1.3E-05 | 1.5E-05 | 2.6E-06 | 2.0E-06 | 1.5E-05 | 1.5E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 8.3E-06 | 9.8E-06 | 1.4E-05 | 1.5E-05 | 1.3E-05 | 1.5E-05 | 2.6E-06 | 2.0E-06 | 1.5E-05 | 1.5E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-330 | | | SB-331 | | | SB-332 | | | SB-333 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-330-0203 | SB-330-0506 | SB-330-0809 | SB-331-0203 | SB-331-0506 | SB-331-0809 | SB-332-0203 | SB-332-0506 | SB-332-0809 | SB-333-0203 | SB-333-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.8E-07 | 3.8E-07 | 6.6E-07 | 6.9E-08 | 6.8E-07 | 6.9E-07 | 1.3E-07 | 7.1E-07 | 2.2E-07 | 7.1E-07 | 6.6E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.8E-07 | 3.8E-07 | 6.6E-07 | 6.9E-08 | 6.8E-07 | 6.9E-07 | 1.3E-07 | 7.1E-07 | 2.2E-07 | 7.1E-07 | 6.6E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.3E-06 | 8.3E-06 | 1.4E-05 | 1.5E-06 | 1.5E-05 | 1.5E-05 | 2.9E-06 | 1.5E-05 | 4.8E-06 | 1.5E-05 | 1.4E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.3E-06 | 8.3E-06 | 1.4E-05 | 1.5E-06 | 1.5E-05 | 1.5E-05 | 2.9E-06 | 1.5E-05 | 4.8E-06 | 1.5E-05 | 1.4E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-334 | | | SB-335 | | | SB-336 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-333-0809 | SB-334-0203 | SB-334-0506 | SB-334-0809 | SB-335-0203 | SB-335-0506 | SB-335-0809 | SB-336-0203 | SB-336-0506 | SB-336-0809 | SB-337-0203 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.6E-07 | 3.0E-07 | 2.2E-07 | 1.0E-07 | 6.9E-08 | 4.5E-08 | 6.9E-07 | 6.6E-07 | 7.3E-07 | 8.3E-08 | 4.5E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.6E-07 | 3.0E-07 | 2.2E-07 | 1.0E-07 | 6.9E-08 | 4.5E-08 | 6.9E-07 | 6.6E-07 | 7.3E-07 | 8.3E-08 | 4.5E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-05 | 6.6E-06 | 4.8E-06 | 2.3E-06 | 1.5E-06 | 9.8E-07 | 1.5E-05 | 1.4E-05 | 1.6E-05 | 1.8E-06 | 9.8E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-05 | 6.6E-06 | 4.8E-06 | 2.3E-06 | 1.5E-06 | 9.8E-07 | 1.5E-05 | 1.4E-05 | 1.6E-05 | 1.8E-06 | 9.8E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-337 | | SB-338 | | | SB-339 | | | SB-340 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-337-0506 | SB-337-0809 | SB-338-0203 | SB-338-0506 | SB-338-0809 | SB-339-0203 | SB-339-0506 | SB-339-0809 | SB-340-0203 | SB-340-0506 | SB-340-0809 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.4E-06 | 7.3E-06 | 1.4E-07 | 1.7E-07 | 6.9E-07 | 4.9E-08 | 2.8E-09 | 2.6E-09 | 3.8E-07 | 1.0E-07 | 2.9E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.4E-06 | 7.3E-06 | 1.4E-07 | 1.7E-07 | 6.9E-07 | 4.9E-08 | 2.8E-09 | 2.6E-09 | 3.8E-07 | 1.0E-07 | 2.9E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.3E-05 | 1.6E-04 | 3.0E-06 | 3.8E-06 | 1.5E-05 | 1.1E-06 | 6.0E-08 | 5.6E-08 | 8.3E-06 | 2.3E-06 | 6.4E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.3E-05 | 1.6E-04 | 3.0E-06 | 3.8E-06 | 1.5E-05 | 1.1E-06 | 6.0E-08 | 5.6E-08 | 8.3E-06 | 2.3E-06 | 6.4E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-341 | | | SB-342 | | | SB-343 | | | SB-344 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-341-0203 | SB-341-0506 | SB-341-0809 | SB-342-0203 | SB-342-0506 | SB-342-0809 | SB-343-0203 | SB-343-0506 | SB-343-0809 | SB-344-0203 | SB-344-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.0E-08 | 8.7E-08 | 1.3E-07 | 2.7E-07 | 5.9E-08 | 3.6E-09 | 3.8E-08 | 2.9E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.0E-08 | 8.7E-08 | 1.3E-07 | 2.7E-07 | 5.9E-08 | 3.6E-09 | 3.8E-08 | 2.9E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-06 | 1.9E-06 | 2.9E-06 | 5.9E-06 | 1.3E-06 | 7.9E-08 | 8.3E-07 | 6.4E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-06 | 1.9E-06 | 2.9E-06 | 5.9E-06 | 1.3E-06 | 7.9E-08 | 8.3E-07 | 6.4E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-592 | | | | | | | | | SB-592A | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-344-0809 | D-SB-592-10 | D-SB-592-10-AVG | D-SB-592-10-D | D-SB-592-3 | D-SB-592-4 | D-SB-592-5 | D-SB-592-6 | D-SB-592-9 | D-SB-592A-4 | D-SB-592A-6 |
| SAMPLE DATE | 20071101 | 20091006 | 20091006 | 20091006 | 20090914 | 20090914 | 20090914 | 20090914 | 20091006 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 10 | 10 | 10 | 3 | 4 | 5 | 6 | 9 | 4 | 6 |
| BOTTOM DEPTH | 9 | 10 | 10 | 10 | 3 | 4 | 5 | 6 | 9 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.1E-09 | 2.4E-08 | 6.0E-08 | 9.6E-08 | 2.9E-06 | 3.2E-06 | 2.4E-06 | 3.9E-07 | 1.8E-08 | 5.3E-08 | 2.2E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.1E-09 | 2.4E-08 | 6.0E-08 | 9.6E-08 | 2.9E-06 | 3.2E-06 | 2.4E-06 | 3.9E-07 | 1.8E-08 | 5.3E-08 | 2.2E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-08 | 5.2E-07 | 1.3E-06 | 2.1E-06 | 6.4E-05 | 7.0E-05 | 5.2E-05 | 8.5E-06 | 4.0E-07 | 1.2E-06 | 4.7E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.8E-08 | 5.2E-07 | 1.3E-06 | 2.1E-06 | 6.4E-05 | 7.0E-05 | 5.2E-05 | 8.5E-06 | 4.0E-07 | 1.2E-06 | 4.7E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-592B | | | | | SB-592D | | | SB-593 | SB-594 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-592A-8 | D-SB-592B-4 | D-SB-592B-6 | D-SB-592B-6-AVG | D-SB-592B-6-D | D-SB-592B-8 | D-SB-592D-4 | D-SB-592D-6 | D-SB-592D-8 | D-SB-593-3 | D-SB-594-3 |
| SAMPLE DATE | 20091015 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20090914 | 20090914 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 6 | 6 | 6 | 8 | 4 | 6 | 8 | 3 | 3 |
| BOTTOM DEPTH | 8 | 4 | 6 | 6 | 6 | 8 | 4 | 6 | 8 | 3 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.3E-07 | 6.4E-07 | 6.7E-07 | 1.1E-06 | 1.5E-06 | 9.0E-08 | 1.8E-07 | 1.8E-06 | 7.2E-07 | 3.0E-07 | 2.9E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.3E-07 | 6.4E-07 | 6.7E-07 | 1.1E-06 | 1.5E-06 | 9.0E-08 | 1.8E-07 | 1.8E-06 | 7.2E-07 | 3.0E-07 | 2.9E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.8E-05 | 1.4E-05 | 1.4E-05 | 2.4E-05 | 3.3E-05 | 2.0E-06 | 3.9E-06 | 3.8E-05 | 1.6E-05 | 6.5E-06 | 6.3E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.8E-05 | 1.4E-05 | 1.4E-05 | 2.4E-05 | 3.3E-05 | 2.0E-06 | 3.9E-06 | 3.8E-05 | 1.6E-05 | 6.5E-06 | 6.3E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-595 | SB-766 | | | | SB-767 | | | | SB-768 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-595-3 | D-SB-766-03 | D-SB-766-05 | D-SB-766-07 | D-SB-766-09 | D-SB-767-03 | D-SB-767-05 | D-SB-767-07 | D-SB-767-09 | D-SB-768-03 | D-SB-768-05 | D-SB-768-07 |
| SAMPLE DATE | 20090914 | 20100827 | 20100827 | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-08 | 6.2E-09 | 3.4E-07 | 6.4E-09 | 1.6E-06 | 6.6E-09 | 6.8E-09 | 7.6E-09 | 6.8E-09 | 6.6E-09 | 3.0E-07 | 6.9E-09 |
| NAPHTHALENE | | 7.8E-11 | 6.9E-10 | 4.3E-10 | 8.2E-09 | 8.2E-11 | 8.4E-11 | 9.5E-11 | 8.4E-11 | 8.2E-11 | 1.9E-09 | 8.7E-11 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.8E-08 | 6.3E-09 | 3.4E-07 | 6.8E-09 | 1.7E-06 | 6.7E-09 | 6.8E-09 | 7.7E-09 | 6.8E-09 | 6.7E-09 | 3.0E-07 | 7.0E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-06 | 1.4E-07 | 7.3E-06 | 1.4E-07 | 3.6E-05 | 1.4E-07 | 1.5E-07 | 1.7E-07 | 1.5E-07 | 1.4E-07 | 6.5E-06 | 1.5E-07 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-06 | 1.4E-07 | 7.3E-06 | 1.4E-07 | 3.6E-05 | 1.4E-07 | 1.5E-07 | 1.7E-07 | 1.5E-07 | 1.4E-07 | 6.5E-06 | 1.5E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-769 | | | | SB-770 | | | | SB-771 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-768-09 | D-SB-769-03 | D-SB-769-05 | D-SB-769-07 | D-SB-769-09 | D-SB-770-03 | D-SB-770-05 | D-SB-770-07 | D-SB-770-09 | D-SB-771-03 | D-SB-771-05 | D-SB-771-07 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-09 | 6.9E-09 | 6.8E-09 | 6.8E-09 | 7.1E-09 | 2.3E-06 | 6.9E-09 | 5.2E-07 | 6.9E-09 | 4.5E-07 | 7.7E-07 | 4.6E-08 |
| NAPHTHALENE | 8.4E-11 | 9.1E-10 | 8.4E-11 | 8.4E-11 | 8.9E-11 | 1.1E-08 | 8.7E-11 | 2.5E-09 | 8.7E-11 | 3.9E-10 | 8.2E-11 | 8.7E-11 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.8E-09 | 7.8E-09 | 6.8E-09 | 6.8E-09 | 7.2E-09 | 2.3E-06 | 7.0E-09 | 5.2E-07 | 7.0E-09 | 4.5E-07 | 7.7E-07 | 4.6E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 5.0E-05 | 1.5E-07 | 1.1E-05 | 1.5E-07 | 9.8E-06 | 1.7E-05 | 9.9E-07 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 5.0E-05 | 1.5E-07 | 1.1E-05 | 1.5E-07 | 9.8E-06 | 1.7E-05 | 9.9E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-772 | | | | SB-773 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-771-09 | D-SB-772-03 | D-SB-772-05 | D-SB-772-07 | D-SB-772-09 | D-SB-773-03 | D-SB-773-05 | D-SB-773-05-AVG | D-SB-773-05-D | D-SB-773-09 | D-SB-774-03 |
| SAMPLE DATE | 20100910 | 20100830 | 20100830 | 20100830 | 20100830 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 5 | 5 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 5 | 5 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.9E-09 | 6.8E-09 | 6.9E-09 | 7.7E-08 | 3.3E-07 | 1.3E-07 | 6.8E-09 | 6.9E-09 | 7.1E-09 | 2.0E-08 | 8.5E-05 |
| NAPHTHALENE | 8.7E-11 | 8.4E-11 | 3.9E-10 | 8.2E-10 | 5.6E-10 | 8.4E-11 | 8.4E-11 | 8.7E-11 | 8.9E-11 | 9.1E-11 | 4.3E-09 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.0E-09 | 6.8E-09 | 7.3E-09 | 7.7E-08 | 3.3E-07 | 1.3E-07 | 6.8E-09 | 7.0E-09 | 7.2E-09 | 2.0E-08 | 8.5E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.7E-06 | 7.1E-06 | 2.9E-06 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 4.2E-07 | 1.8E-03 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.7E-06 | 7.1E-06 | 2.9E-06 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 4.2E-07 | 1.8E-03 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-774 | | | SB-775 | | | | SB-776 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-774-05 | D-SB-774-07 | D-SB-774-09 | D-SB-775-03 | D-SB-775-05 | D-SB-775-07 | D-SB-775-09 | D-SB-776-03 | D-SB-776-05 | D-SB-776-07 | D-SB-776-09 |
| SAMPLE DATE | 20100910 | 20100910 | 20100910 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-07 | 2.0E-06 | 5.9E-07 | 6.8E-09 | 9.5E-07 | 9.6E-08 | 6.8E-09 | 2.0E-07 | 8.2E-08 | 6.8E-09 | 2.4E-07 |
| NAPHTHALENE | 4.2E-09 | 3.2E-09 | 6.5E-10 | 8.4E-11 | 8.7E-11 | 8.2E-11 | 8.4E-11 | 8.4E-11 | 8.7E-11 | 8.4E-11 | 8.9E-11 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.8E-07 | 2.0E-06 | 5.9E-07 | 6.8E-09 | 9.5E-07 | 9.6E-08 | 6.8E-09 | 2.0E-07 | 8.2E-08 | 6.8E-09 | 2.4E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-05 | 4.3E-05 | 1.3E-05 | 1.5E-07 | 2.1E-05 | 2.1E-06 | 1.5E-07 | 4.4E-06 | 1.8E-06 | 1.5E-07 | 5.3E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-05 | 4.3E-05 | 1.3E-05 | 1.5E-07 | 2.1E-05 | 2.1E-06 | 1.5E-07 | 4.4E-06 | 1.8E-06 | 1.5E-07 | 5.3E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | | SB-777 | | | | SB-778 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-776-09-AVG | D-SB-776-09-D | D-SB-777-03 | D-SB-777-05 | D-SB-777-07 | D-SB-777-09 | D-SB-778-03 | D-SB-778-05 | D-SB-778-07 | D-SB-778-09 | D-SB-779-03 |
| SAMPLE DATE | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100831 | 20100831 | 20100831 | 20100831 | 20100901 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.2E-07 | 6.9E-09 | 3.5E-06 | 6.1E-07 | 1.7E-05 | 6.8E-07 | 6.6E-09 | 4.6E-07 | 9.4E-08 | 1.1E-07 | 6.9E-09 |
| NAPHTHALENE | 8.8E-11 | 8.7E-11 | 1.4E-09 | 2.1E-10 | 6.9E-08 | 1.2E-09 | 8.2E-11 | 8.7E-11 | 8.9E-11 | 8.0E-11 | 8.7E-11 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.2E-07 | 7.0E-09 | 3.5E-06 | 6.1E-07 | 1.7E-05 | 6.8E-07 | 6.7E-09 | 4.6E-07 | 9.4E-08 | 1.1E-07 | 7.0E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.7E-06 | 1.5E-07 | 7.7E-05 | 1.3E-05 | 3.7E-04 | 1.5E-05 | 1.4E-07 | 1.0E-05 | 2.0E-06 | 2.4E-06 | 1.5E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.7E-06 | 1.5E-07 | 7.7E-05 | 1.3E-05 | 3.7E-04 | 1.5E-05 | 1.4E-07 | 1.0E-05 | 2.0E-06 | 2.4E-06 | 1.5E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-779 | | | SB-780 | | | | SB-781 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-779-05 | D-SB-779-07 | D-SB-779-09 | D-SB-780-03 | D-SB-780-05 | D-SB-780-07 | D-SB-780-09 | D-SB-781-03 | D-SB-781-05 | D-SB-781-07 | D-SB-781-09 | D-SB-782-03 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.5E-07 | 6.6E-09 | 6.9E-09 | 6.4E-09 | 5.4E-08 | 6.8E-09 | 4.2E-07 | 6.9E-09 | 2.8E-06 | 6.9E-09 | 6.6E-09 | 2.1E-07 |
| NAPHTHALENE | 8.4E-11 | 8.2E-11 | 8.7E-11 | 8.0E-11 | 8.4E-11 | 8.4E-11 | 8.7E-11 | 8.7E-11 | 2.4E-09 | 8.7E-11 | 8.2E-11 | 3.5E-12 |
| AROCLOR-1260 | | | | | | | | | | | | 1.0E-08 |
| ARSENIC | | | | | | | | | | | | 7.7E-07 |
| COBALT | | | | | | | | | | | | 1.5E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | 2.7E-07 |
| TOTAL CANCER RISK | 2.5E-07 | 6.7E-09 | 7.0E-09 | 6.5E-09 | 5.4E-08 | 6.8E-09 | 4.2E-07 | 7.0E-09 | 2.8E-06 | 7.0E-09 | 6.7E-09 | 1.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.4E-06 | 1.4E-07 | 1.5E-07 | 1.4E-07 | 1.2E-06 | 1.5E-07 | 9.1E-06 | 1.5E-07 | 6.1E-05 | 1.5E-07 | 1.4E-07 | 4.5E-06 |
| NAPHTHALENE | | | | | | | | | | | | 1.7E-11 |
| AROCLOR-1260 | | | | | | | | | | | | 5.0E-08 |
| ARSENIC | | | | | | | | | | | | 6.0E-06 |
| COBALT | | | | | | | | | | | | 7.6E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | 4.0E-06 |
| TOTAL CANCER RISK | 5.4E-06 | 1.4E-07 | 1.5E-07 | 1.4E-07 | 1.2E-06 | 1.5E-07 | 9.1E-06 | 1.5E-07 | 6.1E-05 | 1.5E-07 | 1.4E-07 | 1.5E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-782 | | | SB-783 | | | | SB-784 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-782-05 | D-SB-782-07 | D-SB-782-09 | D-SB-783-03 | D-SB-783-05 | D-SB-783-07 | D-SB-783-09 | D-SB-784-03 | D-SB-784-05 | D-SB-784-07 | D-SB-784-09 | D-SB-785-03 |
| SAMPLE DATE | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100903 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.9E-09 | 6.9E-09 | 6.9E-09 | 6.4E-09 | 7.1E-09 | 6.8E-09 | 6.8E-09 | 6.8E-09 | 7.1E-09 | 6.8E-09 | 6.6E-09 | 1.3E-07 |
| NAPHTHALENE | 3.9E-12 | 4.1E-12 | 3.5E-12 | 2.8E-12 | 3.9E-12 | 3.7E-12 | 3.7E-12 | 3.7E-12 | 3.5E-12 | 3.7E-12 | 3.5E-12 | 1.6E-11 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 |
| ARSENIC | 9.1E-07 | 2.7E-06 | 1.8E-06 | 1.8E-06 | 2.2E-06 | 3.4E-06 | 6.6E-07 | 1.1E-06 | 2.9E-06 | 2.1E-06 | 9.5E-07 | 1.7E-06 |
| COBALT | 9.1E-10 | 1.8E-09 | 1.5E-09 | 2.7E-09 | 9.8E-10 | 1.2E-09 | 4.5E-10 | 1.7E-09 | 1.5E-09 | 1.3E-09 | 7.0E-10 | 2.2E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.5E-07 | 8.5E-07 | 6.7E-07 | 4.0E-07 | 6.4E-07 | 8.1E-07 | 2.4E-07 | 4.0E-07 | 6.6E-07 | 6.0E-07 | 1.9E-07 | 4.7E-07 |
| TOTAL CANCER RISK | 1.3E-06 | 3.6E-06 | 2.5E-06 | 2.3E-06 | 2.9E-06 | 4.2E-06 | 9.2E-07 | 1.5E-06 | 3.6E-06 | 2.7E-06 | 1.2E-06 | 2.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 2.9E-06 |
| NAPHTHALENE | 2.0E-11 | 2.1E-11 | 1.7E-11 | 1.4E-11 | 2.0E-11 | 1.9E-11 | 1.9E-11 | 1.9E-11 | 1.7E-11 | 1.9E-11 | 1.7E-11 | 8.2E-11 |
| AROCLOR-1260 | 5.2E-08 | 5.2E-08 | 5.0E-08 | 4.7E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 |
| ARSENIC | 7.1E-06 | 2.1E-05 | 1.4E-05 | 1.4E-05 | 1.7E-05 | 2.6E-05 | 5.1E-06 | 8.5E-06 | 2.3E-05 | 1.7E-05 | 7.4E-06 | 1.3E-05 |
| COBALT | 4.6E-09 | 9.3E-09 | 7.4E-09 | 1.4E-08 | 4.9E-09 | 5.8E-09 | 2.3E-09 | 8.8E-09 | 7.4E-09 | 6.4E-09 | 3.5E-09 | 1.1E-08 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 5.2E-06 | 1.3E-05 | 1.0E-05 | 6.0E-06 | 9.6E-06 | 1.2E-05 | 3.6E-06 | 6.1E-06 | 9.9E-06 | 9.1E-06 | 2.8E-06 | 7.0E-06 |
| TOTAL CANCER RISK | 1.3E-05 | 3.4E-05 | 2.4E-05 | 2.0E-05 | 2.7E-05 | 3.9E-05 | 8.9E-06 | 1.5E-05 | 3.3E-05 | 2.6E-05 | 1.0E-05 | 2.3E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-785 | | | SB-786 | | | | SB-787 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-05 | D-SB-785-07 | D-SB-785-09 | D-SB-786-03 | D-SB-786-05 | D-SB-786-07 | D-SB-786-09 | D-SB-787-03 | D-SB-787-05 | D-SB-787-07 | D-SB-787-09 | D-SB-788-03 |
| SAMPLE DATE | 20100903 | 20100903 | 20100908 | 20100903 | 20100903 | 20100903 | 20100903 | 20100908 | 20100908 | 20100903 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.9E-09 | 5.0E-08 | 6.9E-09 | 5.6E-07 | 1.7E-07 | 2.0E-07 | 6.8E-09 | 2.7E-06 | 7.3E-09 | 6.9E-09 | 6.8E-09 | 1.8E-07 |
| NAPHTHALENE | 2.1E-11 | 2.4E-11 | 1.8E-11 | 1.7E-07 | 8.2E-08 | 8.9E-11 | 6.9E-10 | 3.2E-09 | 2.0E-11 | 2.0E-11 | 1.7E-11 | 8.7E-10 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 |
| ARSENIC | 2.1E-06 | 1.2E-06 | 1.3E-06 | 1.4E-06 | 2.8E-06 | 5.2E-06 | 1.3E-06 | 1.7E-06 | 1.9E-06 | 2.4E-06 | 2.5E-06 | 7.0E-07 |
| COBALT | 4.5E-09 | 1.1E-09 | 3.5E-09 | 3.0E-09 | 3.4E-09 | 1.8E-09 | 2.6E-09 | 5.4E-09 | 1.4E-09 | 1.9E-09 | 2.8E-09 | 1.4E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 6.2E-07 | 4.1E-07 | 4.1E-07 | 5.1E-07 | 6.7E-07 | 5.1E-07 | 7.4E-07 | 4.9E-07 | 7.3E-07 | 1.1E-06 | 9.4E-07 | 2.4E-07 |
| TOTAL CANCER RISK | 2.8E-06 | 1.6E-06 | 1.7E-06 | 2.7E-06 | 3.8E-06 | 6.0E-06 | 2.1E-06 | 4.9E-06 | 2.7E-06 | 3.5E-06 | 3.5E-06 | 1.1E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.1E-06 | 1.5E-07 | 1.2E-05 | 3.8E-06 | 4.4E-06 | 1.5E-07 | 5.8E-05 | 1.6E-07 | 1.5E-07 | 1.5E-07 | 4.0E-06 |
| NAPHTHALENE | 1.0E-10 | 1.2E-10 | 9.3E-11 | 8.7E-07 | 4.1E-07 | 4.5E-10 | 3.5E-09 | | 1.0E-10 | 1.0E-10 | 8.5E-11 | |
| AROCLOR-1260 | 5.2E-08 | 5.2E-08 | 5.2E-08 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 5.0E-08 | 4.7E-08 | 5.4E-08 | 5.2E-08 | 5.0E-08 | 4.7E-08 |
| ARSENIC | 1.7E-05 | 9.1E-06 | 1.0E-05 | 1.1E-05 | 2.2E-05 | 4.1E-05 | 1.0E-05 | 1.3E-05 | 1.5E-05 | 1.9E-05 | 1.9E-05 | 5.4E-06 |
| COBALT | 2.3E-08 | 5.4E-09 | 1.8E-08 | 1.5E-08 | 1.7E-08 | 9.0E-09 | 1.3E-08 | 2.7E-08 | 7.1E-09 | 9.4E-09 | 1.4E-08 | 7.0E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 9.3E-06 | 6.2E-06 | 6.2E-06 | 7.6E-06 | 1.0E-05 | 7.6E-06 | 1.1E-05 | 7.3E-06 | 1.1E-05 | 1.6E-05 | 1.4E-05 | 3.6E-06 |
| TOTAL CANCER RISK | 2.6E-05 | 1.6E-05 | 1.7E-05 | 3.2E-05 | 3.6E-05 | 5.3E-05 | 2.2E-05 | 7.8E-05 | 2.6E-05 | 3.5E-05 | 3.4E-05 | 1.3E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-788 | | | SB-789 | | | | D-TP-1 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-788-05 | D-SB-788-07 | D-SB-788-09 | D-SB-789-03 | D-SB-789-05 | D-SB-789-07 | D-SB-789-09 | D-TP-1-1-4-6 | D-TP-1-2-8-10 | D-TP-1-3-8-10 | D-TP-1-4-4-6 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100920 | 20100920 | 20100920 | 20100920 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 4 | 8 | 8 | 4 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 | 10 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.1E-09 | 7.1E-09 | 6.9E-09 | 6.0E-08 | 6.9E-09 | 7.1E-09 | 6.8E-09 | 6.6E-09 | 6.8E-09 | 2.3E-07 | 2.5E-07 |
| NAPHTHALENE | 1.8E-11 | 1.6E-11 | 1.7E-11 | 4.8E-11 | 3.5E-12 | 4.1E-12 | 3.7E-12 | 8.2E-11 | 8.4E-11 | 1.4E-08 | 4.1E-10 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | | | | |
| ARSENIC | 1.8E-06 | 1.0E-06 | 1.8E-06 | 1.1E-06 | 2.0E-06 | 3.2E-06 | 1.5E-06 | | | | |
| COBALT | 9.1E-10 | 9.3E-10 | 9.5E-10 | 7.7E-10 | 1.5E-09 | 1.2E-09 | 1.4E-09 | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 6.7E-07 | 3.8E-07 | 5.5E-07 | 3.1E-07 | 6.1E-07 | 9.0E-07 | 5.1E-07 | | | | |
| TOTAL CANCER RISK | 2.5E-06 | 1.4E-06 | 2.3E-06 | 1.5E-06 | 2.6E-06 | 4.1E-06 | 2.0E-06 | 6.7E-09 | 6.8E-09 | 2.5E-07 | 2.5E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.3E-06 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 5.0E-06 | 5.4E-06 |
| NAPHTHALENE | 9.3E-11 | 8.2E-11 | 8.7E-11 | 2.4E-10 | 1.7E-11 | 2.1E-11 | 1.9E-11 | | | | |
| AROCLOR-1260 | 5.2E-08 | 5.2E-08 | 5.2E-08 | 4.7E-08 | 5.2E-08 | 5.2E-08 | 5.0E-08 | | | | |
| ARSENIC | 1.4E-05 | 8.0E-06 | 1.4E-05 | 8.8E-06 | 1.6E-05 | 2.5E-05 | 1.1E-05 | | | | |
| COBALT | 4.6E-09 | 4.7E-09 | 4.8E-09 | 3.9E-09 | 7.8E-09 | 6.2E-09 | 7.1E-09 | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.0E-05 | 5.7E-06 | 8.2E-06 | 4.7E-06 | 9.1E-06 | 1.3E-05 | 7.6E-06 | | | | |
| TOTAL CANCER RISK | 2.5E-05 | 1.4E-05 | 2.2E-05 | 1.5E-05 | 2.5E-05 | 3.9E-05 | 1.9E-05 | 1.4E-07 | 1.5E-07 | 5.1E-06 | 5.4E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | | D-TP-2 | | | | | | SB-790 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-TP-1-5-4-6 | D-TP-1-6-8-10 | D-TP-2-1-8-10 | D-TP-2-2-6-7 | D-TP-2-3-6-7 | D-TP-2-4-8-10 | D-TP-2-5-6-7 | D-TP-2-6-6-7 | D-SB-790-03 | D-SB-790-05 | D-SB-790-07 |
| SAMPLE DATE | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 | 20100921 | 20100921 | 20100921 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 8 | 6 | 6 | 8 | 6 | 6 | 3 | 5 | 7 |
| BOTTOM DEPTH | 6 | 10 | 10 | 7 | 7 | 10 | 7 | 7 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.4E-09 | 6.2E-07 | 1.8E-06 | | 2.4E-06 | 6.6E-09 | 7.1E-09 | | 7.8E-07 | 4.7E-06 | 2.5E-07 |
| NAPHTHALENE | 8.0E-11 | 3.9E-10 | 1.2E-08 | | 2.5E-08 | 8.2E-11 | 8.9E-11 | | 5.6E-10 | 1.5E-09 | 1.9E-09 |
| AROCLOR-1260 | | | | | | | | | 1.0E-08 | 2.0E-08 | 1.0E-08 |
| ARSENIC | | | | | | | | | 1.6E-06 | 1.8E-06 | 2.3E-06 |
| COBALT | | | | | | | | | 3.1E-09 | 3.2E-09 | 5.6E-09 |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | 5.4E-07 | 5.0E-07 | 5.2E-07 |
| TOTAL CANCER RISK | 6.5E-09 | 6.2E-07 | 1.8E-06 | | 2.4E-06 | 6.7E-09 | 7.2E-09 | | 3.0E-06 | 7.0E-06 | 3.1E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-07 | 1.3E-05 | 3.8E-05 | | 5.1E-05 | 1.4E-07 | 1.5E-07 | | 1.7E-05 | 1.0E-04 | 5.5E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | 5.0E-08 | 9.9E-08 | 5.2E-08 |
| ARSENIC | | | | | | | | | 1.3E-05 | 1.4E-05 | 1.8E-05 |
| COBALT | | | | | | | | | 1.6E-08 | 1.6E-08 | 2.8E-08 |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | 8.1E-06 | 7.6E-06 | 7.8E-06 |
| TOTAL CANCER RISK | 1.4E-07 | 1.3E-05 | 3.8E-05 | | 5.1E-05 | 1.4E-07 | 1.5E-07 | | 3.8E-05 | 1.2E-04 | 3.1E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-791 | | | | SB-792 | | | | SB-793 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-790-09 | D-SB-791-03 | D-SB-791-05 | D-SB-791-07 | D-SB-791-09 | D-SB-792-03 | D-SB-792-05 | D-SB-792-07 | D-SB-792-09 | D-SB-793-03 | D-SB-793-05 | D-SB-793-07 |
| SAMPLE DATE | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.3E-09 | 2.1E-07 | 7.3E-09 | 6.8E-09 | 6.6E-09 | 1.8E-08 | 6.9E-09 | 6.8E-09 | 6.8E-09 | 7.8E-08 | 7.1E-09 | 6.9E-09 |
| NAPHTHALENE | 3.7E-12 | 5.6E-10 | 2.4E-11 | 1.6E-11 | 2.0E-11 | 4.5E-11 | 1.7E-11 | 1.6E-11 | 1.6E-11 | 2.4E-11 | 1.6E-11 | 1.8E-11 |
| AROCLOR-1260 | 1.1E-08 | 1.0E-08 | 1.1E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| ARSENIC | 1.5E-06 | 2.0E-06 | 1.4E-06 | 2.9E-06 | 1.8E-06 | 2.0E-06 | 1.6E-06 | 1.1E-06 | 1.4E-06 | 2.0E-06 | 1.3E-06 | 1.5E-06 |
| COBALT | 1.0E-09 | 2.5E-09 | 9.8E-10 | 2.3E-09 | 7.7E-10 | 7.5E-09 | 1.6E-09 | 1.6E-09 | 2.7E-09 | 3.6E-09 | 1.2E-09 | 1.1E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 6.5E-07 | 6.6E-07 | 4.7E-07 | 8.5E-07 | 6.1E-08 | 5.4E-07 | 6.1E-07 | 4.9E-07 | 6.8E-07 | 5.5E-07 | 5.1E-07 | 6.5E-07 |
| TOTAL CANCER RISK | 2.2E-06 | 2.9E-06 | 1.8E-06 | 3.8E-06 | 1.9E-06 | 2.6E-06 | 2.2E-06 | 1.6E-06 | 2.1E-06 | 2.7E-06 | 1.9E-06 | 2.2E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.6E-07 | 4.5E-06 | 1.6E-07 | 1.5E-07 | 1.4E-07 | 3.8E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.7E-06 | 1.5E-07 | 1.5E-07 |
| NAPHTHALENE | 1.9E-11 | | 1.2E-10 | 8.2E-11 | 1.0E-10 | 2.3E-10 | 8.7E-11 | 8.2E-11 | 8.3E-11 | 1.2E-10 | 8.2E-11 | 9.2E-11 |
| AROCLOR-1260 | 5.4E-08 | 5.2E-08 | 5.4E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 5.2E-08 |
| ARSENIC | 1.2E-05 | 1.5E-05 | 1.1E-05 | 2.3E-05 | 1.4E-05 | 1.5E-05 | 1.3E-05 | 8.3E-06 | 1.1E-05 | 1.6E-05 | 1.0E-05 | 1.2E-05 |
| COBALT | 5.3E-09 | 1.2E-08 | 4.9E-09 | 1.2E-08 | 3.9E-09 | 3.8E-08 | 8.0E-09 | 8.1E-09 | 1.4E-08 | 1.8E-08 | 6.1E-09 | 5.4E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 9.8E-06 | 9.8E-06 | 7.0E-06 | 1.3E-05 | 9.1E-07 | 8.1E-06 | 9.2E-06 | 7.4E-06 | 1.0E-05 | 8.3E-06 | 7.7E-06 | 9.7E-06 |
| TOTAL CANCER RISK | 2.2E-05 | 3.0E-05 | 1.8E-05 | 3.6E-05 | 1.5E-05 | 2.4E-05 | 2.2E-05 | 1.6E-05 | 2.1E-05 | 2.6E-05 | 1.8E-05 | 2.2E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-794 | | | | SB-795 | | | | SB-796 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-793-09 | D-SB-794-03 | D-SB-794-05 | D-SB-794-07 | D-SB-794-09 | D-SB-795-03 | D-SB-795-05 | D-SB-795-07 | D-SB-795-09 | D-SB-796-03 | D-SB-796-05 | D-SB-796-07 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-09 | 4.8E-07 | 7.1E-09 | 7.1E-09 | 6.6E-09 | 6.8E-08 | 2.5E-08 | 7.1E-09 | 6.8E-09 | 2.6E-07 | 7.8E-09 | 6.8E-09 |
| NAPHTHALENE | 1.6E-11 | 2.0E-09 | 3.5E-12 | 1.7E-11 | 1.6E-11 | 4.8E-10 | 2.2E-11 | 3.5E-12 | 1.7E-11 | 1.5E-11 | 1.8E-11 | 1.8E-11 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.2E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.1E-08 | 1.0E-08 |
| ARSENIC | 1.3E-06 | 2.0E-06 | 2.6E-06 | 2.2E-06 | 2.0E-06 | 2.1E-06 | 1.4E-06 | 2.1E-06 | 1.6E-06 | 1.2E-06 | 3.4E-06 | 1.1E-06 |
| COBALT | 4.1E-09 | 6.8E-09 | 1.0E-09 | 1.4E-09 | 6.8E-10 | 6.2E-09 | 1.5E-09 | 4.7E-09 | 1.7E-09 | 2.1E-09 | 1.5E-09 | 8.0E-10 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 7.5E-07 | 5.3E-07 | 7.1E-07 | 8.2E-07 | 2.2E-07 | 7.0E-07 | 4.6E-07 | 5.8E-07 | 6.0E-07 | 4.2E-07 | 8.9E-07 | 4.4E-07 |
| TOTAL CANCER RISK | 2.1E-06 | 3.0E-06 | 3.3E-06 | 3.1E-06 | 2.3E-06 | 2.9E-06 | 1.9E-06 | 2.7E-06 | 2.2E-06 | 1.9E-06 | 4.3E-06 | 1.6E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.0E-05 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.5E-06 | 5.5E-07 | 1.5E-07 | 1.5E-07 | 5.6E-06 | 1.7E-07 | 1.5E-07 |
| NAPHTHALENE | 8.3E-11 | | 1.7E-11 | 8.7E-11 | 7.9E-11 | | 1.1E-10 | 1.7E-11 | 8.7E-11 | 7.6E-11 | 9.1E-11 | 9.1E-11 |
| AROCLOR-1260 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 5.0E-08 | 5.2E-08 | 6.2E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.7E-08 | 5.0E-08 |
| ARSENIC | 1.0E-05 | 1.6E-05 | 2.0E-05 | 1.7E-05 | 1.6E-05 | 1.7E-05 | 1.1E-05 | 1.6E-05 | 1.3E-05 | 9.7E-06 | 2.7E-05 | 8.8E-06 |
| COBALT | 2.1E-08 | 3.4E-08 | 5.0E-09 | 6.9E-09 | 3.4E-09 | 3.1E-08 | 7.7E-09 | 2.4E-08 | 8.8E-09 | 1.1E-08 | 7.7E-09 | 4.0E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.1E-05 | 8.0E-06 | 1.1E-05 | 1.2E-05 | 3.3E-06 | 1.1E-05 | 6.9E-06 | 8.6E-06 | 9.0E-06 | 6.3E-06 | 1.3E-05 | 6.5E-06 |
| TOTAL CANCER RISK | 2.2E-05 | 3.4E-05 | 3.1E-05 | 3.0E-05 | 1.9E-05 | 2.9E-05 | 1.9E-05 | 2.5E-05 | 2.2E-05 | 2.2E-05 | 4.0E-05 | 1.6E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | |
|---|---|
| SAMPLE ID | **D-SB-796-09** |
| SAMPLE DATE | **20100910** |
| SAMPLE CODE | **NORMAL** |
| MATRIX | **SO** |
| SAMPLE TYPE | **NORMAL** |
| SUBMATRIX | **SB** |
| TOP DEPTH | **9** |
| BOTTOM DEPTH | **9** |
| **INDUSTRIAL** | |
| BAP EQUIVALENT-HALFND | **6.6E-09** |
| NAPHTHALENE | **1.7E-11** |
| AROCLOR-1260 | **1.0E-08** |
| ARSENIC | **1.6E-06** |
| COBALT | **2.0E-09** |
| IRON | |
| LEAD | |
| MANGANESE | |
| MERCURY | |
| VANADIUM | |
| HEXAVALENT CHROMIUM | **6.3E-07** |
| TOTAL CANCER RISK | **2.2E-06** |
| **RESIDENTIAL** | |
| BAP EQUIVALENT-HALFND | **1.4E-07** |
| NAPHTHALENE | **8.4E-11** |
| AROCLOR-1260 | **5.0E-08** |
| ARSENIC | **1.2E-05** |
| COBALT | **1.0E-08** |
| IRON | |
| LEAD | |
| MANGANESE | |
| MERCURY | |
| VANADIUM | |
| HEXAVALENT CHROMIUM | **9.4E-06** |
| TOTAL CANCER RISK | **2.2E-05** |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-031 | SB-032 | SB-033 | SB-057 | | SB-058 | | SB-059 | | SB-060 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-31-05 | SB-32-05 | SB-33-05 | SB-57-05 | SB-57-10 | SB-58-05 | SB-58-10 | SB-59-05 | SB-59-10 | SB-60-05 | SB-60-10 |
| SAMPLE DATE | 20031118 | 20031121 | 20031121 | 20040913 | 20040913 | 20040913 | 20040913 | 20040923 | 20040923 | 20040924 | 20040924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 3.8E-06 | | 4.4E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | 5.7E-03 | 1.1E-02 | 1.5E-03 | 4.1E-03 | 5.2E-03 | 9.4E-03 | 8.9E-03 | 5.7E-03 | 2.3E-03 | 5.5E-03 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 2.8E-04 | 8.0E-03 | 1.6E-02 | 2.6E-04 | 2.8E-04 | 2.8E-04 | 2.6E-04 | 2.6E-04 | 2.6E-04 | 2.8E-04 | 6.6E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.4E-03 | 9.2E-04 | 1.2E-03 | 4.4E-04 | 4.9E-04 | 9.7E-04 | 7.7E-04 | 1.5E-03 | 7.2E-04 | 3.1E-03 | 6.1E-03 |
| TOTAL HAZARD INDEX | 1.7E-03 | 1.5E-02 | 2.8E-02 | 2.2E-03 | 4.9E-03 | 6.5E-03 | 1.0E-02 | 1.1E-02 | 6.7E-03 | 5.6E-03 | 1.2E-02 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.8E-05 | | 2.1E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | 1.2E-01 | 2.3E-01 | 3.0E-02 | 8.3E-02 | 1.1E-01 | 1.9E-01 | 1.8E-01 | 1.2E-01 | 4.6E-02 | 1.1E-01 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 3.6E-03 | 1.0E-01 | 2.0E-01 | 3.3E-03 | 3.6E-03 | 3.6E-03 | 3.3E-03 | 3.3E-03 | 3.3E-03 | 3.6E-03 | 8.4E-03 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.2E-02 | 8.1E-03 | 1.0E-02 | 3.9E-03 | 4.3E-03 | 8.6E-03 | 6.8E-03 | 1.4E-02 | 6.3E-03 | 2.7E-02 | 5.4E-02 |
| TOTAL HAZARD INDEX | 1.6E-02 | 2.3E-01 | 4.3E-01 | 3.7E-02 | 9.1E-02 | 1.2E-01 | 2.0E-01 | 2.0E-01 | 1.3E-01 | 7.7E-02 | 1.7E-01 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-061 | | SB-062 | | SB-063 | | SB-064 | SB-065 | | SB-066 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-61-05 | SB-61-10 | SB-62-05 | SB-62-10 | SB-63-05 | SB-63-10 | SB-64-05 | SB-65-05 | SB-65-10 | SB-66-05 | SB-66-10 |
| SAMPLE DATE | 20040924 | 20040924 | 20040923 | 20040923 | 20040924 | 20040924 | 20040924 | 20040917 | 20040917 | 20040923 | 20040923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 5 | 10 | 5 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 4.4E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 4.4E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | 4.1E-03 | 5.8E-04 | 3.9E-03 | 6.0E-04 | 2.7E-03 | 7.4E-04 | 1.8E-03 | 4.6E-03 | 6.6E-04 | 3.2E-03 | 3.4E-03 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 3.1E-04 | 2.4E-04 | 2.4E-04 | 2.6E-04 | 2.8E-04 | 2.8E-04 | 6.6E-04 | 2.8E-04 | 2.8E-04 | 2.6E-04 | 2.8E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 9.7E-04 | 6.1E-04 | 8.2E-04 | 1.8E-04 | 1.1E-03 | 1.1E-03 | 1.3E-03 | 1.8E-03 | 8.2E-04 | 1.1E-03 | 5.6E-04 |
| TOTAL HAZARD INDEX | 5.4E-03 | 1.4E-03 | 4.9E-03 | 1.1E-03 | 4.2E-03 | 2.2E-03 | 3.8E-03 | 6.6E-03 | 1.8E-03 | 4.6E-03 | 4.3E-03 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 2.1E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 2.1E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | 8.3E-02 | 1.2E-02 | 7.9E-02 | 1.2E-02 | 5.5E-02 | 1.5E-02 | 3.7E-02 | 9.2E-02 | 1.3E-02 | 6.5E-02 | 6.9E-02 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 3.9E-03 | 3.0E-03 | 3.0E-03 | 3.3E-03 | 3.6E-03 | 3.6E-03 | 8.4E-03 | 3.6E-03 | 3.6E-03 | 3.3E-03 | 3.6E-03 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 8.6E-03 | 5.4E-03 | 7.2E-03 | 1.6E-03 | 9.9E-03 | 9.9E-03 | 1.2E-02 | 1.6E-02 | 7.2E-03 | 9.9E-03 | 5.0E-03 |
| TOTAL HAZARD INDEX | 9.6E-02 | 2.0E-02 | 8.9E-02 | 1.7E-02 | 6.9E-02 | 2.9E-02 | 5.7E-02 | 1.1E-01 | 2.4E-02 | 7.8E-02 | 7.8E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-067 | | SB-247 | | SB-248 | | SB-249 | | SB-318 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-67-05 | SB-67-10 | SB-247-05 | SB-247-10 | SB-248-05 | SB-248-10 | SB-249-05 | SB-249-10 | SB-318-0203 | SB-318-0506 | SB-318-0809 | SB-319-0203 |
| SAMPLE DATE | 20040927 | 20040927 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 2 | 5 | 8 | 2 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 | 6 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 4.4E-06 | 3.8E-06 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 2.7E-03 | 2.7E-03 | 9.1E-03 | 9.1E-04 | 1.4E-02 | 1.8E-02 | 3.4E-03 | 1.6E-02 | | | | |
| COBALT | | | 2.0E-02 | 1.2E-02 | 2.1E-02 | 5.6E-02 | 3.6E-02 | 6.3E-03 | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | 3.3E-04 | 2.6E-04 | 4.7E-04 | 4.7E-06 | 2.8E-04 | 4.7E-06 | 1.9E-03 | 4.7E-06 | 4.7E-05 | 1.4E-04 | 2.6E-04 | 2.0E-04 |
| VANADIUM | | | 3.7E-03 | 3.1E-03 | 4.5E-03 | 5.6E-03 | 2.7E-03 | 1.0E-02 | | | | |
| HEXAVALENT CHROMIUM | 2.1E-03 | 6.7E-04 | 1.1E-03 | 1.0E-03 | 1.3E-03 | 1.9E-03 | 9.2E-04 | 2.5E-03 | | | | |
| TOTAL HAZARD INDEX | 5.2E-03 | 3.7E-03 | 3.4E-02 | 1.7E-02 | 4.1E-02 | 8.2E-02 | 4.5E-02 | 3.5E-02 | 4.7E-05 | 1.4E-04 | 2.6E-04 | 2.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 2.1E-05 | 1.8E-05 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 5.5E-02 | 5.5E-02 | 1.8E-01 | 1.8E-02 | 2.8E-01 | 3.7E-01 | 6.9E-02 | 3.2E-01 | | | | |
| COBALT | | | 4.7E-01 | 2.7E-01 | 5.0E-01 | 1.3E+00 | 8.6E-01 | 1.5E-01 | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | 4.2E-03 | 3.3E-03 | 6.0E-03 | 6.0E-05 | 3.6E-03 | 6.0E-05 | 2.4E-02 | 6.0E-05 | 6.0E-04 | 1.7E-03 | 3.3E-03 | 2.6E-03 |
| VANADIUM | | | 8.7E-02 | 7.5E-02 | 1.1E-01 | 1.3E-01 | 6.4E-02 | 2.4E-01 | | | | |
| HEXAVALENT CHROMIUM | 1.9E-02 | 5.9E-03 | 1.0E-02 | 9.2E-03 | 1.1E-02 | 1.7E-02 | 8.1E-03 | 2.2E-02 | | | | |
| TOTAL HAZARD INDEX | 7.8E-02 | 6.5E-02 | 7.6E-01 | 3.7E-01 | 9.0E-01 | 1.8E+00 | 1.0E+00 | 7.3E-01 | 6.0E-04 | 1.7E-03 | 3.3E-03 | 2.6E-03 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-319 | | SB-320 | | | SB-321 | | | SB-322 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-319-0506 | SB-319-0809 | SB-320-0203 | SB-320-0506 | SB-320-0809 | SB-321-0203 | SB-321-0506 | SB-321-0809 | SB-322-0203 | SB-322-0506 | SB-322-0809 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 1.1E-04 | 1.2E-04 | 1.3E-04 | 4.5E-05 | 1.6E-04 | 2.8E-04 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 1.6E-04 | 4.5E-05 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.1E-04 | 1.2E-04 | 1.3E-04 | 4.5E-05 | 1.6E-04 | 2.8E-04 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 1.6E-04 | 4.5E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 1.4E-03 | 1.6E-03 | 1.7E-03 | 5.7E-04 | 2.1E-03 | 3.6E-03 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 2.1E-03 | 5.7E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.4E-03 | 1.6E-03 | 1.7E-03 | 5.7E-04 | 2.1E-03 | 3.6E-03 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 2.1E-03 | 5.7E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-323 | | | SB-324 | | | SB-325 | | | SB-326 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-323-0203 | SB-323-0506 | SB-323-0809 | SB-324-0203 | SB-324-0506 | SB-324-0809 | SB-325-0203 | SB-325-0506 | SB-325-0809 | SB-326-0203 | SB-326-0506 |
| SAMPLE DATE | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 | 20071031 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 4.5E-05 | 4.5E-05 | 2.7E-04 | 1.7E-04 | 1.5E-04 | 1.6E-04 | 2.7E-04 | 4.5E-05 | 4.7E-05 | 4.4E-04 | 9.9E-05 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.5E-05 | 4.5E-05 | 2.7E-04 | 1.7E-04 | 1.5E-04 | 1.6E-04 | 2.7E-04 | 4.5E-05 | 4.7E-05 | 4.4E-04 | 9.9E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 5.7E-04 | 5.7E-04 | 3.4E-03 | 2.1E-03 | 1.8E-03 | 2.0E-03 | 3.4E-03 | 5.7E-04 | 6.0E-04 | 5.5E-03 | 1.3E-03 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 5.7E-04 | 5.7E-04 | 3.4E-03 | 2.1E-03 | 1.8E-03 | 2.0E-03 | 3.4E-03 | 5.7E-04 | 6.0E-04 | 5.5E-03 | 1.3E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-327 | | | SB-328 | | | SB-329 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-326-0809 | SB-327-0203 | SB-327-0506 | SB-327-0809 | SB-328-0203 | SB-328-0506 | SB-328-0809 | SB-329-0203 | SB-329-0506 | SB-329-0809 | SB-330-0203 |
| SAMPLE DATE | 20071031 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 3.0E-04 | 1.3E-03 | 6.8E-05 | 4.7E-05 | 1.6E-03 | 5.4E-05 | 5.9E-05 | 7.3E-05 | 9.7E-05 | 5.9E-05 | 9.7E-05 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 3.0E-04 | 1.3E-03 | 6.8E-05 | 4.7E-05 | 1.6E-03 | 5.4E-05 | 5.9E-05 | 7.3E-05 | 9.7E-05 | 5.9E-05 | 9.7E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 3.8E-03 | 1.6E-02 | 8.7E-04 | 6.0E-04 | 2.0E-02 | 6.9E-04 | 7.5E-04 | 9.2E-04 | 1.2E-03 | 7.5E-04 | 1.2E-03 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 3.8E-03 | 1.6E-02 | 8.7E-04 | 6.0E-04 | 2.0E-02 | 6.9E-04 | 7.5E-04 | 9.2E-04 | 1.2E-03 | 7.5E-04 | 1.2E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-330 | | SB-331 | | | SB-332 | | | SB-333 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-330-0506 | SB-330-0809 | SB-331-0203 | SB-331-0506 | SB-331-0809 | SB-332-0203 | SB-332-0506 | SB-332-0809 | SB-333-0203 | SB-333-0506 | SB-333-0809 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 2.4E-04 | 8.2E-05 | 1.4E-04 | 8.2E-05 | 9.4E-05 | 1.5E-04 | 8.0E-05 | 8.2E-05 | 1.5E-04 | 8.5E-05 | 5.9E-05 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.4E-04 | 8.2E-05 | 1.4E-04 | 8.2E-05 | 9.4E-05 | 1.5E-04 | 8.0E-05 | 8.2E-05 | 1.5E-04 | 8.5E-05 | 5.9E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 3.0E-03 | 1.0E-03 | 1.8E-03 | 1.0E-03 | 1.2E-03 | 1.9E-03 | 1.0E-03 | 1.0E-03 | 1.8E-03 | 1.1E-03 | 7.5E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 3.0E-03 | 1.0E-03 | 1.8E-03 | 1.0E-03 | 1.2E-03 | 1.9E-03 | 1.0E-03 | 1.0E-03 | 1.8E-03 | 1.1E-03 | 7.5E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-334 | | | SB-335 | | | SB-336 | | | SB-337 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-334-0203 | SB-334-0506 | SB-334-0809 | SB-335-0203 | SB-335-0506 | SB-335-0809 | SB-336-0203 | SB-336-0506 | SB-336-0809 | SB-337-0203 | SB-337-0506 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 |
| BOTTOM DEPTH | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 1.8E-03 | 1.6E-04 | 1.4E-04 | 1.4E-03 | 1.4E-04 | 6.4E-05 | 1.6E-04 | 9.4E-05 | 1.6E-03 | 1.9E-03 | 2.2E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.8E-03 | 1.6E-04 | 1.4E-04 | 1.4E-03 | 1.4E-04 | 6.4E-05 | 1.6E-04 | 9.4E-05 | 1.6E-03 | 1.9E-03 | 2.2E-04 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 2.3E-02 | 2.1E-03 | 1.8E-03 | 1.8E-02 | 1.8E-03 | 8.1E-04 | 2.0E-03 | 1.2E-03 | 2.1E-02 | 2.4E-02 | 2.8E-03 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.3E-02 | 2.1E-03 | 1.8E-03 | 1.8E-02 | 1.8E-03 | 8.1E-04 | 2.0E-03 | 1.2E-03 | 2.1E-02 | 2.4E-02 | 2.8E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-338 | | | SB-339 | | | SB-340 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-337-0809 | SB-338-0203 | SB-338-0506 | SB-338-0809 | SB-339-0203 | SB-339-0506 | SB-339-0809 | SB-340-0203 | SB-340-0506 | SB-340-0809 | SB-341-0203 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 |
| BOTTOM DEPTH | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 3.9E-03 | 2.0E-03 | 9.9E-05 | 1.3E-04 | 3.1E-04 | 1.0E-03 | 5.9E-05 | 2.6E-04 | 1.8E-03 | 9.9E-05 | 1.7E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 3.9E-03 | 2.0E-03 | 9.9E-05 | 1.3E-04 | 3.1E-04 | 1.0E-03 | 5.9E-05 | 2.6E-04 | 1.8E-03 | 9.9E-05 | 1.7E-04 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 4.9E-02 | 2.5E-02 | 1.3E-03 | 1.6E-03 | 3.9E-03 | 1.3E-02 | 7.5E-04 | 3.3E-03 | 2.3E-02 | 1.3E-03 | 2.2E-03 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.9E-02 | 2.5E-02 | 1.3E-03 | 1.6E-03 | 3.9E-03 | 1.3E-02 | 7.5E-04 | 3.3E-03 | 2.3E-02 | 1.3E-03 | 2.2E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-341 | | SB-342 | | | SB-343 | | | SB-344 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-341-0506 | SB-341-0809 | SB-342-0203 | SB-342-0506 | SB-342-0809 | SB-343-0203 | SB-343-0506 | SB-343-0809 | SB-344-0203 | SB-344-0506 | SB-344-0809 |
| SAMPLE DATE | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 | 20071101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 | 2 | 5 | 8 |
| BOTTOM DEPTH | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 | 3 | 6 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 1.4E-03 | 1.5E-03 | 8.9E-04 | 4.0E-03 | 1.0E-04 | 3.5E-04 | 8.9E-04 | 8.0E-05 | 3.3E-04 | 8.0E-05 | 1.2E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.4E-03 | 1.5E-03 | 8.9E-04 | 4.0E-03 | 1.0E-04 | 3.5E-04 | 8.9E-04 | 8.0E-05 | 3.3E-04 | 8.0E-05 | 1.2E-04 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 1.7E-02 | 1.8E-02 | 1.1E-02 | 5.0E-02 | 1.3E-03 | 4.5E-03 | 1.1E-02 | 1.0E-03 | 4.2E-03 | 1.0E-03 | 1.6E-03 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.7E-02 | 1.8E-02 | 1.1E-02 | 5.0E-02 | 1.3E-03 | 4.5E-03 | 1.1E-02 | 1.0E-03 | 4.2E-03 | 1.0E-03 | 1.6E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-766 | | | | SB-767 | | | | SB-768 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-766-03 | D-SB-766-05 | D-SB-766-07 | D-SB-766-09 | D-SB-767-03 | D-SB-767-05 | D-SB-767-07 | D-SB-767-09 | D-SB-768-03 | D-SB-768-05 | D-SB-768-07 | D-SB-768-09 |
| SAMPLE DATE | 20100827 | 20100827 | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.3E-06 | 2.0E-05 | 1.3E-05 | 2.4E-04 | 2.4E-06 | 2.4E-06 | 2.8E-06 | 2.4E-06 | 2.4E-06 | 5.4E-05 | 2.5E-06 | 2.4E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.1E-05 | 9.4E-05 | 5.9E-05 | 1.1E-03 | 1.1E-05 | 1.1E-05 | 1.3E-05 | 1.1E-05 | 1.1E-05 | 2.5E-04 | 1.2E-05 | 1.1E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-769 | | | | SB-770 | | | | SB-771 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-769-03 | D-SB-769-05 | D-SB-769-07 | D-SB-769-09 | D-SB-770-03 | D-SB-770-05 | D-SB-770-07 | D-SB-770-09 | D-SB-771-03 | D-SB-771-05 | D-SB-771-07 | D-SB-771-09 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.6E-05 | 2.4E-06 | 2.4E-06 | 2.6E-06 | 3.3E-04 | 2.5E-06 | 7.2E-05 | 2.5E-06 | 1.1E-05 | 2.4E-06 | 2.5E-06 | 2.5E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.2E-04 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.5E-03 | 1.2E-05 | 3.3E-04 | 1.2E-05 | 5.3E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-772 | | | | SB-773 | | | | | SB- | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-772-03 | D-SB-772-05 | D-SB-772-07 | D-SB-772-09 | D-SB-773-03 | D-SB-773-05 | D-SB-773-05-AVG | D-SB-773-05-D | D-SB-773-09 | D-SB-774-03 | D-SB-774-05 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 5 | 5 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 5 | 5 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.4E-06 | 1.1E-05 | 2.4E-05 | 1.6E-05 | 2.4E-06 | 2.4E-06 | 2.5E-06 | 2.6E-06 | 2.6E-06 | 1.3E-04 | 1.2E-04 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.1E-05 | 5.2E-05 | 1.1E-04 | 7.6E-05 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 5.9E-04 | 5.7E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | 774 | | SB-775 | | | | SB-776 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-774-07 | D-SB-774-09 | D-SB-775-03 | D-SB-775-05 | D-SB-775-07 | D-SB-775-09 | D-SB-776-03 | D-SB-776-05 | D-SB-776-07 | D-SB-776-09 | D-SB-776-09-AVG |
| SAMPLE DATE | 20100910 | 20100910 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.4E-05 | 1.9E-05 | 2.4E-06 | 2.5E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.5E-06 | 2.4E-06 | 2.6E-06 | 2.5E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.4E-04 | 8.8E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | SB-777 | | | | SB-778 | | | | SB- | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-776-09-D | D-SB-777-03 | D-SB-777-05 | D-SB-777-07 | D-SB-777-09 | D-SB-778-03 | D-SB-778-05 | D-SB-778-07 | D-SB-778-09 | D-SB-779-03 | D-SB-779-05 |
| SAMPLE DATE | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100831 | 20100831 | 20100831 | 20100831 | 20100901 | 20100901 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.5E-06 | 4.0E-05 | 6.0E-06 | 2.0E-03 | 3.4E-05 | 2.4E-06 | 2.5E-06 | 2.6E-06 | 2.3E-06 | 2.5E-06 | 2.4E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.2E-05 | 1.9E-04 | 2.8E-05 | 9.4E-03 | 1.6E-04 | 1.1E-05 | 1.2E-05 | 1.2E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | 779 | | SB-780 | | | | SB-781 | | | | SB- | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-779-07 | D-SB-779-09 | D-SB-780-03 | D-SB-780-05 | D-SB-780-07 | D-SB-780-09 | D-SB-781-03 | D-SB-781-05 | D-SB-781-07 | D-SB-781-09 | D-SB-782-03 | D-SB-782-05 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100902 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | 1.0E-07 | 1.1E-07 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | 4.8E-03 | 5.7E-03 |
| COBALT | | | | | | | | | | | 1.2E-02 | 7.4E-03 |
| IRON | | | | | | | | | | | 7.3E-03 | 8.9E-03 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | 3.0E-03 | 9.9E-04 |
| MERCURY | | | | | | | | | | | 2.5E-03 | 4.2E-05 |
| VANADIUM | | | | | | | | | | | 1.9E-03 | 2.0E-03 |
| HEXAVALENT CHROMIUM | | | | | | | | | | | 5.0E-04 | 6.5E-04 |
| TOTAL HAZARD INDEX | 2.4E-06 | 2.5E-06 | 2.3E-06 | 2.4E-06 | 2.4E-06 | 2.5E-06 | 2.5E-06 | 6.9E-05 | 2.5E-06 | 2.4E-06 | 3.2E-02 | 2.6E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | 4.7E-07 | 5.3E-07 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | 9.7E-02 | 1.2E-01 |
| COBALT | | | | | | | | | | | 2.9E-01 | 1.8E-01 |
| IRON | | | | | | | | | | | 1.7E-01 | 2.1E-01 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | 3.1E-02 | 1.0E-02 |
| MERCURY | | | | | | | | | | | 3.2E-02 | 5.4E-04 |
| VANADIUM | | | | | | | | | | | 4.4E-02 | 4.7E-02 |
| HEXAVALENT CHROMIUM | | | | | | | | | | | 4.4E-03 | 5.7E-03 |
| TOTAL HAZARD INDEX | 1.1E-05 | 1.2E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 | 3.2E-04 | 1.2E-05 | 1.1E-05 | 6.7E-01 | 5.7E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | 782 | | SB-783 | | | | SB-784 | | | | SB- | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-782-07 | D-SB-782-09 | D-SB-783-03 | D-SB-783-05 | D-SB-783-07 | D-SB-783-09 | D-SB-784-03 | D-SB-784-05 | D-SB-784-07 | D-SB-784-09 | D-SB-785-03 | D-SB-785-05 |
| SAMPLE DATE | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100903 | 20100903 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 1.2E-07 | 1.0E-07 | 8.2E-08 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.0E-07 | 1.1E-07 | 1.0E-07 | 4.7E-07 | 6.0E-07 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 1.7E-02 | 1.1E-02 | 1.1E-02 | 1.4E-02 | 2.1E-02 | 4.1E-03 | 6.8E-03 | 1.8E-02 | 1.3E-02 | 5.9E-03 | 1.0E-02 | 1.3E-02 |
| COBALT | 1.5E-02 | 1.2E-02 | 2.2E-02 | 8.0E-03 | 9.5E-03 | 3.7E-03 | 1.4E-02 | 1.2E-02 | 1.0E-02 | 5.8E-03 | 1.8E-02 | 3.7E-02 |
| IRON | 3.0E-02 | 2.4E-02 | 1.5E-02 | 2.7E-02 | 3.6E-02 | 3.7E-03 | 1.4E-02 | 3.6E-02 | 2.8E-02 | 2.0E-03 | 1.6E-02 | 2.3E-02 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 7.2E-03 | 3.8E-03 | 8.7E-03 | 1.5E-03 | 4.1E-03 | 8.4E-04 | 6.0E-03 | 1.1E-02 | 5.5E-03 | 1.3E-03 | 8.4E-03 | 8.5E-03 |
| MERCURY | 4.2E-05 | 4.2E-05 | 2.2E-03 | 4.5E-05 | 4.2E-05 | 4.2E-05 | 4.2E-05 | 4.5E-05 | 4.2E-05 | 4.0E-05 | 1.4E-03 | 1.9E-03 |
| VANADIUM | 5.9E-03 | 4.9E-03 | 2.7E-03 | 5.1E-03 | 7.3E-03 | 1.2E-03 | 2.8E-03 | 6.4E-03 | 4.2E-03 | 1.1E-03 | 2.8E-03 | 3.8E-03 |
| HEXAVALENT CHROMIUM | 1.6E-03 | 1.2E-03 | 7.5E-04 | 1.2E-03 | 1.5E-03 | 4.5E-04 | 7.5E-04 | 1.2E-03 | 1.1E-03 | 3.5E-04 | 8.7E-04 | 1.1E-03 |
| TOTAL HAZARD INDEX | 7.7E-02 | 5.8E-02 | 6.3E-02 | 5.7E-02 | 7.9E-02 | 1.4E-02 | 4.5E-02 | 8.5E-02 | 6.3E-02 | 1.7E-02 | 5.9E-02 | 8.9E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 5.6E-07 | 4.7E-07 | 3.8E-07 | 5.3E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 | 4.7E-07 | 5.0E-07 | 4.7E-07 | 2.2E-06 | 2.8E-06 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 3.5E-01 | 2.3E-01 | 2.3E-01 | 2.8E-01 | 4.3E-01 | 8.3E-02 | 1.4E-01 | 3.7E-01 | 2.7E-01 | 1.2E-01 | 2.1E-01 | 2.7E-01 |
| COBALT | 3.6E-01 | 2.9E-01 | 5.2E-01 | 1.9E-01 | 2.2E-01 | 8.8E-02 | 3.4E-01 | 2.9E-01 | 2.5E-01 | 1.4E-01 | 4.3E-01 | 8.8E-01 |
| IRON | 7.0E-01 | 5.7E-01 | 3.6E-01 | 6.5E-01 | 8.5E-01 | 8.8E-02 | 3.3E-01 | 8.6E-01 | 6.6E-01 | 4.8E-02 | 3.9E-01 | 5.6E-01 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 7.4E-02 | 3.9E-02 | 8.9E-02 | 1.5E-02 | 4.2E-02 | 8.6E-03 | 6.1E-02 | 1.1E-01 | 5.6E-02 | 1.4E-02 | 8.6E-02 | 8.7E-02 |
| MERCURY | 5.4E-04 | 5.4E-04 | 2.8E-02 | 5.7E-04 | 5.4E-04 | 5.4E-04 | 5.4E-04 | 5.7E-04 | 5.4E-04 | 5.1E-04 | 1.8E-02 | 2.4E-02 |
| VANADIUM | 1.4E-01 | 1.2E-01 | 6.4E-02 | 1.2E-01 | 1.7E-01 | 2.7E-02 | 6.7E-02 | 1.5E-01 | 1.0E-01 | 2.5E-02 | 6.8E-02 | 9.0E-02 |
| HEXAVALENT CHROMIUM | 1.4E-02 | 1.1E-02 | 6.6E-03 | 1.0E-02 | 1.3E-02 | 3.9E-03 | 6.6E-03 | 1.1E-02 | 9.9E-03 | 3.1E-03 | 7.7E-03 | 1.0E-02 |
| TOTAL HAZARD INDEX | 1.6E+00 | 1.3E+00 | 1.3E+00 | 1.3E+00 | 1.7E+00 | 3.0E-01 | 9.4E-01 | 1.8E+00 | 1.3E+00 | 3.5E-01 | 1.2E+00 | 1.9E+00 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | 785 | | SB-786 | | | | SB-787 | | | | SB- | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-07 | D-SB-785-09 | D-SB-786-03 | D-SB-786-05 | D-SB-786-07 | D-SB-786-09 | D-SB-787-03 | D-SB-787-05 | D-SB-787-07 | D-SB-787-09 | D-SB-788-03 | D-SB-788-05 |
| SAMPLE DATE | 20100903 | 20100908 | 20100903 | 20100903 | 20100903 | 20100903 | 20100908 | 20100908 | 20100903 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 6.9E-07 | 5.3E-07 | 5.0E-03 | 2.4E-03 | 2.6E-06 | 2.0E-05 | | 5.8E-07 | 5.8E-07 | 4.9E-07 | | 5.3E-07 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 7.3E-03 | 8.2E-03 | 8.9E-03 | 1.8E-02 | 3.3E-02 | 8.2E-03 | 1.0E-02 | 1.2E-02 | 1.5E-02 | 1.6E-02 | 4.3E-03 | 1.1E-02 |
| COBALT | 8.7E-03 | 2.9E-02 | 2.5E-02 | 2.8E-02 | 1.5E-02 | 2.1E-02 | 4.4E-02 | 1.2E-02 | 1.5E-02 | 2.3E-02 | 1.1E-02 | 7.4E-03 |
| IRON | 1.2E-02 | 2.9E-02 | 1.5E-02 | 2.9E-02 | 1.5E-02 | 2.5E-02 | 1.9E-02 | 3.2E-02 | 4.0E-02 | 5.8E-02 | 4.5E-03 | 2.3E-02 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 3.4E-03 | 5.6E-03 | 4.5E-03 | 8.1E-03 | 3.0E-03 | 1.5E-03 | 9.9E-03 | 5.9E-03 | 7.9E-03 | 3.9E-03 | 1.5E-03 | 2.0E-03 |
| MERCURY | 4.5E-05 | 4.2E-05 | 7.5E-04 | 7.5E-04 | 9.9E-05 | 4.2E-05 | 4.5E-04 | 4.5E-05 | 4.2E-05 | 4.2E-05 | 2.8E-03 | 4.2E-05 |
| VANADIUM | 2.4E-03 | 2.7E-03 | 3.1E-03 | 4.3E-03 | 3.7E-03 | 7.5E-03 | 3.6E-03 | 4.7E-03 | 5.6E-03 | 9.8E-03 | 1.5E-03 | 5.5E-03 |
| HEXAVALENT CHROMIUM | 7.7E-04 | 7.6E-04 | 9.5E-04 | 1.2E-03 | 9.4E-04 | 1.4E-03 | 9.1E-04 | 1.4E-03 | 2.0E-03 | 1.8E-03 | 4.5E-04 | 1.3E-03 |
| TOTAL HAZARD INDEX | 3.5E-02 | 7.5E-02 | 6.3E-02 | 9.1E-02 | 7.0E-02 | 6.4E-02 | 8.8E-02 | 6.8E-02 | 8.6E-02 | 1.1E-01 | 2.6E-02 | 5.0E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 3.2E-06 | 2.5E-06 | 2.3E-02 | 1.1E-02 | 1.2E-05 | 9.4E-05 | | 2.7E-06 | 2.7E-06 | 2.3E-06 | | 2.5E-06 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 1.5E-01 | 1.7E-01 | 1.8E-01 | 3.6E-01 | 6.6E-01 | 1.7E-01 | 2.1E-01 | 2.4E-01 | 3.1E-01 | 3.1E-01 | 8.8E-02 | 2.3E-01 |
| COBALT | 2.1E-01 | 6.8E-01 | 5.8E-01 | 6.5E-01 | 3.5E-01 | 5.0E-01 | 1.0E+00 | 2.7E-01 | 3.6E-01 | 5.4E-01 | 2.7E-01 | 1.8E-01 |
| IRON | 2.9E-01 | 6.9E-01 | 3.6E-01 | 6.8E-01 | 3.6E-01 | 5.9E-01 | 4.5E-01 | 7.6E-01 | 9.6E-01 | 1.4E+00 | 1.1E-01 | 5.4E-01 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 3.5E-02 | 5.8E-02 | 4.6E-02 | 8.3E-02 | 3.1E-02 | 1.5E-02 | 1.0E-01 | 6.0E-02 | 8.1E-02 | 4.0E-02 | 1.5E-02 | 2.1E-02 |
| MERCURY | 5.7E-04 | 5.4E-04 | 9.5E-03 | 9.5E-03 | 1.3E-03 | 5.4E-04 | 5.7E-03 | 5.7E-04 | 5.4E-04 | 5.4E-04 | 3.6E-02 | 5.4E-04 |
| VANADIUM | 5.7E-02 | 6.4E-02 | 7.5E-02 | 1.0E-01 | 8.9E-02 | 1.8E-01 | 8.4E-02 | 1.1E-01 | 1.3E-01 | 2.3E-01 | 3.4E-02 | 1.3E-01 |
| HEXAVALENT CHROMIUM | 6.8E-03 | 6.7E-03 | 8.4E-03 | 1.1E-02 | 8.3E-03 | 1.2E-02 | 8.0E-03 | 1.2E-02 | 1.8E-02 | 1.5E-02 | 4.0E-03 | 1.1E-02 |
| TOTAL HAZARD INDEX | 7.4E-01 | 1.7E+00 | 1.3E+00 | 1.9E+00 | 1.5E+00 | 1.5E+00 | 1.9E+00 | 1.5E+00 | 1.9E+00 | 2.5E+00 | 5.5E-01 | 1.1E+00 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | 788 | | SB-789 | | | | D-TP-1 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-788-07 | D-SB-788-09 | D-SB-789-03 | D-SB-789-05 | D-SB-789-07 | D-SB-789-09 | D-TP-1-1-4-6 | D-TP-1-2-8-10 | D-TP-1-3-8-10 | D-TP-1-4-4-6 | D-TP-1-5-4-6 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100920 | 20100920 | 20100920 | 20100920 | 20100920 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 4 | 8 | 8 | 4 | 4 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 | 10 | 6 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 4.7E-07 | 5.0E-07 | 1.4E-06 | 1.0E-07 | 1.2E-07 | 1.1E-07 | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | 6.4E-03 | 1.1E-02 | 7.1E-03 | 1.3E-02 | 2.0E-02 | 9.1E-03 | | | | | |
| COBALT | 7.6E-03 | 7.8E-03 | 6.3E-03 | 1.3E-02 | 1.0E-02 | 1.2E-02 | | | | | |
| IRON | 6.9E-03 | 1.6E-02 | 6.2E-03 | 2.2E-02 | 3.0E-02 | 1.8E-02 | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | 9.1E-04 | 1.6E-03 | 1.9E-03 | 3.0E-03 | 2.7E-03 | 5.2E-03 | | | | | |
| MERCURY | 4.5E-05 | 4.2E-05 | 1.3E-04 | 4.2E-05 | 4.5E-05 | 4.2E-05 | | | | | |
| VANADIUM | 4.2E-03 | 4.6E-03 | 2.2E-03 | 4.9E-03 | 7.7E-03 | 4.7E-03 | | | | | |
| HEXAVALENT CHROMIUM | 7.1E-04 | 1.0E-03 | 5.8E-04 | 1.1E-03 | 1.7E-03 | 9.5E-04 | | | | | |
| TOTAL HAZARD INDEX | 2.7E-02 | 4.2E-02 | 2.4E-02 | 5.7E-02 | 7.2E-02 | 5.0E-02 | 2.4E-06 | 2.4E-06 | 4.0E-04 | 1.2E-05 | 2.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 2.2E-06 | 2.3E-06 | 6.5E-06 | 4.7E-07 | 5.6E-07 | 5.0E-07 | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | 1.3E-01 | 2.2E-01 | 1.4E-01 | 2.5E-01 | 4.1E-01 | 1.8E-01 | | | | | |
| COBALT | 1.8E-01 | 1.8E-01 | 1.5E-01 | 3.0E-01 | 2.4E-01 | 2.7E-01 | | | | | |
| IRON | 1.6E-01 | 3.9E-01 | 1.5E-01 | 5.3E-01 | 7.2E-01 | 4.4E-01 | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | 9.3E-03 | 1.6E-02 | 1.9E-02 | 3.1E-02 | 2.7E-02 | 5.3E-02 | | | | | |
| MERCURY | 5.7E-04 | 5.4E-04 | 1.7E-03 | 5.4E-04 | 5.7E-04 | 5.4E-04 | | | | | |
| VANADIUM | 1.0E-01 | 1.1E-01 | 5.3E-02 | 1.2E-01 | 1.8E-01 | 1.1E-01 | | | | | |
| HEXAVALENT CHROMIUM | 6.2E-03 | 8.9E-03 | 5.1E-03 | 1.0E-02 | 1.5E-02 | 8.4E-03 | | | | | |
| TOTAL HAZARD INDEX | 5.9E-01 | 9.3E-01 | 5.2E-01 | 1.2E+00 | 1.6E+00 | 1.1E+00 | 1.1E-05 | 1.1E-05 | 1.9E-03 | 5.6E-05 | 1.1E-05 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | | D-TP-2 | | | | SB-790 | | | | | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-TP-1-6-8-10 | D-TP-2-1-8-10 | D-TP-2-3-6-7 | D-TP-2-4-8-10 | D-TP-2-5-6-7 | D-SB-790-03 | D-SB-790-05 | D-SB-790-07 | D-SB-790-09 | D-SB-791-03 | D-SB-791-05 |
| SAMPLE DATE | 20100920 | 20100920 | 20100920 | 20100921 | 20100921 | 20100908 | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 6 | 8 | 6 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 10 | 10 | 7 | 10 | 7 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | 1.1E-07 | | 6.9E-07 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | 1.0E-02 | 1.1E-02 | 1.4E-02 | 9.4E-03 | 1.2E-02 | 8.4E-03 |
| COBALT | | | | | | 2.5E-02 | 2.7E-02 | 4.6E-02 | 8.5E-03 | 2.0E-02 | 8.0E-03 |
| IRON | | | | | | 1.7E-02 | 1.6E-02 | 1.8E-02 | 2.6E-02 | 3.0E-02 | 1.7E-02 |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | 7.6E-03 | 1.0E-02 | 7.0E-03 | 5.6E-03 | 8.0E-03 | 2.5E-03 |
| MERCURY | | | | | | 1.7E-03 | 9.9E-04 | 3.0E-03 | 4.5E-05 | 4.2E-05 | 4.5E-05 |
| VANADIUM | | | | | | 3.3E-03 | 3.0E-03 | 3.1E-03 | 4.7E-03 | 4.2E-03 | 3.4E-03 |
| HEXAVALENT CHROMIUM | | | | | | 1.0E-03 | 9.4E-04 | 9.7E-04 | 1.2E-03 | 1.2E-03 | 8.7E-04 |
| TOTAL HAZARD INDEX | 1.1E-05 | 3.5E-04 | 7.2E-04 | 2.4E-06 | 2.6E-06 | 6.7E-02 | 6.9E-02 | 9.2E-02 | 5.6E-02 | 7.6E-02 | 4.1E-02 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | 5.0E-07 | | 3.2E-06 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | 2.1E-01 | 2.3E-01 | 2.9E-01 | 1.9E-01 | 2.5E-01 | 1.7E-01 |
| COBALT | | | | | | 6.0E-01 | 6.3E-01 | 1.1E+00 | 2.0E-01 | 4.8E-01 | 1.9E-01 |
| IRON | | | | | | 4.1E-01 | 3.8E-01 | 4.2E-01 | 6.2E-01 | 7.0E-01 | 4.1E-01 |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | 7.7E-02 | 1.0E-01 | 7.1E-02 | 5.7E-02 | 8.2E-02 | 2.6E-02 |
| MERCURY | | | | | | 2.1E-02 | 1.3E-02 | 3.8E-02 | 5.7E-04 | 5.4E-04 | 5.7E-04 |
| VANADIUM | | | | | | 7.8E-02 | 7.2E-02 | 7.4E-02 | 1.1E-01 | 9.9E-02 | 8.1E-02 |
| HEXAVALENT CHROMIUM | | | | | | 8.8E-03 | 8.3E-03 | 8.5E-03 | 1.1E-02 | 1.1E-02 | 7.6E-03 |
| TOTAL HAZARD INDEX | 5.2E-05 | 1.6E-03 | 3.3E-03 | 1.1E-05 | 1.2E-05 | 1.4E+00 | 1.4E+00 | 2.0E+00 | 1.2E+00 | 1.6E+00 | 8.9E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | 791 | | SB-792 | | | | SB-793 | | | | | SB- |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-791-07 | D-SB-791-09 | D-SB-792-03 | D-SB-792-05 | D-SB-792-07 | D-SB-792-09 | D-SB-793-03 | D-SB-793-05 | D-SB-793-07 | D-SB-793-09 | D-SB-794-03 | D-SB-794-05 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 4.7E-07 | 5.8E-07 | 1.3E-06 | 5.0E-07 | 4.7E-07 | 4.8E-07 | 6.9E-07 | 4.7E-07 | 5.3E-07 | 4.8E-07 | | 1.0E-07 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 1.8E-02 | 1.1E-02 | 1.2E-02 | 1.0E-02 | 6.6E-03 | 8.7E-03 | 1.3E-02 | 8.2E-03 | 9.4E-03 | 8.2E-03 | 1.3E-02 | 1.6E-02 |
| COBALT | 1.9E-02 | 6.3E-03 | 6.1E-02 | 1.3E-02 | 1.3E-02 | 2.2E-02 | 2.9E-02 | 9.8E-03 | 8.7E-03 | 3.4E-02 | 5.6E-02 | 8.2E-03 |
| IRON | 4.0E-02 | 1.1E-03 | 1.5E-02 | 2.8E-02 | 2.1E-02 | 3.3E-02 | 2.0E-02 | 2.2E-02 | 2.3E-02 | 2.8E-02 | 2.4E-02 | 2.8E-02 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 1.4E-02 | 6.4E-04 | 7.9E-03 | 4.7E-03 | 3.6E-03 | 2.7E-03 | 6.2E-03 | 1.4E-03 | 1.8E-03 | 6.2E-03 | 2.9E-02 | 2.5E-03 |
| MERCURY | 4.2E-05 | 4.0E-05 | 6.1E-03 | 4.2E-05 | 4.2E-05 | 4.2E-05 | 2.2E-03 | 4.2E-05 | 4.2E-05 | 4.2E-05 | 3.3E-03 | 4.5E-05 |
| VANADIUM | 5.7E-03 | 2.3E-04 | 3.2E-03 | 5.1E-03 | 4.0E-03 | 7.4E-03 | 3.4E-03 | 4.6E-03 | 4.3E-03 | 5.1E-03 | 3.3E-03 | 5.4E-03 |
| HEXAVALENT CHROMIUM | 1.6E-03 | 1.1E-04 | 1.0E-03 | 1.1E-03 | 9.2E-04 | 1.3E-03 | 1.0E-03 | 9.6E-04 | 1.2E-03 | 1.4E-03 | 9.9E-04 | 1.3E-03 |
| TOTAL HAZARD INDEX | 9.9E-02 | 2.0E-02 | 1.1E-01 | 6.2E-02 | 5.0E-02 | 7.6E-02 | 7.5E-02 | 4.7E-02 | 4.9E-02 | 8.3E-02 | 1.3E-01 | 6.2E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 2.2E-06 | 2.7E-06 | 6.2E-06 | 2.3E-06 | 2.2E-06 | 2.2E-06 | 3.2E-06 | 2.2E-06 | 2.5E-06 | 2.2E-06 | | 4.7E-07 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 3.7E-01 | 2.3E-01 | 2.5E-01 | 2.0E-01 | 1.3E-01 | 1.8E-01 | 2.6E-01 | 1.7E-01 | 1.9E-01 | 1.7E-01 | 2.5E-01 | 3.2E-01 |
| COBALT | 4.5E-01 | 1.5E-01 | 1.4E+00 | 3.1E-01 | 3.1E-01 | 5.3E-01 | 6.9E-01 | 2.3E-01 | 2.1E-01 | 8.0E-01 | 1.3E+00 | 1.9E-01 |
| IRON | 9.4E-01 | 2.7E-02 | 3.5E-01 | 6.7E-01 | 5.1E-01 | 7.9E-01 | 4.9E-01 | 5.2E-01 | 5.5E-01 | 6.7E-01 | 5.8E-01 | 6.8E-01 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 1.5E-01 | 6.6E-03 | 8.1E-02 | 4.8E-02 | 3.7E-02 | 2.7E-02 | 6.3E-02 | 1.4E-02 | 1.9E-02 | 6.3E-02 | 3.0E-01 | 2.6E-02 |
| MERCURY | 5.4E-04 | 5.1E-04 | 7.8E-02 | 5.4E-04 | 5.4E-04 | 5.4E-04 | 2.8E-02 | 5.4E-04 | 5.4E-04 | 5.4E-04 | 4.2E-02 | 5.7E-04 |
| VANADIUM | 1.3E-01 | 5.5E-03 | 7.6E-02 | 1.2E-01 | 9.4E-02 | 1.8E-01 | 8.1E-02 | 1.1E-01 | 1.0E-01 | 1.2E-01 | 7.9E-02 | 1.3E-01 |
| HEXAVALENT CHROMIUM | 1.4E-02 | 9.9E-04 | 8.9E-03 | 1.0E-02 | 8.1E-03 | 1.1E-02 | 9.1E-03 | 8.5E-03 | 1.1E-02 | 1.2E-02 | 8.8E-03 | 1.2E-02 |
| TOTAL HAZARD INDEX | 2.1E+00 | 4.2E-01 | 2.3E+00 | 1.4E+00 | 1.1E+00 | 1.7E+00 | 1.6E+00 | 1.1E+00 | 1.1E+00 | 1.8E+00 | 2.6E+00 | 1.4E+00 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | 794 | | SB-795 | | | | SB-796 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-794-07 | D-SB-794-09 | D-SB-795-03 | D-SB-795-05 | D-SB-795-07 | D-SB-795-09 | D-SB-796-03 | D-SB-796-05 | D-SB-796-07 | D-SB-796-09 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | |
| NAPHTHALENE | 5.0E-07 | 4.5E-07 | | 6.3E-07 | 1.0E-07 | 5.0E-07 | 4.4E-07 | 5.2E-07 | 5.2E-07 | 4.8E-07 |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | 1.4E-02 | 1.3E-02 | 1.3E-02 | 8.9E-03 | 1.3E-02 | 1.0E-02 | 7.8E-03 | 2.1E-02 | 7.1E-03 | 9.8E-03 |
| COBALT | 1.1E-02 | 5.6E-03 | 5.1E-02 | 1.2E-02 | 3.8E-02 | 1.4E-02 | 1.7E-02 | 1.2E-02 | 6.5E-03 | 1.7E-02 |
| IRON | 3.7E-02 | 3.7E-03 | 3.1E-02 | 1.6E-02 | 2.9E-02 | 2.2E-02 | 1.2E-02 | 4.0E-02 | 2.2E-02 | 2.9E-02 |
| LEAD | | | | | | | | | | |
| MANGANESE | 4.0E-03 | 5.3E-04 | 9.8E-03 | 2.5E-03 | 6.6E-03 | 6.6E-03 | 4.0E-03 | 2.1E-03 | 1.8E-03 | 1.9E-03 |
| MERCURY | 4.5E-05 | 4.0E-05 | 4.2E-05 | 5.2E-05 | 1.1E-04 | 4.2E-05 | 2.4E-03 | 4.9E-05 | 4.2E-05 | 4.0E-05 |
| VANADIUM | 6.1E-03 | 8.8E-04 | 4.7E-03 | 3.7E-03 | 3.6E-03 | 4.3E-03 | 2.7E-03 | 6.4E-03 | 4.6E-03 | 7.6E-03 |
| HEXAVALENT CHROMIUM | 1.5E-03 | 4.2E-04 | 1.3E-03 | 8.6E-04 | 1.1E-03 | 1.1E-03 | 7.8E-04 | 1.6E-03 | 8.1E-04 | 1.2E-03 |
| TOTAL HAZARD INDEX | 7.4E-02 | 2.4E-02 | 1.1E-01 | 4.5E-02 | 9.2E-02 | 5.8E-02 | 4.7E-02 | 8.4E-02 | 4.3E-02 | 6.6E-02 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | |
| NAPHTHALENE | 2.3E-06 | 2.1E-06 | | 2.9E-06 | 4.7E-07 | 2.3E-06 | 2.1E-06 | 2.4E-06 | 2.4E-06 | 2.3E-06 |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | 2.8E-01 | 2.6E-01 | 2.7E-01 | 1.8E-01 | 2.6E-01 | 2.0E-01 | 1.6E-01 | 4.3E-01 | 1.4E-01 | 2.0E-01 |
| COBALT | 2.6E-01 | 1.3E-01 | 1.2E+00 | 2.9E-01 | 9.1E-01 | 3.4E-01 | 4.1E-01 | 2.9E-01 | 1.5E-01 | 3.9E-01 |
| IRON | 8.7E-01 | 8.7E-02 | 7.5E-01 | 3.9E-01 | 7.0E-01 | 5.1E-01 | 2.9E-01 | 9.4E-01 | 5.3E-01 | 6.9E-01 |
| LEAD | | | | | | | | | | |
| MANGANESE | 4.1E-02 | 5.4E-03 | 1.0E-01 | 2.6E-02 | 6.8E-02 | 6.7E-02 | 4.1E-02 | 2.1E-02 | 1.8E-02 | 1.9E-02 |
| MERCURY | 5.7E-04 | 5.1E-04 | 5.4E-04 | 6.6E-04 | 1.4E-03 | 5.4E-04 | 3.0E-02 | 6.3E-04 | 5.4E-04 | 5.1E-04 |
| VANADIUM | 1.4E-01 | 2.1E-02 | 1.1E-01 | 8.8E-02 | 8.6E-02 | 1.0E-01 | 6.5E-02 | 1.5E-01 | 1.1E-01 | 1.8E-01 |
| HEXAVALENT CHROMIUM | 1.3E-02 | 3.7E-03 | 1.2E-02 | 7.5E-03 | 9.4E-03 | 9.8E-03 | 6.9E-03 | 1.5E-02 | 7.1E-03 | 1.0E-02 |
| TOTAL HAZARD INDEX | 1.6E+00 | 5.1E-01 | 2.4E+00 | 9.9E-01 | 2.0E+00 | 1.2E+00 | 1.0E+00 | 1.9E+00 | 9.6E-01 | 1.5E+00 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-060 | SB-060 | SB-060 | SB-060 | SB-060 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061 | SB-061A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-60RE-11 | D-SB-60RE-12 | D-SB-60RE-13 | D-SB-60RE-14 | D-SB-60RE-15 | D-SB-61RE-11 | D-SB-61RE-12 | D-SB-61RE-13 | D-SB-61RE-14 | D-SB-61RE-15 | D-SB-61REA-11 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 9.2E-08 | 2.6E-09 | 2.6E-09 | 7.1E-08 | 2.6E-09 | 6.3E-07 | 2.0E-06 | 2.6E-09 | 5.8E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 9.2E-08 | 2.6E-09 | 2.6E-09 | 7.1E-08 | 2.6E-09 | 6.3E-07 | 2.0E-06 | 2.6E-09 | 5.8E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 2.0E-06 | 5.6E-08 | 5.6E-08 | 1.5E-06 | 5.6E-08 | 1.4E-05 | 4.3E-05 | 5.6E-08 | 1.3E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 2.0E-06 | 5.6E-08 | 5.6E-08 | 1.5E-06 | 5.6E-08 | 1.4E-05 | 4.3E-05 | 5.6E-08 | 1.3E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-061A | SB-061A | SB-061B | SB-061B | SB-061B | SB-061C | SB-061C | SB-061C | SB-061D | SB-061D |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61REA-13 | D-SB-61REA-15 | D-SB-61REB-11 | D-SB-61REB-13 | D-SB-61REB-15 | D-SB-61REC-11 | D-SB-61REC-13 | D-SB-61REC-15 | D-SB-61RED-11 | D-SB-61RED-13 |
| SAMPLE DATE | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 | 20091012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 5.3E-07 | 3.7E-06 | 5.5E-08 | 2.6E-09 | 3.2E-08 | 2.6E-09 | 2.6E-09 | 1.5E-06 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 5.3E-07 | 3.7E-06 | 5.5E-08 | 2.6E-09 | 3.2E-08 | 2.6E-09 | 2.6E-09 | 1.5E-06 |
| **RESIDENTIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 1.2E-05 | 8.1E-05 | 1.2E-06 | 5.6E-08 | 6.9E-07 | 5.6E-08 | 5.6E-08 | 3.2E-05 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 1.2E-05 | 8.1E-05 | 1.2E-06 | 5.6E-08 | 6.9E-07 | 5.6E-08 | 5.6E-08 | 3.2E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-061D | SB-062 | SB-062 | SB-062 | SB-062 | SB-062 | SB-062A | SB-062A | SB-062A | SB-062A |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-61RED-15 | D-SB-62RE-11 | D-SB-62RE-12 | D-SB-62RE-13 | D-SB-62RE-14 | D-SB-62RE-15 | D-SB-62REA-11 | D-SB-62REA-11-AVG | D-SB-62REA-11-D | D-SB-62REA-13 |
| SAMPLE DATE | 20091012 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20091015 | 20091015 | 20091015 | 20091015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 11 | 11 | 13 |
| BOTTOM DEPTH | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 11 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.6E-07 | 2.6E-09 | 2.9E-09 | 7.7E-06 | 2.5E-07 | 1.7E-06 | 5.1E-07 | 4.3E-07 | 3.5E-07 | 3.1E-07 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.6E-07 | 2.6E-09 | 2.9E-09 | 7.7E-06 | 2.5E-07 | 1.7E-06 | 5.1E-07 | 4.3E-07 | 3.5E-07 | 3.1E-07 |
| **RESIDENTIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.5E-06 | 5.6E-08 | 6.4E-08 | 1.7E-04 | 5.5E-06 | 3.6E-05 | 1.1E-05 | 9.3E-06 | 7.5E-06 | 6.8E-06 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 3.5E-06 | 5.6E-08 | 6.4E-08 | 1.7E-04 | 5.5E-06 | 3.6E-05 | 1.1E-05 | 9.3E-06 | 7.5E-06 | 6.8E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-062A | SB-062B | SB-062B | SB-062B | SB-062C | SB-062C | SB-062C | SB-062D | SB-062D | SB-062D |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-62REA-15 | D-SB-62REB-11 | D-SB-62REB-13 | D-SB-62REB-15 | D-SB-62REC-11 | D-SB-62REC-13 | D-SB-62REC-15 | D-SB-62RED-11 | D-SB-62RED-13 | D-SB-62RED-15 |
| SAMPLE DATE | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091015 | 20091014 | 20091014 | 20091014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.7E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 3.5E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 3.7E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 3.5E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.0E-07 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 7.6E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 8.0E-07 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 7.6E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-063 | SB-063 | SB-063 | SB-063 | SB-063 | SB-065 | SB-065 | SB-065 | SB-065 | SB-065 | SB-066 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-63RE-11 | D-SB-63RE-12 | D-SB-63RE-13 | D-SB-63RE-14 | D-SB-63RE-15 | D-SB-65RE-11 | D-SB-65RE-12 | D-SB-65RE-13 | D-SB-65RE-14 | D-SB-65RE-15 | D-SB-66RE-11 |
| SAMPLE DATE | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20090916 | 20090916 | 20090916 | 20090916 | 20090916 | 20090915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.6E-09 | 4.3E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 1.5E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.6E-09 | 4.3E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 1.5E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 5.6E-08 | 9.3E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 3.3E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 5.6E-08 | 9.3E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 3.3E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-066 | SB-066 | SB-239 | SB-239 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240 | SB-240A |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-66RE-12 | D-SB-66RE-15 | D-SB-239RE-11 | D-SB-239RE-12 | D-SB-240RE-11 | D-SB-240RE-12 | D-SB-240RE-13 | D-SB-240RE-14 | D-SB-240RE-15 | D-SB-240REA-11 |
| SAMPLE DATE | 20090914 | 20090914 | 20091015 | 20091015 | 20090914 | 20090914 | 20090914 | 20090914 | 20090914 | 20091014 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 12 | 15 | 11 | 12 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | 12 | 15 | 11 | 12 | 11 | 12 | 13 | 14 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.6E-07 | 1.5E-07 | 6.4E-07 | 4.2E-07 | 6.9E-07 | 1.5E-07 | 1.2E-06 | 8.7E-08 | 7.5E-08 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.6E-07 | 1.5E-07 | 6.4E-07 | 4.2E-07 | 6.9E-07 | 1.5E-07 | 1.2E-06 | 8.7E-08 | 7.5E-08 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.4E-06 | 3.2E-06 | 1.4E-05 | 9.1E-06 | 1.5E-05 | 3.2E-06 | 2.5E-05 | 1.9E-06 | 1.6E-06 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 3.4E-06 | 3.2E-06 | 1.4E-05 | 9.1E-06 | 1.5E-05 | 3.2E-06 | 2.5E-05 | 1.9E-06 | 1.6E-06 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-240A | SB-240A | SB-240B | SB-240B | SB-240C | SB-240C | SB-240C | SB-240D | SB-240D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240REA-13 | D-SB-240REA-15 | D-SB-240REB-11 | D-SB-240REB-13 | D-SB-240REC-11 | D-SB-240REC-13 | D-SB-240REC-15 | D-SB-240RED-11 | D-SB-240RED-11-AVG |
| SAMPLE DATE | 20091014 | 20091014 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 | 20091013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 11 | 13 | 15 | 11 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 11 | 13 | 15 | 11 | 11 |
| **INDUSTRIAL** | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 7.3E-08 | 2.9E-09 | 3.5E-09 | 2.8E-09 | 2.0E-07 | 3.3E-09 | 1.0E-06 | 5.6E-07 |
| NAPHTHALENE | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | |
| ANTIMONY | | | | | | | | | |
| ARSENIC | | | | | | | | | |
| CADMIUM | | | | | | | | | |
| COBALT | | | | | | | | | |
| IRON | | | | | | | | | |
| LEAD | | | | | | | | | |
| MANGANESE | | | | | | | | | |
| MERCURY | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | |
| NICKEL | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 7.3E-08 | 2.9E-09 | 3.5E-09 | 2.8E-09 | 2.0E-07 | 3.3E-09 | 1.0E-06 | 5.6E-07 |
| **RESIDENTIAL** | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 1.6E-06 | 6.4E-08 | 7.5E-08 | 6.0E-08 | 4.3E-06 | 7.1E-08 | 2.2E-05 | 1.2E-05 |
| NAPHTHALENE | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | |
| ANTIMONY | | | | | | | | | |
| ARSENIC | | | | | | | | | |
| CADMIUM | | | | | | | | | |
| COBALT | | | | | | | | | |
| IRON | | | | | | | | | |
| LEAD | | | | | | | | | |
| MANGANESE | | | | | | | | | |
| MERCURY | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | |
| NICKEL | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 1.6E-06 | 6.4E-08 | 7.5E-08 | 6.0E-08 | 4.3E-06 | 7.1E-08 | 2.2E-05 | 1.2E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-240D | SB-240D | SB-240D | SB-243 | SB-243 | SB-243 | SB-243 | SB-243 | SB-766 | SB-766 | SB-766 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-240RED-11-D | D-SB-240RED-13 | D-SB-240RED-15 | D-SB-243RE-11 | D-SB-243RE-12 | D-SB-243RE-13 | D-SB-243RE-14 | D-SB-243RE-15 | D-SB-766-11 | D-SB-766-13 | D-SB-766-15 |
| SAMPLE DATE | 20091013 | 20091013 | 20091013 | 20090915 | 20090915 | 20090915 | 20090915 | 20090915 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.2E-07 | 2.2E-06 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 3.1E-07 | 2.8E-09 | 2.8E-09 | 2.5E-06 | 4.3E-07 | 7.6E-09 |
| NAPHTHALENE | | | | | | | | | 2.4E-09 | 1.7E-08 | 9.5E-11 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.2E-07 | 2.2E-06 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 3.1E-07 | 2.8E-09 | 2.8E-09 | 2.5E-06 | 4.4E-07 | 7.7E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.5E-06 | 4.7E-05 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.8E-06 | 6.0E-08 | 6.0E-08 | 5.4E-05 | 9.3E-06 | 1.7E-07 |
| NAPHTHALENE | | | | | | | | | 1.2E-08 | 8.7E-08 | 4.8E-10 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.5E-06 | 4.7E-05 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.8E-06 | 6.0E-08 | 6.0E-08 | 5.4E-05 | 9.3E-06 | 1.7E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-767 | SB-767 | SB-767 | SB-768 | SB-768 | SB-768 | SB-769 | SB-769 | SB-769 | SB-770 | SB-770 | SB-771 | SB-771 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-767-11 | D-SB-767-13 | D-SB-767-15 | D-SB-768-11 | D-SB-768-13 | D-SB-768-15 | D-SB-769-11 | D-SB-769-13 | D-SB-769-15 | D-SB-770-13 | D-SB-770-15 | D-SB-771-11 | D-SB-771-13 |
| SAMPLE DATE | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.1E-09 | 8.8E-07 | 6.9E-09 | 6.8E-09 | 1.3E-06 | 6.9E-09 | 6.9E-09 | 1.6E-07 | 6.9E-09 | 6.5E-06 | 1.0E-06 | 6.9E-09 | 7.1E-09 |
| NAPHTHALENE | 8.9E-11 | 4.8E-10 | 8.7E-11 | 8.4E-11 | 1.1E-09 | 8.7E-11 | 8.7E-11 | 8.7E-11 | 8.7E-11 | 5.6E-09 | 1.0E-09 | 8.7E-11 | 8.9E-11 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.2E-09 | 8.8E-07 | 7.0E-09 | 6.8E-09 | 1.3E-06 | 7.0E-09 | 7.0E-09 | 1.6E-07 | 7.0E-09 | 6.5E-06 | 1.0E-06 | 7.0E-09 | 7.2E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.9E-05 | 1.5E-07 | 1.5E-07 | 2.7E-05 | 1.5E-07 | 1.5E-07 | 3.5E-06 | 1.5E-07 | 1.4E-04 | 2.3E-05 | 1.5E-07 | 1.5E-07 |
| NAPHTHALENE | 4.5E-10 | 2.4E-09 | 4.4E-10 | 4.3E-10 | 5.7E-09 | 4.4E-10 | 4.4E-10 | 4.4E-10 | 4.4E-10 | 2.8E-08 | 5.2E-09 | 4.4E-10 | 4.5E-10 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-07 | 1.9E-05 | 1.5E-07 | 1.5E-07 | 2.7E-05 | 1.5E-07 | 1.5E-07 | 3.5E-06 | 1.5E-07 | 1.4E-04 | 2.3E-05 | 1.5E-07 | 1.5E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-771 | SB-772 | SB-772 | SB-772 | SB-773 | SB-773 | SB-773 | SB-774 | SB-774 | SB-774 | SB-774 | SB-774 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-771-15 | D-SB-772-11 | D-SB-772-13 | D-SB-772-15 | D-SB-773-11 | D-SB-773-13 | D-SB-773-15 | D-SB-774-11 | D-SB-774-13 | D-SB-774-15 | D-SB-774-15-AVG | D-SB-774-15-D |
| SAMPLE DATE | 20100910 | 20100830 | 20100830 | 20100830 | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.9E-09 | 1.0E-07 | 2.8E-07 | 4.7E-06 | 7.1E-09 | 7.1E-09 | 1.5E-07 | 3.3E-07 | 3.1E-06 | 1.7E-06 | 1.6E-06 | 1.4E-06 |
| NAPHTHALENE | 8.7E-11 | 4.1E-09 | 1.2E-09 | 4.3E-08 | 8.9E-11 | 8.9E-11 | 8.7E-11 | 5.2E-10 | 3.3E-09 | 2.0E-09 | 2.4E-09 | 2.7E-09 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.0E-09 | 1.1E-07 | 2.8E-07 | 4.7E-06 | 7.2E-09 | 7.2E-09 | 1.5E-07 | 3.3E-07 | 3.1E-06 | 1.7E-06 | 1.6E-06 | 1.4E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 2.2E-06 | 6.0E-06 | 1.0E-04 | 1.5E-07 | 1.5E-07 | 3.2E-06 | 7.2E-06 | 6.7E-05 | 3.7E-05 | 3.4E-05 | 3.0E-05 |
| NAPHTHALENE | 4.4E-10 | 2.1E-08 | 6.1E-09 | 2.2E-07 | 4.5E-10 | 4.5E-10 | 4.4E-10 | 2.6E-09 | 1.7E-08 | 1.0E-08 | 1.2E-08 | 1.4E-08 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-07 | 2.3E-06 | 6.0E-06 | 1.0E-04 | 1.5E-07 | 1.5E-07 | 3.2E-06 | 7.3E-06 | 6.7E-05 | 3.7E-05 | 3.4E-05 | 3.0E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-057 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 | SB-058 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-57RE-11 | F-SB-57RE-12 | F-SB-57RE-13 | F-SB-57RE-14 | F-SB-57RE-15 | SB-57-15 | F-SB-58RE-11 | F-SB-58RE-12 | F-SB-58RE-13 | F-SB-58RE-14 | F-SB-58RE-15 | SB-58-15 |
| SAMPLE DATE | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 | 20090917 | 20090917 | 20090917 | 20090917 | 20090917 | 20040913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 15 | 11 | 12 | 13 | 14 | 15 | 15 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 15 | 11 | 12 | 13 | 14 | 15 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | 1.5E-11 | | | | | | 1.5E-11 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | 1.9E-10 | | | | | | 1.9E-10 |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | | 2.2E-08 | 5.0E-06 | 1.3E-07 | 2.8E-09 | 2.8E-09 | |
| NAPHTHALENE | | | | | | 1.3E-10 | | | | | | 1.3E-10 |
| AROCLOR-1254 | | | | | | 1.4E-07 | | | | | | 1.5E-07 |
| AROCLOR-1260 | | | | | | 1.4E-07 | | | | | | 1.5E-07 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | 2.4E-07 | | | | | | 1.9E-06 |
| CADMIUM | | | | | | 6.4E-11 | | | | | | 7.0E-11 |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | 9.2E-12 | | | | | | 1.2E-10 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 1.6E-07 | | | | | | 7.2E-07 |
| TOTAL CANCER RISK | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 6.8E-07 | 2.2E-08 | 5.0E-06 | 1.3E-07 | 2.8E-09 | 2.8E-09 | 3.0E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | 1.5E-10 | | | | | | 1.5E-10 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | 9.8E-10 | | | | | | 9.8E-10 |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | | 4.7E-07 | 1.1E-04 | 2.9E-06 | 6.0E-08 | 6.0E-08 | |
| NAPHTHALENE | | | | | | 6.5E-10 | | | | | | 6.5E-10 |
| AROCLOR-1254 | | | | | | 6.9E-07 | | | | | | 7.7E-07 |
| AROCLOR-1260 | | | | | | 6.9E-07 | | | | | | 7.7E-07 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | 1.9E-06 | | | | | | 1.5E-05 |
| CADMIUM | | | | | | 1.3E-10 | | | | | | 1.4E-10 |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | 1.9E-11 | | | | | | 2.4E-10 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 2.3E-06 | | | | | | 1.1E-05 |
| TOTAL CANCER RISK | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-06 | 4.7E-07 | 1.1E-04 | 2.9E-06 | 6.0E-08 | 6.0E-08 | 2.7E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-058 | SB-058A | SB-058A | SB-058B | SB-058B | SB-058C | SB-058C | SB-058D | SB-058D | SB-059 | SB-062 | SB-065 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-58-20 | F-SB-58REA-12 | F-SB-58REA-14 | F-SB-58REB-12 | F-SB-58REB-14 | F-SB-58REC-12 | F-SB-58REC-14 | F-SB-58RED-12 | F-SB-58RED-14 | SB-59-15 | SB-62-15 | SB-65-15 |
| SAMPLE DATE | 20040913 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20040923 | 20040923 | 20040917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 20 | 12 | 14 | 12 | 14 | 12 | 14 | 12 | 14 | 15 | 15 | 15 |
| BOTTOM DEPTH | 20 | 12 | 14 | 12 | 14 | 12 | 14 | 12 | 14 | 15 | 15 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.5E-11 | | | | | | | | | 1.5E-11 | 1.5E-11 | 1.5E-11 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.9E-10 | | | | | | | | | 1.9E-10 | 1.9E-10 | 1.9E-10 |
| BAP EQUIVALENT-HALFND | 7.6E-07 | 1.8E-07 | 2.6E-09 | 3.6E-09 | 1.7E-06 | 1.5E-07 | 9.1E-07 | 1.7E-07 | 1.7E-07 | 1.0E-05 | | |
| NAPHTHALENE | 1.3E-10 | | | | | | | | | 1.3E-10 | 1.3E-10 | 1.3E-10 |
| AROCLOR-1254 | 1.6E-07 | | | | | | | | | 1.4E-07 | 1.5E-07 | 1.4E-07 |
| AROCLOR-1260 | 1.6E-07 | | | | | | | | | 1.4E-07 | 1.5E-07 | 1.4E-07 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 9.1E-07 | | | | | | | | | 1.0E-06 | 2.6E-07 | 1.0E-07 |
| CADMIUM | 6.8E-11 | | | | | | | | | 5.7E-11 | 5.9E-11 | 6.4E-11 |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 1.5E-10 | | | | | | | | | 9.8E-11 | 8.5E-12 | 4.3E-11 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.0E-07 | | | | | | | | | 7.4E-07 | 1.8E-07 | 3.9E-08 |
| TOTAL CANCER RISK | 2.1E-06 | 1.8E-07 | 2.6E-09 | 3.6E-09 | 1.7E-06 | 1.5E-07 | 9.1E-07 | 1.7E-07 | 1.7E-07 | 1.3E-05 | 7.4E-07 | 4.2E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.5E-10 | | | | | | | | | 1.5E-10 | 1.5E-10 | 1.5E-10 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.8E-10 | | | | | | | | | 9.8E-10 | 9.8E-10 | 9.8E-10 |
| BAP EQUIVALENT-HALFND | 1.7E-05 | 3.9E-06 | 5.6E-08 | 7.9E-08 | 3.7E-05 | 3.3E-06 | 2.0E-05 | 3.7E-06 | 3.8E-06 | 2.3E-04 | | |
| NAPHTHALENE | 6.5E-10 | | | | | | | | | 6.5E-10 | 6.5E-10 | 6.5E-10 |
| AROCLOR-1254 | 8.2E-07 | | | | | | | | | 7.2E-07 | 7.4E-07 | 6.9E-07 |
| AROCLOR-1260 | 8.2E-07 | | | | | | | | | 7.2E-07 | 7.4E-07 | 6.9E-07 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 7.1E-06 | | | | | | | | | 8.0E-06 | 2.0E-06 | 8.1E-07 |
| CADMIUM | 1.4E-10 | | | | | | | | | 1.1E-10 | 1.2E-10 | 1.3E-10 |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 3.0E-10 | | | | | | | | | 2.0E-10 | 1.7E-11 | 8.7E-11 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.6E-06 | | | | | | | | | 1.1E-05 | 2.6E-06 | 5.8E-07 |
| TOTAL CANCER RISK | 2.7E-05 | 3.9E-06 | 5.6E-08 | 7.9E-08 | 3.7E-05 | 3.3E-06 | 2.0E-05 | 3.7E-06 | 3.8E-06 | 2.5E-04 | 6.1E-06 | 2.8E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-065 | SB-067 | SB-067 | SB-067 | SB-244 | SB-245 | SB-246 | SB-247 | SB-248 | SB-249 | SB-775 | SB-775 | SB-775 | SB-776 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-65-20 | SB-67-15 | SB-67-20 | SB-67-25 | SB-244-15 | SB-245-15 | SB-246-15 | SB-247-15 | SB-248-15 | SB-249-15 | D-SB-775-11 | D-SB-775-13 | D-SB-775-15 | D-SB-776-11 |
| SAMPLE DATE | 20040917 | 20040927 | 20040927 | 20040927 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 20 | 15 | 20 | 25 | 15 | 15 | 15 | 15 | 15 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 20 | 15 | 20 | 25 | 15 | 15 | 15 | 15 | 15 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-07 | 7.1E-07 | 1.1E-05 | 7.1E-07 | | | | | | | 3.9E-07 | 6.1E-07 | 7.3E-09 | 3.1E-07 |
| NAPHTHALENE | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | | | | | | | 8.4E-11 | 8.4E-11 | 9.1E-11 | 8.9E-11 |
| AROCLOR-1254 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 1.8E-08 | | | | |
| AROCLOR-1260 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 1.8E-08 | | | | |
| ANTIMONY | | | | | | | | | | | | | | |
| ARSENIC | 1.0E-07 | 9.1E-07 | 4.4E-07 | 9.5E-08 | | | | | 3.7E-07 | | | | | |
| CADMIUM | 6.4E-11 | 6.6E-11 | 6.1E-11 | 5.9E-11 | | | | | 4.1E-12 | | | | | |
| COBALT | | | | | | | | | 1.9E-09 | | | | | |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | | |
| NICKEL | 2.3E-11 | 6.6E-11 | 2.8E-11 | 5.0E-11 | | | | | 2.4E-10 | | | | | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.9E-08 | 3.9E-07 | 5.2E-07 | 4.4E-07 | | | | | 7.8E-07 | | | | | |
| TOTAL CANCER RISK | 1.1E-06 | 2.3E-06 | 1.2E-05 | 1.5E-06 | 3.8E-08 | 3.9E-08 | 4.0E-08 | 3.8E-08 | 1.2E-06 | 3.7E-08 | 3.9E-07 | 6.1E-07 | 7.4E-09 | 3.1E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.8E-10 | 9.8E-10 | 9.8E-10 | 9.8E-10 | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-05 | 1.5E-05 | 2.4E-04 | 1.5E-05 | | | | | | | 8.5E-06 | 1.3E-05 | 1.6E-07 | 6.6E-06 |
| NAPHTHALENE | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | | | | | | | 4.3E-10 | 4.3E-10 | 4.6E-10 | 4.5E-10 |
| AROCLOR-1254 | 7.2E-07 | 7.7E-07 | 7.7E-07 | 7.4E-07 | 9.4E-08 | 9.7E-08 | 9.9E-08 | 9.4E-08 | 9.4E-08 | 9.2E-08 | | | | |
| AROCLOR-1260 | 7.2E-07 | 7.7E-07 | 7.7E-07 | 7.4E-07 | 9.4E-08 | 9.7E-08 | 9.9E-08 | 9.4E-08 | 9.4E-08 | 9.2E-08 | | | | |
| ANTIMONY | | | | | | | | | | | | | | |
| ARSENIC | 8.1E-07 | 7.1E-06 | 3.4E-06 | 7.4E-07 | | | | | 2.8E-06 | | | | | |
| CADMIUM | 1.3E-10 | 1.3E-10 | 1.2E-10 | 1.2E-10 | | | | | 8.2E-12 | | | | | |
| COBALT | | | | | | | | | 3.9E-09 | | | | | |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | | |
| NICKEL | 4.6E-11 | 1.3E-10 | 5.7E-11 | 1.0E-10 | | | | | 4.8E-10 | | | | | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 5.8E-07 | 5.8E-06 | 7.8E-06 | 6.6E-06 | | | | | 1.2E-05 | | | | | |
| TOTAL CANCER RISK | 1.7E-05 | 3.0E-05 | 2.5E-04 | 2.4E-05 | 1.9E-07 | 1.9E-07 | 2.0E-07 | 1.9E-07 | 1.5E-05 | 1.8E-07 | 8.5E-06 | 1.3E-05 | 1.6E-07 | 6.6E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-776 | SB-776 | SB-777 | SB-777 | SB-777 | SB-778 | SB-778 | SB-778 | SB-779 | SB-779 | SB-779 | SB-780 | SB-780 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-776-13 | D-SB-776-15 | D-SB-777-11 | D-SB-777-13 | D-SB-777-15 | D-SB-778-11 | D-SB-778-13 | D-SB-778-15 | D-SB-779-11 | D-SB-779-13 | D-SB-779-15 | D-SB-780-11 | D-SB-780-13 |
| SAMPLE DATE | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 | 20100831 | 20100831 | 20100831 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.4E-07 | 6.8E-09 | 7.5E-08 | 9.3E-07 | 6.8E-09 | 6.9E-09 | 2.2E-05 | 5.4E-08 | 7.3E-09 | 1.5E-07 | 6.8E-09 | 6.6E-09 | 6.9E-07 |
| NAPHTHALENE | 9.3E-11 | 8.4E-11 | 8.2E-11 | 1.6E-09 | 8.4E-11 | 8.7E-11 | 3.4E-09 | 8.7E-11 | 9.1E-11 | 8.4E-11 | 8.4E-11 | 8.2E-11 | 9.3E-11 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.4E-07 | 6.8E-09 | 7.5E-08 | 9.3E-07 | 6.8E-09 | 7.0E-09 | 2.2E-05 | 5.4E-08 | 7.4E-09 | 1.5E-07 | 6.8E-09 | 6.7E-09 | 6.9E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.3E-06 | 1.5E-07 | 1.6E-06 | 2.0E-05 | 1.5E-07 | 1.5E-07 | 4.7E-04 | 1.2E-06 | 1.6E-07 | 3.2E-06 | 1.5E-07 | 1.4E-07 | 1.5E-05 |
| NAPHTHALENE | 4.7E-10 | 4.3E-10 | 4.1E-10 | 8.3E-09 | 4.3E-10 | 4.4E-10 | 1.7E-08 | 4.4E-10 | 4.6E-10 | 4.3E-10 | 4.3E-10 | 4.1E-10 | 4.7E-10 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.3E-06 | 1.5E-07 | 1.6E-06 | 2.0E-05 | 1.5E-07 | 1.5E-07 | 4.7E-04 | 1.2E-06 | 1.6E-07 | 3.2E-06 | 1.5E-07 | 1.4E-07 | 1.5E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-780 | SB-781 | SB-781 | SB-781 | SB-782 | SB-782 | SB-782 | SB-783 | SB-783 | SB-783 | SB-784 | SB-784 | SB-784 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-780-15 | D-SB-781-11 | D-SB-781-13 | D-SB-781-15 | D-SB-782-11 | D-SB-782-13 | D-SB-782-15 | D-SB-783-11 | D-SB-783-13 | D-SB-783-15 | D-SB-784-11 | D-SB-784-13 | D-SB-784-15 |
| SAMPLE DATE | 20100901 | 20100901 | 20100901 | 20100901 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | 5.8E-13 | 6.6E-13 | 5.6E-13 | 5.8E-13 | 6.3E-13 | 7.9E-13 | 6.3E-13 | 5.8E-13 | 6.3E-13 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | 1.8E-11 | 2.0E-11 | 1.7E-11 | 1.8E-11 | 1.9E-11 | 2.4E-11 | 1.9E-11 | 1.8E-11 | 1.9E-11 |
| BAP EQUIVALENT-HALFND | 9.0E-08 | 6.4E-09 | 4.6E-07 | 6.8E-09 | 6.6E-09 | 2.0E-08 | 6.6E-09 | 6.8E-09 | 6.9E-09 | 6.9E-09 | 6.8E-09 | 6.6E-09 | 7.1E-09 |
| NAPHTHALENE | 8.4E-11 | 8.0E-11 | 8.9E-11 | 8.4E-11 | 3.5E-12 | 3.9E-12 | 3.2E-12 | 3.5E-12 | 3.9E-12 | 4.8E-12 | 3.7E-12 | 3.5E-12 | 3.7E-12 |
| AROCLOR-1254 | | | | | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | | | | | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | 1.4E-06 | 1.7E-06 | 9.5E-07 | 7.7E-07 | 8.8E-07 | 1.6E-06 | 4.8E-07 | 9.1E-07 | 2.6E-06 |
| CADMIUM | | | | | 3.5E-12 | 2.5E-12 | 4.4E-12 | 2.5E-13 | 2.7E-13 | 4.3E-13 | 2.7E-13 | 3.2E-13 | 5.2E-13 |
| COBALT | | | | | 2.5E-09 | 1.3E-09 | 1.9E-09 | 9.8E-10 | 6.8E-10 | 1.8E-09 | 1.6E-09 | 2.1E-09 | 3.2E-09 |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | 2.1E-10 | 1.0E-10 | 1.2E-10 | 6.0E-11 | 4.1E-11 | 1.6E-10 | 1.2E-10 | 1.7E-10 | 2.5E-10 |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 5.5E-07 | 4.9E-07 | 3.7E-07 | 2.8E-07 | 3.1E-07 | 5.9E-07 | 4.0E-07 | 7.1E-07 | 8.9E-07 |
| TOTAL CANCER RISK | 9.0E-08 | 6.5E-09 | 4.6E-07 | 6.8E-09 | 2.0E-06 | 2.2E-06 | 1.3E-06 | 1.1E-06 | 1.2E-06 | 2.2E-06 | 9.0E-07 | 1.7E-06 | 3.6E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | 5.8E-12 | 6.6E-12 | 5.6E-12 | 5.8E-12 | 6.3E-12 | 7.8E-12 | 6.3E-12 | 5.8E-12 | 6.3E-12 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | 8.9E-11 | 1.0E-10 | 8.6E-11 | 8.9E-11 | 9.9E-11 | 1.2E-10 | 9.8E-11 | 9.1E-11 | 9.8E-11 |
| BAP EQUIVALENT-HALFND | 2.0E-06 | 1.4E-07 | 9.9E-06 | 1.5E-07 | 1.4E-07 | 4.4E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 |
| NAPHTHALENE | 4.3E-10 | 4.0E-10 | 4.5E-10 | 4.3E-10 | 1.7E-11 | 2.0E-11 | 1.6E-11 | 1.7E-11 | 2.0E-11 | 2.4E-11 | 1.9E-11 | 1.7E-11 | 1.9E-11 |
| AROCLOR-1254 | | | | | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 |
| AROCLOR-1260 | | | | | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | 1.1E-05 | 1.3E-05 | 7.4E-06 | 6.0E-06 | 6.8E-06 | 1.2E-05 | 3.7E-06 | 7.1E-06 | 2.1E-05 |
| CADMIUM | | | | | 7.1E-12 | 4.9E-12 | 8.8E-12 | 5.0E-13 | 5.5E-13 | 8.7E-13 | 5.5E-13 | 6.4E-13 | 1.1E-12 |
| COBALT | | | | | 5.0E-09 | 2.7E-09 | 3.8E-09 | 2.0E-09 | 1.4E-09 | 3.7E-09 | 3.3E-09 | 4.2E-09 | 6.5E-09 |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | 4.2E-10 | 2.1E-10 | 2.3E-10 | 1.2E-10 | 8.3E-11 | 3.2E-10 | 2.4E-10 | 3.4E-10 | 5.0E-10 |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 8.2E-06 | 7.3E-06 | 5.5E-06 | 4.2E-06 | 4.7E-06 | 8.9E-06 | 5.9E-06 | 1.1E-05 | 1.3E-05 |
| TOTAL CANCER RISK | 2.0E-06 | 1.4E-07 | 9.9E-06 | 1.5E-07 | 2.0E-05 | 2.1E-05 | 1.3E-05 | 1.0E-05 | 1.2E-05 | 2.1E-05 | 9.9E-06 | 1.8E-05 | 3.4E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-785 | SB-785 | SB-785 | SB-786 | SB-786 | SB-786 | SB-787 | SB-787 | SB-787 | SB-788 | SB-788 | SB-788 | SB-789 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-11 | D-SB-785-13 | D-SB-785-15 | D-SB-786-11 | D-SB-786-13 | D-SB-786-15 | D-SB-787-11 | D-SB-787-13 | D-SB-787-15 | D-SB-788-11 | D-SB-788-13 | D-SB-788-15 | D-SB-789-11 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100903 | 20100903 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 6.1E-13 | 6.3E-13 | 6.1E-13 | 1.3E-11 | 1.6E-11 | 5.6E-13 | 5.6E-13 | 5.8E-13 | 5.8E-13 | 8.1E-13 | 6.6E-13 | 5.6E-13 | 5.6E-13 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.9E-11 | 1.9E-11 | 1.9E-11 | 1.8E-10 | 2.3E-10 | 1.7E-11 | 1.7E-11 | 1.8E-11 | 1.8E-11 | 2.5E-11 | 2.1E-11 | 1.7E-11 | 1.7E-11 |
| BAP EQUIVALENT-HALFND | 6.8E-09 | 6.2E-08 | 6.8E-09 | 6.6E-09 | 6.9E-09 | 6.4E-09 | 6.6E-09 | 6.8E-09 | 6.4E-09 | 6.9E-09 | 7.1E-09 | 6.6E-09 | 6.8E-09 |
| NAPHTHALENE | 1.7E-11 | 1.8E-11 | 1.8E-11 | 1.1E-08 | 2.3E-08 | 2.0E-09 | 1.6E-11 | 1.7E-11 | 1.6E-11 | 2.4E-11 | 1.9E-11 | 1.6E-11 | 3.5E-12 |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | 1.2E-06 | 1.1E-06 | 1.4E-06 | 9.1E-07 | 4.8E-07 | 3.2E-07 | 1.8E-06 | 2.0E-06 | 6.2E-07 | 2.0E-06 | 2.7E-06 | 1.9E-06 | 1.0E-06 |
| CADMIUM | 2.1E-13 | 5.5E-12 | 3.0E-13 | 1.0E-12 | 1.9E-12 | 1.5E-12 | 3.5E-12 | 4.1E-12 | 3.5E-12 | 1.5E-12 | 4.8E-13 | 7.0E-13 | 3.0E-13 |
| COBALT | 1.8E-09 | 3.1E-09 | 2.0E-09 | 3.4E-10 | 1.9E-09 | 4.3E-10 | 1.7E-09 | 2.7E-09 | 1.1E-09 | 2.8E-09 | 1.2E-09 | 2.5E-09 | 1.3E-09 |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | 1.5E-10 | 2.2E-10 | 1.8E-10 | 1.6E-11 | 9.2E-11 | 2.1E-11 | 1.1E-10 | 1.6E-10 | 6.0E-11 | 2.5E-10 | 1.1E-10 | 2.3E-10 | 1.0E-10 |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 7.9E-07 | 6.4E-07 | 7.9E-07 | 1.0E-07 | 5.2E-07 | 5.8E-08 | 8.0E-07 | 7.7E-07 | 1.3E-07 | 9.4E-07 | 8.3E-07 | 8.5E-07 | 3.8E-07 |
| TOTAL CANCER RISK | 2.0E-06 | 1.9E-06 | 2.2E-06 | 1.1E-06 | 1.0E-06 | 4.1E-07 | 2.7E-06 | 2.8E-06 | 7.8E-07 | 3.0E-06 | 3.6E-06 | 2.8E-06 | 1.4E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 6.1E-12 | 6.3E-12 | 6.1E-12 | 1.3E-10 | 1.6E-10 | 5.6E-12 | 5.6E-12 | 5.8E-12 | 5.8E-12 | 8.1E-12 | 6.6E-12 | 5.6E-12 | 5.6E-12 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.6E-11 | 9.9E-11 | 9.6E-11 | 9.1E-10 | 1.2E-09 | 8.6E-11 | 8.6E-11 | 8.9E-11 | 9.1E-11 | 1.3E-10 | 1.1E-10 | 8.6E-11 | 8.8E-11 |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.3E-06 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.4E-07 | 1.4E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 |
| NAPHTHALENE | 8.7E-11 | 8.8E-11 | 8.8E-11 | 5.7E-08 | 1.2E-07 | 1.0E-08 | 8.3E-11 | 8.4E-11 | 8.3E-11 | 1.2E-10 | 9.5E-11 | 8.0E-11 | 1.7E-11 |
| AROCLOR-1254 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 4.7E-08 | 5.2E-08 | 4.7E-08 | 4.7E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 |
| AROCLOR-1260 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 4.7E-08 | 5.2E-08 | 4.7E-08 | 4.7E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | 9.1E-06 | 8.8E-06 | 1.1E-05 | 7.1E-06 | 3.7E-06 | 2.5E-06 | 1.4E-05 | 1.5E-05 | 4.8E-06 | 1.6E-05 | 2.1E-05 | 1.5E-05 | 8.0E-06 |
| CADMIUM | 4.2E-13 | 1.1E-11 | 6.0E-13 | 2.1E-12 | 3.8E-12 | 3.1E-12 | 7.1E-12 | 8.3E-12 | 7.1E-12 | 3.1E-12 | 9.6E-13 | 1.4E-12 | 6.0E-13 |
| COBALT | 3.7E-09 | 6.3E-09 | 3.9E-09 | 6.9E-10 | 3.9E-09 | 8.7E-10 | 3.4E-09 | 5.4E-09 | 2.2E-09 | 5.6E-09 | 2.3E-09 | 5.1E-09 | 2.6E-09 |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | 3.0E-10 | 4.3E-10 | 3.7E-10 | 3.3E-11 | 1.9E-10 | 4.2E-11 | 2.1E-10 | 3.3E-10 | 1.2E-10 | 5.0E-10 | 2.2E-10 | 4.6E-10 | 2.1E-10 |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.2E-05 | 9.6E-06 | 1.2E-05 | 1.6E-06 | 7.8E-06 | 8.7E-07 | 1.2E-05 | 1.1E-05 | 1.9E-06 | 1.4E-05 | 1.2E-05 | 1.3E-05 | 5.6E-06 |
| TOTAL CANCER RISK | 2.1E-05 | 2.0E-05 | 2.3E-05 | 9.0E-06 | 1.2E-05 | 3.6E-06 | 2.6E-05 | 2.7E-05 | 7.0E-06 | 3.0E-05 | 3.4E-05 | 2.8E-05 | 1.4E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-789 | SB-789 | SB-790 | SB-790 | SB-790 | SB-791 | SB-791 | SB-791 | SB-792 | SB-792 | SB-792 | SB-793 | SB-793 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-789-13 | D-SB-789-15 | D-SB-790-11 | D-SB-790-13 | D-SB-790-15 | D-SB-791-11 | D-SB-791-13 | D-SB-791-15 | D-SB-792-11 | D-SB-792-13 | D-SB-792-15 | D-SB-793-11 | D-SB-793-13 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 5.6E-13 | 6.1E-13 | 6.3E-13 | 6.1E-13 | 5.6E-13 | 5.8E-13 | 7.1E-13 | 6.3E-13 | 5.8E-13 | 6.3E-13 | 6.3E-13 | 6.3E-13 | 6.1E-13 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.8E-11 | 1.9E-11 | 1.9E-11 | 1.9E-11 | 1.8E-11 | 1.8E-11 | 2.2E-11 | 1.9E-11 | 1.8E-11 | 1.9E-11 | 2.0E-11 | 1.9E-11 | 1.9E-11 |
| BAP EQUIVALENT-HALFND | 6.9E-09 | 6.6E-09 | 7.1E-09 | 6.9E-09 | 6.6E-09 | 6.6E-09 | 6.8E-09 | 7.1E-09 | 6.6E-09 | 7.1E-09 | 6.6E-09 | 6.8E-09 | 6.8E-09 |
| NAPHTHALENE | 3.5E-12 | 3.7E-12 | 3.9E-12 | 3.7E-12 | 3.5E-12 | 1.7E-11 | 2.2E-11 | 1.8E-11 | 1.7E-11 | 1.7E-11 | 1.9E-11 | 3.9E-12 | 3.7E-12 |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | 2.5E-06 | 1.6E-06 | 7.7E-07 | 1.8E-06 | 1.2E-06 | 1.4E-06 | 1.0E-06 | 3.0E-06 | 1.2E-06 | 1.8E-06 | 2.4E-07 | 1.7E-06 | 9.9E-07 |
| CADMIUM | 1.9E-12 | 1.5E-12 | 2.2E-13 | 5.7E-13 | 6.1E-13 | 3.4E-13 | 3.9E-13 | 5.7E-13 | 4.3E-13 | 6.1E-13 | 4.5E-13 | 5.0E-13 | 5.5E-13 |
| COBALT | 4.8E-09 | 4.1E-09 | 5.9E-10 | 2.0E-09 | 1.7E-09 | 8.4E-10 | 1.3E-09 | 3.1E-09 | 2.0E-09 | 3.1E-09 | 1.2E-09 | 3.4E-09 | 2.5E-09 |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | 3.6E-10 | 2.7E-10 | 3.5E-11 | 1.8E-10 | 1.6E-10 | 6.1E-11 | 1.2E-10 | 1.8E-10 | 1.1E-10 | 2.5E-10 | 5.6E-11 | 1.9E-10 | 1.2E-10 |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 9.2E-07 | 7.7E-07 | 2.6E-07 | 6.1E-07 | 6.3E-07 | 4.4E-07 | 5.7E-07 | 1.5E-06 | 7.2E-07 | 1.5E-06 | 3.3E-07 | 7.3E-07 | 5.0E-07 |
| TOTAL CANCER RISK | 3.4E-06 | 2.4E-06 | 1.1E-06 | 2.5E-06 | 1.9E-06 | 1.9E-06 | 1.6E-06 | 4.6E-06 | 2.0E-06 | 3.4E-06 | 6.0E-07 | 2.4E-06 | 1.5E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 5.6E-12 | 6.1E-12 | 6.3E-12 | 6.1E-12 | 5.6E-12 | 5.8E-12 | 7.1E-12 | 6.3E-12 | 5.8E-12 | 6.3E-12 | 6.3E-12 | 6.3E-12 | 6.1E-12 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.9E-11 | 9.6E-11 | 9.9E-11 | 9.6E-11 | 8.9E-11 | 9.3E-11 | 1.1E-10 | 9.8E-11 | 9.3E-11 | 9.8E-11 | 1.0E-10 | 9.9E-11 | 9.8E-11 |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 |
| NAPHTHALENE | 1.7E-11 | 1.9E-11 | 2.0E-11 | 1.9E-11 | 1.7E-11 | 8.6E-11 | 1.1E-10 | 9.1E-11 | 8.7E-11 | 8.6E-11 | 9.5E-11 | 2.0E-11 | 1.9E-11 |
| AROCLOR-1254 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 |
| AROCLOR-1260 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | 1.9E-05 | 1.3E-05 | 6.0E-06 | 1.4E-05 | 9.4E-06 | 1.1E-05 | 8.0E-06 | 2.3E-05 | 9.4E-06 | 1.4E-05 | 1.9E-06 | 1.3E-05 | 7.7E-06 |
| CADMIUM | 3.8E-12 | 3.1E-12 | 4.4E-13 | 1.1E-12 | 1.2E-12 | 6.9E-13 | 7.8E-13 | 1.1E-12 | 8.7E-13 | 1.2E-12 | 9.2E-13 | 1.0E-12 | 1.1E-12 |
| COBALT | 9.8E-09 | 8.3E-09 | 1.2E-09 | 4.0E-09 | 3.4E-09 | 1.7E-09 | 2.7E-09 | 6.2E-09 | 4.0E-09 | 6.2E-09 | 2.5E-09 | 6.9E-09 | 5.0E-09 |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | 7.2E-10 | 5.5E-10 | 7.1E-11 | 3.7E-10 | 3.3E-10 | 1.2E-10 | 2.3E-10 | 3.7E-10 | 2.1E-10 | 5.0E-10 | 1.1E-10 | 3.8E-10 | 2.5E-10 |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.4E-05 | 1.1E-05 | 3.9E-06 | 9.1E-06 | 9.4E-06 | 6.6E-06 | 8.5E-06 | 2.3E-05 | 1.1E-05 | 2.3E-05 | 5.0E-06 | 1.1E-05 | 7.4E-06 |
| TOTAL CANCER RISK | 3.3E-05 | 2.5E-05 | 1.0E-05 | 2.4E-05 | 1.9E-05 | 1.8E-05 | 1.7E-05 | 4.7E-05 | 2.0E-05 | 3.7E-05 | 7.1E-06 | 2.4E-05 | 1.5E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-793 | SB-794 | SB-794 | SB-794 | SB-795 | SB-795 | SB-795 | SB-796 | SB-796 | SB-796 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-793-15 | D-SB-794-11 | D-SB-794-13 | D-SB-794-15 | D-SB-795-11 | D-SB-795-13 | D-SB-795-15 | D-SB-796-11 | D-SB-796-13 | D-SB-796-15 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 6.1E-13 | 5.8E-13 | 6.1E-13 | 6.1E-13 | 6.8E-13 | 6.8E-13 | 7.1E-13 | 5.6E-13 | 6.1E-13 | 5.8E-13 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.9E-11 | 1.8E-11 | 1.9E-11 | 1.9E-11 | 2.1E-11 | 2.1E-11 | 2.2E-11 | 1.7E-11 | 1.9E-11 | 1.8E-11 |
| BAP EQUIVALENT-HALFND | 6.9E-09 | 6.8E-09 | 6.9E-09 | 6.8E-09 | 6.8E-09 | 6.9E-09 | 6.9E-09 | 6.6E-09 | 6.9E-09 | 6.6E-09 |
| NAPHTHALENE | 3.7E-12 | 3.7E-12 | 1.6E-11 | 1.7E-11 | 1.9E-11 | 1.9E-11 | 2.0E-11 | 1.5E-11 | 1.6E-11 | 1.5E-11 |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | 7.7E-07 | 5.5E-07 | 2.6E-06 | 8.4E-07 | 8.4E-07 | 1.5E-06 | 1.2E-06 | 4.8E-07 | 1.6E-07 | 2.7E-06 |
| CADMIUM | 3.9E-13 | 3.2E-13 | 7.5E-13 | 4.5E-13 | 2.1E-13 | 4.5E-13 | 3.4E-13 | 5.2E-13 | 5.7E-13 | 4.5E-13 |
| COBALT | 2.7E-09 | 1.4E-09 | 3.3E-09 | 2.4E-09 | 3.9E-10 | 2.7E-09 | 2.3E-09 | 8.9E-10 | 5.5E-10 | 8.2E-10 |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | 1.5E-10 | 7.9E-11 | 2.3E-10 | 1.5E-10 | 2.6E-11 | 2.0E-10 | 1.6E-10 | 5.6E-11 | 2.7E-11 | 3.7E-11 |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 4.9E-07 | 2.6E-07 | 7.3E-07 | 6.2E-07 | 3.4E-07 | 9.0E-07 | 7.0E-07 | 4.8E-07 | 1.0E-07 | 9.6E-08 |
| TOTAL CANCER RISK | 1.3E-06 | 8.4E-07 | 3.3E-06 | 1.5E-06 | 1.2E-06 | 2.5E-06 | 1.9E-06 | 9.8E-07 | 2.9E-07 | 2.8E-06 |
| **RESIDENTIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 6.1E-12 | 5.8E-12 | 6.1E-12 | 6.1E-12 | 6.8E-12 | 6.8E-12 | 7.1E-12 | 5.6E-12 | 6.1E-12 | 5.8E-12 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.6E-11 | 9.3E-11 | 9.4E-11 | 9.4E-11 | 1.1E-10 | 1.1E-10 | 1.1E-10 | 8.6E-11 | 9.4E-11 | 8.9E-11 |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.4E-07 |
| NAPHTHALENE | 1.9E-11 | 1.9E-11 | 8.2E-11 | 8.4E-11 | 9.6E-11 | 9.4E-11 | 1.0E-10 | 7.5E-11 | 8.1E-11 | 7.6E-11 |
| AROCLOR-1254 | 5.2E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 4.7E-08 |
| AROCLOR-1260 | 5.2E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 4.7E-08 |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | 6.0E-06 | 4.3E-06 | 2.0E-05 | 6.6E-06 | 6.6E-06 | 1.2E-05 | 9.1E-06 | 3.7E-06 | 1.2E-06 | 2.1E-05 |
| CADMIUM | 7.8E-13 | 6.4E-13 | 1.5E-12 | 9.2E-13 | 4.3E-13 | 9.2E-13 | 6.9E-13 | 1.1E-12 | 1.1E-12 | 9.2E-13 |
| COBALT | 5.5E-09 | 2.7E-09 | 6.7E-09 | 4.9E-09 | 7.8E-10 | 5.4E-09 | 4.6E-09 | 1.8E-09 | 1.1E-09 | 1.6E-09 |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | 3.1E-10 | 1.6E-10 | 4.7E-10 | 3.1E-10 | 5.2E-11 | 4.0E-10 | 3.2E-10 | 1.1E-10 | 5.4E-11 | 7.5E-11 |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 7.3E-06 | 4.0E-06 | 1.1E-05 | 9.3E-06 | 5.1E-06 | 1.3E-05 | 1.1E-05 | 7.1E-06 | 1.5E-06 | 1.4E-06 |
| TOTAL CANCER RISK | 1.4E-05 | 8.5E-06 | 3.1E-05 | 1.6E-05 | 1.2E-05 | 2.6E-05 | 2.0E-05 | 1.1E-05 | 3.0E-06 | 2.2E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-1.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-766 | SB-766 | SB-766 | SB-767 | SB-767 | SB-767 | SB-768 | SB-768 | SB-768 | SB-769 | SB-769 | SB-769 | SB-770 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-766-11 | D-SB-766-13 | D-SB-766-15 | D-SB-767-11 | D-SB-767-13 | D-SB-767-15 | D-SB-768-11 | D-SB-768-13 | D-SB-768-15 | D-SB-769-11 | D-SB-769-13 | D-SB-769-15 | D-SB-770-13 |
| SAMPLE DATE | 20100827 | 20100827 | 20100827 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 | 20100830 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 7.0E-05 | 5.0E-04 | 2.8E-06 | 2.6E-06 | 1.4E-05 | 2.5E-06 | 2.4E-06 | 3.3E-05 | 2.5E-06 | 2.5E-06 | 2.5E-06 | 2.5E-06 | 1.6E-04 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.0E-05 | 5.0E-04 | 2.8E-06 | 2.6E-06 | 1.4E-05 | 2.5E-06 | 2.4E-06 | 3.3E-05 | 2.5E-06 | 2.5E-06 | 2.5E-06 | 2.5E-06 | 1.6E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 3.3E-04 | 2.3E-03 | 1.3E-05 | 1.2E-05 | 6.5E-05 | 1.2E-05 | 1.1E-05 | 1.5E-04 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 7.6E-04 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 3.3E-04 | 2.3E-03 | 1.3E-05 | 1.2E-05 | 6.5E-05 | 1.2E-05 | 1.1E-05 | 1.5E-04 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 7.6E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-770 | SB-771 | SB-771 | SB-771 | SB-772 | SB-772 | SB-772 | SB-773 | SB-773 | SB-773 | SB-774 | SB-774 | SB-774 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-770-15 | D-SB-771-11 | D-SB-771-13 | D-SB-771-15 | D-SB-772-11 | D-SB-772-13 | D-SB-772-15 | D-SB-773-11 | D-SB-773-13 | D-SB-773-15 | D-SB-774-11 | D-SB-774-13 | D-SB-774-15 |
| SAMPLE DATE | 20100830 | 20100910 | 20100910 | 20100910 | 20100830 | 20100830 | 20100830 | 20100831 | 20100831 | 20100831 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 3.0E-05 | 2.5E-06 | 2.6E-06 | 2.5E-06 | 1.2E-04 | 3.5E-05 | 1.2E-03 | 2.6E-06 | 2.6E-06 | 2.5E-06 | 1.5E-05 | 9.5E-05 | 5.9E-05 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 3.0E-05 | 2.5E-06 | 2.6E-06 | 2.5E-06 | 1.2E-04 | 3.5E-05 | 1.2E-03 | 2.6E-06 | 2.6E-06 | 2.5E-06 | 1.5E-05 | 9.5E-05 | 5.9E-05 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 1.4E-04 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 5.6E-04 | 1.6E-04 | 5.8E-03 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 7.0E-05 | 4.5E-04 | 2.8E-04 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.4E-04 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 5.6E-04 | 1.6E-04 | 5.8E-03 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 7.0E-05 | 4.5E-04 | 2.8E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-774 | SB-774 | SB-057 | SB-058 | SB-058 | SB-059 | SB-062 | SB-065 | SB-065 | SB-067 | SB-067 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-774-15-AVG | D-SB-774-15-D | SB-57-15 | SB-58-15 | SB-58-20 | SB-59-15 | SB-62-15 | SB-65-15 | SB-65-20 | SB-67-15 | SB-67-20 |
| SAMPLE DATE | 20100910 | 20100910 | 20040913 | 20040913 | 20040913 | 20040923 | 20040923 | 20040917 | 20040917 | 20040927 | 20040927 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 15 | 15 | 15 | 20 | 15 | 15 | 15 | 20 | 15 | 20 |
| BOTTOM DEPTH | 15 | 15 | 15 | 15 | 20 | 15 | 15 | 15 | 20 | 15 | 20 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 |
| 1,2,4-TRICHLOROBENZENE | | | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | 8.9E-08 | 8.9E-08 | 8.9E-08 | 8.9E-08 | 8.9E-08 | 8.9E-08 | 8.9E-08 | 8.9E-08 | 8.9E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 6.9E-05 | 7.9E-05 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 |
| AROCLOR-1254 | | | 9.8E-03 | 1.1E-02 | 1.1E-02 | 1.0E-02 | 1.0E-02 | 9.8E-03 | 1.0E-02 | 1.1E-02 | 1.1E-02 |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | 2.9E-03 | 3.0E-03 | | 3.2E-03 | 3.3E-03 | 3.1E-03 |
| ARSENIC | | | 1.5E-03 | 1.2E-02 | 5.7E-03 | 6.4E-03 | 1.6E-03 | 6.5E-04 | 6.5E-04 | 5.7E-03 | 2.7E-03 |
| CADMIUM | | | 1.7E-03 | 1.9E-03 | 1.9E-03 | 1.6E-03 | 1.6E-03 | 1.7E-03 | 1.7E-03 | 1.8E-03 | 1.7E-03 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | 2.6E-04 | 2.8E-04 | 2.8E-04 | 2.4E-04 | 2.6E-04 | 2.6E-04 | 2.6E-04 | 2.8E-04 | 2.6E-04 |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | 1.5E-04 | 1.9E-03 | 2.4E-03 | 1.6E-03 | 1.4E-04 | 7.0E-04 | 3.7E-04 | 1.1E-03 | 4.6E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 2.9E-04 | 1.3E-03 | 1.9E-04 | 1.4E-03 | 3.3E-04 | 7.2E-05 | 7.2E-05 | 7.2E-04 | 9.7E-04 |
| TOTAL HAZARD INDEX | 6.9E-05 | 7.9E-05 | 1.4E-02 | 2.8E-02 | 2.2E-02 | 2.4E-02 | 1.7E-02 | 1.3E-02 | 1.6E-02 | 2.4E-02 | 2.0E-02 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | 4.8E-05 | 4.8E-05 | 4.8E-05 | 4.8E-05 | 4.8E-05 | 4.8E-05 | 4.8E-05 | 4.8E-05 | 4.8E-05 |
| 1,2,4-TRICHLOROBENZENE | | | 3.9E-05 | 3.9E-05 | 3.9E-05 | 3.9E-05 | 3.9E-05 | 3.9E-05 | 3.9E-05 | 3.9E-05 | 3.9E-05 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | 8.4E-07 | 8.4E-07 | 8.4E-07 | 8.4E-07 | 8.4E-07 | 8.4E-07 | 8.4E-07 | 8.4E-07 | 8.4E-07 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 3.2E-04 | 3.7E-04 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 |
| AROCLOR-1254 | | | 1.2E-01 | 1.4E-01 | 1.5E-01 | 1.3E-01 | 1.3E-01 | 1.2E-01 | 1.3E-01 | 1.4E-01 | 1.4E-01 |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | 4.7E-02 | 4.9E-02 | | 5.3E-02 | 5.5E-02 | 5.1E-02 |
| ARSENIC | | | 3.1E-02 | 2.4E-01 | 1.2E-01 | 1.3E-01 | 3.3E-02 | 1.3E-02 | 1.3E-02 | 1.2E-01 | 5.5E-02 |
| CADMIUM | | | 3.8E-02 | 4.2E-02 | 4.1E-02 | 3.4E-02 | 3.5E-02 | 3.8E-02 | 3.8E-02 | 3.9E-02 | 3.6E-02 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | 3.3E-03 | 3.6E-03 | 3.6E-03 | 3.0E-03 | 3.3E-03 | 3.3E-03 | 3.3E-03 | 3.6E-03 | 3.3E-03 |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | 1.5E-03 | 2.0E-02 | 2.5E-02 | 1.6E-02 | 1.4E-03 | 7.2E-03 | 3.8E-03 | 1.1E-02 | 4.7E-03 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 2.6E-03 | 1.2E-02 | 1.7E-03 | 1.2E-02 | 2.9E-03 | 6.3E-04 | 6.3E-04 | 6.3E-03 | 8.6E-03 |
| TOTAL HAZARD INDEX | 3.2E-04 | 3.7E-04 | 2.0E-01 | 4.6E-01 | 3.3E-01 | 3.7E-01 | 2.6E-01 | 1.9E-01 | 2.4E-01 | 3.7E-01 | 3.0E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-067 | SB-244 | SB-245 | SB-246 | SB-247 | SB-248 | SB-249 | SB-775 | SB-775 | SB-775 | SB-776 | SB-776 | SB-776 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-67-25 | SB-244-15 | SB-245-15 | SB-246-15 | SB-247-15 | SB-248-15 | SB-249-15 | D-SB-775-11 | D-SB-775-13 | D-SB-775-15 | D-SB-776-11 | D-SB-776-13 | D-SB-776-15 |
| SAMPLE DATE | 20040927 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20050607 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 | 20100831 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 25 | 15 | 15 | 15 | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 25 | 15 | 15 | 15 | 15 | 15 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.8E-06 | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 8.5E-06 | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.9E-08 | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 3.8E-06 | | | | | | | 2.4E-06 | 2.4E-06 | 2.6E-06 | 2.6E-06 | 2.7E-06 | 2.4E-06 |
| AROCLOR-1254 | 1.0E-02 | 1.3E-03 | 1.4E-03 | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | 3.0E-03 | | | | | 9.2E-04 | | | | | | | |
| ARSENIC | 5.9E-04 | | | | | 2.3E-03 | | | | | | | |
| CADMIUM | 1.6E-03 | | | | | 1.1E-04 | | | | | | | |
| COBALT | | | | | | 1.6E-02 | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | 2.4E-04 | | | | | 4.7E-06 | | | | | | | |
| MOLYBDENUM | | | | | | 3.3E-05 | | | | | | | |
| NICKEL | 8.1E-04 | | | | | 3.8E-03 | | | | | | | |
| VANADIUM | | | | | | 6.8E-03 | | | | | | | |
| HEXAVALENT CHROMIUM | 8.2E-04 | | | | | 1.4E-03 | | | | | | | |
| TOTAL HAZARD INDEX | 1.8E-02 | 1.3E-03 | 1.4E-03 | 1.4E-03 | 1.3E-03 | 3.3E-02 | 1.3E-03 | 2.4E-06 | 2.4E-06 | 2.6E-06 | 2.6E-06 | 2.7E-06 | 2.4E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 4.8E-05 | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 3.9E-05 | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.4E-07 | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 1.8E-05 | | | | | | | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 | 1.3E-05 | 1.1E-05 |
| AROCLOR-1254 | 1.3E-01 | 1.7E-02 | 1.7E-02 | 1.8E-02 | 1.7E-02 | 1.7E-02 | 1.6E-02 | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | 4.9E-02 | | | | | 1.5E-02 | | | | | | | |
| ARSENIC | 1.2E-02 | | | | | 4.6E-02 | | | | | | | |
| CADMIUM | 3.5E-02 | | | | | 2.4E-03 | | | | | | | |
| COBALT | | | | | | 3.7E-01 | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | 3.0E-03 | | | | | 6.0E-05 | | | | | | | |
| MOLYBDENUM | | | | | | 7.9E-04 | | | | | | | |
| NICKEL | 8.3E-03 | | | | | 3.9E-02 | | | | | | | |
| VANADIUM | | | | | | 1.6E-01 | | | | | | | |
| HEXAVALENT CHROMIUM | 7.2E-03 | | | | | 1.3E-02 | | | | | | | |
| TOTAL HAZARD INDEX | 2.5E-01 | 1.7E-02 | 1.7E-02 | 1.8E-02 | 1.7E-02 | 6.7E-01 | 1.6E-02 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 | 1.3E-05 | 1.1E-05 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-1.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-777 | SB-777 | SB-777 | SB-778 | SB-778 | SB-778 | SB-779 | SB-779 | SB-779 | SB-780 | SB-780 | SB-780 | SB-781 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-777-11 | D-SB-777-13 | D-SB-777-15 | D-SB-778-11 | D-SB-778-13 | D-SB-778-15 | D-SB-779-11 | D-SB-779-13 | D-SB-779-15 | D-SB-780-11 | D-SB-780-13 | D-SB-780-15 | D-SB-781-11 |
| SAMPLE DATE | 20100910 | 20100910 | 20100910 | 20100831 | 20100831 | 20100831 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 | 20100901 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 2.4E-06 | 4.8E-05 | 2.4E-06 | 2.5E-06 | 9.8E-05 | 2.5E-06 | 2.6E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.7E-06 | 2.4E-06 | 2.3E-06 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.4E-06 | 4.8E-05 | 2.4E-06 | 2.5E-06 | 9.8E-05 | 2.5E-06 | 2.6E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.7E-06 | 2.4E-06 | 2.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 1.1E-05 | 2.2E-04 | 1.1E-05 | 1.2E-05 | 4.6E-04 | 1.2E-05 | 1.2E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.3E-05 | 1.1E-05 | 1.1E-05 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.1E-05 | 2.2E-04 | 1.1E-05 | 1.2E-05 | 4.6E-04 | 1.2E-05 | 1.2E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.3E-05 | 1.1E-05 | 1.1E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-781 | SB-781 | SB-782 | SB-782 | SB-782 | SB-783 | SB-783 | SB-783 | SB-784 | SB-784 | SB-784 | SB-785 | SB-785 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-781-13 | D-SB-781-15 | D-SB-782-11 | D-SB-782-13 | D-SB-782-15 | D-SB-783-11 | D-SB-783-13 | D-SB-783-15 | D-SB-784-11 | D-SB-784-13 | D-SB-784-15 | D-SB-785-11 | D-SB-785-13 |
| SAMPLE DATE | 20100901 | 20100901 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100902 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | 9.8E-08 | 1.1E-07 | 9.5E-08 | 9.8E-08 | 1.1E-07 | 1.3E-07 | 1.1E-07 | 9.8E-08 | 1.1E-07 | 1.0E-07 | 1.1E-07 |
| 1,2,4-TRICHLOROBENZENE | | | 3.3E-07 | 3.7E-07 | 3.1E-07 | 3.3E-07 | 3.5E-07 | 4.4E-07 | 3.5E-07 | 3.3E-07 | 3.5E-07 | 3.4E-07 | 3.5E-07 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | 8.2E-09 | 9.3E-09 | 7.9E-09 | 8.2E-09 | 9.0E-09 | 1.1E-08 | 8.9E-09 | 8.3E-09 | 8.9E-09 | 8.7E-09 | 9.0E-09 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 2.6E-06 | 2.4E-06 | 1.0E-07 | 1.1E-07 | 9.4E-08 | 1.0E-07 | 1.1E-07 | 1.4E-07 | 1.1E-07 | 1.0E-07 | 1.1E-07 | 5.0E-07 | 5.1E-07 |
| AROCLOR-1254 | | | 7.0E-04 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.0E-04 | 7.3E-04 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | 2.5E-04 | 2.2E-04 | 8.3E-05 | 1.3E-04 | 9.7E-05 | 8.3E-04 | 1.4E-04 | 2.1E-04 | 9.0E-04 | 6.4E-04 | 2.8E-04 |
| ARSENIC | | | 8.9E-03 | 1.0E-02 | 5.9E-03 | 4.8E-03 | 5.5E-03 | 9.8E-03 | 3.0E-03 | 5.7E-03 | 1.6E-02 | 7.3E-03 | 7.1E-03 |
| CADMIUM | | | 9.6E-05 | 6.7E-05 | 1.2E-04 | 6.8E-06 | 7.5E-06 | 1.2E-05 | 7.5E-06 | 8.7E-06 | 1.4E-05 | 5.7E-06 | 1.5E-04 |
| COBALT | | | 2.0E-02 | 1.1E-02 | 1.5E-02 | 8.0E-03 | 5.6E-03 | 1.5E-02 | 1.3E-02 | 1.7E-02 | 2.7E-02 | 1.5E-02 | 2.5E-02 |
| IRON | | | 2.5E-02 | 1.5E-02 | 4.0E-03 | 6.8E-03 | 5.2E-03 | 2.6E-02 | 1.8E-02 | 2.5E-02 | 4.8E-02 | 3.1E-02 | 2.7E-02 |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | 3.0E-03 | 2.8E-03 | 8.6E-04 | 2.8E-03 | 1.3E-03 | 5.7E-03 | 4.7E-03 | 4.9E-03 | 1.3E-02 | 5.9E-03 | 8.6E-03 |
| MERCURY | | | 4.0E-05 | 4.5E-05 | 4.0E-05 | 4.2E-05 | 4.2E-05 | 4.2E-05 | 4.2E-05 | 4.0E-05 | 4.2E-05 | 4.2E-05 | 2.8E-04 |
| MOLYBDENUM | | | 4.8E-05 | 7.4E-05 | 4.0E-06 | 1.3E-05 | 1.9E-05 | 5.6E-05 | 1.7E-05 | 4.9E-05 | 9.1E-05 | 3.5E-05 | 6.6E-05 |
| NICKEL | | | 3.3E-03 | 1.7E-03 | 1.9E-03 | 9.6E-04 | 6.7E-04 | 2.6E-03 | 1.9E-03 | 2.7E-03 | 4.0E-03 | 2.4E-03 | 3.5E-03 |
| VANADIUM | | | 4.5E-03 | 3.3E-03 | 7.3E-04 | 1.5E-03 | 2.0E-03 | 4.0E-03 | 1.7E-03 | 4.7E-03 | 5.6E-03 | 3.4E-03 | 3.8E-03 |
| HEXAVALENT CHROMIUM | | | 1.0E-03 | 9.1E-04 | 6.9E-04 | 5.2E-04 | 5.8E-04 | 1.1E-03 | 7.4E-04 | 1.3E-03 | 1.7E-03 | 1.5E-03 | 1.2E-03 |
| TOTAL HAZARD INDEX | 2.6E-06 | 2.4E-06 | 6.7E-02 | 4.6E-02 | 3.0E-02 | 2.6E-02 | 2.2E-02 | 6.6E-02 | 4.5E-02 | 6.2E-02 | 1.2E-01 | 6.7E-02 | 7.8E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | 2.6E-06 | 2.9E-06 | 2.5E-06 | 2.6E-06 | 2.8E-06 | 3.4E-06 | 2.8E-06 | 2.6E-06 | 2.8E-06 | 2.7E-06 | 2.8E-06 |
| 1,2,4-TRICHLOROBENZENE | | | 1.5E-06 | 1.7E-06 | 1.4E-06 | 1.5E-06 | 1.6E-06 | 2.0E-06 | 1.6E-06 | 1.5E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | 7.7E-08 | 8.9E-08 | 7.5E-08 | 7.7E-08 | 8.6E-08 | 1.1E-07 | 8.4E-08 | 7.9E-08 | 8.4E-08 | 8.3E-08 | 8.6E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 1.2E-05 | 1.1E-05 | 4.7E-07 | 5.3E-07 | 4.4E-07 | 4.7E-07 | 5.3E-07 | 6.5E-07 | 5.0E-07 | 4.7E-07 | 5.0E-07 | 2.3E-06 | 2.4E-06 |
| AROCLOR-1254 | | | 8.9E-03 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.9E-03 | 9.3E-03 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | 4.2E-03 | 3.6E-03 | 1.4E-03 | 2.1E-03 | 1.6E-03 | 1.4E-02 | 2.3E-03 | 3.4E-03 | 1.5E-02 | 1.1E-02 | 4.6E-03 |
| ARSENIC | | | 1.8E-01 | 2.1E-01 | 1.2E-01 | 9.7E-02 | 1.1E-01 | 2.0E-01 | 6.0E-02 | 1.2E-01 | 3.3E-01 | 1.5E-01 | 1.4E-01 |
| CADMIUM | | | 2.1E-03 | 1.5E-03 | 2.6E-03 | 1.5E-04 | 1.6E-04 | 2.6E-04 | 1.6E-04 | 1.9E-04 | 3.1E-04 | 1.2E-04 | 3.2E-03 |
| COBALT | | | 4.8E-01 | 2.6E-01 | 3.6E-01 | 1.9E-01 | 1.3E-01 | 3.6E-01 | 3.2E-01 | 4.0E-01 | 6.3E-01 | 3.5E-01 | 6.0E-01 |
| IRON | | | 5.8E-01 | 3.6E-01 | 9.6E-02 | 1.6E-01 | 1.2E-01 | 6.2E-01 | 4.4E-01 | 5.9E-01 | 1.1E+00 | 7.3E-01 | 6.4E-01 |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | 3.1E-02 | 2.9E-02 | 8.8E-03 | 2.8E-02 | 1.4E-02 | 5.9E-02 | 4.8E-02 | 5.1E-02 | 1.3E-01 | 6.1E-02 | 8.8E-02 |
| MERCURY | | | 5.1E-04 | 5.7E-04 | 5.1E-04 | 5.4E-04 | 5.4E-04 | 5.4E-04 | 5.4E-04 | 5.1E-04 | 5.4E-04 | 5.4E-04 | 3.5E-03 |
| MOLYBDENUM | | | 1.1E-03 | 1.8E-03 | 9.6E-05 | 3.2E-04 | 4.5E-04 | 1.3E-03 | 3.9E-04 | 1.2E-03 | 2.2E-03 | 8.4E-04 | 1.6E-03 |
| NICKEL | | | 3.4E-02 | 1.7E-02 | 1.9E-02 | 9.9E-03 | 6.9E-03 | 2.7E-02 | 2.0E-02 | 2.8E-02 | 4.1E-02 | 2.4E-02 | 3.6E-02 |
| VANADIUM | | | 1.1E-01 | 7.8E-02 | 1.7E-02 | 3.6E-02 | 4.7E-02 | 9.5E-02 | 3.9E-02 | 1.1E-01 | 1.3E-01 | 8.1E-02 | 9.0E-02 |
| HEXAVALENT CHROMIUM | | | 9.0E-03 | 8.0E-03 | 6.1E-03 | 4.6E-03 | 5.2E-03 | 9.8E-03 | 6.5E-03 | 1.2E-02 | 1.5E-02 | 1.3E-02 | 1.0E-02 |
| TOTAL HAZARD INDEX | 1.2E-05 | 1.1E-05 | 1.4E+00 | 9.8E-01 | 6.4E-01 | 5.4E-01 | 4.5E-01 | 1.4E+00 | 9.4E-01 | 1.3E+00 | 2.4E+00 | 1.4E+00 | 1.6E+00 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-1.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-785 | SB-786 | SB-786 | SB-786 | SB-787 | SB-787 | SB-787 | SB-788 | SB-788 | SB-788 | SB-789 | SB-789 | SB-789 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-785-15 | D-SB-786-11 | D-SB-786-13 | D-SB-786-15 | D-SB-787-11 | D-SB-787-13 | D-SB-787-15 | D-SB-788-11 | D-SB-788-13 | D-SB-788-15 | D-SB-789-11 | D-SB-789-13 | D-SB-789-15 |
| SAMPLE DATE | 20100908 | 20100903 | 20100903 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 | 20100908 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.0E-07 | 2.1E-06 | 2.7E-06 | 9.2E-08 | 9.5E-08 | 9.8E-08 | 9.8E-08 | 1.3E-07 | 1.1E-07 | 9.2E-08 | 9.5E-08 | 9.8E-08 | 1.0E-07 |
| 1,2,4-TRICHLOROBENZENE | 3.4E-07 | 7.2E-06 | 9.2E-06 | 3.1E-07 | 3.1E-07 | 3.3E-07 | 3.3E-07 | 4.5E-07 | 3.7E-07 | 3.1E-07 | 3.1E-07 | 3.1E-07 | 3.4E-07 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.7E-09 | 8.3E-08 | 1.1E-07 | 7.9E-09 | 7.9E-09 | 8.2E-09 | 8.3E-09 | 1.1E-08 | 9.6E-09 | 7.9E-09 | 8.0E-09 | 8.2E-09 | 8.7E-09 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 5.1E-07 | 3.3E-04 | 6.7E-04 | 5.9E-05 | 4.8E-07 | 4.8E-07 | 4.8E-07 | 6.9E-07 | 5.5E-07 | 4.6E-07 | 1.0E-07 | 1.0E-07 | 1.1E-07 |
| AROCLOR-1254 | 7.0E-04 | 6.6E-04 | 7.3E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.6E-04 | 7.0E-04 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | 6.4E-04 | 3.1E-05 | 1.7E-04 | 1.5E-04 | 7.6E-04 | 5.1E-04 | 3.1E-05 | 9.9E-04 | 7.1E-04 | 9.0E-04 | 3.2E-04 | 1.1E-03 | 7.4E-04 |
| ARSENIC | 8.7E-03 | 5.7E-03 | 3.0E-03 | 2.0E-03 | 1.1E-02 | 1.2E-02 | 3.9E-03 | 1.3E-02 | 1.7E-02 | 1.2E-02 | 6.4E-03 | 1.6E-02 | 1.0E-02 |
| CADMIUM | 8.1E-06 | 2.9E-05 | 5.1E-05 | 4.2E-05 | 9.7E-05 | 1.1E-04 | 9.6E-05 | 4.2E-05 | 1.3E-05 | 1.9E-05 | 8.1E-06 | 5.1E-05 | 4.2E-05 |
| COBALT | 1.6E-02 | 2.8E-03 | 1.6E-02 | 3.5E-03 | 1.4E-02 | 2.2E-02 | 8.9E-03 | 2.3E-02 | 9.5E-03 | 2.1E-02 | 1.1E-02 | 4.0E-02 | 3.4E-02 |
| IRON | 3.0E-02 | 1.4E-03 | 1.1E-02 | 3.7E-04 | 2.7E-02 | 1.7E-02 | 8.1E-04 | 3.9E-02 | 3.3E-02 | 3.5E-02 | 1.5E-02 | 6.7E-02 | 3.5E-02 |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | 4.8E-03 | 2.8E-04 | 5.0E-04 | 1.4E-04 | 1.8E-03 | 1.4E-03 | 6.1E-04 | 9.3E-03 | 3.5E-03 | 8.3E-03 | 4.4E-03 | 3.0E-02 | 9.4E-03 |
| MERCURY | 4.2E-05 | 4.0E-05 | 4.2E-05 | 4.0E-05 | 4.0E-05 | 4.2E-05 | 4.0E-05 | 4.2E-05 | 4.5E-05 | 4.0E-05 | 4.2E-05 | 4.2E-05 | 4.0E-05 |
| MOLYBDENUM | 6.1E-05 | 4.0E-06 | 1.4E-05 | 1.1E-05 | 8.6E-05 | 3.4E-05 | 2.0E-05 | 8.5E-05 | 8.5E-05 | 7.8E-05 | 2.4E-05 | 1.1E-04 | 7.4E-05 |
| NICKEL | 2.9E-03 | 2.6E-04 | 1.5E-03 | 3.4E-04 | 1.7E-03 | 2.6E-03 | 9.6E-04 | 4.0E-03 | 1.8E-03 | 3.7E-03 | 1.7E-03 | 5.7E-03 | 4.4E-03 |
| VANADIUM | 5.3E-03 | 5.1E-04 | 1.8E-03 | 1.8E-04 | 7.4E-03 | 6.1E-03 | 6.6E-04 | 4.4E-03 | 7.2E-03 | 4.1E-03 | 2.7E-03 | 7.3E-03 | 6.3E-03 |
| HEXAVALENT CHROMIUM | 1.5E-03 | 1.9E-04 | 9.7E-04 | 1.1E-04 | 1.5E-03 | 1.4E-03 | 2.4E-04 | 1.7E-03 | 1.5E-03 | 1.6E-03 | 7.0E-04 | 1.7E-03 | 1.4E-03 |
| TOTAL HAZARD INDEX | 7.1E-02 | 1.2E-02 | 3.6E-02 | 7.6E-03 | 6.6E-02 | 6.4E-02 | 1.7E-02 | 9.6E-02 | 7.6E-02 | 8.7E-02 | 4.2E-02 | 1.7E-01 | 1.0E-01 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.7E-06 | 5.6E-05 | 7.1E-05 | 2.4E-06 | 2.5E-06 | 2.6E-06 | 2.6E-06 | 3.5E-06 | 3.0E-06 | 2.4E-06 | 2.5E-06 | 2.6E-06 | 2.7E-06 |
| 1,2,4-TRICHLOROBENZENE | 1.6E-06 | 3.3E-05 | 4.2E-05 | 1.4E-06 | 1.4E-06 | 1.5E-06 | 1.5E-06 | 2.1E-06 | 1.7E-06 | 1.4E-06 | 1.4E-06 | 1.4E-06 | 1.6E-06 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.3E-08 | 7.9E-07 | 1.0E-06 | 7.5E-08 | 7.5E-08 | 7.7E-08 | 7.9E-08 | 1.1E-07 | 9.1E-08 | 7.5E-08 | 7.6E-08 | 7.7E-08 | 8.3E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 2.4E-06 | 1.5E-03 | 3.1E-03 | 2.8E-04 | 2.2E-06 | 2.3E-06 | 2.2E-06 | 3.2E-06 | 2.6E-06 | 2.1E-06 | 4.7E-07 | 4.7E-07 | 5.0E-07 |
| AROCLOR-1254 | 8.9E-03 | 8.5E-03 | 9.3E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.5E-03 | 8.9E-03 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | 1.1E-02 | 5.1E-04 | 2.8E-03 | 2.4E-03 | 1.3E-02 | 8.3E-03 | 5.1E-04 | 1.6E-02 | 1.2E-02 | 1.5E-02 | 5.3E-03 | 1.8E-02 | 1.2E-02 |
| ARSENIC | 1.8E-01 | 1.2E-01 | 6.0E-02 | 4.1E-02 | 2.3E-01 | 2.5E-01 | 7.9E-02 | 2.6E-01 | 3.5E-01 | 2.4E-01 | 1.3E-01 | 3.1E-01 | 2.1E-01 |
| CADMIUM | 1.8E-04 | 6.2E-04 | 1.1E-03 | 9.2E-04 | 2.1E-03 | 2.5E-03 | 2.1E-03 | 9.2E-04 | 2.8E-04 | 4.2E-04 | 1.8E-04 | 1.1E-03 | 9.2E-04 |
| COBALT | 3.8E-01 | 6.6E-02 | 3.7E-01 | 8.3E-02 | 3.3E-01 | 5.1E-01 | 2.1E-01 | 5.4E-01 | 2.2E-01 | 4.9E-01 | 2.5E-01 | 9.3E-01 | 7.9E-01 |
| IRON | 7.1E-01 | 3.4E-02 | 2.5E-01 | 8.7E-03 | 6.3E-01 | 4.1E-01 | 1.9E-02 | 9.4E-01 | 7.9E-01 | 8.2E-01 | 3.5E-01 | 1.6E+00 | 8.2E-01 |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | 4.9E-02 | 2.8E-03 | 5.1E-03 | 1.5E-03 | 1.9E-02 | 1.4E-02 | 6.3E-03 | 9.5E-02 | 3.5E-02 | 8.5E-02 | 4.5E-02 | 3.1E-01 | 9.7E-02 |
| MERCURY | 5.4E-04 | 5.1E-04 | 5.4E-04 | 5.1E-04 | 5.1E-04 | 5.4E-04 | 5.1E-04 | 5.4E-04 | 5.7E-04 | 5.1E-04 | 5.4E-04 | 5.4E-04 | 5.1E-04 |
| MOLYBDENUM | 1.4E-03 | 9.5E-05 | 3.4E-04 | 2.5E-04 | 2.1E-03 | 8.1E-04 | 4.7E-04 | 2.0E-03 | 2.0E-03 | 1.8E-03 | 5.8E-04 | 2.6E-03 | 1.8E-03 |
| NICKEL | 3.0E-02 | 2.7E-03 | 1.5E-02 | 3.5E-03 | 1.8E-02 | 2.7E-02 | 9.9E-03 | 4.1E-02 | 1.8E-02 | 3.8E-02 | 1.7E-02 | 5.9E-02 | 4.5E-02 |
| VANADIUM | 1.3E-01 | 1.2E-02 | 4.3E-02 | 4.2E-03 | 1.8E-01 | 1.4E-01 | 1.6E-02 | 1.1E-01 | 1.7E-01 | 9.6E-02 | 6.5E-02 | 1.7E-01 | 1.5E-01 |
| HEXAVALENT CHROMIUM | 1.3E-02 | 1.7E-03 | 8.5E-03 | 9.5E-04 | 1.3E-02 | 1.3E-02 | 2.1E-03 | 1.5E-02 | 1.4E-02 | 1.4E-02 | 6.2E-03 | 1.5E-02 | 1.3E-02 |
| TOTAL HAZARD INDEX | 1.5E+00 | 2.5E-01 | 7.8E-01 | 1.6E-01 | 1.4E+00 | 1.4E+00 | 3.5E-01 | 2.0E+00 | 1.6E+00 | 1.8E+00 | 8.7E-01 | 3.4E+00 | 2.1E+00 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-1.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-790 | SB-790 | SB-790 | SB-791 | SB-791 | SB-791 | SB-792 | SB-792 | SB-792 | SB-793 | SB-793 | SB-793 | SB-794 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-790-11 | D-SB-790-13 | D-SB-790-15 | D-SB-791-11 | D-SB-791-13 | D-SB-791-15 | D-SB-792-11 | D-SB-792-13 | D-SB-792-15 | D-SB-793-11 | D-SB-793-13 | D-SB-793-15 | D-SB-794-11 |
| SAMPLE DATE | 20100908 | 20100908 | 20100908 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.1E-07 | 1.0E-07 | 9.5E-08 | 1.0E-07 | 1.2E-07 | 1.1E-07 | 1.0E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 |
| 1,2,4-TRICHLOROBENZENE | 3.5E-07 | 3.4E-07 | 3.1E-07 | 3.3E-07 | 4.0E-07 | 3.5E-07 | 3.3E-07 | 3.5E-07 | 3.5E-07 | 3.5E-07 | 3.4E-07 | 3.4E-07 | 3.3E-07 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.0E-09 | 8.7E-09 | 8.2E-09 | 8.4E-09 | 1.0E-08 | 8.9E-09 | 8.4E-09 | 8.9E-09 | 9.2E-09 | 9.0E-09 | 8.9E-09 | 8.7E-09 | 8.4E-09 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 1.1E-07 | 1.1E-07 | 1.0E-07 | 5.0E-07 | 6.3E-07 | 5.2E-07 | 5.0E-07 | 5.0E-07 | 5.5E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 |
| AROCLOR-1254 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.0E-04 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | 1.2E-04 | 9.4E-04 | 5.1E-04 | 1.3E-04 | 2.1E-04 | 1.6E-03 | 1.6E-04 | 1.9E-03 | 4.9E-05 | 3.2E-04 | 2.0E-04 | 1.4E-04 | 8.5E-05 |
| ARSENIC | 4.8E-03 | 1.1E-02 | 7.5E-03 | 8.9E-03 | 6.4E-03 | 1.9E-02 | 7.5E-03 | 1.1E-02 | 1.5E-03 | 1.0E-02 | 6.2E-03 | 4.8E-03 | 3.4E-03 |
| CADMIUM | 6.0E-06 | 1.6E-05 | 1.7E-05 | 9.3E-06 | 1.1E-05 | 1.6E-05 | 1.2E-05 | 1.7E-05 | 1.2E-05 | 1.4E-05 | 1.5E-05 | 1.1E-05 | 8.7E-06 |
| COBALT | 4.8E-03 | 1.6E-02 | 1.4E-02 | 6.9E-03 | 1.1E-02 | 2.5E-02 | 1.6E-02 | 2.5E-02 | 1.0E-02 | 2.8E-02 | 2.0E-02 | 2.2E-02 | 1.1E-02 |
| IRON | 4.9E-03 | 2.9E-02 | 2.3E-02 | 1.4E-02 | 2.1E-02 | 6.9E-02 | 2.7E-02 | 1.1E-01 | 5.4E-03 | 2.7E-02 | 1.8E-02 | 1.2E-02 | 7.9E-03 |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | 4.6E-04 | 9.5E-03 | 4.2E-03 | 6.6E-04 | 1.0E-03 | 2.1E-03 | 1.9E-03 | 2.8E-03 | 5.2E-04 | 1.8E-03 | 9.1E-04 | 6.3E-04 | 1.8E-03 |
| MERCURY | 4.2E-05 | 4.2E-05 | 4.0E-05 | 4.0E-05 | 4.2E-05 | 4.5E-05 | 4.0E-05 | 4.5E-05 | 4.0E-05 | 4.2E-05 | 4.2E-05 | 4.2E-05 | 4.2E-05 |
| MOLYBDENUM | 1.2E-05 | 6.6E-05 | 5.1E-05 | 3.1E-05 | 6.8E-05 | 1.7E-04 | 6.0E-05 | 1.7E-04 | 6.1E-06 | 7.2E-05 | 4.9E-05 | 1.3E-05 | 5.0E-06 |
| NICKEL | 5.7E-04 | 2.9E-03 | 2.6E-03 | 9.9E-04 | 1.9E-03 | 3.0E-03 | 1.7E-03 | 4.0E-03 | 9.0E-04 | 3.0E-03 | 2.0E-03 | 2.5E-03 | 1.3E-03 |
| VANADIUM | 1.9E-03 | 3.9E-03 | 4.3E-03 | 2.6E-03 | 4.9E-03 | 1.1E-02 | 6.2E-03 | 1.2E-02 | 1.7E-03 | 6.1E-03 | 3.9E-03 | 3.1E-03 | 1.7E-03 |
| HEXAVALENT CHROMIUM | 4.8E-04 | 1.1E-03 | 1.2E-03 | 8.1E-04 | 1.1E-03 | 2.9E-03 | 1.3E-03 | 2.8E-03 | 6.2E-04 | 1.4E-03 | 9.2E-04 | 9.1E-04 | 4.9E-04 |
| TOTAL HAZARD INDEX | 1.9E-02 | 7.6E-02 | 5.7E-02 | 3.5E-02 | 4.8E-02 | 1.3E-01 | 6.3E-02 | 1.7E-01 | 2.1E-02 | 7.8E-02 | 5.3E-02 | 4.7E-02 | 2.9E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.8E-06 | 2.7E-06 | 2.5E-06 | 2.6E-06 | 3.2E-06 | 2.8E-06 | 2.6E-06 | 2.8E-06 | 2.9E-06 | 2.8E-06 | 2.7E-06 | 2.7E-06 | 2.6E-06 |
| 1,2,4-TRICHLOROBENZENE | 1.6E-06 | 1.6E-06 | 1.4E-06 | 1.5E-06 | 1.8E-06 | 1.6E-06 | 1.5E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.6E-06 | 1.5E-06 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.6E-08 | 8.3E-08 | 7.7E-08 | 8.0E-08 | 9.7E-08 | 8.4E-08 | 8.0E-08 | 8.4E-08 | 8.7E-08 | 8.6E-08 | 8.4E-08 | 8.3E-08 | 8.0E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 5.3E-07 | 5.0E-07 | 4.7E-07 | 2.3E-06 | 2.9E-06 | 2.4E-06 | 2.3E-06 | 2.3E-06 | 2.6E-06 | 5.3E-07 | 5.0E-07 | 5.0E-07 | 5.0E-07 |
| AROCLOR-1254 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.9E-03 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | 1.9E-03 | 1.6E-02 | 8.3E-03 | 2.1E-03 | 3.4E-03 | 2.6E-02 | 2.7E-03 | 3.1E-02 | 8.2E-04 | 5.3E-03 | 3.2E-03 | 2.3E-03 | 1.4E-03 |
| ARSENIC | 9.7E-02 | 2.3E-01 | 1.5E-01 | 1.8E-01 | 1.3E-01 | 3.8E-01 | 1.5E-01 | 2.3E-01 | 3.0E-02 | 2.1E-01 | 1.2E-01 | 9.7E-02 | 6.9E-02 |
| CADMIUM | 1.3E-04 | 3.4E-04 | 3.6E-04 | 2.0E-04 | 2.3E-04 | 3.4E-04 | 2.6E-04 | 3.6E-04 | 2.7E-04 | 3.0E-04 | 3.2E-04 | 2.3E-04 | 1.9E-04 |
| COBALT | 1.1E-01 | 3.9E-01 | 3.2E-01 | 1.6E-01 | 2.6E-01 | 5.9E-01 | 3.8E-01 | 6.0E-01 | 2.4E-01 | 6.6E-01 | 4.8E-01 | 5.2E-01 | 2.6E-01 |
| IRON | 1.2E-01 | 6.9E-01 | 5.4E-01 | 3.2E-01 | 5.0E-01 | 1.6E+00 | 6.4E-01 | 2.5E+00 | 1.3E-01 | 6.3E-01 | 4.2E-01 | 2.9E-01 | 1.9E-01 |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | 4.7E-03 | 9.8E-02 | 4.3E-02 | 6.7E-03 | 1.1E-02 | 2.2E-02 | 1.9E-02 | 2.8E-02 | 5.3E-03 | 1.9E-02 | 9.3E-03 | 6.5E-03 | 1.8E-02 |
| MERCURY | 5.4E-04 | 5.4E-04 | 5.1E-04 | 5.1E-04 | 5.4E-04 | 5.7E-04 | 5.1E-04 | 5.7E-04 | 5.1E-04 | 5.4E-04 | 5.4E-04 | 5.4E-04 | 5.4E-04 |
| MOLYBDENUM | 2.9E-04 | 1.6E-03 | 1.2E-03 | 7.4E-04 | 1.6E-03 | 3.9E-03 | 1.4E-03 | 3.9E-03 | 1.4E-04 | 1.7E-03 | 1.2E-03 | 3.2E-04 | 1.2E-04 |
| NICKEL | 5.9E-03 | 3.0E-02 | 2.7E-02 | 1.0E-02 | 1.9E-02 | 3.0E-02 | 1.8E-02 | 4.1E-02 | 9.3E-03 | 3.1E-02 | 2.0E-02 | 2.5E-02 | 1.3E-02 |
| VANADIUM | 4.5E-02 | 9.2E-02 | 1.0E-01 | 6.2E-02 | 1.2E-01 | 2.7E-01 | 1.5E-01 | 2.9E-01 | 3.9E-02 | 1.4E-01 | 9.2E-02 | 7.4E-02 | 4.1E-02 |
| HEXAVALENT CHROMIUM | 4.2E-03 | 1.0E-02 | 1.0E-02 | 7.2E-03 | 9.3E-03 | 2.5E-02 | 1.2E-02 | 2.5E-02 | 5.5E-03 | 1.2E-02 | 8.1E-03 | 8.0E-03 | 4.3E-03 |
| TOTAL HAZARD INDEX | 4.0E-01 | 1.6E+00 | 1.2E+00 | 7.6E-01 | 1.1E+00 | 3.0E+00 | 1.4E+00 | 3.8E+00 | 4.6E-01 | 1.7E+00 | 1.2E+00 | 1.0E+00 | 6.1E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-1.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK D**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-794 | SB-794 | SB-795 | SB-795 | SB-795 | SB-796 | SB-796 | SB-796 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | D-SB-794-13 | D-SB-794-15 | D-SB-795-11 | D-SB-795-13 | D-SB-795-15 | D-SB-796-11 | D-SB-796-13 | D-SB-796-15 |
| SAMPLE DATE | 20100909 | 20100909 | 20100909 | 20100909 | 20100909 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.0E-07 | 1.0E-07 | 1.2E-07 | 1.2E-07 | 1.2E-07 | 9.5E-08 | 1.0E-07 | 9.8E-08 |
| 1,2,4-TRICHLOROBENZENE | 3.4E-07 | 3.4E-07 | 3.8E-07 | 3.8E-07 | 4.0E-07 | 3.1E-07 | 3.4E-07 | 3.3E-07 |
| 1,3-DICHLOROBENZENE | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.6E-09 | 8.6E-09 | 9.9E-09 | 9.8E-09 | 1.0E-08 | 7.9E-09 | 8.6E-09 | 8.2E-09 |
| BAP EQUIVALENT-HALFND | | | | | | | | |
| NAPHTHALENE | 4.7E-07 | 4.8E-07 | 5.5E-07 | 5.4E-07 | 5.8E-07 | 4.3E-07 | 4.6E-07 | 4.4E-07 |
| AROCLOR-1254 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 6.6E-04 |
| AROCLOR-1260 | | | | | | | | |
| ANTIMONY | 8.3E-04 | 2.0E-04 | 9.8E-05 | 9.7E-04 | 2.8E-04 | 1.5E-04 | 3.3E-05 | 4.6E-04 |
| ARSENIC | 1.6E-02 | 5.2E-03 | 5.2E-03 | 9.6E-03 | 7.3E-03 | 3.0E-03 | 9.8E-04 | 1.7E-02 |
| CADMIUM | 2.1E-05 | 1.2E-05 | 5.8E-06 | 1.2E-05 | 9.3E-06 | 1.4E-05 | 1.6E-05 | 1.2E-05 |
| COBALT | 2.7E-02 | 2.0E-02 | 3.2E-03 | 2.2E-02 | 1.9E-02 | 7.2E-03 | 4.5E-03 | 6.7E-03 |
| IRON | 3.3E-02 | 1.9E-02 | 7.3E-03 | 3.1E-02 | 2.3E-02 | 8.8E-03 | 8.3E-04 | 1.3E-03 |
| LEAD | | | | | | | | |
| MANGANESE | 4.5E-03 | 1.8E-03 | 1.0E-03 | 4.6E-03 | 3.7E-03 | 4.5E-04 | 2.6E-04 | 3.2E-04 |
| MERCURY | 4.2E-05 | 4.2E-05 | 4.2E-05 | 4.2E-05 | 4.2E-05 | 4.0E-05 | 4.2E-05 | 4.0E-05 |
| MOLYBDENUM | 7.0E-05 | 3.5E-05 | 4.8E-06 | 6.4E-05 | 4.7E-05 | 1.8E-05 | 4.3E-06 | 8.6E-06 |
| NICKEL | 3.7E-03 | 2.5E-03 | 4.1E-04 | 3.2E-03 | 2.6E-03 | 9.0E-04 | 4.3E-04 | 6.0E-04 |
| VANADIUM | 5.1E-03 | 3.4E-03 | 1.6E-03 | 4.8E-03 | 4.0E-03 | 2.9E-03 | 4.7E-04 | 2.9E-04 |
| HEXAVALENT CHROMIUM | 1.4E-03 | 1.2E-03 | 6.4E-04 | 1.7E-03 | 1.3E-03 | 8.9E-04 | 1.9E-04 | 1.8E-04 |
| TOTAL HAZARD INDEX | 9.3E-02 | 5.3E-02 | 2.0E-02 | 7.9E-02 | 6.1E-02 | 2.5E-02 | 8.4E-03 | 2.7E-02 |
| **RESIDENTIAL** | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.6E-06 | 2.6E-06 | 3.1E-06 | 3.0E-06 | 3.1E-06 | 2.5E-06 | 2.6E-06 | 2.6E-06 |
| 1,2,4-TRICHLOROBENZENE | 1.6E-06 | 1.6E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.4E-06 | 1.6E-06 | 1.5E-06 |
| 1,3-DICHLOROBENZENE | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.2E-08 | 8.2E-08 | 9.4E-08 | 9.3E-08 | 9.6E-08 | 7.5E-08 | 8.2E-08 | 7.7E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | |
| NAPHTHALENE | 2.2E-06 | 2.3E-06 | 2.6E-06 | 2.5E-06 | 2.7E-06 | 2.0E-06 | 2.2E-06 | 2.1E-06 |
| AROCLOR-1254 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.5E-03 |
| AROCLOR-1260 | | | | | | | | |
| ANTIMONY | 1.4E-02 | 3.2E-03 | 1.6E-03 | 1.6E-02 | 4.6E-03 | 2.5E-03 | 5.5E-04 | 7.6E-03 |
| ARSENIC | 3.2E-01 | 1.1E-01 | 1.1E-01 | 1.9E-01 | 1.5E-01 | 6.0E-02 | 2.0E-02 | 3.4E-01 |
| CADMIUM | 4.5E-04 | 2.7E-04 | 1.3E-04 | 2.7E-04 | 2.0E-04 | 3.1E-04 | 3.4E-04 | 2.7E-04 |
| COBALT | 6.4E-01 | 4.6E-01 | 7.5E-02 | 5.2E-01 | 4.4E-01 | 1.7E-01 | 1.1E-01 | 1.6E-01 |
| IRON | 7.8E-01 | 4.4E-01 | 1.7E-01 | 7.4E-01 | 5.4E-01 | 2.1E-01 | 2.0E-02 | 3.0E-02 |
| LEAD | | | | | | | | |
| MANGANESE | 4.6E-02 | 1.9E-02 | 1.0E-02 | 4.7E-02 | 3.8E-02 | 4.6E-03 | 2.6E-03 | 3.3E-03 |
| MERCURY | 5.4E-04 | 5.4E-04 | 5.4E-04 | 5.4E-04 | 5.4E-04 | 5.1E-04 | 5.4E-04 | 5.1E-04 |
| MOLYBDENUM | 1.7E-03 | 8.4E-04 | 1.1E-04 | 1.5E-03 | 1.1E-03 | 4.2E-04 | 1.0E-04 | 2.1E-04 |
| NICKEL | 3.8E-02 | 2.6E-02 | 4.3E-03 | 3.3E-02 | 2.7E-02 | 9.3E-03 | 4.5E-03 | 6.2E-03 |
| VANADIUM | 1.2E-01 | 8.2E-02 | 3.8E-02 | 1.1E-01 | 9.6E-02 | 7.0E-02 | 1.1E-02 | 6.8E-03 |
| HEXAVALENT CHROMIUM | 1.2E-02 | 1.0E-02 | 5.6E-03 | 1.5E-02 | 1.2E-02 | 7.8E-03 | 1.7E-03 | 1.6E-03 |
| TOTAL HAZARD INDEX | 2.0E+00 | 1.2E+00 | 4.2E-01 | 1.7E+00 | 1.3E+00 | 5.4E-01 | 1.8E-01 | 5.6E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

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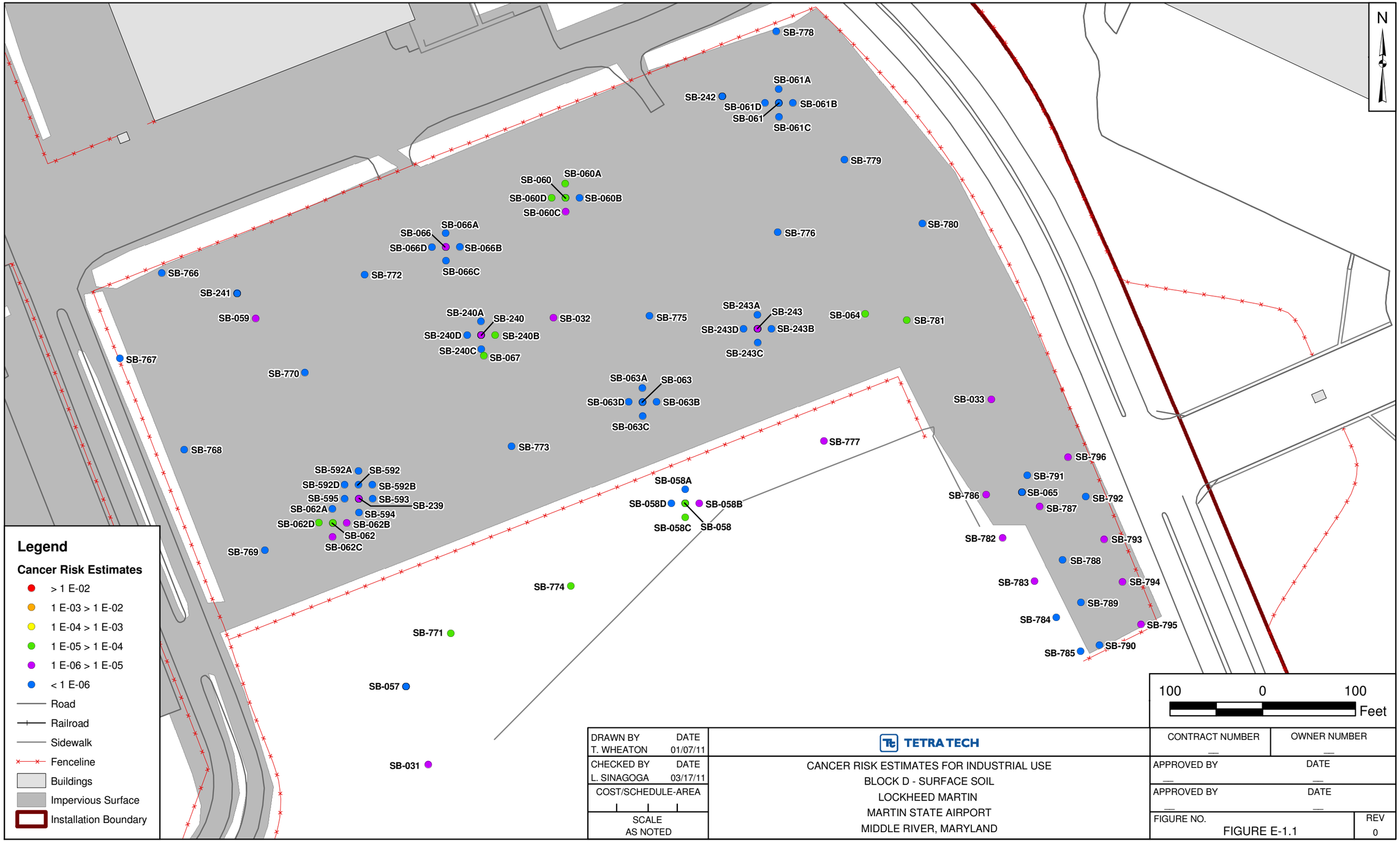


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 | CANCER RISK ESTIMATES FOR INDUSTRIAL USE<br>BLOCK D - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-1.1 / REV 0 |

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N

SB-778
SB-061A
SB-242
SB-061D
SB-061B
SB-061
SB-061C
SB-779
SB-060
SB-060A
SB-060D
SB-060B
SB-060C
SB-780
SB-066
SB-066A
SB-066D
SB-066B
SB-066C
SB-776
SB-766
SB-772
SB-241
SB-059
SB-240A
SB-240
SB-032
SB-775
SB-243A
SB-243
SB-064
SB-781
SB-240D
SB-240B
SB-243D
SB-243B
SB-240C
SB-067
SB-243C
SB-767
SB-770
SB-063A
SB-063
SB-063D
SB-063B
SB-033
SB-063C
SB-768
SB-773
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SB-796
SB-592A
SB-592
SB-791
SB-592D
SB-592B
SB-058A
SB-595
SB-593
SB-239
SB-786
SB-065
SB-792
SB-062A
SB-058D
SB-058B
SB-594
SB-787
SB-062D
SB-062B
SB-058C
SB-058
SB-782
SB-793
SB-062
SB-769
SB-062C
SB-788
SB-774
SB-783
SB-794
SB-789
SB-784
SB-795
SB-771
SB-785
SB-790
SB-057
SB-031

## Legend

**Hazard Indices**

- > 100
- 10 - 100
- 1 - 10
- 0.2 - 1
- < 0.2
- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 | HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE<br>BLOCK D - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-1.2 / REV 0 |

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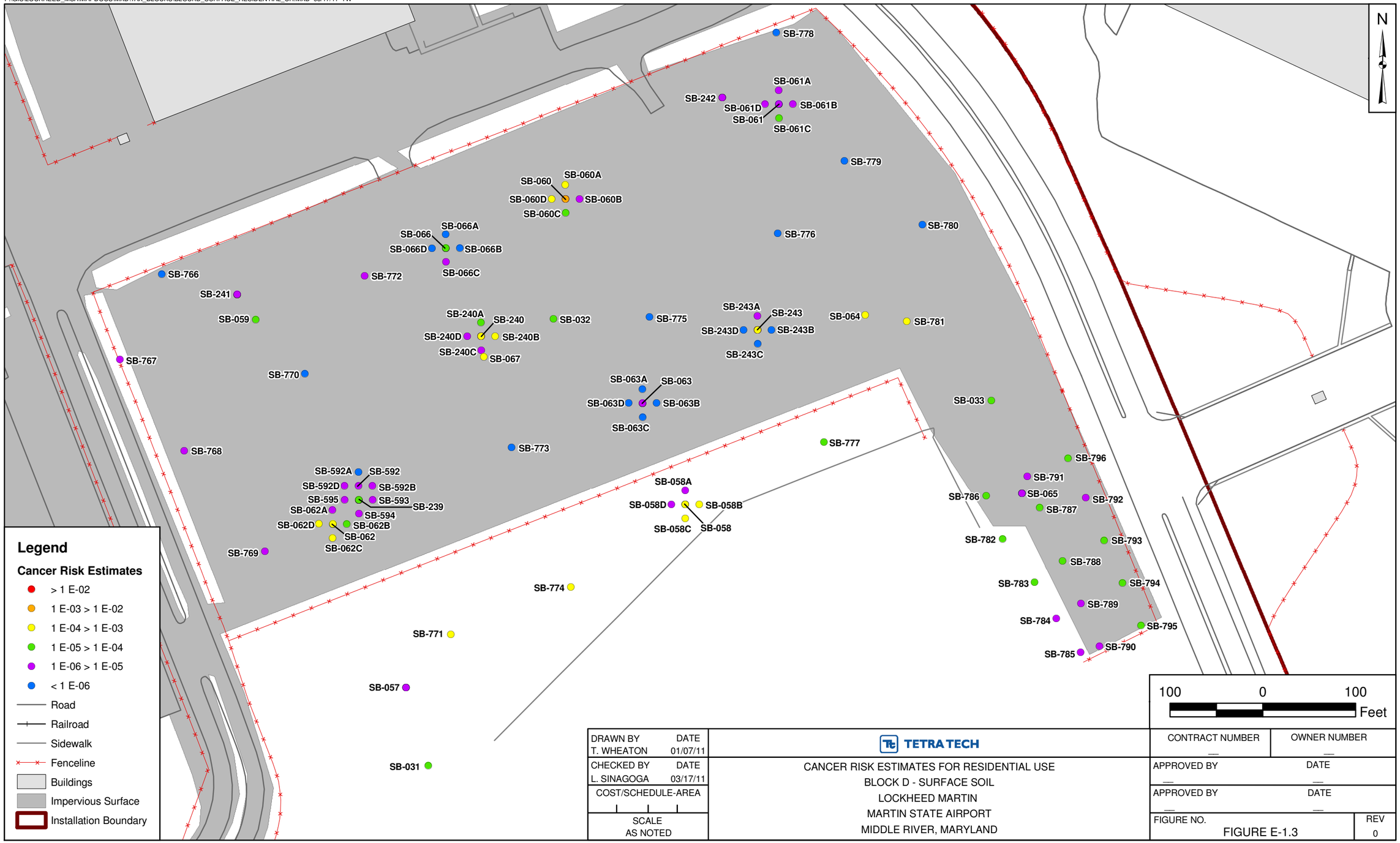


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 | CANCER RISK ESTIMATES FOR RESIDENTIAL USE<br>BLOCK D - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-1.3 / REV 0 |

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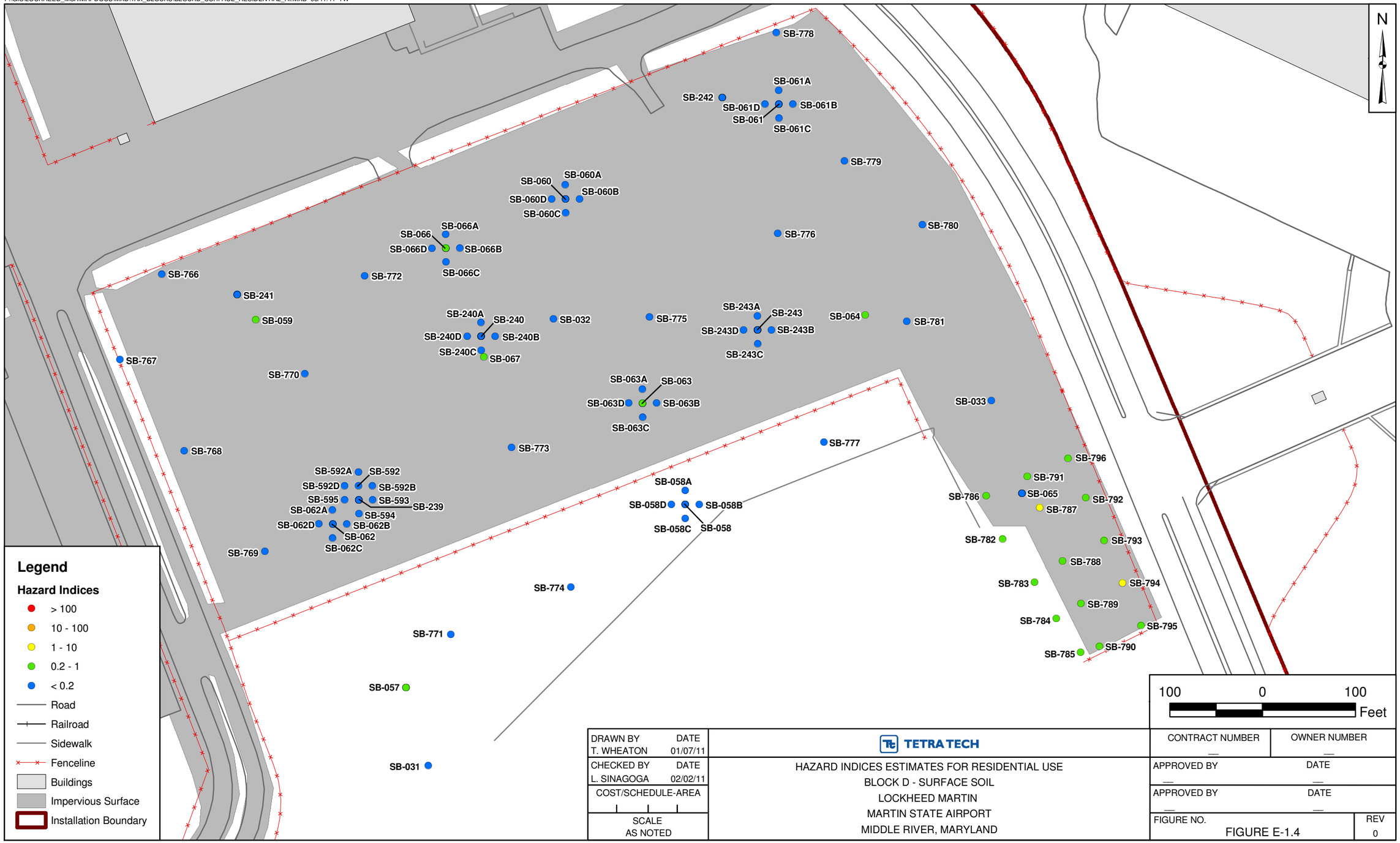


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 02/02/11 | HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE<br>BLOCK D - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-1.4 / REV 0 |

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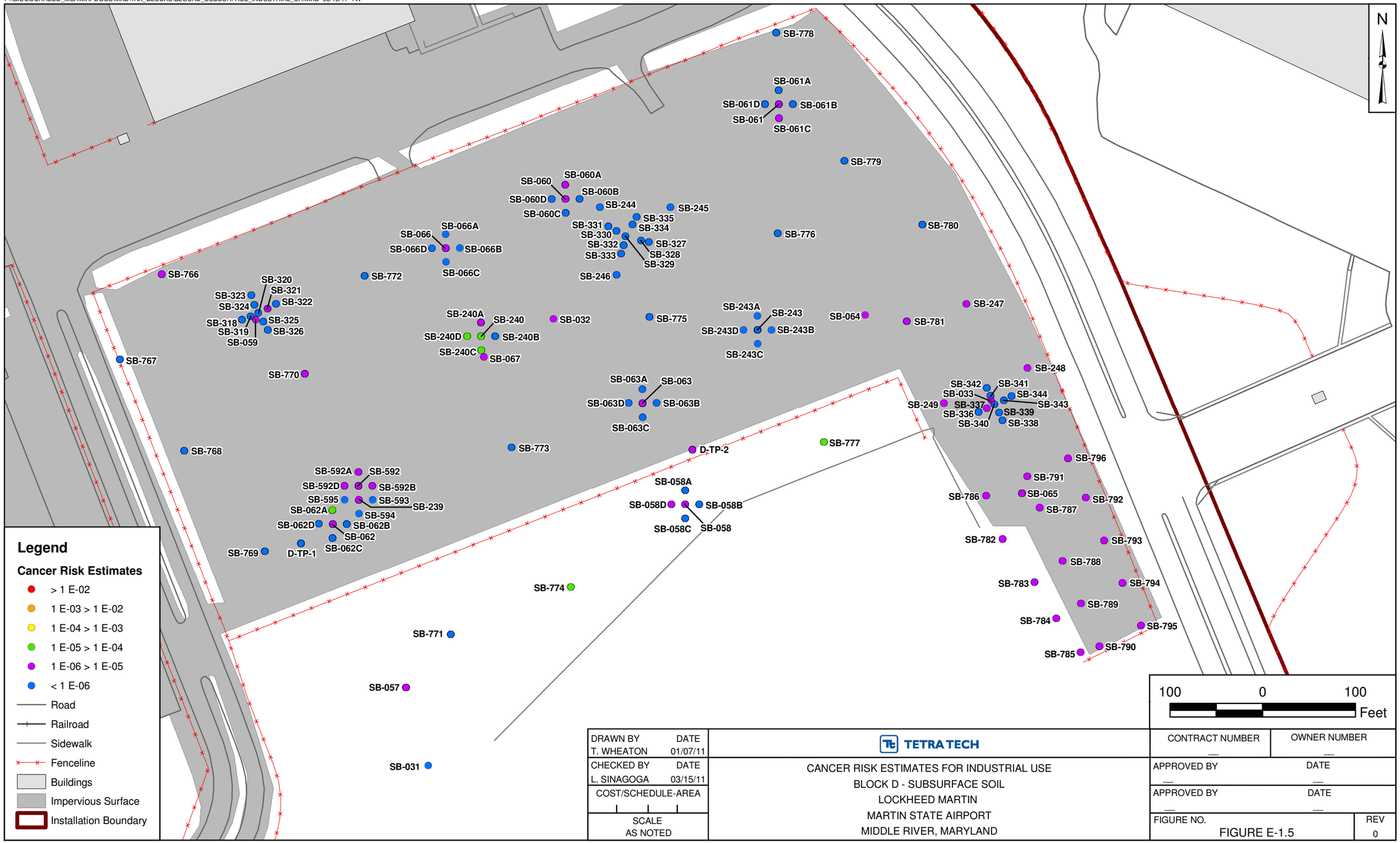


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/15/11 | CANCER RISK ESTIMATES FOR INDUSTRIAL USE<br>BLOCK D - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-1.5 / REV 0 |

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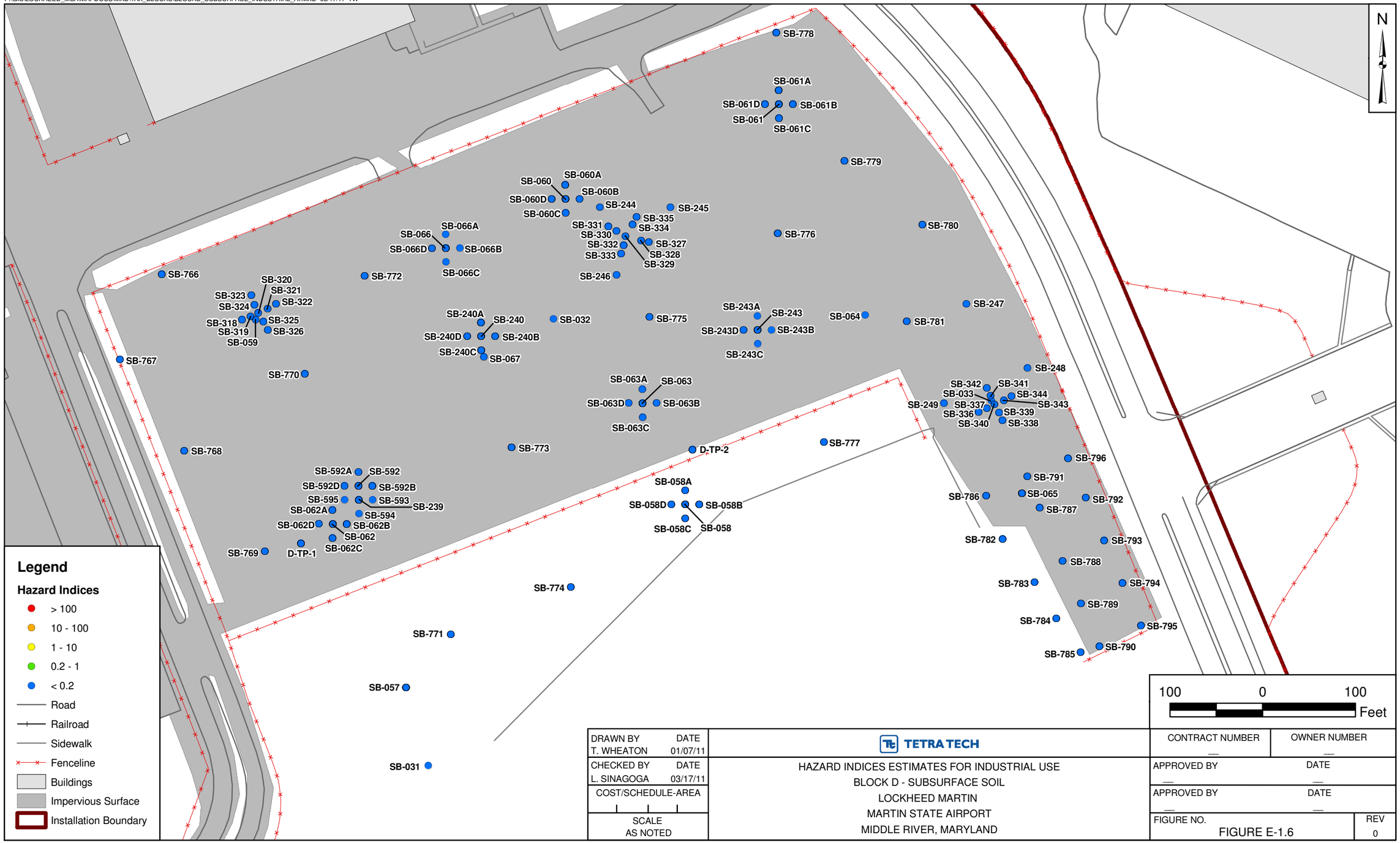


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 | HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE<br>BLOCK D - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-1.6 / REV 0 |

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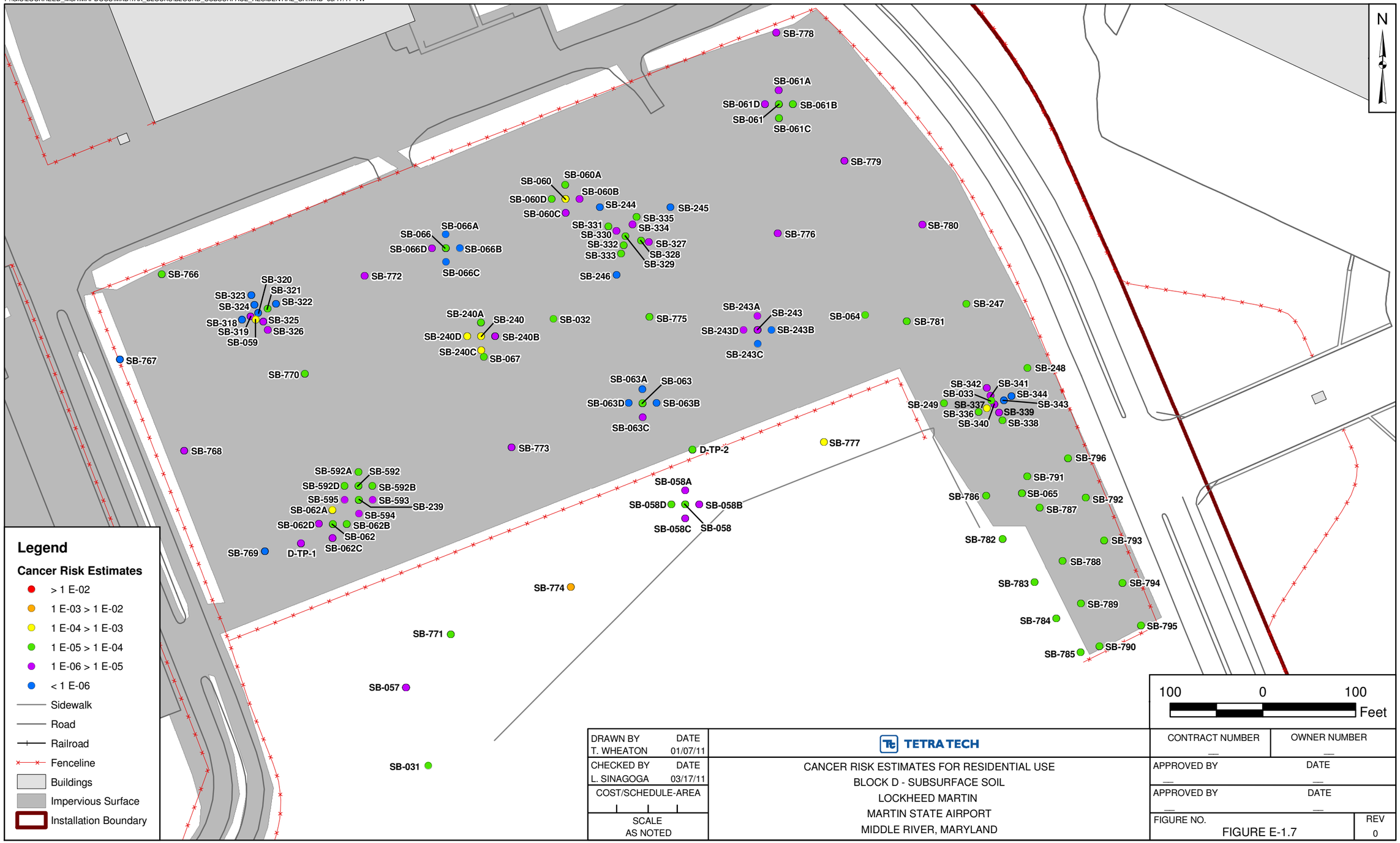


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 | CANCER RISK ESTIMATES FOR RESIDENTIAL USE<br>BLOCK D - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-1.7 / REV 0 |

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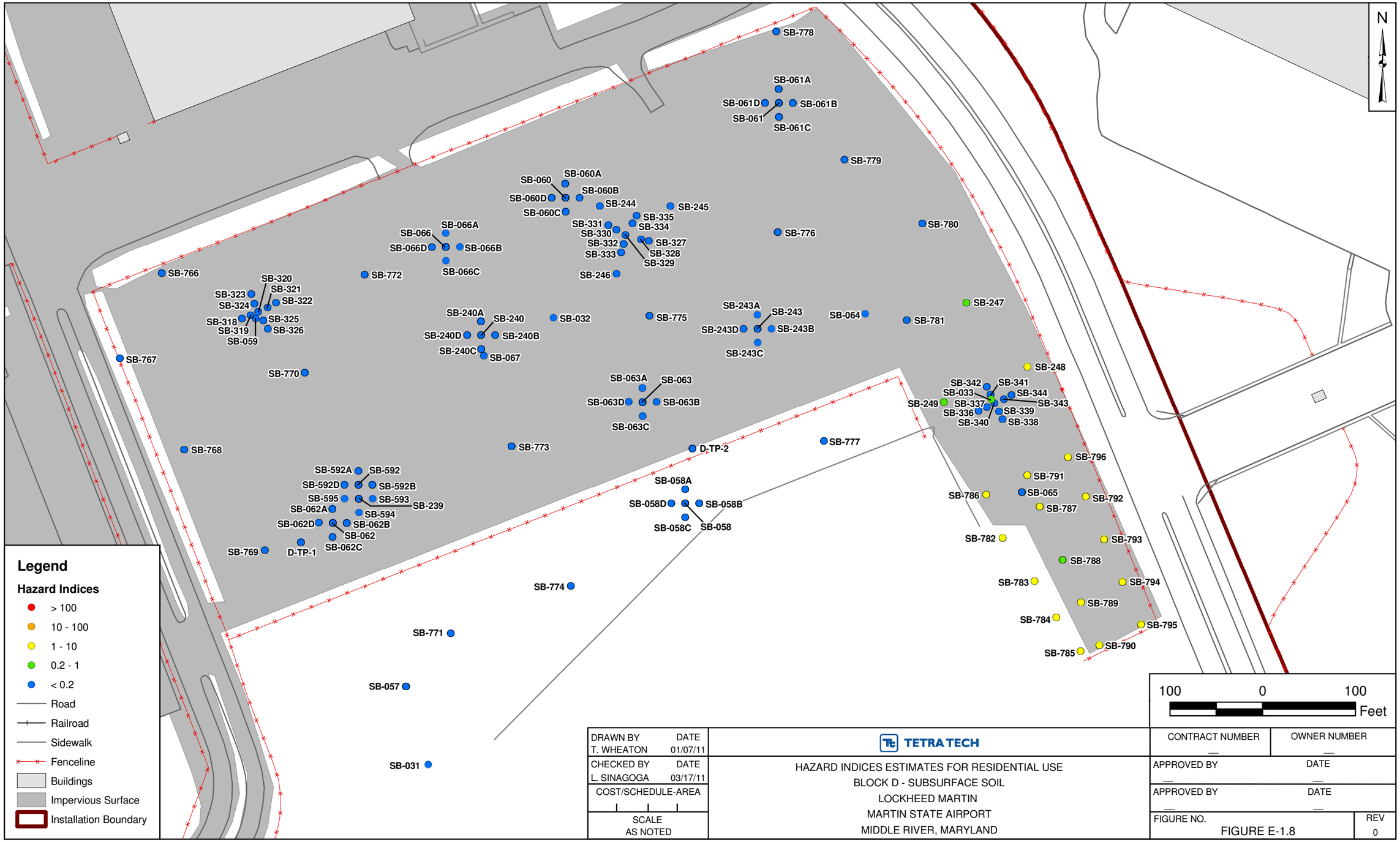


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 | HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE<br>BLOCK D - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-1.8 / REV 0 |

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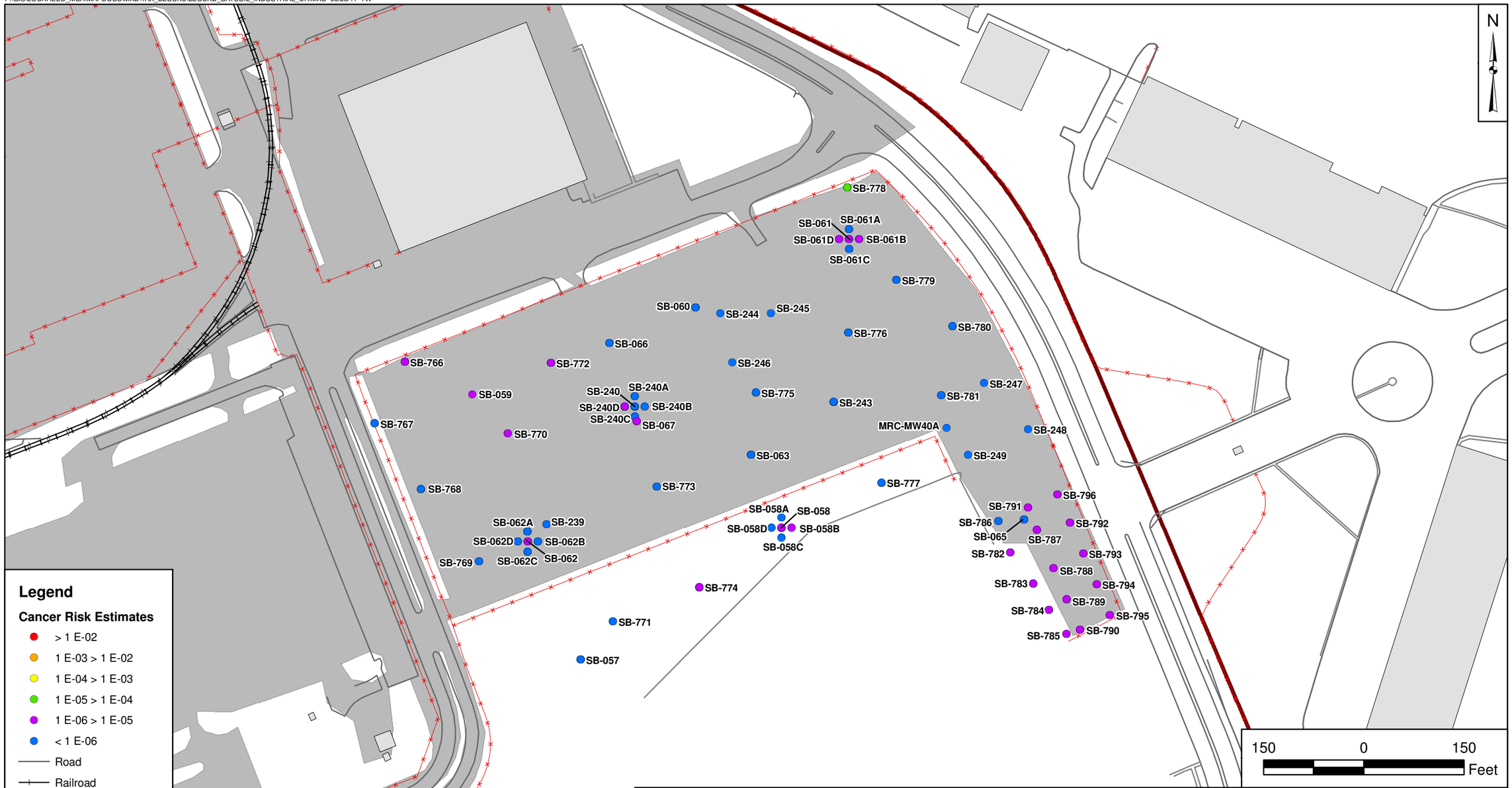


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER -- |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | CANCER RISK ESTIMATES FOR INDUSTRIAL USE<br>BLOCK D - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-1.9 / REV 0 |

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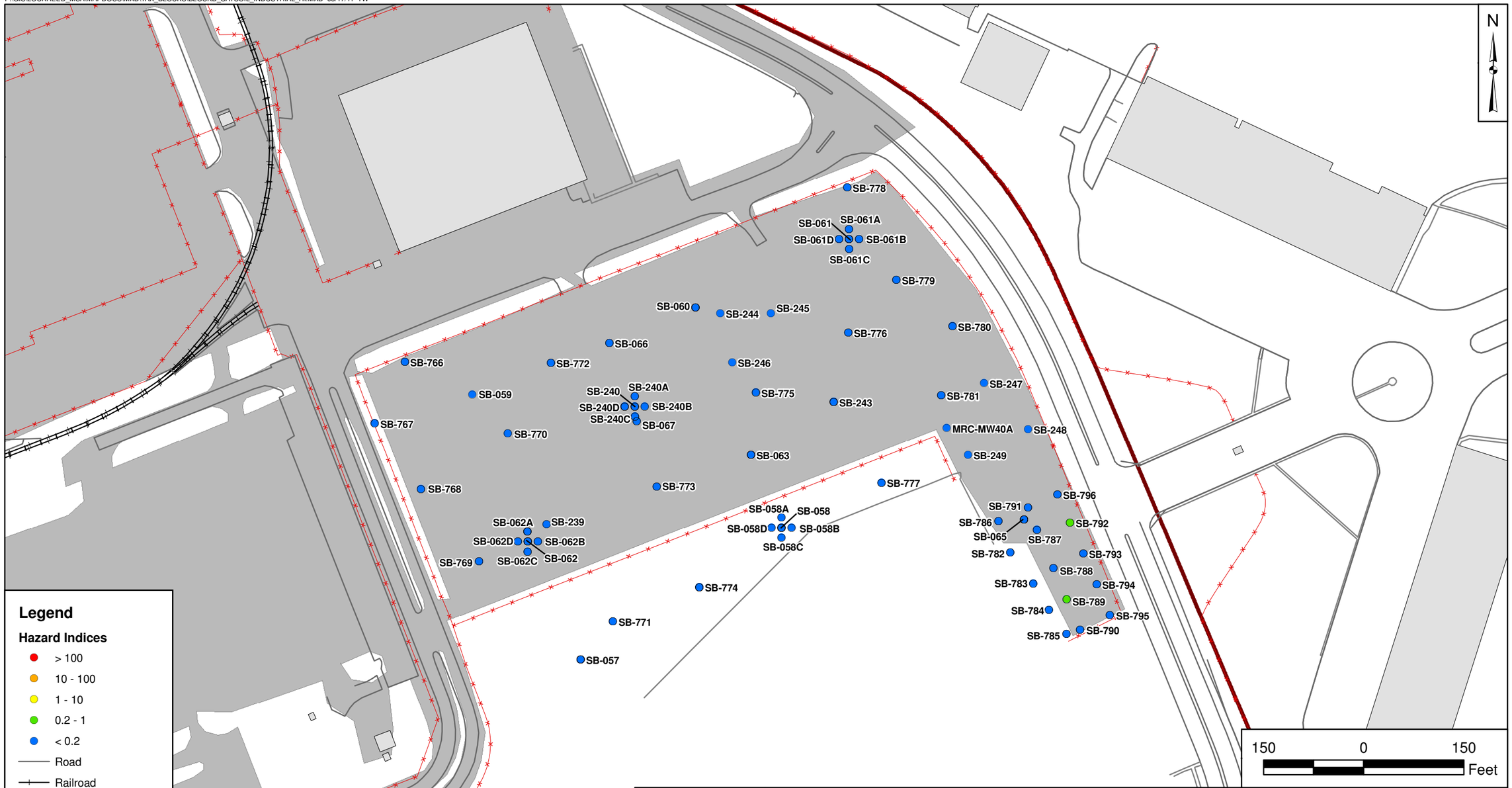


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER -- |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 | HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE<br>BLOCK D - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-1.10 / REV 0 |

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N

SB-778
SB-061
SB-061A
SB-061D
SB-061B
SB-061C
SB-779
SB-060
SB-244
SB-245
SB-780
SB-776
SB-066
SB-766
SB-772
SB-246
SB-247
SB-059
SB-240
SB-240A
SB-775
SB-781
SB-240D
SB-240B
SB-243
SB-240C
SB-067
SB-767
MRC-MW40A
SB-248
SB-770
SB-063
SB-249
SB-768
SB-773
SB-777
SB-796
SB-058A
SB-058
SB-791
SB-062A
SB-239
SB-058D
SB-058B
SB-786
SB-792
SB-062D
SB-062B
SB-058C
SB-065
SB-787
SB-769
SB-062C
SB-062
SB-782
SB-793
SB-788
SB-774
SB-783
SB-794
SB-789
SB-784
SB-795
SB-771
SB-785
SB-790
SB-057

## Legend

**Cancer Risk Estimates**

- > 1 E-02
- 1 E-03 > 1 E-02
- 1 E-04 > 1 E-03
- 1 E-05 > 1 E-04
- 1 E-06 > 1 E-05
- < 1 E-06
- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

150 0 150
Feet

| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER -- |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | CANCER RISK ESTIMATES FOR RESIDENTIAL USE<br>BLOCK D - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-1.11 / REV 0 |

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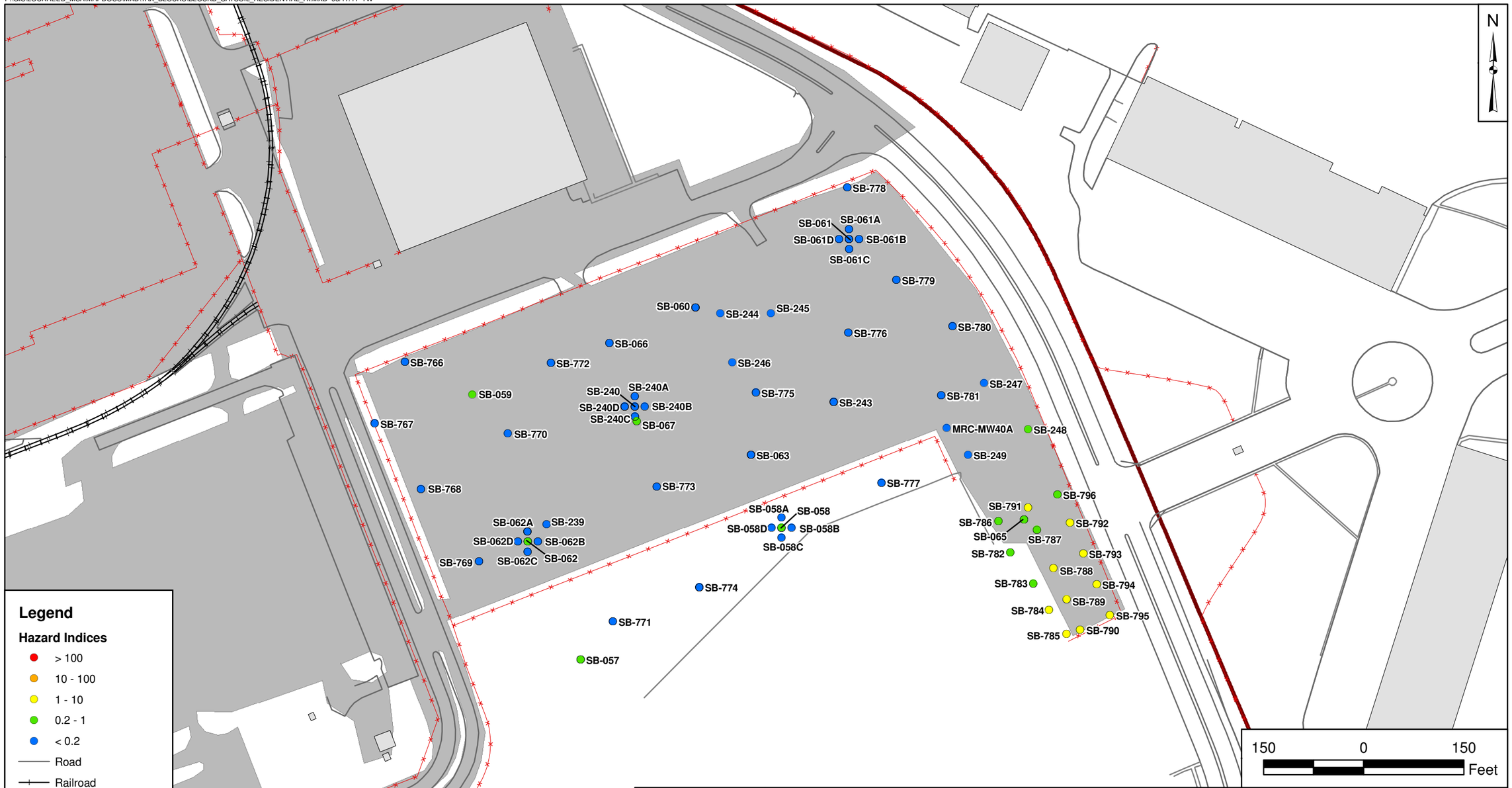


## Legend

**Hazard Indices**

- > 100
- 10 - 100
- 1 - 1
- 0.2 - 1
- < 0.2
- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

| | |
|---|---|
| DRAWN BY / DATE | T. WHEATON / 01/07/11 |
| CHECKED BY / DATE | L. SINAGOGA / 03/17/11 |
| COST/SCHEDULE-AREA | |
| SCALE | AS NOTED |

TETRA TECH

HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE
BLOCK D - SATURATED SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER | OWNER NUMBER |
| — | -- |
| APPROVED BY | DATE |
| — | — |
| APPROVED BY | DATE |
| — | — |
| FIGURE NO. | REV |
| FIGURE E-1.12 | 0 |

**APPENDIX E.2**

**BLOCK E**

## TABLES


E-2.1 Cancer Risks for Individual Sample Locations – Surface Soil - Block E

E-2.2 Hazard Indices for Individual Sample Locations – Surface Soil - Block E

E-2.3 Cancer Risks for Individual Sample Locations – Subsurface Soil - Block E

E-2.4 Hazard Indices for Individual Sample Locations – Subsurface Soil - Block E

E-2.5 Cancer Risks for Individual Sample Locations – Saturated Soil - Block E

E-2.6 Hazard Indices for Individual Sample Locations – Saturated Soil - Block E


## FIGURES


E-2.1 Cancer Risk Estimates for Industrial Use – Block E – Surface Soil

E-2.2 Hazard Indices Estimates for Industrial Use – Block E – Surface Soil

E-2.3 Cancer Risk Estimates for Residential Use – Block E – Surface Soil

E-2.4 Hazard Indices Estimates for Residential Use – Block E – Surface Soil

E-2.5 Cancer Risk Estimates for Industrial Use – Block E – Subsurface Soil

E-2.6 Hazard Indices Estimates for Industrial Use – Block E – Subsurface Soil

E-2.7 Cancer Risk Estimates for Residential Use – Block E – Subsurface Soil

E-2.8 Hazard Indices Estimates for Residential Use – Block E – Subsurface Soil

E-2.9 Cancer Risk Estimates for Industrial Use – Block E – Saturated Soil

E-2.10 Hazard Indices Estimates for Industrial Use – Block E – Saturated Soil

E-2.11 Cancer Risk Estimates for Residential Use – Block E – Saturated Soil

E-2.12 Hazard Indices Estimates for Residential Use – Block E – Saturated Soil

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-005 | SB-006 | SB-540 | SB-541 | SB-541 | SB-541 | SB-541A | SB-541A | SB-541A | SB-542 | SB-542 | SB-542 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5A-SS | SB-6A-SS | SB-540-0001 | SB-541-2 | SB-541- | SB-541-SS0- | SB-541A- | SB-541A- | SB-541A- | SB-542-2 | SB-542- | SB-542-SS0- |
| SAMPLE DATE | 20040917 | 20040917 | 20071204 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | 2 | 0.5 | | | 0.5 | | 2 | 0.5 | |
| BOTTOM DEPTH | | | 1 | 2 | 1 | 0.5 | | 1 | 0.5 | 2 | 1 | 0.5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 2.1E-11 | 2.1E-11 | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.9E-10 | 1.9E-10 | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.6E-07 | 6.8E-07 | | | | | | | | | | |
| AROCLOR-1254 | 1.4E-07 | 1.4E-07 | 2.0E-07 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 4.4E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 1.0E-08 |
| AROCLOR-1260 | 1.4E-07 | 1.4E-07 | 1.8E-06 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 4.9E-07 | 1.9E-08 | 2.1E-08 | 9.5E-09 | 9.5E-09 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 4.0E-07 | 6.2E-07 | | | | | | | | | | |
| CADMIUM | 6.4E-11 | 6.4E-11 | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 2.4E-11 | 3.7E-11 | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 8.0E-07 | 2.8E-07 | | | | | | | | | | |
| TOTAL CANCER RISK | 2.1E-06 | 1.9E-06 | 2.0E-06 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 5.3E-07 | 2.9E-08 | 3.1E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.7E-10 | 1.7E-10 | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 4.1E-10 | 4.1E-10 | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-05 | 1.5E-05 | | | | | | | | | | |
| AROCLOR-1254 | 6.9E-07 | 7.2E-07 | 9.9E-07 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 2.2E-07 | 5.2E-08 | 5.2E-08 | 4.7E-08 | 4.7E-08 | 5.0E-08 |
| AROCLOR-1260 | 6.9E-07 | 7.2E-07 | 8.9E-06 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 2.4E-06 | 9.4E-08 | 1.0E-07 | 4.7E-08 | 4.7E-08 | 5.0E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 3.1E-06 | 4.8E-06 | | | | | | | | | | |
| CADMIUM | 1.3E-10 | 1.3E-10 | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 4.8E-11 | 7.4E-11 | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.2E-05 | 4.1E-06 | | | | | | | | | | |
| TOTAL CANCER RISK | 3.1E-05 | 2.5E-05 | 9.9E-06 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 2.6E-06 | 1.5E-07 | 1.6E-07 | 9.4E-08 | 9.4E-08 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-543 | SB-543 | SB-543 | SB-543A | SB-543A | SB-543A | SB-543A | SB-544 | SB-544 | SB-544 | SB-544A | SB-544A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-543-2 | SB-543- | SB-543-SS0- | SB-543A-2 | SB-543A- | SB-543A- | SB-543A- | SB-544-2 | SB-544- | SB-544-SS0- | SB-544A- | SB-544A- |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 2 | 0.5 | | 2 | | 0.5 | | 2 | 0.5 | | | 0.5 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | | 1 | 0.5 | 2 | 1 | 0.5 | | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 1.0E-08 | 9.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 8.5E-09 | 1.0E-08 |
| AROCLOR-1260 | 1.0E-08 | 9.5E-09 | 5.4E-09 | 1.0E-08 | 9.4E-07 | 7.7E-08 | 9.1E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 4.1E-08 | 2.3E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-08 | 1.9E-08 | 1.5E-08 | 2.0E-08 | 1.0E-06 | 8.6E-08 | 1.0E-07 | 2.0E-08 | 2.0E-08 | 1.9E-08 | 4.9E-08 | 3.3E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 5.0E-08 | 4.7E-08 | 4.7E-08 | 5.0E-08 | 4.5E-07 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 4.2E-08 | 5.0E-08 |
| AROCLOR-1260 | 5.0E-08 | 4.7E-08 | 2.7E-08 | 5.0E-08 | 4.7E-06 | 3.8E-07 | 4.5E-07 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 2.0E-07 | 1.1E-07 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.9E-08 | 9.4E-08 | 7.4E-08 | 9.9E-08 | 5.1E-06 | 4.3E-07 | 5.0E-07 | 9.9E-08 | 9.9E-08 | 9.4E-08 | 2.5E-07 | 1.6E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-544A | SB-545 | SB-545 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-544A-20081111 | SB-545-20081023 | SB-545-SS0-20081023 | SB-546-2 20081023 | SB-546-2-20081023 | SB-546-2-D 20081023 | SB-546-20081023 | SB-546-20081023 | SB-546-20081023 | SB-546-SS0-20081023 | SB-546-SS0-20081023 | SB-546-SS0-20081023 |
| SAMPLE DATE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG | AVG | DUP |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | | 0.5 | | 2 | 2 | 2 | 0.5 | 0.5 | 0.5 | | | |
| TOP DEPTH | 0.5 | 1 | 0.5 | 2 | 2 | 2 | 1 | 1 | 1 | 0.5 | 0.5 | 0.5 |
| BOTTOM DEPTH | | | | | | | | | | | | |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.7E-09 | 9.5E-09 | 9.0E-09 | 9.2E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 |
| AROCLOR-1260 | 1.9E-07 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.7E-09 | 9.5E-09 | 9.0E-09 | 9.2E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-07 | 2.1E-08 | 2.0E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 1.8E-08 | 1.8E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 4.7E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 4.8E-08 | 4.7E-08 | 4.5E-08 | 4.6E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 |
| AROCLOR-1260 | 9.4E-07 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 4.8E-08 | 4.7E-08 | 4.5E-08 | 4.6E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.9E-07 | 1.0E-07 | 9.9E-08 | 9.9E-08 | 9.7E-08 | 9.4E-08 | 8.9E-08 | 9.2E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-546A | SB-546A | SB-546A | SB-547 | SB-547 | SB-547 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-546A-20081111 | SB-546A-20081111 | SB-546A-20081111 | SB-547-2 20081021 | SB-547-20081021 | SB-547-SS0-20081021 | SB-548-2 20081023 | SB-548-2-20081023 | SB-548-2-D 20081023 | SB-548-20081023 | SB-548-20081023 | SB-548-20081023 |
| SAMPLE DATE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | ORIG | AVG | DUP |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | | 0.5 | | 2 | 0.5 | | 2 | 2 | 2 | 0.5 | 0.5 | 0.5 |
| TOP DEPTH | | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 2 | 2 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | | | | | | | | | |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 9.0E-09 | 1.0E-08 | 4.6E-07 | 9.5E-09 | 9.0E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 |
| AROCLOR-1260 | 6.6E-08 | 1.4E-07 | 9.6E-06 | 9.5E-09 | 9.0E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.5E-08 | 1.5E-07 | 1.0E-05 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 4.5E-08 | 5.0E-08 | 2.3E-06 | 4.7E-08 | 4.5E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 |
| AROCLOR-1260 | 3.3E-07 | 6.9E-07 | 4.8E-05 | 4.7E-08 | 4.5E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.7E-07 | 7.4E-07 | 5.0E-05 | 9.4E-08 | 8.9E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-548 | SB-548 | SB-548 | SB-549 | SB-549 | SB-549 | SB-549 | SB-549 | SB-550 | SB-550 | SB-550 | SB-550A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-548-SS0-20081023 | SB-548-SS0-20081023 | SB-548-SS0-20081023 | SB-549-2 20081023 | SB-549-2-20081023 | SB-549-2-D 20081023 | SB-549-20081023 | SB-549-SS0-20081023 | SB-550-2 20081023 | SB-550-20081023 | SB-550-SS0-20081023 | SB-550A-2 20081111 |
| SAMPLE DATE | ORIG | AVG | DUP | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | | | | 2 | 2 | 2 | 0.5 | | 2 | 0.5 | | 2 |
| TOP DEPTH | 0.5 | 0.5 | 0.5 | 2 | 2 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| BOTTOM DEPTH | | | | | | | | | | | | |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 1.0E-08 | 9.7E-09 | 9.5E-09 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 |
| AROCLOR-1260 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 1.0E-08 | 9.7E-09 | 9.5E-09 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 1.9E-08 | 2.0E-08 | 2.0E-08 | 1.9E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 5.0E-08 | 4.8E-08 | 4.7E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 |
| AROCLOR-1260 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 5.0E-08 | 4.8E-08 | 4.7E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.9E-08 | 9.7E-08 | 9.4E-08 | 9.9E-08 | 9.4E-08 | 9.9E-08 | 9.9E-08 | 9.4E-08 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-550A | SB-550A | SB-550A | SB-551 | SB-551 | SB-551 | SB-552 | SB-552 | SB-552 | SB-553 | SB-553 | SB-554 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-550A-20081111 | SB-550A-20081111 | SB-550A-20081111 | SB-551-2 20081023 | SB-551-20081023 | SB-551-SS0-20081023 | SB-552-2 20081023 | SB-552-20081023 | SB-552-SS0-20081023 | SB-553-2 20081021 | SB-553-20081021 | SB-554-2 20081021 |
| SAMPLE DATE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | | 0.5 | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 | 2 |
| TOP DEPTH | | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 2 |
| BOTTOM DEPTH | | | | | | | | | | | | |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 8.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.0E-09 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 1.0E-08 | 9.5E-09 | 9.5E-09 |
| AROCLOR-1260 | 6.1E-08 | 1.0E-08 | 1.2E-08 | 1.0E-08 | 1.0E-08 | 5.6E-09 | 1.0E-08 | 2.7E-08 | 9.5E-09 | 1.0E-08 | 9.5E-09 | 9.5E-09 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.9E-08 | 2.0E-08 | 2.2E-08 | 2.1E-08 | 2.0E-08 | 1.5E-08 | 2.0E-08 | 3.6E-08 | 1.9E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 4.2E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 4.5E-08 | 5.0E-08 | 4.7E-08 | 4.7E-08 | 5.0E-08 | 4.7E-08 | 4.7E-08 |
| AROCLOR-1260 | 3.0E-07 | 5.0E-08 | 5.9E-08 | 5.2E-08 | 5.0E-08 | 2.8E-08 | 5.0E-08 | 1.3E-07 | 4.7E-08 | 5.0E-08 | 4.7E-08 | 4.7E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.4E-07 | 9.9E-08 | 1.1E-07 | 1.0E-07 | 9.9E-08 | 7.2E-08 | 9.9E-08 | 1.8E-07 | 9.4E-08 | 9.9E-08 | 9.4E-08 | 9.4E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-554 | SB-555 | SB-555 | SB-555 | SB-556 | SB-556 | SB-556 | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-554-20081021 | SB-555-2 20081021 | SB-555-20081021 | SB-555-SS0-20081021 | SB-556-2 20081021 | SB-556-20081021 | SB-556-SS0-20081021 | SB-557-2 20081021 | SB-557-20081021 | SB-557-SS0-20081021 | SB-558-2 20081021 | SB-558-20081021 |
| SAMPLE DATE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | 0.5 | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 |
| TOP DEPTH | 1 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 9.5E-09 | 4.7E-07 | 4.8E-06 | 3.6E-05 | | 1.0E-08 | 9.0E-09 | 9.0E-09 | 9.0E-09 | 9.5E-09 | 5.1E-08 | 9.5E-09 |
| AROCLOR-1260 | 9.5E-09 | 3.8E-06 | 3.8E-06 | 1.7E-05 | | 1.0E-08 | 1.8E-07 | 9.0E-09 | 9.0E-09 | 1.1E-08 | 9.5E-09 | 9.5E-09 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-08 | 4.3E-06 | 8.6E-06 | 5.3E-05 | | 2.0E-08 | 1.9E-07 | 1.8E-08 | 1.8E-08 | 2.0E-08 | 6.0E-08 | 1.9E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 4.7E-08 | 2.4E-06 | 2.4E-05 | 1.8E-04 | | 5.0E-08 | 4.5E-08 | 4.5E-08 | 4.5E-08 | 4.7E-08 | 2.5E-07 | 4.7E-08 |
| AROCLOR-1260 | 4.7E-08 | 1.9E-05 | 1.9E-05 | 8.4E-05 | | 5.0E-08 | 8.9E-07 | 4.5E-08 | 4.5E-08 | 5.4E-08 | 4.7E-08 | 4.7E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.4E-08 | 2.1E-05 | 4.3E-05 | 2.6E-04 | | 9.9E-08 | 9.4E-07 | 8.9E-08 | 8.9E-08 | 1.0E-07 | 3.0E-07 | 9.4E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-558 | SB-559 | SB-559 | SB-559 | SB-560 | SB-560 | SB-560 | SB-561 | SB-561 | SB-561 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-558-SS0- | SB-559-2 | SB-559- | SB-559-SS0- | SB-560-2 | SB-560- | SB-560-SS0- | SB-561-2 | SB-561- | SB-561-SS0- | SB-562-2 | SB-562- |
| SAMPLE DATE | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 |
| BOTTOM DEPTH | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 9.8E-08 | 9.0E-09 | 9.0E-09 | 9.0E-09 | 9.0E-09 | 9.0E-09 | 9.0E-09 | | | | | |
| AROCLOR-1260 | 1.6E-06 | 9.0E-09 | 9.0E-09 | 5.2E-09 | 9.0E-09 | 9.0E-09 | 1.3E-08 | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-06 | 1.8E-08 | 1.8E-08 | 1.4E-08 | 1.8E-08 | 1.8E-08 | 2.2E-08 | | | | | |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 4.9E-07 | 4.5E-08 | 4.5E-08 | 4.5E-08 | 4.5E-08 | 4.5E-08 | 4.5E-08 | | | | | |
| AROCLOR-1260 | 7.9E-06 | 4.5E-08 | 4.5E-08 | 2.6E-08 | 4.5E-08 | 4.5E-08 | 6.4E-08 | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.4E-06 | 8.9E-08 | 8.9E-08 | 7.0E-08 | 8.9E-08 | 8.9E-08 | 1.1E-07 | | | | | |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-562 | SB-563 | SB-563 | SB-563 | SB-564 | SB-564 | SB-564 | SB-565 | SB-565 | SB-565 | SB-566 | SB-566 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-562-SS0- | SB-563-2 | SB-563- | SB-563-SS0- | SB-564-2 | SB-564- | SB-564-SS0- | SB-565-2 | SB-565- | SB-565-SS0- | SB-566-2 | SB-566- |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 |
| BOTTOM DEPTH | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | 9.5E-09 | 9.0E-09 | 9.5E-09 | 8.5E-09 | 9.0E-09 | 9.0E-09 | 4.8E-08 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 9.0E-09 |
| AROCLOR-1260 | | 9.5E-09 | 9.0E-09 | 4.0E-08 | 8.5E-09 | 9.0E-09 | 1.1E-08 | 1.0E-06 | 3.4E-07 | 2.1E-07 | 9.5E-09 | 1.1E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | | 1.9E-08 | 1.8E-08 | 4.9E-08 | 1.7E-08 | 1.8E-08 | 2.0E-08 | 1.0E-06 | 3.5E-07 | 2.2E-07 | 1.9E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | 4.7E-08 | 4.5E-08 | 4.7E-08 | 4.2E-08 | 4.5E-08 | 4.5E-08 | 2.4E-07 | 5.0E-08 | 4.7E-08 | 4.7E-08 | 4.5E-08 |
| AROCLOR-1260 | | 4.7E-08 | 4.5E-08 | 2.0E-07 | 4.2E-08 | 4.5E-08 | 5.4E-08 | 5.0E-06 | 1.7E-06 | 1.0E-06 | 4.7E-08 | 5.4E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | | 9.4E-08 | 8.9E-08 | 2.5E-07 | 8.4E-08 | 8.9E-08 | 9.9E-08 | 5.2E-06 | 1.7E-06 | 1.1E-06 | 9.4E-08 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-566 | SB-567 | SB-567 | SB-567 | SB-568 | SB-568 | SB-568 | SB-569 | SB-569 | SB-569 | SB-570 | SB-570 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-566-SS0- | SB-567-2 | SB-567- | SB-567-SS0- | SB-568-2 | SB-568- | SB-568-SS0- | SB-569-2 | SB-569- | SB-569-SS0- | SB-570-2 | SB-570- |
| SAMPLE DATE | 20081022 | 20081023 | 20081023 | 20081023 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 |
| BOTTOM DEPTH | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 4.6E-08 | 9.5E-09 | 9.5E-09 | 9.0E-09 | 9.0E-09 | 4.5E-07 | 4.5E-06 | 1.0E-08 | 3.4E-07 | 9.5E-06 | 9.0E-09 | 9.0E-08 |
| AROCLOR-1260 | 1.2E-06 | 4.3E-09 | 5.4E-09 | 2.5E-08 | 9.0E-09 | 1.1E-05 | 8.1E-05 | 1.0E-08 | 7.9E-06 | 3.0E-04 | 9.0E-09 | 3.2E-06 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.2E-06 | 1.4E-08 | 1.5E-08 | 3.4E-08 | 1.8E-08 | 1.1E-05 | 8.5E-05 | 2.0E-08 | 8.2E-06 | 3.1E-04 | 1.8E-08 | 3.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 2.3E-07 | 4.7E-08 | 4.7E-08 | 4.5E-08 | 4.5E-08 | 2.3E-06 | 2.2E-05 | 5.0E-08 | 1.7E-06 | 4.7E-05 | 4.5E-08 | 4.5E-07 |
| AROCLOR-1260 | 5.9E-06 | 2.1E-08 | 2.7E-08 | 1.2E-07 | 4.5E-08 | 5.4E-05 | 4.0E-04 | 5.0E-08 | 3.9E-05 | 1.5E-03 | 4.5E-08 | 1.6E-05 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.2E-06 | 6.8E-08 | 7.4E-08 | 1.7E-07 | 8.9E-08 | 5.7E-05 | 4.2E-04 | 9.9E-08 | 4.1E-05 | 1.5E-03 | 8.9E-08 | 1.6E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-570 | SB-571 | SB-571 | SB-571 | SB-001 | SB-002 | SB-003 | SB-004 | SB-004 | SB-035 | SB-036 | SB-041 | SB-042 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-570-SS0- | SB-571-2 | SB-571- | SB-571-SS0- | SB-1A-SS | SB-2A-01 | SB-3A-SS | SB-04B- | SB-4A-SS | SB-35-SS | SB-36-SS | SB-41S-SS | SB-42S-SS |
| SAMPLE DATE | 20081022 | 20081023 | 20081023 | 20081023 | 20040921 | 20040920 | 20040920 | 20050512 | 20040921 | 20040917 | 20040917 | 20041105 | 20041105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | 2 | 0.5 | | | 1 | | 1 | | | | | |
| BOTTOM DEPTH | 0.5 | 2 | 1 | 0.5 | | 1 | | 1 | | | | | |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | 2.1E-11 | 2.1E-11 | 1.8E-11 | | 9.9E-10 | 2.1E-11 | 2.1E-11 | | |
| 1,4-DICHLOROBENZENE | | | | | 1.9E-10 | 1.9E-10 | 1.6E-10 | | 1.9E-10 | 1.9E-10 | 1.9E-10 | | |
| BAP EQUIVALENT-HALFND | | | | | 6.6E-07 | 6.8E-07 | 6.2E-06 | | 1.3E-06 | 6.6E-07 | 6.8E-07 | | |
| AROCLOR-1254 | 1.8E-07 | 9.5E-09 | 9.0E-09 | 9.0E-09 | 1.4E-07 | 1.4E-07 | 1.3E-07 | 1.9E-08 | 2.9E-05 | 1.4E-07 | 1.4E-07 | | |
| AROCLOR-1260 | 6.8E-06 | 9.5E-09 | 9.0E-09 | 9.0E-09 | 1.4E-07 | 1.4E-07 | 3.5E-07 | 1.9E-08 | 1.8E-04 | 1.4E-07 | 1.4E-07 | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | 4.0E-07 | 3.6E-07 | 5.5E-07 | | 5.5E-07 | 3.4E-07 | 4.4E-07 | | |
| CADMIUM | | | | | 6.4E-11 | 6.6E-11 | 5.5E-11 | | 6.1E-11 | 5.7E-11 | 6.6E-11 | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | 4.3E-11 | 4.9E-11 | 1.3E-10 | | 9.2E-11 | 2.8E-11 | 6.6E-11 | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 5.2E-07 | 2.8E-07 | 4.1E-07 | | 5.0E-07 | 1.8E-07 | 4.1E-07 | | |
| TOTAL CANCER RISK | 7.0E-06 | 1.9E-08 | 1.8E-08 | 1.8E-08 | 1.9E-06 | 1.6E-06 | 7.7E-06 | 3.8E-08 | 2.1E-04 | 1.5E-06 | 1.8E-06 | | |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | 1.7E-10 | 1.7E-10 | 1.4E-10 | | 7.7E-09 | 1.7E-10 | 1.7E-10 | | |
| 1,4-DICHLOROBENZENE | | | | | 4.1E-10 | 4.1E-10 | 3.4E-10 | | 4.1E-10 | 4.1E-10 | 4.1E-10 | | |
| BAP EQUIVALENT-HALFND | | | | | 1.4E-05 | 1.5E-05 | 1.4E-04 | | 2.7E-05 | 1.4E-05 | 1.5E-05 | | |
| AROCLOR-1254 | 9.2E-07 | 4.7E-08 | 4.5E-08 | 4.5E-08 | 6.9E-07 | 7.2E-07 | 6.7E-07 | 9.4E-08 | 1.4E-04 | 6.9E-07 | 7.2E-07 | | |
| AROCLOR-1260 | 3.4E-05 | 4.7E-08 | 4.5E-08 | 4.5E-08 | 6.9E-07 | 7.2E-07 | 1.7E-06 | 9.4E-08 | 8.9E-04 | 6.9E-07 | 7.2E-07 | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | 3.1E-06 | 2.8E-06 | 4.3E-06 | | 4.3E-06 | 2.6E-06 | 3.4E-06 | | |
| CADMIUM | | | | | 1.3E-10 | 1.3E-10 | 1.1E-10 | | 1.2E-10 | 1.1E-10 | 1.3E-10 | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | 8.6E-11 | 9.9E-11 | 2.6E-10 | | 1.9E-10 | 5.7E-11 | 1.3E-10 | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 7.8E-06 | 4.1E-06 | 6.2E-06 | | 7.4E-06 | 2.7E-06 | 6.2E-06 | | |
| TOTAL CANCER RISK | 3.5E-05 | 9.4E-08 | 8.9E-08 | 8.9E-08 | 2.7E-05 | 2.3E-05 | 1.5E-04 | 1.9E-07 | 1.1E-03 | 2.1E-05 | 2.6E-05 | | |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-169 | SB-232 | SB-232 | SB-233 | SB-233 | SB-234 | SB-234 | SB-235 | SB-235 | SB-345 | SB-346 | SB-347 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-169-SS | SB-232-01 | SB-232-SS | SB-233-01 | SB-233-SS | SB-234-01 | SB-234-SS | SB-235-01 | SB-235-SS | SB-345-0001 | SB-346-0001 | SB-347-0001 |
| SAMPLE DATE | 20041105 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | 1 | | 1 | | 1 | | 1 | | | | |
| BOTTOM DEPTH | | 1 | | 1 | | 1 | | 1 | | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | 1.9E-08 | 1.8E-08 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 1.8E-08 | 1.8E-08 | 1.8E-08 | 1.7E-08 | 1.9E-07 | 1.0E-06 |
| AROCLOR-1260 | | 9.4E-08 | 1.4E-07 | 1.9E-08 | 8.0E-08 | 8.5E-09 | 1.1E-06 | 1.8E-08 | 1.1E-07 | 2.6E-07 | 1.7E-06 | 7.1E-06 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | | 1.1E-07 | 1.6E-07 | 3.9E-08 | 9.8E-08 | 2.8E-08 | 1.1E-06 | 3.7E-08 | 1.3E-07 | 2.8E-07 | 1.9E-06 | 8.1E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | 9.7E-08 | 9.2E-08 | 9.7E-08 | 9.2E-08 | 9.7E-08 | 9.2E-08 | 9.2E-08 | 9.2E-08 | 8.7E-08 | 9.7E-07 | 5.2E-06 |
| AROCLOR-1260 | | 4.7E-07 | 6.9E-07 | 9.7E-08 | 4.0E-07 | 4.2E-08 | 5.3E-06 | 9.2E-08 | 5.3E-07 | 1.3E-06 | 8.4E-06 | 3.5E-05 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | | 5.6E-07 | 7.9E-07 | 1.9E-07 | 4.9E-07 | 1.4E-07 | 5.4E-06 | 1.8E-07 | 6.3E-07 | 1.4E-06 | 9.4E-06 | 4.0E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-348 | SB-349 | SB-350 | SB-351 | SB-352 | SB-353 | SB-354 | SB-355 | SB-356 | SB-357 | SB-358 | SB-359 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-348-0001 | SB-349-0001 | SB-350-0001 | SB-351-0001 | SB-352-0001 | SB-353-0001 | SB-354-0001 | SB-355-0001 | SB-356-0001 | SB-357-0001 | SB-358-0001 | SB-359-0001 |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 2.1E-06 | 2.2E-06 | 4.1E-06 | 2.0E-06 | 1.4E-06 | 3.7E-04 | 4.1E-05 | 1.0E-05 | 2.2E-06 | 1.0E-06 | 1.9E-06 | 3.7E-07 |
| AROCLOR-1260 | 3.4E-05 | 2.4E-05 | 5.5E-05 | 2.1E-05 | 1.9E-05 | 1.8E-03 | 4.0E-04 | 9.6E-05 | 2.5E-05 | 1.2E-05 | 2.7E-05 | 3.7E-06 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.6E-05 | 2.6E-05 | 5.9E-05 | 2.3E-05 | 2.0E-05 | 2.2E-03 | 4.4E-04 | 1.1E-04 | 2.7E-05 | 1.3E-05 | 2.9E-05 | 4.1E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 1.0E-05 | 1.1E-05 | 2.0E-05 | 1.0E-05 | 6.9E-06 | 1.8E-03 | 2.1E-04 | 5.2E-05 | 1.1E-05 | 5.2E-06 | 9.7E-06 | 1.9E-06 |
| AROCLOR-1260 | 1.7E-04 | 1.2E-04 | 2.7E-04 | 1.0E-04 | 9.4E-05 | 8.9E-03 | 2.0E-03 | 4.8E-04 | 1.2E-04 | 5.9E-05 | 1.3E-04 | 1.8E-05 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.8E-04 | 1.3E-04 | 2.9E-04 | 1.1E-04 | 1.0E-04 | 1.1E-02 | 2.2E-03 | 5.3E-04 | 1.3E-04 | 6.5E-05 | 1.4E-04 | 2.0E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-360 | SB-361 | SB-362 | SB-363 | SB-364 | SB-500 | SB-501 | SB-502 | SB-503 | SB-503 | SB-503 | SB-504 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-360-0001 | SB-361-0001 | SB-362-0001 | SB-363-0001 | SB-364-0001 | SB-500-0001 | SB-501-0001 | SB-502-0001 | SB-503-0001 | SB-503-0001- | SB-503-0001- | SB-504-0001 |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | 2.7E-12 | 2.1E-11 | 1.1E-11 | 3.5E-12 | 1.3E-11 | 2.3E-11 | 1.9E-11 |
| 1,4-DICHLOROBENZENE | | | | | | 1.8E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 2.0E-10 | 2.1E-10 | 1.8E-10 |
| BAP EQUIVALENT-HALFND | | | | | | 1.9E-06 | 1.6E-05 | 1.9E-05 | 3.8E-05 | 2.1E-05 | 3.1E-06 | 1.1E-06 |
| AROCLOR-1254 | 1.9E-06 | 1.9E-05 | 4.0E-07 | 2.2E-06 | 1.0E-06 | 1.8E-08 | 3.8E-06 | 1.9E-07 | 1.9E-07 | 1.1E-07 | 2.1E-08 | 9.0E-08 |
| AROCLOR-1260 | 2.7E-05 | 1.4E-04 | 5.0E-06 | 2.4E-05 | 1.2E-05 | 4.7E-08 | 5.8E-05 | 1.2E-06 | 1.7E-06 | 9.1E-07 | 1.2E-07 | 1.2E-06 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | 4.8E-07 | 1.2E-06 | 6.6E-07 | 9.5E-07 | 9.0E-07 | 8.4E-07 | 1.9E-07 |
| CADMIUM | | | | | | 9.1E-12 | 9.1E-12 | 8.6E-12 | 6.8E-11 | 5.3E-11 | 3.7E-11 | 1.9E-11 |
| COBALT | | | | | | 6.1E-10 | 1.1E-09 | 5.0E-10 | 1.1E-09 | 9.2E-10 | 7.0E-10 | 1.0E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | 3.2E-11 | 4.4E-11 | 3.8E-11 | 7.2E-11 | 5.8E-11 | 4.3E-11 | 4.5E-11 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 2.7E-07 | 3.8E-07 | 2.3E-07 | 9.2E-07 | 7.1E-07 | 5.0E-07 | 3.5E-07 |
| TOTAL CANCER RISK | 2.9E-05 | 1.6E-04 | 5.4E-06 | 2.6E-05 | 1.3E-05 | 2.7E-06 | 7.9E-05 | 2.2E-05 | 4.2E-05 | 2.3E-05 | 4.6E-06 | 2.9E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | 2.1E-11 | 1.6E-10 | 8.5E-11 | 2.8E-11 | 1.0E-10 | 1.8E-10 | 1.5E-10 |
| 1,4-DICHLOROBENZENE | | | | | | 3.9E-10 | 4.0E-10 | 4.0E-10 | 4.0E-10 | 4.2E-10 | 4.4E-10 | 3.7E-10 |
| BAP EQUIVALENT-HALFND | | | | | | 4.1E-05 | 3.4E-04 | 4.2E-04 | 8.3E-04 | 4.5E-04 | 6.7E-05 | 2.3E-05 |
| AROCLOR-1254 | 9.7E-06 | 9.4E-05 | 2.0E-06 | 1.1E-05 | 5.2E-06 | 9.2E-08 | 1.9E-05 | 9.7E-07 | 9.7E-07 | 5.4E-07 | 1.1E-07 | 4.5E-07 |
| AROCLOR-1260 | 1.3E-04 | 6.9E-04 | 2.5E-05 | 1.2E-04 | 5.9E-05 | 2.3E-07 | 2.9E-04 | 5.9E-06 | 8.4E-06 | 4.5E-06 | 5.9E-07 | 5.9E-06 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | 3.7E-06 | 9.7E-06 | 5.1E-06 | 7.4E-06 | 7.0E-06 | 6.6E-06 | 1.5E-06 |
| CADMIUM | | | | | | 1.8E-11 | 1.8E-11 | 1.7E-11 | 1.4E-10 | 1.1E-10 | 7.5E-11 | 3.8E-11 |
| COBALT | | | | | | 1.2E-09 | 2.2E-09 | 1.0E-09 | 2.3E-09 | 1.9E-09 | 1.4E-09 | 2.1E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | 6.4E-11 | 8.9E-11 | 7.7E-11 | 1.5E-10 | 1.2E-10 | 8.7E-11 | 9.1E-11 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | 4.1E-06 | 5.7E-06 | 3.5E-06 | 1.4E-05 | 1.1E-05 | 7.4E-06 | 5.2E-06 |
| TOTAL CANCER RISK | 1.4E-04 | 7.9E-04 | 2.7E-05 | 1.3E-04 | 6.5E-05 | 4.9E-05 | 6.6E-04 | 4.3E-04 | 8.6E-04 | 4.7E-04 | 8.2E-05 | 3.6E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-505 | SB-506 | SB-506 | SB-506 | SB-507 | SB-508 | SB-509 | SB-510 | SB-511 | SB-512 | SB-513 | SB-514 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-505-0001 | SB-506-0001 | SB-506-0001- | SB-506-0001- | SB-507-0001 | SB-508-0001 | SB-509-0001 | SB-510-0001 | SB-511-0001 | SB-512-0001 | SB-513-0001 | SB-514-0001 |
| SAMPLE DATE | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 2.1E-11 | 2.0E-11 | 2.0E-11 | 2.1E-11 | 2.1E-11 | 2.1E-11 | 2.1E-11 | 2.0E-11 | 2.0E-11 | 2.0E-11 | 2.1E-11 | 2.1E-11 |
| 1,4-DICHLOROBENZENE | 1.9E-10 | 1.8E-10 | 1.8E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.8E-10 | 1.8E-10 | 1.8E-10 | 1.9E-10 | 1.9E-10 |
| BAP EQUIVALENT-HALFND | 2.9E-06 | 6.6E-07 | 6.6E-07 | 6.6E-07 | 7.9E-07 | 6.6E-07 | 6.6E-07 | 7.5E-07 | 3.4E-07 | 7.3E-07 | 1.5E-06 | 6.6E-07 |
| AROCLOR-1254 | 1.0E-05 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 1.9E-08 |
| AROCLOR-1260 | 9.9E-05 | 1.2E-08 | 1.1E-08 | 1.1E-08 | 1.9E-08 | 1.5E-08 | 1.9E-08 | 3.1E-08 | 4.9E-08 | 3.0E-08 | 8.4E-08 | 1.9E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 1.3E-06 | 6.6E-07 | 6.4E-07 | 6.2E-07 | 7.7E-07 | 9.1E-07 | 5.5E-07 | 3.5E-06 | 1.9E-07 | 5.5E-07 | 6.2E-07 | 5.5E-07 |
| CADMIUM | 2.9E-10 | 3.2E-13 | 5.7E-13 | 8.2E-13 | 5.0E-12 | 2.0E-12 | 2.7E-13 | 1.6E-12 | 1.3E-12 | 4.2E-12 | 5.0E-12 | 3.5E-11 |
| COBALT | 9.1E-10 | 4.8E-10 | 5.1E-10 | 5.5E-10 | 2.5E-09 | 6.2E-09 | 8.9E-10 | 8.9E-10 | 9.5E-10 | 8.4E-10 | 8.9E-10 | 4.0E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 1.2E-10 | 2.7E-11 | 3.1E-11 | 3.5E-11 | 1.0E-10 | 6.0E-11 | 2.1E-11 | 7.3E-11 | 1.1E-10 | 5.7E-11 | 4.3E-11 | 1.0E-10 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.3E-06 | 2.0E-07 | 2.4E-07 | 2.8E-07 | 3.1E-07 | 3.1E-07 | 1.7E-07 | 2.8E-07 | 4.3E-07 | 3.1E-07 | 3.5E-07 | 4.4E-07 |
| TOTAL CANCER RISK | 1.1E-04 | 1.5E-06 | 1.6E-06 | 1.6E-06 | 1.9E-06 | 1.9E-06 | 1.4E-06 | 4.6E-06 | 1.0E-06 | 1.6E-06 | 2.6E-06 | 1.7E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.7E-10 | 1.6E-10 | 1.6E-10 | 1.6E-10 | 1.6E-10 | 1.6E-10 | 1.6E-10 | 1.5E-10 | 1.6E-10 | 1.5E-10 | 1.6E-10 | 1.6E-10 |
| 1,4-DICHLOROBENZENE | 4.1E-10 | 3.9E-10 | 3.9E-10 | 4.0E-10 | 4.0E-10 | 4.0E-10 | 4.0E-10 | 3.8E-10 | 3.9E-10 | 3.8E-10 | 4.0E-10 | 4.0E-10 |
| BAP EQUIVALENT-HALFND | 6.2E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 1.7E-05 | 1.4E-05 | 1.4E-05 | 1.6E-05 | 7.3E-06 | 1.6E-05 | 3.2E-05 | 1.4E-05 |
| AROCLOR-1254 | 5.0E-05 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.2E-08 | 9.4E-08 | 9.2E-08 | 9.7E-08 | 9.4E-08 |
| AROCLOR-1260 | 4.9E-04 | 5.9E-08 | 5.7E-08 | 5.4E-08 | 9.4E-08 | 7.4E-08 | 9.4E-08 | 1.5E-07 | 2.4E-07 | 1.5E-07 | 4.2E-07 | 9.4E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 1.0E-05 | 5.1E-06 | 5.0E-06 | 4.8E-06 | 6.0E-06 | 7.1E-06 | 4.3E-06 | 2.7E-05 | 1.5E-06 | 4.3E-06 | 4.8E-06 | 4.3E-06 |
| CADMIUM | 5.9E-10 | 6.4E-13 | 1.1E-12 | 1.6E-12 | 1.0E-11 | 4.0E-12 | 5.5E-13 | 3.3E-12 | 2.7E-12 | 8.5E-12 | 1.0E-11 | 7.1E-11 |
| COBALT | 1.8E-09 | 9.6E-10 | 1.0E-09 | 1.1E-09 | 4.9E-09 | 1.2E-08 | 1.8E-09 | 1.8E-09 | 1.9E-09 | 1.7E-09 | 1.8E-09 | 8.0E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 2.4E-10 | 5.4E-11 | 6.3E-11 | 7.1E-11 | 2.1E-10 | 1.2E-10 | 4.2E-11 | 1.5E-10 | 2.2E-10 | 1.2E-10 | 8.6E-11 | 2.0E-10 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.4E-05 | 2.9E-06 | 3.6E-06 | 4.2E-06 | 4.6E-06 | 4.6E-06 | 2.6E-06 | 4.2E-06 | 6.4E-06 | 4.7E-06 | 5.2E-06 | 6.5E-06 |
| TOTAL CANCER RISK | 6.5E-04 | 2.2E-05 | 2.3E-05 | 2.3E-05 | 2.8E-05 | 2.6E-05 | 2.1E-05 | 4.8E-05 | 1.6E-05 | 2.5E-05 | 4.3E-05 | 2.5E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-515 | SB-516 | SB-517 | SB-518 | SB-519 | SB-520 | SB-521 | SB-522 | SB-523 | SB-524 | SB-525 | SB-526 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-515-0001 | SB-516-0001 | SB-517-0001 | SB-518-0001 | SB-519-0001 | SB-520-0001 | SB-521-0001 | SB-522-0001 | SB-523-0001 | SB-524-0001 | SB-525-0001 | SB-526-0001 |
| SAMPLE DATE | 20071129 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 2.1E-11 | 2.1E-11 | 2.0E-11 | 2.1E-11 | 2.1E-11 | 2.2E-11 | | | | | | |
| 1,4-DICHLOROBENZENE | 1.9E-10 | 1.9E-10 | 1.8E-10 | 1.9E-10 | 1.9E-10 | 2.0E-10 | | | | | | |
| BAP EQUIVALENT-HALFND | 3.3E-06 | 1.4E-06 | 7.1E-07 | 6.9E-07 | 1.5E-06 | 8.6E-07 | | | | | | |
| AROCLOR-1254 | 1.9E-08 | 1.9E-08 | 1.8E-08 | 2.0E-08 | 1.9E-08 | 2.0E-08 | 2.1E-07 | 2.0E-07 | 1.9E-07 | 3.9E-06 | 4.3E-06 | 1.1E-05 |
| AROCLOR-1260 | 2.9E-07 | 1.9E-08 | 1.8E-08 | 2.0E-08 | 1.9E-08 | 2.0E-08 | 3.1E-06 | 3.4E-06 | 2.1E-06 | 5.2E-05 | 5.4E-05 | 8.2E-05 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 3.6E-07 | 3.4E-07 | 4.0E-07 | 8.1E-07 | 5.9E-07 | 3.0E-07 | | | | | | |
| CADMIUM | 2.0E-11 | 7.3E-12 | 3.2E-12 | 1.0E-12 | 8.6E-13 | 1.3E-12 | | | | | | |
| COBALT | 9.3E-10 | 6.4E-10 | 1.3E-09 | 8.9E-10 | 8.6E-10 | 1.0E-09 | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 7.7E-11 | 7.2E-11 | 8.6E-11 | 4.9E-11 | 5.3E-11 | 6.7E-11 | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.1E-07 | 3.2E-07 | 2.6E-07 | 3.2E-07 | 2.9E-07 | 2.1E-07 | | | | | | |
| TOTAL CANCER RISK | 4.3E-06 | 2.1E-06 | 1.4E-06 | 1.9E-06 | 2.4E-06 | 1.4E-06 | 3.3E-06 | 3.6E-06 | 2.3E-06 | 5.6E-05 | 5.8E-05 | 9.3E-05 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.6E-10 | 1.7E-10 | 1.6E-10 | 1.7E-10 | 1.6E-10 | 1.7E-10 | | | | | | |
| 1,4-DICHLOROBENZENE | 4.0E-10 | 4.1E-10 | 3.9E-10 | 4.1E-10 | 4.0E-10 | 4.2E-10 | | | | | | |
| BAP EQUIVALENT-HALFND | 7.1E-05 | 2.9E-05 | 1.5E-05 | 1.5E-05 | 3.2E-05 | 1.9E-05 | | | | | | |
| AROCLOR-1254 | 9.7E-08 | 9.7E-08 | 9.2E-08 | 9.9E-08 | 9.7E-08 | 1.0E-07 | 1.0E-06 | 1.0E-06 | 9.4E-07 | 2.0E-05 | 2.1E-05 | 5.4E-05 |
| AROCLOR-1260 | 1.4E-06 | 9.7E-08 | 9.2E-08 | 9.9E-08 | 9.7E-08 | 1.0E-07 | 1.5E-05 | 1.7E-05 | 1.0E-05 | 2.6E-04 | 2.7E-04 | 4.1E-04 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 2.8E-06 | 2.7E-06 | 3.1E-06 | 6.3E-06 | 4.6E-06 | 2.3E-06 | | | | | | |
| CADMIUM | 4.1E-11 | 1.5E-11 | 6.4E-12 | 2.0E-12 | 1.7E-12 | 2.7E-12 | | | | | | |
| COBALT | 1.9E-09 | 1.3E-09 | 2.6E-09 | 1.8E-09 | 1.7E-09 | 2.1E-09 | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 1.6E-10 | 1.4E-10 | 1.7E-10 | 9.8E-11 | 1.1E-10 | 1.3E-10 | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 4.7E-06 | 4.9E-06 | 3.8E-06 | 4.7E-06 | 4.3E-06 | 3.1E-06 | | | | | | |
| TOTAL CANCER RISK | 8.0E-05 | 3.7E-05 | 2.3E-05 | 2.6E-05 | 4.2E-05 | 2.4E-05 | 1.6E-05 | 1.8E-05 | 1.1E-05 | 2.8E-04 | 2.9E-04 | 4.6E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-527 | SB-528 | SB-529 | SB-530 | SB-531 | SB-532 | SB-533 | SB-534 | SB-535 | SB-536 | SB-537 | SB-538 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-527-0001 | SB-528-0001 | SB-529-0001 | SB-530-0001 | SB-531-0001 | SB-532-0001 | SB-533-0001 | SB-534-0001 | SB-535-0001 | SB-536-0001 | SB-537-0001 | SB-538-0001 |
| SAMPLE DATE | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 3.6E-06 | 2.1E-06 | 1.0E-04 | 4.4E-05 | 1.9E-05 | 2.1E-07 | 4.4E-06 | 4.8E-06 | 9.5E-07 | 1.3E-05 | 1.2E-06 | 4.4E-07 |
| AROCLOR-1260 | 6.2E-05 | 3.4E-05 | 1.5E-03 | 6.9E-04 | 1.9E-04 | 2.1E-06 | 5.3E-05 | 4.9E-05 | 6.0E-06 | 7.7E-05 | 1.0E-05 | 4.5E-06 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.5E-05 | 3.6E-05 | 1.6E-03 | 7.3E-04 | 2.1E-04 | 2.3E-06 | 5.7E-05 | 5.4E-05 | 6.9E-06 | 9.0E-05 | 1.1E-05 | 4.9E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 1.8E-05 | 1.1E-05 | 5.0E-04 | 2.2E-04 | 9.4E-05 | 1.1E-06 | 2.2E-05 | 2.4E-05 | 4.7E-06 | 6.4E-05 | 6.2E-06 | 2.2E-06 |
| AROCLOR-1260 | 3.1E-04 | 1.7E-04 | 7.4E-03 | 3.4E-03 | 9.4E-04 | 1.0E-05 | 2.6E-04 | 2.4E-04 | 3.0E-05 | 3.8E-04 | 5.0E-05 | 2.2E-05 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.2E-04 | 1.8E-04 | 7.9E-03 | 3.6E-03 | 1.0E-03 | 1.1E-05 | 2.8E-04 | 2.7E-04 | 3.4E-05 | 4.5E-04 | 5.6E-05 | 2.4E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-539 | SB-818 | SB-819 | SB-820 | SB-821 | SB-822 | SB-823 | SB-824 | SB-825 | SB-827 | SB-828 | SB-829 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-539-0001 | E-SB-818-SS | E-SB-819-SS | E-SB-820-SS | E-SB-821-SS | E-SB-822-SS | E-SB-823-SS | E-SB-824-SS | E-SB-825-SS | E-SB-827-SS | E-SB-828-SS | E-SB-829-SS |
| SAMPLE DATE | 20071204 | 20100915 | 20100915 | 20100915 | 20100916 | 20100915 | 20100915 | 20100915 | 20100913 | 20100916 | 20100916 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 2.1E-06 | 9.5E-09 | 9.0E-09 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 1.8E-05 | 9.5E-09 | 9.0E-09 | 9.5E-09 | 2.1E-08 | 1.0E-08 | 3.8E-08 | 9.5E-09 | 1.0E-08 | 3.4E-08 | 3.5E-08 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-05 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 3.1E-08 | 2.0E-08 | 4.8E-08 | 1.9E-08 | 2.0E-08 | 4.4E-08 | 4.5E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 1.1E-05 | 4.7E-08 | 4.5E-08 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 |
| AROCLOR-1260 | 8.9E-05 | 4.7E-08 | 4.5E-08 | 4.7E-08 | 1.0E-07 | 5.0E-08 | 1.9E-07 | 4.7E-08 | 5.0E-08 | 1.7E-07 | 1.7E-07 | 5.0E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.0E-04 | 9.4E-08 | 8.9E-08 | 9.4E-08 | 1.5E-07 | 9.9E-08 | 2.4E-07 | 9.4E-08 | 9.9E-08 | 2.2E-07 | 2.2E-07 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-830 | SB-831 | SB-832 | SB-833 | SB-833A | SB-833B | SB-833C | SB-833D | SB-833E | SB-833F | SB-833G | SB-833H |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-830-SS | E-SB-831-SS | E-SB-832-SS | E-SB-833-SS | E-SB-833A- | E-SB-833B- | E-SB-833C- | E-SB-833D- | E-SB-833E- | E-SB-833F- | E-SB-833G- | E-SB-833H- |
| SAMPLE DATE | 20100914 | 20100913 | 20100917 | 20100916 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | 1.3E-12 | 9.9E-10 | 3.9E-12 | 1.8E-12 | 1.3E-06 | 8.5E-09 | 2.4E-12 | 3.9E-12 |
| 1,4-DICHLOROBENZENE | | | | | 2.2E-11 | 7.7E-10 | 1.6E-11 | 1.7E-11 | 9.6E-08 | 2.7E-09 | 8.3E-11 | 1.9E-11 |
| BAP EQUIVALENT-HALFND | | | | | 2.4E-07 | 6.9E-09 | 6.8E-09 | 2.4E-08 | 6.9E-09 | 6.9E-09 | 6.8E-09 | 6.4E-09 |
| AROCLOR-1254 | 9.5E-09 | 9.5E-09 | 4.5E-08 | 1.1E-08 | 9.0E-09 | 2.0E-07 | 1.0E-08 | 1.0E-08 | 1.0E-05 | 1.0E-06 | 1.0E-08 | 9.5E-09 |
| AROCLOR-1260 | 9.5E-09 | 9.5E-09 | 6.9E-07 | 1.1E-08 | 2.2E-07 | 1.7E-06 | 8.2E-08 | 1.0E-08 | 3.6E-04 | 2.5E-05 | 5.7E-08 | 2.3E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-08 | 1.9E-08 | 7.3E-07 | 2.2E-08 | 4.7E-07 | 1.9E-06 | 9.8E-08 | 4.5E-08 | 3.7E-04 | 2.6E-05 | 7.4E-08 | 3.9E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | 9.9E-12 | 7.7E-09 | 3.0E-11 | 1.4E-11 | 9.9E-06 | 6.6E-08 | 1.9E-11 | 3.0E-11 |
| 1,4-DICHLOROBENZENE | | | | | 4.7E-11 | 1.6E-09 | 3.4E-11 | 3.6E-11 | 2.0E-07 | 5.7E-09 | 1.8E-10 | 4.0E-11 |
| BAP EQUIVALENT-HALFND | | | | | 5.3E-06 | 1.5E-07 | 1.5E-07 | 5.3E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 |
| AROCLOR-1254 | 4.7E-08 | 4.7E-08 | 2.3E-07 | 5.4E-08 | 4.5E-08 | 1.0E-06 | 5.0E-08 | 5.2E-08 | 5.0E-05 | 5.2E-06 | 5.0E-08 | 4.7E-08 |
| AROCLOR-1260 | 4.7E-08 | 4.7E-08 | 3.4E-06 | 5.4E-08 | 1.1E-06 | 8.4E-06 | 4.1E-07 | 5.2E-08 | 1.8E-03 | 1.2E-04 | 2.8E-07 | 1.1E-07 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.4E-08 | 9.4E-08 | 3.6E-06 | 1.1E-07 | 6.4E-06 | 9.6E-06 | 6.0E-07 | 6.3E-07 | 1.8E-03 | 1.3E-04 | 4.8E-07 | 3.0E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-833J | SB-833K | SB-833L | SB-833M | SB-833N | SB-834 | SB-835 | SB-836 | SB-837 | SB-838 | SB-839 | SB-840 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833J-20101013 | E-SB-833K-20101013 | E-SB-833L-20101013 | E-SB-833M-20101013 | E-SB-833N-20101014 | E-SB-834-SS 20100916 | E-SB-835-SS 20100917 | E-SB-836-SS 20100917 | E-SB-837-SS 20100917 | E-SB-838-SS 20100913 | E-SB-839-SS 20100914 | E-SB-840-SS 20100914 |
| SAMPLE DATE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | 2 | 2 | 2 | 2 | 2 | | | | | | | |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | | | | | | | | | | | | |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.8E-09 | 1.5E-06 | 1.1E-08 | 3.3E-10 | 7.8E-13 | | | | | | | |
| 1,4-DICHLOROBENZENE | 7.7E-10 | 1.7E-07 | 2.4E-09 | 1.9E-11 | 1.7E-11 | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-09 | 6.2E-06 | 6.8E-09 | 6.8E-09 | 6.8E-08 | | | | | | | |
| AROCLOR-1254 | 1.0E-07 | 1.9E-05 | 1.0E-08 | 1.0E-07 | 1.0E-08 | 9.5E-09 | 1.0E-07 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 2.6E-06 | 9.0E-09 |
| AROCLOR-1260 | 3.0E-06 | 6.8E-04 | 2.6E-08 | 1.3E-06 | 3.1E-08 | 9.5E-09 | 9.1E-07 | 1.3E-07 | 2.6E-08 | 9.5E-09 | 4.1E-05 | 1.2E-07 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.1E-06 | 7.0E-04 | 5.6E-08 | 1.4E-06 | 1.1E-07 | 1.9E-08 | 1.0E-06 | 1.4E-07 | 3.5E-08 | 1.9E-08 | 4.3E-05 | 1.3E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.4E-08 | 1.2E-05 | 8.8E-08 | 2.6E-09 | 6.1E-12 | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.6E-09 | 3.7E-07 | 5.2E-09 | 4.0E-11 | 3.6E-11 | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.3E-04 | 1.5E-07 | 1.5E-07 | 1.5E-06 | | | | | | | |
| AROCLOR-1254 | 5.0E-07 | 9.7E-05 | 5.0E-08 | 5.0E-07 | 5.0E-08 | 4.7E-08 | 5.0E-07 | 5.0E-08 | 4.7E-08 | 4.7E-08 | 1.3E-05 | 4.5E-08 |
| AROCLOR-1260 | 1.5E-05 | 3.4E-03 | 1.3E-07 | 6.4E-06 | 1.5E-07 | 4.7E-08 | 4.5E-06 | 6.4E-07 | 1.3E-07 | 4.7E-08 | 2.0E-04 | 5.9E-07 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.6E-05 | 3.6E-03 | 4.2E-07 | 7.1E-06 | 1.7E-06 | 9.4E-08 | 5.0E-06 | 6.9E-07 | 1.8E-07 | 9.4E-08 | 2.2E-04 | 6.4E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-841 | SB-842 | SB-843 | SB-844 | SB-845 | SB-846 | SB-847 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-841-SS | E-SB-842-SS | E-SB-843-SS | E-SB-844-SS | E-SB-845-SS | E-SB-846-SS | E-SB-847-SS |
| SAMPLE DATE | 20100914 | 20100913 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | |
| AROCLOR-1254 | 9.0E-07 | 9.5E-09 | 9.5E-09 | 9.5E-08 | 4.5E-06 | 9.5E-09 | 9.0E-09 |
| AROCLOR-1260 | 2.5E-05 | 9.5E-09 | 9.5E-09 | 2.3E-06 | 3.7E-05 | 5.3E-08 | 6.4E-08 |
| ANTIMONY | | | | | | | |
| ARSENIC | | | | | | | |
| CADMIUM | | | | | | | |
| COBALT | | | | | | | |
| IRON | | | | | | | |
| LEAD | | | | | | | |
| MANGANESE | | | | | | | |
| MERCURY | | | | | | | |
| MOLYBDENUM | | | | | | | |
| NICKEL | | | | | | | |
| VANADIUM | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | |
| TOTAL CANCER RISK | 2.6E-05 | 1.9E-08 | 1.9E-08 | 2.4E-06 | 4.1E-05 | 6.2E-08 | 7.3E-08 |
| **RESIDENTIAL** | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | |
| AROCLOR-1254 | 4.5E-06 | 4.7E-08 | 4.7E-08 | 4.7E-07 | 2.3E-05 | 4.7E-08 | 4.5E-08 |
| AROCLOR-1260 | 1.2E-04 | 4.7E-08 | 4.7E-08 | 1.1E-05 | 1.8E-04 | 2.6E-07 | 3.2E-07 |
| ANTIMONY | | | | | | | |
| ARSENIC | | | | | | | |
| CADMIUM | | | | | | | |
| COBALT | | | | | | | |
| IRON | | | | | | | |
| LEAD | | | | | | | |
| MANGANESE | | | | | | | |
| MERCURY | | | | | | | |
| MOLYBDENUM | | | | | | | |
| NICKEL | | | | | | | |
| VANADIUM | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | |
| TOTAL CANCER RISK | 1.3E-04 | 9.4E-08 | 9.4E-08 | 1.2E-05 | 2.1E-04 | 3.1E-07 | 3.6E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-005 | SB-006 | SB-540 | SB-541 | SB-541 | SB-541 | SB-541A | SB-541A | SB-541A | SB-542 | SB-542 | SB-542 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5A-SS | SB-6A-SS | SB-540-0001 | SB-541-2 | SB-541-SS0.5- | SB-541-SS0-0. | SB-541A-SS[S. | SB-541A-SS0.5 | SB-541A-SS0-0 | SB-542-2 | SB-542-SS0.5- | SB-542-SS0-0. |
| SAMPLE DATE | 20040917 | 20040917 | 20071204 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | 2 | 0.5 | | | 0.5 | | 2 | 0.5 | |
| BOTTOM DEPTH | | | 1 | 2 | 1 | 0.5 | | 1 | 0.5 | 2 | 1 | 0.5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.6E-06 | 2.6E-06 | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 8.6E-06 | 8.6E-06 | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.9E-08 | 8.9E-08 | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 9.8E-03 | 1.0E-02 | 1.4E-02 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 3.1E-03 | 7.3E-04 | 7.3E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | 3.2E-03 | 3.2E-03 | | | | | | | | | | |
| ARSENIC | 2.5E-03 | 3.9E-03 | | | | | | | | | | |
| CADMIUM | 1.7E-03 | 1.7E-03 | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | 2.6E-04 | 2.6E-04 | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 3.8E-04 | 5.9E-04 | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.5E-03 | 5.1E-04 | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.9E-02 | 2.0E-02 | 1.4E-02 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 3.1E-03 | 7.3E-04 | 7.3E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 5.2E-05 | 5.2E-05 | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 3.9E-05 | 3.9E-05 | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.4E-07 | 8.4E-07 | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 1.2E-01 | 1.3E-01 | 1.8E-01 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 4.0E-02 | 9.3E-03 | 9.3E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | 5.3E-02 | 5.3E-02 | | | | | | | | | | |
| ARSENIC | 5.1E-02 | 7.9E-02 | | | | | | | | | | |
| CADMIUM | 3.8E-02 | 3.8E-02 | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | 3.3E-03 | 3.3E-03 | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 3.9E-03 | 6.1E-03 | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.3E-02 | 4.5E-03 | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.9E-01 | 3.1E-01 | 1.8E-01 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 4.0E-02 | 9.3E-03 | 9.3E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-543 | SB-543 | SB-543 | SB-543A | SB-543A | SB-543A | SB-543A | SB-544 | SB-544 | SB-544 | SB-544A | SB-544A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-543-2 | SB-543-SS0.5- | SB-543-SS0-0.5 | SB-543A-2 | SB-543A-SS[S.. | SB-543A-SS0.5 | SB-543A-SS0-0 | SB-544-2 | SB-544-SS0.5- | SB-544-SS0-0.5 | SB-544A-SS[S.. | SB-544A-SS0.5- |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081111 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 2 | 0.5 | | 2 | | 0.5 | | 2 | 0.5 | | | 0.5 |
| BOTTOM DEPTH | 2 | 1 | 0.5 | 2 | | 1 | 0.5 | 2 | 1 | 0.5 | | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.3E-03 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 5.9E-04 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.0E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.3E-03 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 5.9E-04 | 7.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.0E-02 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 7.6E-03 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.9E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.0E-02 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 7.6E-03 | 8.9E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-544A | SB-545 | SB-545 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 | SB-546 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | B-544A-SS0-0 | SB-545-SS0.5- | SB-545-SS0-0.5 | SB-546-2 | SB-546-2-AVG | SB-546-2-D | B-546-SS0.5- | 546-SS0.5-1-A | B-546-SS0.5-1 | B-546-SS0-0.5 | 546-SS0-0.5-A | B-546-SS0-0.5 |
| SAMPLE DATE | 20081111 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | ORIG | AVG | DUP | ORIG | AVG | DUP |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | 0.5 | | 2 | 2 | 2 | 0.5 | 0.5 | 0.5 | | | |
| BOTTOM DEPTH | 0.5 | 1 | 0.5 | 2 | 2 | 2 | 1 | 1 | 1 | 0.5 | 0.5 | 0.5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 6.6E-04 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 6.8E-04 | 6.6E-04 | 6.3E-04 | 6.4E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.6E-04 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 6.8E-04 | 6.6E-04 | 6.3E-04 | 6.4E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 8.5E-03 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 8.7E-03 | 8.5E-03 | 8.0E-03 | 8.2E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.5E-03 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 8.7E-03 | 8.5E-03 | 8.0E-03 | 8.2E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-546A | SB-546A | SB-546A | SB-547 | SB-547 | SB-547 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 | SB-548 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-546A-SS[S | SB-546A-SS0.5 | SB-546A-SS0-0 | SB-547-2 | SB-547-SS0.5- | SB-547-SS0-0.5 | SB-548-2 | SB-548-2-AVG | SB-548-2-D | SB-548-SS0.5- | 548-SS0.5-1-A | B-548-SS0.5-1 |
| SAMPLE DATE | 20081111 | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | ORIG | AVG | DUP |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | 0.5 | | 2 | 0.5 | | 2 | 2 | 2 | 0.5 | 0.5 | 0.5 |
| BOTTOM DEPTH | | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 2 | 2 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 6.3E-04 | 7.0E-04 | 3.2E-02 | 6.6E-04 | 6.3E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.3E-04 | 7.0E-04 | 3.2E-02 | 6.6E-04 | 6.3E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 8.0E-03 | 8.9E-03 | 4.1E-01 | 8.5E-03 | 8.0E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.0E-03 | 8.9E-03 | 4.1E-01 | 8.5E-03 | 8.0E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-548 | SB-548 | SB-548 | SB-549 | SB-549 | SB-549 | SB-549 | SB-549 | SB-550 | SB-550 | SB-550 | SB-550A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-548-SS0-0.5 | 548-SS0-0.5-A | B-548-SS0-0.5 | SB-549-2 | SB-549-2-AVG | SB-549-2-D | B-549-SS0.5- | B-549-SS0-0.5 | SB-550-2 | B-550-SS0.5- | B-550-SS0-0.5 | SB-550A-2 |
| SAMPLE DATE | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | ORIG | AVG | DUP | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | 2 | 2 | 2 | 0.5 | | 2 | 0.5 | | 2 |
| BOTTOM DEPTH | 0.5 | 0.5 | 0.5 | 2 | 2 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.8E-04 | 6.6E-04 | 7.0E-04 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.6E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.8E-04 | 6.6E-04 | 7.0E-04 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 7.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.7E-03 | 8.5E-03 | 8.9E-03 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.7E-03 | 8.5E-03 | 8.9E-03 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 8.9E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-550A | SB-550A | SB-550A | SB-551 | SB-551 | SB-551 | SB-552 | SB-552 | SB-552 | SB-553 | SB-553 | SB-554 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-550A-SS[S | SB-550A-SS0.5 | SB-550A-SS0-0 | SB-551-2 | SB-551-SS0.5- | SB-551-SS0-0.5 | SB-552-2 | SB-552-SS0.5- | SB-552-SS0-0.5 | SB-553-2 | SB-553-SS0.5- | SB-554-2 |
| SAMPLE DATE | 20081111 | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081023 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | 0.5 | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 | 2 |
| BOTTOM DEPTH | | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 5.9E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.0E-04 | 6.3E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 5.9E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.0E-04 | 6.3E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 7.6E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.9E-03 | 8.0E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.6E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.9E-03 | 8.0E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-554 | SB-555 | SB-555 | SB-555 | SB-556 | SB-556 | SB-556 | SB-557 | SB-557 | SB-557 | SB-558 | SB-558 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-554-SS0.5- | SB-555-2 | SB-555-SS0.5- | SB-555-SS0-0. | SB-556-2 | SB-556-SS0.5- | SB-556-SS0-0. | SB-557-2 | SB-557-SS0.5- | SB-557-SS0-0. | SB-558-2 | SB-558-SS0.5- |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 0.5 | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 |
| BOTTOM DEPTH | 1 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 6.6E-04 | 3.3E-02 | 3.3E-01 | 2.5E+00 | | 7.0E-04 | 6.3E-04 | 6.3E-04 | 6.3E-04 | 6.6E-04 | 3.6E-03 | 6.6E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.6E-04 | 3.3E-02 | 3.3E-01 | 2.5E+00 | | 7.0E-04 | 6.3E-04 | 6.3E-04 | 6.3E-04 | 6.6E-04 | 3.6E-03 | 6.6E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 8.5E-03 | 4.2E-01 | 4.3E+00 | 3.2E+01 | | 8.9E-03 | 8.0E-03 | 8.0E-03 | 8.0E-03 | 8.5E-03 | 4.5E-02 | 8.5E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.5E-03 | 4.2E-01 | 4.3E+00 | 3.2E+01 | | 8.9E-03 | 8.0E-03 | 8.0E-03 | 8.0E-03 | 8.5E-03 | 4.5E-02 | 8.5E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-558 | SB-559 | SB-559 | SB-559 | SB-560 | SB-560 | SB-560 | SB-561 | SB-561 | SB-561 | SB-562 | SB-562 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-558-SS0-0. | SB-559-2 | SB-559-SS0.5- | SB-559-SS0-0. | SB-560-2 | SB-560-SS0.5- | SB-560-SS0-0. | SB-561-2 | SB-561-SS0.5- | SB-561-SS0-0. | SB-562-2 | SB-562-SS0.5- |
| SAMPLE DATE | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 |
| BOTTOM DEPTH | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 6.8E-03 | 6.3E-04 | 6.3E-04 | 6.3E-04 | 6.3E-04 | 6.3E-04 | 6.3E-04 | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.8E-03 | 6.3E-04 | 6.3E-04 | 6.3E-04 | 6.3E-04 | 6.3E-04 | 6.3E-04 | | | | | |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 8.7E-02 | 8.0E-03 | 8.0E-03 | 8.0E-03 | 8.0E-03 | 8.0E-03 | 8.0E-03 | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.7E-02 | 8.0E-03 | 8.0E-03 | 8.0E-03 | 8.0E-03 | 8.0E-03 | 8.0E-03 | | | | | |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-562 | SB-563 | SB-563 | SB-563 | SB-564 | SB-564 | SB-564 | SB-565 | SB-565 | SB-565 | SB-566 | SB-566 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-562-SS0-0. | SB-563-2 | SB-563-SS0.5- | SB-563-SS0-0. | SB-564-2 | SB-564-SS0.5- | SB-564-SS0-0. | SB-565-2 | SB-565-SS0.5- | SB-565-SS0-0. | SB-566-2 | SB-566-SS0.5- |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 |
| BOTTOM DEPTH | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | 6.6E-04 | 6.3E-04 | 6.6E-04 | 5.9E-04 | 6.3E-04 | 6.3E-04 | 3.4E-03 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 6.3E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | | 6.6E-04 | 6.3E-04 | 6.6E-04 | 5.9E-04 | 6.3E-04 | 6.3E-04 | 3.4E-03 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 6.3E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | 8.5E-03 | 8.0E-03 | 8.5E-03 | 7.6E-03 | 8.0E-03 | 8.0E-03 | 4.3E-02 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 8.0E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | | 8.5E-03 | 8.0E-03 | 8.5E-03 | 7.6E-03 | 8.0E-03 | 8.0E-03 | 4.3E-02 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 8.0E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-566 | SB-567 | SB-567 | SB-567 | SB-568 | SB-568 | SB-568 | SB-569 | SB-569 | SB-569 | SB-570 | SB-570 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-566-SS0-0. | SB-567-2 | SB-567-SS0.5- | SB-567-SS0-0. | SB-568-2 | SB-568-SS0.5- | SB-568-SS0-0. | SB-569-2 | SB-569-SS0.5- | SB-569-SS0-0. | SB-570-2 | SB-570-SS0.5- |
| SAMPLE DATE | 20081022 | 20081023 | 20081023 | 20081023 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 | | 2 | 0.5 |
| BOTTOM DEPTH | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 | 0.5 | 2 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 3.2E-03 | 6.6E-04 | 6.6E-04 | 6.3E-04 | 6.3E-04 | 3.2E-02 | 3.1E-01 | 7.0E-04 | 2.4E-02 | 6.6E-01 | 6.3E-04 | 6.3E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 3.2E-03 | 6.6E-04 | 6.6E-04 | 6.3E-04 | 6.3E-04 | 3.2E-02 | 3.1E-01 | 7.0E-04 | 2.4E-02 | 6.6E-01 | 6.3E-04 | 6.3E-03 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 4.1E-02 | 8.5E-03 | 8.5E-03 | 8.0E-03 | 8.0E-03 | 4.0E-01 | 4.0E+00 | 8.9E-03 | 3.1E-01 | 8.5E+00 | 8.0E-03 | 8.0E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.1E-02 | 8.5E-03 | 8.5E-03 | 8.0E-03 | 8.0E-03 | 4.0E-01 | 4.0E+00 | 8.9E-03 | 3.1E-01 | 8.5E+00 | 8.0E-03 | 8.0E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-570 | SB-571 | SB-571 | SB-571 | SB-001 | SB-002 | SB-003 | SB-004 | SB-004 | SB-035 | SB-036 | SB-041 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-570-SS0-0.5 | SB-571-2 | SB-571-SS0.5-1 | SB-571-SS0-0.5 | SB-1A-SS | SB-2A-01 | SB-3A-SS | SB-04B-01 | SB-4A-SS | SB-35-SS | SB-36-SS | SB-41S-SS |
| SAMPLE DATE | 20081022 | 20081023 | 20081023 | 20081023 | 20040921 | 20040920 | 20040920 | 20050512 | 20040921 | 20040917 | 20040917 | 20041105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | 2 | 0.5 | | | 1 | | 1 | | | | |
| BOTTOM DEPTH | 0.5 | 2 | 1 | 0.5 | | 1 | | 1 | | | | |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | 2.6E-06 | 2.6E-06 | 2.1E-06 | | 3.8E-05 | 2.6E-06 | 2.6E-06 | |
| 1,2,4-TRICHLOROBENZENE | | | | | 8.6E-06 | 8.6E-06 | 7.1E-06 | | 4.0E-04 | 8.6E-06 | 8.6E-06 | |
| 1,4-DICHLOROBENZENE | | | | | 8.9E-08 | 8.9E-08 | 7.4E-08 | | 8.9E-08 | 8.9E-08 | 8.9E-08 | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 1.3E-02 | 6.6E-04 | 6.3E-04 | 6.3E-04 | 9.8E-03 | 1.0E-02 | 9.4E-03 | 1.3E-03 | 2.0E+00 | 9.8E-03 | 1.0E-02 | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | 3.2E-03 | 3.3E-03 | 2.8E-03 | | 3.1E-03 | 2.9E-03 | 3.3E-03 | |
| ARSENIC | | | | | 2.5E-03 | 2.2E-03 | 3.4E-03 | | 3.4E-03 | 2.1E-03 | 2.7E-03 | |
| CADMIUM | | | | | 1.7E-03 | 1.8E-03 | 1.5E-03 | | 1.7E-03 | 1.6E-03 | 1.8E-03 | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | 2.6E-04 | 2.6E-04 | 2.3E-04 | | 5.7E-04 | 2.4E-04 | 2.8E-04 | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | 6.9E-04 | 7.9E-04 | 2.1E-03 | | 1.5E-03 | 4.6E-04 | 1.1E-03 | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 9.7E-04 | 5.1E-04 | 7.7E-04 | | 9.2E-04 | 3.4E-04 | 7.7E-04 | |
| TOTAL HAZARD INDEX | 1.3E-02 | 6.6E-04 | 6.3E-04 | 6.3E-04 | 1.9E-02 | 1.9E-02 | 2.0E-02 | 1.3E-03 | 2.0E+00 | 1.7E-02 | 2.0E-02 | |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | 5.2E-05 | 5.2E-05 | 4.3E-05 | | 7.8E-04 | 5.2E-05 | 5.2E-05 | |
| 1,2,4-TRICHLOROBENZENE | | | | | 3.9E-05 | 3.9E-05 | 3.3E-05 | | 1.8E-03 | 3.9E-05 | 3.9E-05 | |
| 1,4-DICHLOROBENZENE | | | | | 8.4E-07 | 8.4E-07 | 7.0E-07 | | 8.4E-07 | 8.4E-07 | 8.4E-07 | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 1.6E-01 | 8.5E-03 | 8.0E-03 | 8.0E-03 | 1.2E-01 | 1.3E-01 | 1.2E-01 | 1.7E-02 | 2.6E+01 | 1.2E-01 | 1.3E-01 | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | 5.3E-02 | 5.5E-02 | 4.6E-02 | | 5.1E-02 | 4.7E-02 | 5.5E-02 | |
| ARSENIC | | | | | 5.1E-02 | 4.5E-02 | 6.9E-02 | | 6.9E-02 | 4.3E-02 | 5.5E-02 | |
| CADMIUM | | | | | 3.8E-02 | 3.9E-02 | 3.2E-02 | | 3.6E-02 | 3.4E-02 | 3.9E-02 | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | 3.3E-03 | 3.3E-03 | 2.9E-03 | | 7.2E-03 | 3.0E-03 | 3.6E-03 | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | 7.1E-03 | 8.2E-03 | 2.2E-02 | | 1.5E-02 | 4.7E-03 | 1.1E-02 | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 8.6E-03 | 4.5E-03 | 6.8E-03 | | 8.1E-03 | 3.0E-03 | 6.8E-03 | |
| TOTAL HAZARD INDEX | 1.6E-01 | 8.5E-03 | 8.0E-03 | 8.0E-03 | 2.9E-01 | 2.8E-01 | 3.0E-01 | 1.7E-02 | 2.6E+01 | 2.6E-01 | 3.0E-01 | |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-042 | SB-169 | SB-232 | SB-232 | SB-233 | SB-233 | SB-234 | SB-234 | SB-235 | SB-235 | SB-345 | SB-346 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-42S-SS | SB-169-SS | SB-232-01 | SB-232-SS | SB-233-01 | SB-233-SS | SB-234-01 | SB-234-SS | SB-235-01 | SB-235-SS | SB-345-0001 | SB-346-0001 |
| SAMPLE DATE | 20041105 | 20041105 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20050512 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | 1 | | 1 | | 1 | | 1 | | | |
| BOTTOM DEPTH | | | 1 | | 1 | | 1 | | 1 | | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | | 1.4E-03 | 1.3E-03 | 1.4E-03 | 1.3E-03 | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.2E-03 | 1.4E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | | | 1.4E-03 | 1.3E-03 | 1.4E-03 | 1.3E-03 | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.2E-03 | 1.4E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | | 1.7E-02 | 1.6E-02 | 1.7E-02 | 1.6E-02 | 1.7E-02 | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.7E-01 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | | | 1.7E-02 | 1.6E-02 | 1.7E-02 | 1.6E-02 | 1.7E-02 | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.7E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-347 | SB-348 | SB-349 | SB-350 | SB-351 | SB-352 | SB-353 | SB-354 | SB-355 | SB-356 | SB-357 | SB-358 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-347-0001 | SB-348-0001 | SB-349-0001 | SB-350-0001 | SB-351-0001 | SB-352-0001 | SB-353-0001 | SB-354-0001 | SB-355-0001 | SB-356-0001 | SB-357-0001 | SB-358-0001 |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 7.3E-02 | 1.5E-01 | 1.5E-01 | 2.9E-01 | 1.4E-01 | 9.8E-02 | 2.6E+01 | 2.9E+00 | 7.3E-01 | 1.6E-01 | 7.3E-02 | 1.4E-01 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.3E-02 | 1.5E-01 | 1.5E-01 | 2.9E-01 | 1.4E-01 | 9.8E-02 | 2.6E+01 | 2.9E+00 | 7.3E-01 | 1.6E-01 | 7.3E-02 | 1.4E-01 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 9.3E-01 | 1.9E+00 | 2.0E+00 | 3.6E+00 | 1.8E+00 | 1.2E+00 | 3.3E+02 | 3.7E+01 | 9.3E+00 | 2.0E+00 | 9.3E-01 | 1.7E+00 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.3E-01 | 1.9E+00 | 2.0E+00 | 3.6E+00 | 1.8E+00 | 1.2E+00 | 3.3E+02 | 3.7E+01 | 9.3E+00 | 2.0E+00 | 9.3E-01 | 1.7E+00 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-359 | SB-360 | SB-361 | SB-362 | SB-363 | SB-364 | SB-500 | SB-501 | SB-502 | SB-503 | SB-503 | SB-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-359-0001 | SB-360-0001 | SB-361-0001 | SB-362-0001 | SB-363-0001 | SB-364-0001 | SB-500-0001 | SB-501-0001 | SB-502-0001 | SB-503-0001 | B-503-0001-AV | SB-503-0001-D |
| SAMPLE DATE | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071102 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | 2.4E-06 | 2.5E-06 | 2.8E-07 | 2.5E-06 | 2.6E-06 | 2.8E-06 |
| 1,2,4-TRICHLOROBENZENE | | | | | | | 1.1E-06 | 8.3E-06 | 4.4E-06 | 1.4E-06 | 5.3E-06 | 9.3E-06 |
| 1,4-DICHLOROBENZENE | | | | | | | 8.4E-08 | 8.6E-08 | 8.7E-08 | 8.6E-08 | 9.1E-08 | 9.6E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 2.6E-02 | 1.4E-01 | 1.3E+00 | 2.8E-02 | 1.5E-01 | 7.3E-02 | 1.3E-03 | 2.6E-01 | 1.4E-02 | 1.4E-02 | 7.5E-03 | 1.5E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | 1.8E-04 | 1.3E-03 | 1.4E-04 | 5.1E-03 | 3.1E-03 | 1.1E-03 |
| ARSENIC | | | | | | | 3.0E-03 | 7.8E-03 | 4.1E-03 | 5.9E-03 | 5.6E-03 | 5.2E-03 |
| CADMIUM | | | | | | | 2.5E-04 | 2.5E-04 | 2.4E-04 | 1.9E-03 | 1.4E-03 | 1.0E-03 |
| COBALT | | | | | | | 5.0E-03 | 8.9E-03 | 4.1E-03 | 9.3E-03 | 7.5E-03 | 5.8E-03 |
| IRON | | | | | | | 1.0E-02 | 1.1E-02 | 4.4E-03 | 1.1E-02 | 8.4E-03 | 6.3E-03 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | 4.3E-03 | 4.7E-03 | 7.3E-03 | 1.2E-01 | 7.0E-02 | 1.8E-02 |
| MERCURY | | | | | | | 4.5E-05 | 2.9E-04 | 4.7E-05 | 4.5E-05 | 6.1E-04 | 1.2E-03 |
| MOLYBDENUM | | | | | | | 1.9E-05 | 2.3E-05 | 1.2E-05 | 6.5E-05 | 4.2E-05 | 1.8E-05 |
| NICKEL | | | | | | | 5.1E-04 | 7.1E-04 | 6.1E-04 | 1.2E-03 | 9.3E-04 | 7.0E-04 |
| VANADIUM | | | | | | | 1.5E-03 | 2.3E-03 | 1.4E-03 | 5.9E-03 | 4.7E-03 | 3.5E-03 |
| HEXAVALENT CHROMIUM | | | | | | | 5.1E-04 | 7.1E-04 | 4.3E-04 | 1.7E-03 | 1.3E-03 | 9.2E-04 |
| TOTAL HAZARD INDEX | 2.6E-02 | 1.4E-01 | 1.3E+00 | 2.8E-02 | 1.5E-01 | 7.3E-02 | 2.7E-02 | 3.0E-01 | 3.6E-02 | 1.8E-01 | 1.1E-01 | 4.6E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | 4.9E-05 | 5.0E-05 | 5.6E-06 | 5.0E-05 | 5.3E-05 | 5.6E-05 |
| 1,2,4-TRICHLOROBENZENE | | | | | | | 5.0E-06 | 3.8E-05 | 2.0E-05 | 6.5E-06 | 2.5E-05 | 4.3E-05 |
| 1,4-DICHLOROBENZENE | | | | | | | 8.0E-07 | 8.2E-07 | 8.3E-07 | 8.2E-07 | 8.7E-07 | 9.1E-07 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 3.3E-01 | 1.7E+00 | 1.7E+01 | 3.6E-01 | 2.0E+00 | 9.3E-01 | 1.6E-02 | 3.4E+00 | 1.7E-01 | 1.7E-01 | 9.6E-02 | 1.9E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | 3.0E-03 | 2.1E-02 | 2.3E-03 | 8.3E-02 | 5.1E-02 | 1.9E-02 |
| ARSENIC | | | | | | | 6.0E-02 | 1.6E-01 | 8.3E-02 | 1.2E-01 | 1.1E-01 | 1.1E-01 |
| CADMIUM | | | | | | | 5.4E-03 | 5.4E-03 | 5.1E-03 | 4.1E-02 | 3.1E-02 | 2.2E-02 |
| COBALT | | | | | | | 1.2E-01 | 2.1E-01 | 9.6E-02 | 2.2E-01 | 1.8E-01 | 1.4E-01 |
| IRON | | | | | | | 2.5E-01 | 2.6E-01 | 1.1E-01 | 2.5E-01 | 2.0E-01 | 1.5E-01 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | 4.4E-02 | 4.8E-02 | 7.4E-02 | 1.2E+00 | 7.2E-01 | 1.9E-01 |
| MERCURY | | | | | | | 5.7E-04 | 3.6E-03 | 6.0E-04 | 5.7E-04 | 7.7E-03 | 1.5E-02 |
| MOLYBDENUM | | | | | | | 4.5E-04 | 5.5E-04 | 2.9E-04 | 1.6E-03 | 9.9E-04 | 4.3E-04 |
| NICKEL | | | | | | | 5.2E-03 | 7.3E-03 | 6.3E-03 | 1.2E-02 | 9.6E-03 | 7.2E-03 |
| VANADIUM | | | | | | | 3.5E-02 | 5.5E-02 | 3.3E-02 | 1.4E-01 | 1.1E-01 | 8.4E-02 |
| HEXAVALENT CHROMIUM | | | | | | | 4.5E-03 | 6.2E-03 | 3.8E-03 | 1.5E-02 | 1.2E-02 | 8.1E-03 |
| TOTAL HAZARD INDEX | 3.3E-01 | 1.7E+00 | 1.7E+01 | 3.6E-01 | 2.0E+00 | 9.3E-01 | 5.4E-01 | 4.2E+00 | 5.8E-01 | 2.3E+00 | 1.5E+00 | 7.5E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-504 | SB-505 | SB-506 | SB-506 | SB-506 | SB-507 | SB-508 | SB-509 | SB-510 | SB-511 | SB-512 | SB-513 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-504-0001 | SB-505-0001 | SB-506-0001 | B-506-0001-AV | SB-506-0001-D | SB-507-0001 | SB-508-0001 | SB-509-0001 | SB-510-0001 | SB-511-0001 | SB-512-0001 | SB-513-0001 |
| SAMPLE DATE | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 | 20071128 | 20071129 | 20071129 | 20071129 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.3E-06 | 2.6E-06 | 2.4E-06 | 2.5E-06 | 2.5E-06 | 2.5E-06 | 2.5E-06 | 2.5E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.5E-06 |
| 1,2,4-TRICHLOROBENZENE | 7.8E-06 | 8.6E-06 | 8.1E-06 | 8.2E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.3E-06 | 8.0E-06 | 8.1E-06 | 8.0E-06 | 8.3E-06 |
| 1,4-DICHLOROBENZENE | 8.2E-08 | 8.9E-08 | 8.4E-08 | 8.5E-08 | 8.6E-08 | 8.6E-08 | 8.6E-08 | 8.6E-08 | 8.3E-08 | 8.4E-08 | 8.3E-08 | 8.6E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 6.3E-03 | 7.0E-01 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.4E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | 1.0E-04 | 2.0E-03 | 8.4E-05 | 7.6E-05 | 6.8E-05 | 1.5E-04 | 1.6E-04 | 7.1E-05 | 6.7E-04 | 5.3E-04 | 1.9E-04 | 4.1E-04 |
| ARSENIC | 1.2E-03 | 8.0E-03 | 4.1E-03 | 4.0E-03 | 3.9E-03 | 4.8E-03 | 5.7E-03 | 3.4E-03 | 2.2E-02 | 1.2E-03 | 3.4E-03 | 3.9E-03 |
| CADMIUM | 5.1E-04 | 8.0E-03 | 8.7E-06 | 1.6E-05 | 2.2E-05 | 1.4E-04 | 5.5E-05 | 7.5E-06 | 4.5E-05 | 3.6E-05 | 1.2E-04 | 1.4E-04 |
| COBALT | 8.5E-03 | 7.4E-03 | 3.9E-03 | 4.2E-03 | 4.5E-03 | 2.0E-02 | 5.1E-02 | 7.2E-03 | 7.2E-03 | 7.8E-03 | 6.9E-03 | 7.2E-03 |
| IRON | 1.6E-02 | 7.2E-03 | 1.1E-02 | 9.3E-03 | 7.8E-03 | 1.6E-02 | 1.1E-02 | 8.2E-03 | 1.1E-02 | 1.9E-02 | 1.0E-02 | 1.1E-02 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 2.1E-02 | 1.0E-03 | 1.5E-02 | 9.7E-03 | 4.1E-03 | 1.2E-02 | 3.7E-03 | 2.4E-03 | 7.4E-03 | 4.8E-03 | 5.9E-03 | 1.1E-02 |
| MERCURY | 1.9E-03 | 6.1E-04 | 4.5E-05 | 4.5E-05 | 4.5E-05 | 1.4E-03 | 4.5E-05 | 4.5E-05 | 4.5E-05 | 4.5E-05 | 4.5E-05 | 4.5E-05 |
| MOLYBDENUM | 4.3E-05 | 1.3E-04 | 1.7E-05 | 1.4E-05 | 1.1E-05 | 8.3E-06 | 3.2E-05 | 8.9E-06 | 3.5E-04 | 5.0E-06 | 1.7E-05 | 4.3E-06 |
| NICKEL | 7.3E-04 | 2.0E-03 | 4.3E-04 | 5.0E-04 | 5.7E-04 | 1.7E-03 | 9.6E-04 | 3.4E-04 | 1.2E-03 | 1.7E-03 | 9.2E-04 | 6.9E-04 |
| VANADIUM | 2.5E-03 | 6.7E-03 | 1.4E-03 | 1.5E-03 | 1.7E-03 | 1.9E-03 | 1.8E-03 | 1.3E-03 | 9.4E-04 | 2.3E-03 | 1.6E-03 | 1.2E-03 |
| HEXAVALENT CHROMIUM | 6.5E-04 | 4.3E-03 | 3.6E-04 | 4.4E-04 | 5.2E-04 | 5.7E-04 | 5.7E-04 | 3.2E-04 | 5.2E-04 | 7.9E-04 | 5.8E-04 | 6.5E-04 |
| TOTAL HAZARD INDEX | 6.0E-02 | 7.4E-01 | 3.8E-02 | 3.1E-02 | 2.5E-02 | 6.0E-02 | 7.6E-02 | 2.5E-02 | 5.2E-02 | 4.0E-02 | 3.1E-02 | 3.7E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 4.8E-05 | 5.2E-05 | 4.9E-05 | 5.0E-05 | 5.0E-05 | 5.0E-05 | 5.0E-05 | 5.0E-05 | 4.9E-05 | 4.9E-05 | 4.9E-05 | 5.0E-05 |
| 1,2,4-TRICHLOROBENZENE | 3.6E-05 | 3.9E-05 | 3.7E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.7E-05 | 3.7E-05 | 3.7E-05 | 3.8E-05 |
| 1,4-DICHLOROBENZENE | 7.7E-07 | 8.4E-07 | 8.0E-07 | 8.1E-07 | 8.2E-07 | 8.2E-07 | 8.2E-07 | 8.2E-07 | 7.9E-07 | 8.0E-07 | 7.9E-07 | 8.2E-07 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 8.0E-02 | 8.9E+00 | 1.7E-02 | 1.7E-02 | 1.7E-02 | 1.7E-02 | 1.7E-02 | 1.7E-02 | 1.6E-02 | 1.7E-02 | 1.6E-02 | 1.7E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | 1.7E-03 | 3.4E-02 | 1.4E-03 | 1.3E-03 | 1.1E-03 | 2.5E-03 | 2.7E-03 | 1.2E-03 | 1.1E-02 | 8.7E-03 | 3.1E-03 | 6.8E-03 |
| ARSENIC | 2.4E-02 | 1.6E-01 | 8.3E-02 | 8.1E-02 | 7.9E-02 | 9.7E-02 | 1.2E-01 | 6.9E-02 | 4.4E-01 | 2.4E-02 | 6.9E-02 | 7.9E-02 |
| CADMIUM | 1.1E-02 | 1.7E-01 | 1.9E-04 | 3.4E-04 | 4.9E-04 | 3.0E-03 | 1.2E-03 | 1.6E-04 | 9.7E-04 | 7.8E-04 | 2.5E-03 | 3.0E-03 |
| COBALT | 2.0E-01 | 1.8E-01 | 9.2E-02 | 9.9E-02 | 1.1E-01 | 4.7E-01 | 1.2E+00 | 1.7E-01 | 1.7E-01 | 1.8E-01 | 1.6E-01 | 1.7E-01 |
| IRON | 3.9E-01 | 1.7E-01 | 2.6E-01 | 2.2E-01 | 1.9E-01 | 3.8E-01 | 2.6E-01 | 2.0E-01 | 2.5E-01 | 4.6E-01 | 2.5E-01 | 2.6E-01 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 2.1E-01 | 1.0E-02 | 1.6E-01 | 1.0E-01 | 4.2E-02 | 1.2E-01 | 3.8E-02 | 2.5E-02 | 7.6E-02 | 4.9E-02 | 6.1E-02 | 1.1E-01 |
| MERCURY | 2.4E-02 | 7.8E-03 | 5.7E-04 | 5.7E-04 | 5.7E-04 | 1.7E-02 | 5.7E-04 | 5.7E-04 | 5.7E-04 | 5.7E-04 | 5.7E-04 | 5.7E-04 |
| MOLYBDENUM | 1.0E-03 | 3.2E-03 | 3.9E-04 | 3.2E-04 | 2.5E-04 | 2.0E-04 | 7.6E-04 | 2.1E-04 | 8.4E-03 | 1.2E-04 | 4.1E-04 | 1.0E-04 |
| NICKEL | 7.5E-03 | 2.0E-02 | 4.5E-03 | 5.2E-03 | 5.9E-03 | 1.7E-02 | 9.9E-03 | 3.5E-03 | 1.2E-02 | 1.8E-02 | 9.5E-03 | 7.1E-03 |
| VANADIUM | 6.0E-02 | 1.6E-01 | 3.4E-02 | 3.7E-02 | 3.9E-02 | 4.5E-02 | 4.2E-02 | 3.0E-02 | 2.2E-02 | 5.4E-02 | 3.8E-02 | 2.8E-02 |
| HEXAVALENT CHROMIUM | 5.7E-03 | 3.8E-02 | 3.2E-03 | 3.9E-03 | 4.6E-03 | 5.1E-03 | 5.0E-03 | 2.8E-03 | 4.6E-03 | 7.0E-03 | 5.2E-03 | 5.7E-03 |
| TOTAL HAZARD INDEX | 1.0E+00 | 9.9E+00 | 6.5E-01 | 5.7E-01 | 4.8E-01 | 1.2E+00 | 1.7E+00 | 5.2E-01 | 1.0E+00 | 8.2E-01 | 6.2E-01 | 6.9E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-514 | SB-515 | SB-516 | SB-517 | SB-518 | SB-519 | SB-520 | SB-521 | SB-522 | SB-523 | SB-524 | SB-525 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-514-0001 | SB-515-0001 | SB-516-0001 | SB-517-0001 | SB-518-0001 | SB-519-0001 | SB-520-0001 | SB-521-0001 | SB-522-0001 | SB-523-0001 | SB-524-0001 | SB-525-0001 |
| SAMPLE DATE | 20071129 | 20071129 | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.5E-06 | 2.5E-06 | 2.6E-06 | 2.4E-06 | 2.6E-06 | 2.5E-06 | 2.6E-06 | | | | | |
| 1,2,4-TRICHLOROBENZENE | 8.3E-06 | 8.4E-06 | 8.6E-06 | 8.1E-06 | 8.6E-06 | 8.4E-06 | 8.8E-06 | | | | | |
| 1,4-DICHLOROBENZENE | 8.6E-08 | 8.7E-08 | 8.9E-08 | 8.4E-08 | 8.9E-08 | 8.7E-08 | 9.2E-08 | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 1.3E-03 | 1.4E-03 | 1.4E-03 | 1.3E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 | 1.5E-02 | 1.4E-02 | 1.3E-02 | 2.8E-01 | 3.0E-01 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | 2.3E-04 | 6.7E-04 | 5.3E-04 | 4.1E-04 | 4.1E-04 | 2.8E-04 | 5.1E-04 | | | | | |
| ARSENIC | 3.4E-03 | 2.3E-03 | 2.1E-03 | 2.5E-03 | 5.0E-03 | 3.7E-03 | 1.9E-03 | | | | | |
| CADMIUM | 9.7E-04 | 5.6E-04 | 2.0E-04 | 8.7E-05 | 2.7E-05 | 2.4E-05 | 3.6E-05 | | | | | |
| COBALT | 3.3E-02 | 7.6E-03 | 5.2E-03 | 1.1E-02 | 7.2E-03 | 7.1E-03 | 8.5E-03 | | | | | |
| IRON | 1.3E-02 | 9.4E-03 | 1.3E-02 | 1.4E-02 | 2.4E-02 | 1.2E-02 | 1.4E-02 | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 1.2E-02 | 1.4E-02 | 6.2E-03 | 5.8E-03 | 7.6E-03 | 6.7E-03 | 3.7E-03 | | | | | |
| MERCURY | 4.5E-05 | 3.4E-04 | 8.9E-04 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.9E-05 | | | | | |
| MOLYBDENUM | 4.5E-06 | 5.2E-06 | 1.3E-05 | 6.6E-06 | 1.0E-05 | 8.9E-06 | 7.1E-05 | | | | | |
| NICKEL | 1.6E-03 | 1.3E-03 | 1.2E-03 | 1.4E-03 | 7.8E-04 | 8.6E-04 | 1.1E-03 | | | | | |
| VANADIUM | 2.1E-03 | 1.7E-03 | 2.2E-03 | 1.8E-03 | 1.9E-03 | 2.2E-03 | 1.3E-03 | | | | | |
| HEXAVALENT CHROMIUM | 8.1E-04 | 5.8E-04 | 6.0E-04 | 4.8E-04 | 5.9E-04 | 5.4E-04 | 3.8E-04 | | | | | |
| TOTAL HAZARD INDEX | 6.8E-02 | 3.9E-02 | 3.4E-02 | 3.8E-02 | 4.9E-02 | 3.4E-02 | 3.3E-02 | 1.5E-02 | 1.4E-02 | 1.3E-02 | 2.8E-01 | 3.0E-01 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 5.0E-05 | 5.1E-05 | 5.2E-05 | 4.9E-05 | 5.2E-05 | 5.1E-05 | 5.4E-05 | | | | | |
| 1,2,4-TRICHLOROBENZENE | 3.8E-05 | 3.9E-05 | 3.9E-05 | 3.7E-05 | 3.9E-05 | 3.9E-05 | 4.1E-05 | | | | | |
| 1,4-DICHLOROBENZENE | 8.2E-07 | 8.3E-07 | 8.4E-07 | 8.0E-07 | 8.4E-07 | 8.3E-07 | 8.7E-07 | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 1.7E-02 | 1.7E-02 | 1.7E-02 | 1.6E-02 | 1.8E-02 | 1.7E-02 | 1.8E-02 | 1.9E-01 | 1.8E-01 | 1.7E-01 | 3.5E+00 | 3.8E+00 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | 3.7E-03 | 1.1E-02 | 8.7E-03 | 6.8E-03 | 6.8E-03 | 4.6E-03 | 8.3E-03 | | | | | |
| ARSENIC | 6.9E-02 | 4.6E-02 | 4.3E-02 | 5.1E-02 | 1.0E-01 | 7.4E-02 | 3.8E-02 | | | | | |
| CADMIUM | 2.1E-02 | 1.2E-02 | 4.3E-03 | 1.9E-03 | 5.9E-04 | 5.1E-04 | 7.8E-04 | | | | | |
| COBALT | 7.7E-01 | 1.8E-01 | 1.2E-01 | 2.5E-01 | 1.7E-01 | 1.7E-01 | 2.0E-01 | | | | | |
| IRON | 3.0E-01 | 2.2E-01 | 3.1E-01 | 3.3E-01 | 5.6E-01 | 2.7E-01 | 3.3E-01 | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 1.2E-01 | 1.4E-01 | 6.3E-02 | 6.0E-02 | 7.7E-02 | 6.8E-02 | 3.8E-02 | | | | | |
| MERCURY | 5.7E-04 | 4.3E-03 | 1.1E-02 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 6.3E-04 | | | | | |
| MOLYBDENUM | 1.1E-04 | 1.2E-04 | 3.0E-04 | 1.6E-04 | 2.4E-04 | 2.1E-04 | 1.7E-03 | | | | | |
| NICKEL | 1.7E-02 | 1.3E-02 | 1.2E-02 | 1.4E-02 | 8.1E-03 | 8.8E-03 | 1.1E-02 | | | | | |
| VANADIUM | 4.9E-02 | 3.9E-02 | 5.3E-02 | 4.2E-02 | 4.6E-02 | 5.3E-02 | 3.2E-02 | | | | | |
| HEXAVALENT CHROMIUM | 7.1E-03 | 5.1E-03 | 5.3E-03 | 4.2E-03 | 5.2E-03 | 4.7E-03 | 3.4E-03 | | | | | |
| TOTAL HAZARD INDEX | 1.4E+00 | 6.9E-01 | 6.5E-01 | 7.8E-01 | 1.0E+00 | 6.7E-01 | 6.9E-01 | 1.9E-01 | 1.8E-01 | 1.7E-01 | 3.5E+00 | 3.8E+00 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-526 | SB-527 | SB-528 | SB-529 | SB-530 | SB-531 | SB-532 | SB-533 | SB-534 | SB-535 | SB-536 | SB-537 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-526-0001 | SB-527-0001 | SB-528-0001 | SB-529-0001 | SB-530-0001 | SB-531-0001 | SB-532-0001 | SB-533-0001 | SB-534-0001 | SB-535-0001 | SB-536-0001 | SB-537-0001 |
| SAMPLE DATE | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 | 20071204 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 7.7E-01 | 2.5E-01 | 1.5E-01 | 7.0E+00 | 3.1E+00 | 1.3E+00 | 1.5E-02 | 3.1E-01 | 3.4E-01 | 6.6E-02 | 9.1E-01 | 8.7E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.7E-01 | 2.5E-01 | 1.5E-01 | 7.0E+00 | 3.1E+00 | 1.3E+00 | 1.5E-02 | 3.1E-01 | 3.4E-01 | 6.6E-02 | 9.1E-01 | 8.7E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 9.8E+00 | 3.2E+00 | 1.9E+00 | 8.9E+01 | 4.0E+01 | 1.7E+01 | 1.9E-01 | 3.9E+00 | 4.3E+00 | 8.5E-01 | 1.2E+01 | 1.1E+00 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.8E+00 | 3.2E+00 | 1.9E+00 | 8.9E+01 | 4.0E+01 | 1.7E+01 | 1.9E-01 | 3.9E+00 | 4.3E+00 | 8.5E-01 | 1.2E+01 | 1.1E+00 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-538 | SB-539 | SB-818 | SB-819 | SB-820 | SB-821 | SB-822 | SB-823 | SB-824 | SB-825 | SB-827 | SB-828 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-538-0001 | SB-539-0001 | E-SB-818-SS | E-SB-819-SS | E-SB-820-SS | E-SB-821-SS | E-SB-822-SS | E-SB-823-SS | E-SB-824-SS | E-SB-825-SS | E-SB-827-SS | E-SB-828-SS |
| SAMPLE DATE | 20071204 | 20071204 | 20100915 | 20100915 | 20100915 | 20100916 | 20100915 | 20100915 | 20100915 | 20100913 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 3.1E-02 | 1.5E-01 | 6.6E-04 | 6.3E-04 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 3.1E-02 | 1.5E-01 | 6.6E-04 | 6.3E-04 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 3.9E-01 | 1.9E+00 | 8.5E-03 | 8.0E-03 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 3.9E-01 | 1.9E+00 | 8.5E-03 | 8.0E-03 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-829 | SB-830 | SB-831 | SB-832 | SB-833 | SB-833A | SB-833B | SB-833C | SB-833D | SB-833E | SB-833F | SB-833G |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-829-SS | E-SB-830-SS | E-SB-831-SS | E-SB-832-SS | E-SB-833-SS | E-SB-833A-02 | E-SB-833B-02 | E-SB-833C-02 | E-SB-833D-02 | E-SB-833E-02 | E-SB-833F-02 | E-SB-833G-02 |
| SAMPLE DATE | 20100917 | 20100914 | 20100913 | 20100917 | 20100916 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | 1.7E-07 | 1.2E-04 | 1.2E-07 | 1.3E-07 | 3.3E-02 | 2.4E-04 | 1.3E-07 |
| 1,2,4-TRICHLOROBENZENE | | | | | | 5.1E-07 | 4.0E-04 | 1.6E-06 | 7.4E-07 | 5.1E-01 | 3.4E-03 | 9.7E-07 |
| 1,4-DICHLOROBENZENE | | | | | | 1.0E-08 | 3.6E-07 | 7.4E-09 | 7.9E-09 | 4.4E-05 | 1.2E-06 | 3.9E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 3.2E-03 | 7.7E-04 | 6.3E-04 | 1.4E-02 | 7.0E-04 | 7.3E-04 | 7.0E-01 | 7.3E-02 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.0E-04 | 6.6E-04 | 6.6E-04 | 3.2E-03 | 7.7E-04 | 6.3E-04 | 1.5E-02 | 7.0E-04 | 7.3E-04 | 1.2E+00 | 7.7E-02 | 7.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | 3.5E-06 | 2.4E-03 | 2.5E-06 | 2.7E-06 | 6.8E-01 | 4.9E-03 | 2.7E-06 |
| 1,2,4-TRICHLOROBENZENE | | | | | | 2.4E-06 | 1.8E-03 | 7.2E-06 | 3.4E-06 | 2.4E+00 | 1.6E-02 | 4.4E-06 |
| 1,4-DICHLOROBENZENE | | | | | | 9.7E-08 | 3.4E-06 | 7.0E-08 | 7.5E-08 | 4.2E-04 | 1.2E-05 | 3.7E-07 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 4.0E-02 | 9.8E-03 | 8.0E-03 | 1.8E-01 | 8.9E-03 | 9.3E-03 | 8.9E+00 | 9.3E-01 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.9E-03 | 8.5E-03 | 8.5E-03 | 4.0E-02 | 9.8E-03 | 8.0E-03 | 1.9E-01 | 8.9E-03 | 9.3E-03 | 1.2E+01 | 9.5E-01 | 8.9E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-833H | SB-833J | SB-833K | SB-833L | SB-833M | SB-833N | SB-834 | SB-835 | SB-836 | SB-837 | SB-838 | SB-839 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833H-02 | E-SB-833J-02 | E-SB-833K-02 | E-SB-833L-02 | E-SB-833M-02 | E-SB-833N-02 | E-SB-834-SS | E-SB-835-SS | E-SB-836-SS | E-SB-837-SS | E-SB-838-SS | E-SB-839-SS |
| SAMPLE DATE | 20101012 | 20101013 | 20101013 | 20101013 | 20101013 | 20101014 | 20100916 | 20100917 | 20100917 | 20100917 | 20100913 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | | | | | | |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.4E-07 | 4.0E-05 | 3.7E-02 | 2.6E-04 | 9.4E-06 | 1.3E-07 | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.6E-06 | 7.4E-04 | 6.0E-01 | 4.6E-03 | 1.3E-04 | 3.1E-07 | | | | | | |
| 1,4-DICHLOROBENZENE | 8.6E-09 | 3.6E-07 | 8.0E-05 | 1.1E-06 | 8.6E-09 | 7.9E-09 | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 6.6E-04 | 7.0E-03 | 1.4E+00 | 7.0E-04 | 7.0E-03 | 7.0E-04 | 6.6E-04 | 7.0E-03 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 1.8E-01 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.6E-04 | 7.7E-03 | 2.0E+00 | 5.5E-03 | 7.1E-03 | 7.0E-04 | 6.6E-04 | 7.0E-03 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 1.8E-01 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.9E-06 | 8.1E-04 | 7.4E-01 | 5.2E-03 | 1.9E-04 | 2.7E-06 | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 7.2E-06 | 3.4E-03 | 2.7E+00 | 2.1E-02 | 6.1E-04 | 1.4E-06 | | | | | | |
| 1,4-DICHLOROBENZENE | 8.2E-08 | 3.4E-06 | 7.6E-04 | 1.1E-05 | 8.2E-08 | 7.5E-08 | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 8.5E-03 | 8.9E-02 | 1.7E+01 | 8.9E-03 | 8.9E-02 | 8.9E-03 | 8.5E-03 | 8.9E-02 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 2.4E+00 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.5E-03 | 9.3E-02 | 2.1E+01 | 3.5E-02 | 9.0E-02 | 8.9E-03 | 8.5E-03 | 8.9E-02 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 2.4E+00 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-840 | SB-841 | SB-842 | SB-843 | SB-844 | SB-845 | SB-846 | SB-847 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-840-SS | E-SB-841-SS | E-SB-842-SS | E-SB-843-SS | E-SB-844-SS | E-SB-845-SS | E-SB-846-SS | E-SB-847-SS |
| SAMPLE DATE | 20100914 | 20100914 | 20100913 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | |
| AROCLOR-1254 | 6.3E-04 | 6.3E-02 | 6.6E-04 | 6.6E-04 | 6.6E-03 | 3.2E-01 | 6.6E-04 | 6.3E-04 |
| AROCLOR-1260 | | | | | | | | |
| ANTIMONY | | | | | | | | |
| ARSENIC | | | | | | | | |
| CADMIUM | | | | | | | | |
| COBALT | | | | | | | | |
| IRON | | | | | | | | |
| LEAD | | | | | | | | |
| MANGANESE | | | | | | | | |
| MERCURY | | | | | | | | |
| MOLYBDENUM | | | | | | | | |
| NICKEL | | | | | | | | |
| VANADIUM | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | |
| TOTAL HAZARD INDEX | 6.3E-04 | 6.3E-02 | 6.6E-04 | 6.6E-04 | 6.6E-03 | 3.2E-01 | 6.6E-04 | 6.3E-04 |
| **RESIDENTIAL** | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | |
| AROCLOR-1254 | 8.0E-03 | 8.0E-01 | 8.5E-03 | 8.5E-03 | 8.5E-02 | 4.0E+00 | 8.5E-03 | 8.0E-03 |
| AROCLOR-1260 | | | | | | | | |
| ANTIMONY | | | | | | | | |
| ARSENIC | | | | | | | | |
| CADMIUM | | | | | | | | |
| COBALT | | | | | | | | |
| IRON | | | | | | | | |
| LEAD | | | | | | | | |
| MANGANESE | | | | | | | | |
| MERCURY | | | | | | | | |
| MOLYBDENUM | | | | | | | | |
| NICKEL | | | | | | | | |
| VANADIUM | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | |
| TOTAL HAZARD INDEX | 8.0E-03 | 8.0E-01 | 8.5E-03 | 8.5E-03 | 8.5E-02 | 4.0E+00 | 8.5E-03 | 8.0E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-818 | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-818-03 | E-SB-818-05 | E-SB-818-07 | E-SB-818-09 | E-SB-819-03 | E-SB-819-05 | E-SB-819-07 | E-SB-819-07-AV | E-SB-819-07-D | E-SB-819-09 | E-SB-820-03 | E-SB-820-05 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 9.0E-09 | 1.1E-08 | 1.0E-08 | 1.1E-08 | 9.0E-09 | 1.0E-08 | 9.0E-09 | 8.7E-09 | 8.5E-09 | 1.0E-08 | 9.5E-09 | 1.0E-08 |
| AROCLOR-1260 | 9.0E-09 | 1.1E-08 | 1.0E-08 | 1.1E-08 | 9.6E-08 | 1.0E-08 | 9.0E-09 | 8.7E-09 | 8.5E-09 | 5.4E-08 | 9.5E-09 | 1.0E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.8E-08 | 2.2E-08 | 2.0E-08 | 2.2E-08 | 1.0E-07 | 2.0E-08 | 1.8E-08 | 1.7E-08 | 1.7E-08 | 6.4E-08 | 1.9E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 4.5E-08 | 5.4E-08 | 5.0E-08 | 5.4E-08 | 4.5E-08 | 5.0E-08 | 4.5E-08 | 4.3E-08 | 4.2E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 |
| AROCLOR-1260 | 4.5E-08 | 5.4E-08 | 5.0E-08 | 5.4E-08 | 4.8E-07 | 5.0E-08 | 4.5E-08 | 4.3E-08 | 4.2E-08 | 2.7E-07 | 4.7E-08 | 5.0E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.9E-08 | 1.1E-07 | 9.9E-08 | 1.1E-07 | 5.2E-07 | 9.9E-08 | 8.9E-08 | 8.7E-08 | 8.4E-08 | 3.2E-07 | 9.4E-08 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-820 | SB-820 | SB-821 | SB-821 | SB-821 | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-822 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-820-07 | E-SB-820-09 | E-SB-821-03 | E-SB-821-05 | E-SB-821-07 | E-SB-821-09 | SB-821-09-AV | E-SB-821-09-D | E-SB-822-03 | E-SB-822-05 | SB-822-05-AV | E-SB-822-05-D |
| SAMPLE DATE | 20100915 | 20100915 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.1E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 3.7E-08 | 1.0E-08 | 6.0E-08 | 4.1E-08 | 2.3E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-08 | 2.0E-08 | 2.1E-08 | 4.6E-08 | 2.0E-08 | 7.1E-08 | 5.2E-08 | 3.3E-08 | 2.0E-08 | 2.1E-08 | 2.1E-08 | 2.1E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 4.7E-08 | 5.0E-08 | 5.2E-08 | 4.7E-08 | 5.0E-08 | 5.4E-08 | 5.3E-08 | 5.2E-08 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 5.2E-08 |
| AROCLOR-1260 | 4.7E-08 | 5.0E-08 | 5.2E-08 | 1.8E-07 | 5.0E-08 | 3.0E-07 | 2.1E-07 | 1.1E-07 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 5.2E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.4E-08 | 9.9E-08 | 1.0E-07 | 2.3E-07 | 9.9E-08 | 3.5E-07 | 2.6E-07 | 1.7E-07 | 9.9E-08 | 1.0E-07 | 1.0E-07 | 1.0E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-822 | SB-822 | SB-823 | SB-823 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 | SB-825 | SB-825 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-822-07 | E-SB-822-09 | E-SB-823-05 | E-SB-823-07 | E-SB-824-03 | E-SB-824-05 | E-SB-824-07 | E-SB-824-07-AV | E-SB-824-07-D | E-SB-824-09 | E-SB-825-03 | E-SB-825-05 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 3.7E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-08 | 2.0E-08 | 2.1E-08 | 2.1E-08 | 1.9E-08 | 4.6E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.1E-08 | 1.9E-08 | 2.1E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 4.7E-08 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 4.7E-08 | 5.2E-08 |
| AROCLOR-1260 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 4.7E-08 | 1.8E-07 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 4.7E-08 | 5.2E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.9E-08 | 9.9E-08 | 1.0E-07 | 1.0E-07 | 9.4E-08 | 2.3E-07 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 1.0E-07 | 9.4E-08 | 1.0E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-826 | SB-826 | SB-827 | SB-827 | SB-827 | SB-827 | SB-828 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-07 | E-SB-825-09 | E-SB-826-05 | E-SB-826-07 | E-SB-826-09 | SB-826-09-AV | E-SB-826-09-D | E-SB-827-03 | E-SB-827-05 | E-SB-827-07 | E-SB-827-09 | E-SB-828-03 |
| SAMPLE DATE | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.9E-07 | 1.0E-05 | 1.0E-08 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 2.5E-06 | 2.6E-04 | 3.0E-07 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.7E-06 | 2.7E-04 | 3.1E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 9.7E-07 | 5.0E-05 | 5.0E-08 |
| AROCLOR-1260 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 1.2E-05 | 1.3E-03 | 1.5E-06 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 1.3E-05 | 1.3E-03 | 1.5E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-828 | SB-829 | SB-829 | SB-829 | SB-829 | SB-830 | SB-830 | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-828-09 | E-SB-829-03 | E-SB-829-05 | E-SB-829-07 | E-SB-829-09 | E-SB-830-03 | E-SB-830-05 | E-SB-830-07 | E-SB-830-09 | E-SB-831-03 | E-SB-831-05 | E-SB-831-07 |
| SAMPLE DATE | 20100916 | 20100917 | 20100917 | 20100917 | 20100917 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.0E-09 | 1.0E-08 |
| AROCLOR-1260 | 1.3E-07 | 1.0E-08 | 1.0E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.0E-09 | 1.0E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-07 | 2.0E-08 | 2.0E-08 | 2.3E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.1E-08 | 2.0E-08 | 1.8E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.7E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 4.5E-08 | 5.0E-08 |
| AROCLOR-1260 | 6.4E-07 | 5.0E-08 | 5.0E-08 | 5.7E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 4.5E-08 | 5.0E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.0E-07 | 9.9E-08 | 9.9E-08 | 1.1E-07 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 1.0E-07 | 9.9E-08 | 8.9E-08 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-831 | SB-832 | SB-832 | SB-832 | SB-833 | SB-833 | SB-833 | SB-833 | SB-833A | SB-833A | SB-833B | SB-833B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-831-09 | E-SB-832-05 | E-SB-832-07 | E-SB-832-09 | E-SB-833-03 | E-SB-833-05 | E-SB-833-07 | E-SB-833-09 | E-SB-833A-06 | E-SB-833A-10 | E-SB-833B-04 | E-SB-833B-06 |
| SAMPLE DATE | 20100913 | 20100917 | 20100917 | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 | 4 | 6 |
| BOTTOM DEPTH | 9 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | 4.9E-05 | 7.1E-07 | 4.2E-06 | 1.7E-12 | 6.1E-11 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | 8.3E-06 | 1.1E-06 | 1.8E-06 | 1.5E-11 | 1.8E-11 |
| BAP EQUIVALENT-HALFND | | | | | | | | 1.4E-04 | 1.4E-06 | 3.5E-07 | 6.8E-09 | 7.1E-09 |
| NAPHTHALENE | | | | | | | | 2.4E-07 | 1.3E-08 | 2.0E-08 | 1.3E-09 | 1.9E-09 |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.2E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 5.5E-04 | 1.0E-04 | 1.0E-04 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 1.0E-08 | 6.3E-08 | 1.2E-08 | 1.1E-08 | 3.3E-07 | 1.4E-07 | 1.0E-08 | 2.4E-02 | 5.1E-04 | 2.0E-03 | 1.1E-07 | 5.2E-07 |
| ARSENIC | | | | | | | | 2.2E-07 | | | | |
| COBALT | | | | | | | | 1.2E-09 | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | 8.8E-08 | | | | |
| TOTAL CANCER RISK | 2.0E-08 | 7.3E-08 | 2.4E-08 | 2.2E-08 | 3.4E-07 | 1.5E-07 | 2.0E-08 | 2.5E-02 | 6.2E-04 | 2.1E-03 | 1.3E-07 | 5.4E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | 4.8E-04 | 7.1E-06 | 4.2E-05 | 1.7E-11 | 6.1E-10 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | 4.2E-05 | 5.5E-06 | 9.1E-06 | 7.8E-11 | 9.3E-11 |
| BAP EQUIVALENT-HALFND | | | | | | | | 3.0E-03 | 3.0E-05 | 7.5E-06 | 1.5E-07 | 1.5E-07 |
| NAPHTHALENE | | | | | | | | 1.2E-06 | 6.8E-08 | 1.0E-07 | 6.8E-09 | 9.4E-09 |
| AROCLOR-1254 | 5.0E-08 | 5.0E-08 | 5.9E-08 | 5.4E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 2.7E-03 | 5.2E-04 | 5.2E-04 | 5.0E-08 | 5.2E-08 |
| AROCLOR-1260 | 5.0E-08 | 3.1E-07 | 5.9E-08 | 5.4E-08 | 1.6E-06 | 6.9E-07 | 5.0E-08 | 1.2E-01 | 2.5E-03 | 9.9E-03 | 5.4E-07 | 2.6E-06 |
| ARSENIC | | | | | | | | 1.7E-06 | | | | |
| COBALT | | | | | | | | 6.1E-09 | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | 1.3E-06 | | | | |
| TOTAL CANCER RISK | 9.9E-08 | 3.6E-07 | 1.2E-07 | 1.1E-07 | 1.7E-06 | 7.4E-07 | 9.9E-08 | 1.3E-01 | 3.1E-03 | 1.0E-02 | 7.5E-07 | 2.8E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-833B | SB-833B | SB-833C | SB-833C | SB-833C | SB-833C | SB-833D | SB-833D | SB-833D | SB-833D | SB-833E | SB-833E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833B-08 | E-SB-833B-10 | E-SB-833C-04 | E-SB-833C-06 | E-SB-833C-08 | E-SB-833C-10 | E-SB-833D-04 | E-SB-833D-06 | E-SB-833D-08 | E-SB-833D-10 | E-SB-833E-06 | E-SB-833E-10 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 10 | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 6 | 10 |
| BOTTOM DEPTH | 8 | 10 | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 6 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 5.6E-11 | 3.5E-12 | 1.7E-12 | 2.4E-12 | 2.0E-12 | 1.2E-12 | 1.4E-12 | 6.8E-12 | 5.6E-10 | 1.3E-10 | 1.3E-06 | 2.4E-08 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.7E-11 | 1.9E-11 | 1.8E-11 | 1.8E-11 | 2.0E-11 | 1.6E-11 | 1.8E-11 | 2.0E-11 | 8.9E-10 | 5.2E-10 | 1.7E-07 | 8.9E-09 |
| BAP EQUIVALENT-HALFND | 6.6E-09 | 6.8E-09 | 6.6E-09 | 6.8E-09 | 6.9E-09 | 7.1E-09 | 6.9E-09 | 7.3E-09 | 6.8E-09 | 7.4E-09 | 1.3E-07 | 6.8E-09 |
| NAPHTHALENE | 8.7E-09 | 2.8E-09 | 1.0E-08 | 8.4E-11 | 8.7E-11 | 8.9E-11 | 8.7E-11 | 9.1E-11 | 2.7E-09 | 8.2E-10 | 1.7E-09 | 8.4E-11 |
| AROCLOR-1254 | 1.0E-08 | 5.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.1E-08 | 1.0E-08 | 1.1E-08 | 4.9E-06 | 1.0E-06 |
| AROCLOR-1260 | 1.5E-07 | 7.5E-07 | 5.0E-08 | 2.4E-08 | 1.0E-08 | 2.7E-08 | 1.0E-08 | 1.1E-08 | 4.8E-08 | 1.1E-08 | 1.8E-04 | 2.7E-05 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-07 | 8.1E-07 | 7.6E-08 | 4.1E-08 | 2.7E-08 | 4.5E-08 | 2.8E-08 | 2.9E-08 | 6.9E-08 | 3.1E-08 | 1.9E-04 | 2.8E-05 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 5.6E-10 | 3.5E-11 | 1.7E-11 | 2.4E-11 | 2.0E-11 | 1.2E-11 | 1.4E-11 | 6.8E-11 | 5.6E-09 | 1.3E-09 | 1.3E-05 | 2.4E-07 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.5E-11 | 9.8E-11 | 9.3E-11 | 9.3E-11 | 1.0E-10 | 8.3E-11 | 8.9E-11 | 1.0E-10 | 4.6E-09 | 2.7E-09 | 8.8E-07 | 4.6E-08 |
| BAP EQUIVALENT-HALFND | 1.4E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.6E-07 | 1.5E-07 | 1.6E-07 | 2.9E-06 | 1.5E-07 |
| NAPHTHALENE | 4.4E-08 | 1.4E-08 | 5.0E-08 | 4.3E-10 | 4.4E-10 | 4.5E-10 | 4.4E-10 | 4.6E-10 | 1.4E-08 | 4.1E-09 | 8.4E-09 | 4.3E-10 |
| AROCLOR-1254 | 5.0E-08 | 2.5E-07 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 5.4E-08 | 5.0E-08 | 5.4E-08 | 2.5E-05 | 5.0E-06 |
| AROCLOR-1260 | 7.4E-07 | 3.7E-06 | 2.5E-07 | 1.2E-07 | 5.0E-08 | 1.3E-07 | 5.2E-08 | 5.4E-08 | 2.4E-07 | 5.4E-08 | 8.9E-04 | 1.3E-04 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.8E-07 | 4.1E-06 | 4.9E-07 | 3.2E-07 | 2.5E-07 | 3.4E-07 | 2.5E-07 | 2.7E-07 | 4.6E-07 | 2.8E-07 | 9.3E-04 | 1.4E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-833F | SB-833F | SB-833F | SB-833F | SB-833G | SB-833G | SB-833G | SB-833H | SB-833H | SB-833H | SB-833I | SB-833I |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833F-04 | E-SB-833F-06 | E-SB-833F-08 | E-SB-833F-10 | E-SB-833G-06 | E-SB-833G-08 | E-SB-833G-10 | E-SB-833H-06 | E-SB-833H-08 | E-SB-833H-10 | E-SB-833I-08 | E-SB-833I-10 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 7.6E-09 | 9.1E-09 | 7.6E-09 | 3.6E-09 | 3.8E-11 | 1.1E-10 | 1.7E-12 | 1.9E-10 | 4.9E-09 | 4.9E-10 | 5.6E-07 | 3.3E-07 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 5.7E-09 | 7.0E-09 | 5.9E-09 | 3.7E-09 | 1.0E-10 | 2.4E-09 | 1.1E-09 | 1.9E-09 | 8.9E-09 | 6.3E-10 | 1.9E-07 | 1.5E-07 |
| BAP EQUIVALENT-HALFND | 6.8E-09 | 6.9E-09 | 7.1E-09 | 7.1E-09 | 7.3E-09 | 6.9E-09 | 6.8E-09 | 6.8E-09 | 6.6E-09 | 6.9E-09 | 6.9E-08 | 6.1E-07 |
| NAPHTHALENE | 8.4E-11 | 7.4E-10 | 8.9E-11 | 8.9E-11 | 9.1E-11 | 8.7E-11 | 8.4E-11 | 1.0E-09 | 8.2E-11 | 8.7E-11 | 8.7E-10 | 8.4E-10 |
| AROCLOR-1254 | 1.0E-08 | 1.0E-07 | 1.0E-08 | 1.0E-07 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-05 | 1.0E-05 |
| AROCLOR-1260 | 2.5E-07 | 2.3E-06 | 1.0E-07 | 1.0E-06 | 8.3E-08 | 7.7E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 2.2E-04 | 3.5E-04 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-07 | 2.4E-06 | 1.3E-07 | 1.1E-06 | 1.0E-07 | 9.7E-08 | 2.8E-08 | 3.0E-08 | 4.0E-08 | 2.9E-08 | 2.3E-04 | 3.6E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 7.6E-08 | 9.1E-08 | 7.6E-08 | 3.6E-08 | 3.8E-10 | 1.1E-09 | 1.7E-11 | 1.9E-09 | 4.9E-08 | 4.8E-09 | 5.6E-06 | 3.3E-06 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 2.9E-08 | 3.6E-08 | 3.0E-08 | 1.9E-08 | 5.2E-10 | 1.2E-08 | 5.9E-09 | 9.8E-09 | 4.6E-08 | 3.2E-09 | 9.4E-07 | 7.5E-07 |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.6E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.5E-06 | 1.3E-05 |
| NAPHTHALENE | 4.3E-10 | 3.7E-09 | 4.5E-10 | 4.5E-10 | 4.6E-10 | 4.4E-10 | 4.3E-10 | 5.0E-09 | 4.1E-10 | 4.4E-10 | 4.4E-09 | 4.3E-09 |
| AROCLOR-1254 | 5.0E-08 | 5.2E-07 | 5.2E-08 | 5.2E-07 | 5.4E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.2E-05 | 5.0E-05 |
| AROCLOR-1260 | 1.2E-06 | 1.1E-05 | 5.0E-07 | 5.0E-06 | 4.1E-07 | 3.8E-07 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 1.1E-03 | 1.7E-03 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-06 | 1.2E-05 | 8.1E-07 | 5.7E-06 | 6.2E-07 | 6.0E-07 | 2.5E-07 | 2.6E-07 | 3.4E-07 | 2.6E-07 | 1.1E-03 | 1.8E-03 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-833J | SB-833J | SB-833J | SB-833J | SB-833K | SB-833K | SB-833K | SB-833L | SB-833L | SB-833L | SB-833M | SB-833M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833J-04 | E-SB-833J-06 | E-SB-833J-08 | E-SB-833J-10 | E-SB-833K-06 | E-SB-833K-08 | E-SB-833K-10 | E-SB-833L-04 | E-SB-833L-06 | E-SB-833L-08 | E-SB-833M-04 | E-SB-833M-06 |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 | 4 | 6 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 2.8E-12 | 2.8E-12 | 1.2E-12 | 2.6E-09 | 6.1E-07 | 8.6E-09 | 1.4E-07 | 9.6E-09 | 5.1E-09 | 2.1E-06 | 2.5E-12 | 1.3E-10 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.9E-11 | 1.7E-11 | 1.8E-11 | 1.3E-09 | 9.6E-08 | 6.3E-09 | 1.6E-08 | 4.3E-09 | 1.7E-09 | 2.7E-07 | 2.0E-11 | 1.6E-11 |
| BAP EQUIVALENT-HALFND | 6.6E-09 | 6.9E-09 | 6.8E-09 | 7.1E-09 | 6.8E-08 | 6.8E-09 | 4.9E-07 | 6.8E-09 | 6.9E-09 | 6.6E-08 | 6.9E-09 | 6.6E-09 |
| NAPHTHALENE | 8.2E-11 | 8.7E-11 | 8.4E-11 | 8.9E-11 | 8.4E-10 | 8.4E-11 | 8.4E-10 | 8.4E-11 | 8.7E-11 | 8.2E-10 | 8.7E-11 | 8.2E-11 |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 5.0E-05 | 2.0E-06 | 1.0E-05 | 1.0E-08 | 2.0E-07 | 4.9E-05 | 2.0E-08 | 4.9E-08 |
| AROCLOR-1260 | 1.6E-07 | 3.9E-08 | 7.0E-08 | 1.8E-07 | 9.7E-04 | 3.5E-05 | 2.7E-04 | 7.3E-08 | 4.5E-06 | 7.0E-04 | 2.4E-07 | 8.6E-07 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.8E-07 | 5.6E-08 | 8.6E-08 | 2.0E-07 | 1.0E-03 | 3.7E-05 | 2.8E-04 | 1.0E-07 | 4.7E-06 | 7.5E-04 | 2.7E-07 | 9.1E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 2.8E-11 | 2.8E-11 | 1.2E-11 | 2.6E-08 | 6.1E-06 | 8.6E-08 | 1.4E-06 | 9.6E-08 | 5.1E-08 | 2.1E-05 | 2.5E-11 | 1.3E-09 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.9E-11 | 8.8E-11 | 8.9E-11 | 6.5E-09 | 4.9E-07 | 3.2E-08 | 8.1E-08 | 2.2E-08 | 8.8E-09 | 1.4E-06 | 1.0E-10 | 8.3E-11 |
| BAP EQUIVALENT-HALFND | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-06 | 1.5E-07 | 1.1E-05 | 1.5E-07 | 1.5E-07 | 1.4E-06 | 1.5E-07 | 1.4E-07 |
| NAPHTHALENE | 4.1E-10 | 4.4E-10 | 4.3E-10 | 4.5E-10 | 4.3E-09 | 4.3E-10 | 4.3E-09 | 4.3E-10 | 4.4E-10 | 4.1E-09 | 4.4E-10 | 4.1E-10 |
| AROCLOR-1254 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 2.5E-04 | 9.9E-06 | 5.0E-05 | 5.0E-08 | 1.0E-06 | 2.5E-04 | 1.0E-07 | 2.5E-07 |
| AROCLOR-1260 | 7.9E-07 | 1.9E-07 | 3.5E-07 | 8.9E-07 | 4.8E-03 | 1.7E-04 | 1.3E-03 | 3.6E-07 | 2.2E-05 | 3.5E-03 | 1.2E-06 | 4.3E-06 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.9E-07 | 3.9E-07 | 5.4E-07 | 1.1E-06 | 5.1E-03 | 1.8E-04 | 1.4E-03 | 6.8E-07 | 2.4E-05 | 3.7E-03 | 1.4E-06 | 4.6E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-833M | SB-833M | SB-833N | SB-833N | SB-833N | SB-833N | /IRC-MW43/ | SB-001 | SB-001 | SB-002 | SB-002 | SB-003 | SB-003 | SB-004 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833M-08 | E-SB-833M-10 | E-SB-833N-04 | E-SB-833N-06 | E-SB-833N-08 | E-SB-833N-10 | C-MW43[09 | SB-1-05 | SB-1-10 | SB-2-05 | SB-2-10 | SB-3-05 | SB-3-10 | SB-4-05 |
| SAMPLE DATE | 20101013 | 20101013 | 20101014 | 20101014 | 20101014 | 20101014 | 20050517 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 10 | 4 | 6 | 8 | 10 | 9 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | 8 | 10 | 4 | 6 | 8 | 10 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.7E-12 | 1.7E-12 | 5.8E-13 | 6.3E-13 | 1.3E-12 | 3.0E-11 | | 1.8E-11 | 1.8E-11 | 1.8E-11 | 1.8E-11 | 1.8E-11 | 1.8E-11 | 1.8E-11 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 2.0E-11 | 1.8E-11 | 1.8E-11 | 2.0E-11 | 2.0E-11 | 1.9E-11 | | 2.2E-10 | 2.2E-10 | 2.2E-10 | 2.2E-10 | 2.2E-10 | 2.2E-10 | 2.2E-10 |
| BAP EQUIVALENT-HALFND | 6.9E-09 | 6.9E-09 | 6.9E-08 | 9.2E-07 | 2.1E-07 | 2.8E-08 | | 8.3E-07 | 7.8E-07 | 7.6E-07 | 7.6E-07 | 7.6E-07 | 7.6E-07 | 1.8E-06 |
| NAPHTHALENE | 8.7E-11 | 8.7E-11 | 8.7E-10 | 8.9E-10 | 8.7E-10 | 3.5E-10 | | 1.0E-08 | 9.7E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 1.0E-08 |
| AROCLOR-1254 | 2.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 5.0E-08 | 5.0E-08 | | 3.6E-08 | 3.3E-08 | 3.3E-08 | 3.3E-08 | 3.2E-08 | 3.3E-08 | 3.4E-08 |
| AROCLOR-1260 | 5.9E-07 | 7.3E-08 | 2.1E-07 | 8.0E-08 | 3.7E-07 | 4.3E-07 | | 3.6E-08 | 3.3E-08 | 3.3E-08 | 3.3E-08 | 3.2E-08 | 3.3E-08 | 3.4E-08 |
| ARSENIC | | | | | | | | 2.0E-06 | 6.6E-07 | 7.7E-07 | 3.2E-07 | 5.5E-07 | 5.9E-07 | 1.8E-06 |
| COBALT | | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | 7.2E-07 | 1.8E-07 | 4.7E-08 | 4.5E-08 | 9.1E-08 | 7.2E-08 | 7.4E-07 |
| TOTAL CANCER RISK | 6.1E-07 | 9.0E-08 | 2.9E-07 | 1.0E-06 | 6.3E-07 | 5.1E-07 | | 3.6E-06 | 1.7E-06 | 1.7E-06 | 1.2E-06 | 1.5E-06 | 1.5E-06 | 4.5E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.7E-11 | 1.7E-11 | 5.8E-12 | 6.3E-12 | 1.3E-11 | 3.0E-10 | | 1.8E-10 | 1.8E-10 | 1.8E-10 | 1.8E-10 | 1.8E-10 | 1.8E-10 | 1.8E-10 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.0E-10 | 9.3E-11 | 9.1E-11 | 1.0E-10 | 1.0E-10 | 9.9E-11 | | 1.1E-09 | 1.1E-09 | 1.1E-09 | 1.1E-09 | 1.1E-09 | 1.1E-09 | 1.1E-09 |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.5E-07 | 1.5E-06 | 2.0E-05 | 4.5E-06 | 6.0E-07 | | 1.8E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 1.7E-05 | 4.0E-05 |
| NAPHTHALENE | 4.4E-10 | 4.4E-10 | 4.4E-09 | 4.5E-09 | 4.4E-09 | 1.7E-09 | | 5.2E-08 | 4.9E-08 | 4.8E-08 | 4.8E-08 | 4.8E-08 | 4.8E-08 | 5.0E-08 |
| AROCLOR-1254 | 1.0E-07 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 2.5E-07 | 2.5E-07 | | 1.8E-07 | 1.7E-07 | 1.7E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.7E-07 |
| AROCLOR-1260 | 2.9E-06 | 3.6E-07 | 1.0E-06 | 4.0E-07 | 1.8E-06 | 2.1E-06 | | 1.8E-07 | 1.7E-07 | 1.7E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.7E-07 |
| ARSENIC | | | | | | | | 1.6E-05 | 5.1E-06 | 6.0E-06 | 2.5E-06 | 4.3E-06 | 4.6E-06 | 1.4E-05 |
| COBALT | | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | 1.1E-05 | 2.7E-06 | 7.0E-07 | 6.8E-07 | 1.4E-06 | 1.1E-06 | 1.1E-05 |
| TOTAL CANCER RISK | 3.2E-06 | 5.6E-07 | 2.6E-06 | 2.0E-05 | 6.6E-06 | 3.0E-06 | | 4.5E-05 | 2.5E-05 | 2.4E-05 | 2.0E-05 | 2.3E-05 | 2.3E-05 | 6.5E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-004 | SB-010 | SB-011 | SB-012 | SB-013 | SB-014 | SB-015 | SB-016 | SB-017 | SB-018 | SB-019 | SB-019 | SB-020 | SB-020 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-4-10 | SB-10-05 | SB-11-05 | SB-12-05 | SB-13-05 | SB-14-05 | SB-15-05 | SB-16-05 | SB-17-05 | SB-18-05 | SB-19-05 | SB-19-10 | SB-20-05 | SB-20-10 |
| SAMPLE DATE | 20031120 | 20031118 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031119 | 20031121 | 20031121 | 20031120 | 20031120 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.8E-11 | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 2.2E-10 | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.8E-07 | | | | | | | | | | | | | |
| NAPHTHALENE | 9.7E-09 | | | | | | | | | | | | | |
| AROCLOR-1254 | 3.4E-08 | | | | | | | | | | | | | |
| AROCLOR-1260 | 3.4E-08 | | | | | | | | | | | | | |
| ARSENIC | 8.8E-07 | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.9E-07 | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-06 | | | | | | | | | | | | | |
| **RESIDENTIAL** | | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.8E-10 | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.1E-09 | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-05 | | | | | | | | | | | | | |
| NAPHTHALENE | 4.9E-08 | | | | | | | | | | | | | |
| AROCLOR-1254 | 1.7E-07 | | | | | | | | | | | | | |
| AROCLOR-1260 | 1.7E-07 | | | | | | | | | | | | | |
| ARSENIC | 6.8E-06 | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.9E-06 | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.7E-05 | | | | | | | | | | | | | |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-021 | SB-021 | SB-035 | SB-036 | SB-500 | SB-500 | SB-501 | SB-501 | SB-502 | SB-502 | SB-503 | SB-504 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-21-05 | SB-21-10 | SB-35-04 | SB-36-05 | SB-500-0406 | SB-500-0810 | SB-501-0406 | SB-501-0810 | SB-502-0406 | SB-502-0810 | SB-503-0406 | SB-504-0406 |
| SAMPLE DATE | 20031120 | 20031120 | 20040922 | 20040917 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 4 | 5 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 |
| BOTTOM DEPTH | 5 | 10 | 4 | 5 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | 1.5E-11 | 1.5E-11 | 1.4E-11 | 1.5E-11 | 2.4E-08 | 3.5E-07 | 3.6E-10 | 1.9E-08 | 1.5E-11 | 2.4E-12 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | 1.9E-10 | 1.9E-10 | 1.8E-10 | 1.9E-10 | 1.1E-09 | 4.1E-08 | 1.9E-10 | 9.3E-09 | 1.9E-10 | 1.8E-10 |
| BAP EQUIVALENT-HALFND | | | 6.8E-07 | 6.9E-07 | 6.4E-07 | 6.9E-07 | 6.4E-07 | 6.8E-07 | 7.5E-07 | 6.6E-06 | 8.1E-07 | 7.5E-06 |
| NAPHTHALENE | | | 8.4E-09 | 8.7E-09 | 8.0E-09 | 8.7E-09 | 8.0E-09 | 8.4E-09 | 8.4E-09 | 8.2E-08 | 8.7E-09 | 1.4E-08 |
| AROCLOR-1254 | | | 1.4E-07 | 1.5E-07 | 1.8E-08 | 2.0E-08 | 3.7E-07 | 1.9E-06 | 3.8E-06 | 9.5E-06 | 1.0E-07 | 9.5E-07 |
| AROCLOR-1260 | | | 1.4E-07 | 1.5E-07 | 1.8E-08 | 2.0E-08 | 5.8E-06 | 2.4E-05 | 4.9E-05 | 6.5E-05 | 3.8E-07 | 1.1E-05 |
| ARSENIC | | | 5.9E-07 | 4.8E-07 | 1.1E-07 | 2.7E-07 | 4.0E-07 | 3.4E-07 | 4.8E-07 | 2.0E-07 | 1.5E-07 | 7.3E-07 |
| COBALT | | | | | 2.7E-10 | 3.9E-10 | 3.9E-10 | 9.3E-10 | 2.5E-10 | 1.5E-10 | 4.1E-11 | 2.0E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 2.8E-07 | 1.5E-07 | 2.0E-07 | 3.0E-07 | 1.7E-07 | 4.3E-07 | 1.6E-07 | 9.1E-08 | 8.8E-08 | 3.6E-07 |
| TOTAL CANCER RISK | | | 1.8E-06 | 1.6E-06 | 1.0E-06 | 1.3E-06 | 7.4E-06 | 2.8E-05 | 5.4E-05 | 8.1E-05 | 1.5E-06 | 2.1E-05 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | 1.5E-10 | 1.5E-10 | 1.4E-10 | 1.5E-10 | 2.4E-07 | 3.5E-06 | 3.6E-09 | 1.9E-07 | 1.5E-10 | 2.4E-11 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | 9.8E-10 | 9.8E-10 | 9.1E-10 | 9.8E-10 | 5.5E-09 | 2.1E-07 | 9.4E-10 | 4.7E-08 | 9.9E-10 | 9.3E-10 |
| BAP EQUIVALENT-HALFND | | | 1.5E-05 | 1.5E-05 | 1.4E-05 | 1.5E-05 | 1.4E-05 | 1.5E-05 | 1.6E-05 | 1.4E-04 | 1.8E-05 | 1.6E-04 |
| NAPHTHALENE | | | 4.3E-08 | 4.4E-08 | 4.0E-08 | 4.4E-08 | 4.0E-08 | 4.3E-08 | 4.3E-08 | 4.1E-07 | 4.4E-08 | 7.2E-08 |
| AROCLOR-1254 | | | 6.9E-07 | 7.4E-07 | 9.2E-08 | 9.9E-08 | 1.8E-06 | 9.7E-06 | 1.9E-05 | 4.7E-05 | 5.0E-07 | 4.7E-06 |
| AROCLOR-1260 | | | 6.9E-07 | 7.4E-07 | 9.2E-08 | 9.9E-08 | 2.9E-05 | 1.2E-04 | 2.4E-04 | 3.2E-04 | 1.9E-06 | 5.4E-05 |
| ARSENIC | | | 4.6E-06 | 3.7E-06 | 8.8E-07 | 2.1E-06 | 3.1E-06 | 2.7E-06 | 3.7E-06 | 1.6E-06 | 1.2E-06 | 5.7E-06 |
| COBALT | | | | | 1.4E-09 | 1.9E-09 | 1.9E-09 | 4.7E-09 | 1.3E-09 | 7.7E-10 | 2.1E-10 | 9.8E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 4.1E-06 | 2.3E-06 | 3.1E-06 | 4.5E-06 | 2.5E-06 | 6.5E-06 | 2.4E-06 | 1.4E-06 | 1.3E-06 | 5.3E-06 |
| TOTAL CANCER RISK | | | 2.5E-05 | 2.3E-05 | 1.8E-05 | 2.2E-05 | 5.0E-05 | 1.6E-04 | 2.8E-04 | 5.2E-04 | 2.3E-05 | 2.3E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-504 | SB-505 | SB-505 | SB-506 | SB-506 | SB-507 | SB-507 | SB-508 | SB-508 | SB-508 | SB-508 | SB-509 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-504-0810 | SB-505-0406 | SB-505-0810 | SB-506-0406 | SB-506-0810 | SB-507-0406 | SB-507-0810 | SB-508-0406 | SB-508-0406-AV | SB-508-0406-D | SB-508-0810 | SB-509-0406 |
| SAMPLE DATE | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 | 4 | 8 | 4 |
| BOTTOM DEPTH | 10 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 | 6 | 10 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.6E-12 | 1.5E-11 | 1.1E-12 | 1.5E-11 | 1.6E-11 | 1.6E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.9E-10 | 1.9E-10 | 2.0E-10 | 1.9E-10 | 2.0E-10 | 2.0E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 |
| BAP EQUIVALENT-HALFND | 9.9E-07 | 6.6E-07 | 8.3E-07 | 6.6E-07 | 7.3E-07 | 7.1E-07 | 6.6E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.9E-07 | 6.6E-07 |
| NAPHTHALENE | 9.5E-10 | 8.2E-09 | 8.9E-09 | 8.2E-09 | 9.1E-09 | 8.9E-09 | 8.2E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.7E-09 | 8.2E-09 |
| AROCLOR-1254 | 1.9E-07 | 1.9E-08 | 1.0E-07 | 1.9E-08 | 2.1E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 1.9E-08 |
| AROCLOR-1260 | 2.3E-06 | 1.5E-08 | 6.5E-07 | 1.9E-08 | 2.0E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 1.9E-08 |
| ARSENIC | 4.4E-07 | 4.4E-07 | 6.2E-07 | 5.9E-07 | 3.7E-07 | 8.4E-07 | 4.0E-07 | 5.1E-07 | 4.4E-07 | 3.7E-07 | 1.5E-07 | 6.2E-07 |
| COBALT | 1.0E-09 | 1.4E-09 | 1.0E-09 | 7.5E-10 | 5.5E-10 | 7.5E-10 | 2.7E-10 | 5.2E-10 | 4.5E-10 | 3.9E-10 | 8.0E-10 | 5.2E-10 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.7E-07 | 2.8E-07 | 3.5E-07 | 2.4E-07 | 1.2E-07 | 3.1E-07 | 2.1E-07 | 2.5E-07 | 2.2E-07 | 1.8E-07 | 3.6E-07 | 2.8E-07 |
| TOTAL CANCER RISK | 4.3E-06 | 1.4E-06 | 2.6E-06 | 1.5E-06 | 1.3E-06 | 1.9E-06 | 1.3E-06 | 1.5E-06 | 1.4E-06 | 1.3E-06 | 1.3E-06 | 1.6E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.6E-11 | 1.5E-10 | 1.1E-11 | 1.5E-10 | 1.6E-10 | 1.6E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.4E-10 | 9.4E-10 | 1.0E-09 | 9.4E-10 | 1.0E-09 | 1.0E-09 | 9.4E-10 | 9.4E-10 | 9.5E-10 | 9.6E-10 | 9.8E-10 | 9.4E-10 |
| BAP EQUIVALENT-HALFND | 2.2E-05 | 1.4E-05 | 1.8E-05 | 1.4E-05 | 1.6E-05 | 1.5E-05 | 1.4E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.4E-05 |
| NAPHTHALENE | 4.8E-09 | 4.1E-08 | 4.5E-08 | 4.1E-08 | 4.6E-08 | 4.5E-08 | 4.1E-08 | 4.3E-08 | 4.3E-08 | 4.3E-08 | 4.4E-08 | 4.1E-08 |
| AROCLOR-1254 | 9.4E-07 | 9.4E-08 | 5.2E-07 | 9.4E-08 | 1.0E-07 | 1.0E-07 | 9.4E-08 | 9.7E-08 | 9.7E-08 | 9.7E-08 | 9.9E-08 | 9.4E-08 |
| AROCLOR-1260 | 1.1E-05 | 7.4E-08 | 3.2E-06 | 9.4E-08 | 9.9E-08 | 1.0E-07 | 9.4E-08 | 9.7E-08 | 9.7E-08 | 9.7E-08 | 9.9E-08 | 9.4E-08 |
| ARSENIC | 3.4E-06 | 3.4E-06 | 4.8E-06 | 4.6E-06 | 2.8E-06 | 6.6E-06 | 3.1E-06 | 4.0E-06 | 3.4E-06 | 2.8E-06 | 1.2E-06 | 4.8E-06 |
| COBALT | 5.2E-09 | 7.2E-09 | 5.3E-09 | 3.8E-09 | 2.7E-09 | 3.8E-09 | 1.4E-09 | 2.6E-09 | 2.3E-09 | 1.9E-09 | 4.0E-09 | 2.6E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 5.5E-06 | 4.2E-06 | 5.3E-06 | 3.6E-06 | 1.8E-06 | 4.6E-06 | 3.1E-06 | 3.8E-06 | 3.3E-06 | 2.8E-06 | 5.5E-06 | 4.1E-06 |
| TOTAL CANCER RISK | 4.3E-05 | 2.2E-05 | 3.2E-05 | 2.3E-05 | 2.1E-05 | 2.7E-05 | 2.1E-05 | 2.3E-05 | 2.2E-05 | 2.1E-05 | 2.2E-05 | 2.3E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-509 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 | SB-835 | SB-835 | SB-836 | SB-836 | SB-836 | SB-836 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-509-0810 | E-SB-834-05 | E-SB-834-07 | E-SB-834-09 | E-SB-835-03 | E-SB-835-05 | E-SB-835-07 | E-SB-835-09 | E-SB-836-03 | E-SB-836-05 | E-SB-836-07 | E-SB-836-09 |
| SAMPLE DATE | 20071129 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 10 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.4E-11 | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.8E-10 | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.6E-07 | | | | | | | | | | | |
| NAPHTHALENE | 8.2E-09 | | | | | | | | | | | |
| AROCLOR-1254 | 1.9E-08 | 1.1E-08 | 1.0E-08 | 1.1E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-07 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.1E-08 |
| AROCLOR-1260 | 1.9E-08 | 2.8E-07 | 2.3E-08 | 2.4E-08 | 9.5E-09 | 3.1E-07 | 9.4E-08 | 3.5E-06 | 1.1E-08 | 2.2E-08 | 1.0E-08 | 1.1E-08 |
| ARSENIC | 9.1E-07 | | | | | | | | | | | |
| COBALT | 5.2E-10 | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.3E-07 | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.8E-06 | 2.9E-07 | 3.3E-08 | 3.5E-08 | 1.9E-08 | 3.2E-07 | 1.0E-07 | 3.6E-06 | 2.3E-08 | 3.2E-08 | 2.0E-08 | 2.2E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.4E-10 | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.3E-10 | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-05 | | | | | | | | | | | |
| NAPHTHALENE | 4.1E-08 | | | | | | | | | | | |
| AROCLOR-1254 | 9.4E-08 | 5.7E-08 | 5.0E-08 | 5.4E-08 | 4.7E-08 | 5.2E-08 | 5.2E-08 | 5.0E-07 | 5.7E-08 | 5.0E-08 | 5.0E-08 | 5.4E-08 |
| AROCLOR-1260 | 9.4E-08 | 1.4E-06 | 1.1E-07 | 1.2E-07 | 4.7E-08 | 1.5E-06 | 4.7E-07 | 1.7E-05 | 5.7E-08 | 1.1E-07 | 5.0E-08 | 5.4E-08 |
| ARSENIC | 7.1E-06 | | | | | | | | | | | |
| COBALT | 2.6E-09 | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.4E-06 | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.5E-05 | 1.4E-06 | 1.6E-07 | 1.7E-07 | 9.4E-08 | 1.6E-06 | 5.2E-07 | 1.8E-05 | 1.1E-07 | 1.6E-07 | 9.9E-08 | 1.1E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-837 | SB-837 | SB-837 | SB-837 | SB-838 | SB-838 | SB-838 | SB-838 | SB-839 | SB-839 | SB-839 | SB-839 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-837-03 | E-SB-837-05 | E-SB-837-07 | E-SB-837-09 | E-SB-838-3 | E-SB-838-5 | E-SB-838-7 | E-SB-838-9 | E-SB-839-03 | E-SB-839-05 | E-SB-839-07 | E-SB-839-09 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 9.0E-09 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 9.0E-09 | 9.5E-09 | 1.0E-08 | 5.9E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 2.7E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.8E-08 | 1.9E-08 | 2.1E-08 | 6.9E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 3.7E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 4.5E-08 | 4.7E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 |
| AROCLOR-1260 | 4.5E-08 | 4.7E-08 | 5.2E-08 | 2.9E-07 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 1.3E-07 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.9E-08 | 9.4E-08 | 1.0E-07 | 3.4E-07 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 1.8E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 | SB-841 | SB-841 | SB-842 | SB-842 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-840-03 | E-SB-840-05 | SB-840-05-AV | E-SB-840-05-D | E-SB-840-07 | E-SB-840-09 | E-SB-841-03 | E-SB-841-05 | E-SB-841-07 | E-SB-841-09 | E-SB-842-3 | E-SB-842-5 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 9.0E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 |
| AROCLOR-1260 | 9.0E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 3.5E-08 | 6.8E-08 | 1.4E-07 | 9.5E-09 | 1.0E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.8E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 4.4E-08 | 7.8E-08 | 1.5E-07 | 1.9E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 4.5E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 |
| AROCLOR-1260 | 4.5E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 4.7E-08 | 1.7E-07 | 3.4E-07 | 6.9E-07 | 4.7E-08 | 5.0E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.4E-08 | 9.4E-08 | 2.2E-07 | 3.9E-07 | 7.4E-07 | 9.4E-08 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 | SB-843 | SB-844 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-842-7 | E-SB-842-9 | E-SB-843-03 | E-SB-843-05 | E-SB-843-07 | E-SB-843-09 | E-SB-844-03 | E-SB-844-05 | E-SB-844-07 | E-SB-844-09 | E-SB-845-03 | E-SB-845-05 |
| SAMPLE DATE | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.1E-08 | 1.1E-08 | 1.0E-08 | 5.5E-08 | 4.4E-08 | 9.0E-09 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.1E-08 | 1.2E-07 | 1.0E-08 | 4.0E-07 | 9.5E-09 | 9.0E-09 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-08 | 2.0E-08 | 1.9E-08 | 2.0E-08 | 2.0E-08 | 1.9E-08 | 2.3E-08 | 1.3E-07 | 2.1E-08 | 4.5E-07 | 5.3E-08 | 1.8E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 5.7E-08 | 5.4E-08 | 5.2E-08 | 2.7E-07 | 2.2E-07 | 4.5E-08 |
| AROCLOR-1260 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 5.7E-08 | 5.9E-07 | 5.2E-08 | 2.0E-06 | 4.7E-08 | 4.5E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.9E-08 | 9.9E-08 | 9.4E-08 | 9.9E-08 | 9.9E-08 | 9.4E-08 | 1.1E-07 | 6.5E-07 | 1.0E-07 | 2.3E-06 | 2.6E-07 | 8.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-845 | SB-845 | SB-846 | SB-846 | SB-846 | SB-846 | SB-847 | SB-847 | SB-847 | SB-847 | SB-005 | SB-005 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-845-07 | E-SB-845-09 | E-SB-846-03 | E-SB-846-05 | E-SB-846-07 | E-SB-846-09 | E-SB-847-03 | E-SB-847-05 | E-SB-847-07 | E-SB-847-09 | SB-5-05 | SB-5-10 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20031120 | 20031120 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 10 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | 1.5E-11 | 1.8E-11 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | 1.9E-10 | 2.2E-10 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | 7.3E-07 | 7.8E-07 |
| NAPHTHALENE | | | | | | | | | | | 9.1E-09 | 9.7E-09 |
| AROCLOR-1254 | 1.0E-08 | 4.7E-08 | 1.0E-08 | 9.0E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 3.2E-08 | 3.4E-08 |
| AROCLOR-1260 | 1.0E-08 | 3.5E-07 | 1.0E-08 | 9.0E-09 | 1.0E-08 | 1.0E-08 | 6.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 3.2E-08 | 3.4E-08 |
| ARSENIC | | | | | | | | | | | 5.1E-07 | 4.0E-07 |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | 6.6E-08 | 5.2E-08 |
| TOTAL CANCER RISK | 2.0E-08 | 4.0E-07 | 2.0E-08 | 1.8E-08 | 2.0E-08 | 2.1E-08 | 7.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 1.4E-06 | 1.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | 1.5E-10 | 1.8E-10 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | 9.8E-10 | 1.1E-09 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | 1.6E-05 | 1.7E-05 |
| NAPHTHALENE | | | | | | | | | | | 4.6E-08 | 4.9E-08 |
| AROCLOR-1254 | 5.0E-08 | 2.3E-07 | 5.0E-08 | 4.5E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 1.6E-07 | 1.7E-07 |
| AROCLOR-1260 | 5.0E-08 | 1.7E-06 | 5.0E-08 | 4.5E-08 | 5.0E-08 | 5.2E-08 | 3.0E-07 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 1.6E-07 | 1.7E-07 |
| ARSENIC | | | | | | | | | | | 4.0E-06 | 3.1E-06 |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | 9.9E-07 | 7.9E-07 |
| TOTAL CANCER RISK | 9.9E-08 | 2.0E-06 | 9.9E-08 | 8.9E-08 | 9.9E-08 | 1.0E-07 | 3.5E-07 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 2.1E-05 | 2.1E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-006 | SB-006 | SB-009 | SB-510 | SB-510 | SB-510 | SB-510 | SB-511 | SB-511 | SB-512 | SB-512 | SB-512 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-6-05 | SB-6-10 | SB-9-05 | SB-510-0406 | SB-510-0810 | B-510-0810-AV | SB-510-0810-D | SB-511-0406 | SB-511-0810 | SB-512-0406 | SB-512-0810 | B-512-0810-AV |
| SAMPLE DATE | 20031120 | 20031120 | 20031118 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 4 | 8 | 8 | 8 | 4 | 8 | 4 | 8 | 8 |
| BOTTOM DEPTH | 5 | 10 | 5 | 6 | 10 | 10 | 10 | 6 | 10 | 6 | 10 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.8E-11 | 1.8E-11 | | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.6E-11 | 1.4E-11 | 1.6E-11 | 1.6E-11 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 2.2E-10 | 2.2E-10 | | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 2.0E-10 | 1.8E-10 | 2.0E-10 | 2.0E-10 |
| BAP EQUIVALENT-HALFND | 7.4E-07 | 7.6E-07 | | 6.6E-07 | 8.2E-07 | 8.0E-07 | 7.8E-07 | 1.4E-06 | 7.1E-07 | 6.6E-07 | 1.0E-06 | 1.3E-06 |
| NAPHTHALENE | 9.3E-09 | 9.5E-09 | | 8.2E-09 | 8.2E-09 | 8.3E-09 | 8.4E-09 | 8.4E-09 | 8.9E-09 | 8.2E-09 | 8.9E-09 | 2.8E-09 |
| AROCLOR-1254 | 3.2E-08 | 3.3E-08 | | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 1.9E-08 | 2.0E-08 | 2.1E-08 |
| AROCLOR-1260 | 3.2E-08 | 3.3E-08 | | 1.9E-08 | 1.6E-08 | 1.6E-08 | 1.9E-08 | 1.6E-08 | 2.0E-08 | 1.9E-08 | 1.8E-08 | 3.5E-08 |
| ARSENIC | 2.8E-07 | 7.3E-07 | | 9.5E-08 | 1.3E-07 | 1.1E-07 | 9.5E-08 | 2.1E-07 | 1.3E-07 | 2.2E-07 | 2.8E-07 | 4.0E-07 |
| COBALT | | | | 2.7E-10 | 4.3E-10 | 4.4E-10 | 4.5E-10 | 1.9E-10 | 2.3E-10 | 6.8E-10 | 5.0E-10 | 4.9E-10 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.3E-07 | 6.1E-07 | | 2.3E-07 | 3.2E-07 | 3.0E-07 | 2.8E-07 | 4.1E-08 | 1.1E-07 | 2.3E-07 | 2.5E-07 | 2.5E-07 |
| TOTAL CANCER RISK | 1.2E-06 | 2.2E-06 | | 1.0E-06 | 1.3E-06 | 1.3E-06 | 1.2E-06 | 1.7E-06 | 1.0E-06 | 1.2E-06 | 1.6E-06 | 2.0E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.8E-10 | 1.8E-10 | | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.6E-10 | 1.4E-10 | 1.6E-10 | 1.6E-10 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.1E-09 | 1.1E-09 | | 9.4E-10 | 9.4E-10 | 9.4E-10 | 9.4E-10 | 9.6E-10 | 1.0E-09 | 9.3E-10 | 1.0E-09 | 1.0E-09 |
| BAP EQUIVALENT-HALFND | 1.6E-05 | 1.7E-05 | | 1.4E-05 | 1.8E-05 | 1.7E-05 | 1.7E-05 | 3.1E-05 | 1.5E-05 | 1.4E-05 | 2.3E-05 | 2.9E-05 |
| NAPHTHALENE | 4.7E-08 | 4.8E-08 | | 4.1E-08 | 4.1E-08 | 4.2E-08 | 4.3E-08 | 4.3E-08 | 4.5E-08 | 4.1E-08 | 4.5E-08 | 1.4E-08 |
| AROCLOR-1254 | 1.6E-07 | 1.6E-07 | | 9.4E-08 | 9.4E-08 | 9.5E-08 | 9.7E-08 | 9.7E-08 | 1.0E-07 | 9.4E-08 | 1.0E-07 | 1.0E-07 |
| AROCLOR-1260 | 1.6E-07 | 1.6E-07 | | 9.4E-08 | 7.9E-08 | 7.9E-08 | 9.7E-08 | 7.9E-08 | 1.0E-07 | 9.4E-08 | 8.9E-08 | 1.8E-07 |
| ARSENIC | 2.2E-06 | 5.7E-06 | | 7.4E-07 | 1.0E-06 | 8.8E-07 | 7.4E-07 | 1.7E-06 | 1.0E-06 | 1.7E-06 | 2.2E-06 | 3.1E-06 |
| COBALT | | | | 1.4E-09 | 2.2E-09 | 2.2E-09 | 2.3E-09 | 9.4E-10 | 1.1E-09 | 3.4E-09 | 2.5E-09 | 2.5E-09 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.0E-06 | 9.1E-06 | | 3.5E-06 | 4.8E-06 | 4.5E-06 | 4.2E-06 | 6.2E-07 | 1.7E-06 | 3.5E-06 | 3.7E-06 | 3.7E-06 |
| TOTAL CANCER RISK | 2.1E-05 | 3.2E-05 | | 1.9E-05 | 2.4E-05 | 2.3E-05 | 2.2E-05 | 3.4E-05 | 1.8E-05 | 2.0E-05 | 2.9E-05 | 3.6E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-512 | SB-513 | SB-513 | SB-514 | SB-514 | SB-514 | SB-514 | SB-515 | SB-515 | SB-517 | SB-517 | SB-518 | SB-518 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-512-0810-D | SB-513-0406 | SB-513-0810 | SB-514-0406 | SB-514-0810 | B-514-0810-AV | SB-514-0810-D | SB-515-0406 | SB-515-0810 | SB-517-0406 | SB-517-0816 | B-518-0406 | B-518-081 |
| SAMPLE DATE | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 | 20071130 | 20071130 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 4 | 8 | 8 | 8 | 4 | 8 | 4 | 8 | 4 | 8 |
| BOTTOM DEPTH | 10 | 6 | 10 | 6 | 10 | 10 | 10 | 6 | 10 | 6 | 10 | 6 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.6E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.6E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.6E-11 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 2.0E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 2.0E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | 2.1E-10 |
| BAP EQUIVALENT-HALFND | 1.6E-06 | 1.5E-06 | 6.8E-07 | 6.9E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.9E-07 | 1.6E-06 | 6.9E-07 | 8.3E-07 | 6.9E-07 | 7.4E-07 |
| NAPHTHALENE | 2.8E-09 | 8.4E-09 | 8.4E-09 | 8.7E-09 | 8.4E-09 | 8.4E-09 | 8.4E-09 | 8.7E-09 | 8.9E-09 | 8.7E-09 | 8.7E-09 | 8.7E-09 | 9.3E-09 |
| AROCLOR-1254 | 2.1E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.1E-08 |
| AROCLOR-1260 | 5.3E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 1.9E-08 | 2.0E-08 | 1.9E-07 | 2.0E-08 | 2.1E-08 |
| ARSENIC | 5.1E-07 | 8.4E-07 | 1.7E-07 | 1.4E-07 | 4.8E-07 | 3.1E-07 | 1.5E-07 | 2.3E-07 | 8.1E-08 | 2.0E-07 | 2.7E-07 | 8.1E-07 | 1.6E-07 |
| COBALT | 4.8E-10 | 9.1E-10 | 2.2E-10 | 2.1E-09 | 2.0E-09 | 1.7E-09 | 1.5E-09 | 9.8E-10 | 1.4E-09 | 1.1E-09 | 1.0E-09 | 8.4E-10 | 6.4E-10 |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.5E-07 | 2.1E-07 | 6.3E-08 | 3.2E-07 | 3.1E-07 | 3.0E-07 | 2.9E-07 | 2.5E-07 | 2.9E-07 | 2.1E-07 | 3.1E-07 | 3.6E-07 | 1.2E-07 |
| TOTAL CANCER RISK | 2.4E-06 | 2.6E-06 | 9.5E-07 | 1.2E-06 | 1.5E-06 | 1.3E-06 | 1.2E-06 | 1.2E-06 | 2.0E-06 | 1.2E-06 | 1.6E-06 | 1.9E-06 | 1.1E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.6E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.6E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.6E-10 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.0E-09 | 9.6E-10 | 9.4E-10 | 9.8E-10 | 9.6E-10 | 9.6E-10 | 9.6E-10 | 9.9E-10 | 1.0E-09 | 9.9E-10 | 9.9E-10 | 9.8E-10 | 1.1E-09 |
| BAP EQUIVALENT-HALFND | 3.4E-05 | 3.2E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 3.4E-05 | 1.5E-05 | 1.8E-05 | 1.5E-05 | 1.6E-05 |
| NAPHTHALENE | 1.4E-08 | 4.3E-08 | 4.3E-08 | 4.4E-08 | 4.3E-08 | 4.3E-08 | 4.3E-08 | 4.4E-08 | 4.5E-08 | 4.4E-08 | 4.4E-08 | 4.4E-08 | 4.7E-08 |
| AROCLOR-1254 | 1.0E-07 | 9.7E-08 | 9.7E-08 | 9.9E-08 | 9.7E-08 | 9.7E-08 | 9.7E-08 | 9.9E-08 | 1.0E-07 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 1.1E-07 |
| AROCLOR-1260 | 2.6E-07 | 9.7E-08 | 9.7E-08 | 9.9E-08 | 9.7E-08 | 9.7E-08 | 9.7E-08 | 9.9E-08 | 9.4E-08 | 9.9E-08 | 9.4E-07 | 9.9E-08 | 1.1E-07 |
| ARSENIC | 4.0E-06 | 6.6E-06 | 1.3E-06 | 1.1E-06 | 3.7E-06 | 2.5E-06 | 1.2E-06 | 1.8E-06 | 6.3E-07 | 1.6E-06 | 2.1E-06 | 6.3E-06 | 1.2E-06 |
| COBALT | 2.4E-09 | 4.6E-09 | 1.1E-09 | 1.0E-08 | 1.0E-08 | 8.8E-09 | 7.4E-09 | 4.9E-09 | 7.1E-09 | 5.6E-09 | 5.3E-09 | 4.2E-09 | 3.2E-09 |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.8E-06 | 3.2E-06 | 9.5E-07 | 4.8E-06 | 4.6E-06 | 4.5E-06 | 4.4E-06 | 3.8E-06 | 4.4E-06 | 3.2E-06 | 4.7E-06 | 5.5E-06 | 1.8E-06 |
| TOTAL CANCER RISK | 4.2E-05 | 4.2E-05 | 1.7E-05 | 2.1E-05 | 2.3E-05 | 2.2E-05 | 2.1E-05 | 2.1E-05 | 3.9E-05 | 2.0E-05 | 2.6E-05 | 2.7E-05 | 1.9E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-519 | SB-519 | SB-520 | SB-520 | SB-541A | SB-542 | SB-542 | SB-543A | SB-543A | SB-545 | SB-547 | SB-547 | SB-548 | SB-548 | SB-550A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-519-040 | SB-519-081 | SB-520-040 | SB-520-081 | SB-541A-4 | SB-542-3 | SB-542-4 | SB-543A-3 | SB-543A-4 | SB-545-4 | SB-547-3 | SB-547-4 | SB-548-3 | SB-548-4 | SB-550A-3 |
| SAMPLE DATE | 20071130 | 20071130 | 20071130 | 20071130 | 20081111 | 20081023 | 20081023 | 20081111 | 20081111 | 20081023 | 20081021 | 20081021 | 20081023 | 20081023 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 4 | 8 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 |
| BOTTOM DEPTH | 6 | 10 | 6 | 10 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.5E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.9E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.6E-07 | 6.6E-07 | 6.9E-07 | 1.5E-06 | | | | | | | | | | | |
| NAPHTHALENE | 8.2E-09 | 8.2E-09 | 8.7E-09 | 8.7E-09 | | | | | | | | | | | |
| AROCLOR-1254 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 2.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 1.0E-08 | | | 9.5E-09 | 9.5E-09 | 1.0E-08 |
| AROCLOR-1260 | 1.9E-08 | 1.9E-08 | 2.0E-08 | 2.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 1.0E-08 | | | 9.5E-09 | 9.5E-09 | 1.0E-08 |
| ARSENIC | 2.2E-07 | 4.4E-07 | 4.4E-07 | 4.8E-07 | | | | | | | | | | | |
| COBALT | 6.4E-10 | 3.6E-10 | 1.2E-09 | 8.2E-10 | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.1E-07 | 1.2E-07 | 2.6E-07 | 1.8E-07 | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-06 | 1.3E-06 | 1.4E-06 | 2.2E-06 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 2.0E-08 | | | 1.9E-08 | 1.9E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.5E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.4E-10 | 9.4E-10 | 9.9E-10 | 9.8E-10 | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-05 | 1.4E-05 | 1.5E-05 | 3.2E-05 | | | | | | | | | | | |
| NAPHTHALENE | 4.1E-08 | 4.1E-08 | 4.4E-08 | 4.4E-08 | | | | | | | | | | | |
| AROCLOR-1254 | 9.4E-08 | 9.4E-08 | 9.9E-08 | 9.9E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 4.7E-08 | 5.0E-08 | | | 4.7E-08 | 4.7E-08 | 5.0E-08 |
| AROCLOR-1260 | 9.4E-08 | 9.4E-08 | 9.9E-08 | 9.9E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 4.7E-08 | 5.0E-08 | | | 4.7E-08 | 4.7E-08 | 5.0E-08 |
| ARSENIC | 1.7E-06 | 3.4E-06 | 3.4E-06 | 3.7E-06 | | | | | | | | | | | |
| COBALT | 3.2E-09 | 1.8E-09 | 6.1E-09 | 4.1E-09 | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.2E-06 | 1.9E-06 | 3.9E-06 | 2.7E-06 | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-05 | 2.0E-05 | 2.3E-05 | 3.9E-05 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.4E-08 | 9.4E-08 | 9.9E-08 | | | 9.4E-08 | 9.4E-08 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-550A | SB-554 | SB-554 | SB-555 | SB-555 | SB-555 | SB-555A | SB-556 | SB-556 | SB-556 | SB-557 | SB-557 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-550A-4 | SB-554-3 | SB-554-4 | SB-555-4 | SB-555-6 | SB-555-8 | SB-555A-10 | SB-556-4 | SB-556-6 | SB-556-8 | SB-557-4 | SB-557-6 |
| SAMPLE DATE | 20081111 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 4 | 6 |
| BOTTOM DEPTH | 4 | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 1.0E-08 | | | 9.8E-06 | 9.0E-09 | 9.5E-09 | 1.0E-08 | | | | 2.7E-08 | |
| AROCLOR-1260 | 1.0E-08 | | | 7.8E-06 | 9.0E-09 | 2.5E-07 | 1.0E-08 | | | | 9.0E-09 | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-08 | | | 1.8E-05 | 1.8E-08 | 2.6E-07 | 2.0E-08 | | | | 3.6E-08 | |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 5.0E-08 | | | 4.9E-05 | 4.5E-08 | 4.7E-08 | 5.0E-08 | | | | 1.3E-07 | |
| AROCLOR-1260 | 5.0E-08 | | | 3.9E-05 | 4.5E-08 | 1.2E-06 | 5.0E-08 | | | | 4.5E-08 | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.9E-08 | | | 8.7E-05 | 8.9E-08 | 1.3E-06 | 9.9E-08 | | | | 1.8E-07 | |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-557 | SB-558 | SB-558 | SB-558 | SB-559 | SB-559 | SB-559 | SB-560 | SB-561 | SB-561 | SB-561 | SB-561A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-557-8 | SB-558-4 | SB-558-6 | SB-558-8 | SB-559-4 | SB-559-6 | SB-559-8 | SB-560-4 | SB-561-4 | SB-561-6 | SB-561-8 | SB-561A-6 |
| SAMPLE DATE | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081021 | 20081021 | 20081021 | 20081111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 6 | 8 | 6 |
| BOTTOM DEPTH | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 6 | 8 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | 9.5E-09 | | | 9.0E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | | 9.0E-09 | 9.5E-09 | 9.5E-09 |
| AROCLOR-1260 | | 1.4E-07 | | | 9.0E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | | 9.0E-09 | 1.8E-07 | 9.5E-09 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | | 1.5E-07 | | | 1.8E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | | 1.8E-08 | 1.9E-07 | 1.9E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | 4.7E-08 | | | 4.5E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | | 4.5E-08 | 4.7E-08 | 4.7E-08 |
| AROCLOR-1260 | | 6.9E-07 | | | 4.5E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | | 4.5E-08 | 8.9E-07 | 4.7E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | | 7.4E-07 | | | 8.9E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | | 8.9E-08 | 9.4E-07 | 9.4E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-561A | SB-562 | SB-562 | SB-562 | SB-563 | SB-563 | SB-563 | SB-564 | SB-565 | SB-566 | SB-566 | SB-566 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-561A-8 | SB-562-4 | SB-562-6 | SB-562-8 | SB-563-4 | SB-563-6 | SB-563-8 | SB-564-4 | SB-565-4 | SB-566-4 | SB-566-6 | SB-566-8 |
| SAMPLE DATE | 20081111 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 |
| BOTTOM DEPTH | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 9.5E-09 | | | | 1.0E-08 | | | 9.5E-09 | 9.5E-09 | 4.7E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 9.5E-09 | | | | 1.0E-08 | | | 9.5E-09 | 9.5E-09 | 7.0E-07 | 1.0E-08 | 1.0E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-08 | | | | 2.0E-08 | | | 1.9E-08 | 1.9E-08 | 7.4E-07 | 2.0E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 4.7E-08 | | | | 5.0E-08 | | | 4.7E-08 | 4.7E-08 | 2.4E-07 | 5.0E-08 | 5.0E-08 |
| AROCLOR-1260 | 4.7E-08 | | | | 5.0E-08 | | | 4.7E-08 | 4.7E-08 | 3.5E-06 | 5.0E-08 | 5.0E-08 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.4E-08 | | | | 9.9E-08 | | | 9.4E-08 | 9.4E-08 | 3.7E-06 | 9.9E-08 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-567 | SB-568 | SB-568 | SB-568 | SB-568 | SB-568 | SB-568A | SB-568A | SB-568A | SB-569 | SB-569 | SB-569 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-567-4 | SB-568-4 | SB-568-4-AVG | SB-568-4-D | SB-568-6 | SB-568-8 | SB-568A-10 | SB-568A-6 | SB-568A-8 | SB-569-4 | SB-569-6 | SB-569-8 |
| SAMPLE DATE | 20081023 | 20081021 | 20081021 | 20081021 | 20081021 | 20081021 | 20081111 | 20081111 | 20081111 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 4 | 4 | 4 | 6 | 8 | 10 | 6 | 8 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 9.5E-09 | | | 1.0E-08 | 9.5E-09 | 9.5E-09 | 1.9E-07 | 1.0E-08 | 9.5E-09 |
| AROCLOR-1260 | 9.5E-09 | 8.9E-08 | 6.6E-08 | 4.3E-08 | | | 1.0E-08 | 9.5E-09 | 9.5E-09 | 4.0E-06 | 3.3E-08 | 3.0E-07 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-08 | 9.8E-08 | 7.5E-08 | 5.2E-08 | | | 2.0E-08 | 1.9E-08 | 1.9E-08 | 4.2E-06 | 4.3E-08 | 3.1E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | | | 5.0E-08 | 4.7E-08 | 4.7E-08 | 9.4E-07 | 5.0E-08 | 4.7E-08 |
| AROCLOR-1260 | 4.7E-08 | 4.4E-07 | 3.3E-07 | 2.1E-07 | | | 5.0E-08 | 4.7E-08 | 4.7E-08 | 2.0E-05 | 1.6E-07 | 1.5E-06 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.4E-08 | 4.9E-07 | 3.7E-07 | 2.6E-07 | | | 9.9E-08 | 9.4E-08 | 9.4E-08 | 2.1E-05 | 2.1E-07 | 1.5E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-570 | SB-570 | SB-570 | SB-570A | SB-570A | SB-570A | SB-571 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-570-4 | SB-570-6 | SB-570-8 | SB-570A-10 | SB-570A-6 | SB-570A-8 | SB-571-4 |
| SAMPLE DATE | 20081022 | 20081022 | 20081022 | 20081111 | 20081111 | 20081111 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 6 | 8 | 4 |
| **INDUSTRIAL** | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | |
| NAPHTHALENE | | | | | | | |
| AROCLOR-1254 | 1.8E-08 | | | 9.0E-09 | 9.5E-09 | 9.5E-09 | 9.0E-09 |
| AROCLOR-1260 | 3.9E-07 | | | 3.4E-08 | 9.5E-09 | 9.5E-09 | 9.0E-09 |
| ARSENIC | | | | | | | |
| COBALT | | | | | | | |
| IRON | | | | | | | |
| LEAD | | | | | | | |
| MANGANESE | | | | | | | |
| MERCURY | | | | | | | |
| VANADIUM | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | |
| TOTAL CANCER RISK | 4.1E-07 | | | 4.3E-08 | 1.9E-08 | 1.9E-08 | 1.8E-08 |
| **RESIDENTIAL** | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | |
| NAPHTHALENE | | | | | | | |
| AROCLOR-1254 | 8.9E-08 | | | 4.5E-08 | 4.7E-08 | 4.7E-08 | 4.5E-08 |
| AROCLOR-1260 | 1.9E-06 | | | 1.7E-07 | 4.7E-08 | 4.7E-08 | 4.5E-08 |
| ARSENIC | | | | | | | |
| COBALT | | | | | | | |
| IRON | | | | | | | |
| LEAD | | | | | | | |
| MANGANESE | | | | | | | |
| MERCURY | | | | | | | |
| VANADIUM | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | |
| TOTAL CANCER RISK | 2.0E-06 | | | 2.1E-07 | 9.4E-08 | 9.4E-08 | 8.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-818 | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 | SB-819 | SB-819 | SB-819 | SB-820 | SB-820 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-818-03 | E-SB-818-05 | E-SB-818-07 | E-SB-818-09 | E-SB-819-03 | E-SB-819-05 | E-SB-819-07 | SB-819-07-AV | E-SB-819-07-D | E-SB-819-09 | E-SB-820-03 | E-SB-820-05 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 6.3E-04 | 7.7E-04 | 7.0E-04 | 7.7E-04 | 6.3E-04 | 7.0E-04 | 6.3E-04 | 6.1E-04 | 5.9E-04 | 7.0E-04 | 6.6E-04 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.3E-04 | 7.7E-04 | 7.0E-04 | 7.7E-04 | 6.3E-04 | 7.0E-04 | 6.3E-04 | 6.1E-04 | 5.9E-04 | 7.0E-04 | 6.6E-04 | 7.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 8.0E-03 | 9.8E-03 | 8.9E-03 | 9.8E-03 | 8.0E-03 | 8.9E-03 | 8.0E-03 | 7.8E-03 | 7.6E-03 | 8.9E-03 | 8.5E-03 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.0E-03 | 9.8E-03 | 8.9E-03 | 9.8E-03 | 8.0E-03 | 8.9E-03 | 8.0E-03 | 7.8E-03 | 7.6E-03 | 8.9E-03 | 8.5E-03 | 8.9E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-820 | SB-820 | SB-821 | SB-821 | SB-821 | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-822 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-820-07 | E-SB-820-09 | E-SB-821-03 | E-SB-821-05 | E-SB-821-07 | E-SB-821-09 | SB-821-09-AV | E-SB-821-09-D | E-SB-822-03 | E-SB-822-05 | SB-822-05-AV | E-SB-822-05-D |
| SAMPLE DATE | 20100915 | 20100915 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 5 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 6.6E-04 | 7.0E-04 | 7.3E-04 | 6.6E-04 | 7.0E-04 | 7.7E-04 | 7.5E-04 | 7.3E-04 | 7.0E-04 | 7.3E-04 | 7.3E-04 | 7.3E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.6E-04 | 7.0E-04 | 7.3E-04 | 6.6E-04 | 7.0E-04 | 7.7E-04 | 7.5E-04 | 7.3E-04 | 7.0E-04 | 7.3E-04 | 7.3E-04 | 7.3E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 8.5E-03 | 8.9E-03 | 9.3E-03 | 8.5E-03 | 8.9E-03 | 9.8E-03 | 9.6E-03 | 9.3E-03 | 8.9E-03 | 9.3E-03 | 9.3E-03 | 9.3E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.5E-03 | 8.9E-03 | 9.3E-03 | 8.5E-03 | 8.9E-03 | 9.8E-03 | 9.6E-03 | 9.3E-03 | 8.9E-03 | 9.3E-03 | 9.3E-03 | 9.3E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-822 | SB-822 | SB-823 | SB-823 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 | SB-824 | SB-825 | SB-825 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-822-07 | E-SB-822-09 | E-SB-823-05 | E-SB-823-07 | E-SB-824-03 | E-SB-824-05 | E-SB-824-07 | E-SB-824-07-AV | E-SB-824-07-D | E-SB-824-09 | E-SB-825-03 | E-SB-825-05 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 9 | 5 | 7 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.3E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 6.6E-04 | 7.3E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.3E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 6.6E-04 | 7.3E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 9.3E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.5E-03 | 9.3E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.9E-03 | 8.9E-03 | 9.3E-03 | 9.3E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.5E-03 | 9.3E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-826 | SB-826 | SB-827 | SB-827 | SB-827 | SB-827 | SB-828 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-07 | E-SB-825-09 | E-SB-826-05 | E-SB-826-07 | E-SB-826-09 | SB-826-09-AV | E-SB-826-09-D | E-SB-827-03 | E-SB-827-05 | E-SB-827-07 | E-SB-827-09 | E-SB-828-03 |
| SAMPLE DATE | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 7 | 9 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 1.4E-02 | 7.0E-01 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 1.4E-02 | 7.0E-01 | 7.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 1.7E-01 | 8.9E+00 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 1.7E-01 | 8.9E+00 | 8.9E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-828 | SB-829 | SB-829 | SB-829 | SB-829 | SB-830 | SB-830 | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-828-09 | E-SB-829-03 | E-SB-829-05 | E-SB-829-07 | E-SB-829-09 | E-SB-830-03 | E-SB-830-05 | E-SB-830-07 | E-SB-830-09 | E-SB-831-03 | E-SB-831-05 | E-SB-831-07 |
| SAMPLE DATE | 20100916 | 20100917 | 20100917 | 20100917 | 20100917 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 8.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.0E-04 | 6.3E-04 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.3E-04 | 7.0E-04 | 7.0E-04 | 8.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.0E-04 | 6.3E-04 | 7.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 1.0E-02 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.9E-03 | 8.0E-03 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.3E-03 | 8.9E-03 | 8.9E-03 | 1.0E-02 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 8.9E-03 | 8.0E-03 | 8.9E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-831 | SB-832 | SB-832 | SB-832 | SB-833 | SB-833 | SB-833 | SB-833 | SB-833A | SB-833A | SB-833B | SB-833B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-831-09 | E-SB-832-05 | E-SB-832-07 | E-SB-832-09 | E-SB-833-03 | E-SB-833-05 | E-SB-833-07 | E-SB-833-09 | E-SB-833A-06 | E-SB-833A-10 | E-SB-833B-04 | E-SB-833B-06 |
| SAMPLE DATE | 20100913 | 20100917 | 20100917 | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 | 4 | 6 |
| BOTTOM DEPTH | 9 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 10 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | 1.3E+00 | 1.1E-02 | 8.6E-02 | 8.6E-08 | 1.3E-06 |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | 2.7E+01 | 4.0E-01 | 2.4E+00 | 9.8E-07 | 3.4E-05 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | 3.9E-03 | 5.0E-04 | 8.3E-04 | 7.1E-09 | 8.4E-09 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | 6.9E-03 | 3.9E-04 | 5.8E-04 | 3.9E-05 | 5.4E-05 |
| AROCLOR-1254 | 7.0E-04 | 7.0E-04 | 8.4E-04 | 7.7E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 3.8E+01 | 7.3E+00 | 7.3E+00 | 7.0E-04 | 7.3E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | 1.4E-03 | | | | |
| COBALT | | | | | | | | 9.8E-03 | | | | |
| IRON | | | | | | | | 8.6E-03 | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | 1.2E-03 | | | | |
| MERCURY | | | | | | | | 4.7E-05 | | | | |
| VANADIUM | | | | | | | | 3.3E-04 | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | 1.6E-04 | | | | |
| TOTAL HAZARD INDEX | 7.0E-04 | 7.0E-04 | 8.4E-04 | 7.7E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 6.7E+01 | 7.7E+00 | 9.8E+00 | 7.4E-04 | 8.2E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | 3.5E+01 | 2.9E-01 | 2.2E+00 | 2.2E-06 | 3.5E-05 |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | 1.2E+02 | 1.8E+00 | 1.1E+01 | 4.5E-06 | 1.6E-04 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | 3.7E-02 | 4.8E-03 | 7.9E-03 | 6.8E-08 | 8.0E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | 3.2E-02 | 1.8E-03 | 2.7E-03 | 1.8E-04 | 2.5E-04 |
| AROCLOR-1254 | 8.9E-03 | 8.9E-03 | 1.1E-02 | 9.8E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 4.9E+02 | 9.3E+01 | 9.3E+01 | 8.9E-03 | 9.3E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | 2.8E-02 | | | | |
| COBALT | | | | | | | | 2.3E-01 | | | | |
| IRON | | | | | | | | 2.0E-01 | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | 1.2E-02 | | | | |
| MERCURY | | | | | | | | 6.0E-04 | | | | |
| VANADIUM | | | | | | | | 7.9E-03 | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | 1.4E-03 | | | | |
| TOTAL HAZARD INDEX | 8.9E-03 | 8.9E-03 | 1.1E-02 | 9.8E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 6.5E+02 | 9.6E+01 | 1.1E+02 | 9.1E-03 | 9.8E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-833B | SB-833B | SB-833C | SB-833C | SB-833C | SB-833C | SB-833D | SB-833D | SB-833D | SB-833D | SB-833E | SB-833E |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833B-08 | E-SB-833B-10 | E-SB-833C-04 | E-SB-833C-06 | E-SB-833C-08 | E-SB-833C-10 | E-SB-833D-04 | E-SB-833D-06 | E-SB-833D-08 | E-SB-833D-10 | E-SB-833E-06 | E-SB-833E-10 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 10 | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 6 | 10 |
| BOTTOM DEPTH | 8 | 10 | 4 | 6 | 8 | 10 | 4 | 6 | 8 | 10 | 6 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.3E-06 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.1E-07 | 8.9E-08 | 9.5E-08 | 3.7E-07 | 4.0E-05 | 3.4E-06 | 3.2E-02 | 5.6E-04 |
| 1,2,4-TRICHLOROBENZENE | 3.1E-05 | 2.0E-06 | 9.4E-07 | 1.3E-06 | 1.1E-06 | 6.9E-07 | 8.1E-07 | 3.8E-06 | 3.1E-04 | 7.4E-05 | 7.4E-01 | 1.3E-02 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 7.7E-09 | 8.9E-09 | 8.4E-09 | 8.4E-09 | 9.2E-09 | 7.6E-09 | 8.2E-09 | 9.3E-09 | 4.2E-07 | 2.4E-07 | 8.0E-05 | 4.2E-06 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 2.5E-04 | 8.2E-05 | 2.9E-04 | 2.4E-06 | 2.5E-06 | 2.6E-06 | 2.5E-06 | 2.6E-06 | 7.8E-05 | 2.4E-05 | 4.8E-05 | 2.4E-06 |
| AROCLOR-1254 | 7.0E-04 | 3.5E-03 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.3E-04 | 7.7E-04 | 7.0E-04 | 7.7E-04 | 3.4E-01 | 7.0E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.8E-04 | 3.6E-03 | 9.9E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.3E-04 | 7.7E-04 | 1.1E-03 | 8.7E-04 | 1.1E+00 | 8.4E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 3.4E-05 | 2.7E-06 | 2.6E-06 | 2.6E-06 | 2.9E-06 | 2.3E-06 | 2.5E-06 | 9.6E-06 | 1.0E-03 | 8.8E-05 | 8.3E-01 | 1.5E-02 |
| 1,2,4-TRICHLOROBENZENE | 1.4E-04 | 9.1E-06 | 4.3E-06 | 6.1E-06 | 5.1E-06 | 3.2E-06 | 3.7E-06 | 1.8E-05 | 1.4E-03 | 3.4E-04 | 3.4E+00 | 6.1E-02 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 7.3E-08 | 8.4E-08 | 8.0E-08 | 8.0E-08 | 8.7E-08 | 7.2E-08 | 7.7E-08 | 8.9E-08 | 3.9E-06 | 2.3E-06 | 7.6E-04 | 3.9E-05 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 1.2E-03 | 3.8E-04 | 1.3E-03 | 1.1E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 3.6E-04 | 1.1E-04 | 2.3E-04 | 1.1E-05 |
| AROCLOR-1254 | 8.9E-03 | 4.4E-02 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 9.3E-03 | 9.8E-03 | 8.9E-03 | 9.8E-03 | 4.4E+00 | 8.9E-01 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.0E-02 | 4.5E-02 | 1.0E-02 | 8.9E-03 | 8.9E-03 | 9.4E-03 | 9.4E-03 | 9.8E-03 | 1.2E-02 | 1.0E-02 | 8.6E+00 | 9.7E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-833F | SB-833F | SB-833F | SB-833F | SB-833G | SB-833G | SB-833G | SB-833H | SB-833H | SB-833H | SB-833I | SB-833I |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833F-04 | E-SB-833F-06 | E-SB-833F-08 | E-SB-833F-10 | E-SB-833G-06 | E-SB-833G-08 | E-SB-833G-10 | E-SB-833H-06 | E-SB-833H-08 | E-SB-833H-10 | E-SB-833I-08 | E-SB-833I-10 |
| SAMPLE DATE | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101012 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 6 | 8 | 10 | 6 | 8 | 10 | 8 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.1E-04 | 2.3E-04 | 2.0E-04 | 9.2E-05 | 1.2E-06 | 2.5E-06 | 9.8E-08 | 3.6E-06 | 1.1E-04 | 1.2E-05 | 1.3E-02 | 6.7E-03 |
| 1,2,4-TRICHLOROBENZENE | 4.3E-03 | 5.1E-03 | 4.3E-03 | 2.0E-03 | 2.1E-05 | 6.0E-05 | 9.5E-07 | 1.1E-04 | 2.7E-03 | 2.7E-04 | 3.1E-01 | 1.9E-01 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 2.6E-06 | 3.3E-06 | 2.8E-06 | 1.7E-06 | 4.7E-08 | 1.1E-06 | 5.3E-07 | 8.9E-07 | 4.2E-06 | 2.9E-07 | 8.6E-05 | 6.8E-05 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 2.4E-06 | 2.1E-05 | 2.6E-06 | 2.6E-06 | 2.6E-06 | 2.5E-06 | 2.4E-06 | 2.9E-05 | 2.4E-06 | 2.5E-06 | 2.5E-05 | 2.4E-05 |
| AROCLOR-1254 | 7.0E-04 | 7.3E-03 | 7.3E-04 | 7.3E-03 | 7.7E-04 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 7.3E-01 | 7.0E-01 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 5.2E-03 | 1.3E-02 | 5.2E-03 | 9.5E-03 | 7.9E-04 | 8.0E-04 | 7.0E-04 | 8.4E-04 | 3.6E-03 | 1.0E-03 | 1.1E+00 | 8.9E-01 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 5.4E-03 | 6.1E-03 | 5.1E-03 | 2.4E-03 | 3.2E-05 | 6.6E-05 | 2.6E-06 | 9.4E-05 | 2.9E-03 | 3.0E-04 | 3.4E-01 | 1.8E-01 |
| 1,2,4-TRICHLOROBENZENE | 1.9E-02 | 2.3E-02 | 1.9E-02 | 9.3E-03 | 9.7E-05 | 2.7E-04 | 4.3E-06 | 4.9E-04 | 1.3E-02 | 1.2E-03 | 1.4E+00 | 8.6E-01 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 2.5E-05 | 3.1E-05 | 2.6E-05 | 1.6E-05 | 4.5E-07 | 1.1E-05 | 5.1E-06 | 8.4E-06 | 3.9E-05 | 2.8E-06 | 8.2E-04 | 6.5E-04 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 1.1E-05 | 1.0E-04 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.1E-05 | 1.3E-04 | 1.1E-05 | 1.2E-05 | 1.2E-04 | 1.1E-04 |
| AROCLOR-1254 | 8.9E-03 | 9.3E-02 | 9.3E-03 | 9.3E-02 | 9.8E-03 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 9.3E+00 | 8.9E+00 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 3.4E-02 | 1.2E-01 | 3.4E-02 | 1.1E-01 | 9.9E-03 | 9.7E-03 | 8.9E-03 | 9.6E-03 | 2.4E-02 | 1.1E-02 | 1.1E+01 | 9.9E+00 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-833J | SB-833J | SB-833J | SB-833J | SB-833K | SB-833K | SB-833K | SB-833L | SB-833L | SB-833L | SB-833M | SB-833M |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833J-04 | E-SB-833J-06 | E-SB-833J-08 | E-SB-833J-10 | E-SB-833K-06 | E-SB-833K-08 | E-SB-833K-10 | E-SB-833L-04 | E-SB-833L-06 | E-SB-833L-08 | E-SB-833M-04 | E-SB-833M-06 |
| SAMPLE DATE | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 | 20101013 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 | 4 | 6 |
| BOTTOM DEPTH | 4 | 6 | 8 | 10 | 6 | 8 | 10 | 4 | 6 | 8 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.1E-07 | 9.5E-08 | 9.5E-08 | 5.4E-05 | 1.3E-02 | 2.3E-04 | 3.5E-03 | 2.6E-04 | 1.4E-04 | 4.7E-02 | 1.1E-07 | 3.3E-06 |
| 1,2,4-TRICHLOROBENZENE | 1.6E-06 | 1.6E-06 | 6.5E-07 | 1.5E-03 | 3.4E-01 | 4.8E-03 | 7.9E-02 | 5.4E-03 | 2.8E-03 | 1.2E+00 | 1.4E-06 | 7.1E-05 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.0E-09 | 8.0E-09 | 8.2E-09 | 5.9E-07 | 4.4E-05 | 2.9E-06 | 7.4E-06 | 2.0E-06 | 8.0E-07 | 1.3E-04 | 9.2E-09 | 7.6E-09 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 2.4E-06 | 2.5E-06 | 2.4E-06 | 2.6E-06 | 2.4E-05 | 2.4E-06 | 2.4E-05 | 2.4E-06 | 2.5E-06 | 2.4E-05 | 2.5E-06 | 2.4E-06 |
| AROCLOR-1254 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 3.5E+00 | 1.4E-01 | 7.0E-01 | 7.0E-04 | 1.4E-02 | 3.4E+00 | 1.4E-03 | 3.4E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.0E-04 | 7.0E-04 | 7.0E-04 | 2.3E-03 | 3.8E+00 | 1.4E-01 | 7.8E-01 | 6.3E-03 | 1.7E-02 | 4.7E+00 | 1.4E-03 | 3.5E-03 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.8E-06 | 2.5E-06 | 2.5E-06 | 1.4E-03 | 3.5E-01 | 5.9E-03 | 9.3E-02 | 6.7E-03 | 3.7E-03 | 1.2E+00 | 2.9E-06 | 8.6E-05 |
| 1,2,4-TRICHLOROBENZENE | 7.1E-06 | 7.1E-06 | 3.0E-06 | 6.7E-03 | 1.6E+00 | 2.2E-02 | 3.6E-01 | 2.5E-02 | 1.3E-02 | 5.3E+00 | 6.4E-06 | 3.2E-04 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.6E-08 | 7.6E-08 | 7.7E-08 | 5.6E-06 | 4.2E-04 | 2.8E-05 | 7.0E-05 | 1.9E-05 | 7.6E-06 | 1.2E-03 | 8.7E-08 | 7.2E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 1.1E-05 | 1.2E-05 | 1.1E-05 | 1.2E-05 | 1.1E-04 | 1.1E-05 | 1.1E-04 | 1.1E-05 | 1.2E-05 | 1.1E-04 | 1.2E-05 | 1.1E-05 |
| AROCLOR-1254 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 4.4E+01 | 1.8E+00 | 8.9E+00 | 8.9E-03 | 1.8E-01 | 4.4E+01 | 1.8E-02 | 4.4E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.9E-03 | 8.9E-03 | 8.9E-03 | 1.8E-02 | 4.6E+01 | 1.8E+00 | 9.4E+00 | 4.0E-02 | 2.0E-01 | 5.1E+01 | 1.8E-02 | 4.4E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-833M | SB-833M | SB-833N | SB-833N | SB-833N | SB-833N | SB-001 | SB-001 | SB-002 | SB-002 | SB-003 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-833M-08 | E-SB-833M-10 | E-SB-833N-04 | E-SB-833N-06 | E-SB-833N-08 | E-SB-833N-10 | SB-1-05 | SB-1-10 | SB-2-05 | SB-2-10 | SB-3-05 |
| SAMPLE DATE | 20101013 | 20101013 | 20101014 | 20101014 | 20101014 | 20101014 | 20031120 | 20031120 | 20031120 | 20031120 | 20031120 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 10 | 4 | 6 | 8 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | 8 | 10 | 4 | 6 | 8 | 10 | 5 | 10 | 5 | 10 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.1E-07 | 1.0E-07 | 9.8E-08 | 1.1E-07 | 1.1E-07 | 4.3E-07 | 2.1E-06 | 2.1E-06 | 2.1E-06 | 2.1E-06 | 2.1E-06 |
| 1,2,4-TRICHLOROBENZENE | 9.6E-07 | 9.6E-07 | 3.3E-07 | 3.5E-07 | 7.2E-07 | 1.7E-05 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 | 9.9E-06 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.2E-09 | 8.4E-09 | 8.3E-09 | 9.2E-09 | 9.3E-09 | 9.0E-09 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 2.5E-06 | 2.5E-06 | 2.5E-05 | 2.6E-05 | 2.5E-05 | 1.0E-05 | 3.0E-04 | 2.8E-04 | 2.8E-04 | 2.8E-04 | 2.8E-04 |
| AROCLOR-1254 | 1.4E-03 | 7.0E-04 | 7.3E-04 | 7.3E-04 | 3.5E-03 | 3.5E-03 | 2.5E-03 | 2.3E-03 | 2.3E-03 | 2.3E-03 | 2.3E-03 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | 1.3E-02 | 4.1E-03 | 4.8E-03 | 2.0E-03 | 3.4E-03 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | 3.3E-04 | 3.1E-04 | 3.1E-04 | 3.1E-04 | 3.1E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | 1.3E-03 | 3.3E-04 | 8.7E-05 | 8.5E-05 | 1.7E-04 |
| TOTAL HAZARD INDEX | 1.4E-03 | 7.0E-04 | 7.6E-04 | 7.6E-04 | 3.5E-03 | 3.5E-03 | 1.7E-02 | 7.4E-03 | 7.8E-03 | 5.0E-03 | 6.4E-03 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.9E-06 | 2.6E-06 | 2.6E-06 | 2.8E-06 | 2.9E-06 | 1.1E-05 | 5.6E-05 | 5.6E-05 | 5.6E-05 | 5.6E-05 | 5.6E-05 |
| 1,2,4-TRICHLOROBENZENE | 4.4E-06 | 4.4E-06 | 1.5E-06 | 1.6E-06 | 3.3E-06 | 7.7E-05 | 4.5E-05 | 4.5E-05 | 4.5E-05 | 4.5E-05 | 4.5E-05 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.7E-08 | 8.0E-08 | 7.9E-08 | 8.7E-08 | 8.9E-08 | 8.6E-08 | 9.9E-07 | 9.9E-07 | 9.9E-07 | 9.9E-07 | 9.9E-07 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.2E-05 | 1.2E-05 | 1.2E-04 | 1.2E-04 | 1.2E-04 | 4.7E-05 | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 |
| AROCLOR-1254 | 1.8E-02 | 8.9E-03 | 9.3E-03 | 9.3E-03 | 4.4E-02 | 4.4E-02 | 3.2E-02 | 3.0E-02 | 3.0E-02 | 2.9E-02 | 2.9E-02 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | 2.5E-01 | 8.3E-02 | 9.7E-02 | 4.0E-02 | 6.9E-02 |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | 4.2E-03 | 3.9E-03 | 3.9E-03 | 3.9E-03 | 3.9E-03 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | 1.2E-02 | 2.9E-03 | 7.7E-04 | 7.5E-04 | 1.5E-03 |
| TOTAL HAZARD INDEX | 1.8E-02 | 8.9E-03 | 9.5E-03 | 9.5E-03 | 4.5E-02 | 4.5E-02 | 3.0E-01 | 1.2E-01 | 1.3E-01 | 7.6E-02 | 1.1E-01 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-003 | SB-004 | SB-004 | SB-035 | SB-036 | SB-500 | SB-500 | SB-501 | SB-501 | SB-502 | SB-502 | SB-503 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-3-10 | SB-4-05 | SB-4-10 | SB-35-04 | SB-36-05 | SB-500-0406 | SB-500-0810 | SB-501-0406 | SB-501-0810 | SB-502-0406 | SB-502-0810 | SB-503-0406 |
| SAMPLE DATE | 20031120 | 20031120 | 20031120 | 20040922 | 20040917 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 | 20071127 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 4 | 5 | 4 | 8 | 4 | 8 | 4 | 8 | 4 |
| BOTTOM DEPTH | 10 | 5 | 10 | 4 | 5 | 6 | 10 | 6 | 10 | 6 | 10 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.1E-06 | 2.1E-06 | 2.1E-06 | 1.8E-06 | 1.8E-06 | 1.7E-06 | 1.8E-06 | 1.3E-03 | 8.6E-03 | 1.3E-05 | 4.3E-04 | 1.9E-06 |
| 1,2,4-TRICHLOROBENZENE | 9.9E-06 | 9.9E-06 | 9.9E-06 | 8.5E-06 | 8.5E-06 | 7.9E-06 | 8.5E-06 | 1.4E-02 | 2.0E-01 | 2.0E-04 | 1.0E-02 | 8.6E-06 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.0E-07 | 1.0E-07 | 1.0E-07 | 8.9E-08 | 8.9E-08 | 8.3E-08 | 8.9E-08 | 5.0E-07 | 1.9E-05 | 8.6E-08 | 4.3E-06 | 9.0E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 2.8E-04 | 2.9E-04 | 2.8E-04 | 2.4E-04 | 2.5E-04 | 2.3E-04 | 2.5E-04 | 2.3E-04 | 2.4E-04 | 2.4E-04 | 2.4E-03 | 2.5E-04 |
| AROCLOR-1254 | 2.3E-03 | 2.4E-03 | 2.4E-03 | 9.8E-03 | 1.0E-02 | 1.3E-03 | 1.4E-03 | 2.6E-02 | 1.4E-01 | 2.7E-01 | 6.6E-01 | 7.0E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 3.7E-03 | 1.1E-02 | 5.5E-03 | 3.7E-03 | 3.0E-03 | 7.1E-04 | 1.7E-03 | 2.5E-03 | 2.1E-03 | 3.0E-03 | 1.3E-03 | 9.6E-04 |
| COBALT | | | | | | 2.2E-03 | 3.2E-03 | 3.2E-03 | 7.6E-03 | 2.0E-03 | 1.2E-03 | 3.3E-04 |
| IRON | | | | | | 7.8E-03 | 8.6E-03 | 6.1E-03 | 2.0E-02 | 4.4E-03 | 3.2E-03 | 1.6E-03 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | 1.7E-03 | 1.7E-03 | 2.6E-03 | 6.3E-03 | 3.9E-03 | 3.5E-03 | 3.1E-04 |
| MERCURY | 3.1E-04 | 3.3E-04 | 3.3E-04 | 2.4E-04 | 2.6E-04 | 4.5E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 | 4.5E-05 | 4.7E-05 |
| VANADIUM | | | | | | 1.2E-03 | 1.9E-03 | 7.9E-04 | 2.3E-03 | 8.0E-04 | 4.4E-04 | 5.9E-04 |
| HEXAVALENT CHROMIUM | 1.3E-04 | 1.4E-03 | 3.6E-04 | 5.1E-04 | 2.9E-04 | 3.8E-04 | 5.5E-04 | 3.1E-04 | 8.0E-04 | 3.0E-04 | 1.7E-04 | 1.6E-04 |
| TOTAL HAZARD INDEX | 6.7E-03 | 1.6E-02 | 8.8E-03 | 1.4E-02 | 1.4E-02 | 1.6E-02 | 1.9E-02 | 5.6E-02 | 3.8E-01 | 2.8E-01 | 6.9E-01 | 1.1E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 5.6E-05 | 5.6E-05 | 5.6E-05 | 4.8E-05 | 4.8E-05 | 4.5E-05 | 4.8E-05 | 3.4E-02 | 2.2E-01 | 3.4E-04 | 1.1E-02 | 4.9E-05 |
| 1,2,4-TRICHLOROBENZENE | 4.5E-05 | 4.5E-05 | 4.5E-05 | 3.9E-05 | 3.9E-05 | 3.6E-05 | 3.9E-05 | 6.2E-02 | 9.0E-01 | 9.2E-04 | 4.8E-02 | 4.0E-05 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.9E-07 | 9.9E-07 | 9.9E-07 | 8.4E-07 | 8.4E-07 | 7.9E-07 | 8.4E-07 | 4.8E-06 | 1.8E-04 | 8.2E-07 | 4.1E-05 | 8.6E-07 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.1E-03 | 1.2E-03 | 1.1E-03 | 1.2E-03 | 1.1E-03 | 1.1E-03 | 1.1E-03 | 1.1E-02 | 1.2E-03 |
| AROCLOR-1254 | 2.9E-02 | 3.1E-02 | 3.0E-02 | 1.2E-01 | 1.3E-01 | 1.6E-02 | 1.8E-02 | 3.3E-01 | 1.7E+00 | 3.4E+00 | 8.5E+00 | 8.9E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 7.4E-02 | 2.3E-01 | 1.1E-01 | 7.4E-02 | 6.0E-02 | 1.4E-02 | 3.4E-02 | 5.1E-02 | 4.3E-02 | 6.0E-02 | 2.5E-02 | 1.9E-02 |
| COBALT | | | | | | 5.3E-02 | 7.5E-02 | 7.5E-02 | 1.8E-01 | 4.8E-02 | 2.9E-02 | 7.9E-03 |
| IRON | | | | | | 1.9E-01 | 2.0E-01 | 1.4E-01 | 4.8E-01 | 1.0E-01 | 7.6E-02 | 3.7E-02 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | 1.8E-02 | 1.7E-02 | 2.6E-02 | 6.4E-02 | 4.0E-02 | 3.6E-02 | 3.2E-03 |
| MERCURY | 3.9E-03 | 4.2E-03 | 4.2E-03 | 3.0E-03 | 3.3E-03 | 5.7E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 | 5.7E-04 | 6.0E-04 |
| VANADIUM | | | | | | 2.8E-02 | 4.5E-02 | 1.9E-02 | 5.4E-02 | 1.9E-02 | 1.1E-02 | 1.4E-02 |
| HEXAVALENT CHROMIUM | 1.2E-03 | 1.2E-02 | 3.2E-03 | 4.5E-03 | 2.5E-03 | 3.3E-03 | 4.9E-03 | 2.7E-03 | 7.1E-03 | 2.7E-03 | 1.5E-03 | 1.4E-03 |
| TOTAL HAZARD INDEX | 1.1E-01 | 2.7E-01 | 1.5E-01 | 2.1E-01 | 2.0E-01 | 3.2E-01 | 4.0E-01 | 7.4E-01 | 3.7E+00 | 3.7E+00 | 8.7E+00 | 1.7E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-504 | SB-504 | SB-505 | SB-505 | SB-506 | SB-506 | SB-507 | SB-507 | SB-508 | SB-508 | SB-508 | SB-508 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-504-0406 | SB-504-0810 | SB-505-0406 | SB-505-0810 | SB-506-0406 | SB-506-0810 | SB-507-0406 | SB-507-0810 | SB-508-0406 | B-508-0406-AV | SB-508-0406-D | SB-508-0810 |
| SAMPLE DATE | 20071127 | 20071127 | 20071127 | 20071127 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 | 20071128 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 8 | 4 | 4 | 4 | 8 |
| BOTTOM DEPTH | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 10 | 6 | 6 | 6 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.7E-06 | 1.8E-06 | 1.8E-06 | 1.9E-06 | 1.8E-06 | 2.0E-06 | 1.9E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 |
| 1,2,4-TRICHLOROBENZENE | 1.3E-06 | 8.9E-07 | 8.2E-06 | 6.4E-07 | 8.2E-06 | 9.1E-06 | 8.8E-06 | 8.2E-06 | 8.2E-06 | 8.3E-06 | 8.4E-06 | 8.5E-06 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.4E-08 | 8.6E-08 | 8.6E-08 | 9.3E-08 | 8.6E-08 | 9.5E-08 | 9.2E-08 | 8.6E-08 | 8.6E-08 | 8.7E-08 | 8.7E-08 | 8.9E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 4.1E-04 | 2.8E-05 | 2.4E-04 | 2.6E-04 | 2.4E-04 | 2.6E-04 | 2.6E-04 | 2.4E-04 | 2.4E-04 | 2.4E-04 | 2.4E-04 | 2.5E-04 |
| AROCLOR-1254 | 6.6E-02 | 1.3E-02 | 1.3E-03 | 7.3E-03 | 1.3E-03 | 1.5E-03 | 1.4E-03 | 1.3E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 4.6E-03 | 2.7E-03 | 2.7E-03 | 3.9E-03 | 3.7E-03 | 2.3E-03 | 5.2E-03 | 2.5E-03 | 3.2E-03 | 2.7E-03 | 2.3E-03 | 9.6E-04 |
| COBALT | 1.6E-02 | 8.4E-03 | 1.2E-02 | 8.5E-03 | 6.1E-03 | 4.5E-03 | 6.1E-03 | 2.2E-03 | 4.3E-03 | 3.7E-03 | 3.2E-03 | 6.5E-03 |
| IRON | 1.2E-02 | 1.5E-02 | 1.4E-02 | 1.3E-02 | 7.0E-03 | 4.9E-03 | 1.1E-02 | 3.0E-03 | 1.4E-02 | 1.2E-02 | 9.0E-03 | 6.8E-03 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 7.9E-03 | 1.5E-02 | 3.1E-03 | 2.8E-03 | 3.7E-03 | 2.6E-03 | 4.0E-03 | 7.2E-04 | 1.3E-03 | 6.5E-03 | 1.2E-02 | 1.7E-03 |
| MERCURY | 3.7E-04 | 1.4E-03 | 4.5E-05 | 4.9E-05 | 4.5E-05 | 4.9E-05 | 4.9E-05 | 4.5E-05 | 4.5E-05 | 4.6E-05 | 4.7E-05 | 4.7E-05 |
| VANADIUM | 2.0E-03 | 2.2E-03 | 2.1E-03 | 1.8E-03 | 1.8E-03 | 8.4E-04 | 1.9E-03 | 1.6E-03 | 2.2E-03 | 1.8E-03 | 1.5E-03 | 1.5E-03 |
| HEXAVALENT CHROMIUM | 6.6E-04 | 6.8E-04 | 5.2E-04 | 6.6E-04 | 4.5E-04 | 2.3E-04 | 5.7E-04 | 3.8E-04 | 4.7E-04 | 4.0E-04 | 3.4E-04 | 6.8E-04 |
| TOTAL HAZARD INDEX | 1.1E-01 | 5.9E-02 | 3.6E-02 | 3.9E-02 | 2.4E-02 | 1.7E-02 | 3.0E-02 | 1.2E-02 | 2.7E-02 | 2.8E-02 | 3.0E-02 | 2.0E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 4.6E-05 | 4.6E-05 | 4.6E-05 | 5.0E-05 | 4.6E-05 | 5.1E-05 | 5.0E-05 | 4.6E-05 | 4.6E-05 | 4.7E-05 | 4.7E-05 | 4.8E-05 |
| 1,2,4-TRICHLOROBENZENE | 6.2E-06 | 4.1E-06 | 3.8E-05 | 2.9E-06 | 3.8E-05 | 4.2E-05 | 4.0E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.9E-05 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.0E-07 | 8.2E-07 | 8.2E-07 | 8.9E-07 | 8.2E-07 | 9.0E-07 | 8.7E-07 | 8.2E-07 | 8.2E-07 | 8.2E-07 | 8.3E-07 | 8.4E-07 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 1.9E-03 | 1.3E-04 | 1.1E-03 | 1.2E-03 | 1.1E-03 | 1.2E-03 | 1.2E-03 | 1.1E-03 | 1.1E-03 | 1.1E-03 | 1.1E-03 | 1.2E-03 |
| AROCLOR-1254 | 8.5E-01 | 1.7E-01 | 1.7E-02 | 9.3E-02 | 1.7E-02 | 1.9E-02 | 1.8E-02 | 1.7E-02 | 1.7E-02 | 1.7E-02 | 1.7E-02 | 1.8E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 9.2E-02 | 5.5E-02 | 5.5E-02 | 7.9E-02 | 7.4E-02 | 4.6E-02 | 1.1E-01 | 5.1E-02 | 6.5E-02 | 5.5E-02 | 4.6E-02 | 1.9E-02 |
| COBALT | 3.8E-01 | 2.0E-01 | 2.8E-01 | 2.0E-01 | 1.4E-01 | 1.1E-01 | 1.4E-01 | 5.3E-02 | 1.0E-01 | 8.8E-02 | 7.5E-02 | 1.5E-01 |
| IRON | 2.9E-01 | 3.5E-01 | 3.3E-01 | 3.2E-01 | 1.7E-01 | 1.2E-01 | 2.6E-01 | 7.1E-02 | 3.3E-01 | 2.7E-01 | 2.1E-01 | 1.6E-01 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 8.1E-02 | 1.5E-01 | 3.1E-02 | 2.9E-02 | 3.8E-02 | 2.7E-02 | 4.1E-02 | 7.4E-03 | 1.3E-02 | 6.7E-02 | 1.2E-01 | 1.7E-02 |
| MERCURY | 4.7E-03 | 1.7E-02 | 5.7E-04 | 6.3E-04 | 5.7E-04 | 6.3E-04 | 6.3E-04 | 5.7E-04 | 5.7E-04 | 5.8E-04 | 6.0E-04 | 6.0E-04 |
| VANADIUM | 4.8E-02 | 5.3E-02 | 4.9E-02 | 4.2E-02 | 4.2E-02 | 2.0E-02 | 4.6E-02 | 3.8E-02 | 5.2E-02 | 4.4E-02 | 3.5E-02 | 3.5E-02 |
| HEXAVALENT CHROMIUM | 5.8E-03 | 6.0E-03 | 4.6E-03 | 5.8E-03 | 3.9E-03 | 2.0E-03 | 5.0E-03 | 3.4E-03 | 4.1E-03 | 3.6E-03 | 3.0E-03 | 6.0E-03 |
| TOTAL HAZARD INDEX | 1.7E+00 | 1.0E+00 | 7.7E-01 | 7.7E-01 | 4.9E-01 | 3.4E-01 | 6.2E-01 | 2.4E-01 | 5.9E-01 | 5.5E-01 | 5.1E-01 | 4.1E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-509 | SB-509 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 | SB-835 | SB-835 | SB-836 | SB-836 | SB-836 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-509-0406 | SB-509-0810 | E-SB-834-05 | E-SB-834-07 | E-SB-834-09 | E-SB-835-03 | E-SB-835-05 | E-SB-835-07 | E-SB-835-09 | E-SB-836-03 | E-SB-836-05 | E-SB-836-07 |
| SAMPLE DATE | 20071129 | 20071129 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 8 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 6 | 10 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.8E-06 | 1.7E-06 | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 8.2E-06 | 8.1E-06 | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.6E-08 | 8.4E-08 | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 2.4E-04 | 2.4E-04 | | | | | | | | | | |
| AROCLOR-1254 | 1.3E-03 | 1.3E-03 | 8.0E-04 | 7.0E-04 | 7.7E-04 | 6.6E-04 | 7.3E-04 | 7.3E-04 | 7.0E-03 | 8.0E-04 | 7.0E-04 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 3.9E-03 | 5.7E-03 | | | | | | | | | | |
| COBALT | 4.3E-03 | 4.3E-03 | | | | | | | | | | |
| IRON | 8.1E-03 | 8.1E-03 | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 2.4E-03 | 2.3E-03 | | | | | | | | | | |
| MERCURY | 4.5E-05 | 4.5E-05 | | | | | | | | | | |
| VANADIUM | 1.6E-03 | 1.2E-03 | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 5.1E-04 | 4.3E-04 | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.2E-02 | 2.4E-02 | 8.0E-04 | 7.0E-04 | 7.7E-04 | 6.6E-04 | 7.3E-04 | 7.3E-04 | 7.0E-03 | 8.0E-04 | 7.0E-04 | 7.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 4.6E-05 | 4.6E-05 | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 3.8E-05 | 3.7E-05 | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.2E-07 | 8.0E-07 | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 1.1E-03 | 1.1E-03 | | | | | | | | | | |
| AROCLOR-1254 | 1.7E-02 | 1.7E-02 | 1.0E-02 | 8.9E-03 | 9.8E-03 | 8.5E-03 | 9.3E-03 | 9.3E-03 | 8.9E-02 | 1.0E-02 | 8.9E-03 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 7.9E-02 | 1.2E-01 | | | | | | | | | | |
| COBALT | 1.0E-01 | 1.0E-01 | | | | | | | | | | |
| IRON | 1.9E-01 | 1.9E-01 | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 2.5E-02 | 2.4E-02 | | | | | | | | | | |
| MERCURY | 5.7E-04 | 5.7E-04 | | | | | | | | | | |
| VANADIUM | 3.8E-02 | 2.8E-02 | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 4.5E-03 | 3.8E-03 | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.6E-01 | 4.8E-01 | 1.0E-02 | 8.9E-03 | 9.8E-03 | 8.5E-03 | 9.3E-03 | 9.3E-03 | 8.9E-02 | 1.0E-02 | 8.9E-03 | 8.9E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-836 | SB-837 | SB-837 | SB-837 | SB-837 | SB-838 | SB-838 | SB-838 | SB-838 | SB-839 | SB-839 | SB-839 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-836-09 | E-SB-837-03 | E-SB-837-05 | E-SB-837-07 | E-SB-837-09 | E-SB-838-3 | E-SB-838-5 | E-SB-838-7 | E-SB-838-9 | E-SB-839-03 | E-SB-839-05 | E-SB-839-07 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 7.7E-04 | 6.3E-04 | 6.6E-04 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.7E-04 | 6.3E-04 | 6.6E-04 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 9.8E-03 | 8.0E-03 | 8.5E-03 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.8E-03 | 8.0E-03 | 8.5E-03 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-839 | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-840 | SB-841 | SB-841 | SB-841 | SB-841 | SB-842 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-839-09 | E-SB-840-03 | E-SB-840-05 | SB-840-05-AVE | E-SB-840-05-D | E-SB-840-07 | E-SB-840-09 | E-SB-841-03 | E-SB-841-05 | E-SB-841-07 | E-SB-841-09 | E-SB-842-3 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 7.0E-04 | 6.3E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.0E-04 | 6.3E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 8.9E-03 | 8.0E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.9E-03 | 8.0E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 | SB-843 | SB-844 | SB-844 | SB-844 | SB-844 | SB-845 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-842-5 | E-SB-842-7 | E-SB-842-9 | E-SB-843-03 | E-SB-843-05 | E-SB-843-07 | E-SB-843-09 | E-SB-844-03 | E-SB-844-05 | E-SB-844-07 | E-SB-844-09 | E-SB-845-03 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 8.0E-04 | 7.7E-04 | 7.3E-04 | 3.8E-03 | 3.1E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.0E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 8.0E-04 | 7.7E-04 | 7.3E-04 | 3.8E-03 | 3.1E-03 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 1.0E-02 | 9.8E-03 | 9.3E-03 | 4.9E-02 | 3.9E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 1.0E-02 | 9.8E-03 | 9.3E-03 | 4.9E-02 | 3.9E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-845 | SB-845 | SB-845 | SB-846 | SB-846 | SB-846 | SB-846 | SB-847 | SB-847 | SB-847 | SB-847 | SB-005 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-845-05 | E-SB-845-07 | E-SB-845-09 | E-SB-846-03 | E-SB-846-05 | E-SB-846-07 | E-SB-846-09 | E-SB-847-03 | E-SB-847-05 | E-SB-847-07 | E-SB-847-09 | SB-5-05 |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20031120 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | 1.8E-06 |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | 8.5E-06 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | 8.9E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | 2.6E-04 |
| AROCLOR-1254 | 6.3E-04 | 7.0E-04 | 3.3E-03 | 7.0E-04 | 6.3E-04 | 7.0E-04 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 2.2E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | 3.2E-03 |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | 3.1E-04 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | 1.2E-04 |
| TOTAL HAZARD INDEX | 6.3E-04 | 7.0E-04 | 3.3E-03 | 7.0E-04 | 6.3E-04 | 7.0E-04 | 7.3E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 6.1E-03 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | 4.8E-05 |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | 3.9E-05 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | 8.4E-07 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | 1.2E-03 |
| AROCLOR-1254 | 8.0E-03 | 8.9E-03 | 4.2E-02 | 8.9E-03 | 8.0E-03 | 8.9E-03 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 2.8E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | 6.5E-02 |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | 3.9E-03 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | 1.1E-03 |
| TOTAL HAZARD INDEX | 8.0E-03 | 8.9E-03 | 4.2E-02 | 8.9E-03 | 8.0E-03 | 8.9E-03 | 9.3E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 9.9E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-005 | SB-006 | SB-006 | SB-510 | SB-510 | SB-510 | SB-510 | SB-511 | SB-511 | SB-512 | SB-512 | SB-512 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-5-10 | SB-6-05 | SB-6-10 | SB-510-0406 | SB-510-0810 | B-510-0810-AV | SB-510-0810-D | SB-511-0406 | SB-511-0810 | SB-512-0406 | SB-512-0810 | B-512-0810-AV |
| SAMPLE DATE | 20031120 | 20031120 | 20031120 | 20071128 | 20071128 | 20071128 | 20071128 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 4 | 8 | 8 | 8 | 4 | 8 | 4 | 8 | 8 |
| BOTTOM DEPTH | 10 | 5 | 10 | 6 | 10 | 10 | 10 | 6 | 10 | 6 | 10 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.1E-06 | 2.1E-06 | 2.1E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.9E-06 | 1.7E-06 | 1.9E-06 | 1.9E-06 |
| 1,2,4-TRICHLOROBENZENE | 9.9E-06 | 9.9E-06 | 9.9E-06 | 8.2E-06 | 8.2E-06 | 8.2E-06 | 8.2E-06 | 8.4E-06 | 8.9E-06 | 8.1E-06 | 8.9E-06 | 8.9E-06 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.0E-07 | 1.0E-07 | 1.0E-07 | 8.6E-08 | 8.6E-08 | 8.6E-08 | 8.6E-08 | 8.7E-08 | 9.3E-08 | 8.4E-08 | 9.3E-08 | 9.3E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 2.8E-04 | 2.7E-04 | 2.8E-04 | 2.4E-04 | 2.4E-04 | 2.4E-04 | 2.4E-04 | 2.4E-04 | 2.6E-04 | 2.4E-04 | 2.6E-04 | 8.2E-05 |
| AROCLOR-1254 | 2.4E-03 | 2.3E-03 | 2.3E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 | 1.3E-03 | 1.4E-03 | 1.4E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 2.5E-03 | 1.8E-03 | 4.6E-03 | 5.9E-04 | 8.2E-04 | 7.1E-04 | 5.9E-04 | 1.3E-03 | 8.0E-04 | 1.3E-03 | 1.7E-03 | 2.5E-03 |
| COBALT | | | | 2.2E-03 | 3.5E-03 | 3.6E-03 | 3.7E-03 | 1.5E-03 | 1.9E-03 | 5.6E-03 | 4.1E-03 | 4.0E-03 |
| IRON | | | | 1.2E-02 | 1.7E-02 | 1.5E-02 | 1.4E-02 | 1.0E-03 | 2.6E-03 | 1.2E-02 | 7.8E-03 | 7.5E-03 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | 2.4E-03 | 6.6E-03 | 4.3E-03 | 2.0E-03 | 2.0E-04 | 4.3E-04 | 3.0E-03 | 6.1E-03 | 9.5E-03 |
| MERCURY | 3.3E-04 | 2.8E-04 | 3.1E-04 | 4.5E-05 | 4.5E-05 | 4.5E-05 | 4.5E-05 | 4.7E-05 | 4.9E-05 | 4.5E-05 | 4.9E-05 | 4.9E-05 |
| VANADIUM | | | | 1.4E-03 | 1.8E-03 | 1.8E-03 | 1.9E-03 | 2.4E-04 | 8.3E-04 | 1.4E-03 | 1.4E-03 | 1.5E-03 |
| HEXAVALENT CHROMIUM | 9.7E-05 | 2.4E-04 | 1.1E-03 | 4.4E-04 | 6.0E-04 | 5.6E-04 | 5.2E-04 | 7.7E-05 | 2.0E-04 | 4.4E-04 | 4.6E-04 | 4.6E-04 |
| TOTAL HAZARD INDEX | 5.6E-03 | 4.8E-03 | 8.6E-03 | 2.1E-02 | 3.1E-02 | 2.8E-02 | 2.4E-02 | 6.0E-03 | 8.4E-03 | 2.5E-02 | 2.3E-02 | 2.7E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 5.6E-05 | 5.6E-05 | 5.6E-05 | 4.6E-05 | 4.6E-05 | 4.6E-05 | 4.6E-05 | 4.7E-05 | 5.0E-05 | 4.6E-05 | 5.0E-05 | 5.0E-05 |
| 1,2,4-TRICHLOROBENZENE | 4.5E-05 | 4.5E-05 | 4.5E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.1E-05 | 3.7E-05 | 4.1E-05 | 4.1E-05 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.9E-07 | 9.9E-07 | 9.9E-07 | 8.2E-07 | 8.2E-07 | 8.2E-07 | 8.2E-07 | 8.3E-07 | 8.9E-07 | 8.0E-07 | 8.9E-07 | 8.9E-07 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.1E-03 | 1.1E-03 | 1.1E-03 | 1.1E-03 | 1.1E-03 | 1.2E-03 | 1.1E-03 | 1.2E-03 | 3.8E-04 |
| AROCLOR-1254 | 3.0E-02 | 2.9E-02 | 2.9E-02 | 1.7E-02 | 1.7E-02 | 1.7E-02 | 1.7E-02 | 1.7E-02 | 1.8E-02 | 1.7E-02 | 1.8E-02 | 1.8E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 5.1E-02 | 3.6E-02 | 9.2E-02 | 1.2E-02 | 1.7E-02 | 1.4E-02 | 1.2E-02 | 2.7E-02 | 1.6E-02 | 2.7E-02 | 3.5E-02 | 5.0E-02 |
| COBALT | | | | 5.3E-02 | 8.3E-02 | 8.6E-02 | 8.8E-02 | 3.6E-02 | 4.4E-02 | 1.3E-01 | 9.6E-02 | 9.4E-02 |
| IRON | | | | 2.9E-01 | 3.9E-01 | 3.6E-01 | 3.3E-01 | 2.4E-02 | 6.1E-02 | 2.9E-01 | 1.8E-01 | 1.8E-01 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | 2.5E-02 | 6.7E-02 | 4.4E-02 | 2.1E-02 | 2.0E-03 | 4.4E-03 | 3.1E-02 | 6.2E-02 | 9.8E-02 |
| MERCURY | 4.2E-03 | 3.6E-03 | 3.9E-03 | 5.7E-04 | 5.7E-04 | 5.7E-04 | 5.7E-04 | 6.0E-04 | 6.3E-04 | 5.7E-04 | 6.3E-04 | 6.3E-04 |
| VANADIUM | | | | 3.4E-02 | 4.2E-02 | 4.3E-02 | 4.4E-02 | 5.8E-03 | 2.0E-02 | 3.3E-02 | 3.3E-02 | 3.6E-02 |
| HEXAVALENT CHROMIUM | 8.6E-04 | 2.1E-03 | 9.9E-03 | 3.8E-03 | 5.3E-03 | 4.9E-03 | 4.6E-03 | 6.8E-04 | 1.8E-03 | 3.8E-03 | 4.0E-03 | 4.1E-03 |
| TOTAL HAZARD INDEX | 8.8E-02 | 7.2E-02 | 1.4E-01 | 4.3E-01 | 6.2E-01 | 5.7E-01 | 5.2E-01 | 1.1E-01 | 1.7E-01 | 5.3E-01 | 4.3E-01 | 4.8E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-512 | SB-513 | SB-513 | SB-514 | SB-514 | SB-514 | SB-514 | SB-515 | SB-515 | SB-517 | SB-517 | SB-518 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-512-0810-D | SB-513-0406 | SB-513-0810 | SB-514-0406 | SB-514-0810 | B-514-0810-AV | SB-514-0810-D | SB-515-0406 | SB-515-0810 | SB-517-0406 | SB-517-0810 | SB-518-0406 |
| SAMPLE DATE | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071129 | 20071130 | 20071130 | 20071130 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 4 | 8 | 8 | 8 | 4 | 8 | 4 | 8 | 4 |
| BOTTOM DEPTH | 10 | 6 | 10 | 6 | 10 | 10 | 10 | 6 | 10 | 6 | 10 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.9E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.9E-06 | 1.8E-06 |
| 1,2,4-TRICHLOROBENZENE | 8.9E-06 | 8.4E-06 | 8.2E-06 | 8.5E-06 | 8.4E-06 | 8.4E-06 | 8.4E-06 | 8.6E-06 | 8.8E-06 | 8.6E-06 | 8.6E-06 | 8.5E-06 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.3E-08 | 8.7E-08 | 8.6E-08 | 8.9E-08 | 8.7E-08 | 8.7E-08 | 8.7E-08 | 9.0E-08 | 9.2E-08 | 9.0E-08 | 9.0E-08 | 8.9E-08 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 8.2E-05 | 2.4E-04 | 2.4E-04 | 2.5E-04 | 2.4E-04 | 2.4E-04 | 2.4E-04 | 2.5E-04 | 2.6E-04 | 2.5E-04 | 2.5E-04 | 2.5E-04 |
| AROCLOR-1254 | 1.5E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 | 1.4E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 3.2E-03 | 5.2E-03 | 1.0E-03 | 8.9E-04 | 3.0E-03 | 2.0E-03 | 9.6E-04 | 1.4E-03 | 5.0E-04 | 1.3E-03 | 1.7E-03 | 5.0E-03 |
| COBALT | 3.9E-03 | 7.4E-03 | 1.8E-03 | 1.7E-02 | 1.6E-02 | 1.4E-02 | 1.2E-02 | 8.0E-03 | 1.2E-02 | 9.1E-03 | 8.5E-03 | 6.9E-03 |
| IRON | 7.3E-03 | 6.8E-03 | 1.8E-03 | 3.2E-02 | 4.1E-02 | 3.3E-02 | 2.6E-02 | 2.3E-02 | 1.8E-02 | 2.3E-02 | 1.5E-02 | 1.9E-02 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 1.3E-02 | 4.2E-03 | 7.8E-04 | 2.5E-02 | 2.0E-02 | 1.8E-02 | 1.7E-02 | 9.4E-03 | 2.5E-02 | 8.3E-03 | 4.7E-03 | 4.1E-03 |
| MERCURY | 4.9E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.9E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 |
| VANADIUM | 1.6E-03 | 1.4E-03 | 3.3E-04 | 1.7E-03 | 1.8E-03 | 1.5E-03 | 1.2E-03 | 1.5E-03 | 1.3E-03 | 1.4E-03 | 1.7E-03 | 2.3E-03 |
| HEXAVALENT CHROMIUM | 4.7E-04 | 4.0E-04 | 1.2E-04 | 6.0E-04 | 5.7E-04 | 5.6E-04 | 5.5E-04 | 4.7E-04 | 5.4E-04 | 3.9E-04 | 5.8E-04 | 6.8E-04 |
| TOTAL HAZARD INDEX | 3.1E-02 | 2.7E-02 | 7.6E-03 | 7.8E-02 | 8.4E-02 | 7.2E-02 | 5.9E-02 | 4.5E-02 | 5.8E-02 | 4.5E-02 | 3.3E-02 | 3.9E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 5.0E-05 | 4.7E-05 | 4.6E-05 | 4.8E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.9E-05 | 5.0E-05 | 4.9E-05 | 4.9E-05 | 4.8E-05 |
| 1,2,4-TRICHLOROBENZENE | 4.1E-05 | 3.8E-05 | 3.8E-05 | 3.9E-05 | 3.8E-05 | 3.8E-05 | 3.8E-05 | 4.0E-05 | 4.0E-05 | 4.0E-05 | 4.0E-05 | 3.9E-05 |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.9E-07 | 8.3E-07 | 8.2E-07 | 8.4E-07 | 8.3E-07 | 8.3E-07 | 8.3E-07 | 8.6E-07 | 8.7E-07 | 8.6E-07 | 8.6E-07 | 8.4E-07 |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 3.8E-04 | 1.1E-03 | 1.1E-03 | 1.2E-03 | 1.1E-03 | 1.1E-03 | 1.1E-03 | 1.2E-03 | 1.2E-03 | 1.2E-03 | 1.2E-03 | 1.2E-03 |
| AROCLOR-1254 | 1.9E-02 | 1.7E-02 | 1.7E-02 | 1.8E-02 | 1.7E-02 | 1.7E-02 | 1.7E-02 | 1.8E-02 | 1.8E-02 | 1.8E-02 | 1.8E-02 | 1.8E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 6.5E-02 | 1.1E-01 | 2.1E-02 | 1.8E-02 | 6.0E-02 | 4.0E-02 | 1.9E-02 | 2.9E-02 | 1.0E-02 | 2.5E-02 | 3.5E-02 | 1.0E-01 |
| COBALT | 9.2E-02 | 1.8E-01 | 4.3E-02 | 4.0E-01 | 3.9E-01 | 3.4E-01 | 2.9E-01 | 1.9E-01 | 2.7E-01 | 2.1E-01 | 2.0E-01 | 1.6E-01 |
| IRON | 1.7E-01 | 1.6E-01 | 4.3E-02 | 7.5E-01 | 9.6E-01 | 7.9E-01 | 6.2E-01 | 5.4E-01 | 4.2E-01 | 5.4E-01 | 3.5E-01 | 4.4E-01 |
| LEAD | | | | | | | | | | | | |
| MANGANESE | 1.3E-01 | 4.3E-02 | 8.0E-03 | 2.6E-01 | 2.1E-01 | 1.9E-01 | 1.7E-01 | 9.7E-02 | 2.5E-01 | 8.5E-02 | 4.8E-02 | 4.1E-02 |
| MERCURY | 6.3E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 6.3E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 |
| VANADIUM | 3.9E-02 | 3.2E-02 | 7.9E-03 | 4.0E-02 | 4.3E-02 | 3.6E-02 | 2.9E-02 | 3.5E-02 | 3.0E-02 | 3.3E-02 | 4.0E-02 | 5.5E-02 |
| HEXAVALENT CHROMIUM | 4.1E-03 | 3.5E-03 | 1.0E-03 | 5.3E-03 | 5.0E-03 | 4.9E-03 | 4.8E-03 | 4.1E-03 | 4.8E-03 | 3.5E-03 | 5.1E-03 | 6.0E-03 |
| TOTAL HAZARD INDEX | 5.3E-01 | 5.4E-01 | 1.4E-01 | 1.5E+00 | 1.7E+00 | 1.4E+00 | 1.2E+00 | 9.1E-01 | 1.0E+00 | 9.2E-01 | 6.9E-01 | 8.3E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-518 | SB-519 | SB-519 | SB-520 | SB-520 | SB-541A | SB-542 | SB-542 | SB-543A | SB-543A | SB-545 | SB-548 | SB-548 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-518-0810 | SB-519-0406 | SB-519-0810 | SB-520-0406 | SB-520-0810 | SB-541A-4 | SB-542-3 | SB-542-4 | SB-543A-3 | SB-543A-4 | SB-545-4 | SB-548-3 | SB-548-4 |
| SAMPLE DATE | 20071130 | 20071130 | 20071130 | 20071130 | 20071130 | 20081111 | 20081023 | 20081023 | 20081111 | 20081111 | 20081023 | 20081023 | 20081023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 8 | 4 | 8 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 |
| BOTTOM DEPTH | 10 | 6 | 10 | 6 | 10 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 2.0E-06 | 1.8E-06 | 1.8E-06 | 1.9E-06 | 1.8E-06 | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 9.2E-06 | 8.2E-06 | 8.2E-06 | 8.6E-06 | 8.5E-06 | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.6E-08 | 8.6E-08 | 8.6E-08 | 9.0E-08 | 8.9E-08 | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 2.7E-04 | 2.4E-04 | 2.4E-04 | 2.5E-04 | 2.5E-04 | | | | | | | | |
| AROCLOR-1254 | 1.5E-03 | 1.3E-03 | 1.3E-03 | 1.4E-03 | 1.4E-03 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | 9.8E-04 | 1.4E-03 | 2.7E-03 | 2.7E-03 | 3.0E-03 | | | | | | | | |
| COBALT | 5.2E-03 | 5.2E-03 | 3.0E-03 | 9.8E-03 | 6.7E-03 | | | | | | | | |
| IRON | 6.8E-03 | 1.4E-02 | 7.7E-03 | 1.1E-02 | 1.1E-02 | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | 2.5E-03 | 2.3E-03 | 1.9E-03 | 3.7E-03 | 2.9E-03 | | | | | | | | |
| MERCURY | 5.2E-05 | 4.5E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | | | | | | | | |
| VANADIUM | 7.6E-04 | 1.3E-03 | 5.6E-04 | 1.8E-03 | 1.5E-03 | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.3E-04 | 3.9E-04 | 2.3E-04 | 4.8E-04 | 3.4E-04 | | | | | | | | |
| TOTAL HAZARD INDEX | 1.8E-02 | 2.7E-02 | 1.8E-02 | 3.2E-02 | 2.7E-02 | 7.0E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 5.2E-05 | 4.6E-05 | 4.6E-05 | 4.9E-05 | 4.8E-05 | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 4.2E-05 | 3.8E-05 | 3.8E-05 | 4.0E-05 | 3.9E-05 | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.1E-07 | 8.2E-07 | 8.2E-07 | 8.6E-07 | 8.4E-07 | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 1.3E-03 | 1.1E-03 | 1.1E-03 | 1.2E-03 | 1.2E-03 | | | | | | | | |
| AROCLOR-1254 | 1.9E-02 | 1.7E-02 | 1.7E-02 | 1.8E-02 | 1.8E-02 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | 2.0E-02 | 2.8E-02 | 5.5E-02 | 5.5E-02 | 6.0E-02 | | | | | | | | |
| COBALT | 1.2E-01 | 1.2E-01 | 7.0E-02 | 2.3E-01 | 1.6E-01 | | | | | | | | |
| IRON | 1.6E-01 | 3.4E-01 | 1.8E-01 | 2.7E-01 | 2.5E-01 | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | 2.6E-02 | 2.4E-02 | 1.9E-02 | 3.8E-02 | 2.9E-02 | | | | | | | | |
| MERCURY | 6.6E-04 | 5.7E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | | | | | | | | |
| VANADIUM | 1.8E-02 | 3.0E-02 | 1.3E-02 | 4.4E-02 | 3.5E-02 | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.0E-03 | 3.5E-03 | 2.0E-03 | 4.2E-03 | 3.0E-03 | | | | | | | | |
| TOTAL HAZARD INDEX | 3.7E-01 | 5.7E-01 | 3.6E-01 | 6.6E-01 | 5.6E-01 | 8.9E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-550A | SB-550A | SB-555 | SB-555 | SB-555 | SB-555A | SB-557 | SB-558 | SB-559 | SB-559 | SB-559 | SB-560 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-550A-3 | SB-550A-4 | SB-555-4 | SB-555-6 | SB-555-8 | SB-555A-10 | SB-557-4 | SB-558-4 | SB-559-4 | SB-559-6 | SB-559-8 | SB-560-4 |
| SAMPLE DATE | 20081111 | 20081111 | 20081021 | 20081021 | 20081021 | 20081111 | 20081021 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 4 | 4 | 6 | 8 | 4 |
| BOTTOM DEPTH | 3 | 4 | 4 | 6 | 8 | 10 | 4 | 4 | 4 | 6 | 8 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 7.0E-04 | 7.0E-04 | 6.8E-01 | 6.3E-04 | 6.6E-04 | 7.0E-04 | 1.9E-03 | 6.6E-04 | 6.3E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.0E-04 | 7.0E-04 | 6.8E-01 | 6.3E-04 | 6.6E-04 | 7.0E-04 | 1.9E-03 | 6.6E-04 | 6.3E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 8.9E-03 | 8.9E-03 | 8.7E+00 | 8.0E-03 | 8.5E-03 | 8.9E-03 | 2.4E-02 | 8.5E-03 | 8.0E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.9E-03 | 8.9E-03 | 8.7E+00 | 8.0E-03 | 8.5E-03 | 8.9E-03 | 2.4E-02 | 8.5E-03 | 8.0E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-561 | SB-561 | SB-561A | SB-561A | SB-563 | SB-564 | SB-565 | SB-566 | SB-566 | SB-566 | SB-567 | SB-568 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-561-6 | SB-561-8 | SB-561A-6 | SB-561A-8 | SB-563-4 | SB-564-4 | SB-565-4 | SB-566-4 | SB-566-6 | SB-566-8 | SB-567-4 | SB-568-4 |
| SAMPLE DATE | 20081021 | 20081021 | 20081111 | 20081111 | 20081021 | 20081022 | 20081022 | 20081022 | 20081022 | 20081022 | 20081023 | 20081021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 6 | 8 | 4 | 4 |
| BOTTOM DEPTH | 6 | 8 | 6 | 8 | 4 | 4 | 4 | 4 | 6 | 8 | 4 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 6.3E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 3.3E-03 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.3E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 3.3E-03 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 8.0E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 4.2E-02 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.0E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 4.2E-02 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-568 | SB-568 | SB-568A | SB-568A | SB-568A | SB-569 | SB-569 | SB-569 | SB-570 | SB-570A | SB-570A | SB-570A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-568-4-AVG | SB-568-4-D | SB-568A-10 | SB-568A-6 | SB-568A-8 | SB-569-4 | SB-569-6 | SB-569-8 | SB-570-4 | SB-570A-10 | SB-570A-6 | SB-570A-8 |
| SAMPLE DATE | 20081021 | 20081021 | 20081111 | 20081111 | 20081111 | 20081022 | 20081022 | 20081022 | 20081022 | 20081111 | 20081111 | 20081111 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 10 | 6 | 8 | 4 | 6 | 8 | 4 | 10 | 6 | 8 |
| BOTTOM DEPTH | 4 | 4 | 10 | 6 | 8 | 4 | 6 | 8 | 4 | 10 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 1.3E-02 | 7.0E-04 | 6.6E-04 | 1.3E-03 | 6.3E-04 | 6.6E-04 | 6.6E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.6E-04 | 6.6E-04 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 1.3E-02 | 7.0E-04 | 6.6E-04 | 1.3E-03 | 6.3E-04 | 6.6E-04 | 6.6E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 1.7E-01 | 8.9E-03 | 8.5E-03 | 1.6E-02 | 8.0E-03 | 8.5E-03 | 8.5E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.5E-03 | 8.5E-03 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 1.7E-01 | 8.9E-03 | 8.5E-03 | 1.6E-02 | 8.0E-03 | 8.5E-03 | 8.5E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-571 |
|---|---|
| SAMPLE ID | SB-571-4 |
| SAMPLE DATE | 20081023 |
| SAMPLE CODE | NORMAL |
| MATRIX | SO |
| SAMPLE TYPE | NORMAL |
| SUBMATRIX | SB |
| TOP DEPTH | 4 |
| BOTTOM DEPTH | 4 |
| **INDUSTRIAL** | |
| 1,2,3-TRICHLOROBENZENE | |
| 1,2,4-TRICHLOROBENZENE | |
| 1,3-DICHLOROBENZENE | |
| 1,4-DICHLOROBENZENE | |
| BAP EQUIVALENT-HALFND | |
| NAPHTHALENE | |
| AROCLOR-1254 | 6.3E-04 |
| AROCLOR-1260 | |
| ARSENIC | |
| COBALT | |
| IRON | |
| LEAD | |
| MANGANESE | |
| MERCURY | |
| VANADIUM | |
| HEXAVALENT CHROMIUM | |
| TOTAL HAZARD INDEX | 6.3E-04 |
| **RESIDENTIAL** | |
| 1,2,3-TRICHLOROBENZENE | |
| 1,2,4-TRICHLOROBENZENE | |
| 1,3-DICHLOROBENZENE | |
| 1,4-DICHLOROBENZENE | |
| BAP EQUIVALENT-HALFND | |
| NAPHTHALENE | |
| AROCLOR-1254 | 8.0E-03 |
| AROCLOR-1260 | |
| ARSENIC | |
| COBALT | |
| IRON | |
| LEAD | |
| MANGANESE | |
| MERCURY | |
| VANADIUM | |
| HEXAVALENT CHROMIUM | |
| TOTAL HAZARD INDEX | 8.0E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-503 | SB-555A | SB-555A | SB-555A | SB-570A | SB-570A | SB-570A | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-503-1012 | SB-555A-12 | SB-555A-14 | SB-555A-16 | SB-570A-12 | SB-570A-14 | SB-570A-16 | E-SB-818-11 | E-SB-818-13 | E-SB-818-15 | E-SB-819-11 | E-SB-819-13 | E-SB-819-15 |
| SAMPLE DATE | 20071127 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 10 | 12 | 14 | 16 | 12 | 14 | 16 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 12 | 12 | 14 | 16 | 12 | 14 | 16 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.5E-11 | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 1.9E-10 | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-07 | | | | | | | | | | | | |
| NAPHTHALENE | 1.3E-10 | | | | | | | | | | | | |
| AROCLOR-1254 | 1.9E-08 | 4.6E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 1.9E-08 | 7.1E-07 | 3.8E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | 6.2E-07 | | | | | | | | | | | | |
| CADMIUM | 2.0E-12 | | | | | | | | | | | | |
| COBALT | 7.5E-10 | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | 7.9E-11 | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 9.6E-06 | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-05 | 7.5E-07 | 4.8E-08 | 2.0E-08 | 1.9E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.3E-08 | 2.0E-08 | 2.1E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | 1.5E-10 | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 9.6E-10 | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-05 | | | | | | | | | | | | |
| NAPHTHALENE | 6.4E-10 | | | | | | | | | | | | |
| AROCLOR-1254 | 9.7E-08 | 2.3E-07 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.7E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 |
| AROCLOR-1260 | 9.7E-08 | 3.5E-06 | 1.9E-07 | 5.0E-08 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.7E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | 4.8E-06 | | | | | | | | | | | | |
| CADMIUM | 3.9E-12 | | | | | | | | | | | | |
| COBALT | 1.5E-09 | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | 1.6E-10 | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.4E-04 | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.6E-04 | 3.7E-06 | 2.4E-07 | 9.9E-08 | 9.4E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 1.1E-07 | 9.9E-08 | 1.0E-07 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-820 | SB-820 | SB-820 | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-824 | SB-824 | SB-824 | SB-825 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-820-11 | E-SB-820-13 | E-SB-820-15 | E-SB-821-11 | E-SB-821-13 | E-SB-821-15 | E-SB-822-11 | E-SB-822-13 | E-SB-822-15 | E-SB-824-11 | E-SB-824-13 | E-SB-824-15 | E-SB-825-11 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-08 | 2.1E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.1E-08 | 2.0E-08 | 2.3E-08 | 2.0E-08 | 2.1E-08 | 2.1E-08 | 2.0E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 4.7E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.7E-08 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 |
| AROCLOR-1260 | 4.7E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.7E-08 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.4E-08 | 1.0E-07 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 1.0E-07 | 9.9E-08 | 1.1E-07 | 9.9E-08 | 1.0E-07 | 1.0E-07 | 9.9E-08 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-827 | SB-827 | SB-827 | SB-828 | SB-828 | SB-828 | SB-829 | SB-829 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-13 | E-SB-825-15 | E-SB-826-11 | E-SB-826-13 | E-SB-826-15 | E-SB-827-11 | E-SB-827-13 | E-SB-827-15 | E-SB-828-11 | E-SB-828-13 | E-SB-828-15 | E-SB-829-11 | E-SB-829-13 |
| SAMPLE DATE | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 5.5E-07 | 2.1E-08 | 5.0E-08 | 1.2E-08 | 1.1E-08 | 1.1E-08 | 1.0E-08 |
| AROCLOR-1260 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.5E-05 | 1.8E-07 | 2.8E-07 | 6.1E-08 | 4.0E-08 | 1.1E-08 | 3.3E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.2E-08 | 2.1E-08 | 2.1E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 1.5E-05 | 2.0E-07 | 3.3E-07 | 7.3E-08 | 5.1E-08 | 2.2E-08 | 4.3E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 5.4E-08 | 5.2E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 2.7E-06 | 1.1E-07 | 2.5E-07 | 5.9E-08 | 5.4E-08 | 5.4E-08 | 5.2E-08 |
| AROCLOR-1260 | 5.4E-08 | 5.2E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 7.4E-05 | 8.9E-07 | 1.4E-06 | 3.0E-07 | 2.0E-07 | 5.4E-08 | 1.6E-07 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-07 | 1.0E-07 | 1.0E-07 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 7.7E-05 | 1.0E-06 | 1.6E-06 | 3.6E-07 | 2.5E-07 | 1.1E-07 | 2.2E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-829 | SB-830 | SB-830 | SB-830 | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 | SB-831 | SB-832 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-829-15 | E-SB-830-11 | E-SB-830-11-AVG | E-SB-830-11-D | E-SB-830-13 | E-SB-830-15 | E-SB-831-11 | E-SB-831-13 | E-SB-831-15 | E-SB-831-15-AVG | E-SB-831-15-D | E-SB-832-11 |
| SAMPLE DATE | 20100917 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100917 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.7E-09 | 9.5E-09 | 1.0E-08 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 3.3E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.7E-09 | 9.5E-09 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.1E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 4.4E-08 | 2.1E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 2.1E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.4E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 4.8E-08 | 4.7E-08 | 5.2E-08 |
| AROCLOR-1260 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 1.6E-07 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 4.8E-08 | 4.7E-08 | 5.2E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.0E-07 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 2.2E-07 | 1.0E-07 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.7E-08 | 9.4E-08 | 1.0E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-832 | SB-832 | SB-833 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 | SB-835 | SB-836 | SB-836 | SB-836 | SB-837 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-832-13 | E-SB-832-15 | E-SB-833-11 | E-SB-834-11 | E-SB-834-13 | E-SB-834-15 | E-SB-835-11 | E-SB-835-13 | E-SB-835-15 | E-SB-836-11 | E-SB-836-13 | E-SB-836-15 | E-SB-837-11 |
| SAMPLE DATE | 20100917 | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 1.1E-08 | 1.1E-08 | 1.0E-06 | 1.1E-08 | 5.5E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 1.1E-08 | 3.3E-08 | 6.1E-05 | 3.2E-08 | 3.5E-07 | 2.7E-08 | 1.0E-08 | 1.9E-07 | 1.0E-08 | 1.0E-08 | 2.6E-08 | 1.0E-08 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.2E-08 | 4.4E-08 | 6.2E-05 | 4.3E-08 | 4.0E-07 | 3.8E-08 | 2.0E-08 | 2.0E-07 | 2.0E-08 | 2.0E-08 | 3.7E-08 | 2.0E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 5.4E-08 | 5.4E-08 | 5.0E-06 | 5.4E-08 | 2.7E-07 | 5.4E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.4E-08 | 5.0E-08 | 5.0E-08 |
| AROCLOR-1260 | 5.4E-08 | 1.6E-07 | 3.0E-04 | 1.6E-07 | 1.7E-06 | 1.3E-07 | 5.0E-08 | 9.4E-07 | 5.0E-08 | 5.0E-08 | 1.3E-07 | 5.0E-08 | 5.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-07 | 2.2E-07 | 3.1E-04 | 2.1E-07 | 2.0E-06 | 1.9E-07 | 9.9E-08 | 9.9E-07 | 9.9E-08 | 9.9E-08 | 1.8E-07 | 9.9E-08 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-837 | SB-837 | SB-837 | SB-837 | SB-838 | SB-838 | SB-838 | SB-839 | SB-839 | SB-839 | SB-840 | SB-840 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-837-13 | E-SB-837-13-AVG | E-SB-837-13-D | E-SB-837-15 | E-SB-838-11 | E-SB-838-13 | E-SB-838-15 | E-SB-839-11 | E-SB-839-13 | E-SB-839-15 | E-SB-840-11 | E-SB-840-13 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 13 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 13 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 4.9E-08 |
| AROCLOR-1260 | 5.3E-08 | 1.8E-07 | 3.1E-07 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 5.1E-08 | 1.0E-08 | 9.5E-09 | 2.4E-07 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.3E-08 | 1.9E-07 | 3.2E-07 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.1E-08 | 2.0E-08 | 6.1E-08 | 2.0E-08 | 1.9E-08 | 2.9E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 5.2E-08 | 5.1E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 4.7E-08 | 2.5E-07 |
| AROCLOR-1260 | 2.6E-07 | 9.0E-07 | 1.5E-06 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 2.5E-07 | 5.0E-08 | 4.7E-08 | 1.2E-06 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.1E-07 | 9.5E-07 | 1.6E-06 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 1.0E-07 | 9.9E-08 | 3.0E-07 | 9.9E-08 | 9.4E-08 | 1.4E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-840 | SB-841 | SB-841 | SB-841 | SB-842 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-840-15 | E-SB-841-11 | E-SB-841-13 | E-SB-841-15 | E-SB-842-11 | E-SB-842-11-AVG | E-SB-842-11-D | E-SB-842-13 | E-SB-842-15 | E-SB-843-11 | E-SB-843-11-AVG | E-SB-843-11-D |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 6.7E-07 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 6.2E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.1E-08 | 2.0E-08 | 6.8E-07 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 2.0E-08 | 7.2E-08 | 2.1E-08 | 2.0E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.2E-08 | 5.1E-08 | 5.0E-08 |
| AROCLOR-1260 | 5.2E-08 | 5.0E-08 | 3.3E-06 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 3.1E-07 | 5.2E-08 | 5.1E-08 | 5.0E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.0E-07 | 9.9E-08 | 3.4E-06 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 9.9E-08 | 3.6E-07 | 1.0E-07 | 1.0E-07 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-843 | SB-843 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-846 | SB-846 | SB-846 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-843-13 | E-SB-843-15 | E-SB-844-11 | E-SB-844-13 | E-SB-844-15 | E-SB-845-11 | E-SB-845-13 | E-SB-845-15 | E-SB-846-11 | E-SB-846-13 | E-SB-846-15 | E-SB-847-11 | E-SB-847-13 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 5.5E-08 | 1.0E-08 | 1.0E-08 | 1.1E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.7E-07 | 1.0E-08 | 1.0E-08 | 5.9E-07 | 1.0E-08 | 1.0E-08 | 1.1E-08 | 1.1E-08 | 1.0E-08 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.1E-08 | 2.0E-08 | 2.0E-08 | 1.8E-07 | 2.0E-08 | 2.0E-08 | 6.4E-07 | 2.0E-08 | 2.0E-08 | 2.2E-08 | 2.2E-08 | 2.0E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 2.7E-07 | 5.0E-08 | 5.0E-08 | 5.4E-08 | 5.4E-08 | 5.0E-08 | 5.0E-08 |
| AROCLOR-1260 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 8.4E-07 | 5.0E-08 | 5.0E-08 | 2.9E-06 | 5.0E-08 | 5.0E-08 | 5.4E-08 | 5.4E-08 | 5.0E-08 | 5.0E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.0E-07 | 9.9E-08 | 9.9E-08 | 8.9E-07 | 9.9E-08 | 9.9E-08 | 3.2E-06 | 9.9E-08 | 9.9E-08 | 1.1E-07 | 1.1E-07 | 9.9E-08 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-847 | SB-847 | SB-847 |
|---|---|---|---|
| SAMPLE ID | E-SB-847-15 | E-SB-847-15-AVG | E-SB-847-15-D |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | ORIG | AVG | DUP |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 15 | 15 |
| BOTTOM DEPTH | 15 | 15 | 15 |
| **INDUSTRIAL** | | | |
| 1,2,3-TRICHLOROBENZENE | | | |
| 1,2,4-TRICHLOROBENZENE | | | |
| 1,3-DICHLOROPROPENE | | | |
| 1,4-DICHLOROBENZENE | | | |
| BAP EQUIVALENT-HALFND | | | |
| NAPHTHALENE | | | |
| AROCLOR-1254 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| ANTIMONY | | | |
| ARSENIC | | | |
| CADMIUM | | | |
| COBALT | | | |
| IRON | | | |
| LEAD | | | |
| MANGANESE | | | |
| MERCURY | | | |
| MOLYBDENUM | | | |
| NICKEL | | | |
| VANADIUM | | | |
| HEXAVALENT CHROMIUM | | | |
| TOTAL CANCER RISK | 2.0E-08 | 2.0E-08 | 2.0E-08 |
| **RESIDENTIAL** | | | |
| 1,2,3-TRICHLOROBENZENE | | | |
| 1,2,4-TRICHLOROBENZENE | | | |
| 1,3-DICHLOROPROPENE | | | |
| 1,4-DICHLOROBENZENE | | | |
| BAP EQUIVALENT-HALFND | | | |
| NAPHTHALENE | | | |
| AROCLOR-1254 | 5.0E-08 | 5.0E-08 | 5.0E-08 |
| AROCLOR-1260 | 5.0E-08 | 5.0E-08 | 5.0E-08 |
| ANTIMONY | | | |
| ARSENIC | | | |
| CADMIUM | | | |
| COBALT | | | |
| IRON | | | |
| LEAD | | | |
| MANGANESE | | | |
| MERCURY | | | |
| MOLYBDENUM | | | |
| NICKEL | | | |
| VANADIUM | | | |
| HEXAVALENT CHROMIUM | | | |
| TOTAL CANCER RISK | 9.9E-08 | 9.9E-08 | 9.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-2.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-503 | SB-555A | SB-555A | SB-555A | SB-570A | SB-570A | SB-570A | SB-818 | SB-818 | SB-818 | SB-819 | SB-819 | SB-819 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-503-1012 | SB-555A-12 | SB-555A-14 | SB-555A-16 | SB-570A-12 | SB-570A-14 | SB-570A-16 | E-SB-818-11 | E-SB-818-13 | E-SB-818-15 | E-SB-819-11 | E-SB-819-13 | E-SB-819-15 |
| SAMPLE DATE | 20071127 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 | 20081111 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 10 | 12 | 14 | 16 | 12 | 14 | 16 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 12 | 12 | 14 | 16 | 12 | 14 | 16 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.80E-06 | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 5.80E-06 | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 3.70E-06 | | | | | | | | | | | | |
| AROCLOR-1254 | 1.40E-03 | 3.20E-03 | 7.00E-04 | 7.00E-04 | 6.60E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 8.00E-04 | 7.00E-04 | 7.30E-04 | 7.00E-04 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | 6.00E-04 | | | | | | | | | | | | |
| ARSENIC | 3.90E-03 | | | | | | | | | | | | |
| CADMIUM | 5.30E-05 | | | | | | | | | | | | |
| COBALT | 6.10E-03 | | | | | | | | | | | | |
| IRON | 2.70E-02 | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | 6.20E-03 | | | | | | | | | | | | |
| MERCURY | 4.70E-05 | | | | | | | | | | | | |
| MOLYBDENUM | 1.20E-05 | | | | | | | | | | | | |
| NICKEL | 1.30E-03 | | | | | | | | | | | | |
| VANADIUM | 6.20E-06 | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.80E-02 | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.50E-02 | 3.20E-03 | 7.00E-04 | 7.00E-04 | 6.60E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 8.00E-04 | 7.00E-04 | 7.30E-04 | 7.00E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 4.70E-05 | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 5.50E-05 | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 1.70E-05 | | | | | | | | | | | | |
| AROCLOR-1254 | 1.70E-02 | 4.10E-02 | 8.90E-03 | 8.90E-03 | 8.50E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 1.00E-02 | 8.90E-03 | 9.30E-03 | 8.90E-03 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | 9.90E-03 | | | | | | | | | | | | |
| ARSENIC | 7.90E-02 | | | | | | | | | | | | |
| CADMIUM | 1.20E-03 | | | | | | | | | | | | |
| COBALT | 1.40E-01 | | | | | | | | | | | | |
| IRON | 6.40E-01 | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | 6.40E-02 | | | | | | | | | | | | |
| MERCURY | 6.00E-04 | | | | | | | | | | | | |
| MOLYBDENUM | 2.90E-04 | | | | | | | | | | | | |
| NICKEL | 1.30E-02 | | | | | | | | | | | | |
| VANADIUM | 1.50E-04 | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.60E-01 | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.10E+00 | 4.10E-02 | 8.90E-03 | 8.90E-03 | 8.50E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 1.00E-02 | 8.90E-03 | 9.30E-03 | 8.90E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-820 | SB-820 | SB-820 | SB-821 | SB-821 | SB-821 | SB-822 | SB-822 | SB-822 | SB-824 | SB-824 | SB-824 | SB-825 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-820-11 | E-SB-820-13 | E-SB-820-15 | E-SB-821-11 | E-SB-821-13 | E-SB-821-15 | E-SB-822-11 | E-SB-822-13 | E-SB-822-15 | E-SB-824-11 | E-SB-824-13 | E-SB-824-15 | E-SB-825-11 |
| SAMPLE DATE | 20100915 | 20100915 | 20100915 | 20100916 | 20100916 | 20100916 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100915 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 6.60E-04 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.30E-04 | 7.00E-04 | 8.00E-04 | 7.00E-04 | 7.30E-04 | 7.30E-04 | 7.00E-04 | 7.00E-04 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.60E-04 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.30E-04 | 7.00E-04 | 8.00E-04 | 7.00E-04 | 7.30E-04 | 7.30E-04 | 7.00E-04 | 7.00E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 8.50E-03 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 9.30E-03 | 8.90E-03 | 1.00E-02 | 8.90E-03 | 9.30E-03 | 9.30E-03 | 8.90E-03 | 8.90E-03 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.50E-03 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 9.30E-03 | 8.90E-03 | 1.00E-02 | 8.90E-03 | 9.30E-03 | 9.30E-03 | 8.90E-03 | 8.90E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-825 | SB-825 | SB-826 | SB-826 | SB-826 | SB-827 | SB-827 | SB-827 | SB-828 | SB-828 | SB-828 | SB-829 | SB-829 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-825-13 | E-SB-825-15 | E-SB-826-11 | E-SB-826-13 | E-SB-826-15 | E-SB-827-11 | E-SB-827-13 | E-SB-827-15 | E-SB-828-11 | E-SB-828-13 | E-SB-828-15 | E-SB-829-11 | E-SB-829-13 |
| SAMPLE DATE | 20100913 | 20100913 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 7.70E-04 | 7.30E-04 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 3.80E-02 | 1.50E-03 | 3.50E-03 | 8.40E-04 | 7.70E-04 | 7.70E-04 | 7.30E-04 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.70E-04 | 7.30E-04 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 3.80E-02 | 1.50E-03 | 3.50E-03 | 8.40E-04 | 7.70E-04 | 7.70E-04 | 7.30E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 9.80E-03 | 9.30E-03 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 4.90E-01 | 1.90E-02 | 4.40E-02 | 1.10E-02 | 9.80E-03 | 9.80E-03 | 9.30E-03 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.80E-03 | 9.30E-03 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 4.90E-01 | 1.90E-02 | 4.40E-02 | 1.10E-02 | 9.80E-03 | 9.80E-03 | 9.30E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-829 | SB-830 | SB-830 | SB-830 | SB-830 | SB-830 | SB-831 | SB-831 | SB-831 | SB-831 | SB-831 | SB-832 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-829-15 | E-SB-830-11 | E-SB-830-11-AVG | E-SB-830-11-D | E-SB-830-13 | E-SB-830-15 | E-SB-831-11 | E-SB-831-13 | E-SB-831-15 | E-SB-831-15-AVG | E-SB-831-15-D | E-SB-832-11 |
| SAMPLE DATE | 20100917 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100917 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 15 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.70E-04 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 6.80E-04 | 6.60E-04 | 7.30E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.70E-04 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 6.80E-04 | 6.60E-04 | 7.30E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 9.80E-03 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.70E-03 | 8.50E-03 | 9.30E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.30E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 9.80E-03 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.70E-03 | 8.50E-03 | 9.30E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-832 | SB-832 | SB-833 | SB-834 | SB-834 | SB-834 | SB-835 | SB-835 | SB-835 | SB-836 | SB-836 | SB-836 | SB-837 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-832-13 | E-SB-832-15 | E-SB-833-11 | E-SB-834-11 | E-SB-834-13 | E-SB-834-15 | E-SB-835-11 | E-SB-835-13 | E-SB-835-15 | E-SB-836-11 | E-SB-836-13 | E-SB-836-15 | E-SB-837-11 |
| SAMPLE DATE | 20100917 | 20100917 | 20100916 | 20100916 | 20100916 | 20100916 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 | 20100917 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 7.70E-04 | 7.70E-04 | 7.00E-02 | 7.70E-04 | 3.80E-03 | 7.70E-04 | 7.00E-04 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.70E-04 | 7.00E-04 | 7.00E-04 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.70E-04 | 7.70E-04 | 7.00E-02 | 7.70E-04 | 3.80E-03 | 7.70E-04 | 7.00E-04 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.70E-04 | 7.00E-04 | 7.00E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 9.80E-03 | 9.80E-03 | 8.90E-01 | 9.80E-03 | 4.90E-02 | 9.80E-03 | 8.90E-03 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 9.80E-03 | 8.90E-03 | 8.90E-03 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.80E-03 | 9.80E-03 | 8.90E-01 | 9.80E-03 | 4.90E-02 | 9.80E-03 | 8.90E-03 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 9.80E-03 | 8.90E-03 | 8.90E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-837 | SB-837 | SB-837 | SB-837 | SB-838 | SB-838 | SB-838 | SB-839 | SB-839 | SB-839 | SB-840 | SB-840 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-837-13 | E-SB-837-13-AVG | E-SB-837-13-D | E-SB-837-15 | E-SB-838-11 | E-SB-838-13 | E-SB-838-15 | E-SB-839-11 | E-SB-839-13 | E-SB-839-15 | E-SB-840-11 | E-SB-840-13 |
| SAMPLE DATE | 20100917 | 20100917 | 20100917 | 20100917 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 13 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 13 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 7.30E-04 | 7.10E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.30E-04 | 7.00E-04 | 7.30E-04 | 7.00E-04 | 6.60E-04 | 3.40E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.30E-04 | 7.10E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.30E-04 | 7.00E-04 | 7.30E-04 | 7.00E-04 | 6.60E-04 | 3.40E-03 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 9.30E-03 | 9.10E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 9.30E-03 | 8.90E-03 | 9.30E-03 | 8.90E-03 | 8.50E-03 | 4.40E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.30E-03 | 9.10E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 9.30E-03 | 8.90E-03 | 9.30E-03 | 8.90E-03 | 8.50E-03 | 4.40E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-840 | SB-841 | SB-841 | SB-841 | SB-842 | SB-842 | SB-842 | SB-842 | SB-842 | SB-843 | SB-843 | SB-843 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-840-15 | E-SB-841-11 | E-SB-841-13 | E-SB-841-15 | E-SB-842-11 | E-SB-842-11-AVG | E-SB-842-11-D | E-SB-842-13 | E-SB-842-15 | E-SB-843-11 | E-SB-843-11-AVG | E-SB-843-11-D |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100914 | 20100914 | 20100914 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 11 | 11 | 13 | 15 | 11 | 11 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.30E-04 | 7.30E-04 | 7.10E-04 | 7.00E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.00E-04 | 7.30E-04 | 7.30E-04 | 7.10E-04 | 7.00E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 9.30E-03 | 9.30E-03 | 9.10E-03 | 8.90E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.30E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 8.90E-03 | 9.30E-03 | 9.30E-03 | 9.10E-03 | 8.90E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-843 | SB-843 | SB-844 | SB-844 | SB-844 | SB-845 | SB-845 | SB-845 | SB-846 | SB-846 | SB-846 | SB-847 | SB-847 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | E-SB-843-13 | E-SB-843-15 | E-SB-844-11 | E-SB-844-13 | E-SB-844-15 | E-SB-845-11 | E-SB-845-13 | E-SB-845-15 | E-SB-846-11 | E-SB-846-13 | E-SB-846-15 | E-SB-847-11 | E-SB-847-13 |
| SAMPLE DATE | 20100914 | 20100914 | 20100914 | 20100914 | 20100914 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 3.80E-03 | 7.00E-04 | 7.00E-04 | 7.70E-04 | 7.70E-04 | 7.00E-04 | 7.00E-04 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.30E-04 | 7.00E-04 | 7.00E-04 | 7.30E-04 | 7.00E-04 | 7.00E-04 | 3.80E-03 | 7.00E-04 | 7.00E-04 | 7.70E-04 | 7.70E-04 | 7.00E-04 | 7.00E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROPROPENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1254 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 4.90E-02 | 8.90E-03 | 8.90E-03 | 9.80E-03 | 9.80E-03 | 8.90E-03 | 8.90E-03 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.30E-03 | 8.90E-03 | 8.90E-03 | 9.30E-03 | 8.90E-03 | 8.90E-03 | 4.90E-02 | 8.90E-03 | 8.90E-03 | 9.80E-03 | 9.80E-03 | 8.90E-03 | 8.90E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-2.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK E**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-847 | SB-847 | SB-847 |
|---|---|---|---|
| SAMPLE ID | E-SB-847-15 | E-SB-847-15-AVG | E-SB-847-15-D |
| SAMPLE DATE | 20100913 | 20100913 | 20100913 |
| SAMPLE CODE | ORIG | AVG | DUP |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 15 | 15 |
| BOTTOM DEPTH | 15 | 15 | 15 |
| **INDUSTRIAL** | | | |
| 1,2,3-TRICHLOROBENZENE | | | |
| 1,2,4-TRICHLOROBENZENE | | | |
| 1,3-DICHLOROPROPENE | | | |
| 1,4-DICHLOROBENZENE | | | |
| BAP EQUIVALENT-HALFND | | | |
| NAPHTHALENE | | | |
| AROCLOR-1254 | 7.00E-04 | 7.00E-04 | 7.00E-04 |
| AROCLOR-1260 | | | |
| ANTIMONY | | | |
| ARSENIC | | | |
| CADMIUM | | | |
| COBALT | | | |
| IRON | | | |
| LEAD | | | |
| MANGANESE | | | |
| MERCURY | | | |
| MOLYBDENUM | | | |
| NICKEL | | | |
| VANADIUM | | | |
| HEXAVALENT CHROMIUM | | | |
| TOTAL HAZARD INDEX | 7.00E-04 | 7.00E-04 | 7.00E-04 |
| **RESIDENTIAL** | | | |
| 1,2,3-TRICHLOROBENZENE | | | |
| 1,2,4-TRICHLOROBENZENE | | | |
| 1,3-DICHLOROPROPENE | | | |
| 1,4-DICHLOROBENZENE | | | |
| BAP EQUIVALENT-HALFND | | | |
| NAPHTHALENE | | | |
| AROCLOR-1254 | 8.90E-03 | 8.90E-03 | 8.90E-03 |
| AROCLOR-1260 | | | |
| ANTIMONY | | | |
| ARSENIC | | | |
| CADMIUM | | | |
| COBALT | | | |
| IRON | | | |
| LEAD | | | |
| MANGANESE | | | |
| MERCURY | | | |
| MOLYBDENUM | | | |
| NICKEL | | | |
| VANADIUM | | | |
| HEXAVALENT CHROMIUM | | | |
| TOTAL HAZARD INDEX | 8.90E-03 | 8.90E-03 | 8.90E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

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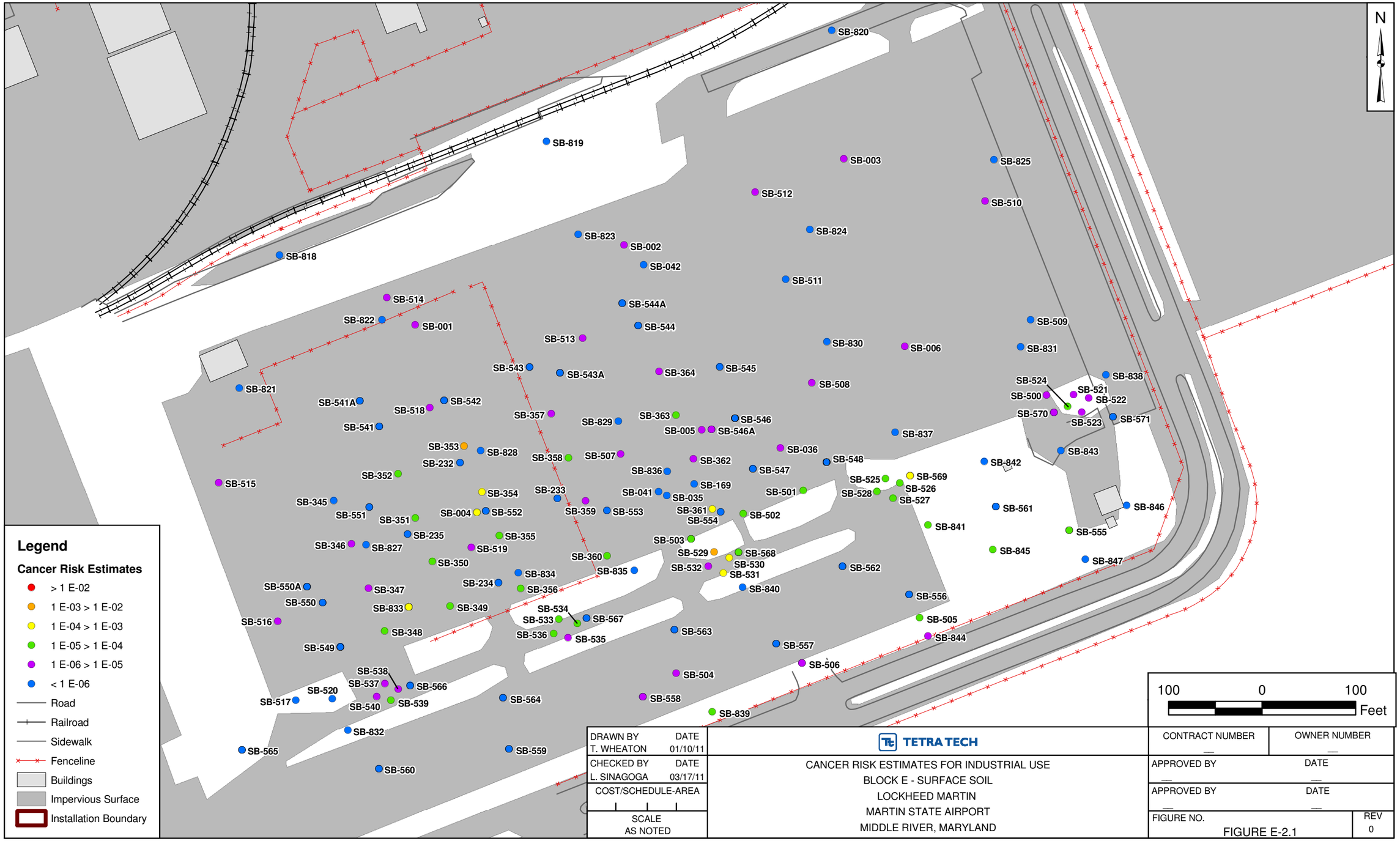


## Legend

**Cancer Risk Estimates**

- > 1 E-02
- 1 E-03 > 1 E-02
- 1 E-04 > 1 E-03
- 1 E-05 > 1 E-04
- 1 E-06 > 1 E-05
- < 1 E-06
- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

CANCER RISK ESTIMATES FOR INDUSTRIAL USE
BLOCK E - SURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-2.1 | REV 0 |

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SB-820 SB-819 SB-003 SB-825 SB-512 SB-510 SB-824 SB-823 SB-002 SB-818 SB-042 SB-511 SB-514 SB-544A SB-822 SB-001 SB-544 SB-509 SB-513 SB-830 SB-006 SB-831 SB-543 SB-543A SB-364 SB-545 SB-838 SB-821 SB-508 SB-524 SB-521 SB-500 SB-522 SB-541A SB-518 SB-542 SB-570 SB-571 SB-357 SB-829 SB-363 SB-546 SB-523 SB-541 SB-005 SB-546A SB-837 SB-353 SB-828 SB-036 SB-843 SB-358 SB-507 SB-548 SB-842 SB-232 SB-362 SB-547 SB-836 SB-352 SB-569 SB-525 SB-515 SB-169 SB-526 SB-501 SB-354 SB-233 SB-041 SB-528 SB-527 SB-345 SB-035 SB-561 SB-846 SB-551 SB-359 SB-553 SB-361 SB-004 SB-552 SB-554 SB-502 SB-841 SB-351 SB-555 SB-235 SB-355 SB-503 SB-346 SB-827 SB-519 SB-529 SB-568 SB-845 SB-360 SB-530 SB-847 SB-350 SB-532 SB-531 SB-562 SB-834 SB-835 SB-550A SB-234 SB-356 SB-840 SB-347 SB-556 SB-550 SB-833 SB-349 SB-534 SB-505 SB-516 SB-533 SB-567 SB-844 SB-348 SB-536 SB-535 SB-563 SB-549 SB-557 SB-538 SB-506 SB-537 SB-566 SB-504 SB-520 SB-517 SB-540 SB-539 SB-564 SB-558 SB-839 SB-832 SB-565 SB-559 SB-560

## Legend

**Hazard Indices**

- > 100
- 10 - 100
- 1 - 1 0
- 0.2 - 1
- < 0.2

- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE
BLOCK E - SURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-2.2 | REV 0 |

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SB-820 SB-819 SB-003 SB-825 SB-512 SB-510 SB-824 SB-823 SB-002 SB-818 SB-042 SB-511 SB-514 SB-544A SB-822 SB-001 SB-544 SB-509 SB-513 SB-830 SB-006 SB-831 SB-543 SB-543A SB-364 SB-545 SB-838 SB-821 SB-508 SB-524 SB-521 SB-500 SB-522 SB-541A SB-518 SB-542 SB-570 SB-523 SB-571 SB-357 SB-829 SB-363 SB-546 SB-541 SB-005 SB-546A SB-837 SB-353 SB-828 SB-036 SB-843 SB-358 SB-507 SB-362 SB-548 SB-232 SB-842 SB-352 SB-836 SB-547 SB-525 SB-569 SB-515 SB-169 SB-526 SB-354 SB-233 SB-041 SB-501 SB-528 SB-527 SB-345 SB-035 SB-561 SB-846 SB-551 SB-359 SB-553 SB-361 SB-004 SB-552 SB-554 SB-502 SB-841 SB-351 SB-555 SB-235 SB-355 SB-503 SB-346 SB-827 SB-519 SB-529 SB-568 SB-845 SB-360 SB-350 SB-532 SB-530 SB-847 SB-835 SB-562 SB-834 SB-531 SB-550A SB-234 SB-356 SB-840 SB-347 SB-556 SB-550 SB-833 SB-349 SB-534 SB-505 SB-516 SB-533 SB-567 SB-844 SB-348 SB-536 SB-535 SB-563 SB-549 SB-557 SB-538 SB-506 SB-537 SB-566 SB-504 SB-520 SB-517 SB-540 SB-539 SB-564 SB-558 SB-839 SB-832 SB-565 SB-559 SB-560

## Legend

**Cancer Risk Estimates**

- > 1 E-02
- 1 E-03 > 1 E-02
- 1 E-04 > 1 E-03
- 1 E-05 > 1 E-04
- 1 E-06 > 1 E-05
- < 1 E-06
- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

CANCER RISK ESTIMATES FOR RESIDENTIAL USE
BLOCK E - SURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-2.3 | REV 0 |

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SB-820 SB-819 SB-003 SB-825 SB-512 SB-510 SB-824 SB-823 SB-002 SB-818 SB-042 SB-511 SB-514 SB-544A SB-822 SB-001 SB-544 SB-509 SB-513 SB-830 SB-006 SB-831 SB-543 SB-543A SB-364 SB-545 SB-838 SB-821 SB-508 SB-524 SB-521 SB-500 SB-522 SB-541A SB-518 SB-542 SB-570 SB-523 SB-571 SB-357 SB-829 SB-363 SB-546 SB-541 SB-005 SB-546A SB-837 SB-353 SB-828 SB-036 SB-843 SB-358 SB-507 SB-362 SB-548 SB-842 SB-232 SB-836 SB-547 SB-352 SB-525 SB-569 SB-515 SB-169 SB-526 SB-354 SB-233 SB-041 SB-501 SB-528 SB-527 SB-345 SB-035 SB-561 SB-846 SB-551 SB-004 SB-552 SB-359 SB-553 SB-361 SB-554 SB-502 SB-351 SB-841 SB-555 SB-235 SB-355 SB-503 SB-346 SB-827 SB-519 SB-529 SB-568 SB-845 SB-360 SB-530 SB-847 SB-350 SB-532 SB-531 SB-562 SB-834 SB-835 SB-550A SB-234 SB-356 SB-840 SB-347 SB-556 SB-550 SB-833 SB-349 SB-534 SB-505 SB-516 SB-533 SB-567 SB-844 SB-348 SB-536 SB-535 SB-563 SB-549 SB-557 SB-538 SB-506 SB-537 SB-566 SB-504 SB-520 SB-517 SB-540 SB-539 SB-564 SB-558 SB-839 SB-832 SB-565 SB-559 SB-560

## Legend

**Hazard Indices**

- > 100
- 10 - 100
- 1 - 1
- 0.2 - 1
- < 0.2

Road
Railroad
Sidewalk
Fenceline
Buildings
Impervious Surface
Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE
BLOCK E - SURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-2.4 | REV 0 |

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SB-820
SB-819
SB-003
SB-825
SB-512
SB-510
SB-824
SB-823
SB-002
SB-818
SB-511
SB-514
SB-822
SB-001
SB-509
SB-513
SB-830
SB-006
SB-831
SB-009
SB-543A
SB-545
SB-838
SB-821
SB-508
SB-500
SB-541A
SB-542
SB-570A
SB-570
SB-571
SB-518
SB-829
SB-005
SB-837
SB-828
SB-507
SB-036
SB-843
SB-548
SB-842
SB-515
SB-836
SB-547
SB-020
SB-569
SB-501
SB-035
SB-561A
SB-561
SB-846
SB-010
SB-004
SB-554
SB-502
SB-021
SB-841
SB-555
SB-827
SB-519
SB-503
SB-568A
SB-555A
SB-833I
SB-568
SB-845
SB-019
SB-847
SB-833N
SB-834
SB-835
SB-562
SB-018
SB-833B
SB-550A
SB-833M
SB-833C
SB-840
SB-833A
SB-833D
SB-556
SB-833J
SB-833K
SB-505
SB-017
SB-833H
SB-833
SB-833E
SB-567
SB-826
MRC-MW43A
SB-563
SB-844
SB-833G
SB-833L
SB-011
SB-557
SB-833F
SB-506
SB-504
SB-016
SB-566
SB-517
SB-520
SB-564
SB-558
SB-015
SB-839
SB-832
SB-565
SB-012
SB-559
SB-560
SB-014
SB-013

## Legend

**Cancer Risk Estimates**

- > 1 E-02
- 1 E-03 > 1 E-02
- 1 E-04 > 1 E-03
- 1 E-05 > 1 E-04
- 1 E-06 > 1 E-05
- < 1 E-06

Road
Railroad
Sidewalk
Fenceline
Buildings
Impervious Surface
Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

CANCER RISK ESTIMATES FOR INDUSTRIAL USE
BLOCK E - SUBSURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-2.5 | REV 0 |

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SB-820
SB-819
SB-003
SB-825
SB-512
SB-510
SB-824
SB-823
SB-002
SB-818
SB-511
SB-514
SB-822
SB-001
SB-509
SB-513
SB-830
SB-006
SB-831
SB-009
SB-543A
SB-545
SB-838
SB-821
SB-508
SB-500
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SB-518
SB-542
SB-570A
SB-570
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SB-836
SB-547
SB-569
SB-020
SB-035
SB-501
SB-561A
SB-561
SB-846
SB-010
SB-004
SB-554
SB-502
SB-021
SB-841
SB-555
SB-827
SB-519
SB-503
SB-568A
SB-555A
SB-845
SB-019
SB-568
SB-847
SB-833I
SB-833N
SB-833B
SB-834
SB-835
SB-562
SB-018
SB-550A
SB-833M
SB-833C
SB-840
SB-833A
SB-833D
SB-556
SB-833J
SB-833K
SB-505
SB-017
SB-833H
SB-833
SB-567
SB-826
SB-833E
SB-563
SB-844
SB-833G
MRC-MW43A
SB-011
SB-833L
SB-557
SB-833F
SB-506
SB-016
SB-504
SB-566
SB-517
SB-520
SB-564
SB-558
SB-015
SB-839
SB-832
SB-565
SB-012
SB-559
SB-560
SB-014
SB-013

## Legend

**Hazard Indices**

- > 100
- 10 - 100
- 1 - 10
- 0.2 - 1
- < 0.2

Road
Railroad
Sidewalk
Fenceline
Buildings
Impervious Surface
Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE
BLOCK E - SUBSURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-2.6 | REV 0 |

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SB-820
SB-819
SB-003
SB-825
SB-512
SB-510
SB-824
SB-823
SB-002
SB-818
SB-511
SB-514
SB-822
SB-001
SB-509
SB-513
SB-830
SB-006
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SB-009
SB-543A
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SB-500
SB-541A
SB-518
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SB-829
SB-005
SB-837
SB-828
SB-507
SB-036
SB-843
SB-548
SB-842
SB-836
SB-547
SB-020
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SB-501
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SB-840
SB-833A
SB-833D
SB-556
SB-833J
SB-833K
SB-505
SB-017
SB-833H
SB-833
SB-833E
SB-567
SB-826
MRC-MW43A
SB-563
SB-844
SB-833G
SB-833L
SB-011
SB-557
SB-833F
SB-506
SB-504
SB-016
SB-566
SB-517
SB-520
SB-564
SB-558
SB-015
SB-839
SB-832
SB-565
SB-012
SB-559
SB-560
SB-014
SB-013

## Legend

**Cancer Risk Estimates**

- > 1 E-02
- 1 E-03 > 1 E-02
- 1 E-04 > 1 E-03
- 1 E-05 > 1 E-04
- 1 E-06 > 1 E-05
- < 1 E-06
- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

CANCER RISK ESTIMATES FOR RESIDENTIAL USE
BLOCK E - SUBSURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-2.7 | REV 0 |

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SB-820 SB-819 SB-003 SB-825 SB-512 SB-510 SB-824 SB-823 SB-002 SB-818 SB-511 SB-514 SB-822 SB-001 SB-509 SB-513 SB-830 SB-006 SB-831 SB-009 SB-543A SB-545 SB-838 SB-821 SB-508 SB-500 SB-541A SB-518 SB-542 SB-570A SB-570 SB-571 SB-829 SB-005 SB-837 SB-828 SB-507 SB-036 SB-843 SB-548 SB-842 SB-836 SB-547 SB-020 SB-569 SB-515 SB-501 SB-035 SB-561A SB-561 SB-846 SB-010 SB-004 SB-554 SB-502 SB-021 SB-841 SB-555 SB-827 SB-519 SB-503 SB-568A SB-555A SB-845 SB-019 SB-568 SB-847 SB-833I SB-833N SB-833B SB-834 SB-835 SB-562 SB-018 SB-550A SB-833M SB-833C SB-840 SB-833A SB-833D SB-556 SB-833J SB-833H SB-833 SB-833K SB-505 SB-017 SB-826 SB-833E SB-567 MRC-MW43A SB-563 SB-844 SB-011 SB-833G SB-833L SB-557 SB-833F SB-506 SB-504 SB-016 SB-566 SB-517 SB-520 SB-564 SB-558 SB-015 SB-839 SB-832 SB-565 SB-012 SB-559 SB-560 SB-014 SB-013

## Legend

**Hazard Indices**

- > 100
- 10 - 100
- 1 - 100
- 0.2 - 1
- < 0.2
- Sidewalk
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE
BLOCK E - SUBSURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-2.8 | REV 0 |

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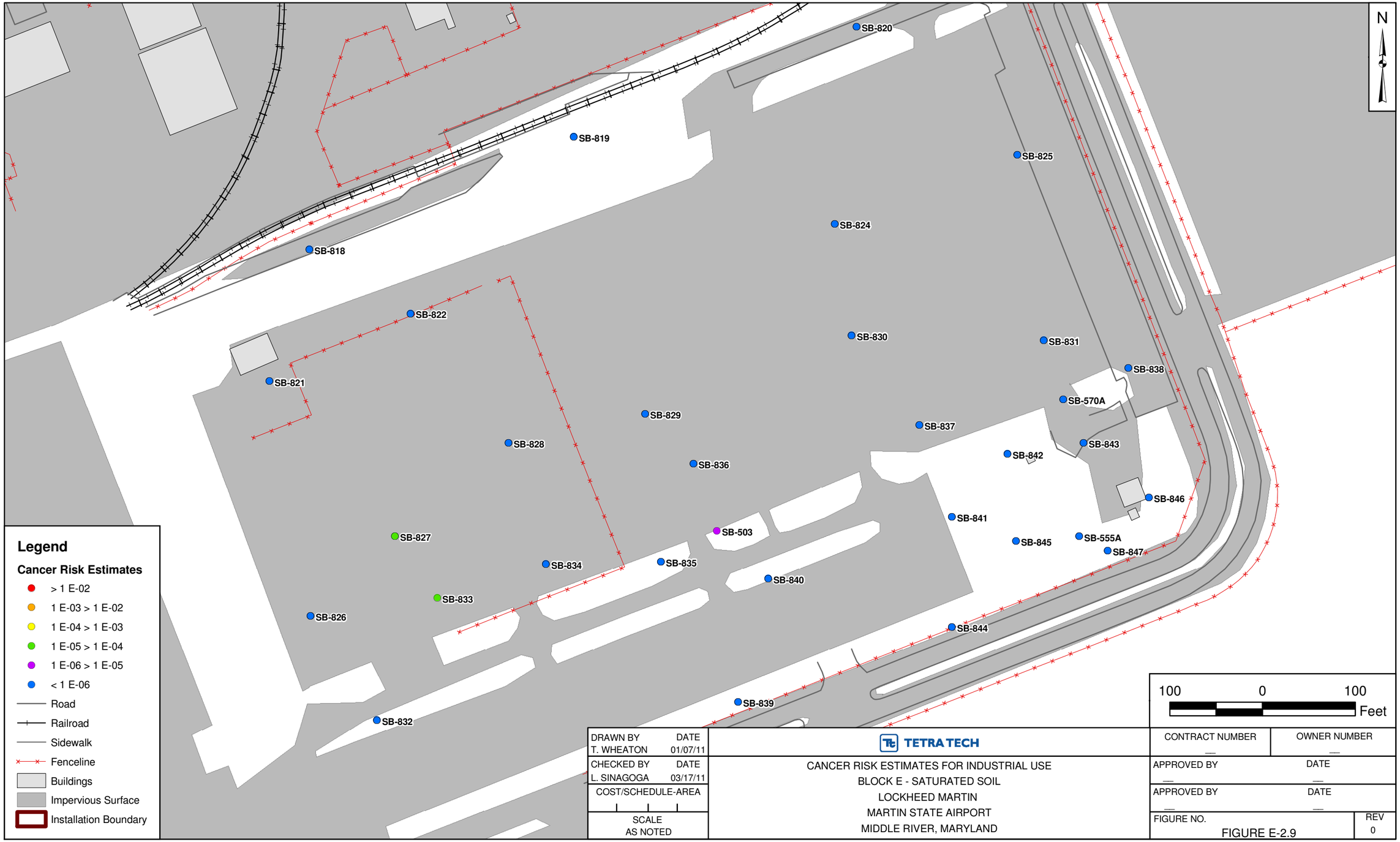


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 | CANCER RISK ESTIMATES FOR INDUSTRIAL USE<br>BLOCK E - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-2.9 / REV 0 |

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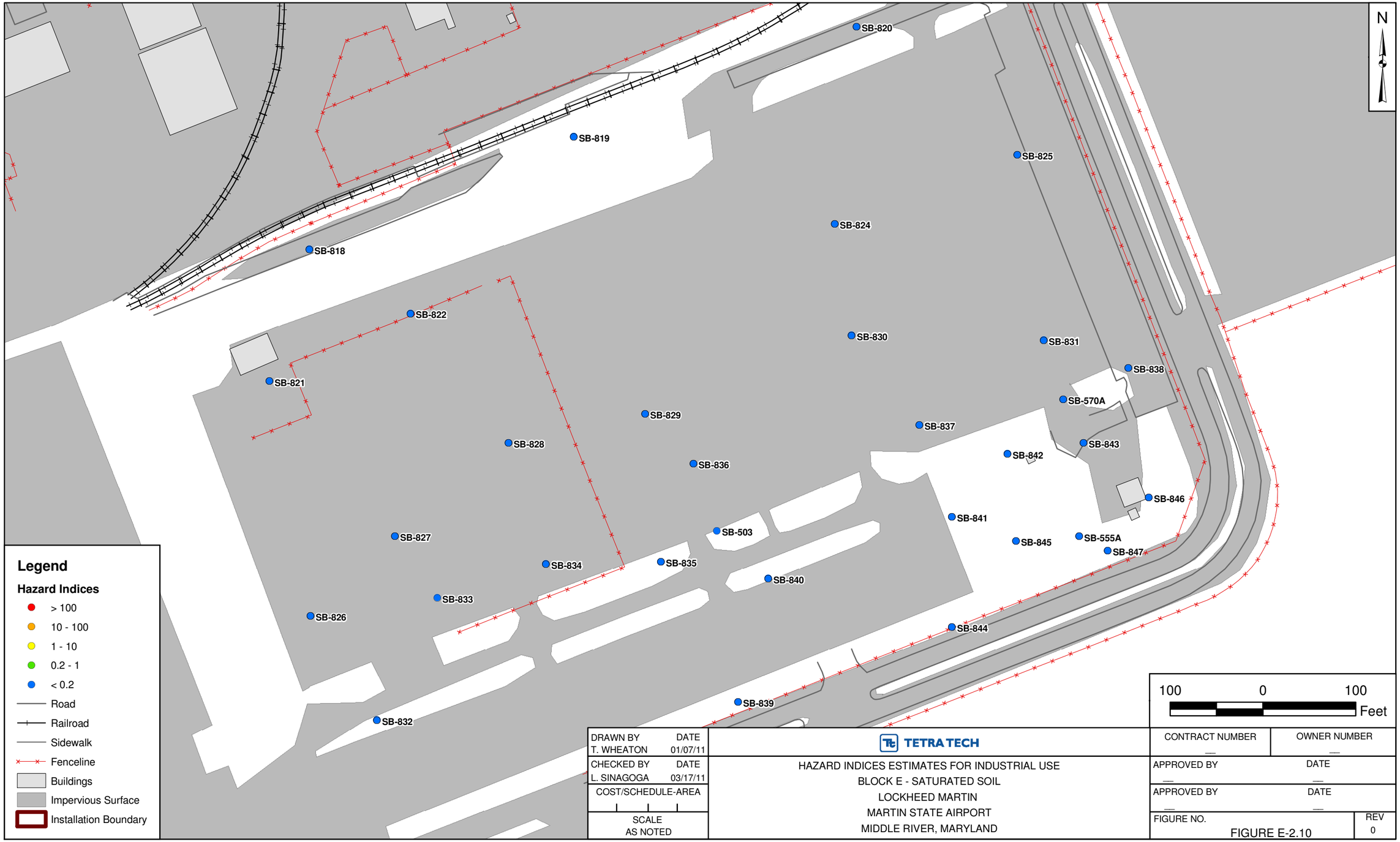


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|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 | HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE<br>BLOCK E - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-2.10 / REV 0 |

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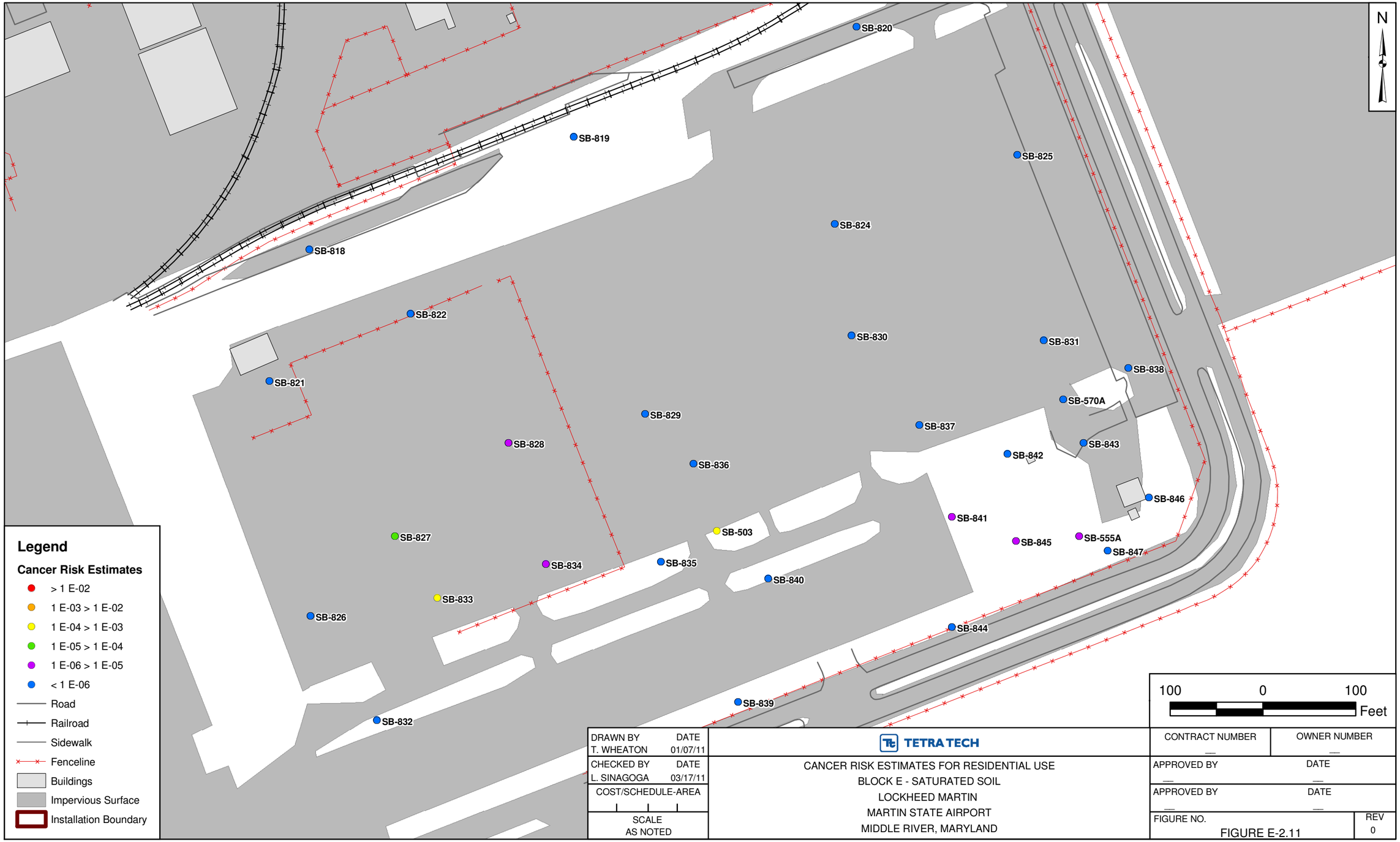


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|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 | CANCER RISK ESTIMATES FOR RESIDENTIAL USE<br>BLOCK E - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-2.11 / REV 0 |

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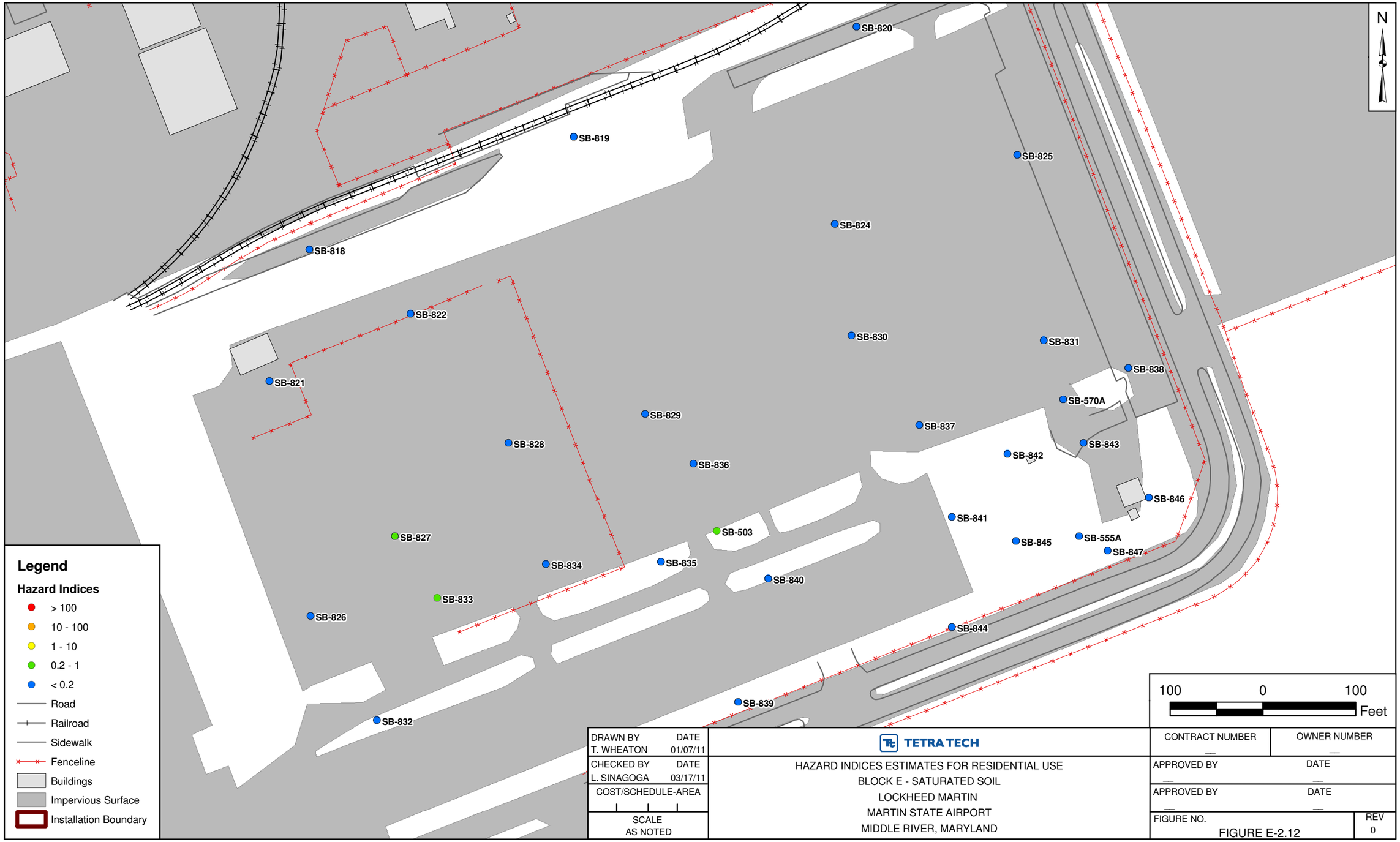


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/17/11 | HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE<br>BLOCK E - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-2.12 / REV 0 |

**APPENDIX E.3**

**BLOCK F**

## TABLES


E-3.1 Cancer Risks for Individual Sample Locations – Surface Soil - Block F

E-3.2 Hazard Indices for Individual Sample Locations – Surface Soil - Block F

E-3.3 Cancer Risks for Individual Sample Locations – Subsurface Soil - Block F

E-3.4 Hazard Indices for Individual Sample Locations – Subsurface Soil - Block F

E-3.5 Cancer Risks for Individual Sample Locations – Saturated Soil - Block F

E-3.6 Hazard Indices for Individual Sample Locations – Saturated Soil - Block F


## FIGURES


E-3.1 Cancer Risk Estimates for Industrial Use – Block F – Surface Soil

E-3.2 Hazard Indices Estimates for Industrial Use – Block F – Surface Soil

E-3.3 Cancer Risk Estimates for Residential Use – Block F – Surface Soil

E-3.4 Hazard Indices Estimates for Residential Use – Block F – Surface Soil

E-3.5 Cancer Risk Estimates for Industrial Use – Block F – Subsurface Soil

E-3.6 Hazard Indices Estimates for Industrial Use – Block F – Subsurface Soil

E-3.7 Cancer Risk Estimates for Residential Use – Block F – Subsurface Soil

E-3.8 Hazard Indices Estimates for Residential Use – Block F – Subsurface Soil

E-3.9 Cancer Risk Estimates for Industrial Use – Block F – Saturated Soil

E-3.10 Hazard Indices Estimates for Industrial Use – Block F – Saturated Soil

E-3.11 Cancer Risk Estimates for Residential Use – Block F – Saturated Soil

E-3.12 Hazard Indices Estimates for Residential Use – Block F – Saturated Soil

**TABLE E-3.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-056 | SB-056 | SB-093 | SB-093 | SB-094 | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 | SB-635C | SB-635D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-56RE-1 | F-SB-56RE-2 | F-SB-93RE-1 | F-SB-93RE-2 | F-SB-94RE-1 | F-SB-94RE-2 | F-SB-95RE-1 | F-SB-95RE-2 | F-SB-96RE-1 | F-SB-96RE-2 | F-SB-635C-1 | F-SB-635D-1 |
| SAMPLE DATE | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 | 20090921 | 20090921 | 20091104 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.9E-08 | 2.6E-09 | 4.1E-06 | 5.2E-07 | 6.4E-07 | 3.3E-07 | 1.7E-04 | 9.1E-09 | 2.1E-06 | 2.8E-09 | 4.4E-06 | 7.0E-08 |
| AROCLOR-1254 | | | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | | | | | | |
| AROCLOR-1260 | | | 1.2E-07 | 1.0E-08 | 1.0E-08 | 1.0E-08 | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.9E-08 | 2.6E-09 | 4.3E-06 | 5.4E-07 | 6.6E-07 | 3.5E-07 | 1.7E-04 | 9.1E-09 | 2.1E-06 | 2.8E-09 | 4.4E-06 | 7.0E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-06 | 5.6E-08 | 8.9E-05 | 1.1E-05 | 1.4E-05 | 7.2E-06 | 3.8E-03 | 2.0E-07 | 4.5E-05 | 6.0E-08 | 9.5E-05 | 1.5E-06 |
| AROCLOR-1254 | | | 4.7E-08 | 5.0E-08 | 5.0E-08 | 5.2E-08 | | | | | | |
| AROCLOR-1260 | | | 5.9E-07 | 5.0E-08 | 5.0E-08 | 5.2E-08 | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-06 | 5.6E-08 | 9.0E-05 | 1.1E-05 | 1.4E-05 | 7.3E-06 | 3.8E-03 | 2.0E-07 | 4.5E-05 | 6.0E-08 | 9.5E-05 | 1.5E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-636 | SB-636A | SB-636B | SB-636C | SB-636D | SB-637 | SB-637B | SB-637C | SB-638 | SB-639 | SB-640 | SB-641 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636-1 | F-SB-636A-1 | F-SB-636B-1 | F-SB-636C-1 | F-SB-636D-1 | F-SB-637-1 | F-SB-637B-1 | F-SB-637C-1 | F-SB-638-1 | F-SB-639-1 | F-SB-640-1 | F-SB-641-1 |
| SAMPLE DATE | 20091007 | 20091105 | 20091105 | 20091105 | 20091105 | 20091007 | 20091106 | 20091106 | 20091007 | 20091007 | 20091007 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-07 | 1.4E-06 | 4.9E-06 | 2.5E-05 | 2.3E-05 | 4.1E-06 | 2.4E-05 | 7.2E-06 | 2.4E-09 | 2.7E-07 | 2.6E-07 | 4.7E-06 |
| AROCLOR-1254 | 1.0E-08 | | | | | 9.5E-09 | | | 9.0E-09 | 1.0E-08 | 1.0E-08 | |
| AROCLOR-1260 | 1.0E-08 | | | | | 9.5E-09 | | | 9.0E-09 | 1.0E-08 | 1.0E-08 | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.8E-07 | 1.4E-06 | 4.9E-06 | 2.5E-05 | 2.3E-05 | 4.1E-06 | 2.4E-05 | 7.2E-06 | 2.0E-08 | 2.9E-07 | 2.8E-07 | 4.7E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.2E-05 | 3.1E-05 | 1.1E-04 | 5.3E-04 | 5.1E-04 | 8.9E-05 | 5.2E-04 | 1.6E-04 | 5.3E-08 | 5.9E-06 | 5.5E-06 | 1.0E-04 |
| AROCLOR-1254 | 5.0E-08 | | | | | 4.7E-08 | | | 4.5E-08 | 5.0E-08 | 5.0E-08 | |
| AROCLOR-1260 | 5.0E-08 | | | | | 4.7E-08 | | | 4.5E-08 | 5.0E-08 | 5.0E-08 | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.2E-05 | 3.1E-05 | 1.1E-04 | 5.3E-04 | 5.1E-04 | 8.9E-05 | 5.2E-04 | 1.6E-04 | 1.4E-07 | 6.0E-06 | 5.6E-06 | 1.0E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-641A | SB-641B | SB-641C | SB-642 | SB-642A | SB-642B | SB-642C | SB-643 | SB-643B | SB-643C | SB-644 | SB-645 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-641A-1 | F-SB-641B-1 | F-SB-641C-1 | F-SB-642-1 | F-SB-642A-1 | F-SB-642B-1 | F-SB-642C-1 | F-SB-643-1 | F-SB-643B-1 | F-SB-643C-1 | F-SB-644-1 | F-SB-645-1 |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091019 | 20091104 | 20091104 | 20091104 | 20091016 | 20091105 | 20091105 | 20091016 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-07 | 1.0E-06 | 3.2E-05 | 5.2E-06 | 2.6E-09 | 2.0E-07 | 6.0E-09 | 2.5E-06 | 4.1E-07 | 2.4E-09 | 2.4E-07 | 9.3E-05 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-07 | 1.0E-06 | 3.2E-05 | 5.2E-06 | 2.6E-09 | 2.0E-07 | 6.0E-09 | 2.5E-06 | 4.1E-07 | 2.4E-09 | 2.4E-07 | 9.3E-05 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.1E-06 | 2.2E-05 | 6.8E-04 | 1.1E-04 | 5.6E-08 | 4.3E-06 | 1.3E-07 | 5.3E-05 | 8.9E-06 | 5.3E-08 | 5.2E-06 | 2.0E-03 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.1E-06 | 2.2E-05 | 6.8E-04 | 1.1E-04 | 5.6E-08 | 4.3E-06 | 1.3E-07 | 5.3E-05 | 8.9E-06 | 5.3E-08 | 5.2E-06 | 2.0E-03 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-645A | SB-645B | SB-645C | SB-646 | SB-647 | SB-647A | SB-647B | SB-647C | SB-648 | SB-649 | SB-650 | SB-651 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-645A-1 | F-SB-645B-1 | F-SB-645C-1 | F-SB-646-1 | F-SB-647-1 | F-SB-647A-1 | F-SB-647B-1 | F-SB-647C-1 | F-SB-648-1 | F-SB-649-1 | F-SB-650-1 | F-SB-651-1 |
| SAMPLE DATE | 20091105 | 20091105 | 20091105 | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.8E-07 | 3.9E-07 | 1.3E-06 | 7.9E-08 | 9.8E-07 | 1.3E-05 | 9.8E-07 | 1.8E-05 | 3.8E-09 | 3.8E-09 | 1.4E-08 | 4.8E-08 |
| AROCLOR-1254 | | | | | | | | | | | | 9.5E-09 |
| AROCLOR-1260 | | | | | | | | | | | | 9.5E-09 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.8E-07 | 3.9E-07 | 1.3E-06 | 7.9E-08 | 9.8E-07 | 1.3E-05 | 9.8E-07 | 1.8E-05 | 3.8E-09 | 3.8E-09 | 1.4E-08 | 6.6E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.3E-06 | 8.4E-06 | 2.8E-05 | 1.7E-06 | 2.1E-05 | 2.9E-04 | 2.1E-05 | 3.9E-04 | 8.3E-08 | 8.3E-08 | 3.1E-07 | 1.0E-06 |
| AROCLOR-1254 | | | | | | | | | | | | 4.7E-08 |
| AROCLOR-1260 | | | | | | | | | | | | 4.7E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.3E-06 | 8.4E-06 | 2.8E-05 | 1.7E-06 | 2.1E-05 | 2.9E-04 | 2.1E-05 | 3.9E-04 | 8.3E-08 | 8.3E-08 | 3.1E-07 | 1.1E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-652 | SB-652A | SB-652B | SB-652C | SB-797 | SB-798 | SB-799 | SB-022 | SB-023 | SB-024 | SB-025 | SB-030 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652-1 | F-SB-652A-1 | F-SB-652B-1 | F-SB-652C-1 | F-SB-797-SS | F-SB-798-SS | F-SB-799-SS | SB-22A-SS | SB-23A-SS | SB-24A-SS | SB-25A-SS | SB-30A-SS |
| SAMPLE DATE | 20091007 | 20091105 | 20091105 | 20091105 | 20100820 | 20100820 | 20100820 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.2E-06 | 7.9E-07 | 1.8E-06 | 6.4E-08 | 1.2E-05 | 6.4E-09 | 4.5E-08 | 7.4E-07 | 6.6E-07 | 1.0E-06 | 6.9E-07 | 1.4E-06 |
| AROCLOR-1254 | 1.0E-08 | | | | | | | 1.6E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.3E-07 |
| AROCLOR-1260 | 1.0E-08 | | | | | | | 1.6E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.3E-07 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | 4.8E-07 | 8.1E-07 | 1.2E-06 | 2.2E-07 | 8.4E-07 |
| CADMIUM | | | | | | | | 6.8E-11 | 5.9E-11 | 6.4E-11 | 6.1E-11 | 6.1E-11 |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | 3.0E-11 | 4.7E-11 | 9.2E-11 | 1.8E-10 | 3.0E-11 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | 2.2E-07 | 3.6E-07 | 5.0E-07 | 5.0E-07 | 2.4E-07 |
| TOTAL CANCER RISK | 1.2E-06 | 7.9E-07 | 1.8E-06 | 6.4E-08 | 1.2E-05 | 6.4E-09 | 4.5E-08 | 1.8E-06 | 2.1E-06 | 3.1E-06 | 1.7E-06 | 2.7E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-05 | 1.7E-05 | 3.8E-05 | 1.4E-06 | 2.6E-04 | 1.4E-07 | 9.8E-07 | 1.6E-05 | 1.4E-05 | 2.2E-05 | 1.5E-05 | 3.0E-05 |
| AROCLOR-1254 | 5.0E-08 | | | | | | | 7.9E-07 | 6.9E-07 | 7.4E-07 | 7.4E-07 | 6.7E-07 |
| AROCLOR-1260 | 5.0E-08 | | | | | | | 7.9E-07 | 6.9E-07 | 7.4E-07 | 7.4E-07 | 6.7E-07 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | 3.7E-06 | 6.3E-06 | 9.7E-06 | 1.7E-06 | 6.6E-06 |
| CADMIUM | | | | | | | | 1.4E-10 | 1.2E-10 | 1.3E-10 | 1.2E-10 | 1.2E-10 |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | 6.1E-11 | 9.4E-11 | 1.9E-10 | 3.6E-10 | 6.0E-11 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | 3.3E-06 | 5.4E-06 | 7.4E-06 | 7.4E-06 | 3.6E-06 |
| TOTAL CANCER RISK | 2.6E-05 | 1.7E-05 | 3.8E-05 | 1.4E-06 | 2.6E-04 | 1.4E-07 | 9.8E-07 | 2.5E-05 | 2.7E-05 | 4.1E-05 | 2.6E-05 | 4.2E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-050 | SB-055 | SB-056 | SB-093 | SB-094 | SB-095 | SB-096 | SB-236 | SB-236 | SB-237 | SB-237 | SB-238 | SB-238 | SB-250 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-50-SS | SB-55-SS | SB-56-SS | SB-93-SS | SB-94-SS | SB-95-SS | SB-96-SS | SB-236-01 | SB-236-SS | SB-237-01 | SB-237-SS | SB-238-01 | SB-238-SS | SB-250-02 |
| SAMPLE DATE | 20040915 | 20040915 | 20040913 | 20040916 | 20040916 | 20040916 | 20040916 | 20050509 | 20050509 | 20050509 | 20050509 | 20050517 | 20050517 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | | | | | | | | 1 | | 1 | | 1 | | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | 1.1E-06 | | 6.7E-06 | 3.7E-06 | 7.4E-06 | | | | | | 4.9E-07 | 1.5E-06 | |
| AROCLOR-1254 | | 1.3E-07 | 2.0E-07 | 1.6E-07 | 6.5E-07 | 1.5E-07 | 1.4E-07 | | | | | 1.9E-08 | 1.8E-08 | |
| AROCLOR-1260 | | 1.3E-07 | 2.0E-07 | 8.0E-07 | 1.4E-06 | 1.5E-07 | 1.4E-07 | | | | | 1.9E-08 | 1.5E-07 | |
| ANTIMONY | | | | | | | | | | | | | | |
| ARSENIC | 1.2E-06 | 5.5E-07 | 1.1E-06 | 6.6E-07 | 7.7E-07 | 7.3E-07 | 7.3E-07 | 1.5E-06 | 1.1E-06 | 1.8E-06 | 5.5E-07 | 1.1E-06 | 1.1E-06 | 5.5E-07 |
| CADMIUM | 5.5E-11 | 6.1E-11 | 9.1E-11 | 1.6E-10 | 2.0E-10 | 6.8E-11 | 6.6E-11 | 1.8E-11 | 1.4E-11 | 1.4E-11 | 1.8E-11 | 2.7E-11 | 9.1E-11 | 4.5E-12 |
| COBALT | | | | | | | | 1.3E-09 | 1.5E-09 | 1.2E-09 | 1.3E-09 | 1.9E-09 | 1.5E-09 | 6.4E-10 |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | | |
| NICKEL | 5.6E-11 | 8.5E-11 | 3.3E-11 | 7.2E-11 | 7.2E-11 | 5.3E-11 | 3.5E-11 | 7.9E-11 | 7.9E-11 | 1.2E-10 | 7.9E-11 | 1.4E-10 | 1.4E-10 | 2.0E-11 |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.6E-07 | 3.6E-07 | 3.9E-07 | 3.0E-06 | 6.9E-07 | 3.9E-07 | 2.6E-07 | 5.5E-07 | 4.9E-07 | 5.1E-06 | 5.5E-07 | 7.5E-07 | 1.0E-06 | 4.3E-07 |
| TOTAL CANCER RISK | 1.4E-06 | 2.3E-06 | 1.9E-06 | 1.1E-05 | 7.2E-06 | 8.8E-06 | 1.3E-06 | 2.0E-06 | 1.6E-06 | 6.9E-06 | 1.1E-06 | 2.4E-06 | 3.7E-06 | 9.8E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | 2.4E-05 | | 1.5E-04 | 8.1E-05 | 1.6E-04 | | | | | | 1.1E-05 | 3.2E-05 | |
| AROCLOR-1254 | | 6.4E-07 | 1.0E-06 | 8.2E-07 | 3.2E-06 | 7.4E-07 | 6.9E-07 | | | | | 9.7E-08 | 9.2E-08 | |
| AROCLOR-1260 | | 6.4E-07 | 1.0E-06 | 4.0E-06 | 6.9E-06 | 7.4E-07 | 6.9E-07 | | | | | 9.7E-08 | 7.6E-07 | |
| ANTIMONY | | | | | | | | | | | | | | |
| ARSENIC | 9.1E-06 | 4.3E-06 | 8.3E-06 | 5.1E-06 | 6.0E-06 | 5.7E-06 | 5.7E-06 | 1.1E-05 | 8.5E-06 | 1.4E-05 | 4.3E-06 | 8.5E-06 | 8.5E-06 | 4.3E-06 |
| CADMIUM | 1.1E-10 | 1.2E-10 | 1.8E-10 | 3.2E-10 | 4.1E-10 | 1.4E-10 | 1.3E-10 | 3.7E-11 | 2.7E-11 | 2.7E-11 | 3.7E-11 | 5.5E-11 | 1.8E-10 | 9.2E-12 |
| COBALT | | | | | | | | 2.7E-09 | 3.1E-09 | 2.3E-09 | 2.6E-09 | 3.8E-09 | 2.9E-09 | 1.3E-09 |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | | |
| NICKEL | 1.1E-10 | 1.7E-10 | 6.7E-11 | 1.5E-10 | 1.5E-10 | 1.1E-10 | 7.1E-11 | 1.6E-10 | 1.6E-10 | 2.4E-10 | 1.6E-10 | 2.9E-10 | 2.8E-10 | 4.0E-11 |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.9E-06 | 5.4E-06 | 5.8E-06 | 4.5E-05 | 1.0E-05 | 5.8E-06 | 3.8E-06 | 8.2E-06 | 7.3E-06 | 7.6E-05 | 8.2E-06 | 1.1E-05 | 1.5E-05 | 6.4E-06 |
| TOTAL CANCER RISK | 1.3E-05 | 3.4E-05 | 1.6E-05 | 2.0E-04 | 1.1E-04 | 1.7E-04 | 1.1E-05 | 2.0E-05 | 1.6E-05 | 9.0E-05 | 1.2E-05 | 3.1E-05 | 5.6E-05 | 1.1E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-250 | SB-251 | SB-251 | SB-252 | SB-252 | SB-253 | SB-253 | SB-265 | SB-265 | SB-266 | SB-266 | SB-267 | SB-267 | SB-268 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-250-SS | SB-251-02 | SB-251-SS | SB-252-02 | SB-252-SS | SB-253-02 | SB-253-SS | SB-265-02 | SB-265-SS | SB-266-02 | SB-266-SS | SB-267-02 | SB-267-SS | SB-268-02 |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SB | SS | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | 2.1E-06 | 8.8E-06 | 6.7E-07 | 4.7E-06 | 5.0E-07 | 1.1E-06 | 1.5E-05 |
| AROCLOR-1254 | | | | | | | | | 1.8E-08 | | 1.8E-08 | | 9.6E-08 | |
| AROCLOR-1260 | | | | | | | | | 1.2E-07 | | 7.5E-07 | | 7.3E-08 | |
| ANTIMONY | | | | | | | | | | | | | | |
| ARSENIC | 1.8E-07 | 1.8E-06 | 5.5E-07 | 1.5E-06 | 3.7E-07 | 5.5E-07 | 5.5E-07 | | 1.8E-06 | | 5.5E-07 | | 5.5E-07 | |
| CADMIUM | 4.5E-12 | 2.3E-12 | 4.5E-12 | 4.5E-12 | 2.3E-12 | 2.0E-12 | 1.8E-11 | | 3.6E-11 | | 8.2E-11 | | 3.2E-11 | |
| COBALT | 1.3E-09 | 1.6E-09 | 1.3E-09 | 8.0E-10 | 8.2E-10 | 9.1E-10 | 1.1E-09 | | 2.0E-09 | | 1.9E-09 | | 1.4E-09 | |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | | |
| NICKEL | 5.3E-11 | 5.9E-11 | 3.0E-11 | 2.0E-11 | 2.0E-11 | 1.6E-11 | 2.6E-11 | | 1.3E-10 | | 9.2E-11 | | 5.9E-11 | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.2E-07 | 5.7E-07 | 4.4E-07 | 4.3E-07 | 3.2E-07 | 3.9E-07 | 4.0E-07 | | 1.5E-06 | | 8.6E-07 | | 4.5E-07 | |
| TOTAL CANCER RISK | 5.1E-07 | 2.4E-06 | 9.9E-07 | 1.9E-06 | 6.9E-07 | 9.4E-07 | 9.5E-07 | 2.1E-06 | 1.2E-05 | 6.7E-07 | 6.8E-06 | 5.0E-07 | 2.3E-06 | 1.5E-05 |
| **RESIDENTIAL** | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | 4.5E-05 | 1.9E-04 | 1.4E-05 | 1.0E-04 | 1.1E-05 | 2.4E-05 | 3.2E-04 |
| AROCLOR-1254 | | | | | | | | | 8.9E-08 | | 8.9E-08 | | 4.8E-07 | |
| AROCLOR-1260 | | | | | | | | | 5.9E-07 | | 3.7E-06 | | 3.6E-07 | |
| ANTIMONY | | | | | | | | | | | | | | |
| ARSENIC | 1.4E-06 | 1.4E-05 | 4.3E-06 | 1.1E-05 | 2.8E-06 | 4.3E-06 | 4.3E-06 | | 1.4E-05 | | 4.3E-06 | | 4.3E-06 | |
| CADMIUM | 9.2E-12 | 4.6E-12 | 9.2E-12 | 9.2E-12 | 4.6E-12 | 4.1E-12 | 3.7E-11 | | 7.3E-11 | | 1.6E-10 | | 6.4E-11 | |
| COBALT | 2.7E-09 | 3.3E-09 | 2.7E-09 | 1.6E-09 | 1.6E-09 | 1.8E-09 | 2.2E-09 | | 4.1E-09 | | 3.9E-09 | | 2.7E-09 | |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | | |
| NICKEL | 1.1E-10 | 1.2E-10 | 6.0E-11 | 4.0E-11 | 4.0E-11 | 3.3E-11 | 5.3E-11 | | 2.6E-10 | | 1.9E-10 | | 1.2E-10 | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 4.9E-06 | 8.6E-06 | 6.5E-06 | 6.4E-06 | 4.9E-06 | 5.8E-06 | 5.9E-06 | | 2.3E-05 | | 1.3E-05 | | 6.8E-06 | |
| TOTAL CANCER RISK | 6.3E-06 | 2.3E-05 | 1.1E-05 | 1.8E-05 | 7.7E-06 | 1.0E-05 | 1.0E-05 | 4.5E-05 | 2.3E-04 | 1.4E-05 | 1.2E-04 | 1.1E-05 | 3.5E-05 | 3.2E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-268 | SB-269 | SB-269 | SB-270 | SB-270 | SB-382 | SB-383 | SB-384 | SB-385 | SB-386 | SB-387 | SB-388 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-268-SS | SB-269-02 | SB-269-SS | SB-270-02 | SB-270-SS | SB-382-0102 | SB-383-0102 | SB-384-0102 | SB-385-0102 | SB-386-0102 | SB-387-0102 | SB-388-0102 |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB | SS | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.3E-04 | 1.4E-07 | 6.5E-06 | 4.3E-07 | 1.3E-06 | 2.6E-09 | 6.6E-05 | 2.6E-09 | 2.4E-09 | 2.4E-09 | 4.2E-08 | 1.3E-06 |
| AROCLOR-1254 | 1.9E-08 | | 1.8E-08 | | 1.9E-08 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 1.8E-08 | 1.8E-08 | 1.7E-08 | 1.7E-08 |
| AROCLOR-1260 | 6.3E-08 | | 9.5E-08 | | 2.9E-08 | 1.9E-08 | 3.4E-08 | 1.9E-08 | 1.8E-08 | 1.8E-08 | 1.7E-08 | 1.7E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 1.8E-06 | | 2.2E-06 | | 5.5E-07 | | | | | | | |
| CADMIUM | 1.4E-10 | | 3.2E-11 | | 6.8E-12 | | | | | | | |
| COBALT | 2.7E-09 | | 1.5E-09 | | 1.2E-09 | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 9.2E-11 | | 8.5E-11 | | 2.6E-11 | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 8.8E-07 | | 7.2E-07 | | 4.2E-07 | | | | | | | |
| TOTAL CANCER RISK | 1.3E-04 | 1.4E-07 | 9.6E-06 | 4.3E-07 | 2.3E-06 | 4.1E-08 | 6.6E-05 | 4.0E-08 | 3.8E-08 | 3.9E-08 | 7.6E-08 | 1.4E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.9E-03 | 3.1E-06 | 1.4E-04 | 9.3E-06 | 2.8E-05 | 5.6E-08 | 1.4E-03 | 5.6E-08 | 5.3E-08 | 5.3E-08 | 9.0E-07 | 2.9E-05 |
| AROCLOR-1254 | 9.7E-08 | | 9.2E-08 | | 9.4E-08 | 9.7E-08 | 9.2E-08 | 9.4E-08 | 8.9E-08 | 9.2E-08 | 8.7E-08 | 8.7E-08 |
| AROCLOR-1260 | 3.1E-07 | | 4.7E-07 | | 1.4E-07 | 9.7E-08 | 1.7E-07 | 9.4E-08 | 8.9E-08 | 9.2E-08 | 8.7E-08 | 8.7E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 1.4E-05 | | 1.7E-05 | | 4.3E-06 | | | | | | | |
| CADMIUM | 2.7E-10 | | 6.4E-11 | | 1.4E-11 | | | | | | | |
| COBALT | 5.4E-09 | | 3.0E-09 | | 2.5E-09 | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 1.9E-10 | | 1.7E-10 | | 5.3E-11 | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.3E-05 | | 1.1E-05 | | 6.3E-06 | | | | | | | |
| TOTAL CANCER RISK | 2.9E-03 | 3.1E-06 | 1.7E-04 | 9.3E-06 | 3.9E-05 | 2.5E-07 | 1.4E-03 | 2.4E-07 | 2.3E-07 | 2.4E-07 | 1.1E-06 | 2.9E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-389 | SB-390 | SB-391 | SB-392 | SB-393 | SB-394 | SB-395 | SB-396 | SB-397 | SB-398 | SB-399 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-389-0102 | SB-390-0102 | SB-391-0102 | SB-392-0102 | SB-393-0102 | SB-394-0102 | SB-395-0102 | SB-396-0102 | SB-397-0102 | SB-398-0102 | SB-399-0102 |
| SAMPLE DATE | 20071015 | 20071015 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.6E-07 | 3.4E-08 | 2.8E-09 | 2.4E-09 | 1.6E-06 | 4.9E-07 | 2.8E-09 | 2.8E-07 | 2.8E-07 | 1.0E-07 | 2.4E-09 |
| AROCLOR-1254 | 1.8E-08 | 1.9E-08 | 1.9E-08 | 1.8E-08 | 1.7E-08 | 1.8E-08 | 2.0E-08 | 1.9E-08 | 1.7E-08 | 1.8E-08 | 1.8E-08 |
| AROCLOR-1260 | 1.8E-08 | 1.9E-08 | 1.9E-08 | 1.8E-08 | 2.2E-08 | 1.8E-08 | 2.0E-08 | 1.9E-08 | 1.7E-08 | 1.8E-08 | 1.8E-08 |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.0E-07 | 7.2E-08 | 4.2E-08 | 3.9E-08 | 1.6E-06 | 5.2E-07 | 4.3E-08 | 3.2E-07 | 3.1E-07 | 1.4E-07 | 3.8E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-05 | 7.4E-07 | 6.0E-08 | 5.3E-08 | 3.4E-05 | 1.1E-05 | 6.0E-08 | 6.0E-06 | 6.0E-06 | 2.2E-06 | 5.3E-08 |
| AROCLOR-1254 | 8.9E-08 | 9.4E-08 | 9.7E-08 | 9.2E-08 | 8.7E-08 | 9.2E-08 | 9.9E-08 | 9.7E-08 | 8.7E-08 | 8.9E-08 | 8.9E-08 |
| AROCLOR-1260 | 8.9E-08 | 9.4E-08 | 9.7E-08 | 9.2E-08 | 1.1E-07 | 9.2E-08 | 9.9E-08 | 9.7E-08 | 8.7E-08 | 8.9E-08 | 8.9E-08 |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-05 | 9.3E-07 | 2.5E-07 | 2.4E-07 | 3.4E-05 | 1.1E-05 | 2.6E-07 | 6.2E-06 | 6.2E-06 | 2.4E-06 | 2.3E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-400 | SB-401 | SB-402 | SB-403 | SB-404 | SB-405 | SB-406 | SB-407 | SB-408 | SB-409 | SB-489 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-400-0102 | SB-401-0102 | SB-402-0102 | SB-403-0102 | SB-404-0102 | SB-405-0102 | SB-406-0102 | SB-407-0102 | SB-408-0102 | SB-409-0102 | SB-489-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.2E-08 | 8.7E-08 | 1.3E-07 | 2.6E-09 | 2.6E-09 | 1.2E-07 | 1.8E-06 | 4.5E-07 | 3.0E-07 | 1.4E-07 | 3.3E-08 |
| AROCLOR-1254 | 1.8E-08 | 2.0E-08 | 2.0E-08 | 1.8E-08 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 2.1E-08 | 2.0E-08 | 2.1E-08 | 2.0E-08 |
| AROCLOR-1260 | 1.8E-08 | 2.0E-08 | 2.0E-08 | 1.8E-08 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 2.1E-08 | 2.0E-08 | 2.1E-08 | 2.0E-08 |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.7E-08 | 1.3E-07 | 1.7E-07 | 3.9E-08 | 4.0E-08 | 1.6E-07 | 1.8E-06 | 4.9E-07 | 3.4E-07 | 1.8E-07 | 7.4E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-07 | 1.9E-06 | 2.8E-06 | 5.6E-08 | 5.6E-08 | 2.7E-06 | 3.8E-05 | 9.8E-06 | 6.5E-06 | 2.9E-06 | 7.2E-07 |
| AROCLOR-1254 | 8.9E-08 | 1.0E-07 | 1.0E-07 | 9.2E-08 | 9.4E-08 | 8.9E-08 | 9.4E-08 | 1.0E-07 | 9.9E-08 | 1.1E-07 | 1.0E-07 |
| AROCLOR-1260 | 8.9E-08 | 1.0E-07 | 1.0E-07 | 9.2E-08 | 9.4E-08 | 8.9E-08 | 9.4E-08 | 1.0E-07 | 9.9E-08 | 1.1E-07 | 1.0E-07 |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.6E-07 | 2.1E-06 | 3.0E-06 | 2.4E-07 | 2.4E-07 | 2.9E-06 | 3.8E-05 | 1.0E-05 | 6.7E-06 | 3.1E-06 | 9.2E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-024A | SB-024A | SB-093 | SB-093 | SB-094 | SB-094 | SB-624 | SB-624 | SB-625 | SB-625 | SB-626 | SB-626 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-24ARE-1 | F-SB-24ARE-2 | F-SB-93RE-1 | F-SB-93RE-2 | F-SB-94RE-1 | F-SB-94RE-2 | F-SB-624-1 | F-SB-624-2 | F-SB-625-1 | F-SB-625-2 | F-SB-626-1 | F-SB-626-2 |
| SAMPLE DATE | 20090922 | 20090922 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | | 6.6E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 7.1E-03 | 4.7E-03 | | | | | 1.6E-04 | 1.0E-03 | 4.7E-05 | 2.7E-03 | 1.0E-02 | 1.3E-02 |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.1E-03 | 4.7E-03 | 6.6E-04 | 7.0E-04 | 7.0E-04 | 7.3E-04 | 1.6E-04 | 1.0E-03 | 4.7E-05 | 2.7E-03 | 1.0E-02 | 1.3E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | | 8.5E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 9.0E-02 | 6.0E-02 | | | | | 2.1E-03 | 1.3E-02 | 6.0E-04 | 3.5E-02 | 1.3E-01 | 1.6E-01 |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.0E-02 | 6.0E-02 | 8.5E-03 | 8.9E-03 | 8.9E-03 | 9.3E-03 | 2.1E-03 | 1.3E-02 | 6.0E-04 | 3.5E-02 | 1.3E-01 | 1.6E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-3.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-626B | SB-626C | SB-626D | SB-627 | SB-627 | SB-636 | SB-637 | SB-638 | SB-639 | SB-640 | SB-651 | SB-652 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-626B-(1-4) | F-SB-626C-1 | F-SB-626D-1 | F-SB-627-1 | F-SB-627-2 | F-SB-636-1 | F-SB-637-1 | F-SB-638-1 | F-SB-639-1 | F-SB-640-1 | F-SB-651-1 | F-SB-652-1 |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20090922 | 20090922 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 4 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | 7.0E-04 | 6.6E-04 | 6.3E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 7.0E-04 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 5.7E-03 | 1.0E-02 | 1.7E-03 | 1.5E-03 | 1.8E-03 | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 5.7E-03 | 1.0E-02 | 1.7E-03 | 1.5E-03 | 1.8E-03 | 7.0E-04 | 6.6E-04 | 6.3E-04 | 7.0E-04 | 7.0E-04 | 6.6E-04 | 7.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | 8.9E-03 | 8.5E-03 | 8.0E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 8.9E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 7.2E-02 | 1.3E-01 | 2.1E-02 | 1.8E-02 | 2.3E-02 | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.2E-02 | 1.3E-01 | 2.1E-02 | 1.8E-02 | 2.3E-02 | 8.9E-03 | 8.5E-03 | 8.0E-03 | 8.9E-03 | 8.9E-03 | 8.5E-03 | 8.9E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-3.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-800 | SB-801 | SB-022 | SB-023 | SB-024 | SB-025 | SB-030 | SB-050 | SB-055 | SB-056 | SB-093 | SB-094 | SB-095 | SB-096 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-800-SS | F-SB-801-SS | SB-22A-SS | SB-23A-SS | SB-24A-SS | SB-25A-SS | SB-30A-SS | SB-50-SS | SB-55-SS | SB-56-SS | SB-93-SS | SB-94-SS | SB-95-SS | SB-96-SS |
| SAMPLE DATE | 20100910 | 20100910 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040915 | 20040913 | 20040916 | 20040916 | 20040916 | 20040916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | | |
| AROCLOR-1254 | | | 1.1E-02 | 9.8E-03 | 1.0E-02 | 1.0E-02 | 9.4E-03 | | 9.1E-03 | 1.4E-02 | 1.1E-02 | 4.5E-02 | 1.0E-02 | 9.8E-03 |
| AROCLOR-1260 | | | | | | | | | | | | | | |
| ANTIMONY | | | 3.4E-03 | 3.0E-03 | 3.2E-03 | 3.1E-03 | | 2.8E-03 | | | | | | |
| ARSENIC | | | 3.0E-03 | 5.0E-03 | 7.8E-03 | 1.4E-03 | 5.2E-03 | 7.3E-03 | 3.4E-03 | 6.6E-03 | 4.1E-03 | 4.8E-03 | 4.6E-03 | 4.6E-03 |
| CADMIUM | | | 1.9E-03 | 1.6E-03 | 1.7E-03 | 1.7E-03 | 1.7E-03 | 1.5E-03 | 1.7E-03 | 2.5E-03 | 4.4E-03 | 5.6E-03 | 1.9E-03 | 1.8E-03 |
| COBALT | | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MERCURY | 4.7E-03 | 8.5E-04 | 2.8E-04 | 2.4E-04 | 6.6E-03 | 2.6E-04 | 2.6E-04 | 2.0E-03 | 2.6E-04 | 3.8E-04 | 3.2E-03 | 4.6E-03 | 7.1E-04 | 2.8E-04 |
| MOLYBDENUM | | | | | | | | | | | | | | |
| NICKEL | | | 4.9E-04 | 7.5E-04 | 1.5E-03 | 2.9E-03 | 4.8E-04 | 9.0E-04 | 1.4E-03 | 5.4E-04 | 1.2E-03 | 1.2E-03 | 8.6E-04 | 5.7E-04 |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 4.2E-04 | 6.7E-04 | 9.2E-04 | 9.2E-04 | 4.5E-04 | 4.8E-04 | 6.7E-04 | 7.2E-04 | 5.6E-03 | 1.3E-03 | 7.2E-04 | 4.8E-04 |
| TOTAL HAZARD INDEX | 4.7E-03 | 8.5E-04 | 2.1E-02 | 2.1E-02 | 3.2E-02 | 2.1E-02 | 1.8E-02 | 1.5E-02 | 1.6E-02 | 2.5E-02 | 3.0E-02 | 6.3E-02 | 1.9E-02 | 1.7E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | | |
| AROCLOR-1254 | | | 1.4E-01 | 1.2E-01 | 1.3E-01 | 1.3E-01 | 1.2E-01 | | 1.2E-01 | 1.8E-01 | 1.5E-01 | 5.8E-01 | 1.3E-01 | 1.2E-01 |
| AROCLOR-1260 | | | | | | | | | | | | | | |
| ANTIMONY | | | 5.7E-02 | 4.9E-02 | 5.3E-02 | 5.1E-02 | | 4.6E-02 | | | | | | |
| ARSENIC | | | 6.0E-02 | 1.0E-01 | 1.6E-01 | 2.8E-02 | 1.1E-01 | 1.5E-01 | 6.9E-02 | 1.3E-01 | 8.3E-02 | 9.7E-02 | 9.2E-02 | 9.2E-02 |
| CADMIUM | | | 4.1E-02 | 3.5E-02 | 3.8E-02 | 3.6E-02 | 3.6E-02 | 3.2E-02 | 3.6E-02 | 5.4E-02 | 9.5E-02 | 1.2E-01 | 4.1E-02 | 3.9E-02 |
| COBALT | | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MERCURY | 6.0E-02 | 1.1E-02 | 3.6E-03 | 3.0E-03 | 8.4E-02 | 3.3E-03 | 3.3E-03 | 2.5E-02 | 3.3E-03 | 4.8E-03 | 4.1E-02 | 5.8E-02 | 9.0E-03 | 3.6E-03 |
| MOLYBDENUM | | | | | | | | | | | | | | |
| NICKEL | | | 5.0E-03 | 7.7E-03 | 1.5E-02 | 2.9E-02 | 4.9E-03 | 9.3E-03 | 1.4E-02 | 5.6E-03 | 1.2E-02 | 1.2E-02 | 8.8E-03 | 5.9E-03 |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 3.7E-03 | 5.9E-03 | 8.1E-03 | 8.1E-03 | 3.9E-03 | 4.2E-03 | 5.9E-03 | 6.3E-03 | 5.0E-02 | 1.1E-02 | 6.3E-03 | 4.2E-03 |
| TOTAL HAZARD INDEX | 6.0E-02 | 1.1E-02 | 3.1E-01 | 3.3E-01 | 4.9E-01 | 2.9E-01 | 2.8E-01 | 2.6E-01 | 2.4E-01 | 3.9E-01 | 4.3E-01 | 8.8E-01 | 2.9E-01 | 2.7E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-3.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-236 | SB-236 | SB-237 | SB-237 | SB-238 | SB-238 | SB-250 | SB-250 | SB-251 | SB-251 | SB-252 | SB-252 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-236-01 | SB-236-SS | SB-237-01 | SB-237-SS | SB-238-01 | SB-238-SS | SB-250-02 | SB-250-SS | SB-251-02 | SB-251-SS | SB-252-02 | SB-252-SS |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20050517 | 20050517 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 1 | | 1 | | 1 | | 1 | | 1 | | 1 | |
| BOTTOM DEPTH | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | 1.4E-03 | 1.3E-03 | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | 4.6E-03 | 1.1E-03 | 9.2E-03 | 9.2E-04 | 3.4E-04 | 2.3E-03 | 1.4E-03 | 1.8E-03 | 2.1E-03 | 2.3E-03 | 1.8E-03 | 1.6E-03 |
| ARSENIC | 9.1E-03 | 6.8E-03 | 1.1E-02 | 3.4E-03 | 6.8E-03 | 6.8E-03 | 3.4E-03 | 1.1E-03 | 1.1E-02 | 3.4E-03 | 9.1E-03 | 2.3E-03 |
| CADMIUM | 5.0E-04 | 3.7E-04 | 3.7E-04 | 5.0E-04 | 7.5E-04 | 2.5E-03 | 1.2E-04 | 1.2E-04 | 6.2E-05 | 1.2E-04 | 1.2E-04 | 6.2E-05 |
| COBALT | 1.1E-02 | 1.3E-02 | 9.5E-03 | 1.0E-02 | 1.6E-02 | 1.2E-02 | 5.2E-03 | 1.1E-02 | 1.3E-02 | 1.1E-02 | 6.5E-03 | 6.7E-03 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 4.3E-03 | 1.4E-03 | 1.6E-03 | 2.8E-04 | 3.8E-04 | 1.1E-03 | 1.4E-04 | 1.9E-04 | 4.7E-05 | 9.4E-05 | 1.9E-04 | 1.9E-04 |
| MOLYBDENUM | 3.3E-05 | 2.2E-05 | 7.0E-03 | 3.3E-05 | 4.4E-05 | 5.5E-05 | 3.3E-05 | 2.8E-05 | 2.8E-05 | 3.3E-05 | 3.9E-05 | 2.2E-05 |
| NICKEL | 1.3E-03 | 1.3E-03 | 1.9E-03 | 1.3E-03 | 2.3E-03 | 2.2E-03 | 3.2E-04 | 8.5E-04 | 9.5E-04 | 4.8E-04 | 3.2E-04 | 3.2E-04 |
| VANADIUM | 3.4E-03 | 3.3E-03 | 4.6E-03 | 3.4E-03 | 4.0E-03 | 5.4E-03 | 3.0E-03 | 2.3E-03 | 3.9E-03 | 2.7E-03 | 3.1E-03 | 2.2E-03 |
| HEXAVALENT CHROMIUM | 1.0E-03 | 9.1E-04 | 9.5E-03 | 1.0E-03 | 1.4E-03 | 1.9E-03 | 7.9E-04 | 6.0E-04 | 1.1E-03 | 8.1E-04 | 8.0E-04 | 6.0E-04 |
| TOTAL HAZARD INDEX | 3.5E-02 | 2.8E-02 | 5.5E-02 | 2.1E-02 | 3.3E-02 | 3.6E-02 | 1.4E-02 | 1.8E-02 | 3.3E-02 | 2.1E-02 | 2.2E-02 | 1.4E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | 1.7E-02 | 1.6E-02 | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | 7.6E-02 | 1.9E-02 | 1.5E-01 | 1.5E-02 | 5.7E-03 | 3.8E-02 | 2.3E-02 | 3.0E-02 | 3.4E-02 | 3.8E-02 | 3.0E-02 | 2.7E-02 |
| ARSENIC | 1.8E-01 | 1.4E-01 | 2.3E-01 | 6.9E-02 | 1.4E-01 | 1.4E-01 | 6.9E-02 | 2.3E-02 | 2.3E-01 | 6.9E-02 | 1.8E-01 | 4.6E-02 |
| CADMIUM | 1.1E-02 | 8.1E-03 | 8.1E-03 | 1.1E-02 | 1.6E-02 | 5.4E-02 | 2.7E-03 | 2.7E-03 | 1.4E-03 | 2.7E-03 | 2.7E-03 | 1.4E-03 |
| COBALT | 2.5E-01 | 3.0E-01 | 2.2E-01 | 2.5E-01 | 3.7E-01 | 2.8E-01 | 1.2E-01 | 2.5E-01 | 3.1E-01 | 2.6E-01 | 1.5E-01 | 1.6E-01 |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 5.5E-02 | 1.7E-02 | 2.1E-02 | 3.6E-03 | 4.8E-03 | 1.4E-02 | 1.8E-03 | 2.4E-03 | 6.0E-04 | 1.2E-03 | 2.4E-03 | 2.4E-03 |
| MOLYBDENUM | 7.9E-04 | 5.3E-04 | 1.7E-01 | 7.9E-04 | 1.1E-03 | 1.3E-03 | 7.9E-04 | 6.6E-04 | 6.6E-04 | 7.9E-04 | 9.2E-04 | 5.3E-04 |
| NICKEL | 1.3E-02 | 1.3E-02 | 2.0E-02 | 1.3E-02 | 2.4E-02 | 2.3E-02 | 3.3E-03 | 8.7E-03 | 9.8E-03 | 4.9E-03 | 3.3E-03 | 3.3E-03 |
| VANADIUM | 8.1E-02 | 7.9E-02 | 1.1E-01 | 8.1E-02 | 9.4E-02 | 1.3E-01 | 7.1E-02 | 5.4E-02 | 9.4E-02 | 6.5E-02 | 7.3E-02 | 5.3E-02 |
| HEXAVALENT CHROMIUM | 8.9E-03 | 8.0E-03 | 8.4E-02 | 8.9E-03 | 1.2E-02 | 1.6E-02 | 7.0E-03 | 5.3E-03 | 9.4E-03 | 7.1E-03 | 7.0E-03 | 5.3E-03 |
| TOTAL HAZARD INDEX | 6.9E-01 | 5.8E-01 | 1.0E+00 | 4.5E-01 | 6.8E-01 | 7.1E-01 | 3.0E-01 | 3.8E-01 | 6.9E-01 | 4.5E-01 | 4.6E-01 | 3.0E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-3.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-253 | SB-253 | SB-265 | SB-266 | SB-267 | SB-268 | SB-269 | SB-270 | SB-382 | SB-383 | SB-384 | SB-385 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-253-02 | SB-253-SS | SB-265-SS | SB-266-SS | SB-267-SS | SB-268-SS | SB-269-SS | SB-270-SS | SB-382-0102 | SB-383-0102 | SB-384-0102 | SB-385-0102 |
| SAMPLE DATE | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20050509 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SS | SS | SS | SS | SS | SS | SB | SB | SB | SB |
| TOP DEPTH | 1 | | | | | | | | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | | 1.3E-03 | 1.3E-03 | 6.7E-03 | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | 2.1E-03 | 2.3E-03 | 1.1E-03 | 2.3E-03 | 2.3E-03 | 4.6E-03 | 2.3E-03 | 2.3E-03 | | | | |
| ARSENIC | 3.4E-03 | 3.4E-03 | 1.1E-02 | 3.4E-03 | 3.4E-03 | 1.1E-02 | 1.4E-02 | 3.4E-03 | | | | |
| CADMIUM | 5.6E-05 | 5.0E-04 | 1.0E-03 | 2.2E-03 | 8.7E-04 | 3.7E-03 | 8.7E-04 | 1.9E-04 | | | | |
| COBALT | 7.4E-03 | 9.1E-03 | 1.7E-02 | 1.6E-02 | 1.1E-02 | 2.2E-02 | 1.2E-02 | 1.0E-02 | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 1.4E-04 | 3.3E-04 | 4.2E-04 | 2.4E-03 | 3.3E-04 | 2.3E-03 | 8.5E-04 | 5.2E-04 | | | | |
| MOLYBDENUM | 2.8E-05 | 2.8E-05 | 1.1E-04 | 3.3E-05 | 3.3E-05 | 5.5E-05 | 5.5E-05 | 3.3E-05 | | | | |
| NICKEL | 2.6E-04 | 4.2E-04 | 2.1E-03 | 1.5E-03 | 9.5E-04 | 1.5E-03 | 1.4E-03 | 4.2E-04 | | | | |
| VANADIUM | 2.8E-03 | 3.3E-03 | 5.1E-03 | 3.7E-03 | 2.4E-03 | 4.0E-03 | 4.7E-03 | 2.9E-03 | | | | |
| HEXAVALENT CHROMIUM | 7.2E-04 | 7.4E-04 | 2.9E-03 | 1.6E-03 | 8.4E-04 | 1.6E-03 | 1.3E-03 | 7.8E-04 | | | | |
| TOTAL HAZARD INDEX | 1.7E-02 | 2.0E-02 | 4.2E-02 | 3.4E-02 | 2.9E-02 | 5.2E-02 | 3.9E-02 | 2.2E-02 | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | | | 1.6E-02 | 1.6E-02 | 8.5E-02 | 1.7E-02 | 1.6E-02 | 1.7E-02 | 1.7E-02 | 1.6E-02 | 1.7E-02 | 1.6E-02 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | 3.4E-02 | 3.8E-02 | 1.9E-02 | 3.8E-02 | 3.8E-02 | 7.6E-02 | 3.8E-02 | 3.8E-02 | | | | |
| ARSENIC | 6.9E-02 | 6.9E-02 | 2.3E-01 | 6.9E-02 | 6.9E-02 | 2.3E-01 | 2.8E-01 | 6.9E-02 | | | | |
| CADMIUM | 1.2E-03 | 1.1E-02 | 2.2E-02 | 4.9E-02 | 1.9E-02 | 8.1E-02 | 1.9E-02 | 4.1E-03 | | | | |
| COBALT | 1.8E-01 | 2.1E-01 | 3.9E-01 | 3.7E-01 | 2.6E-01 | 5.1E-01 | 2.9E-01 | 2.4E-01 | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 1.8E-03 | 4.2E-03 | 5.4E-03 | 3.0E-02 | 4.2E-03 | 2.9E-02 | 1.1E-02 | 6.6E-03 | | | | |
| MOLYBDENUM | 6.6E-04 | 6.6E-04 | 2.6E-03 | 7.9E-04 | 7.9E-04 | 1.3E-03 | 1.3E-03 | 7.9E-04 | | | | |
| NICKEL | 2.7E-03 | 4.4E-03 | 2.2E-02 | 1.5E-02 | 9.8E-03 | 1.5E-02 | 1.4E-02 | 4.4E-03 | | | | |
| VANADIUM | 6.7E-02 | 7.8E-02 | 1.2E-01 | 8.8E-02 | 5.7E-02 | 9.4E-02 | 1.1E-01 | 6.9E-02 | | | | |
| HEXAVALENT CHROMIUM | 6.3E-03 | 6.5E-03 | 2.5E-02 | 1.4E-02 | 7.4E-03 | 1.4E-02 | 1.2E-02 | 6.9E-03 | | | | |
| TOTAL HAZARD INDEX | 3.6E-01 | 4.3E-01 | 8.5E-01 | 6.9E-01 | 5.5E-01 | 1.1E+00 | 7.9E-01 | 4.5E-01 | 1.7E-02 | 1.6E-02 | 1.7E-02 | 1.6E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-3.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-386 | SB-387 | SB-388 | SB-389 | SB-390 | SB-391 | SB-392 | SB-393 | SB-394 | SB-395 | SB-396 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-386-0102 | SB-387-0102 | SB-388-0102 | SB-389-0102 | SB-390-0102 | SB-391-0102 | SB-392-0102 | SB-393-0102 | SB-394-0102 | SB-395-0102 | SB-396-0102 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| AROCLOR-1254 | 1.3E-03 | 1.2E-03 | 1.2E-03 | 1.3E-03 | 1.3E-03 | 1.4E-03 | 1.3E-03 | 1.2E-03 | 1.3E-03 | 1.4E-03 | 1.4E-03 |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.3E-03 | 1.2E-03 | 1.2E-03 | 1.3E-03 | 1.3E-03 | 1.4E-03 | 1.3E-03 | 1.2E-03 | 1.3E-03 | 1.4E-03 | 1.4E-03 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| AROCLOR-1254 | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.7E-02 | 1.7E-02 | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.8E-02 | 1.7E-02 |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.7E-02 | 1.7E-02 | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.8E-02 | 1.7E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-3.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-397 | SB-398 | SB-399 | SB-400 | SB-401 | SB-402 | SB-403 | SB-404 | SB-405 | SB-406 | SB-407 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-397-0102 | SB-398-0102 | SB-399-0102 | SB-400-0102 | SB-401-0102 | SB-402-0102 | SB-403-0102 | SB-404-0102 | SB-405-0102 | SB-406-0102 | SB-407-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| AROCLOR-1254 | 1.2E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.4E-03 | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.5E-03 |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.2E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.4E-03 | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 1.5E-03 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| AROCLOR-1254 | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.8E-02 | 1.8E-02 | 1.6E-02 | 1.7E-02 | 1.6E-02 | 1.7E-02 | 1.9E-02 |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.6E-02 | 1.8E-02 | 1.8E-02 | 1.6E-02 | 1.7E-02 | 1.6E-02 | 1.7E-02 | 1.9E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-3.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-408 | SB-409 | SB-489 |
|---|---|---|---|
| SAMPLE ID | SB-408-0102 | SB-409-0102 | SB-489-0102 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 |
| **INDUSTRIAL** | | | |
| BAP EQUIVALENT-HALFND | | | |
| AROCLOR-1254 | 1.4E-03 | 1.5E-03 | 1.4E-03 |
| AROCLOR-1260 | | | |
| ANTIMONY | | | |
| ARSENIC | | | |
| CADMIUM | | | |
| COBALT | | | |
| IRON | | | |
| LEAD | | | |
| MERCURY | | | |
| MOLYBDENUM | | | |
| NICKEL | | | |
| VANADIUM | | | |
| HEXAVALENT CHROMIUM | | | |
| TOTAL HAZARD INDEX | 1.4E-03 | 1.5E-03 | 1.4E-03 |
| **RESIDENTIAL** | | | |
| BAP EQUIVALENT-HALFND | | | |
| AROCLOR-1254 | 1.8E-02 | 1.9E-02 | 1.8E-02 |
| AROCLOR-1260 | | | |
| ANTIMONY | | | |
| ARSENIC | | | |
| CADMIUM | | | |
| COBALT | | | |
| IRON | | | |
| LEAD | | | |
| MERCURY | | | |
| MOLYBDENUM | | | |
| NICKEL | | | |
| VANADIUM | | | |
| HEXAVALENT CHROMIUM | | | |
| TOTAL HAZARD INDEX | 1.8E-02 | 1.9E-02 | 1.8E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-055 | SB-056 | SB-056 | SB-056 | SB-056 | SB-056 | SB-056 | SB-056 | SB-056 | SB-265RE | SB-265RE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-55RE-10 | F-SB-56RE-10 | F-SB-56RE-3 | F-SB-56RE-4 | F-SB-56RE-5 | F-SB-56RE-6 | F-SB-56RE-7 | F-SB-56RE-8 | F-SB-56RE-9 | F-SB-265RE-3 | F-SB-265RE-4 |
| SAMPLE DATE | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 |
| BOTTOM DEPTH | 10 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.3E-07 | 2.9E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.3E-07 | 2.9E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.7E-06 | 6.4E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.7E-06 | 6.4E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-266RE | SB-266RE | SB-267RE | SB-267RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-266RE-3 | F-SB-266RE-4 | F-SB-267RE-3 | F-SB-267RE-4 | F-SB-268RE-10 | F-SB-268RE-3 | F-SB-268RE-4 | F-SB-268RE-5 | F-SB-268RE-6 | F-SB-268RE-7 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090921 | 20091006 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 3 | 4 | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 3 | 4 | 3 | 4 | 10 | 3 | 4 | 5 | 6 | 7 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.7E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.5E-06 | 2.6E-05 | 2.6E-06 | 1.0E-06 | 4.8E-06 | 2.5E-06 |
| NAPHTHALENE | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | 1.0E-08 | 9.5E-09 | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-08 | 1.2E-08 | 2.6E-09 | 2.6E-09 | 1.5E-06 | 2.6E-05 | 2.6E-06 | 1.0E-06 | 4.8E-06 | 2.5E-06 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.9E-07 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 3.3E-05 | 5.7E-04 | 5.6E-05 | 2.2E-05 | 1.0E-04 | 5.3E-05 |
| NAPHTHALENE | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | 5.0E-08 | 4.7E-08 | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 2.4E-07 | 1.0E-07 | 5.6E-08 | 5.6E-08 | 3.3E-05 | 5.7E-04 | 5.6E-05 | 2.2E-05 | 1.0E-04 | 5.3E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-269RE | SB-269RE | SB-270RE | SB-270RE | SB-383 | SB-383 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-268RE-7-AVG | F-SB-268RE-7-D | F-SB-268RE-8 | F-SB-268RE-9 | F-SB-269RE-3 | F-SB-269RE-4 | F-SB-270RE-3 | F-SB-270RE-4 | F-SB-383RE-3 | F-SB-383RE-4 |
| SAMPLE DATE | 20090921 | 20090921 | 20091006 | 20091006 | 20090921 | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 |
| BOTTOM DEPTH | 7 | 7 | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.5E-06 | 1.1E-05 | 1.7E-08 | 4.0E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 6.5E-06 | 1.1E-05 | 1.7E-08 | 4.0E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-04 | 2.3E-04 | 3.6E-07 | 8.7E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-04 | 2.3E-04 | 3.6E-07 | 8.7E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-388 | SB-388 | SB-388 | SB-389 | SB-389 | SB-390 | SB-390 | SB-393 | SB-393 | SB-393 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-388RE-3 | F-SB-388RE-4 | F-SB-388RE-5 | F-SB-389RE-3 | F-SB-389RE-4 | F-SB-390RE-6 | F-SB-390RE-7 | F-SB-393RE-3 | F-SB-393RE-4 | F-SB-393RE-5 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 3 | 4 | 6 | 7 | 3 | 4 | 5 |
| BOTTOM DEPTH | 3 | 4 | 5 | 3 | 4 | 6 | 7 | 3 | 4 | 5 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.1E-06 | 2.6E-09 | 1.0E-07 |
| NAPHTHALENE | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.1E-06 | 2.6E-09 | 1.0E-07 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.5E-05 | 5.6E-08 | 2.2E-06 |
| NAPHTHALENE | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.5E-05 | 5.6E-08 | 2.2E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-393 | SB-393 | SB-393 | SB-393 | SB-397 | SB-397 | SB-405 | SB-405 | SB-628 | SB-629 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-393RE-5-AVG | F-SB-393RE-5-D | F-SB-393RE-6 | F-SB-393RE-7 | F-SB-397RE-6 | F-SB-397RE-7 | F-SB-405RE-10 | F-SB-405RE-9 | F-SB-628-10 | F-SB-629-10 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090922 | 20090922 | 20090918 | 20090918 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 6 | 7 | 6 | 7 | 10 | 9 | 10 | 10 |
| BOTTOM DEPTH | 5 | 5 | 6 | 7 | 6 | 7 | 10 | 9 | 10 | 10 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 2.0E-07 | 2.6E-09 | 2.6E-09 | 1.3E-07 | 8.6E-08 | 1.0E-07 | 8.9E-06 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-07 | 2.0E-07 | 2.6E-09 | 2.6E-09 | 1.3E-07 | 8.6E-08 | 1.0E-07 | 8.9E-06 | 2.8E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.3E-06 | 4.4E-06 | 5.6E-08 | 5.6E-08 | 2.7E-06 | 1.9E-06 | 2.3E-06 | 1.9E-04 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 3.3E-06 | 4.4E-06 | 5.6E-08 | 5.6E-08 | 2.7E-06 | 1.9E-06 | 2.3E-06 | 1.9E-04 | 6.0E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-630 | SB-631 | SB-632 | SB-632 | SB-633 | SB-633 | SB-634 | SB-634 | SB-635 | SB-635 | SB-635 | SB-635 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-630-10 | F-SB-631-10 | F-SB-632-10 | F-SB-632-9 | F-SB-633-10 | F-SB-633-9 | F-SB-634-10 | F-SB-634-9 | F-SB-635-10 | F-SB-635-10-AVG | F-SB-635-10-D | F-SB-635-9 |
| SAMPLE DATE | 20090918 | 20090918 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 10 | 10 | 9 | 10 | 9 | 10 | 9 | 10 | 10 | 10 | 9 |
| BOTTOM DEPTH | 10 | 10 | 10 | 9 | 10 | 9 | 10 | 9 | 10 | 10 | 10 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.2E-07 | 9.2E-09 | 2.9E-09 | 2.8E-09 | 3.1E-09 | 1.0E-08 | 2.6E-09 | 6.0E-08 | 1.2E-07 | 9.5E-07 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.2E-07 | 9.2E-09 | 2.9E-09 | 2.8E-09 | 3.1E-09 | 1.0E-08 | 2.6E-09 | 6.0E-08 | 1.2E-07 | 9.5E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 4.9E-06 | 2.0E-07 | 6.4E-08 | 6.0E-08 | 6.8E-08 | 2.2E-07 | 5.6E-08 | 1.3E-06 | 2.5E-06 | 2.1E-05 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 4.9E-06 | 2.0E-07 | 6.4E-08 | 6.0E-08 | 6.8E-08 | 2.2E-07 | 5.6E-08 | 1.3E-06 | 2.5E-06 | 2.1E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-635C | SB-635C | SB-635C | SB-635C | SB-635C | SB-635D | SB-635D | SB-635D | SB-636 | SB-636 | SB-636 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-635C-3 | F-SB-635C-5 | F-SB-635C-7 | F-SB-635C-7-AVG | F-SB-635C-7-D | F-SB-635D-5 | F-SB-635D-7 | F-SB-635D-9 | F-SB-636-3 | F-SB-636-3-AVG | F-SB-636-3-D |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091110 | 20091110 | 20091110 | 20091007 | 20091007 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 7 | 7 | 5 | 7 | 9 | 3 | 3 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 7 | 7 | 5 | 7 | 9 | 3 | 3 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.1E-08 | 9.6E-08 | 1.8E-07 | 4.7E-07 | 7.6E-07 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 4.0E-07 | 3.5E-07 | 3.0E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | 1.1E-08 | 1.1E-08 | 1.1E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.1E-08 | 9.6E-08 | 1.8E-07 | 4.7E-07 | 7.6E-07 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 4.1E-07 | 3.6E-07 | 3.1E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.0E-06 | 2.1E-06 | 3.9E-06 | 1.0E-05 | 1.6E-05 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 8.7E-06 | 7.6E-06 | 6.5E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | 5.4E-08 | 5.4E-08 | 5.4E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-06 | 2.1E-06 | 3.9E-06 | 1.0E-05 | 1.6E-05 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 8.8E-06 | 7.7E-06 | 6.5E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-636 | SB-636 | SB-636 | SB-636A | SB-636A | SB-636A | SB-636A | SB-636A | SB-636B | SB-636B | SB-636B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636-5 | F-SB-636-7 | F-SB-636-9 | F-SB-636A-3 | F-SB-636A-5 | F-SB-636A-7 | F-SB-636A-7-AVG | F-SB-636A-7-D | F-SB-636B-3 | F-SB-636B-5 | F-SB-636B-7 |
| SAMPLE DATE | 20091007 | 20091019 | 20091019 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-06 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 2.7E-08 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-06 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.4E-05 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 1.3E-07 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.4E-05 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-636C | SB-636C | SB-636C | SB-636D | SB-636D | SB-636D | SB-637 | SB-637 | SB-637B | SB-637B | SB-637B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-636C-3 | F-SB-636C-5 | F-SB-636C-7 | F-SB-636D-3 | F-SB-636D-5 | F-SB-636D-7 | F-SB-637-3 | F-SB-637-5 | F-SB-637B-3 | F-SB-637B-5 | F-SB-637B-5-AVG |
| SAMPLE DATE | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091007 | 20091007 | 20091106 | 20091106 | 20091106 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-06 | 1.3E-07 | 2.6E-09 | 1.2E-07 | 2.6E-09 | 2.8E-09 | 1.3E-08 | 2.4E-07 | 2.6E-09 | 2.8E-09 | 2.7E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | 1.0E-08 | 1.0E-08 | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-06 | 1.3E-07 | 2.6E-09 | 1.2E-07 | 2.6E-09 | 2.8E-09 | 2.3E-08 | 2.5E-07 | 2.6E-09 | 2.8E-09 | 2.7E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.9E-05 | 2.9E-06 | 5.6E-08 | 2.5E-06 | 5.6E-08 | 6.0E-08 | 2.8E-07 | 5.1E-06 | 5.6E-08 | 6.0E-08 | 5.8E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | 5.2E-08 | 5.2E-08 | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.9E-05 | 2.9E-06 | 5.6E-08 | 2.5E-06 | 5.6E-08 | 6.0E-08 | 3.3E-07 | 5.2E-06 | 5.6E-08 | 6.0E-08 | 5.8E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-637B | SB-637C | SB-637C | SB-638 | SB-638 | SB-638 | SB-638 | SB-639 | SB-639 | SB-640 | SB-640 | SB-641 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-637B-5-D | F-SB-637C-3 | F-SB-637C-5 | F-SB-638-3 | F-SB-638-3-AVG | F-SB-638-3-D | F-SB-638-5 | F-SB-639-3 | F-SB-639-5 | F-SB-640-3 | F-SB-640-5 | F-SB-641-3 |
| SAMPLE DATE | 20091106 | 20091106 | 20091106 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20091007 | 20091006 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 3 |
| BOTTOM DEPTH | 5 | 3 | 5 | 3 | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 8.4E-09 | 2.6E-09 | 2.6E-09 | 2.6E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.2E-08 | 1.3E-08 | 1.8E-08 | 1.3E-08 | 1.3E-08 | 2.6E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 1.8E-07 | 5.6E-08 | 5.6E-08 | 5.6E-07 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | 5.0E-08 | 5.0E-08 | 5.0E-08 | 4.7E-08 | 5.2E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.0E-07 | 1.1E-07 | 2.3E-07 | 1.1E-07 | 1.1E-07 | 5.6E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-641 | SB-641A | SB-641B | SB-641C | SB-642 | SB-642 | SB-642 | SB-642 | SB-642 | SB-642 | SB-642A | SB-642A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-641-5 | F-SB-641A-3 | F-SB-641B-3 | F-SB-641C-3 | F-SB-642-3 | F-SB-642-3-AVG | F-SB-642-3-D | F-SB-642-5 | F-SB-642-7 | F-SB-642-9 | F-SB-642A-3 | F-SB-642A-5 |
| SAMPLE DATE | 20091006 | 20091104 | 20091104 | 20091104 | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091019 | 20091104 | 20091104 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 5 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 9.6E-08 | 2.6E-09 | 2.0E-06 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 9.6E-08 | 2.6E-09 | 2.0E-06 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.3E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.1E-06 | 5.6E-08 | 4.3E-05 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.3E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.1E-06 | 5.6E-08 | 4.3E-05 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-642A | SB-642A | SB-642B | SB-642B | SB-642B | SB-642B | SB-642C | SB-642C | SB-642C | SB-642C | SB-642C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642A-7 | F-SB-642A-9 | F-SB-642B-3 | F-SB-642B-5 | F-SB-642B-7 | F-SB-642B-9 | F-SB-642C-3 | F-SB-642C-5 | F-SB-642C-7 | F-SB-642C-7-AVG | F-SB-642C-7-D |
| SAMPLE DATE | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.6E-09 | 7.0E-07 | 3.4E-08 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.7E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.6E-09 | 7.0E-07 | 3.4E-08 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.7E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.5E-05 | 7.4E-07 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.8E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.5E-05 | 7.4E-07 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.8E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-642C | SB-643 | SB-643 | SB-643 | SB-643 | SB-643B | SB-643B | SB-643B | SB-643B | SB-643B | SB-643B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642C-9 | F-SB-643-3 | F-SB-643-5 | F-SB-643-7 | F-SB-643-9 | F-SB-643B-3 | F-SB-643B-5 | F-SB-643B-7 | F-SB-643B-7-AVG | F-SB-643B-7-D | F-SB-643B-9 |
| SAMPLE DATE | 20091104 | 20091016 | 20091016 | 20091016 | 20091016 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.7E-09 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.7E-09 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.8E-08 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.8E-08 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-643C | SB-643C | SB-643C | SB-643C | SB-644 | SB-644 | SB-644 | SB-644 | SB-644 | SB-644 | SB-645 | SB-645 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-643C-3 | F-SB-643C-5 | F-SB-643C-7 | F-SB-643C-9 | F-SB-644-3 | F-SB-644-3-AVG | F-SB-644-3-D | F-SB-644-5 | F-SB-644-7 | F-SB-644-9 | F-SB-645-3 | F-SB-645-5 |
| SAMPLE DATE | 20091105 | 20091105 | 20091105 | 20091105 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091016 | 20091006 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.8E-09 | 2.8E-09 | 3.1E-07 | 2.8E-09 | 2.7E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.9E-09 | 2.4E-08 | 7.9E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.8E-09 | 2.8E-09 | 3.1E-07 | 2.8E-09 | 2.7E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.9E-09 | 2.4E-08 | 7.9E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.7E-06 | 6.0E-08 | 5.8E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 6.4E-08 | 5.2E-07 | 1.7E-07 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.7E-06 | 6.0E-08 | 5.8E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 6.4E-08 | 5.2E-07 | 1.7E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-645 | SB-645A | SB-645B | SB-645B | SB-645B | SB-645C | SB-646 | SB-646 | SB-646 | SB-646 | SB-646 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-645-7 | F-SB-645A-3 | F-SB-645B-3 | F-SB-645B-3-AVG | F-SB-645B-3-D | F-SB-645C-3 | F-SB-646-3 | F-SB-646-3-AVG | F-SB-646-3-D | F-SB-646-5 | F-SB-646-7 |
| SAMPLE DATE | 20091006 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 7 |
| BOTTOM DEPTH | 7 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.9E-09 | 2.6E-09 | 2.6E-09 | 2.7E-09 | 2.8E-09 | 2.9E-09 | 4.2E-09 | 4.0E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.9E-09 | 2.6E-09 | 2.6E-09 | 2.7E-09 | 2.8E-09 | 2.9E-09 | 4.2E-09 | 4.0E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-07 | 5.6E-08 | 5.6E-08 | 5.8E-08 | 6.0E-08 | 6.4E-08 | 9.0E-08 | 8.6E-08 | 8.3E-08 | 8.3E-08 | 8.3E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-07 | 5.6E-08 | 5.6E-08 | 5.8E-08 | 6.0E-08 | 6.4E-08 | 9.0E-08 | 8.6E-08 | 8.3E-08 | 8.3E-08 | 8.3E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-647 | SB-647 | SB-647 | SB-647A | SB-647B | SB-647C | SB-648 | SB-648 | SB-648 | SB-649 | SB-649 | SB-650 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-647-3 | F-SB-647-5 | F-SB-647-7 | F-SB-647A-3 | F-SB-647B-3 | F-SB-647C-3 | F-SB-648-3 | F-SB-648-5 | F-SB-648-7 | F-SB-649-3 | F-SB-649-5 | F-SB-650-3 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20091105 | 20091105 | 20091105 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 | 20091006 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 3 | 3 | 3 | 5 | 7 | 3 | 5 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.0E-09 | 4.2E-09 | 3.6E-09 | 2.8E-09 | 2.8E-09 | 2.0E-07 | 3.6E-09 | 3.8E-09 | 4.0E-09 | 3.8E-09 | 3.8E-09 | 3.6E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.0E-09 | 4.2E-09 | 3.6E-09 | 2.8E-09 | 2.8E-09 | 2.0E-07 | 3.6E-09 | 3.8E-09 | 4.0E-09 | 3.8E-09 | 3.8E-09 | 3.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.6E-08 | 9.0E-08 | 7.9E-08 | 6.0E-08 | 6.0E-08 | 4.4E-06 | 7.9E-08 | 8.3E-08 | 8.6E-08 | 8.3E-08 | 8.3E-08 | 7.9E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.6E-08 | 9.0E-08 | 7.9E-08 | 6.0E-08 | 6.0E-08 | 4.4E-06 | 7.9E-08 | 8.3E-08 | 8.6E-08 | 8.3E-08 | 8.3E-08 | 7.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-650 | SB-650 | SB-650 | SB-651 | SB-651 | SB-652 | SB-652 | SB-652 | SB-652 | SB-652A | SB-652A | SB-652A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-650-3-AVG | F-SB-650-3-D | F-SB-650-5 | F-SB-651-3 | F-SB-651-5 | F-SB-652-3 | F-SB-652-5 | F-SB-652-7 | F-SB-652-9 | F-SB-652A-3 | F-SB-652A-5 | F-SB-652A-7 |
| SAMPLE DATE | 20091006 | 20091006 | 20091006 | 20091007 | 20091007 | 20091007 | 20091007 | 20091019 | 20091019 | 20091105 | 20091105 | 20091105 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.6E-09 | 3.6E-09 | 3.6E-09 | 2.6E-09 | 2.6E-09 | 1.2E-07 | 1.4E-06 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.6E-09 | 3.6E-09 | 3.6E-09 | 1.3E-08 | 1.3E-08 | 1.3E-07 | 1.4E-06 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.9E-08 | 7.9E-08 | 7.9E-08 | 5.6E-08 | 5.6E-08 | 2.5E-06 | 2.9E-05 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.9E-08 | 7.9E-08 | 7.9E-08 | 1.1E-07 | 1.1E-07 | 2.6E-06 | 2.9E-05 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-652B | SB-652B | SB-652B | SB-652C | SB-652C | SB-652C | SB-797 | SB-797 | SB-798 | SB-798 | SB-798 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-652B-3 | F-SB-652B-5 | F-SB-652B-7 | F-SB-652C-3 | F-SB-652C-5 | F-SB-652C-7 | F-SB-797-03 | F-SB-797-05 | F-SB-798-03 | F-SB-798-03-AVG | F-SB-798-03-D |
| SAMPLE DATE | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 3 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 3 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 6.4E-09 | 9.0E-07 | 7.1E-08 | 3.9E-08 | 6.1E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | 8.0E-11 | 8.7E-11 | 8.2E-11 | 7.9E-11 | 7.6E-11 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 6.5E-09 | 9.0E-07 | 7.2E-08 | 3.9E-08 | 6.1E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.4E-07 | 1.9E-05 | 1.5E-06 | 8.4E-07 | 1.3E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | 4.0E-10 | 4.4E-10 | 4.1E-10 | 4.0E-10 | 3.8E-10 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.4E-07 | 1.9E-05 | 1.5E-06 | 8.4E-07 | 1.3E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-798 | SB-799 | SB-799 | SB-022 | SB-022 | SB-023 | SB-023 | SB-024 | SB-024 | SB-025 | SB-025 | SB-026 | SB-027 | SB-028 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-798-05 | F-SB-799-03 | F-SB-799-05 | SB-22-05 | SB-22-10 | SB-23-05 | SB-23-10 | SB-24-05 | SB-24-10 | SB-25-05 | SB-25-10 | SB-26-10 | SB-27-10 | SB-28-10 |
| SAMPLE DATE | 20100820 | 20100820 | 20100820 | 20031117 | 20031117 | 20031118 | 20031118 | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 10 | 10 | 10 |
| BOTTOM DEPTH | 5 | 3 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 10 | 10 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.2E-09 | 6.2E-09 | 6.4E-09 | 6.9E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.8E-07 | 6.9E-07 | 6.8E-07 | 6.9E-07 | | | |
| NAPHTHALENE | | | | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.5E-10 | 1.5E-10 | 1.3E-10 |
| NAPHTHALENE | 7.8E-11 | 7.8E-11 | 8.0E-11 | | | | | | | | | | | |
| AROCLOR-1260 | | | | 3.0E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | 3.1E-08 | 2.9E-08 | 2.9E-08 | 2.9E-08 | | | |
| ARSENIC | | | | 1.1E-06 | 9.9E-07 | 5.5E-07 | 3.7E-07 | 1.3E-06 | 8.4E-07 | 3.4E-07 | 6.2E-07 | | | |
| COBALT | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | 3.6E-07 | 4.4E-07 | 1.5E-07 | | 3.6E-07 | 3.3E-07 | 3.0E-07 | 4.4E-07 | | | |
| TOTAL CANCER RISK | 6.3E-09 | 6.3E-09 | 6.5E-09 | 2.1E-06 | 2.1E-06 | 1.4E-06 | 1.1E-06 | 2.3E-06 | 1.9E-06 | 1.3E-06 | 1.8E-06 | 1.5E-10 | 1.5E-10 | 1.3E-10 |
| **RESIDENTIAL** | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | | | |
| NAPHTHALENE | | | | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 7.6E-10 | 7.6E-10 | 6.5E-10 |
| NAPHTHALENE | 3.9E-10 | 3.9E-10 | 4.0E-10 | | | | | | | | | | | |
| AROCLOR-1260 | | | | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | | | |
| ARSENIC | | | | 8.3E-06 | 7.7E-06 | 4.3E-06 | 2.8E-06 | 1.0E-05 | 6.6E-06 | 2.6E-06 | 4.8E-06 | | | |
| COBALT | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | 5.4E-06 | 6.6E-06 | 2.2E-06 | | 5.4E-06 | 5.0E-06 | 4.5E-06 | 6.6E-06 | | | |
| TOTAL CANCER RISK | 1.4E-07 | 1.4E-07 | 1.4E-07 | 2.9E-05 | 2.9E-05 | 2.1E-05 | 1.8E-05 | 3.0E-05 | 2.7E-05 | 2.2E-05 | 2.7E-05 | 7.6E-10 | 7.6E-10 | 6.5E-10 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-029 | SB-030 | SB-093 | SB-093 | SB-093 | SB-093 | SB-093 | SB-093 | SB-093 | SB-093 | SB-094 | SB-094 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-29-10 | SB-30-05 | F-SB-93RE-10 | F-SB-93RE-3 | F-SB-93RE-4 | F-SB-93RE-5 | F-SB-93RE-6 | F-SB-93RE-7 | F-SB-93RE-8 | F-SB-93RE-9 | F-SB-94RE-10 | F-SB-94RE-3 |
| SAMPLE DATE | 20031117 | 20031118 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| BOTTOM DEPTH | 10 | 5 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | 6.6E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.2E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | 1.5E-10 | 1.3E-10 | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | 2.9E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 |
| ARSENIC | | 3.6E-07 | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | 5.2E-07 | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-10 | 1.6E-06 | 1.3E-08 | 1.2E-08 | 1.3E-08 | 1.3E-07 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | 1.4E-05 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.7E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | 7.6E-10 | 6.5E-10 | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | 1.4E-07 | 5.0E-08 | 4.7E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 |
| ARSENIC | | 2.8E-06 | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | 7.9E-06 | | | | | | | | | | |
| TOTAL CANCER RISK | 7.6E-10 | 2.5E-05 | 1.1E-07 | 1.0E-07 | 1.1E-07 | 2.8E-06 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 1.1E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-94RE-4 | F-SB-94RE-5 | F-SB-94RE-6 | F-SB-94RE-7 | F-SB-94RE-8 | F-SB-94RE-9 | F-SB-95RE-10 | F-SB-95RE-3 | F-SB-95RE-4 | F-SB-95RE-5 | F-SB-95RE-6 | F-SB-95RE-7 |
| SAMPLE DATE | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 8.5E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.0E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.3E-08 | 1.3E-08 | 9.5E-08 | 1.3E-08 | 1.3E-08 | 1.3E-08 | 1.0E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 1.8E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.2E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-07 | 1.1E-07 | 1.9E-06 | 1.1E-07 | 1.1E-07 | 1.1E-07 | 2.2E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-095 | SB-095 | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 | SB-236 | SB-237 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-95RE-8 | F-SB-95RE-9 | F-SB-96RE-10 | F-SB-96RE-3 | F-SB-96RE-4 | F-SB-96RE-5 | F-SB-96RE-6 | F-SB-96RE-7 | F-SB-96RE-8 | F-SB-96RE-9 | SB-236-05 | SB-237-05 |
| SAMPLE DATE | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20050509 | 20050509 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 5 |
| BOTTOM DEPTH | 8 | 9 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 5 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.5E-07 | 2.6E-09 | 2.8E-09 | 2.9E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 6.2E-08 | | |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | 2.6E-06 | 3.7E-07 |
| COBALT | | | | | | | | | | | 1.4E-09 | 1.8E-09 |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | 5.7E-07 | 6.8E-07 |
| TOTAL CANCER RISK | 2.8E-09 | 2.5E-07 | 2.6E-09 | 2.8E-09 | 2.9E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 6.2E-08 | 3.1E-06 | 1.0E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 5.4E-06 | 5.6E-08 | 6.0E-08 | 6.4E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.3E-06 | | |
| NAPHTHALENE | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | 2.0E-05 | 2.8E-06 |
| COBALT | | | | | | | | | | | 7.1E-09 | 9.2E-09 |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | 8.5E-06 | 1.0E-05 |
| TOTAL CANCER RISK | 6.0E-08 | 5.4E-06 | 5.6E-08 | 6.0E-08 | 6.4E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.3E-06 | 2.8E-05 | 1.3E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-238 | SB-295 | SB-295 | SB-296 | SB-296 | SB-297 | SB-297 | SB-298 | SB-298 | SB-299 | SB-299 | SB-382 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-238-05 | SB-295-0405 | SB-295-0910 | SB-296-0405 | SB-296-0910 | SB-297-0405 | SB-297-0910 | SB-298-0405 | SB-298-0910 | SB-299-0405 | SB-299-0910 | SB-382-0203 |
| SAMPLE DATE | 20050517 | 20051101 | 20051101 | 20051028 | 20051028 | 20051028 | 20051028 | 20051101 | 20051101 | 20051101 | 20051101 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 2 |
| BOTTOM DEPTH | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.0E-05 | 6.9E-07 | 6.8E-07 | 7.1E-07 | 6.8E-07 | 6.6E-07 | 6.8E-07 | 6.8E-07 | 6.9E-07 | 6.6E-07 | 6.8E-07 | 2.9E-09 |
| NAPHTHALENE | 6.9E-06 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | 1.9E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 2.1E-08 |
| ARSENIC | 1.1E-06 | 1.7E-06 | 1.1E-06 | 2.1E-06 | 8.8E-07 | 1.2E-06 | 1.1E-06 | 1.3E-06 | 7.3E-07 | 4.8E-07 | 8.1E-07 | |
| COBALT | 3.4E-09 | 3.6E-10 | 1.9E-09 | 7.3E-09 | 1.4E-09 | 1.4E-09 | 2.0E-09 | 1.8E-09 | 1.2E-09 | 2.5E-09 | 2.1E-09 | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 6.6E-07 | 6.9E-07 | 8.0E-07 | 1.1E-06 | 5.8E-07 | 7.2E-07 | 5.3E-07 | 4.5E-07 | 1.1E-06 | 5.1E-07 | 4.4E-07 | |
| TOTAL CANCER RISK | 1.9E-05 | 3.1E-06 | 2.5E-06 | 3.9E-06 | 2.1E-06 | 2.6E-06 | 2.3E-06 | 2.4E-06 | 2.5E-06 | 1.7E-06 | 1.9E-06 | 2.4E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.2E-04 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.4E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.4E-05 | 1.5E-05 | 6.4E-08 |
| NAPHTHALENE | 3.5E-05 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | 9.7E-08 | 5.2E-08 | 5.0E-08 | 5.2E-08 | 5.0E-08 | 4.7E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 5.0E-08 | 1.1E-07 |
| ARSENIC | 8.5E-06 | 1.3E-05 | 8.3E-06 | 1.6E-05 | 6.8E-06 | 9.4E-06 | 8.5E-06 | 1.0E-05 | 5.7E-06 | 3.7E-06 | 6.3E-06 | |
| COBALT | 1.7E-08 | 1.8E-09 | 9.7E-09 | 3.7E-08 | 6.9E-09 | 6.9E-09 | 1.0E-08 | 9.2E-09 | 6.1E-09 | 1.3E-08 | 1.1E-08 | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 9.9E-06 | 1.0E-05 | 1.2E-05 | 1.6E-05 | 8.7E-06 | 1.1E-05 | 7.9E-06 | 6.7E-06 | 1.6E-05 | 7.7E-06 | 6.6E-06 | |
| TOTAL CANCER RISK | 2.8E-04 | 3.9E-05 | 3.5E-05 | 4.8E-05 | 3.0E-05 | 3.5E-05 | 3.1E-05 | 3.1E-05 | 3.7E-05 | 2.6E-05 | 2.8E-05 | 1.7E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-382 | SB-382 | SB-383 | SB-383 | SB-383 | SB-384 | SB-384 | SB-384 | SB-385 | SB-385 | SB-385 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-382-0405 | SB-382-0708 | SB-383-0203 | SB-383-0405 | SB-383-0708 | SB-384-0203 | SB-384-0405 | SB-384-0708 | SB-385-0203 | SB-385-0405 | SB-385-0708 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 |
| BOTTOM DEPTH | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 1.8E-07 | 1.3E-07 | 3.5E-08 | 2.6E-09 | 2.6E-09 | 2.9E-09 | 2.4E-09 | 2.4E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 2.0E-08 | 2.1E-08 | 1.9E-08 | 2.1E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 2.1E-08 | 1.8E-08 | 1.8E-08 | 1.9E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.3E-08 | 2.4E-08 | 2.0E-07 | 1.5E-07 | 5.5E-08 | 2.2E-08 | 2.2E-08 | 2.4E-08 | 2.0E-08 | 2.0E-08 | 2.2E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 3.8E-06 | 2.9E-06 | 7.5E-07 | 5.6E-08 | 5.6E-08 | 6.4E-08 | 5.3E-08 | 5.3E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 1.0E-07 | 1.0E-07 | 9.4E-08 | 1.0E-07 | 9.9E-08 | 9.4E-08 | 9.7E-08 | 1.1E-07 | 8.9E-08 | 8.9E-08 | 9.7E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.6E-07 | 1.6E-07 | 3.9E-06 | 3.0E-06 | 8.5E-07 | 1.5E-07 | 1.5E-07 | 1.7E-07 | 1.4E-07 | 1.4E-07 | 1.5E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-386 | SB-386 | SB-386 | SB-387 | SB-387 | SB-387 | SB-388 | SB-388 | SB-388 | SB-389 | SB-389 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-386-0203 | SB-386-0405 | SB-386-0708 | SB-387-0203 | SB-387-0405 | SB-387-0708 | SB-388-0203 | SB-388-0405 | SB-388-0708 | SB-389-0203 | SB-389-0405 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 | 20071015 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.4E-09 | 2.4E-09 | 2.6E-09 | 1.1E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 1.8E-08 | 1.8E-08 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 1.8E-08 | 1.8E-08 | 1.9E-08 | 1.9E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.1E-08 | 2.1E-08 | 2.2E-08 | 2.0E-08 | 2.2E-08 | 2.1E-08 | 2.2E-08 | 2.0E-08 | 2.1E-08 | 2.2E-08 | 1.3E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.3E-08 | 5.3E-08 | 5.6E-08 | 2.5E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 9.2E-08 | 9.2E-08 | 9.7E-08 | 8.9E-08 | 9.7E-08 | 9.2E-08 | 9.4E-08 | 8.9E-08 | 9.2E-08 | 9.7E-08 | 9.4E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.4E-07 | 1.5E-07 | 2.6E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-389 | SB-050 | SB-050 | SB-055 | SB-055 | SB-056 | SB-056 | SB-093 | SB-093 | SB-094 | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-389-0708 | SB-50-05 | SB-50-10 | SB-55-05 | SB-55-10 | SB-56-05 | SB-56-10 | SB-93-05 | SB-93-10 | SB-94-05 | SB-94-10 | SB-95-05 | SB-95-10 | SB-96-05 | SB-96-10 |
| SAMPLE DATE | 20071015 | 20040915 | 20040915 | 20040915 | 20040915 | 20040913 | 20040913 | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 8 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.4E-08 | | | 7.1E-07 | 1.6E-06 | | | | | 2.2E-06 | 4.3E-06 | | | | |
| NAPHTHALENE | | | | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 |
| NAPHTHALENE | | | | | | | | | | | 2.5E-09 | | | | |
| AROCLOR-1260 | 1.9E-08 | | | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.5E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 |
| ARSENIC | | 3.5E-07 | 4.4E-07 | 7.0E-07 | 2.1E-07 | 9.7E-08 | 1.1E-07 | 1.1E-07 | 1.0E-07 | 1.1E-07 | 1.0E-07 | 1.1E-07 | 1.1E-07 | 9.5E-08 | 1.1E-07 |
| COBALT | | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | 3.6E-07 | 1.6E-07 | 4.1E-07 | 2.3E-07 | 4.1E-07 | 2.8E-07 | 5.5E-07 | 2.7E-07 | 3.9E-07 | 5.5E-07 | 5.2E-07 | 2.6E-07 | 3.6E-08 | 4.7E-07 |
| TOTAL CANCER RISK | 5.3E-08 | 7.1E-07 | 6.0E-07 | 2.0E-06 | 2.2E-06 | 6.5E-07 | 5.2E-07 | 8.0E-07 | 5.2E-07 | 2.9E-06 | 5.1E-06 | 7.8E-07 | 5.2E-07 | 2.8E-07 | 7.2E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.3E-07 | | | 1.5E-05 | 3.5E-05 | | | | | 4.9E-05 | 9.3E-05 | | | | |
| NAPHTHALENE | | | | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | | 6.5E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 |
| NAPHTHALENE | | | | | | | | | | | 1.3E-08 | | | | |
| AROCLOR-1260 | 9.4E-08 | | | 7.4E-07 | 7.7E-07 | 6.9E-07 | 6.9E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 | 7.4E-07 | 7.2E-07 | 7.2E-07 | 7.2E-07 |
| ARSENIC | | 2.7E-06 | 3.4E-06 | 5.4E-06 | 1.7E-06 | 7.6E-07 | 8.3E-07 | 8.4E-07 | 8.0E-07 | 8.3E-07 | 7.8E-07 | 8.3E-07 | 8.4E-07 | 7.4E-07 | 8.4E-07 |
| COBALT | | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | 5.4E-06 | 2.4E-06 | 6.2E-06 | 3.5E-06 | 6.2E-06 | 4.1E-06 | 8.3E-06 | 4.1E-06 | 5.8E-06 | 8.3E-06 | 7.9E-06 | 4.0E-06 | 5.4E-07 | 7.0E-06 |
| TOTAL CANCER RISK | 8.2E-07 | 8.1E-06 | 5.8E-06 | 2.8E-05 | 4.1E-05 | 7.6E-06 | 5.7E-06 | 9.8E-06 | 5.6E-06 | 5.6E-05 | 1.0E-04 | 9.4E-06 | 5.5E-06 | 2.0E-06 | 8.6E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-390 | SB-390 | SB-390 | SB-391 | SB-391 | SB-391 | SB-392 | SB-392 | SB-392 | SB-393 | SB-393 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-390-0203 | SB-390-0405 | SB-390-0708 | SB-391-0203 | SB-391-0405 | SB-391-0708 | SB-392-0203 | SB-392-0405 | SB-392-0708 | SB-393-0203 | SB-393-0405 |
| SAMPLE DATE | 20071015 | 20071015 | 20071015 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.9E-09 | 3.4E-06 | 2.8E-09 | 3.5E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 6.9E-08 | 2.6E-09 | 2.4E-09 | 2.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 2.1E-08 | 2.0E-08 | 2.0E-08 | 2.5E-08 | 1.9E-08 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 1.9E-08 | 1.8E-08 | 1.7E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.4E-08 | 3.4E-06 | 2.3E-08 | 2.8E-08 | 2.2E-08 | 2.2E-08 | 2.1E-08 | 8.9E-08 | 2.2E-08 | 2.0E-08 | 4.3E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.4E-08 | 7.4E-05 | 6.0E-08 | 7.5E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.5E-06 | 5.6E-08 | 5.3E-08 | 5.6E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 1.0E-07 | 9.9E-08 | 9.9E-08 | 1.2E-07 | 9.4E-08 | 9.7E-08 | 9.2E-08 | 9.7E-08 | 9.7E-08 | 8.9E-08 | 8.7E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-07 | 7.4E-05 | 1.6E-07 | 2.0E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.6E-06 | 1.5E-07 | 1.4E-07 | 6.5E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-393 | SB-394 | SB-394 | SB-394 | SB-395 | SB-395 | SB-395 | SB-396 | SB-396 | SB-396 | SB-397 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-393-0708 | SB-394-0203 | SB-394-0405 | SB-394-0708 | SB-395-0203 | SB-395-0405 | SB-395-0708 | SB-396-0203 | SB-396-0405 | SB-396-0708 | SB-397-0203 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 8.7E-08 | 2.6E-09 | 2.6E-09 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 1.9E-08 | 1.7E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.8E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.2E-08 | 1.0E-07 | 2.2E-08 | 2.2E-08 | 1.9E-08 | 2.2E-08 | 2.2E-08 | 2.2E-08 | 2.2E-08 | 2.2E-08 | 2.1E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 1.9E-06 | 5.6E-08 | 5.6E-08 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 9.4E-08 | 8.9E-08 | 9.4E-08 | 9.4E-08 | 8.4E-08 | 9.4E-08 | 9.4E-08 | 9.4E-08 | 9.7E-08 | 9.7E-08 | 9.2E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-07 | 2.0E-06 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.6E-07 | 1.5E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-397 | SB-397 | SB-398 | SB-398 | SB-398 | SB-399 | SB-399 | SB-399 | SB-400 | SB-400 | SB-400 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-397-0405 | SB-397-0708 | SB-398-0203 | SB-398-0405 | SB-398-0708 | SB-399-0203 | SB-399-0405 | SB-399-0708 | SB-400-0203 | SB-400-0405 | SB-400-0708 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 |
| BOTTOM DEPTH | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.9E-06 | 2.6E-09 | 1.1E-07 | 2.6E-09 | 2.6E-09 | 2.4E-09 | 7.6E-08 | 2.8E-09 | 2.4E-09 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 2.0E-08 | 1.8E-08 | 1.9E-08 | 2.0E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.0E-06 | 2.2E-08 | 1.3E-07 | 2.1E-08 | 2.2E-08 | 2.1E-08 | 9.6E-08 | 2.3E-08 | 2.0E-08 | 2.2E-08 | 2.3E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.4E-05 | 5.6E-08 | 2.5E-06 | 5.6E-08 | 5.6E-08 | 5.3E-08 | 1.7E-06 | 6.0E-08 | 5.3E-08 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 9.4E-08 | 9.7E-08 | 9.4E-08 | 9.2E-08 | 9.4E-08 | 9.2E-08 | 9.7E-08 | 9.9E-08 | 8.9E-08 | 9.7E-08 | 1.0E-07 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.4E-05 | 1.5E-07 | 2.6E-06 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.7E-06 | 1.6E-07 | 1.4E-07 | 1.5E-07 | 1.6E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-401 | SB-401 | SB-401 | SB-402 | SB-402 | SB-402 | SB-403 | SB-403 | SB-403 | SB-404 | SB-404 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-401-0203 | SB-401-0405 | SB-401-0708 | SB-402-0203 | SB-402-0405 | SB-402-0708 | SB-403-0203 | SB-403-0405 | SB-403-0708 | SB-404-0203 | SB-404-0405 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 |
| BOTTOM DEPTH | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 6.2E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 1.8E-08 | 2.0E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.9E-08 | 1.8E-08 | 1.9E-08 | 2.0E-08 | 2.0E-08 | 2.1E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.1E-08 | 2.3E-08 | 2.2E-08 | 2.2E-08 | 2.2E-08 | 2.2E-08 | 2.1E-08 | 2.2E-08 | 2.3E-08 | 2.3E-08 | 8.3E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 1.4E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 9.2E-08 | 9.9E-08 | 9.4E-08 | 9.7E-08 | 9.7E-08 | 9.7E-08 | 9.2E-08 | 9.7E-08 | 9.9E-08 | 1.0E-07 | 1.0E-07 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-07 | 1.6E-07 | 1.5E-07 | 1.5E-07 | 1.6E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.6E-07 | 1.6E-07 | 1.5E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-404 | SB-405 | SB-405 | SB-405 | SB-406 | SB-406 | SB-406 | SB-407 | SB-407 | SB-407 | SB-408 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-404-0708 | SB-405-0203 | SB-405-0405 | SB-405-0708 | SB-406-0203 | SB-406-0405 | SB-406-0708 | SB-407-0203 | SB-407-0405 | SB-407-0708 | SB-408-0203 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 2 |
| BOTTOM DEPTH | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.5E-07 | 2.4E-09 | 1.1E-06 | 8.0E-07 | 1.1E-06 | 2.1E-07 | 2.9E-07 | 6.6E-07 | 3.8E-07 | 1.0E-07 | 1.7E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 2.1E-08 | 1.8E-08 | 2.0E-08 | 2.1E-08 | 2.1E-08 | 2.0E-08 | 2.1E-08 | 2.1E-08 | 2.2E-08 | 2.2E-08 | 1.9E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.7E-07 | 2.1E-08 | 1.2E-06 | 8.2E-07 | 1.1E-06 | 2.4E-07 | 3.2E-07 | 6.8E-07 | 4.0E-07 | 1.3E-07 | 1.9E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.4E-06 | 5.3E-08 | 2.5E-05 | 1.7E-05 | 2.4E-05 | 4.7E-06 | 6.4E-06 | 1.4E-05 | 8.3E-06 | 2.3E-06 | 3.8E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | 1.1E-07 | 9.2E-08 | 9.9E-08 | 1.1E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.0E-07 | 1.1E-07 | 1.1E-07 | 9.7E-08 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.5E-06 | 1.4E-07 | 2.5E-05 | 1.7E-05 | 2.4E-05 | 4.8E-06 | 6.5E-06 | 1.4E-05 | 8.4E-06 | 2.4E-06 | 3.9E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-408 | SB-408 | SB-409 | SB-409 | SB-409 | SB-489 | SB-489 | SB-489 | SB-490 | SB-490 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-408-0405 | SB-408-0708 | SB-409-0203 | SB-409-0405 | SB-409-0708 | SB-489-0203 | SB-489-0405 | SB-489-0708 | SB-490-0405 | SB-490-0708 |
| SAMPLE DATE | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071016 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 7 | 2 | 4 | 7 | 2 | 4 | 7 | 4 | 7 |
| BOTTOM DEPTH | 5 | 8 | 3 | 5 | 8 | 3 | 5 | 8 | 5 | 8 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.2E-08 | 2.8E-09 | 2.8E-09 | 2.3E-07 | 3.1E-09 | 9.0E-07 | 3.4E-08 | 7.3E-08 | 3.8E-07 | 1.1E-07 |
| NAPHTHALENE | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | 1.5E-08 | 2.0E-08 | 2.0E-08 | 2.1E-08 | 2.2E-08 | 2.1E-08 | 2.1E-08 | 2.2E-08 | 2.1E-08 | 1.9E-08 |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 5.7E-08 | 2.3E-08 | 2.3E-08 | 2.5E-07 | 2.6E-08 | 9.2E-07 | 5.5E-08 | 9.5E-08 | 4.0E-07 | 1.3E-07 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.0E-07 | 6.0E-08 | 6.0E-08 | 5.0E-06 | 6.8E-08 | 2.0E-05 | 7.4E-07 | 1.6E-06 | 8.3E-06 | 2.3E-06 |
| NAPHTHALENE | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | 7.4E-08 | 1.0E-07 | 9.9E-08 | 1.0E-07 | 1.1E-07 | 1.1E-07 | 1.0E-07 | 1.1E-07 | 1.0E-07 | 9.4E-08 |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 9.8E-07 | 1.6E-07 | 1.6E-07 | 5.1E-06 | 1.8E-07 | 2.0E-05 | 8.4E-07 | 1.7E-06 | 8.4E-06 | 2.4E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-024A | SB-024A | SB-024A | SB-626 | SB-626 | SB-626 | SB-626C | SB-626D | SB-626D | SB-626D | SB-797 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-24ARE-3 | F-SB-24ARE-4 | F-SB-24ARE-5 | F-SB-626-3 | F-SB-626-4 | F-SB-626-5 | F-SB-626C-3 | F-SB-626D-3 | F-SB-626D-3-AVG | F-SB-626D-3-D | F-SB-797-03 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20091111 | 20091111 | 20091111 | 20091111 | 20100820 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 3 |
| BOTTOM DEPTH | 3 | 4 | 5 | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | 2.3E-06 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 4.0E-04 | 3.9E-04 | 4.9E-05 | 2.8E-03 | 2.4E-03 | 4.5E-05 | 6.1E-04 | 4.7E-03 | 4.0E-03 | 3.4E-03 | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.0E-04 | 3.9E-04 | 4.9E-05 | 2.8E-03 | 2.4E-03 | 4.5E-05 | 6.1E-04 | 4.7E-03 | 4.0E-03 | 3.4E-03 | 2.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | 1.1E-05 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 5.1E-03 | 5.0E-03 | 6.3E-04 | 3.6E-02 | 3.0E-02 | 5.7E-04 | 7.8E-03 | 6.0E-02 | 5.1E-02 | 4.3E-02 | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 5.1E-03 | 5.0E-03 | 6.3E-04 | 3.6E-02 | 3.0E-02 | 5.7E-04 | 7.8E-03 | 6.0E-02 | 5.1E-02 | 4.3E-02 | 1.1E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-3.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-797 | SB-798 | SB-798 | SB-798 | SB-798 | SB-799 | SB-799 | SB-800 | SB-800 | SB-801 | SB-802 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-797-05 | F-SB-798-03 | F-SB-798-03-AVG | F-SB-798-03-D | F-SB-798-05 | F-SB-799-03 | F-SB-799-05 | F-SB-800-03 | F-SB-800-05-AVG | F-SB-801-03 | F-SB-802-03 |
| SAMPLE DATE | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 | 20100820 | 20100910 | 20100910 | 20100910 | 20100910 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | AVG | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 3 | 3 |
| BOTTOM DEPTH | 5 | 3 | 3 | 3 | 5 | 3 | 5 | 3 | 5 | 3 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | 2.5E-06 | 2.4E-06 | 2.3E-06 | 2.2E-06 | 2.3E-06 | 2.3E-06 | 2.3E-06 | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | 8.5E-03 | 8.2E-05 | 3.2E-03 | 4.2E-03 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.5E-06 | 2.4E-06 | 2.3E-06 | 2.2E-06 | 2.3E-06 | 2.3E-06 | 2.3E-06 | 8.5E-03 | 8.2E-05 | 3.2E-03 | 4.2E-03 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| NAPHTHALENE | 1.2E-05 | 1.1E-05 | 1.1E-05 | 1.0E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | 1.1E-01 | 1.0E-03 | 4.1E-02 | 5.3E-02 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.2E-05 | 1.1E-05 | 1.1E-05 | 1.0E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-01 | 1.0E-03 | 4.1E-02 | 5.3E-02 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-3.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-022 | SB-022 | SB-023 | SB-023 | SB-024 | SB-024 | SB-025 | SB-025 | SB-026 | SB-027 | SB-028 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-22-05 | SB-22-10 | SB-23-05 | SB-23-10 | SB-24-05 | SB-24-10 | SB-25-05 | SB-25-10 | SB-26-10 | SB-27-10 | SB-28-10 |
| SAMPLE DATE | 20031117 | 20031117 | 20031118 | 20031118 | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 | 20031117 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 10 | 10 | 10 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 10 | 10 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 4.4E-06 | 4.4E-06 | 3.8E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | 6.6E-03 | 6.2E-03 | 3.4E-03 | 2.3E-03 | 8.0E-03 | 5.2E-03 | 2.1E-03 | 3.9E-03 | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 2.8E-04 | 2.8E-04 | 2.8E-04 | 2.8E-04 | 4.4E-03 | 8.0E-04 | 2.8E-04 | 2.8E-04 | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 6.7E-04 | 8.2E-04 | 2.7E-04 | | 6.7E-04 | 6.1E-04 | 5.6E-04 | 8.2E-04 | | | |
| TOTAL HAZARD INDEX | 7.6E-03 | 7.3E-03 | 4.0E-03 | 2.6E-03 | 1.3E-02 | 6.7E-03 | 2.9E-03 | 5.0E-03 | 4.4E-06 | 4.4E-06 | 3.8E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 2.1E-05 | 2.1E-05 | 1.8E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | 1.3E-01 | 1.2E-01 | 6.9E-02 | 4.6E-02 | 1.6E-01 | 1.1E-01 | 4.3E-02 | 7.9E-02 | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 3.6E-03 | 3.6E-03 | 3.6E-03 | 3.6E-03 | 5.6E-02 | 1.0E-02 | 3.6E-03 | 3.6E-03 | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 5.9E-03 | 7.2E-03 | 2.4E-03 | | 5.9E-03 | 5.4E-03 | 5.0E-03 | 7.2E-03 | | | |
| TOTAL HAZARD INDEX | 1.4E-01 | 1.4E-01 | 7.5E-02 | 5.0E-02 | 2.2E-01 | 1.2E-01 | 5.1E-02 | 8.9E-02 | 2.1E-05 | 2.1E-05 | 1.8E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-3.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-029 | SB-030 | SB-236 | SB-237 | SB-238 | SB-295 | SB-295 | SB-296 | SB-296 | SB-297 | SB-297 | SB-298 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-29-10 | SB-30-05 | SB-236-05 | SB-237-05 | SB-238-05 | SB-295-0405 | SB-295-0910 | SB-296-0405 | SB-296-0910 | SB-297-0405 | SB-297-0910 | SB-298-0405 |
| SAMPLE DATE | 20031117 | 20031118 | 20050509 | 20050509 | 20050517 | 20051101 | 20051101 | 20051028 | 20051028 | 20051028 | 20051028 | 20051101 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 5 | 5 | 5 | 4 | 9 | 4 | 9 | 4 | 9 | 4 |
| BOTTOM DEPTH | 10 | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 4.4E-06 | 3.8E-06 | | | 2.0E-01 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | 2.3E-03 | 1.6E-02 | 2.3E-03 | 6.8E-03 | 1.0E-02 | 6.6E-03 | 1.3E-02 | 5.5E-03 | 7.5E-03 | 6.8E-03 | 8.0E-03 |
| COBALT | | | 1.2E-02 | 1.5E-02 | 2.7E-02 | 3.0E-03 | 1.6E-02 | 6.0E-02 | 1.1E-02 | 1.1E-02 | 1.6E-02 | 1.5E-02 |
| LEAD | | | | | | | | | | | | |
| MERCURY | | 2.8E-04 | 4.6E-03 | 4.7E-05 | 3.3E-04 | 4.7E-05 | 2.4E-05 | 9.4E-05 | 4.7E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 |
| VANADIUM | | | 3.0E-03 | 3.9E-03 | 3.8E-03 | 4.5E-03 | 3.6E-03 | 6.8E-03 | 3.6E-03 | 3.9E-03 | 3.5E-03 | 3.1E-03 |
| HEXAVALENT CHROMIUM | | 9.7E-04 | 1.1E-03 | 1.3E-03 | 1.2E-03 | 1.3E-03 | 1.5E-03 | 2.0E-03 | 1.1E-03 | 1.3E-03 | 9.8E-04 | 8.4E-04 |
| TOTAL HAZARD INDEX | 4.4E-06 | 3.5E-03 | 3.6E-02 | 2.2E-02 | 2.4E-01 | 1.9E-02 | 2.8E-02 | 8.2E-02 | 2.1E-02 | 2.4E-02 | 2.8E-02 | 2.7E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 2.1E-05 | 1.8E-05 | | | 9.3E-01 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | 4.6E-02 | 3.2E-01 | 4.6E-02 | 1.4E-01 | 2.1E-01 | 1.3E-01 | 2.6E-01 | 1.1E-01 | 1.5E-01 | 1.4E-01 | 1.6E-01 |
| COBALT | | | 2.7E-01 | 3.5E-01 | 6.5E-01 | 7.0E-02 | 3.7E-01 | 1.4E+00 | 2.6E-01 | 2.6E-01 | 3.8E-01 | 3.5E-01 |
| LEAD | | | | | | | | | | | | |
| MERCURY | | 3.6E-03 | 5.8E-02 | 6.0E-04 | 4.2E-03 | 6.0E-04 | 3.0E-04 | 1.2E-03 | 6.0E-04 | 3.0E-04 | 3.0E-04 | 3.0E-04 |
| VANADIUM | | | 7.1E-02 | 9.2E-02 | 9.0E-02 | 1.1E-01 | 8.5E-02 | 1.6E-01 | 8.6E-02 | 9.3E-02 | 8.4E-02 | 7.5E-02 |
| HEXAVALENT CHROMIUM | | 8.6E-03 | 9.3E-03 | 1.1E-02 | 1.1E-02 | 1.1E-02 | 1.3E-02 | 1.7E-02 | 9.5E-03 | 1.2E-02 | 8.7E-03 | 7.4E-03 |
| TOTAL HAZARD INDEX | 2.1E-05 | 5.8E-02 | 7.3E-01 | 5.0E-01 | 1.8E+00 | 4.0E-01 | 6.1E-01 | 1.9E+00 | 4.7E-01 | 5.2E-01 | 6.1E-01 | 5.9E-01 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-3.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-298 | SB-299 | SB-299 | SB-050 | SB-050 | SB-055 | SB-055 | SB-056 | SB-056 | SB-093 | SB-093 | SB-094 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-298-0910 | SB-299-0405 | SB-299-0910 | SB-50-05 | SB-50-10 | SB-55-05 | SB-55-10 | SB-56-05 | SB-56-10 | SB-93-05 | SB-93-10 | SB-94-05 |
| SAMPLE DATE | 20051101 | 20051101 | 20051101 | 20040915 | 20040915 | 20040915 | 20040915 | 20040913 | 20040913 | 20040916 | 20040916 | 20040916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 4 | 9 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 3.8E-06 | 3.8E-06 | 3.8E-06 | | | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 4.6E-03 | 3.0E-03 | 5.0E-03 | 2.2E-03 | 2.7E-03 | 4.3E-03 | 1.3E-03 | 6.0E-04 | 6.6E-04 | 6.7E-04 | 6.4E-04 | 6.6E-04 |
| COBALT | 9.8E-03 | 2.0E-02 | 1.7E-02 | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.6E-04 | 2.6E-04 | 2.6E-04 | 2.6E-04 | 2.6E-04 | 2.8E-04 | 2.8E-04 | 2.6E-04 | 2.8E-04 |
| VANADIUM | 5.1E-03 | 3.0E-03 | 2.3E-03 | | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.0E-03 | 9.5E-04 | 8.2E-04 | 6.7E-04 | 3.0E-04 | 7.7E-04 | 4.3E-04 | 7.7E-04 | 5.1E-04 | 1.0E-03 | 5.1E-04 | 7.2E-04 |
| TOTAL HAZARD INDEX | 2.2E-02 | 2.7E-02 | 2.5E-02 | 3.1E-03 | 3.3E-03 | 5.4E-03 | 2.0E-03 | 1.6E-03 | 1.5E-03 | 2.0E-03 | 1.4E-03 | 1.7E-03 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | 1.8E-05 | 1.8E-05 | 1.8E-05 | | | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | 9.2E-02 | 6.0E-02 | 1.0E-01 | 4.4E-02 | 5.5E-02 | 8.8E-02 | 2.7E-02 | 1.2E-02 | 1.3E-02 | 1.4E-02 | 1.3E-02 | 1.3E-02 |
| COBALT | 2.3E-01 | 4.8E-01 | 4.1E-01 | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 3.0E-04 | 3.0E-04 | 3.0E-04 | 3.3E-03 | 3.3E-03 | 3.3E-03 | 3.3E-03 | 3.3E-03 | 3.6E-03 | 3.6E-03 | 3.3E-03 | 3.6E-03 |
| VANADIUM | 1.2E-01 | 7.1E-02 | 5.4E-02 | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.8E-02 | 8.4E-03 | 7.2E-03 | 5.9E-03 | 2.6E-03 | 6.8E-03 | 3.8E-03 | 6.8E-03 | 4.5E-03 | 9.0E-03 | 4.5E-03 | 6.3E-03 |
| TOTAL HAZARD INDEX | 4.6E-01 | 6.2E-01 | 5.7E-01 | 5.4E-02 | 6.1E-02 | 9.8E-02 | 3.4E-02 | 2.2E-02 | 2.2E-02 | 2.6E-02 | 2.1E-02 | 2.3E-02 |

**Legend**
Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-3.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-094 | SB-095 | SB-095 | SB-096 | SB-096 |
|---|---|---|---|---|---|
| SAMPLE ID | SB-94-10 | SB-95-05 | SB-95-10 | SB-96-05 | SB-96-10 |
| SAMPLE DATE | 20040916 | 20040916 | 20040916 | 20040916 | 20040916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 |
| **INDUSTRIAL** | | | | | |
| BAP EQUIVALENT-HALFND | | | | | |
| NAPHTHALENE | | 3.8E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 |
| NAPHTHALENE | 7.3E-05 | | | | |
| AROCLOR-1260 | | | | | |
| ARSENIC | 6.3E-04 | 6.6E-04 | 6.7E-04 | 5.9E-04 | 6.7E-04 |
| COBALT | | | | | |
| LEAD | | | | | |
| MERCURY | 2.6E-04 | 2.8E-04 | 2.8E-04 | 2.4E-04 | 2.8E-04 |
| VANADIUM | | | | | |
| HEXAVALENT CHROMIUM | 1.0E-03 | 9.7E-04 | 4.9E-04 | 6.7E-05 | 8.7E-04 |
| TOTAL HAZARD INDEX | 2.0E-03 | 1.9E-03 | 1.5E-03 | 9.0E-04 | 1.8E-03 |
| **RESIDENTIAL** | | | | | |
| BAP EQUIVALENT-HALFND | | | | | |
| NAPHTHALENE | | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 |
| NAPHTHALENE | 3.4E-04 | | | | |
| AROCLOR-1260 | | | | | |
| ARSENIC | 1.3E-02 | 1.3E-02 | 1.4E-02 | 1.2E-02 | 1.4E-02 |
| COBALT | | | | | |
| LEAD | | | | | |
| MERCURY | 3.3E-03 | 3.6E-03 | 3.6E-03 | 3.0E-03 | 3.6E-03 |
| VANADIUM | | | | | |
| HEXAVALENT CHROMIUM | 9.0E-03 | 8.6E-03 | 4.3E-03 | 5.9E-04 | 7.7E-03 |
| TOTAL HAZARD INDEX | 2.5E-02 | 2.6E-02 | 2.2E-02 | 1.6E-02 | 2.5E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-3.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-055 | SB-056 | SB-056 | SB-056 | SB-056 | SB-056 | SB-056 | SB-056 | SB-056 | SB-093 | SB-093 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-55RE-11 | F-SB-56RE-11 | F-SB-56RE-12 | F-SB-56RE-13 | F-SB-56RE-13-AVG | F-SB-56RE-13-D | F-SB-56RE-14 | F-SB-56RE-15 | SB-56-15 | F-SB-93RE-11 | F-SB-93RE-12 |
| SAMPLE DATE | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20040913 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 11 | 12 | 13 | 13 | 13 | 14 | 15 | 15 | 11 | 12 |
| BOTTOM DEPTH | 11 | 11 | 12 | 13 | 13 | 13 | 14 | 15 | 15 | 11 | 12 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | 1.5E-11 | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | 1.9E-10 | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | 1.3E-10 | | |
| AROCLOR-1254 | | | | | | | | | 1.5E-07 | 1.0E-08 | 1.0E-08 |
| AROCLOR-1260 | | | | | | | | | 1.5E-07 | 1.0E-08 | 1.0E-08 |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | 1.0E-07 | | |
| CADMIUM | | | | | | | | | 6.4E-11 | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | 3.9E-11 | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | 2.6E-07 | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 6.6E-07 | 2.3E-08 | 2.3E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | 1.5E-10 | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | 9.8E-10 | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | 6.5E-10 | | |
| AROCLOR-1254 | | | | | | | | | 7.4E-07 | 5.0E-08 | 5.0E-08 |
| AROCLOR-1260 | | | | | | | | | 7.4E-07 | 5.0E-08 | 5.0E-08 |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | 8.0E-07 | | |
| CADMIUM | | | | | | | | | 1.3E-10 | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | 7.9E-11 | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | 3.9E-06 | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 6.2E-06 | 1.6E-07 | 1.6E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-093 | SB-093 | SB-093 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 | SB-095 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-93RE-13 | F-SB-93RE-14 | SB-93-15 | F-SB-94RE-11 | F-SB-94RE-12 | F-SB-94RE-12-AVG | F-SB-94RE-12-D | F-SB-94RE-13 | F-SB-94RE-14 | F-SB-94RE-15 | SB-94-15 | F-SB-95RE-11 |
| SAMPLE DATE | 20090921 | 20090921 | 20040916 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 | 20040916 | 20090918 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 14 | 15 | 11 | 12 | 12 | 12 | 13 | 14 | 15 | 15 | 11 |
| BOTTOM DEPTH | 13 | 14 | 15 | 11 | 12 | 12 | 12 | 13 | 14 | 15 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | 1.5E-11 | | | | | | | | 1.5E-11 | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | 1.9E-10 | | | | | | | | 1.9E-10 | |
| BAP EQUIVALENT-HALFND | 8.2E-08 | 5.0E-08 | 6.9E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | | 1.1E-08 |
| NAPHTHALENE | | | 1.3E-10 | | | | | | | | 1.3E-10 | |
| AROCLOR-1254 | 1.1E-08 | 1.0E-08 | 1.4E-07 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.5E-07 | |
| AROCLOR-1260 | 1.1E-08 | 1.0E-08 | 1.4E-07 | 1.0E-08 | 9.5E-09 | 9.5E-09 | 9.5E-09 | 1.0E-08 | 1.0E-08 | 1.0E-08 | 1.5E-07 | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | 1.0E-07 | | | | | | | | 1.1E-07 | |
| CADMIUM | | | 6.4E-11 | | | | | | | | 6.8E-11 | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | 1.2E-10 | | | | | | | | 1.3E-10 | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 5.0E-07 | | | | | | | | 7.4E-07 | |
| TOTAL CANCER RISK | 1.0E-07 | 7.1E-08 | 1.6E-06 | 2.3E-08 | 2.2E-08 | 2.2E-08 | 2.2E-08 | 2.4E-08 | 2.4E-08 | 2.4E-08 | 1.2E-06 | 1.1E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | 1.5E-10 | | | | | | | | 1.5E-10 | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | 9.8E-10 | | | | | | | | 9.8E-10 | |
| BAP EQUIVALENT-HALFND | 1.8E-06 | 1.1E-06 | 1.5E-05 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | | 2.4E-07 |
| NAPHTHALENE | | | 6.5E-10 | | | | | | | | 6.5E-10 | |
| AROCLOR-1254 | 5.7E-08 | 5.2E-08 | 7.2E-07 | 5.0E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 5.2E-08 | 5.2E-08 | 5.2E-08 | 7.4E-07 | |
| AROCLOR-1260 | 5.7E-08 | 5.2E-08 | 7.2E-07 | 5.0E-08 | 4.7E-08 | 4.7E-08 | 4.7E-08 | 5.2E-08 | 5.2E-08 | 5.2E-08 | 7.4E-07 | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | 8.0E-07 | | | | | | | | 8.4E-07 | |
| CADMIUM | | | 1.3E-10 | | | | | | | | 1.4E-10 | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | 2.4E-10 | | | | | | | | 2.6E-10 | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 7.4E-06 | | | | | | | | 1.1E-05 | |
| TOTAL CANCER RISK | 1.9E-06 | 1.2E-06 | 2.5E-05 | 1.6E-07 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 1.6E-07 | 1.6E-07 | 1.6E-07 | 1.3E-05 | 2.4E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-095 | SB-096 | SB-096 | SB-096 | SB-096 | SB-096 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-95RE-12 | F-SB-95RE-13 | F-SB-95RE-13-AVG | F-SB-95RE-13-D | F-SB-95RE-14 | F-SB-95RE-15 | F-SB-96RE-11 | F-SB-96RE-11-AVG | F-SB-96RE-11-D | F-SB-96RE-12 | F-SB-96RE-13 |
| SAMPLE DATE | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090918 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 12 | 13 | 13 | 13 | 14 | 15 | 11 | 11 | 11 | 12 | 13 |
| BOTTOM DEPTH | 12 | 13 | 13 | 13 | 14 | 15 | 11 | 11 | 11 | 12 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.1E-07 | 1.1E-06 | 1.9E-06 | 2.4E-07 | 1.1E-07 | 2.8E-09 | 2.7E-09 | 2.6E-09 | 2.8E-09 | 1.3E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.1E-07 | 1.1E-06 | 1.9E-06 | 2.4E-07 | 1.1E-07 | 2.8E-09 | 2.7E-09 | 2.6E-09 | 2.8E-09 | 1.3E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 4.6E-06 | 2.3E-05 | 4.2E-05 | 5.2E-06 | 2.4E-06 | 6.0E-08 | 5.8E-08 | 5.6E-08 | 6.0E-08 | 2.9E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 4.6E-06 | 2.3E-05 | 4.2E-05 | 5.2E-06 | 2.4E-06 | 6.0E-08 | 5.8E-08 | 5.6E-08 | 6.0E-08 | 2.9E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-096 | SB-096 | SB-096 | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-268RE | SB-405 | SB-405 | SB-405 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-96RE-14 | F-SB-96RE-15 | SB-96-15 | F-SB-268RE-11 | F-SB-268RE-12 | F-SB-268RE-13 | F-SB-268RE-14 | F-SB-268RE-15 | F-SB-405RE-11 | F-SB-405RE-12 | F-SB-405RE-13 |
| SAMPLE DATE | 20090921 | 20090921 | 20040916 | 20091006 | 20091019 | 20091019 | 20091019 | 20091019 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 14 | 15 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 |
| BOTTOM DEPTH | 14 | 15 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | 1.5E-11 | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | 1.9E-10 | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.0E-07 | 2.6E-09 | | 3.3E-07 | 2.6E-09 | 2.2E-05 | 4.9E-08 | 7.8E-08 | 1.5E-07 | 4.7E-08 | 1.8E-07 |
| NAPHTHALENE | | | 1.3E-10 | | | | | | | | |
| AROCLOR-1254 | | | 1.5E-07 | | | | | | | | |
| AROCLOR-1260 | | | 1.5E-07 | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | 1.1E-07 | | | | | | | | |
| CADMIUM | | | 6.8E-11 | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | 9.8E-12 | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 4.1E-08 | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-07 | 2.6E-09 | 4.5E-07 | 3.3E-07 | 2.6E-09 | 2.2E-05 | 4.9E-08 | 7.8E-08 | 1.5E-07 | 4.7E-08 | 1.8E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | 1.5E-10 | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | 9.8E-10 | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.3E-06 | 5.6E-08 | | 7.1E-06 | 5.6E-08 | 4.8E-04 | 1.1E-06 | 1.7E-06 | 3.4E-06 | 1.0E-06 | 4.0E-06 |
| NAPHTHALENE | | | 6.5E-10 | | | | | | | | |
| AROCLOR-1254 | | | 7.4E-07 | | | | | | | | |
| AROCLOR-1260 | | | 7.4E-07 | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | 8.5E-07 | | | | | | | | |
| CADMIUM | | | 1.4E-10 | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | 2.0E-11 | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 6.2E-07 | | | | | | | | |
| TOTAL CANCER RISK | 4.3E-06 | 5.6E-08 | 3.0E-06 | 7.1E-06 | 5.6E-08 | 4.8E-04 | 1.1E-06 | 1.7E-06 | 3.4E-06 | 1.0E-06 | 4.0E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-405 | SB-405 | SB-628 | SB-629 | SB-630 | SB-631 | SB-635 | SB-635 | SB-635 | SB-635C | SB-635D | SB-642 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-405RE-13-AVG | F-SB-405RE-13-D | F-SB-628-11 | F-SB-629-11 | F-SB-630-11 | F-SB-631-11 | F-SB-635-11 | F-SB-635-12 | F-SB-635-13 | F-SB-635C-11 | F-SB-635D-11 | F-SB-642-11 |
| SAMPLE DATE | 20090922 | 20090922 | 20090918 | 20090918 | 20090918 | 20090918 | 20090922 | 20090922 | 20090922 | 20091104 | 20091110 | 20091019 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 13 | 11 | 11 | 11 | 11 | 11 | 12 | 13 | 11 | 11 | 11 |
| BOTTOM DEPTH | 13 | 13 | 11 | 11 | 11 | 11 | 11 | 12 | 13 | 11 | 11 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.3E-08 | 4.2E-09 | 2.9E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 1.3E-08 | 9.6E-08 | 2.8E-09 | 8.5E-08 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.3E-08 | 4.2E-09 | 2.9E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 1.3E-08 | 9.6E-08 | 2.8E-09 | 8.5E-08 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.0E-06 | 9.0E-08 | 6.4E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 2.7E-07 | 2.1E-06 | 6.0E-08 | 1.8E-06 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-06 | 9.0E-08 | 6.4E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 2.7E-07 | 2.1E-06 | 6.0E-08 | 1.8E-06 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-642 | SB-642 | SB-642A | SB-642A | SB-642A | SB-642B | SB-642B | SB-642B | SB-642C | SB-642C | SB-642C | SB-643 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-642-13 | F-SB-642-15 | F-SB-642A-11 | F-SB-642A-13 | F-SB-642A-15 | F-SB-642B-11 | F-SB-642B-13 | F-SB-642B-15 | F-SB-642C-11 | F-SB-642C-13 | F-SB-642C-15 | F-SB-643-11 |
| SAMPLE DATE | 20091019 | 20091019 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091104 | 20091016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.6E-07 | 9.7E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 4.3E-08 | 2.8E-09 | 2.6E-09 | 9.0E-09 | 2.6E-09 | 7.8E-07 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.6E-07 | 9.7E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 4.3E-08 | 2.8E-09 | 2.6E-09 | 9.0E-09 | 2.6E-09 | 7.8E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-05 | 2.1E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 9.3E-07 | 6.0E-08 | 5.6E-08 | 1.9E-07 | 5.6E-08 | 1.7E-05 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-05 | 2.1E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 9.3E-07 | 6.0E-08 | 5.6E-08 | 1.9E-07 | 5.6E-08 | 1.7E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-643 | SB-643 | SB-643B | SB-643B | SB-643B | SB-643C | SB-643C | SB-643C | SB-644 | SB-644 | SB-644 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | F-SB-643-13 | F-SB-643-15 | F-SB-643B-11 | F-SB-643B-13 | F-SB-643B-15 | F-SB-643C-11 | F-SB-643C-13 | F-SB-643C-15 | F-SB-644-11 | F-SB-644-13 | F-SB-644-15 |
| SAMPLE DATE | 20091016 | 20091016 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091105 | 20091016 | 20091016 | 20091016 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 2.6E-09 | 8.8E-08 | 2.8E-09 | 2.8E-09 | 9.3E-07 | 1.4E-08 | 2.6E-09 | 5.9E-08 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.8E-09 | 2.6E-09 | 8.8E-08 | 2.8E-09 | 2.8E-09 | 9.3E-07 | 1.4E-08 | 2.6E-09 | 5.9E-08 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 5.6E-08 | 1.9E-06 | 6.0E-08 | 6.0E-08 | 2.0E-05 | 3.1E-07 | 5.6E-08 | 1.3E-06 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 6.0E-08 | 5.6E-08 | 1.9E-06 | 6.0E-08 | 6.0E-08 | 2.0E-05 | 3.1E-07 | 5.6E-08 | 1.3E-06 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-3.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-056 | SB-093 | SB-093 | SB-093 | SB-093 | SB-093 | SB-094 | SB-094 | SB-094 | SB-094 | SB-094 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-56-15 | F-SB-93RE-11 | F-SB-93RE-12 | F-SB-93RE-13 | F-SB-93RE-14 | SB-93-15 | F-SB-94RE-11 | F-SB-94RE-12 | F-SB-94RE-12-AVG | F-SB-94RE-12-D | F-SB-94RE-13 |
| SAMPLE DATE | 20040913 | 20090921 | 20090921 | 20090921 | 20090921 | 20040916 | 20090921 | 20090921 | 20090921 | 20090921 | 20090921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 12 | 12 | 13 |
| BOTTOM DEPTH | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 12 | 12 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 1.8E-06 | | | | | 1.8E-06 | | | | | |
| 1,2,4-TRICHLOROBENZENE | 8.5E-06 | | | | | 8.5E-06 | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.9E-08 | | | | | 8.9E-08 | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 3.8E-06 | | | | | 3.8E-06 | | | | | |
| AROCLOR-1254 | 1.0E-02 | 7.0E-04 | 7.0E-04 | 8.0E-04 | 7.3E-04 | 1.0E-02 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 7.3E-04 |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | 6.4E-04 | | | | | 6.4E-04 | | | | | |
| CADMIUM | 1.7E-03 | | | | | 1.7E-03 | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 2.6E-04 | | | | | 2.6E-04 | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | 6.4E-04 | | | | | 1.9E-03 | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 4.9E-04 | | | | | 9.2E-04 | | | | | |
| TOTAL HAZARD INDEX | 1.4E-02 | 7.0E-04 | 7.0E-04 | 8.0E-04 | 7.3E-04 | 1.6E-02 | 7.0E-04 | 6.6E-04 | 6.6E-04 | 6.6E-04 | 7.3E-04 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | 4.8E-05 | | | | | 4.8E-05 | | | | | |
| 1,2,4-TRICHLOROBENZENE | 3.9E-05 | | | | | 3.9E-05 | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | 8.4E-07 | | | | | 8.4E-07 | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.8E-05 | | | | | 1.8E-05 | | | | | |
| AROCLOR-1254 | 1.3E-01 | 8.9E-03 | 8.9E-03 | 1.0E-02 | 9.3E-03 | 1.3E-01 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 9.3E-03 |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | 1.3E-02 | | | | | 1.3E-02 | | | | | |
| CADMIUM | 3.8E-02 | | | | | 3.8E-02 | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 3.3E-03 | | | | | 3.3E-03 | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | 6.5E-03 | | | | | 2.0E-02 | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 4.3E-03 | | | | | 8.1E-03 | | | | | |
| TOTAL HAZARD INDEX | 2.0E-01 | 8.9E-03 | 8.9E-03 | 1.0E-02 | 9.3E-03 | 2.1E-01 | 8.9E-03 | 8.5E-03 | 8.5E-03 | 8.5E-03 | 9.3E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-3.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-094 | SB-094 | SB-094 | SB-096 |
|---|---|---|---|---|
| SAMPLE ID | F-SB-94RE-14 | F-SB-94RE-15 | SB-94-15 | SB-96-15 |
| SAMPLE DATE | 20090921 | 20090921 | 20040916 | 20040916 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 14 | 15 | 15 | 15 |
| BOTTOM DEPTH | 14 | 15 | 15 | 15 |
| **INDUSTRIAL** | | | | |
| 1,2,3-TRICHLOROBENZENE | | | 1.8E-06 | 1.8E-06 |
| 1,2,4-TRICHLOROBENZENE | | | 8.5E-06 | 8.5E-06 |
| 1,3-DICHLOROBENZENE | | | | |
| 1,4-DICHLOROBENZENE | | | 8.9E-08 | 8.9E-08 |
| BAP EQUIVALENT-HALFND | | | | |
| NAPHTHALENE | | | 3.8E-06 | 3.8E-06 |
| AROCLOR-1254 | 7.3E-04 | 7.3E-04 | 1.0E-02 | 1.0E-02 |
| AROCLOR-1260 | | | | |
| ANTIMONY | | | | |
| ARSENIC | | | 6.7E-04 | 6.8E-04 |
| CADMIUM | | | 1.9E-03 | 1.9E-03 |
| COBALT | | | | |
| IRON | | | | |
| LEAD | | | | |
| MANGANESE | | | | |
| MERCURY | | | 2.8E-04 | 2.8E-04 |
| MOLYBDENUM | | | | |
| NICKEL | | | 2.1E-03 | 1.6E-04 |
| VANADIUM | | | | |
| HEXAVALENT CHROMIUM | | | 1.4E-03 | 7.7E-05 |
| TOTAL HAZARD INDEX | 7.3E-04 | 7.3E-04 | 1.7E-02 | 1.4E-02 |
| **RESIDENTIAL** | | | | |
| 1,2,3-TRICHLOROBENZENE | | | 4.8E-05 | 4.8E-05 |
| 1,2,4-TRICHLOROBENZENE | | | 3.9E-05 | 3.9E-05 |
| 1,3-DICHLOROBENZENE | | | | |
| 1,4-DICHLOROBENZENE | | | 8.4E-07 | 8.4E-07 |
| BAP EQUIVALENT-HALFND | | | | |
| NAPHTHALENE | | | 1.8E-05 | 1.8E-05 |
| AROCLOR-1254 | 9.3E-03 | 9.3E-03 | 1.3E-01 | 1.3E-01 |
| AROCLOR-1260 | | | | |
| ANTIMONY | | | | |
| ARSENIC | | | 1.4E-02 | 1.4E-02 |
| CADMIUM | | | 4.1E-02 | 4.1E-02 |
| COBALT | | | | |
| IRON | | | | |
| LEAD | | | | |
| MANGANESE | | | | |
| MERCURY | | | 3.6E-03 | 3.6E-03 |
| MOLYBDENUM | | | | |
| NICKEL | | | 2.2E-02 | 1.6E-03 |
| VANADIUM | | | | |
| HEXAVALENT CHROMIUM | | | 1.2E-02 | 6.8E-04 |
| TOTAL HAZARD INDEX | 9.3E-03 | 9.3E-03 | 2.3E-01 | 1.9E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

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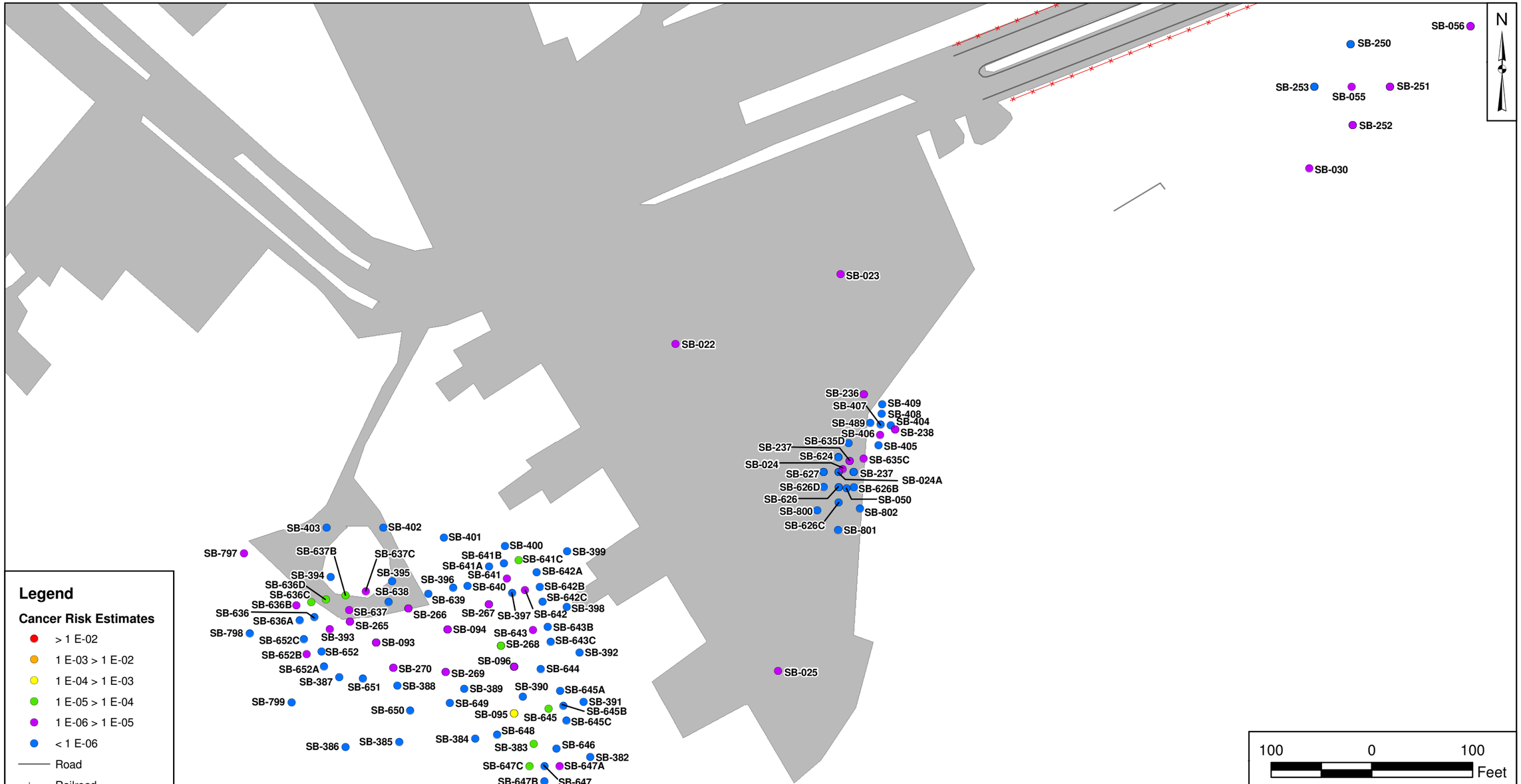


## Legend

**Cancer Risk Estimates**

- > 1 E-02
- 1 E-03 > 1 E-02
- 1 E-04 > 1 E-03
- 1 E-05 > 1 E-04
- 1 E-06 > 1 E-05
- < 1 E-06
- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

CANCER RISK ESTIMATES FOR INDUSTRIAL USE
BLOCK F - SURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-3.1 | REV 0 |

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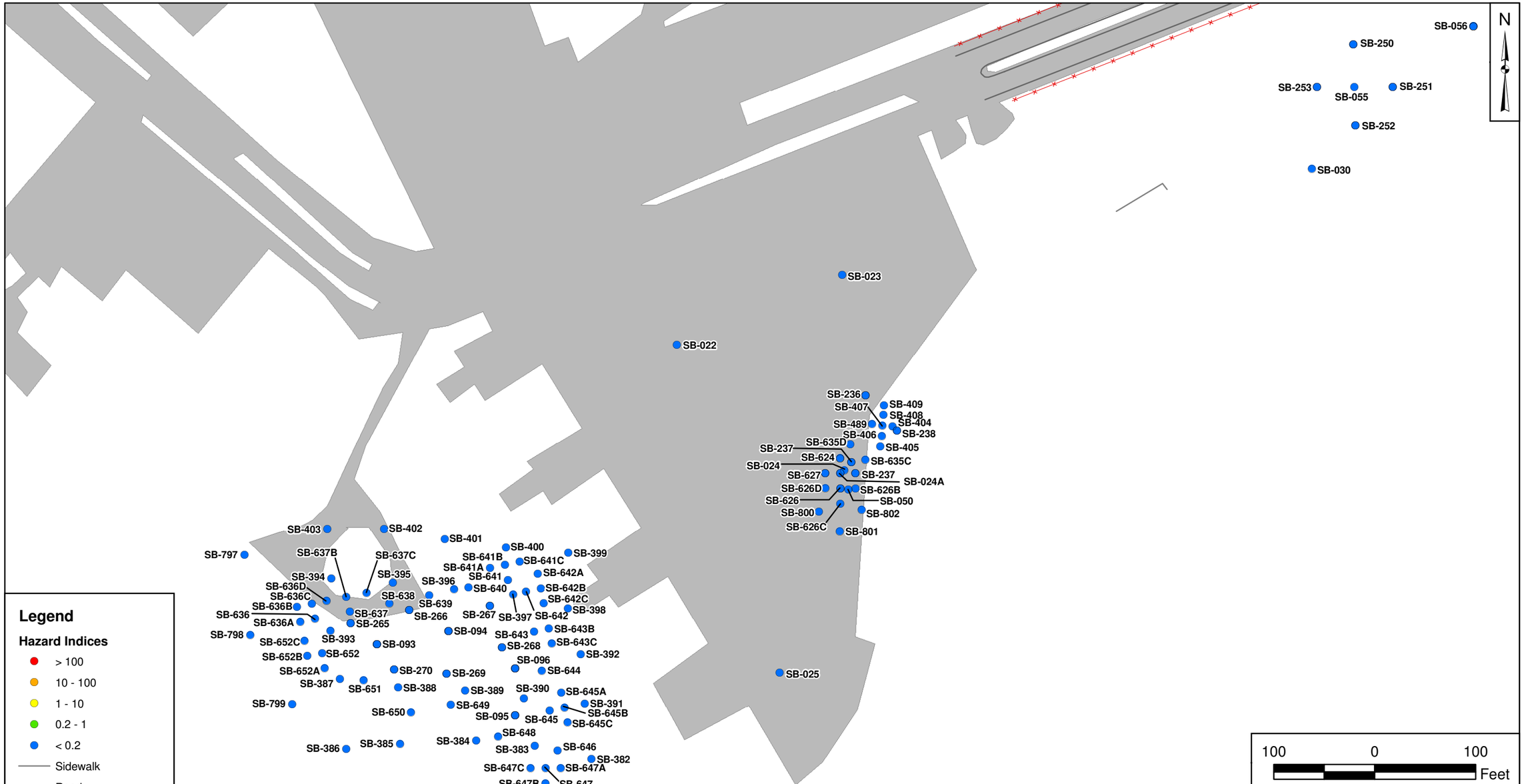


## Legend

**Hazard Indices**

- > 100
- 10 - 100
- 1 - 10
- 0.2 - 1
- < 0.2
- Sidewalk
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE<br>BLOCK F - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-3.2 / REV 0 |

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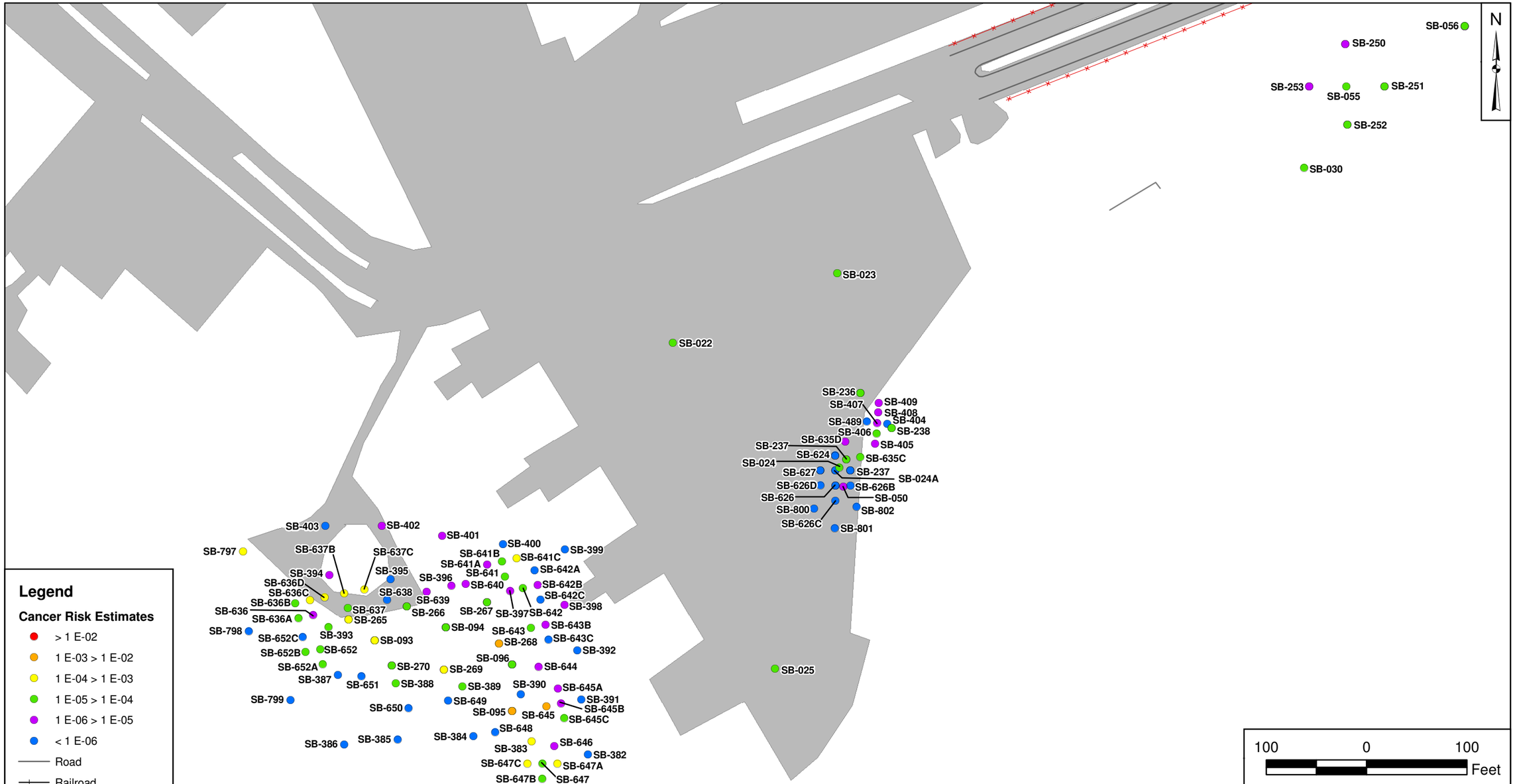


## Legend

**Cancer Risk Estimates**

- > 1 E-02
- 1 E-03 > 1 E-02
- 1 E-04 > 1 E-03
- 1 E-05 > 1 E-04
- 1 E-06 > 1 E-05
- < 1 E-06
- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

CANCER RISK ESTIMATES FOR RESIDENTIAL USE
BLOCK F - SURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-3.3 | REV 0 |

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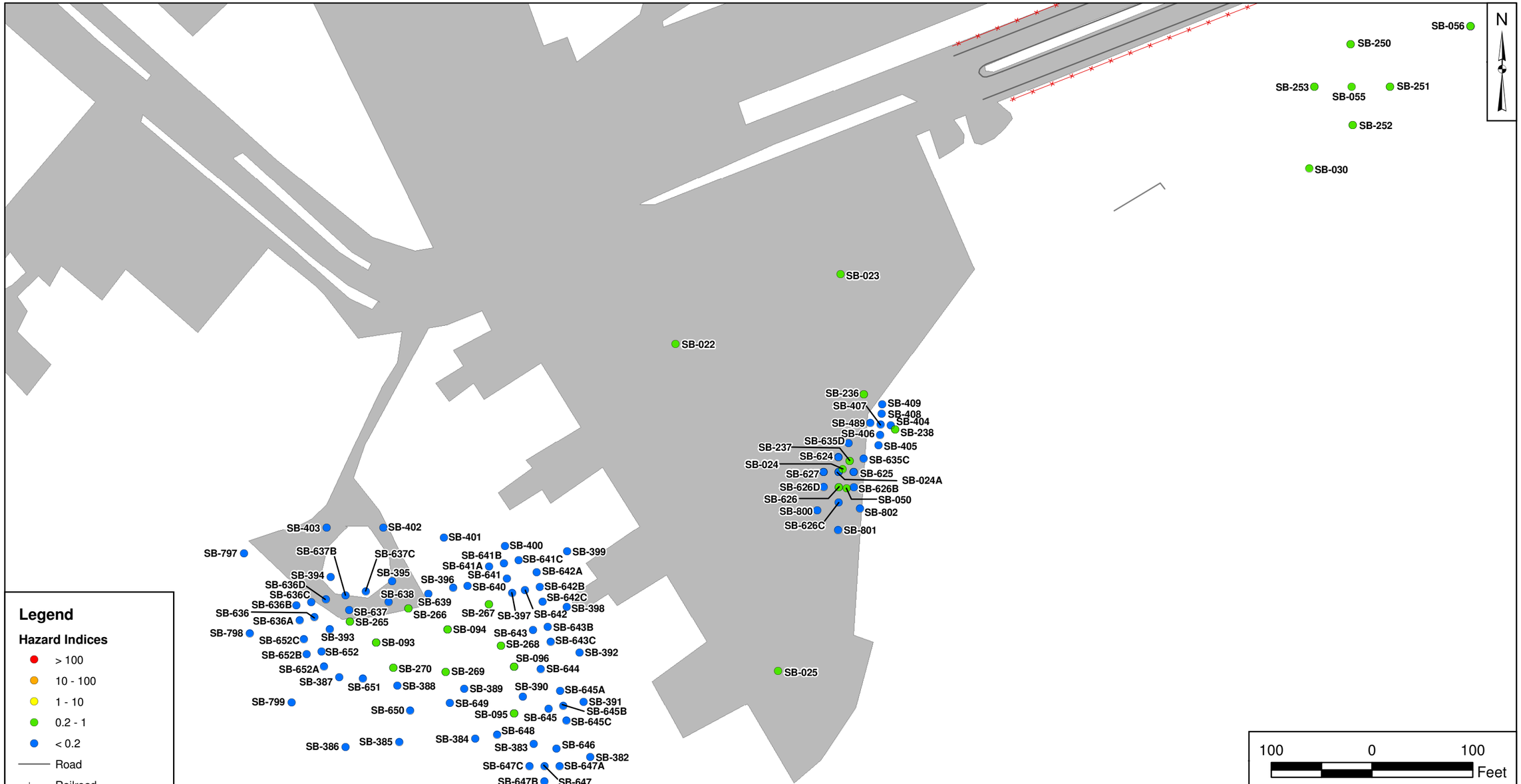


## Legend

**Hazard Indices**

- > 100
- 10 - 100
- 1 - 10
- 0.2 - 1
- < 0.2
- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE<br>BLOCK F - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-3.4 / REV 0 |

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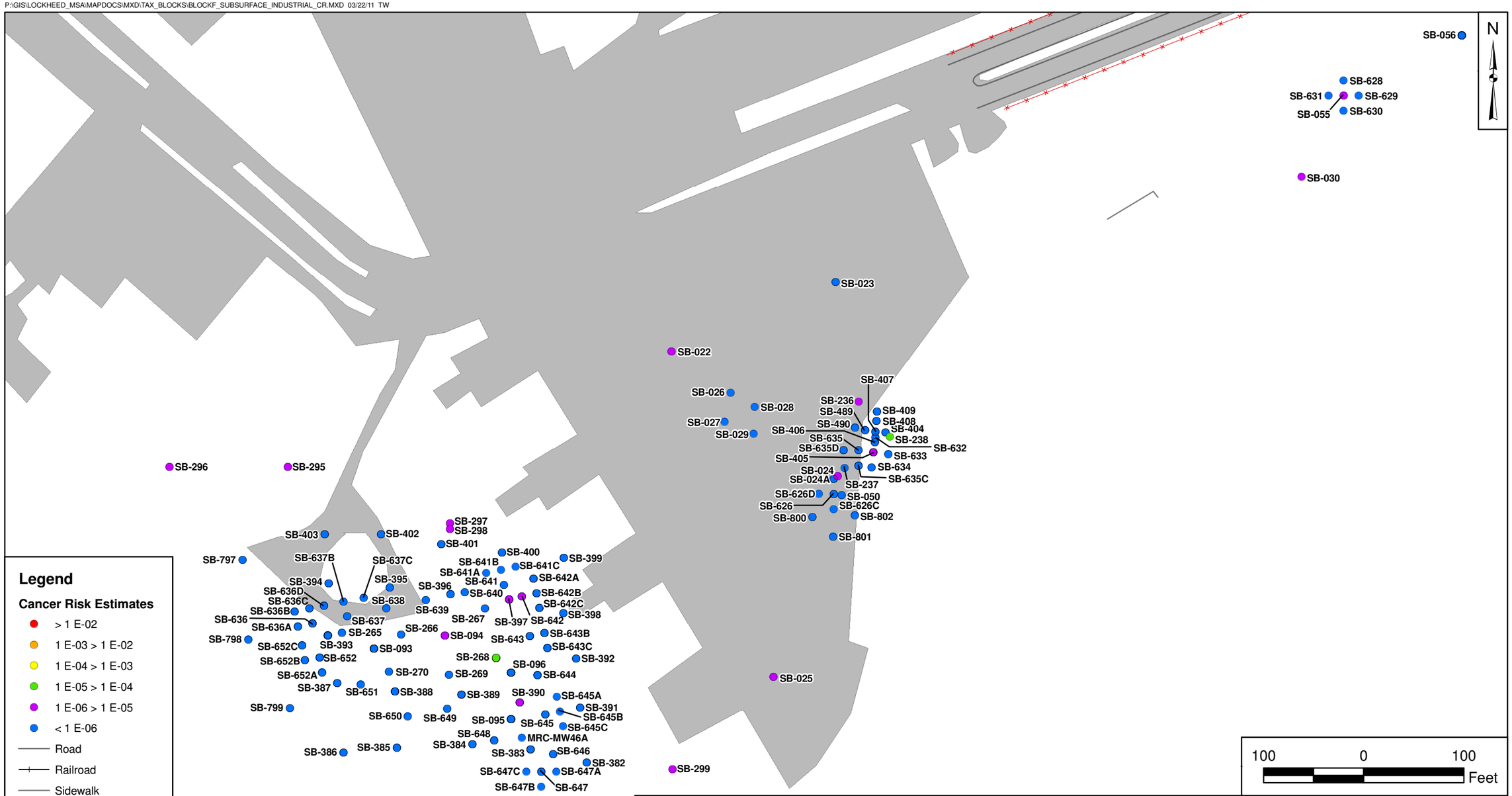


## Legend

**Cancer Risk Estimates**

- > 1 E-02
- 1 E-03 > 1 E-02
- 1 E-04 > 1 E-03
- 1 E-05 > 1 E-04
- 1 E-06 > 1 E-05
- < 1 E-06
- Road
- Railroad
- Sidewalk
- Fenceline
- Water
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

CANCER RISK ESTIMATES FOR INDUSTRIAL USE
BLOCK F - SUBSURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-3.5 | REV 0 |

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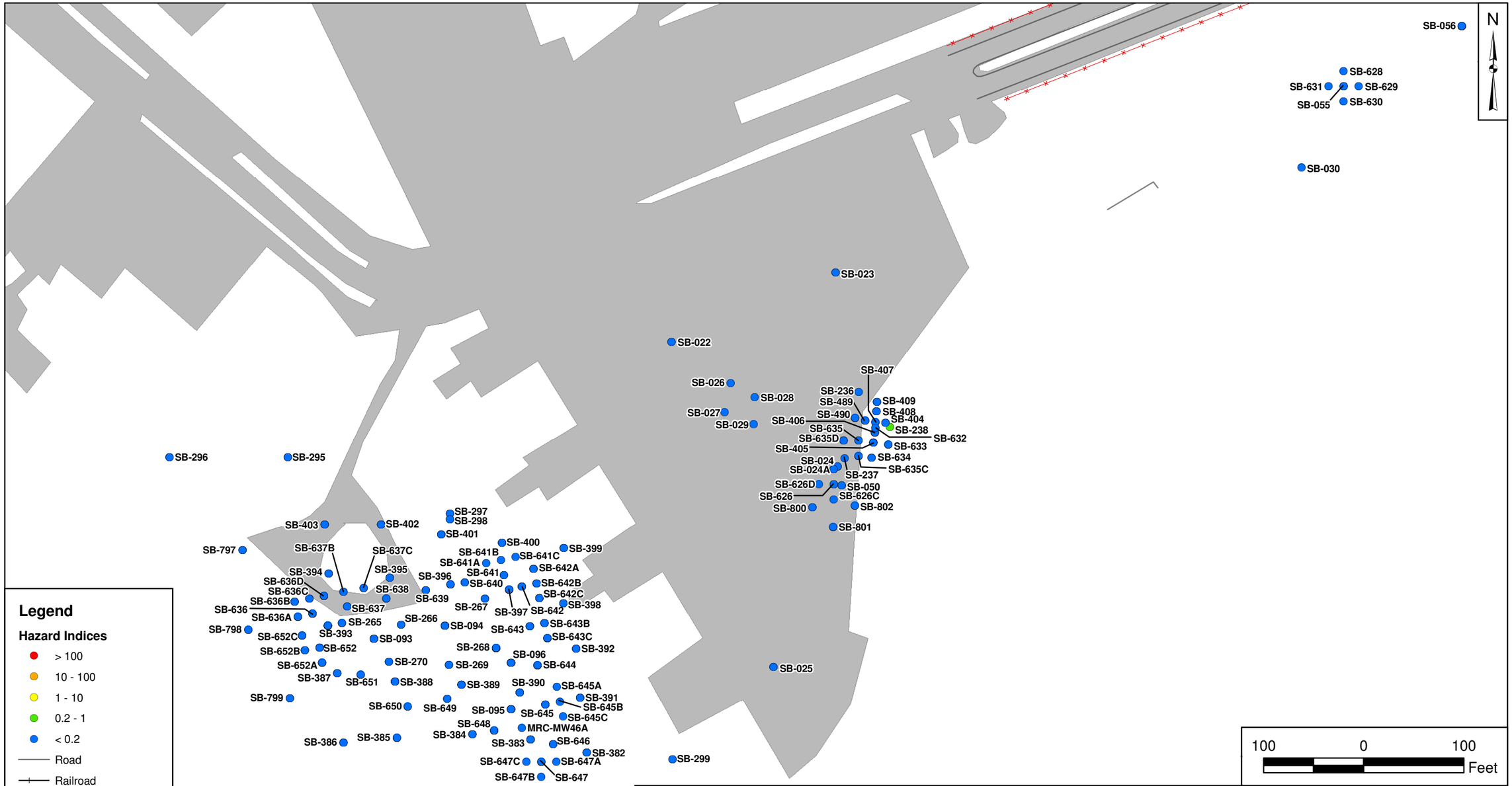


## Legend

**Hazard Indices**

- > 100
- 10 - 100
- 1 - 10
- 0.2 - 1
- < 0.2
- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE
BLOCK F - SUBSURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-3.6 | REV 0 |

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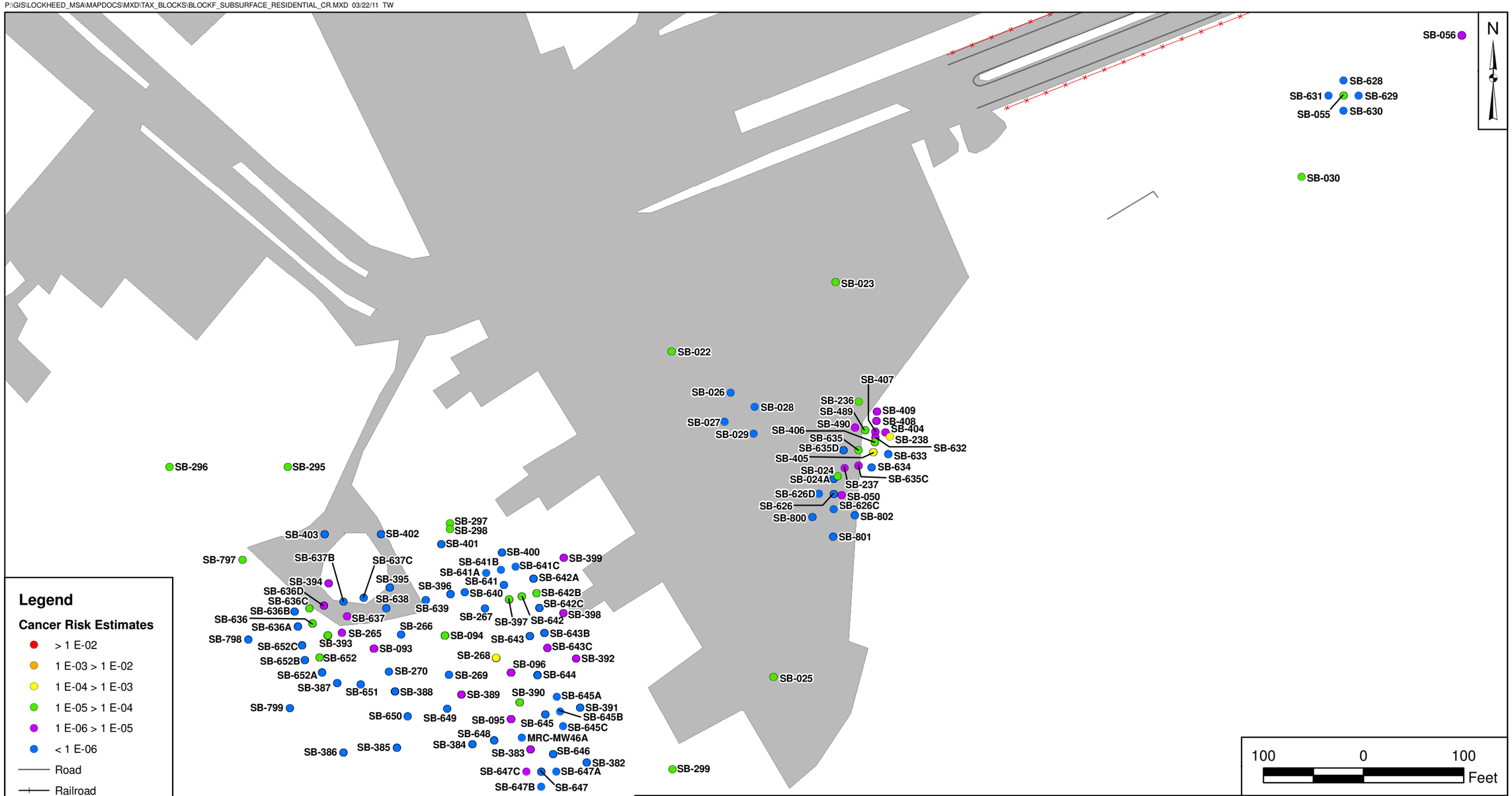


## Legend

**Cancer Risk Estimates**

- > 1 E-02
- 1 E-03 > 1 E-02
- 1 E-04 > 1 E-03
- 1 E-05 > 1 E-04
- 1 E-06 > 1 E-05
- < 1 E-06
- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | |
|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 |
| COST/SCHEDULE-AREA | |
| SCALE AS NOTED | |

TETRA TECH

CANCER RISK ESTIMATES FOR RESIDENTIAL USE
BLOCK F - SUBSURFACE SOIL
LOCKHEED MARTIN
MARTIN STATE AIRPORT
MIDDLE RIVER, MARYLAND

| | |
|---|---|
| CONTRACT NUMBER — | OWNER NUMBER — |
| APPROVED BY — | DATE — |
| APPROVED BY — | DATE — |
| FIGURE NO. FIGURE E-3.7 | REV 0 |

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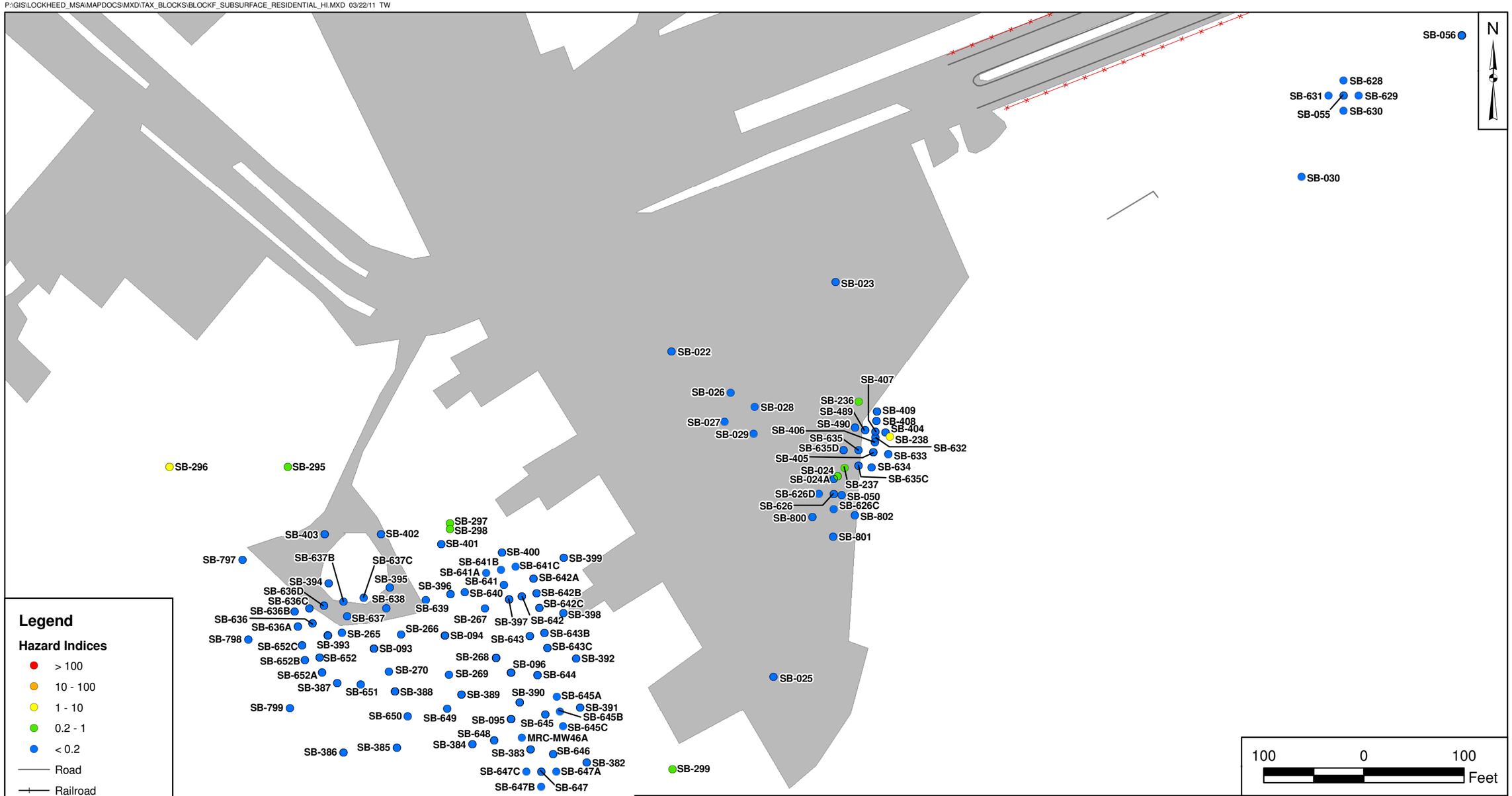


## Legend

**Hazard Indices**

- > 100
- 10 - 100
- 1 - 10
- 0.2 - 1
- < 0.2
- Road
- Railroad
- Sidewalk
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

100 0 100 Feet

| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE<br>BLOCK F - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-3.8 / REV 0 |

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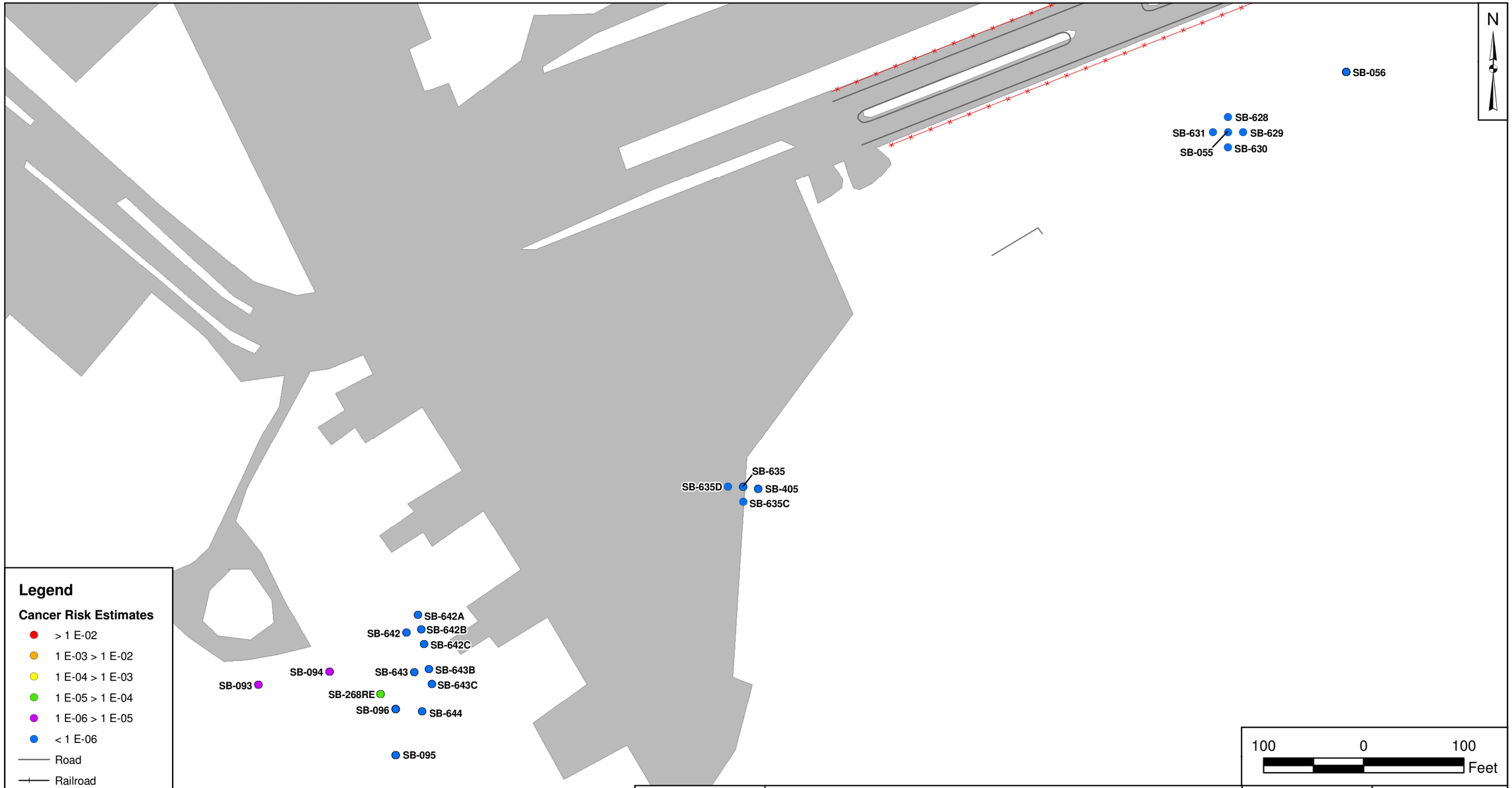


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | CANCER RISK ESTIMATES FOR INDUSTRIAL USE<br>BLOCK F - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-3.9 / REV 0 |

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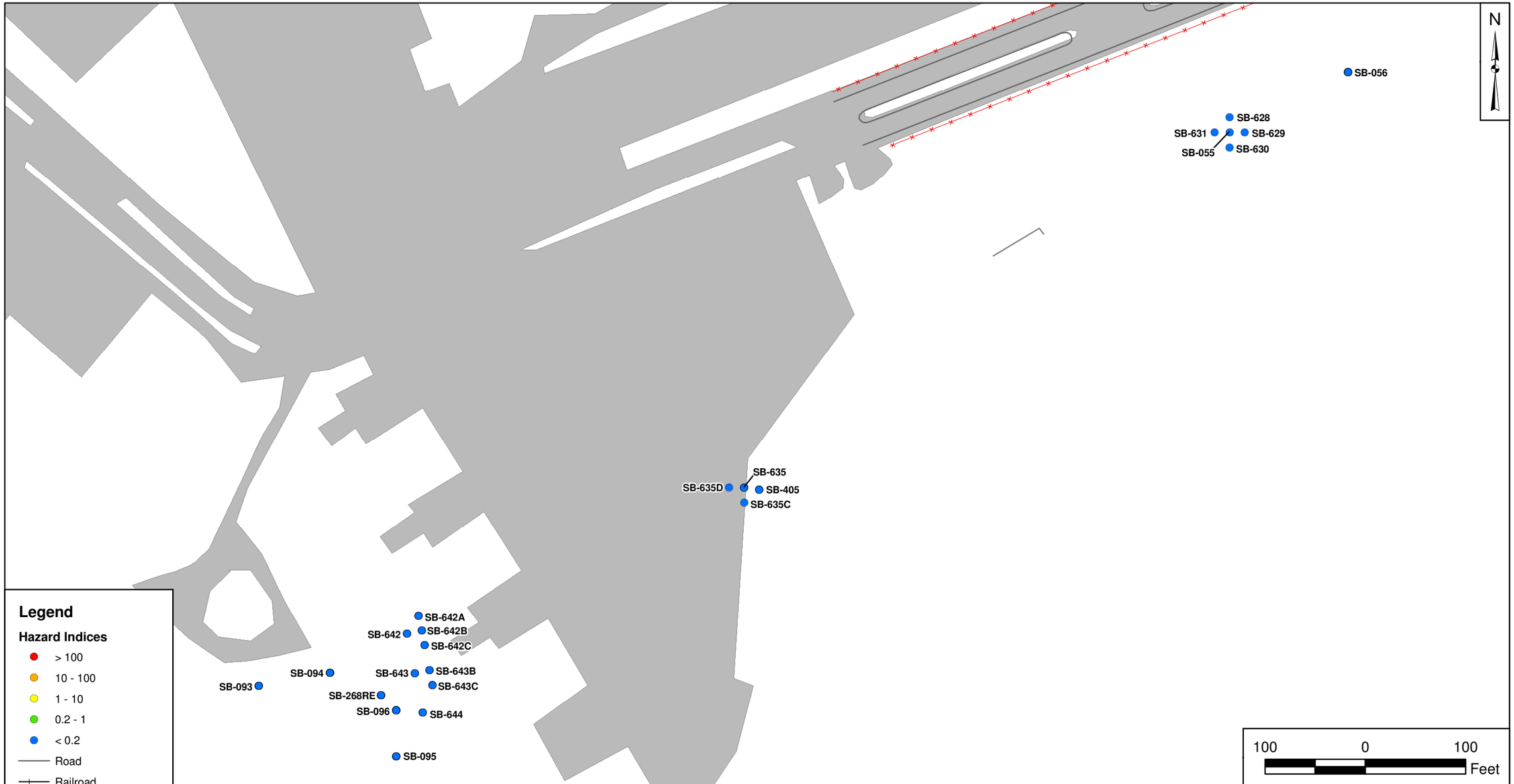


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE<br>BLOCK F - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-3.10 / REV 0 |

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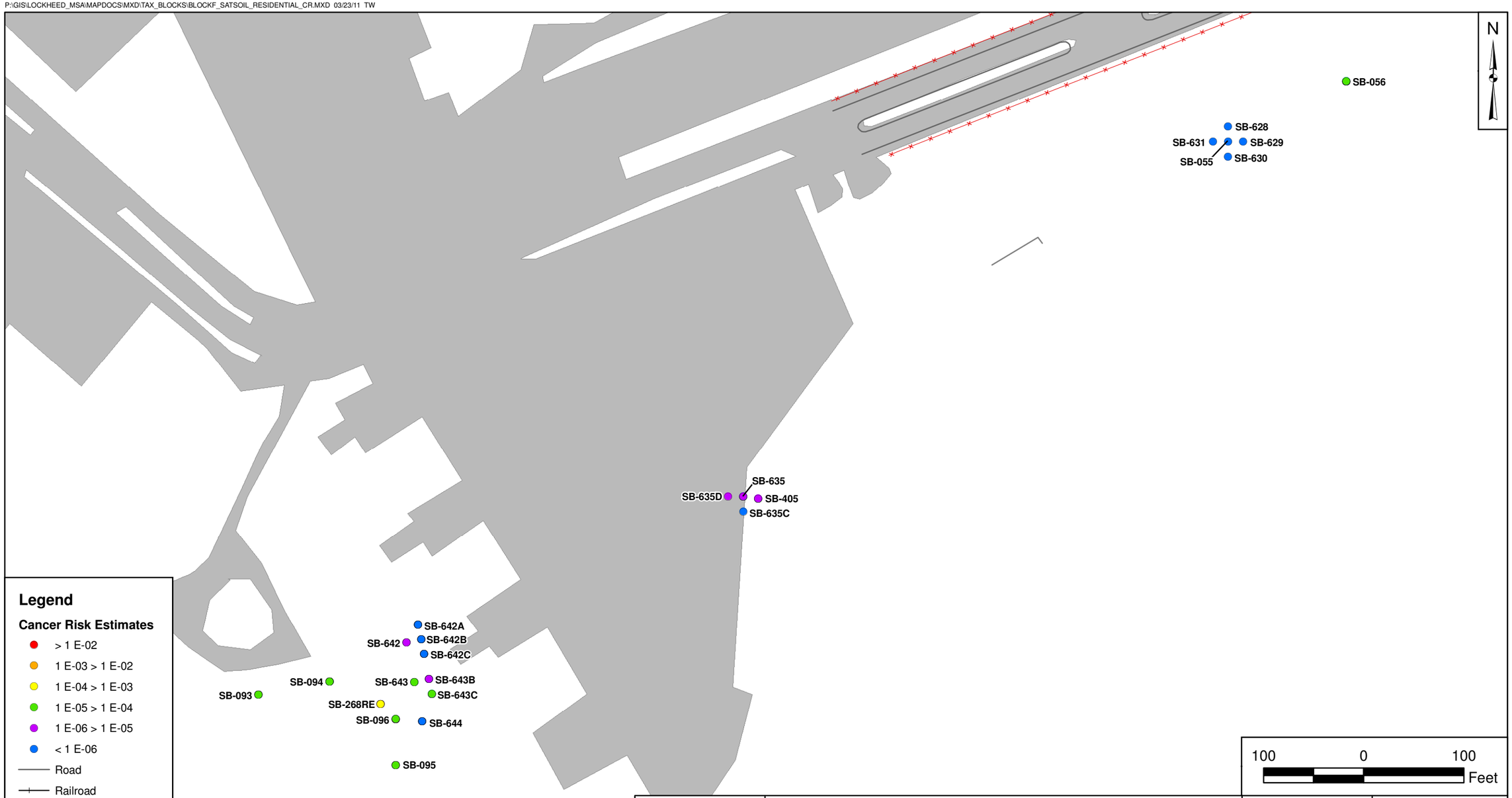


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | CANCER RISK ESTIMATES FOR RESIDENTIAL USE<br>BLOCK F - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-3.11 / REV 0 |

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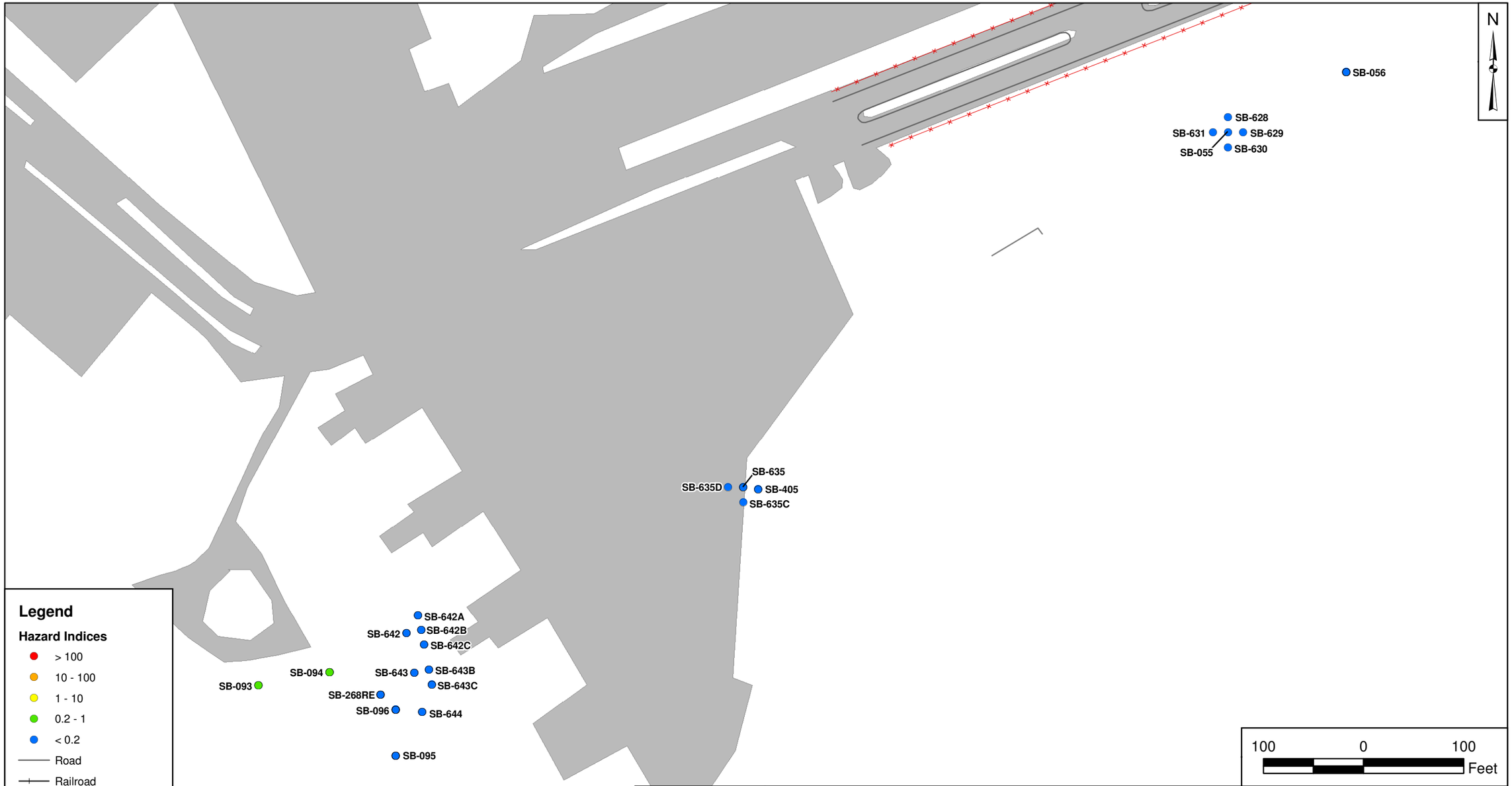


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/07/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE<br>BLOCK F - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-3.12 / REV 0 |

**APPENDIX E.4**

**BLOCK E**

## TABLES


E-4.1 Cancer Risks for Individual Sample Locations – Surface Soil - Block G

E-4.2 Hazard Indices for Individual Sample Locations – Surface Soil - Block G

E-4.3 Cancer Risks for Individual Sample Locations – Subsurface Soil - Block G

E-4.4 Hazard Indices for Individual Sample Locations – Subsurface Soil - Block G

E-4.5 Cancer Risks for Individual Sample Locations – Saturated Soil - Block G

E-4.6 Hazard Indices for Individual Sample Locations – Saturated Soil - Block G


## FIGURES


E-4.1 Cancer Risk Estimates for Industrial Use – Block G – Surface Soil

E-4.2 Hazard Indices Estimates for Industrial Use – Block G – Surface Soil

E-4.3 Cancer Risk Estimates for Residential Use – Block G – Surface Soil

E-4.4 Hazard Indices Estimates for Residential Use – Block G – Surface Soil

E-4.5 Cancer Risk Estimates for Industrial Use – Block G – Subsurface Soil

E-4.6 Hazard Indices Estimates for Industrial Use – Block G – Subsurface Soil

E-4.7 Cancer Risk Estimates for Residential Use – Block G – Subsurface Soil

E-4.8 Hazard Indices Estimates for Residential Use – Block G – Subsurface Soil

E-4.9 Cancer Risk Estimates for Industrial Use – Block G – Saturated Soil

E-4.10 Hazard Indices Estimates for Industrial Use – Block G – Saturated Soil

E-4.11 Cancer Risk Estimates for Residential Use – Block G – Saturated Soil

E-4.12 Hazard Indices Estimates for Residential Use – Block G – Saturated Soil

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-194 | SB-194 | SB-198 | SB-198 | SB-254 | SB-254 | SB-255 | SB-255 | SB-257RE | SB-257RE | SB-653 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-194RE-1 | G-SB-194RE-2 | G-SB-198RE-1 | G-SB-198RE-2 | G-SB-254RE-1 | G-SB-254RE-2 | G-SB-255RE-1 | G-SB-255RE-2 | G-SB-257RE-1 | G-SB-257RE-2 | G-SB-653-1 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20090930 | 20090930 | 20091001 | 20091001 | 20091002 | 20091002 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| BOTTOM DEPTH | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.1E-06 | 1.5E-08 | 5.6E-07 | 7.9E-07 | 1.1E-07 | 1.4E-07 | 2.5E-06 | 2.6E-07 | 1.1E-07 | 2.6E-09 | 5.0E-07 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.1E-06 | 1.5E-08 | 5.6E-07 | 7.9E-07 | 1.1E-07 | 1.4E-07 | 2.5E-06 | 2.6E-07 | 1.1E-07 | 2.6E-09 | 5.0E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.0E-05 | 3.2E-07 | 1.2E-05 | 1.7E-05 | 2.3E-06 | 3.1E-06 | 5.4E-05 | 5.6E-06 | 2.4E-06 | 5.6E-08 | 1.1E-05 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.0E-05 | 3.2E-07 | 1.2E-05 | 1.7E-05 | 2.3E-06 | 3.1E-06 | 5.4E-05 | 5.6E-06 | 2.4E-06 | 5.6E-08 | 1.1E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-653 | SB-653A | SB-653B | SB-653D | SB-654 | SB-654 | SB-654B | SB-654C | SB-655 | SB-655 | SB-656 | SB-656 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653-2 | G-SB-653A-1 | G-SB-653B-1 | G-SB-653D-1 | G-SB-654-1 | G-SB-654-2 | G-SB-654B-1 | G-SB-654C-1 | G-SB-655-1 | G-SB-655-2 | G-SB-656-1 | G-SB-656-2 |
| SAMPLE DATE | 20090930 | 20091029 | 20091029 | 20091029 | 20090930 | 20090930 | 20091030 | 20091030 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-06 | 1.3E-06 | 6.0E-07 | 1.6E-07 | 2.3E-07 | 1.4E-06 | 3.4E-07 | 1.8E-07 | 1.9E-07 | 4.1E-08 | 2.6E-07 | 7.8E-07 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-06 | 1.3E-06 | 6.0E-07 | 1.6E-07 | 2.3E-07 | 1.4E-06 | 3.4E-07 | 1.8E-07 | 1.9E-07 | 4.1E-08 | 2.6E-07 | 7.8E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.0E-05 | 2.8E-05 | 1.3E-05 | 3.5E-06 | 4.9E-06 | 3.0E-05 | 7.4E-06 | 3.9E-06 | 4.1E-06 | 9.0E-07 | 5.7E-06 | 1.7E-05 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.0E-05 | 2.8E-05 | 1.3E-05 | 3.5E-06 | 4.9E-06 | 3.0E-05 | 7.4E-06 | 3.9E-06 | 4.1E-06 | 9.0E-07 | 5.7E-06 | 1.7E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-656C | SB-656D | SB-657A | SB-657B | SB-657D | SB-658B | SB-658C | SB-659C | SB-659D | SB-662A | SB-662B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656C-2 | G-SB-656D-2 | G-SB-657A-1 | G-SB-657B-1 | G-SB-657D-1 | G-SB-658B-1 | G-SB-658C-1 | G-SB-659C-1 | G-SB-659D-1 | G-SB-662A-1 | G-SB-662B-1 |
| SAMPLE DATE | 20091029 | 20091029 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-08 | 2.1E-07 | 6.6E-06 | 4.1E-06 | 1.1E-07 | 2.0E-07 | 2.5E-07 | 2.8E-07 | 8.0E-08 | 2.2E-06 | 5.6E-09 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-08 | 2.1E-07 | 6.6E-06 | 4.1E-06 | 1.1E-07 | 2.0E-07 | 2.5E-07 | 2.8E-07 | 8.0E-08 | 2.2E-06 | 5.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.1E-07 | 4.4E-06 | 1.4E-04 | 8.9E-05 | 2.3E-06 | 4.4E-06 | 5.4E-06 | 6.1E-06 | 1.7E-06 | 4.7E-05 | 1.2E-07 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.1E-07 | 4.4E-06 | 1.4E-04 | 8.9E-05 | 2.3E-06 | 4.4E-06 | 5.4E-06 | 6.1E-06 | 1.7E-06 | 4.7E-05 | 1.2E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-662C | SB-669 | SB-669 | SB-670 | SB-670 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671B | SB-671C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662C-1 | G-SB-669-1 | G-SB-669-2 | G-SB-670-1 | G-SB-670-2 | G-SB-671-1 | G-SB-671-2 | G-SB-671-2-AVG | G-SB-671-2-D | G-SB-671B-1 | G-SB-671C-1 |
| SAMPLE DATE | 20091029 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091111 | 20091111 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.0E-07 | 1.5E-07 | 3.6E-07 | 1.9E-07 | 7.5E-08 | 1.5E-06 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 7.9E-07 | 8.2E-08 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-07 | 1.5E-07 | 3.6E-07 | 1.9E-07 | 7.5E-08 | 1.5E-06 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 7.9E-07 | 8.2E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.4E-06 | 3.3E-06 | 7.9E-06 | 4.1E-06 | 1.6E-06 | 3.3E-05 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.7E-05 | 1.8E-06 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.4E-06 | 3.3E-06 | 7.9E-06 | 4.1E-06 | 1.6E-06 | 3.3E-05 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.7E-05 | 1.8E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-671D | SB-672 | SB-672 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677A | SB-677B | SB-677D | SB-678 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671D-1 | G-SB-672-1 | G-SB-672-2 | G-SB-677-1 | G-SB-677-1-AVG | G-SB-677-1-D | G-SB-677-2 | G-SB-677A-1 | G-SB-677B-1 | G-SB-677D-1 | G-SB-678-1 |
| SAMPLE DATE | 20091111 | 20090929 | 20090929 | 20091001 | 20091001 | 20091001 | 20091001 | 20091030 | 20091030 | 20091030 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.8E-08 | 2.1E-07 | 2.0E-07 | 7.1E-05 | 5.0E-05 | 2.9E-05 | 6.9E-06 | 4.1E-06 | 2.7E-07 | 4.8E-08 | 7.2E-07 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.8E-08 | 2.1E-07 | 2.0E-07 | 7.1E-05 | 5.0E-05 | 2.9E-05 | 6.9E-06 | 4.1E-06 | 2.7E-07 | 4.8E-08 | 7.2E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-06 | 4.5E-06 | 4.3E-06 | 1.5E-03 | 1.1E-03 | 6.3E-04 | 1.5E-04 | 9.0E-05 | 5.8E-06 | 1.0E-06 | 1.6E-05 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-06 | 4.5E-06 | 4.3E-06 | 1.5E-03 | 1.1E-03 | 6.3E-04 | 1.5E-04 | 9.0E-05 | 5.8E-06 | 1.0E-06 | 1.6E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-678 | SB-678B | SB-678C | SB-679 | SB-679 | SB-679C | SB-679D | SB-680 | SB-680 | SB-680D | SB-680D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678-2 | G-SB-678B-1 | G-SB-678C-1 | G-SB-679-1 | G-SB-679-2 | G-SB-679C-1 | G-SB-679D-1 | G-SB-680-1 | G-SB-680-2 | G-SB-680D-1 | G-SB-680D-1-AVG |
| SAMPLE DATE | 20091001 | 20091111 | 20091030 | 20091001 | 20091001 | 20091030 | 20091030 | 20091001 | 20091001 | 20091102 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 2 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.6E-07 | 2.9E-05 | 1.1E-07 | 2.1E-06 | 3.9E-07 | 1.5E-06 | 5.2E-07 | 2.3E-06 | 1.6E-06 | 3.0E-07 | 5.8E-06 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.6E-07 | 2.9E-05 | 1.1E-07 | 2.1E-06 | 3.9E-07 | 1.5E-06 | 5.2E-07 | 2.3E-06 | 1.6E-06 | 3.0E-07 | 5.8E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.9E-05 | 6.2E-04 | 2.5E-06 | 4.5E-05 | 8.5E-06 | 3.2E-05 | 1.1E-05 | 5.0E-05 | 3.4E-05 | 6.5E-06 | 1.3E-04 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-05 | 6.2E-04 | 2.5E-06 | 4.5E-05 | 8.5E-06 | 3.2E-05 | 1.1E-05 | 5.0E-05 | 3.4E-05 | 6.5E-06 | 1.3E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-680D | SB-693A | SB-693B | SB-693D | SB-734 | SB-735 | SB-735A | SB-735B | SB-735C | SB-736 | SB-736B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680D-1-D | G-SB-693A-2 | G-SB-693B-2 | G-SB-693D-2 | G-SB-734-0-4 | G-SB-735-1 | G-SB-735A-1 | G-SB-735B-1 | G-SB-735C-1 | G-SB-736-1 | G-SB-736B-1 |
| SAMPLE DATE | 20091102 | 20091027 | 20091027 | 20091027 | 20090923 | 20091021 | 20091112 | 20091112 | 20091112 | 20091021 | 20091112 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 2 | 2 | 2 | | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 2 | 2 | 2 | 4 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-05 | 7.8E-08 | 2.5E-07 | 2.5E-07 | 1.8E-06 | 1.6E-06 | 7.3E-06 | 2.2E-05 | 8.9E-07 | 2.0E-06 | 4.3E-06 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-05 | 7.8E-08 | 2.5E-07 | 2.5E-07 | 1.8E-06 | 1.6E-06 | 7.3E-06 | 2.2E-05 | 8.9E-07 | 2.0E-06 | 4.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.4E-04 | 1.7E-06 | 5.4E-06 | 5.4E-06 | 4.0E-05 | 3.6E-05 | 1.6E-04 | 4.7E-04 | 1.9E-05 | 4.3E-05 | 9.4E-05 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.4E-04 | 1.7E-06 | 5.4E-06 | 5.4E-06 | 4.0E-05 | 3.6E-05 | 1.6E-04 | 4.7E-04 | 1.9E-05 | 4.3E-05 | 9.4E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-736C | SB-737 | SB-738 | SB-738 | SB-738 | SB-739 | G-TP-1 | G-TP-1 | G-TP-2 | G-TP-2 | G-TP-2 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-736C-1 | G-SB-737-1 | G-SB-738-2 | G-SB-738-2-AVG | G-SB-738-2-D | G-SB-739-2 | G-TP-1-3-1-2 | G-TP-1-4-1-2 | G-TP-2-1-1-3 | G-TP-2-2-1-3 | G-TP-2-4-1-3 |
| SAMPLE DATE | 20091112 | 20091021 | 20091008 | 20091008 | 20091008 | 20091008 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.2E-06 | 4.3E-07 | 2.0E-08 | 1.8E-08 | 1.6E-08 | 9.4E-08 | 4.1E-05 | | 7.3E-09 | | 2.0E-07 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.2E-06 | 4.3E-07 | 2.0E-08 | 1.8E-08 | 1.6E-08 | 9.4E-08 | 4.1E-05 | | 7.3E-09 | | 2.0E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-04 | 9.3E-06 | 4.3E-07 | 3.9E-07 | 3.4E-07 | 2.0E-06 | 8.8E-04 | | 1.6E-07 | | 4.4E-06 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-04 | 9.3E-06 | 4.3E-07 | 3.9E-07 | 3.4E-07 | 2.0E-06 | 8.8E-04 | | 1.6E-07 | | 4.4E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | G-TP-2 | G-TP-2 | SB-091 | SB-091 | SB-091A | SB-091B | SB-091C | SB-092 | SB-092 | SB-092C | SB-092D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-2-6-1-2 | G-TP-2-7-1-2 | G-SB-91RE-1 | G-SB-91RE-2 | G-SB-91REA-1 | G-SB-91REB-1 | G-SB-91REC-1 | G-SB-92RE-1 | G-SB-92RE-2 | G-SB-92REC-1 | G-SB-92RED-1 |
| SAMPLE DATE | 20100921 | 20100921 | 20090930 | 20090930 | 20091030 | 20091102 | 20091102 | 20090929 | 20090929 | 20091102 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 2 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.4E-06 | | 4.6E-05 | 3.7E-07 | 2.1E-07 | 2.4E-09 | 7.9E-07 | 2.2E-07 | 2.5E-07 | 7.3E-08 | 7.5E-08 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | 2.0E-06 | 1.2E-06 | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.4E-06 | | 4.6E-05 | 3.7E-07 | 2.1E-07 | 2.4E-09 | 7.9E-07 | 2.2E-06 | 1.5E-06 | 7.3E-08 | 7.5E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.6E-05 | | 1.0E-03 | 8.0E-06 | 4.6E-06 | 5.3E-08 | 1.7E-05 | 4.9E-06 | 5.3E-06 | 1.6E-06 | 1.6E-06 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | 1.5E-05 | 9.4E-06 | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.6E-05 | | 1.0E-03 | 8.0E-06 | 4.6E-06 | 5.3E-08 | 1.7E-05 | 2.0E-05 | 1.5E-05 | 1.6E-06 | 1.6E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-092D | SB-092D | SB-183 | SB-194 | SB-195 | SB-196 | SB-197 | SB-198 | SB-199 | SB-740 | SB-741 | SB-742 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RED-1-AVG | G-SB-92RED-1-D | SB-183-SS | SB-194-SS | SB-195-SS | SB-196-SS | SB-197-SS | SB-198-SS | SB-199-SS | G-SB-740-2 | G-SB-741-2 | G-SB-742-2 |
| SAMPLE DATE | 20091102 | 20091102 | 20041102 | 20050511 | 20050510 | 20050511 | 20050511 | 20050511 | 20050511 | 20091008 | 20091009 | 20091009 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SS | SS | SS | SS | SS | SB | SB | SB |
| TOP DEPTH | 1 | 1 | | | | | | | | 2 | 2 | 2 |
| BOTTOM DEPTH | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.0E-07 | 1.2E-07 | | 1.8E-06 | 3.9E-07 | 4.3E-06 | 4.0E-07 | 7.8E-07 | 6.4E-07 | 3.6E-09 | 8.1E-09 | 3.7E-08 |
| AROCLOR-1254 | | | | 1.8E-08 | 1.9E-08 | 1.7E-08 | 2.0E-08 | 1.2E-08 | 1.8E-08 | | | |
| AROCLOR-1260 | | | | 1.8E-08 | 1.9E-08 | 1.3E-08 | 2.0E-08 | 1.8E-08 | 1.8E-08 | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | 3.7E-07 | 3.7E-07 | 1.8E-07 | 1.8E-06 | 3.7E-07 | 5.5E-07 | | | |
| CADMIUM | | | | 2.3E-12 | 4.5E-12 | 4.5E-12 | 6.8E-12 | 4.5E-12 | 2.3E-12 | | | |
| COBALT | | | | 1.6E-09 | 3.6E-09 | 7.3E-10 | 1.2E-08 | 1.3E-09 | 1.7E-09 | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| NICKEL | | | | 7.2E-11 | 7.2E-11 | 3.3E-11 | 1.2E-10 | 5.3E-11 | 3.9E-11 | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | 3.1E-07 | 4.0E-07 | 3.1E-07 | 5.5E-07 | 3.6E-07 | 3.8E-07 | | | |
| TOTAL CANCER RISK | 1.0E-07 | 1.2E-07 | | 2.5E-06 | 1.2E-06 | 4.8E-06 | 2.8E-06 | 1.5E-06 | 1.6E-06 | 3.6E-09 | 8.1E-09 | 3.7E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.2E-06 | 2.7E-06 | | 3.9E-05 | 8.4E-06 | 9.3E-05 | 8.7E-06 | 1.7E-05 | 1.4E-05 | 7.9E-08 | 1.8E-07 | 7.9E-07 |
| AROCLOR-1254 | | | | 8.9E-08 | 9.4E-08 | 8.7E-08 | 9.9E-08 | 5.9E-08 | 9.2E-08 | | | |
| AROCLOR-1260 | | | | 8.9E-08 | 9.4E-08 | 6.4E-08 | 9.9E-08 | 8.9E-08 | 9.2E-08 | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | 2.8E-06 | 2.8E-06 | 1.4E-06 | 1.4E-05 | 2.8E-06 | 4.3E-06 | | | |
| CADMIUM | | | | 4.6E-12 | 9.2E-12 | 9.2E-12 | 1.4E-11 | 9.2E-12 | 4.6E-12 | | | |
| COBALT | | | | 3.3E-09 | 7.2E-09 | 1.5E-09 | 2.3E-08 | 2.7E-09 | 3.5E-09 | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| NICKEL | | | | 1.5E-10 | 1.5E-10 | 6.6E-11 | 2.4E-10 | 1.1E-10 | 7.9E-11 | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | 4.6E-06 | 6.1E-06 | 4.7E-06 | 8.2E-06 | 5.4E-06 | 5.7E-06 | | | |
| TOTAL CANCER RISK | 2.2E-06 | 2.7E-06 | | 4.6E-05 | 1.8E-05 | 1.0E-04 | 3.1E-05 | 2.5E-05 | 2.4E-05 | 7.9E-08 | 1.8E-07 | 7.9E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-743 | SB-744 | SB-745 | SB-745A | SB-745B | SB-745C | SB-746 | SB-747 | SB-747 | SB-747 | SB-748 | SB-749 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-743-2 | G-SB-744-2 | G-SB-745-2 | G-SB-745A-2 | G-SB-745B-2 | G-SB-745C-2 | G-SB-746-2 | G-SB-747-2 | G-SB-747-2-AVG | G-SB-747-2-D | G-SB-748-2 | G-SB-749-2 |
| SAMPLE DATE | 20091009 | 20091009 | 20091009 | 20091021 | 20091021 | 20091021 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.0E-07 | 2.4E-07 | 9.6E-07 | 2.8E-09 | 2.6E-09 | 9.2E-06 | 4.9E-07 | 3.8E-09 | 1.8E-07 | 3.6E-07 | 3.8E-09 | 8.5E-09 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-07 | 2.4E-07 | 9.6E-07 | 2.8E-09 | 2.6E-09 | 9.2E-06 | 4.9E-07 | 3.8E-09 | 1.8E-07 | 3.6E-07 | 3.8E-09 | 8.5E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.4E-06 | 5.3E-06 | 2.1E-05 | 6.0E-08 | 5.6E-08 | 2.0E-04 | 1.1E-05 | 8.3E-08 | 4.0E-06 | 7.9E-06 | 8.3E-08 | 1.9E-07 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.4E-06 | 5.3E-06 | 2.1E-05 | 6.0E-08 | 5.6E-08 | 2.0E-04 | 1.1E-05 | 8.3E-08 | 4.0E-06 | 7.9E-06 | 8.3E-08 | 1.9E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-750 | SB-751 | SB-752 | SB-753 | SB-754 | SB-755 | SB-756 | SB-757 | SB-758 | SB-759 | SB-760 | SB-761 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-750-2 | G-SB-751-2 | G-SB-752-2 | G-SB-753-2 | G-SB-754-2 | G-SB-755-2 | G-SB-756-2 | G-SB-757-2 | G-SB-758-2 | G-SB-759-1 | G-SB-760-1 | G-SB-761-1 |
| SAMPLE DATE | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091103 | 20091103 | 20091103 | 20091103 | 20091113 | 20091113 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 6.4E-08 | 5.9E-08 | 2.8E-09 | 2.1E-05 | 2.8E-09 | 1.1E-05 | 3.9E-07 | 4.3E-06 | 2.6E-06 | 3.8E-08 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 6.4E-08 | 5.9E-08 | 2.8E-09 | 2.1E-05 | 2.8E-09 | 1.1E-05 | 3.9E-07 | 4.3E-06 | 2.6E-06 | 3.8E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 1.4E-06 | 1.3E-06 | 6.0E-08 | 4.5E-04 | 6.0E-08 | 2.4E-04 | 8.4E-06 | 9.4E-05 | 5.6E-05 | 8.3E-07 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 1.4E-06 | 1.3E-06 | 6.0E-08 | 4.5E-04 | 6.0E-08 | 2.4E-04 | 8.4E-06 | 9.4E-05 | 5.6E-05 | 8.3E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-761A | SB-761B | SB-761C | SB-761D | SB-762 | SB-762A | SB-762B | SB-762C | SB-762D | SB-763 | SB-763A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761A-1 | G-SB-761B-1 | G-SB-761C-1 | G-SB-761D-1 | G-SB-762-1 | G-SB-762A-1 | G-SB-762B-1 | G-SB-762C-1 | G-SB-762D-1 | G-SB-763-1 | G-SB-763A-1 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091001 | 20091022 | 20091023 | 20091022 | 20091022 | 20091001 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.4E-07 | 4.5E-07 | 1.3E-04 | 1.3E-04 | 2.8E-09 | 1.6E-06 | 2.6E-09 | 2.6E-07 | 2.3E-07 | 4.5E-08 | 2.6E-06 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.4E-07 | 4.5E-07 | 1.3E-04 | 1.3E-04 | 2.8E-09 | 1.6E-06 | 2.6E-09 | 2.6E-07 | 2.3E-07 | 4.5E-08 | 2.6E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.6E-05 | 9.9E-06 | 2.8E-03 | 2.9E-03 | 6.0E-08 | 3.5E-05 | 5.6E-08 | 5.7E-06 | 5.0E-06 | 9.7E-07 | 5.6E-05 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.6E-05 | 9.9E-06 | 2.8E-03 | 2.9E-03 | 6.0E-08 | 3.5E-05 | 5.6E-08 | 5.7E-06 | 5.0E-06 | 9.7E-07 | 5.6E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-763B | SB-763C | SB-763D | SB-764 | SB-764A | SB-764B | SB-764C | SB-764D | SB-765 | SB-765A | SB-765B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763B-1 | G-SB-763C-1 | G-SB-763D-1 | G-SB-764-1 | G-SB-764A-1 | G-SB-764B-1 | G-SB-764C-1 | G-SB-764D-1 | G-SB-765-1 | G-SB-765A-1 | G-SB-765B-1 |
| SAMPLE DATE | 20091027 | 20091023 | 20091023 | 20091002 | 20091027 | 20091113 | 20091027 | 20091027 | 20091002 | 20091028 | 20091113 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.9E-07 | 6.9E-07 | 2.5E-07 | 9.2E-08 | 2.0E-06 | 7.3E-08 | 9.1E-05 | 1.3E-04 | 8.5E-09 | 2.1E-06 | 1.8E-07 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.9E-07 | 6.9E-07 | 2.5E-07 | 9.2E-08 | 2.0E-06 | 7.3E-08 | 9.1E-05 | 1.3E-04 | 8.5E-09 | 2.1E-06 | 1.8E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.3E-06 | 1.5E-05 | 5.3E-06 | 2.0E-06 | 4.4E-05 | 1.6E-06 | 2.0E-03 | 2.9E-03 | 1.8E-07 | 4.7E-05 | 4.0E-06 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.3E-06 | 1.5E-05 | 5.3E-06 | 2.0E-06 | 4.4E-05 | 1.6E-06 | 2.0E-03 | 2.9E-03 | 1.8E-07 | 4.7E-05 | 4.0E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-765C | SB-765D | SB-803 | SB-804 | SB-805 | SB-806 | SB-807 | SB-808 | SB-809 | SB-810 | SB-811 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765C-1 | G-SB-765D-1 | G-SB-803-SS | G-SB-804-SS | G-SB-805-SS | G-SB-806-SS | G-SB-807-SS | G-SB-808-SS | G-SB-809-SS | G-SB-810-SS | G-SB-811-SS |
| SAMPLE DATE | 20091028 | 20091028 | 20100826 | 20100823 | 20100824 | 20100824 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | | | | | | | | | |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-06 | 1.3E-07 | 6.8E-09 | 6.8E-09 | 6.6E-09 | 2.0E-05 | 6.8E-08 | 1.2E-06 | 5.6E-08 | 7.6E-09 | 4.7E-08 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-06 | 1.3E-07 | 6.8E-09 | 6.8E-09 | 6.6E-09 | 2.0E-05 | 6.8E-08 | 1.2E-06 | 5.6E-08 | 7.6E-09 | 4.7E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.4E-05 | 2.8E-06 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 4.3E-04 | 1.5E-06 | 2.6E-05 | 1.2E-06 | 1.7E-07 | 1.0E-06 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.4E-05 | 2.8E-06 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 4.3E-04 | 1.5E-06 | 2.6E-05 | 1.2E-06 | 1.7E-07 | 1.0E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-812 | SB-813 | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-086 | SB-091 | SB-092 | SB-254 | SB-254 | SB-254 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-812-SS | G-SB-813-SS | SB-81-SS | SB-82-SS | SB-83-SS | SB-84-SS | SB-85-SS | SB-86-SS | SB-91-SS | SB-92-SS | SB-254-SS[12] | SB-254-SS[18] | SB-254-SS[6] |
| SAMPLE DATE | 20100824 | 20100826 | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20040927 | 20040927 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SB | SB | SS |
| TOP DEPTH | | | | | | | | | | | 1 | 1.5 | 0.5 |
| BOTTOM DEPTH | 1 | 1 | | | | | | | | | 1 | 1.5 | 0.5 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.3E-07 | 6.6E-09 | 1.3E-06 | 3.6E-06 | 6.9E-07 | 1.8E-05 | 1.7E-05 | 6.2E-06 | 1.3E-04 | 7.1E-05 | 2.3E-07 | 1.1E-07 | 6.0E-07 |
| AROCLOR-1254 | | | 1.6E-07 | 1.5E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.5E-07 | 1.4E-07 | 1.3E-07 | | | 1.8E-08 |
| AROCLOR-1260 | | | 1.6E-07 | 1.5E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 4.1E-07 | 7.8E-07 | 1.3E-07 | | | 1.1E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | 1.3E-06 | 7.3E-07 | 3.4E-07 | 9.9E-07 | 1.1E-06 | 1.2E-06 | 7.7E-07 | 1.4E-05 | | | |
| CADMIUM | | | 7.3E-11 | 5.9E-11 | 6.4E-11 | 5.7E-11 | 6.4E-10 | 2.6E-10 | 5.7E-11 | 6.1E-11 | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| NICKEL | | | 7.9E-11 | 8.5E-11 | 9.2E-11 | 5.2E-11 | 8.5E-11 | 1.8E-09 | 1.4E-10 | 1.8E-09 | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 5.8E-07 | 5.8E-07 | 4.1E-07 | 5.2E-07 | 1.3E-06 | 8.3E-07 | 6.9E-07 | 9.4E-07 | | | |
| TOTAL CANCER RISK | 1.3E-07 | 6.6E-09 | 3.5E-06 | 5.3E-06 | 1.7E-06 | 2.0E-05 | 2.0E-05 | 8.7E-06 | 1.3E-04 | 8.6E-05 | 2.3E-07 | 1.1E-07 | 6.3E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-06 | 1.4E-07 | 2.8E-05 | 7.9E-05 | 1.5E-05 | 4.0E-04 | 3.7E-04 | 1.3E-04 | 2.9E-03 | 1.5E-03 | 5.0E-06 | 2.4E-06 | 1.3E-05 |
| AROCLOR-1254 | | | 8.2E-07 | 7.7E-07 | 7.2E-07 | 6.9E-07 | 7.2E-07 | 7.4E-07 | 7.2E-07 | 6.4E-07 | | | 8.9E-08 |
| AROCLOR-1260 | | | 8.2E-07 | 7.7E-07 | 7.2E-07 | 6.9E-07 | 7.2E-07 | 2.0E-06 | 3.9E-06 | 6.4E-07 | | | 5.4E-08 |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | 1.0E-05 | 5.7E-06 | 2.6E-06 | 7.7E-06 | 8.5E-06 | 9.1E-06 | 6.0E-06 | 1.1E-04 | | | |
| CADMIUM | | | 1.5E-10 | 1.2E-10 | 1.3E-10 | 1.1E-10 | 1.3E-09 | 5.2E-10 | 1.1E-10 | 1.2E-10 | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| NICKEL | | | 1.6E-10 | 1.7E-10 | 1.9E-10 | 1.0E-10 | 1.7E-10 | 3.7E-09 | 2.8E-10 | 3.6E-09 | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 8.7E-06 | 8.7E-06 | 6.2E-06 | 7.8E-06 | 2.0E-05 | 1.2E-05 | 1.0E-05 | 1.4E-05 | | | |
| TOTAL CANCER RISK | 2.8E-06 | 1.4E-07 | 4.9E-05 | 9.5E-05 | 2.5E-05 | 4.1E-04 | 4.0E-04 | 1.6E-04 | 2.9E-03 | 1.7E-03 | 5.0E-06 | 2.4E-06 | 1.3E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-255 | SB-255 | SB-255 | SB-256 | SB-256 | SB-256 | SB-257 | SB-257 | SB-257 | SB-258 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-255-SS[12] | SB-255-SS[18] | SB-255-SS[6] | SB-256-SS[12] | SB-256-SS[18] | SB-256-SS[6] | SB-257-SS[12] | SB-257-SS[18] | SB-257-SS[6] | SB-258-SS[12] |
| SAMPLE DATE | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SB | SB | SS | SB | SB | SS | SB |
| TOP DEPTH | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| BOTTOM DEPTH | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.1E-07 | 1.3E-07 | 4.6E-06 | 1.3E-07 | 1.3E-07 | 3.3E-07 | | | 4.1E-07 | 1.4E-07 |
| AROCLOR-1254 | | | 1.7E-08 | | | 1.8E-08 | | | 1.8E-08 | |
| AROCLOR-1260 | | | 8.2E-09 | | | 1.8E-08 | | | 1.8E-08 | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 3.1E-07 | 1.3E-07 | 4.7E-06 | 1.3E-07 | 1.3E-07 | 3.7E-07 | | | 4.4E-07 | 1.4E-07 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-06 | 2.8E-06 | 1.0E-04 | 2.9E-06 | 2.9E-06 | 7.1E-06 | | | 8.8E-06 | 3.1E-06 |
| AROCLOR-1254 | | | 8.4E-08 | | | 9.2E-08 | | | 9.2E-08 | |
| AROCLOR-1260 | | | 4.1E-08 | | | 9.2E-08 | | | 8.9E-08 | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 6.8E-06 | 2.8E-06 | 1.0E-04 | 2.9E-06 | 2.9E-06 | 7.3E-06 | | | 9.0E-06 | 3.1E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-258 | SB-258 | SB-259 | SB-259 | SB-259 | SB-260 | SB-260 | SB-260 | SB-261 | SB-261 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-258-SS[18] | SB-258-SS[6] | SB-259-SS[12] | SB-259-SS[18] | SB-259-SS[6] | SB-260-SS[12] | SB-260-SS[18] | SB-260-SS[6] | SB-261-SS[12] | SB-261-SS[18] |
| SAMPLE DATE | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SB | SS | SB | SB | SS | SB | SB |
| TOP DEPTH | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 |
| BOTTOM DEPTH | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 | 0.5 | 1 | 1.5 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-07 | 3.7E-06 | 1.0E-06 | 1.2E-06 | 1.6E-06 | 8.4E-07 | 2.6E-05 | 9.8E-06 | 5.0E-07 | 7.8E-06 |
| AROCLOR-1254 | | 1.9E-08 | | | 1.9E-08 | | | 1.8E-08 | | |
| AROCLOR-1260 | | 1.2E-06 | | | 1.0E-07 | | | 3.8E-07 | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-07 | 4.9E-06 | 1.0E-06 | 1.2E-06 | 1.7E-06 | 8.4E-07 | 2.6E-05 | 1.0E-05 | 5.0E-07 | 7.8E-06 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.1E-06 | 8.1E-05 | 2.2E-05 | 2.6E-05 | 3.5E-05 | 1.8E-05 | 5.6E-04 | 2.1E-04 | 1.1E-05 | 1.7E-04 |
| AROCLOR-1254 | | 9.7E-08 | | | 9.4E-08 | | | 9.2E-08 | | |
| AROCLOR-1260 | | 5.9E-06 | | | 5.0E-07 | | | 1.9E-06 | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 3.1E-06 | 8.7E-05 | 2.2E-05 | 2.6E-05 | 3.5E-05 | 1.8E-05 | 5.6E-04 | 2.1E-04 | 1.1E-05 | 1.7E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-261 | SB-410 | SB-411 | SB-412 | SB-413 | SB-414 | SB-415 | SB-416 | SB-417 | SB-418 | SB-419 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-261-SS[6] | SB-410-0102 | SB-411-0102 | SB-412-0102 | SB-413-0102 | SB-414-0102 | SB-415-0102 | SB-416-0102 | SB-417-0102 | SB-418-0102 | SB-419-0102 |
| SAMPLE DATE | 20050510 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 0.5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 0.5 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.6E-07 | 4.2E-08 | 2.8E-09 | 5.5E-07 | 4.9E-07 | 2.4E-09 | 1.0E-05 | 7.3E-07 | 3.8E-08 | 4.5E-08 | 1.5E-07 |
| AROCLOR-1254 | 1.9E-08 | | | | | | | | | | |
| AROCLOR-1260 | 1.9E-08 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.0E-07 | 4.2E-08 | 2.8E-09 | 5.5E-07 | 4.9E-07 | 2.4E-09 | 1.0E-05 | 7.3E-07 | 3.8E-08 | 4.5E-08 | 1.5E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.0E-05 | 9.0E-07 | 6.0E-08 | 1.2E-05 | 1.1E-05 | 5.3E-08 | 2.3E-04 | 1.6E-05 | 8.3E-07 | 9.8E-07 | 3.2E-06 |
| AROCLOR-1254 | 9.4E-08 | | | | | | | | | | |
| AROCLOR-1260 | 9.4E-08 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.0E-05 | 9.0E-07 | 6.0E-08 | 1.2E-05 | 1.1E-05 | 5.3E-08 | 2.3E-04 | 1.6E-05 | 8.3E-07 | 9.8E-07 | 3.2E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-420 | SB-421 | SB-422 | SB-423 | SB-424 | SB-425 | SB-426 | SB-427 | SB-428 | SB-429 | SB-430 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-420-0102 | SB-421-0102 | SB-422-0102 | SB-423-0102 | SB-424-0102 | SB-425-0102 | SB-426-0102 | SB-427-0102 | SB-428-0102 | SB-429-0102 | SB-430-0102 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.3E-08 | 2.8E-09 | 2.6E-09 | 3.4E-08 | 3.4E-06 | 2.6E-07 | 2.8E-07 | 1.2E-06 | 2.2E-07 | 4.2E-08 | 6.9E-06 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.3E-08 | 2.8E-09 | 2.6E-09 | 3.4E-08 | 3.4E-06 | 2.6E-07 | 2.8E-07 | 1.2E-06 | 2.2E-07 | 4.2E-08 | 6.9E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.6E-06 | 6.0E-08 | 5.6E-08 | 7.4E-07 | 7.4E-05 | 5.6E-06 | 6.0E-06 | 2.6E-05 | 4.8E-06 | 9.0E-07 | 1.5E-04 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.6E-06 | 6.0E-08 | 5.6E-08 | 7.4E-07 | 7.4E-05 | 5.6E-06 | 6.0E-06 | 2.6E-05 | 4.8E-06 | 9.0E-07 | 1.5E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-431 | SB-432 | SB-433 | SB-434 | SB-435 | SB-436 | SB-437 | SB-438 | SB-439 | SB-440 | SB-441 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-431-0102 | SB-432-0102 | SB-433-0102 | SB-434-0102 | SB-435-0102 | SB-436-0102 | SB-437-0102 | SB-438-0102 | SB-439-0102 | SB-440-0102 | SB-441-0102 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-06 | 2.4E-09 | 1.6E-07 | 2.6E-09 | 6.6E-08 | 1.6E-07 | 8.0E-07 | 2.4E-09 | 5.2E-08 | 2.6E-09 | 4.2E-07 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-06 | 2.4E-09 | 1.6E-07 | 2.6E-09 | 6.6E-08 | 1.6E-07 | 8.0E-07 | 2.4E-09 | 5.2E-08 | 2.6E-09 | 4.2E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.9E-05 | 5.3E-08 | 3.4E-06 | 5.6E-08 | 1.4E-06 | 3.5E-06 | 1.7E-05 | 5.3E-08 | 1.1E-06 | 5.6E-08 | 9.0E-06 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.9E-05 | 5.3E-08 | 3.4E-06 | 5.6E-08 | 1.4E-06 | 3.5E-06 | 1.7E-05 | 5.3E-08 | 1.1E-06 | 5.6E-08 | 9.0E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-442 | SB-443 | SB-444 | SB-445 | SB-446 | SB-447 | SB-448 | SB-449 | SB-450 | SB-451 | SB-452 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-442-0102 | SB-443-0102 | SB-444-0102 | SB-445-0102 | SB-446-0102 | SB-447-0102 | SB-448-0102 | SB-449-0102 | SB-450-0102 | SB-451-0102 | SB-452-0102 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.2E-08 | 1.8E-07 | 3.0E-08 | 5.9E-08 | 3.8E-07 | 2.6E-09 | 7.6E-08 | 2.4E-09 | 4.2E-08 | 2.6E-09 | 4.2E-07 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.2E-08 | 1.8E-07 | 3.0E-08 | 5.9E-08 | 3.8E-07 | 2.6E-09 | 7.6E-08 | 2.4E-09 | 4.2E-08 | 2.6E-09 | 4.2E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-06 | 4.0E-06 | 6.5E-07 | 1.3E-06 | 8.3E-06 | 5.6E-08 | 1.7E-06 | 5.3E-08 | 9.0E-07 | 5.6E-08 | 9.0E-06 |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-06 | 4.0E-06 | 6.5E-07 | 1.3E-06 | 8.3E-06 | 5.6E-08 | 1.7E-06 | 5.3E-08 | 9.0E-07 | 5.6E-08 | 9.0E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-453 | SB-454 | SB-455 | SB-456 | SB-457 | SB-457 | SB-458 | SB-458 | SB-459 | SB-459 | SB-460 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-453-0102 | SB-454-0102 | SB-455-0102 | SB-456-0102 | SB-457-0000 | SB-457-0102 | SB-458-0000 | SB-458-0102 | SB-459-0000 | SB-459-0102 | SB-460-0000 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SB | SS | SB | SS | SB | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | | 1 | | 1 | | 1 | |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | | 2 | | 2 | | 2 | |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.7E-08 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 1.0E-06 | 9.0E-07 | 3.1E-08 | 2.6E-09 | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | 5.1E-07 | 5.9E-07 | 8.4E-07 | 8.8E-07 | 3.3E-07 | 6.6E-07 | 3.6E-07 |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.7E-08 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 1.6E-06 | 1.5E-06 | 8.7E-07 | 8.8E-07 | 3.3E-07 | 6.6E-07 | 3.6E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.9E-07 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 2.3E-05 | 2.0E-05 | 6.7E-07 | 5.6E-08 | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | 4.0E-06 | 4.6E-06 | 6.6E-06 | 6.8E-06 | 2.6E-06 | 5.1E-06 | 2.8E-06 |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.9E-07 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 2.7E-05 | 2.4E-05 | 7.2E-06 | 6.9E-06 | 2.6E-06 | 5.1E-06 | 2.8E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-460 | SB-461 | SB-461 | SB-494 | SB-494 | SB-495 | SB-495 | SB-496 | SB-496 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-460-0102 | SB-461-0000 | SB-461-0102 | SB-494-0000 | SB-494-0102 | SB-495-0000 | SB-495-0102 | SB-496-0000 | SB-496-0102 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | 1 | | 1 | | 1 | | 1 | | 1 |
| BOTTOM DEPTH | 2 | | 2 | | 2 | | 2 | | 2 |
| **INDUSTRIAL** | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | |
| ANTIMONY | | | | | | | | | |
| ARSENIC | 7.0E-07 | 2.9E-07 | 9.1E-07 | 4.8E-07 | 5.9E-07 | 3.4E-07 | 3.4E-07 | 4.4E-07 | 4.0E-07 |
| CADMIUM | | | | | | | | | |
| COBALT | | | | | | | | | |
| IRON | | | | | | | | | |
| LEAD | | | | | | | | | |
| MERCURY | | | | | | | | | |
| NICKEL | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 7.0E-07 | 2.9E-07 | 9.1E-07 | 4.8E-07 | 5.9E-07 | 3.4E-07 | 3.4E-07 | 4.4E-07 | 4.0E-07 |
| **RESIDENTIAL** | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | |
| ANTIMONY | | | | | | | | | |
| ARSENIC | 5.4E-06 | 2.3E-06 | 7.1E-06 | 3.7E-06 | 4.6E-06 | 2.6E-06 | 2.6E-06 | 3.4E-06 | 3.1E-06 |
| CADMIUM | | | | | | | | | |
| COBALT | | | | | | | | | |
| IRON | | | | | | | | | |
| LEAD | | | | | | | | | |
| MERCURY | | | | | | | | | |
| NICKEL | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 5.4E-06 | 2.3E-06 | 7.1E-06 | 3.7E-06 | 4.6E-06 | 2.6E-06 | 2.6E-06 | 3.4E-06 | 3.1E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-092 | SB-092 | SB-194 | SB-195 | SB-196 | SB-197 | SB-198 | SB-199 | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RE-1 | G-SB-92RE-2 | SB-194-SS | SB-195-SS | SB-196-SS | SB-197-SS | SB-198-SS | SB-199-SS | SB-81-SS | SB-82-SS | SB-83-SS | SB-84-SS | SB-85-SS |
| SAMPLE DATE | 20090929 | 20090929 | 20050511 | 20050510 | 20050511 | 20050511 | 20050511 | 20050511 | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 2 | | | | | | | | | | | |
| BOTTOM DEPTH | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | | | | | |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| AROCLOR-1254 | | | 1.3E-03 | 1.3E-03 | 1.2E-03 | 1.4E-03 | 8.4E-04 | 1.3E-03 | 1.1E-02 | 1.1E-02 | 1.0E-02 | 9.8E-03 | 1.0E-02 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | 1.4E-03 | 4.6E-03 | 2.1E-03 | 2.3E-03 | 1.6E-03 | 2.3E-03 | 3.7E-03 | 3.0E-03 | 3.2E-03 | 2.9E-03 | 9.0E-03 |
| ARSENIC | 1.2E-02 | 7.5E-03 | 2.3E-03 | 2.3E-03 | 1.1E-03 | 1.1E-02 | 2.3E-03 | 3.4E-03 | 8.2E-03 | 4.6E-03 | 2.1E-03 | 6.2E-03 | 6.8E-03 |
| CADMIUM | | | 6.2E-05 | 1.2E-04 | 1.2E-04 | 1.9E-04 | 1.2E-04 | 6.2E-05 | 2.0E-03 | 1.6E-03 | 1.7E-03 | 1.6E-03 | 1.7E-02 |
| COBALT | | | 1.3E-02 | 2.9E-02 | 5.9E-03 | 9.5E-02 | 1.1E-02 | 1.4E-02 | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MERCURY | | | 9.4E-05 | 9.4E-05 | 9.4E-05 | 9.4E-05 | 1.9E-04 | 9.4E-05 | 1.0E-03 | 1.1E-03 | 2.6E-04 | 2.0E-02 | 6.6E-03 |
| NICKEL | | | 1.2E-03 | 1.2E-03 | 5.3E-04 | 1.9E-03 | 8.5E-04 | 6.4E-04 | 1.3E-03 | 1.4E-03 | 1.5E-03 | 8.4E-04 | 1.4E-03 |
| VANADIUM | | | 2.2E-03 | 2.8E-03 | 2.3E-03 | 4.3E-03 | 2.5E-03 | 2.9E-03 | | | | | |
| HEXAVALENT CHROMIUM | | | 5.7E-04 | 7.5E-04 | 5.8E-04 | 1.0E-03 | 6.7E-04 | 7.1E-04 | 1.1E-03 | 1.1E-03 | 7.7E-04 | 9.7E-04 | 2.5E-03 |
| TOTAL HAZARD INDEX | 1.2E-02 | 7.5E-03 | 2.2E-02 | 4.3E-02 | 1.4E-02 | 1.2E-01 | 2.0E-02 | 2.6E-02 | 2.9E-02 | 2.4E-02 | 2.0E-02 | 4.2E-02 | 5.4E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| AROCLOR-1254 | | | 1.6E-02 | 1.7E-02 | 1.6E-02 | 1.8E-02 | 1.1E-02 | 1.6E-02 | 1.5E-01 | 1.4E-01 | 1.3E-01 | 1.2E-01 | 1.3E-01 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | 2.3E-02 | 7.6E-02 | 3.4E-02 | 3.8E-02 | 2.7E-02 | 3.8E-02 | 6.1E-02 | 4.9E-02 | 5.3E-02 | 4.7E-02 | 1.5E-01 |
| ARSENIC | 2.5E-01 | 1.5E-01 | 4.6E-02 | 4.6E-02 | 2.3E-02 | 2.3E-01 | 4.6E-02 | 6.9E-02 | 1.7E-01 | 9.2E-02 | 4.3E-02 | 1.2E-01 | 1.4E-01 |
| CADMIUM | | | 1.4E-03 | 2.7E-03 | 2.7E-03 | 4.1E-03 | 2.7E-03 | 1.4E-03 | 4.3E-02 | 3.5E-02 | 3.8E-02 | 3.4E-02 | 3.8E-01 |
| COBALT | | | 3.2E-01 | 6.9E-01 | 1.4E-01 | 2.2E+00 | 2.5E-01 | 3.3E-01 | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MERCURY | | | 1.2E-03 | 1.2E-03 | 1.2E-03 | 1.2E-03 | 2.4E-03 | 1.2E-03 | 1.3E-02 | 1.4E-02 | 3.3E-03 | 2.5E-01 | 8.4E-02 |
| NICKEL | | | 1.2E-02 | 1.2E-02 | 5.5E-03 | 2.0E-02 | 8.7E-03 | 6.5E-03 | 1.3E-02 | 1.4E-02 | 1.5E-02 | 8.6E-03 | 1.4E-02 |
| VANADIUM | | | 5.3E-02 | 6.8E-02 | 5.5E-02 | 1.0E-01 | 5.8E-02 | 6.9E-02 | | | | | |
| HEXAVALENT CHROMIUM | | | 5.1E-03 | 6.6E-03 | 5.2E-03 | 8.9E-03 | 5.9E-03 | 6.2E-03 | 9.5E-03 | 9.5E-03 | 6.8E-03 | 8.6E-03 | 2.2E-02 |
| TOTAL HAZARD INDEX | 2.5E-01 | 1.5E-01 | 4.7E-01 | 9.2E-01 | 2.8E-01 | 2.7E+00 | 4.2E-01 | 5.4E-01 | 4.5E-01 | 3.5E-01 | 2.9E-01 | 6.0E-01 | 9.1E-01 |

**Legend**

Hazard Index Values

| |
|---|
| > 1E+2 |
| 1E+1 < 1E+2 |
| 1E+0 < 1E+1 |
| 2E-1 < 1E+0 |
| <2E-1 |

**TABLE E-4.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-086 | SB-091 | SB-092 | SB-254 | SB-255 | SB-256 | SB-257 | SB-258 | SB-259 | SB-260 | SB-261 | SB-457 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-86-SS | SB-91-SS | SB-92-SS | SB-254-SS[6] | SB-255-SS[6] | SB-256-SS[6] | SB-257-SS[6] | SB-258-SS[6] | SB-259-SS[6] | SB-260-SS[6] | SB-261-SS[6] | SB-457-0000 |
| SAMPLE DATE | 20041115 | 20040927 | 20040927 | 20050511 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS | SS |
| TOP DEPTH | | | | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | |
| BOTTOM DEPTH | | | | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 1.0E-02 | 1.0E-02 | 9.1E-03 | 1.3E-03 | 1.2E-03 | 1.3E-03 | 1.3E-03 | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | 3.0E-03 | 2.9E-03 | 3.1E-03 | | | | | | | | | |
| ARSENIC | 7.3E-03 | 4.8E-03 | 8.4E-02 | | | | | | | | | 3.2E-03 |
| CADMIUM | 7.1E-03 | 1.6E-03 | 1.7E-03 | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 1.9E-03 | 2.4E-04 | 2.6E-04 | | | | | | | | | |
| NICKEL | 3.0E-02 | 2.2E-03 | 2.9E-02 | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.5E-03 | 1.3E-03 | 1.7E-03 | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.1E-02 | 2.3E-02 | 1.3E-01 | 1.3E-03 | 1.2E-03 | 1.3E-03 | 1.3E-03 | 1.4E-03 | 1.3E-03 | 1.3E-03 | 1.3E-03 | 3.2E-03 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| AROCLOR-1254 | 1.3E-01 | 1.3E-01 | 1.2E-01 | 1.6E-02 | 1.5E-02 | 1.6E-02 | 1.6E-02 | 1.7E-02 | 1.7E-02 | 1.6E-02 | 1.7E-02 | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | 4.9E-02 | 4.7E-02 | 5.1E-02 | | | | | | | | | |
| ARSENIC | 1.5E-01 | 9.7E-02 | 1.7E+00 | | | | | | | | | 6.5E-02 |
| CADMIUM | 1.5E-01 | 3.4E-02 | 3.6E-02 | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 2.4E-02 | 3.0E-03 | 3.3E-03 | | | | | | | | | |
| NICKEL | 3.1E-01 | 2.3E-02 | 2.9E-01 | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 1.4E-02 | 1.1E-02 | 1.5E-02 | | | | | | | | | |
| TOTAL HAZARD INDEX | 8.3E-01 | 3.4E-01 | 2.2E+00 | 1.6E-02 | 1.5E-02 | 1.6E-02 | 1.6E-02 | 1.7E-02 | 1.7E-02 | 1.6E-02 | 1.7E-02 | 6.5E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-457 | SB-458 | SB-458 | SB-459 | SB-459 | SB-460 | SB-460 | SB-461 | SB-461 | SB-494 | SB-494 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-457-0102 | SB-458-0000 | SB-458-0102 | SB-459-0000 | SB-459-0102 | SB-460-0000 | SB-460-0102 | SB-461-0000 | SB-461-0102 | SB-494-0000 | SB-494-0102 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SS | SB | SS | SB | SS | SB | SS | SB | SS | SB |
| TOP DEPTH | 1 | | 1 | | 1 | | 1 | | 1 | | 1 |
| BOTTOM DEPTH | 2 | | 2 | | 2 | | 2 | | 2 | | 2 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | 3.7E-03 | 5.2E-03 | 5.5E-03 | 2.1E-03 | 4.1E-03 | 2.3E-03 | 4.3E-03 | 1.8E-03 | 5.7E-03 | 3.0E-03 | 3.7E-03 |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 3.7E-03 | 5.2E-03 | 5.5E-03 | 2.1E-03 | 4.1E-03 | 2.3E-03 | 4.3E-03 | 1.8E-03 | 5.7E-03 | 3.0E-03 | 3.7E-03 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | 7.4E-02 | 1.1E-01 | 1.1E-01 | 4.2E-02 | 8.3E-02 | 4.6E-02 | 8.8E-02 | 3.7E-02 | 1.2E-01 | 6.0E-02 | 7.4E-02 |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.4E-02 | 1.1E-01 | 1.1E-01 | 4.2E-02 | 8.3E-02 | 4.6E-02 | 8.8E-02 | 3.7E-02 | 1.2E-01 | 6.0E-02 | 7.4E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-495 | SB-495 | SB-496 | SB-496 |
|---|---|---|---|---|
| SAMPLE ID | SB-495-0000 | SB-495-0102 | SB-496-0000 | SB-496-0102 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SB | SS | SB |
| TOP DEPTH | | 1 | | 1 |
| BOTTOM DEPTH | | 2 | | 2 |
| **INDUSTRIAL** | | | | |
| BAP EQUIVALENT-HALFND | | | | |
| AROCLOR-1254 | | | | |
| AROCLOR-1260 | | | | |
| ANTIMONY | | | | |
| ARSENIC | 2.1E-03 | 2.1E-03 | 2.7E-03 | 2.5E-03 |
| CADMIUM | | | | |
| COBALT | | | | |
| IRON | | | | |
| LEAD | | | | |
| MERCURY | | | | |
| NICKEL | | | | |
| VANADIUM | | | | |
| HEXAVALENT CHROMIUM | | | | |
| TOTAL HAZARD INDEX | 2.1E-03 | 2.1E-03 | 2.7E-03 | 2.5E-03 |
| **RESIDENTIAL** | | | | |
| BAP EQUIVALENT-HALFND | | | | |
| AROCLOR-1254 | | | | |
| AROCLOR-1260 | | | | |
| ANTIMONY | | | | |
| ARSENIC | 4.3E-02 | 4.3E-02 | 5.5E-02 | 5.1E-02 |
| CADMIUM | | | | |
| COBALT | | | | |
| IRON | | | | |
| LEAD | | | | |
| MERCURY | | | | |
| NICKEL | | | | |
| VANADIUM | | | | |
| HEXAVALENT CHROMIUM | | | | |
| TOTAL HAZARD INDEX | 4.3E-02 | 4.3E-02 | 5.5E-02 | 5.1E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-194 | SB-194 | SB-194 | SB-196 | SB-196 | SB-196 | SB-196 | SB-196 | SB-196 | SB-196 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-194RE-3 | G-SB-194RE-4 | G-SB-194RE-5 | G-SB-196RE-10 | G-SB-196RE-6 | G-SB-196RE-7 | G-SB-196RE-7-AVG | G-SB-196RE-7-D | G-SB-196RE-8 | G-SB-196RE-9 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 10 | 6 | 7 | 7 | 7 | 8 | 9 |
| BOTTOM DEPTH | 3 | 4 | 5 | 10 | 6 | 7 | 7 | 7 | 8 | 9 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.5E-08 | 2.6E-09 | 1.8E-07 | 7.2E-08 | 1.5E-06 | 2.0E-07 | 1.6E-07 | 1.2E-07 | 2.8E-09 | 1.1E-06 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 3.5E-08 | 2.6E-09 | 1.8E-07 | 7.2E-08 | 1.5E-06 | 2.0E-07 | 1.6E-07 | 1.2E-07 | 2.8E-09 | 1.1E-06 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.6E-07 | 5.6E-08 | 3.8E-06 | 1.6E-06 | 3.2E-05 | 4.3E-06 | 3.4E-06 | 2.5E-06 | 6.0E-08 | 2.4E-05 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 7.6E-07 | 5.6E-08 | 3.8E-06 | 1.6E-06 | 3.2E-05 | 4.3E-06 | 3.4E-06 | 2.5E-06 | 6.0E-08 | 2.4E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-197 | SB-197 | SB-197 | SB-197 | SB-198 | SB-198 | SB-198 | SB-198 | SB-198 | SB-198 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-197RE-6 | G-SB-197RE-6-AVG | G-SB-197RE-6-D | G-SB-197RE-7 | G-SB-198RE-3 | G-SB-198RE-4 | G-SB-198RE-5 | G-SB-198RE-6 | G-SB-198RE-7 | G-SB-198RE-8 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20090929 | 20090929 | 20090929 | 20091019 | 20091019 | 20091019 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 6 | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 8 |
| BOTTOM DEPTH | 6 | 6 | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 8 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.2E-08 | 1.3E-07 | 1.7E-07 | 2.8E-09 | 1.2E-07 | 2.2E-06 | 3.0E-07 | 1.6E-06 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 8.2E-08 | 1.3E-07 | 1.7E-07 | 2.8E-09 | 1.2E-07 | 2.2E-06 | 3.0E-07 | 1.6E-06 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.8E-06 | 2.7E-06 | 3.7E-06 | 6.0E-08 | 2.6E-06 | 4.8E-05 | 6.6E-06 | 3.5E-05 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.8E-06 | 2.7E-06 | 3.7E-06 | 6.0E-08 | 2.6E-06 | 4.8E-05 | 6.6E-06 | 3.5E-05 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-198 | SB-199 | SB-199 | SB-255 | SB-255 | SB-255 | SB-424 | SB-424 | SB-424 | SB-424 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-198RE-9 | G-SB-199RE-6 | G-SB-199RE-7 | G-SB-255RE-3 | G-SB-255RE-4 | G-SB-255RE-5 | G-SB-424RE-5 | G-SB-424RE-5-AVG | G-SB-424RE-5-D | G-SB-424RE-6 |
| SAMPLE DATE | 20091019 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20090924 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 6 | 7 | 3 | 4 | 5 | 5 | 5 | 5 | 6 |
| BOTTOM DEPTH | 9 | 6 | 7 | 3 | 4 | 5 | 5 | 5 | 5 | 6 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 4.8E-08 | 4.4E-08 | 1.5E-07 | 2.6E-09 | 3.7E-07 | 6.0E-09 | 4.3E-09 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 4.8E-08 | 4.4E-08 | 1.5E-07 | 2.6E-09 | 3.7E-07 | 6.0E-09 | 4.3E-09 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 1.0E-06 | 9.5E-07 | 3.2E-06 | 5.6E-08 | 8.0E-06 | 1.3E-07 | 9.3E-08 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 1.0E-06 | 9.5E-07 | 3.2E-06 | 5.6E-08 | 8.0E-06 | 1.3E-07 | 9.3E-08 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-437 | SB-437 | SB-441 | SB-441 | SB-453 | SB-453 | SB-456 | SB-456 | SB-457 | SB-457 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-437RE-3 | G-SB-437RE-4 | G-SB-441RE-7 | G-SB-441RE-8 | G-SB-453RE-5 | G-SB-453RE-6 | G-SB-456RE-10 | G-SB-456RE-9 | G-SB-457RE-3 | G-SB-457RE-4 |
| SAMPLE DATE | 20090930 | 20090930 | 20090929 | 20090929 | 20091001 | 20091001 | 20090930 | 20090930 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 7 | 8 | 5 | 6 | 10 | 9 | 3 | 4 |
| BOTTOM DEPTH | 3 | 4 | 7 | 8 | 5 | 6 | 10 | 9 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.8E-07 | 3.8E-08 | 8.2E-08 | 8.1E-08 | 2.7E-07 | 4.9E-07 | 1.2E-07 | 4.6E-08 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.8E-07 | 3.8E-08 | 8.2E-08 | 8.1E-08 | 2.7E-07 | 4.9E-07 | 1.2E-07 | 4.6E-08 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 6.0E-06 | 8.2E-07 | 1.8E-06 | 1.8E-06 | 5.9E-06 | 1.1E-05 | 2.6E-06 | 1.0E-06 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 6.0E-06 | 8.2E-07 | 1.8E-06 | 1.8E-06 | 5.9E-06 | 1.1E-05 | 2.6E-06 | 1.0E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-653 | SB-653 | SB-653 | SB-653 | SB-653 | SB-653 | SB-653 | SB-653 | SB-653A | SB-653A | SB-653A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653-3 | G-SB-653-5 | G-SB-653-6 | G-SB-653-7 | G-SB-653-8 | G-SB-653-9 | G-SB-653-9-AVG | G-SB-653-9-D | G-SB-653A-3 | G-SB-653A-5 | G-SB-653A-7 |
| SAMPLE DATE | 20090930 | 20090930 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 9 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 9 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.2E-08 | 1.8E-05 | 1.4E-08 | 2.9E-09 | 2.4E-09 | 2.4E-09 | 2.5E-09 | 2.6E-09 | 2.4E-09 | 1.3E-05 | 2.4E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.2E-08 | 1.8E-05 | 1.4E-08 | 2.9E-09 | 2.4E-09 | 2.4E-09 | 2.5E-09 | 2.6E-09 | 2.4E-09 | 1.3E-05 | 2.4E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.3E-06 | 3.9E-04 | 2.9E-07 | 6.4E-08 | 5.3E-08 | 5.3E-08 | 5.4E-08 | 5.6E-08 | 5.3E-08 | 2.8E-04 | 5.3E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.3E-06 | 3.9E-04 | 2.9E-07 | 6.4E-08 | 5.3E-08 | 5.3E-08 | 5.4E-08 | 5.6E-08 | 5.3E-08 | 2.8E-04 | 5.3E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-653B | SB-653B | SB-653B | SB-653D | SB-653D | SB-653D | SB-654 | SB-654 | SB-654B | SB-654B | SB-654C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-653B-3 | G-SB-653B-5 | G-SB-653B-7 | G-SB-653D-3 | G-SB-653D-5 | G-SB-653D-7 | G-SB-654-3 | G-SB-654-5 | G-SB-654B-3 | G-SB-654B-5 | G-SB-654C-3 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 3 | 5 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.0E-07 | 3.4E-07 | 1.2E-07 | 2.6E-09 | 1.7E-07 | 2.6E-09 | 2.4E-07 | 2.3E-07 | 2.7E-08 | 3.5E-05 | 9.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.0E-07 | 3.4E-07 | 1.2E-07 | 2.6E-09 | 1.7E-07 | 2.6E-09 | 2.4E-07 | 2.3E-07 | 2.7E-08 | 3.5E-05 | 9.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.2E-06 | 7.4E-06 | 2.6E-06 | 5.6E-08 | 3.7E-06 | 5.6E-08 | 5.1E-06 | 5.0E-06 | 5.9E-07 | 7.6E-04 | 2.1E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.2E-06 | 7.4E-06 | 2.6E-06 | 5.6E-08 | 3.7E-06 | 5.6E-08 | 5.1E-06 | 5.0E-06 | 5.9E-07 | 7.6E-04 | 2.1E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-654C | SB-656 | SB-656 | SB-656 | SB-656 | SB-656 | SB-656 | SB-656C | SB-656C | SB-656C | SB-656C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-654C-5 | G-SB-656-3 | G-SB-656-5 | G-SB-656-6 | G-SB-656-7 | G-SB-656-8 | G-SB-656-9 | G-SB-656C-4 | G-SB-656C-6 | G-SB-656C-8 | G-SB-656C-8-AVG |
| SAMPLE DATE | 20091030 | 20090930 | 20090930 | 20091020 | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 6 | 7 | 8 | 9 | 4 | 6 | 8 | 8 |
| BOTTOM DEPTH | 5 | 3 | 5 | 6 | 7 | 8 | 9 | 4 | 6 | 8 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 3.4E-08 | 1.5E-06 | 6.1E-07 | 9.1E-09 | 2.8E-09 | 2.6E-09 | 1.1E-07 | 2.3E-07 | 2.8E-09 | 2.7E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 3.4E-08 | 1.5E-06 | 6.1E-07 | 9.1E-09 | 2.8E-09 | 2.6E-09 | 1.1E-07 | 2.3E-07 | 2.8E-09 | 2.7E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 7.4E-07 | 3.3E-05 | 1.3E-05 | 2.0E-07 | 6.0E-08 | 5.6E-08 | 2.4E-06 | 5.0E-06 | 6.0E-08 | 5.8E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 7.4E-07 | 3.3E-05 | 1.3E-05 | 2.0E-07 | 6.0E-08 | 5.6E-08 | 2.4E-06 | 5.0E-06 | 6.0E-08 | 5.8E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-656C | SB-656D | SB-656D | SB-656D | SB-657A | SB-657A | SB-657A | SB-657A | SB-657A | SB-657A |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-656C-8-D | G-SB-656D-4 | G-SB-656D-6 | G-SB-656D-8 | G-SB-657A-3 | G-SB-657A-5 | G-SB-657A-5-AVG | G-SB-657A-5-D | G-SB-657A-7 | G-SB-657A-9 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 6 | 8 | 3 | 5 | 5 | 5 | 7 | 9 |
| BOTTOM DEPTH | 8 | 4 | 6 | 8 | 3 | 5 | 5 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 7.7E-08 | 7.6E-08 | 5.7E-08 | 1.2E-07 | 4.2E-06 | 3.7E-06 | 3.3E-06 | 7.4E-07 | 2.1E-05 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 7.7E-08 | 7.6E-08 | 5.7E-08 | 1.2E-07 | 4.2E-06 | 3.7E-06 | 3.3E-06 | 7.4E-07 | 2.1E-05 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 1.7E-06 | 1.7E-06 | 1.2E-06 | 2.7E-06 | 9.1E-05 | 8.1E-05 | 7.1E-05 | 1.6E-05 | 4.4E-04 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 1.7E-06 | 1.7E-06 | 1.2E-06 | 2.7E-06 | 9.1E-05 | 8.1E-05 | 7.1E-05 | 1.6E-05 | 4.4E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-657B | SB-657B | SB-657B | SB-657B | SB-657B | SB-657B | SB-657D | SB-657D | SB-657D | SB-657D | SB-658B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657B-3 | G-SB-657B-5 | G-SB-657B-5-AVG | G-SB-657B-5-D | G-SB-657B-7 | G-SB-657B-9 | G-SB-657D-3 | G-SB-657D-5 | G-SB-657D-7 | G-SB-657D-9 | G-SB-658B-3 |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.2E-08 | 5.0E-06 | 2.8E-06 | 7.0E-07 | 5.0E-08 | 2.3E-06 | 1.5E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.2E-08 | 5.0E-06 | 2.8E-06 | 7.0E-07 | 5.0E-08 | 2.3E-06 | 1.5E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.6E-06 | 1.1E-04 | 6.1E-05 | 1.5E-05 | 1.1E-06 | 4.9E-05 | 3.3E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.6E-06 | 1.1E-04 | 6.1E-05 | 1.5E-05 | 1.1E-06 | 4.9E-05 | 3.3E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-658B | SB-658B | SB-658B | SB-658C | SB-658C | SB-658C | SB-658C | SB-659C | SB-659C | SB-659C | SB-659C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658B-5 | G-SB-658B-7 | G-SB-658B-9 | G-SB-658C-3 | G-SB-658C-5 | G-SB-658C-7 | G-SB-658C-9 | G-SB-659C-3 | G-SB-659C-5 | G-SB-659C-7 | G-SB-659C-9 |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.9E-06 | 2.6E-09 | 2.2E-07 | 1.1E-07 | 2.4E-06 | 7.6E-08 | 1.4E-06 | 3.0E-08 | 1.4E-08 | 2.6E-09 | 5.7E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-06 | 2.6E-09 | 2.2E-07 | 1.1E-07 | 2.4E-06 | 7.6E-08 | 1.4E-06 | 3.0E-08 | 1.4E-08 | 2.6E-09 | 5.7E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.2E-05 | 5.6E-08 | 4.8E-06 | 2.4E-06 | 5.2E-05 | 1.6E-06 | 3.1E-05 | 6.5E-07 | 3.0E-07 | 5.6E-08 | 1.2E-04 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.2E-05 | 5.6E-08 | 4.8E-06 | 2.4E-06 | 5.2E-05 | 1.6E-06 | 3.1E-05 | 6.5E-07 | 3.0E-07 | 5.6E-08 | 1.2E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-659D | SB-659D | SB-659D | SB-659D | SB-659D | SB-659D | SB-661 | SB-661 | SB-662 | SB-662 | SB-662 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-659D-3 | G-SB-659D-5 | G-SB-659D-7 | G-SB-659D-7-AVG | G-SB-659D-7-D | G-SB-659D-9 | G-SB-661-6 | G-SB-661-7 | G-SB-662-10 | G-SB-662-6 | G-SB-662-7 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 6 | 7 | 10 | 6 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 6 | 7 | 10 | 6 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 8.3E-08 | 7.0E-08 | 5.8E-08 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 4.8E-07 | 3.0E-06 | 8.1E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 8.3E-08 | 7.0E-08 | 5.8E-08 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 4.8E-07 | 3.0E-06 | 8.1E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 1.8E-06 | 1.5E-06 | 1.2E-06 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 1.0E-05 | 6.4E-05 | 1.7E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 1.8E-06 | 1.5E-06 | 1.2E-06 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 1.0E-05 | 6.4E-05 | 1.7E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-662 | SB-662 | SB-662A | SB-662A | SB-662A | SB-662A | SB-662B | SB-662B | SB-662B | SB-662B | SB-662B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662-8 | G-SB-662-9 | G-SB-662A-3 | G-SB-662A-5 | G-SB-662A-7 | G-SB-662A-9 | G-SB-662B-3 | G-SB-662B-5 | G-SB-662B-7 | G-SB-662B-7-AVG | G-SB-662B-7-D |
| SAMPLE DATE | 20091001 | 20091001 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| BOTTOM DEPTH | 8 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.9E-09 | 1.5E-05 | 2.1E-07 | 1.8E-07 | 7.6E-08 | 2.4E-06 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.9E-09 | 1.5E-05 | 2.1E-07 | 1.8E-07 | 7.6E-08 | 2.4E-06 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.2E-07 | 3.2E-04 | 4.5E-06 | 3.8E-06 | 1.6E-06 | 5.3E-05 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.2E-07 | 3.2E-04 | 4.5E-06 | 3.8E-06 | 1.6E-06 | 5.3E-05 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-662B | SB-662C | SB-662C | SB-662C | SB-662C | SB-663 | SB-663 | SB-663 | SB-663 | SB-664 | SB-664 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662B-9 | G-SB-662C-3 | G-SB-662C-5 | G-SB-662C-7 | G-SB-662C-9 | G-SB-663-6 | G-SB-663-6-AVG | G-SB-663-6-D | G-SB-663-7 | G-SB-664-6 | G-SB-664-7 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 6 | 6 | 6 | 7 | 6 | 7 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 6 | 6 | 6 | 7 | 6 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-05 | 2.1E-05 | 6.7E-08 | 6.0E-09 | 7.9E-06 | 2.8E-09 | 2.7E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-05 | 2.1E-05 | 6.7E-08 | 6.0E-09 | 7.9E-06 | 2.8E-09 | 2.7E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.4E-04 | 4.6E-04 | 1.5E-06 | 1.3E-07 | 1.7E-04 | 6.0E-08 | 5.8E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.4E-04 | 4.6E-04 | 1.5E-06 | 1.3E-07 | 1.7E-04 | 6.0E-08 | 5.8E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-665 | SB-665 | SB-666 | SB-666 | SB-667 | SB-667 | SB-668 | SB-668 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-665-6 | G-SB-665-7 | G-SB-666-6 | G-SB-666-7 | G-SB-667-6 | G-SB-667-7 | G-SB-668-6 | G-SB-668-7 | G-SB-671-3 | G-SB-671-4 | G-SB-671-5 | G-SB-671-6 | G-SB-671-7 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20090929 | 20090929 | 20090929 | 20091019 | 20091019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 6 | 7 | 6 | 7 | 6 | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.9E-09 | 2.9E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.9E-09 | 2.8E-09 | 2.9E-09 | 8.5E-07 | 4.2E-07 | 5.3E-05 | 1.5E-06 | 3.0E-06 |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.9E-09 | 2.9E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.9E-09 | 2.8E-09 | 2.9E-09 | 8.5E-07 | 4.2E-07 | 5.3E-05 | 1.5E-06 | 3.0E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.4E-08 | 6.4E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.4E-08 | 6.0E-08 | 6.4E-08 | 1.8E-05 | 9.1E-06 | 1.1E-03 | 3.3E-05 | 6.5E-05 |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.4E-08 | 6.4E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.4E-08 | 6.0E-08 | 6.4E-08 | 1.8E-05 | 9.1E-06 | 1.1E-03 | 3.3E-05 | 6.5E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-671 | SB-671 | SB-671 | SB-671 | SB-671 | SB-671B | SB-671B | SB-671B | SB-671B | SB-671C | SB-671C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671-7-AVG | G-SB-671-7-D | G-SB-671-8 | G-SB-671-9 | G-SB-671RE-10 | G-SB-671B-3 | G-SB-671B-5 | G-SB-671B-7 | G-SB-671B-9 | G-SB-671C-3 | G-SB-671C-5 |
| SAMPLE DATE | 20091019 | 20091019 | 20091019 | 20091019 | 20091029 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 8 | 9 | 10 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 7 | 7 | 8 | 9 | 10 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-06 | 2.8E-09 | 4.4E-07 | 6.9E-06 | 2.8E-09 | 6.6E-07 | 6.1E-08 | 2.9E-09 | 2.9E-09 | 8.4E-08 | 1.2E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-06 | 2.8E-09 | 4.4E-07 | 6.9E-06 | 2.8E-09 | 6.6E-07 | 6.1E-08 | 2.9E-09 | 2.9E-09 | 8.4E-08 | 1.2E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.2E-05 | 6.0E-08 | 9.5E-06 | 1.5E-04 | 6.0E-08 | 1.4E-05 | 1.3E-06 | 6.4E-08 | 6.4E-08 | 1.8E-06 | 2.7E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.2E-05 | 6.0E-08 | 9.5E-06 | 1.5E-04 | 6.0E-08 | 1.4E-05 | 1.3E-06 | 6.4E-08 | 6.4E-08 | 1.8E-06 | 2.7E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-671C | SB-671C | SB-671C | SB-671C | SB-671D | SB-671D | SB-671D | SB-671D | SB-673 | SB-673 | SB-674 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-671C-7 | G-SB-671C-7-AVG | G-SB-671C-7-D | G-SB-671C-9 | G-SB-671D-3 | G-SB-671D-5 | G-SB-671D-7 | G-SB-671D-9 | G-SB-673-6 | G-SB-673-7 | G-SB-674-6 |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 7 | 6 |
| BOTTOM DEPTH | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 | 6 | 7 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.7E-09 | 2.8E-09 | 2.8E-09 | 3.9E-07 | 2.8E-09 | 1.6E-08 | 5.6E-08 | 2.6E-09 | 2.6E-09 | 1.4E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.7E-09 | 2.8E-09 | 2.8E-09 | 3.9E-07 | 2.8E-09 | 1.6E-08 | 5.6E-08 | 2.6E-09 | 2.6E-09 | 1.4E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.8E-08 | 6.0E-08 | 6.0E-08 | 8.5E-06 | 6.0E-08 | 3.6E-07 | 1.2E-06 | 5.6E-08 | 5.6E-08 | 3.0E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.8E-08 | 6.0E-08 | 6.0E-08 | 8.5E-06 | 6.0E-08 | 3.6E-07 | 1.2E-06 | 5.6E-08 | 5.6E-08 | 3.0E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-674 | SB-675 | SB-675 | SB-676 | SB-676 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677 | SB-677 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-674-7 | G-SB-675-6 | G-SB-675-7 | G-SB-676-6 | G-SB-676-7 | G-SB-677-3 | G-SB-677-4 | G-SB-677-5 | G-SB-677-6 | G-SB-677-7 | G-SB-677-8 | G-SB-677-9 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 6 | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| BOTTOM DEPTH | 7 | 6 | 7 | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.2E-08 | 4.4E-07 | 5.6E-08 | 2.6E-09 | 2.8E-09 | 1.6E-07 | 1.4E-07 | 6.3E-06 | 7.2E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.2E-08 | 4.4E-07 | 5.6E-08 | 2.6E-09 | 2.8E-09 | 1.6E-07 | 1.4E-07 | 6.3E-06 | 7.2E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.0E-06 | 9.5E-06 | 1.2E-06 | 5.6E-08 | 6.0E-08 | 3.4E-06 | 3.0E-06 | 1.4E-04 | 1.6E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-06 | 9.5E-06 | 1.2E-06 | 5.6E-08 | 6.0E-08 | 3.4E-06 | 3.0E-06 | 1.4E-04 | 1.6E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-677A | SB-677A | SB-677A | SB-677A | SB-677B | SB-677B | SB-677B | SB-677B | SB-677B | SB-677B | SB-677D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-677A-3 | G-SB-677A-5 | G-SB-677A-7 | G-SB-677A-9 | G-SB-677B-3 | G-SB-677B-5 | G-SB-677B-7 | G-SB-677B-9 | G-SB-677B-9-AVG | G-SB-677B-9-D | G-SB-677D-3 |
| SAMPLE DATE | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-07 | 9.3E-07 | 1.4E-08 | 7.3E-08 | 1.5E-07 | 4.1E-07 | 2.6E-09 | 7.0E-07 | 1.1E-06 | 1.6E-06 | 4.3E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-07 | 9.3E-07 | 1.4E-08 | 7.3E-08 | 1.5E-07 | 4.1E-07 | 2.6E-09 | 7.0E-07 | 1.1E-06 | 1.6E-06 | 4.3E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.0E-06 | 2.0E-05 | 3.1E-07 | 1.6E-06 | 3.3E-06 | 9.0E-06 | 5.6E-08 | 1.5E-05 | 2.5E-05 | 3.4E-05 | 9.3E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.0E-06 | 2.0E-05 | 3.1E-07 | 1.6E-06 | 3.3E-06 | 9.0E-06 | 5.6E-08 | 1.5E-05 | 2.5E-05 | 3.4E-05 | 9.3E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-677D | SB-677D | SB-677D | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 | SB-678 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-677D-5 | G-SB-677D-7 | G-SB-677D-9 | G-SB-678-3 | G-SB-678-4 | G-SB-678-5 | G-SB-678-6 | G-SB-678-7 | G-SB-678-8 | G-SB-678-8-AVG | G-SB-678-8-D | G-SB-678-9 |
| SAMPLE DATE | 20091030 | 20091030 | 20091030 | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 8 | 9 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 4 | 5 | 6 | 7 | 8 | 8 | 8 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.6E-05 | 2.7E-07 | 1.3E-07 | 1.3E-07 | 3.6E-07 | 6.6E-06 | 3.7E-07 | 1.3E-06 | 2.6E-09 | 6.0E-08 | 1.2E-07 | 8.6E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.6E-05 | 2.7E-07 | 1.3E-07 | 1.3E-07 | 3.6E-07 | 6.6E-06 | 3.7E-07 | 1.3E-06 | 2.6E-09 | 6.0E-08 | 1.2E-07 | 8.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.6E-04 | 5.9E-06 | 2.8E-06 | 2.7E-06 | 7.8E-06 | 1.4E-04 | 8.0E-06 | 2.8E-05 | 5.6E-08 | 1.3E-06 | 2.5E-06 | 1.9E-07 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.6E-04 | 5.9E-06 | 2.8E-06 | 2.7E-06 | 7.8E-06 | 1.4E-04 | 8.0E-06 | 2.8E-05 | 5.6E-08 | 1.3E-06 | 2.5E-06 | 1.9E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-678B | SB-678B | SB-678B | SB-678B | SB-678B | SB-678B | SB-678C | SB-678C | SB-678C | SB-678C | SB-679 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-678B-3 | G-SB-678B-3-AVG | G-SB-678B-3-D | G-SB-678B-5 | G-SB-678B-7 | G-SB-678B-9 | G-SB-678C-3 | G-SB-678C-5 | G-SB-678C-7 | G-SB-678C-9 | G-SB-679-3 |
| SAMPLE DATE | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091111 | 20091030 | 20091030 | 20091030 | 20091030 | 20091001 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.8E-08 | 6.3E-08 | 4.7E-08 | 4.8E-07 | 2.6E-09 | 3.3E-06 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 9.6E-08 | 2.5E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.8E-08 | 6.3E-08 | 4.7E-08 | 4.8E-07 | 2.6E-09 | 3.3E-06 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 9.6E-08 | 2.5E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-06 | 1.4E-06 | 1.0E-06 | 1.0E-05 | 5.6E-08 | 7.1E-05 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 2.1E-06 | 5.4E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-06 | 1.4E-06 | 1.0E-06 | 1.0E-05 | 5.6E-08 | 7.1E-05 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 2.1E-06 | 5.4E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-679 | SB-679 | SB-679 | SB-679 | SB-679 | SB-679 | SB-679C | SB-679C | SB-679C | SB-679C | SB-679C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-679-4 | G-SB-679-5 | G-SB-679-6 | G-SB-679-7 | G-SB-679-8 | G-SB-679-9 | G-SB-679C-3 | G-SB-679C-5 | G-SB-679C-7 | G-SB-679C-9 | G-SB-679C-9-AVG |
| SAMPLE DATE | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 5 | 7 | 9 | 9 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 5 | 7 | 9 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.0E-08 | 7.7E-07 | 1.3E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 3.9E-07 | 1.9E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.0E-08 | 7.7E-07 | 1.3E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 3.9E-07 | 1.9E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.7E-07 | 1.7E-05 | 2.7E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 8.4E-06 | 4.2E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.7E-07 | 1.7E-05 | 2.7E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 8.4E-06 | 4.2E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-679C | SB-679D | SB-679D | SB-679D | SB-679D | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 | SB-680 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-679C-9-D | G-SB-679D-3 | G-SB-679D-5 | G-SB-679D-7 | G-SB-679D-9 | G-SB-680-3 | G-SB-680-4 | G-SB-680-5 | G-SB-680-6 | G-SB-680-7 | G-SB-680-8 | G-SB-680-9 |
| SAMPLE DATE | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091001 | 20091001 | 20091001 | 20091020 | 20091020 | 20091020 | 20091020 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.6E-09 | 5.9E-08 | 2.6E-09 | 7.1E-08 | 8.2E-08 | 2.8E-06 | 3.9E-06 | 8.6E-05 | 2.1E-06 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.6E-09 | 5.9E-08 | 2.6E-09 | 7.1E-08 | 8.2E-08 | 2.8E-06 | 3.9E-06 | 8.6E-05 | 2.1E-06 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 5.6E-08 | 1.3E-06 | 5.6E-08 | 1.5E-06 | 1.8E-06 | 6.0E-05 | 8.4E-05 | 1.9E-03 | 4.5E-05 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 5.6E-08 | 1.3E-06 | 5.6E-08 | 1.5E-06 | 1.8E-06 | 6.0E-05 | 8.4E-05 | 1.9E-03 | 4.5E-05 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-680D | SB-680D | SB-680D | SB-681 | SB-681 | SB-682 | SB-682 | SB-683 | SB-683 | SB-684 | SB-684 | SB-684 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-680D-3 | G-SB-680D-7 | G-SB-680D-9 | G-SB-681-5 | G-SB-681-6 | G-SB-682-5 | G-SB-682-6 | G-SB-683-5 | G-SB-683-6 | G-SB-684-5 | G-SB-684-5-AVG | G-SB-684-5-D |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20090924 | 20090924 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 7 | 9 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 | 5 |
| BOTTOM DEPTH | 3 | 7 | 9 | 5 | 6 | 5 | 6 | 5 | 6 | 5 | 5 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-07 | 7.2E-06 | 3.6E-08 | 2.9E-07 | 2.6E-09 | 2.6E-09 | 8.2E-08 | 5.2E-07 | 2.8E-09 | 9.6E-09 | 2.0E-07 | 3.9E-07 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-07 | 7.2E-06 | 3.6E-08 | 2.9E-07 | 2.6E-09 | 2.6E-09 | 8.2E-08 | 5.2E-07 | 2.8E-09 | 9.6E-09 | 2.0E-07 | 3.9E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.7E-06 | 1.6E-04 | 7.7E-07 | 6.2E-06 | 5.6E-08 | 5.6E-08 | 1.8E-06 | 1.1E-05 | 6.0E-08 | 2.1E-07 | 4.4E-06 | 8.5E-06 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.7E-06 | 1.6E-04 | 7.7E-07 | 6.2E-06 | 5.6E-08 | 5.6E-08 | 1.8E-06 | 1.1E-05 | 6.0E-08 | 2.1E-07 | 4.4E-06 | 8.5E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-684 | SB-685 | SB-685 | SB-685 | SB-685 | SB-686 | SB-686 | SB-687 | SB-687 | SB-688 | SB-688 | SB-689 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-684-6 | G-SB-685-3 | G-SB-685-4 | G-SB-685-4-AVG | G-SB-685-4-D | G-SB-686-3 | G-SB-686-4 | G-SB-687-3 | G-SB-687-4 | G-SB-688-3 | G-SB-688-4 | G-SB-689-7 |
| SAMPLE DATE | 20090923 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 7 |
| BOTTOM DEPTH | 6 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 3.8E-08 | 1.6E-07 | 1.5E-07 | 1.4E-07 | 2.4E-09 | 2.6E-09 | 3.5E-08 | 5.5E-08 | 4.4E-08 | 2.8E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 3.8E-08 | 1.6E-07 | 1.5E-07 | 1.4E-07 | 2.4E-09 | 2.6E-09 | 3.5E-08 | 5.5E-08 | 4.4E-08 | 2.8E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 8.2E-07 | 3.6E-06 | 3.3E-06 | 3.0E-06 | 5.3E-08 | 5.6E-08 | 7.6E-07 | 1.2E-06 | 9.6E-07 | 6.0E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 8.2E-07 | 3.6E-06 | 3.3E-06 | 3.0E-06 | 5.3E-08 | 5.6E-08 | 7.6E-07 | 1.2E-06 | 9.6E-07 | 6.0E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-689 | SB-690 | SB-690 | SB-690 | SB-690 | SB-691 | SB-691 | SB-692 | SB-692 | SB-693 | SB-693 | SB-693 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-689-8 | G-SB-690-7 | G-SB-690-7-AVG | G-SB-690-7-D | G-SB-690-8 | G-SB-691-7 | G-SB-691-8 | G-SB-692-7 | G-SB-692-8 | G-SB-693-5 | G-SB-693-6 | G-SB-693-7 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090929 | 20090929 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 7 | 7 | 7 | 8 | 7 | 8 | 7 | 8 | 5 | 6 | 7 |
| BOTTOM DEPTH | 8 | 7 | 7 | 7 | 8 | 7 | 8 | 7 | 8 | 5 | 6 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.9E-09 | 2.2E-08 | 4.1E-08 | 2.6E-09 | 1.2E-08 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 1.5E-05 | 7.3E-08 | 9.3E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.9E-09 | 2.2E-08 | 4.1E-08 | 2.6E-09 | 1.2E-08 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 1.5E-05 | 7.3E-08 | 9.3E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 6.4E-08 | 4.8E-07 | 9.0E-07 | 5.6E-08 | 2.6E-07 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 3.4E-04 | 1.6E-06 | 2.0E-07 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 6.4E-08 | 4.8E-07 | 9.0E-07 | 5.6E-08 | 2.6E-07 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 3.4E-04 | 1.6E-06 | 2.0E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-693 | SB-693 | SB-693A | SB-693A | SB-693A | SB-693B | SB-693B | SB-693B | SB-693D | SB-693D | SB-693D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-693-8 | G-SB-693-9 | G-SB-693A-4 | G-SB-693A-6 | G-SB-693A-8 | G-SB-693B-4 | G-SB-693B-6 | G-SB-693B-8 | G-SB-693D-4 | G-SB-693D-6 | G-SB-693D-8 |
| SAMPLE DATE | 20091001 | 20091001 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 8 | 9 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 9.3E-09 | 1.9E-07 | 1.3E-06 | 8.4E-07 | 2.7E-07 | 8.1E-08 | 4.9E-08 | 5.3E-08 | 2.7E-06 | 2.2E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 9.3E-09 | 1.9E-07 | 1.3E-06 | 8.4E-07 | 2.7E-07 | 8.1E-08 | 4.9E-08 | 5.3E-08 | 2.7E-06 | 2.2E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 2.0E-07 | 4.1E-06 | 2.9E-05 | 1.8E-05 | 5.8E-06 | 1.8E-06 | 1.1E-06 | 1.2E-06 | 5.9E-05 | 4.9E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 2.0E-07 | 4.1E-06 | 2.9E-05 | 1.8E-05 | 5.8E-06 | 1.8E-06 | 1.1E-06 | 1.2E-06 | 5.9E-05 | 4.9E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-693D | SB-693D | SB-694 | SB-694 | SB-695 | SB-695 | SB-695 | SB-695 | SB-696 | SB-696 | SB-697 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-693D-8-AVG | G-SB-693D-8-D | G-SB-694-5 | G-SB-694-6 | G-SB-695-5 | G-SB-695-5-AVG | G-SB-695-5-D | G-SB-695-6 | G-SB-696-5 | G-SB-696-6 | G-SB-697-10 |
| SAMPLE DATE | 20091027 | 20091027 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 | 20090930 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 8 | 5 | 6 | 5 | 5 | 5 | 6 | 5 | 6 | 10 |
| BOTTOM DEPTH | 8 | 8 | 5 | 6 | 5 | 5 | 5 | 6 | 5 | 6 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.2E-06 | 2.2E-06 | 6.8E-08 | 2.8E-09 | 1.7E-07 | 1.5E-07 | 1.3E-07 | 8.6E-08 | 1.5E-07 | 4.4E-07 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.2E-06 | 2.2E-06 | 6.8E-08 | 2.8E-09 | 1.7E-07 | 1.5E-07 | 1.3E-07 | 8.6E-08 | 1.5E-07 | 4.4E-07 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.7E-05 | 4.8E-05 | 1.5E-06 | 6.0E-08 | 3.7E-06 | 3.3E-06 | 2.9E-06 | 1.9E-06 | 3.2E-06 | 9.5E-06 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.7E-05 | 4.8E-05 | 1.5E-06 | 6.0E-08 | 3.7E-06 | 3.3E-06 | 2.9E-06 | 1.9E-06 | 3.2E-06 | 9.5E-06 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-697 | SB-698 | SB-698 | SB-699 | SB-699 | SB-700 | SB-700 | SB-701 | SB-701 | SB-702 | SB-702 | SB-703 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-697-9 | G-SB-698-10 | G-SB-698-9 | G-SB-699-3 | G-SB-699-4 | G-SB-700-3 | G-SB-700-4 | G-SB-701-3 | G-SB-701-4 | G-SB-702-3 | G-SB-702-4 | G-SB-703-7 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091007 | 20091007 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 10 | 9 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 7 |
| BOTTOM DEPTH | 9 | 10 | 9 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 6.2E-08 | 8.6E-09 | 4.7E-07 | 4.9E-08 | 5.9E-08 | 1.1E-07 | 2.3E-07 | 2.2E-07 | 2.6E-09 | 1.1E-08 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 6.2E-08 | 8.6E-09 | 4.7E-07 | 4.9E-08 | 5.9E-08 | 1.1E-07 | 2.3E-07 | 2.2E-07 | 2.6E-09 | 1.1E-08 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 1.3E-06 | 1.9E-07 | 1.0E-05 | 1.1E-06 | 1.3E-06 | 2.5E-06 | 5.1E-06 | 4.9E-06 | 5.6E-08 | 2.3E-07 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 1.3E-06 | 1.9E-07 | 1.0E-05 | 1.1E-06 | 1.3E-06 | 2.5E-06 | 5.1E-06 | 4.9E-06 | 5.6E-08 | 2.3E-07 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-703 | SB-704 | SB-704 | SB-704 | SB-704 | SB-704 | SB-704 | SB-704 | SB-704 | SB-705 | SB-705 | SB-706 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-703-8 | G-SB-704-10 | G-SB-704-3 | G-SB-704-4 | G-SB-704-5 | G-SB-704-6 | G-SB-704-7 | G-SB-704-8 | G-SB-704-9 | G-SB-705-3 | G-SB-705-4 | G-SB-706-10 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 10 |
| BOTTOM DEPTH | 8 | 10 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-706 | SB-707 | SB-707 | SB-708 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-706-3 | G-SB-706-4 | G-SB-706-5 | G-SB-706-6 | G-SB-706-6-AVG | G-SB-706-6-D | G-SB-706-7 | G-SB-706-8 | G-SB-706-9 | G-SB-707-3 | G-SB-707-4 | G-SB-708-3 |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20091007 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 3 | 4 | 3 |
| BOTTOM DEPTH | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 8 | 9 | 3 | 4 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.9E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.7E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.9E-06 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.9E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.7E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.9E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.8E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 4.1E-05 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.8E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 4.1E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-708 | SB-708 | SB-708 | SB-708 | SB-709 | SB-709 | SB-710 | SB-710 | SB-710 | SB-710 | SB-712 | SB-712 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-708-4 | G-SB-708-5 | G-SB-708-6 | G-SB-708-7 | G-SB-709-3 | G-SB-709-4 | G-SB-710-3 | G-SB-710-4 | G-SB-710-4-AVG | G-SB-710-4-D | G-SB-712-3 | G-SB-712-4 |
| SAMPLE DATE | 20091007 | 20091007 | 20091007 | 20091007 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 4 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 3 | 4 | 3 | 4 | 4 | 4 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.8E-06 | 3.1E-07 | 2.8E-09 | 2.6E-09 | 1.8E-07 | 2.8E-09 | 8.3E-08 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.4E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.8E-06 | 3.1E-07 | 2.8E-09 | 2.6E-09 | 1.8E-07 | 2.8E-09 | 8.3E-08 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.4E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.1E-04 | 6.8E-06 | 6.0E-08 | 5.6E-08 | 3.8E-06 | 6.0E-08 | 1.8E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.3E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.1E-04 | 6.8E-06 | 6.0E-08 | 5.6E-08 | 3.8E-06 | 6.0E-08 | 1.8E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.3E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-713 | SB-713 | SB-714 | SB-714 | SB-714 | SB-714 | SB-714 | SB-714 | SB-714 | SB-715 | SB-715 | SB-716 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-713-3 | G-SB-713-4 | G-SB-714-3 | G-SB-714-4 | G-SB-714-5 | G-SB-714-6 | G-SB-714-6-AVG | G-SB-714-6-D | G-SB-714-7 | G-SB-715-3 | G-SB-715-4 | G-SB-716-10 |
| SAMPLE DATE | 20090922 | 20090922 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090923 | 20090923 | 20090923 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 3 | 4 | 10 |
| BOTTOM DEPTH | 3 | 4 | 3 | 4 | 5 | 6 | 6 | 6 | 7 | 3 | 4 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.6E-09 | 2.8E-06 | 8.6E-06 | 1.6E-05 | 1.8E-04 | 9.4E-05 | 4.2E-06 | 8.3E-06 | 1.7E-07 | 7.9E-08 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.6E-09 | 2.8E-06 | 8.6E-06 | 1.6E-05 | 1.8E-04 | 9.4E-05 | 4.2E-06 | 8.3E-06 | 1.7E-07 | 7.9E-08 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 5.6E-08 | 6.2E-05 | 1.9E-04 | 3.4E-04 | 4.0E-03 | 2.0E-03 | 9.1E-05 | 1.8E-04 | 3.6E-06 | 1.7E-06 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 5.6E-08 | 6.2E-05 | 1.9E-04 | 3.4E-04 | 4.0E-03 | 2.0E-03 | 9.1E-05 | 1.8E-04 | 3.6E-06 | 1.7E-06 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-716 | SB-716 | SB-716 | SB-716 | SB-716 | SB-716 | SB-717 | SB-717 | SB-718 | SB-718 | SB-719 | SB-719 | SB-720 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-716-3 | G-SB-716-5 | G-SB-716-6 | G-SB-716-7 | G-SB-716-8 | G-SB-716-9 | G-SB-717-3 | G-SB-717-4 | G-SB-718-3 | G-SB-718-4 | G-SB-719-3 | G-SB-719-4 | G-SB-720-3 |
| SAMPLE DATE | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20090922 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 | 3 |
| BOTTOM DEPTH | 3 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 3 | 4 | 3 | 4 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.9E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 8.2E-06 |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.9E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 8.2E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 6.4E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.8E-04 |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 6.4E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.8E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-720 | SB-720 | SB-720 | SB-720 | SB-721 | SB-721 | SB-721 | SB-721 | SB-721 | SB-722 | SB-722 | SB-723 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-720-4 | G-SB-720-5 | G-SB-720-6 | G-SB-720-7 | G-SB-721-3 | G-SB-721-4 | G-SB-721-5 | G-SB-721-6 | G-SB-721-7 | G-SB-722-3 | G-SB-722-4 | G-SB-723-3 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090923 | 20090923 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 | 3 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 3 | 4 | 5 | 6 | 7 | 3 | 4 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.1E-07 | 3.5E-08 | 4.0E-09 | 9.1E-09 | 1.7E-08 | 2.2E-06 | 3.8E-09 | 3.8E-09 | 4.0E-09 | 2.8E-08 | 4.9E-07 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.1E-07 | 3.5E-08 | 4.0E-09 | 9.1E-09 | 1.7E-08 | 2.2E-06 | 3.8E-09 | 3.8E-09 | 4.0E-09 | 2.8E-08 | 4.9E-07 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.3E-05 | 7.6E-07 | 8.6E-08 | 2.0E-07 | 3.7E-07 | 4.8E-05 | 8.3E-08 | 8.3E-08 | 8.6E-08 | 6.2E-07 | 1.1E-05 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.3E-05 | 7.6E-07 | 8.6E-08 | 2.0E-07 | 3.7E-07 | 4.8E-05 | 8.3E-08 | 8.3E-08 | 8.6E-08 | 6.2E-07 | 1.1E-05 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-723 | SB-723 | SB-723 | SB-724 | SB-724 | SB-724 | SB-724 | SB-725 | SB-725 | SB-726 | SB-726 | SB-726 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-723-3-AVG | G-SB-723-3-D | G-SB-723-4 | G-SB-724-3 | G-SB-724-4 | G-SB-724-6 | G-SB-724-7 | G-SB-725-3 | G-SB-725-4 | G-SB-726-10 | G-SB-726-3 | G-SB-726-4 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 | 20090923 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 4 | 3 | 4 | 6 | 7 | 3 | 4 | 10 | 3 | 4 |
| BOTTOM DEPTH | 3 | 3 | 4 | 3 | 4 | 6 | 7 | 3 | 4 | 10 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.9E-09 | 9.0E-09 | 2.8E-09 | 1.1E-05 | 2.9E-06 | 1.6E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 3.8E-09 | 1.5E-05 | 3.6E-06 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.9E-09 | 9.0E-09 | 2.8E-09 | 1.1E-05 | 2.9E-06 | 1.6E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 3.8E-09 | 1.5E-05 | 3.6E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.3E-07 | 1.9E-07 | 6.0E-08 | 2.3E-04 | 6.3E-05 | 3.5E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 8.3E-08 | 3.2E-04 | 7.8E-05 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.3E-07 | 1.9E-07 | 6.0E-08 | 2.3E-04 | 6.3E-05 | 3.5E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 8.3E-08 | 3.2E-04 | 7.8E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-727 | SB-727 | SB-727 | SB-727 | SB-727 | SB-728 | SB-728 | SB-729 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-726-5 | G-SB-726-6 | G-SB-726-7 | G-SB-726-8 | G-SB-726-9 | G-SB-727-3 | G-SB-727-4 | G-SB-727-5 | G-SB-727-6 | G-SB-727-7 | G-SB-728-3 | G-SB-728-4 | G-SB-729-3 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 | 20090923 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 | 6 | 7 | 3 | 4 | 3 |
| BOTTOM DEPTH | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 | 6 | 7 | 3 | 4 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.5E-09 | 3.8E-09 | 4.2E-09 | 3.8E-09 | 1.6E-08 | 2.0E-06 | 1.0E-07 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 3.3E-06 |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.5E-09 | 3.8E-09 | 4.2E-09 | 3.8E-09 | 1.6E-08 | 2.0E-06 | 1.0E-07 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 3.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.8E-07 | 8.3E-08 | 9.0E-08 | 8.3E-08 | 3.4E-07 | 4.3E-05 | 2.2E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 7.2E-05 |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.8E-07 | 8.3E-08 | 9.0E-08 | 8.3E-08 | 3.4E-07 | 4.3E-05 | 2.2E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 7.2E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-729 | SB-729 | SB-729 | SB-729 | SB-730 | SB-730 | SB-731 | SB-731 | SB-732 | SB-732 | SB-732 | SB-732 | SB-732 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-729-4 | G-SB-729-5 | G-SB-729-6 | G-SB-729-7 | G-SB-730-4 | G-SB-730-5 | G-SB-731-3 | G-SB-731-4 | G-SB-732-3 | G-SB-732-4 | G-SB-732-5 | G-SB-732-6 | G-SB-732-7 |
| SAMPLE DATE | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090923 | 20090923 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 5 | 6 | 7 | 4 | 5 | 3 | 4 | 3 | 4 | 5 | 6 | 7 |
| BOTTOM DEPTH | 4 | 5 | 6 | 7 | 4 | 5 | 3 | 4 | 3 | 4 | 5 | 6 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.1E-07 | 1.2E-08 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.4E-09 | 2.8E-09 | 2.6E-06 | 2.3E-07 | 3.8E-09 | 1.7E-08 | 3.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.1E-07 | 1.2E-08 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.4E-09 | 2.8E-09 | 2.6E-06 | 2.3E-07 | 3.8E-09 | 1.7E-08 | 3.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.5E-06 | 2.6E-07 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.3E-08 | 6.0E-08 | 5.7E-05 | 4.9E-06 | 8.3E-08 | 3.7E-07 | 8.3E-08 |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.5E-06 | 2.6E-07 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.3E-08 | 6.0E-08 | 5.7E-05 | 4.9E-06 | 8.3E-08 | 3.7E-07 | 8.3E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-733 | SB-733 | SB-734 | SB-734 | SB-735 | SB-735 | SB-735 | SB-735 | SB-735 | SB-735 | SB-735A | SB-735A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-733-3 | G-SB-733-4 | G-SB-734-6 | G-SB-734-7 | G-SB-735-3 | G-SB-735-5 | G-SB-735-5-AVG | G-SB-735-5-D | G-SB-735-7 | G-SB-735-9 | G-SB-735A-3 | G-SB-735A-5 |
| SAMPLE DATE | 20090924 | 20090924 | 20090923 | 20090923 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091103 | 20091112 | 20091112 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 6 | 7 | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 4 | 6 | 7 | 3 | 5 | 5 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 7.3E-07 | 1.3E-05 | 2.9E-05 | 4.5E-05 | 1.2E-05 | 9.2E-07 | 9.7E-06 | 2.0E-04 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 7.3E-07 | 1.3E-05 | 2.9E-05 | 4.5E-05 | 1.2E-05 | 9.2E-07 | 9.7E-06 | 2.0E-04 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 1.6E-05 | 2.9E-04 | 6.4E-04 | 9.9E-04 | 2.7E-04 | 2.0E-05 | 2.1E-04 | 4.3E-03 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 1.6E-05 | 2.9E-04 | 6.4E-04 | 9.9E-04 | 2.7E-04 | 2.0E-05 | 2.1E-04 | 4.3E-03 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-735A | SB-735B | SB-735B | SB-735B | SB-735B | SB-735B | SB-735B | SB-735C | SB-735C | SB-735C | SB-736 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-735A-9 | G-SB-735B-3 | G-SB-735B-5 | G-SB-735B-7 | G-SB-735B-7-AVG | G-SB-735B-7-D | G-SB-735B-9 | G-SB-735C-3 | G-SB-735C-5 | G-SB-735C-7 | G-SB-736-3 |
| SAMPLE DATE | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 3 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.5E-07 | 1.0E-07 | 6.5E-08 | 3.3E-08 | 4.2E-08 | 5.1E-08 | 5.4E-08 | 6.4E-08 | 2.6E-07 | 2.4E-07 | 2.9E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.5E-07 | 1.0E-07 | 6.5E-08 | 3.3E-08 | 4.2E-08 | 5.1E-08 | 5.4E-08 | 6.4E-08 | 2.6E-07 | 2.4E-07 | 2.9E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.8E-06 | 2.2E-06 | 1.4E-06 | 7.1E-07 | 9.1E-07 | 1.1E-06 | 1.2E-06 | 1.4E-06 | 5.5E-06 | 5.3E-06 | 6.4E-04 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.8E-06 | 2.2E-06 | 1.4E-06 | 7.1E-07 | 9.1E-07 | 1.1E-06 | 1.2E-06 | 1.4E-06 | 5.5E-06 | 5.3E-06 | 6.4E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-736B | SB-736B | SB-736B | SB-736B | SB-736C | SB-736C | SB-736C | SB-736C | SB-737 | SB-737 | SB-737 | SB-738 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-736B-3 | G-SB-736B-5 | G-SB-736B-7 | G-SB-736B-9 | G-SB-736C-3 | G-SB-736C-5 | G-SB-736C-7 | G-SB-736C-9 | G-SB-737-3 | G-SB-737-5 | G-SB-737-7 | G-SB-738-4 |
| SAMPLE DATE | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091021 | 20091021 | 20091021 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 4 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.6E-06 | 1.1E-06 | 3.2E-08 | 2.8E-09 | 2.4E-07 | 6.7E-07 | 2.6E-09 | 9.5E-08 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 3.6E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.6E-06 | 1.1E-06 | 3.2E-08 | 2.8E-09 | 2.4E-07 | 6.7E-07 | 2.6E-09 | 9.5E-08 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 3.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.9E-05 | 2.4E-05 | 7.0E-07 | 6.0E-08 | 5.1E-06 | 1.4E-05 | 5.6E-08 | 2.1E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 7.9E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.9E-05 | 2.4E-05 | 7.0E-07 | 6.0E-08 | 5.1E-06 | 1.4E-05 | 5.6E-08 | 2.1E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 7.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-738 | SB-738 | SB-739 | SB-739 | SB-739 | SB-740 | SB-740 | SB-740 | SB-741 | SB-741 | SB-741 | SB-742 | SB-742 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-738-6 | G-SB-738-8 | G-SB-739-4 | G-SB-739-6 | G-SB-739-8 | G-SB-740-4 | G-SB-740-6 | G-SB-740-8 | G-SB-741-4 | G-SB-741-6 | G-SB-741-8 | G-SB-742-4 | G-SB-742-6 |
| SAMPLE DATE | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 |
| BOTTOM DEPTH | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.0E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 | 4.0E-09 | 3.8E-09 | 3.8E-09 | 3.6E-09 | 3.8E-09 | 1.0E-08 | 3.8E-09 | 4.0E-08 | 1.5E-08 |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.0E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 | 4.0E-09 | 3.8E-09 | 3.8E-09 | 3.6E-09 | 3.8E-09 | 1.0E-08 | 3.8E-09 | 4.0E-08 | 1.5E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.6E-08 | 8.3E-08 | 8.3E-08 | 8.3E-08 | 8.6E-08 | 8.3E-08 | 8.3E-08 | 7.9E-08 | 8.3E-08 | 2.2E-07 | 8.3E-08 | 8.6E-07 | 3.3E-07 |
| NAPHTHALENE | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.6E-08 | 8.3E-08 | 8.3E-08 | 8.3E-08 | 8.6E-08 | 8.3E-08 | 8.3E-08 | 7.9E-08 | 8.3E-08 | 2.2E-07 | 8.3E-08 | 8.6E-07 | 3.3E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-742 | SB-743 | SB-743 | SB-743 | SB-744 | SB-744 | SB-744 | SB-745 | SB-745 | SB-745 | SB-745 | SB-745 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-742-8 | G-SB-743-4 | G-SB-743-6 | G-SB-743-8 | G-SB-744-4 | G-SB-744-6 | G-SB-744-8 | G-SB-745-4 | G-SB-745-4-AVG | G-SB-745-4-D | G-SB-745-6 | G-SB-745-8 |
| SAMPLE DATE | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 |
| BOTTOM DEPTH | 8 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 4 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.8E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 | 4.0E-09 | 4.0E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 | 1.9E-07 | 3.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.8E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 | 4.0E-09 | 4.0E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 | 1.9E-07 | 3.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.3E-08 | 8.3E-08 | 8.3E-08 | 8.3E-08 | 8.6E-08 | 8.6E-08 | 8.3E-08 | 8.3E-08 | 8.3E-08 | 8.3E-08 | 4.2E-06 | 8.3E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.3E-08 | 8.3E-08 | 8.3E-08 | 8.3E-08 | 8.6E-08 | 8.6E-08 | 8.3E-08 | 8.3E-08 | 8.3E-08 | 8.3E-08 | 4.2E-06 | 8.3E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-745A | SB-745B | SB-745C | SB-746 | SB-746 | SB-746 | SB-747 | SB-747 | SB-747 | SB-748 | SB-748 | SB-748 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-745A-4 | G-SB-745B-4 | G-SB-745C-4 | G-SB-746-4 | G-SB-746-6 | G-SB-746-8 | G-SB-747-4 | G-SB-747-6 | G-SB-747-8 | G-SB-748-4 | G-SB-748-6 | G-SB-748-8 |
| SAMPLE DATE | 20091021 | 20091021 | 20091021 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 | 20091009 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 4 | 4 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| BOTTOM DEPTH | 4 | 4 | 4 | 4 | 6 | 8 | 4 | 6 | 8 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.9E-09 | 2.9E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 | 3.6E-09 | 3.8E-09 | 3.8E-09 | 8.5E-09 | 3.8E-09 | 3.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.9E-09 | 2.9E-09 | 3.8E-09 | 3.8E-09 | 3.8E-09 | 3.6E-09 | 3.8E-09 | 3.8E-09 | 8.5E-09 | 3.8E-09 | 3.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 6.4E-08 | 6.4E-08 | 8.3E-08 | 8.3E-08 | 8.3E-08 | 7.9E-08 | 8.3E-08 | 8.3E-08 | 1.8E-07 | 8.3E-08 | 8.3E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 6.4E-08 | 6.4E-08 | 8.3E-08 | 8.3E-08 | 8.3E-08 | 7.9E-08 | 8.3E-08 | 8.3E-08 | 1.8E-07 | 8.3E-08 | 8.3E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-749 | SB-749 | SB-750 | SB-750 | SB-751 | SB-751 | SB-752 | SB-752 | SB-752 | SB-752 | SB-753 | SB-753 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-749-4 | G-SB-749-6 | G-SB-750-4 | G-SB-750-6 | G-SB-751-4 | G-SB-751-6 | G-SB-752-4 | G-SB-752-6 | G-SB-752-6-AVG | G-SB-752-6-D | G-SB-753-4 | G-SB-753-6 |
| SAMPLE DATE | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 | 20091021 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 4 | 6 | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 |
| BOTTOM DEPTH | 4 | 6 | 4 | 6 | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.4E-09 | 2.6E-09 | 1.3E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.4E-09 | 2.6E-09 | 1.3E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.3E-08 | 5.6E-08 | 2.9E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.3E-08 | 5.6E-08 | 2.9E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-754 | SB-754 | SB-755 | SB-755 | SB-755 | SB-755 | SB-756 | SB-756 | SB-757 | SB-757 | SB-758 | SB-758 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-754-4 | G-SB-754-6 | G-SB-755-4 | G-SB-755-6 | G-SB-755-6-AVG | G-SB-755-6-D | G-SB-756-4 | G-SB-756-6 | G-SB-757-4 | G-SB-757-6 | G-SB-758-4 | G-SB-758-6 |
| SAMPLE DATE | 20091021 | 20091021 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 | 20091103 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 | 6 | 4 | 6 |
| BOTTOM DEPTH | 4 | 6 | 4 | 6 | 6 | 6 | 4 | 6 | 4 | 6 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 2.6E-09 | 5.2E-08 | 5.2E-08 | 2.8E-08 | 2.6E-09 | 2.6E-09 | 1.3E-05 | 2.8E-09 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.8E-09 | 2.6E-09 | 5.2E-08 | 5.2E-08 | 2.8E-08 | 2.6E-09 | 2.6E-09 | 1.3E-05 | 2.8E-09 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 5.6E-08 | 1.1E-06 | 1.1E-06 | 6.0E-07 | 5.6E-08 | 5.6E-08 | 2.8E-04 | 6.0E-08 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 6.0E-08 | 5.6E-08 | 1.1E-06 | 1.1E-06 | 6.0E-07 | 5.6E-08 | 5.6E-08 | 2.8E-04 | 6.0E-08 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-759 | SB-759 | SB-759 | SB-760 | SB-760 | SB-760 | SB-761 | SB-761 | SB-761 | SB-761 | SB-761A | SB-761A |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-759-3 | G-SB-759-5 | G-SB-759-7 | G-SB-760-3 | G-SB-760-5 | G-SB-760-7 | G-SB-761-3 | G-SB-761-5 | G-SB-761-7 | G-SB-761-9 | G-SB-761A-3 | G-SB-761A-5 |
| SAMPLE DATE | 20091113 | 20091113 | 20091113 | 20091113 | 20091113 | 20091113 | 20090930 | 20090930 | 20090930 | 20090930 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.6E-06 | 2.9E-09 | 4.5E-08 | 4.2E-06 | 1.5E-06 | 2.8E-09 | 2.6E-09 | 1.0E-07 | 2.8E-09 | 2.4E-05 | 8.1E-08 | 1.2E-05 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.6E-06 | 2.9E-09 | 4.5E-08 | 4.2E-06 | 1.5E-06 | 2.8E-09 | 2.6E-09 | 1.0E-07 | 2.8E-09 | 2.4E-05 | 8.1E-08 | 1.2E-05 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-04 | 6.4E-08 | 9.8E-07 | 9.1E-05 | 3.3E-05 | 6.0E-08 | 5.6E-08 | 2.3E-06 | 6.0E-08 | 5.3E-04 | 1.7E-06 | 2.6E-04 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-04 | 6.4E-08 | 9.8E-07 | 9.1E-05 | 3.3E-05 | 6.0E-08 | 5.6E-08 | 2.3E-06 | 6.0E-08 | 5.3E-04 | 1.7E-06 | 2.6E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-761A | SB-761A | SB-761B | SB-761B | SB-761B | SB-761B | SB-761B | SB-761B | SB-761C | SB-761C | SB-761C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761A-7 | G-SB-761A-9 | G-SB-761B-3 | G-SB-761B-3-AVG | G-SB-761B-3-D | G-SB-761B-5 | G-SB-761B-7 | G-SB-761B-9 | G-SB-761C-3 | G-SB-761C-5 | G-SB-761C-7 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.2E-08 | 9.1E-06 | 2.7E-07 | 3.5E-07 | 4.4E-07 | 2.0E-07 | 9.2E-08 | 4.8E-06 | 5.4E-08 | 9.7E-07 | 9.2E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.2E-08 | 9.1E-06 | 2.7E-07 | 3.5E-07 | 4.4E-07 | 2.0E-07 | 9.2E-08 | 4.8E-06 | 5.4E-08 | 9.7E-07 | 9.2E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-06 | 2.0E-04 | 5.9E-06 | 7.7E-06 | 9.5E-06 | 4.4E-06 | 2.0E-06 | 1.0E-04 | 1.2E-06 | 2.1E-05 | 2.0E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-06 | 2.0E-04 | 5.9E-06 | 7.7E-06 | 9.5E-06 | 4.4E-06 | 2.0E-06 | 1.0E-04 | 1.2E-06 | 2.1E-05 | 2.0E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-761C | SB-761D | SB-761D | SB-761D | SB-761D | SB-761D | SB-761D | SB-762 | SB-762 | SB-762 | SB-762 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761C-9 | G-SB-761D-3 | G-SB-761D-5 | G-SB-761D-7 | G-SB-761D-7-AVG | G-SB-761D-7-D | G-SB-761D-9 | G-SB-762-3 | G-SB-762-5 | G-SB-762-7 | G-SB-762-9 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.2E-07 | 6.0E-08 | 1.4E-06 | 2.8E-09 | 2.7E-09 | 2.6E-09 | 9.7E-05 | 2.6E-09 | 1.2E-06 | 6.5E-08 | 1.3E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.2E-07 | 6.0E-08 | 1.4E-06 | 2.8E-09 | 2.7E-09 | 2.6E-09 | 9.7E-05 | 2.6E-09 | 1.2E-06 | 6.5E-08 | 1.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.8E-06 | 1.3E-06 | 2.9E-05 | 6.0E-08 | 5.8E-08 | 5.6E-08 | 2.1E-03 | 5.6E-08 | 2.7E-05 | 1.4E-06 | 2.7E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.8E-06 | 1.3E-06 | 2.9E-05 | 6.0E-08 | 5.8E-08 | 5.6E-08 | 2.1E-03 | 5.6E-08 | 2.7E-05 | 1.4E-06 | 2.7E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-762A | SB-762A | SB-762A | SB-762A | SB-762B | SB-762B | SB-762B | SB-762B | SB-762C | SB-762C | SB-762C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762A-3 | G-SB-762A-5 | G-SB-762A-7 | G-SB-762A-9 | G-SB-762B-3 | G-SB-762B-5 | G-SB-762B-7 | G-SB-762B-9 | G-SB-762C-3 | G-SB-762C-5 | G-SB-762C-7 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091023 | 20091023 | 20091023 | 20091023 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-09 | 4.9E-08 | 3.9E-08 | 4.7E-05 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 4.5E-07 | 2.6E-09 | 2.2E-06 | 1.5E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-09 | 4.9E-08 | 3.9E-08 | 4.7E-05 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 4.5E-07 | 2.6E-09 | 2.2E-06 | 1.5E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.3E-07 | 1.1E-06 | 8.5E-07 | 1.0E-03 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 9.7E-06 | 5.6E-08 | 4.7E-05 | 3.3E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.3E-07 | 1.1E-06 | 8.5E-07 | 1.0E-03 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 9.7E-06 | 5.6E-08 | 4.7E-05 | 3.3E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-762D | SB-762D | SB-762D | SB-762D | SB-762D | SB-762D | SB-763 | SB-763 | SB-763 | SB-763 | SB-763 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762D-3 | G-SB-762D-5 | G-SB-762D-7 | G-SB-762D-7-AVG | G-SB-762D-7-D | G-SB-762D-9 | G-SB-763-3 | G-SB-763-3-AVG | G-SB-763-3-D | G-SB-763-5 | G-SB-763-7 |
| SAMPLE DATE | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091001 | 20091001 | 20091001 | 20091001 | 20091001 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 3 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 3 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 8.3E-07 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 1.7E-05 | 5.6E-08 | 3.4E-08 | 1.2E-08 | 3.3E-07 | 7.8E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 8.3E-07 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 1.7E-05 | 5.6E-08 | 3.4E-08 | 1.2E-08 | 3.3E-07 | 7.8E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 1.8E-05 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 3.8E-04 | 1.2E-06 | 7.3E-07 | 2.5E-07 | 7.3E-06 | 1.7E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 1.8E-05 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 3.8E-04 | 1.2E-06 | 7.3E-07 | 2.5E-07 | 7.3E-06 | 1.7E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-763 | SB-763A | SB-763A | SB-763A | SB-763A | SB-763B | SB-763B | SB-763B | SB-763B | SB-763C | SB-763C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763-9 | G-SB-763A-3 | G-SB-763A-5 | G-SB-763A-7 | G-SB-763A-9 | G-SB-763B-3 | G-SB-763B-5 | G-SB-763B-7 | G-SB-763B-9 | G-SB-763C-3 | G-SB-763C-5 |
| SAMPLE DATE | 20091001 | 20091023 | 20091023 | 20091023 | 20091023 | 20091027 | 20091027 | 20091027 | 20091027 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-08 | 6.0E-09 | 4.1E-08 | 2.8E-09 | 5.3E-06 | 2.6E-09 | 5.4E-05 | 6.0E-09 | 9.4E-07 | 5.8E-08 | 3.2E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-08 | 6.0E-09 | 4.1E-08 | 2.8E-09 | 5.3E-06 | 2.6E-09 | 5.4E-05 | 6.0E-09 | 9.4E-07 | 5.8E-08 | 3.2E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.2E-07 | 1.3E-07 | 8.9E-07 | 6.0E-08 | 1.2E-04 | 5.6E-08 | 1.2E-03 | 1.3E-07 | 2.0E-05 | 1.2E-06 | 6.8E-04 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.2E-07 | 1.3E-07 | 8.9E-07 | 6.0E-08 | 1.2E-04 | 5.6E-08 | 1.2E-03 | 1.3E-07 | 2.0E-05 | 1.2E-06 | 6.8E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-763C | SB-763C | SB-763D | SB-763D | SB-763D | SB-763D | SB-763D | SB-763D | SB-764 | SB-764 | SB-764 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763C-7 | G-SB-763C-9 | G-SB-763D-3 | G-SB-763D-5 | G-SB-763D-7 | G-SB-763D-7-AVG | G-SB-763D-7-D | G-SB-763D-9 | G-SB-764-3 | G-SB-764-5 | G-SB-764-5-AVG |
| SAMPLE DATE | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091002 | 20091002 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.3E-08 | 1.6E-05 | 2.8E-09 | 1.2E-07 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 9.6E-09 | 4.3E-07 | 4.8E-06 | 6.4E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.3E-08 | 1.6E-05 | 2.8E-09 | 1.2E-07 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 9.6E-09 | 4.3E-07 | 4.8E-06 | 6.4E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.8E-06 | 3.5E-04 | 6.0E-08 | 2.5E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 2.1E-07 | 9.3E-06 | 1.0E-04 | 1.4E-04 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.8E-06 | 3.5E-04 | 6.0E-08 | 2.5E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 2.1E-07 | 9.3E-06 | 1.0E-04 | 1.4E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-764 | SB-764 | SB-764 | SB-764A | SB-764A | SB-764A | SB-764A | SB-764B | SB-764B | SB-764B | SB-764B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764-5-D | G-SB-764-7 | G-SB-764-9 | G-SB-764A-3 | G-SB-764A-5 | G-SB-764A-7 | G-SB-764A-9 | G-SB-764B-3 | G-SB-764B-5 | G-SB-764B-5-AVG | G-SB-764B-5-D |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091027 | 20091027 | 20091027 | 20091027 | 20091113 | 20091113 | 20091113 | 20091113 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 5 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 5 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.0E-06 | 2.6E-09 | 4.5E-06 | 2.8E-09 | 1.5E-07 | 2.6E-09 | 7.3E-06 | 3.3E-07 | 2.6E-07 | 3.1E-07 | 3.7E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.0E-06 | 2.6E-09 | 4.5E-06 | 2.8E-09 | 1.5E-07 | 2.6E-09 | 7.3E-06 | 3.3E-07 | 2.6E-07 | 3.1E-07 | 3.7E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-04 | 5.6E-08 | 9.8E-05 | 6.0E-08 | 3.3E-06 | 5.6E-08 | 1.6E-04 | 7.2E-06 | 5.7E-06 | 6.8E-06 | 8.0E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-04 | 5.6E-08 | 9.8E-05 | 6.0E-08 | 3.3E-06 | 5.6E-08 | 1.6E-04 | 7.2E-06 | 5.7E-06 | 6.8E-06 | 8.0E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-764C | SB-764C | SB-764C | SB-764C | SB-764D | SB-764D | SB-764D | SB-764D | SB-764D | SB-764D | SB-765 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764C-3 | G-SB-764C-5 | G-SB-764C-7 | G-SB-764C-9 | G-SB-764D-3 | G-SB-764D-3-AVG | G-SB-764D-3-D | G-SB-764D-5 | G-SB-764D-7 | G-SB-764D-9 | G-SB-765-3 |
| SAMPLE DATE | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091027 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.3E-08 | 2.4E-05 | 7.8E-07 | 5.9E-05 | 3.9E-08 | 4.2E-08 | 4.4E-08 | 7.5E-05 | 1.7E-06 | 4.1E-05 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.3E-08 | 2.4E-05 | 7.8E-07 | 5.9E-05 | 3.9E-08 | 4.2E-08 | 4.4E-08 | 7.5E-05 | 1.7E-06 | 4.1E-05 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-06 | 5.3E-04 | 1.7E-05 | 1.3E-03 | 8.5E-07 | 9.0E-07 | 9.6E-07 | 1.6E-03 | 3.8E-05 | 8.8E-04 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-06 | 5.3E-04 | 1.7E-05 | 1.3E-03 | 8.5E-07 | 9.0E-07 | 9.6E-07 | 1.6E-03 | 3.8E-05 | 8.8E-04 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-765 | SB-765 | SB-765 | SB-765A | SB-765A | SB-765A | SB-765B | SB-765B | SB-765B | SB-765C | SB-765C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765-5 | G-SB-765-7 | G-SB-765-9 | G-SB-765A-3 | G-SB-765A-5 | G-SB-765A-7 | G-SB-765B-3 | G-SB-765B-5 | G-SB-765B-7 | G-SB-765C-3 | G-SB-765C-5 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 | 20091028 | 20091113 | 20091113 | 20091113 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-06 | 2.6E-09 | 2.3E-07 | 3.7E-07 | 1.1E-06 | 8.5E-09 | 2.7E-07 | 9.7E-08 | 2.8E-07 | 1.3E-07 | 3.4E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-06 | 2.6E-09 | 2.3E-07 | 3.7E-07 | 1.1E-06 | 8.5E-09 | 2.7E-07 | 9.7E-08 | 2.8E-07 | 1.3E-07 | 3.4E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.0E-05 | 5.6E-08 | 5.0E-06 | 7.9E-06 | 2.5E-05 | 1.9E-07 | 5.9E-06 | 2.1E-06 | 6.0E-06 | 2.9E-06 | 7.5E-04 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.0E-05 | 5.6E-08 | 5.0E-06 | 7.9E-06 | 2.5E-05 | 1.9E-07 | 5.9E-06 | 2.1E-06 | 6.0E-06 | 2.9E-06 | 7.5E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-765C | SB-765D | SB-765D | SB-765D | SB-803 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-765C-7 | G-SB-765D-3 | G-SB-765D-5 | G-SB-765D-7 | G-SB-803-03 | G-SB-803-05 | G-SB-803-07 | G-SB-803-09 | G-SB-804-03 | G-SB-804-05 | G-SB-804-07 |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20100826 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.3E-07 | 1.0E-07 | 1.3E-05 | 1.8E-06 | 6.8E-09 | 1.2E-07 | 6.2E-09 | 5.0E-07 | 6.6E-09 | 9.9E-08 | 6.6E-09 |
| NAPHTHALENE | | | | | 8.4E-11 | 8.4E-11 | 7.8E-11 | 9.1E-11 | 8.2E-11 | 8.9E-11 | 8.2E-11 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.3E-07 | 1.0E-07 | 1.3E-05 | 1.8E-06 | 6.8E-09 | 1.2E-07 | 6.3E-09 | 5.0E-07 | 6.7E-09 | 9.9E-08 | 6.7E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.9E-06 | 2.2E-06 | 2.9E-04 | 3.9E-05 | 1.5E-07 | 2.5E-06 | 1.4E-07 | 1.1E-05 | 1.4E-07 | 2.1E-06 | 1.4E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.9E-06 | 2.2E-06 | 2.9E-04 | 3.9E-05 | 1.5E-07 | 2.5E-06 | 1.4E-07 | 1.1E-05 | 1.4E-07 | 2.1E-06 | 1.4E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-804 | SB-805 | SB-805 | SB-806 | SB-806 | SB-806 | SB-806 | SB-806 | SB-806 | SB-807 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-804-09 | G-SB-805-07 | G-SB-805-09 | G-SB-806-03 | G-SB-806-05 | G-SB-806-07 | G-SB-806-07-AVG | G-SB-806-07-D | G-SB-806-09 | G-SB-807-03 |
| SAMPLE DATE | 20100823 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100825 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| BOTTOM DEPTH | 9 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.0E-06 | 6.9E-09 | 2.1E-07 | 7.3E-09 | 2.3E-07 | 6.6E-09 | 6.8E-09 | 7.1E-09 | 5.3E-05 | 6.4E-09 |
| NAPHTHALENE | 3.5E-10 | 8.7E-11 | 9.5E-11 | 9.1E-11 | 8.2E-11 | 8.2E-11 | 8.6E-11 | 8.9E-11 | 2.2E-08 | 8.0E-11 |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 5.0E-06 | 7.0E-09 | 2.1E-07 | 7.4E-09 | 2.3E-07 | 6.7E-09 | 6.9E-09 | 7.2E-09 | 5.3E-05 | 6.5E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-04 | 1.5E-07 | 4.5E-06 | 1.6E-07 | 5.0E-06 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.1E-03 | 1.4E-07 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-04 | 1.5E-07 | 4.5E-06 | 1.6E-07 | 5.0E-06 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.1E-03 | 1.4E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-807 | SB-807 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 | SB-808 | SB-808 | SB-809 | SB-809 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-807-03-AVG | G-SB-807-03-D | G-SB-807-05 | G-SB-807-07 | G-SB-807-09 | G-SB-808-03 | G-SB-808-05 | G-SB-808-07 | G-SB-808-09 | G-SB-809-03 | G-SB-809-05 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 3 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.3E-09 | 6.2E-09 | 6.6E-09 | 6.8E-09 | 1.8E-07 | 6.4E-09 | 7.0E-06 | 6.4E-09 | 3.0E-05 | 6.8E-09 | 2.5E-07 |
| NAPHTHALENE | 7.9E-11 | 7.8E-11 | 8.2E-11 | 8.4E-11 | 9.3E-11 | 8.0E-11 | 9.5E-10 | 8.0E-11 | 8.0E-10 | 8.4E-11 | 8.4E-11 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.4E-09 | 6.3E-09 | 6.7E-09 | 6.8E-09 | 1.8E-07 | 6.5E-09 | 7.0E-06 | 6.5E-09 | 3.0E-05 | 6.8E-09 | 2.5E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.5E-07 | 3.8E-06 | 1.4E-07 | 1.5E-04 | 1.4E-07 | 6.4E-04 | 1.5E-07 | 5.3E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.5E-07 | 3.8E-06 | 1.4E-07 | 1.5E-04 | 1.4E-07 | 6.4E-04 | 1.5E-07 | 5.3E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 | SB-810 | SB-811 | SB-811 | SB-811 | SB-811 | SB-811 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-809-07 | G-SB-809-09 | G-SB-810-03 | G-SB-810-05 | G-SB-810-07 | G-SB-810-09 | G-SB-811-05 | G-SB-811-07 | G-SB-811-07-AVG | G-SB-811-07-D | G-SB-811-09 |
| SAMPLE DATE | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 7 | 7 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 5 | 7 | 7 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-09 | 6.2E-07 | 1.9E-08 | 8.6E-07 | 3.7E-08 | 6.2E-08 | 6.7E-06 | 6.9E-09 | 6.8E-09 | 6.8E-09 | 2.0E-07 |
| NAPHTHALENE | 8.4E-11 | 8.4E-11 | 8.7E-11 | 8.9E-11 | 7.8E-11 | 9.1E-11 | 3.5E-10 | 8.7E-11 | 8.6E-11 | 8.4E-11 | 9.5E-11 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.8E-09 | 6.2E-07 | 1.9E-08 | 8.6E-07 | 3.7E-08 | 6.2E-08 | 6.7E-06 | 7.0E-09 | 6.9E-09 | 6.8E-09 | 2.0E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.3E-05 | 4.1E-07 | 1.9E-05 | 8.1E-07 | 1.3E-06 | 1.4E-04 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 4.3E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-07 | 1.3E-05 | 4.1E-07 | 1.9E-05 | 8.1E-07 | 1.3E-06 | 1.4E-04 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 4.3E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-812 | SB-812 | SB-812 | SB-812 | SB-813 | SB-813 | SB-813 | SB-813 | G-TP-1 | G-TP-1 | G-TP-1 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-812-03 | G-SB-812-05 | G-SB-812-07 | G-SB-812-09 | G-SB-813-03 | G-SB-813-05 | G-SB-813-07 | G-SB-813-09 | G-TP-1-1-7-8 | G-TP-1-5-2-3 | G-TP-1-7-5-7 |
| SAMPLE DATE | 20100824 | 20100824 | 20100824 | 20100824 | 20100826 | 20100826 | 20100826 | 20100826 | 20100921 | 20100921 | 20100921 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 7 | 2 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 8 | 3 | 7 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.6E-09 | 2.3E-07 | 6.8E-09 | 2.7E-06 | 6.8E-09 | 6.9E-09 | 6.8E-09 | 3.7E-05 | 2.2E-07 | 6.6E-09 | 1.3E-07 |
| NAPHTHALENE | 8.2E-11 | 8.9E-11 | 8.4E-11 | 1.7E-09 | 8.4E-11 | 8.7E-11 | 8.4E-11 | 9.5E-09 | 8.9E-11 | 8.2E-11 | 8.7E-11 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.7E-09 | 2.3E-07 | 6.8E-09 | 2.7E-06 | 6.8E-09 | 7.0E-09 | 6.8E-09 | 3.7E-05 | 2.2E-07 | 6.7E-09 | 1.3E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-07 | 4.9E-06 | 1.5E-07 | 5.9E-05 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 7.9E-04 | 4.8E-06 | 1.4E-07 | 2.7E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-07 | 4.9E-06 | 1.5E-07 | 5.9E-05 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 7.9E-04 | 4.8E-06 | 1.4E-07 | 2.7E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | G-TP-2 | G-TP-2 | OW-5 | OW-5 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 | SB-091 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-2-3-6-7 | G-TP-2-8-5-6 | OW-5-4 | OW-5-6 | G-SB-91RE-10 | G-SB-91RE-3 | G-SB-91RE-5 | G-SB-91RE-6 | G-SB-91RE-7 | G-SB-91RE-8 | G-SB-91RE-8-AVG |
| SAMPLE DATE | 20100921 | 20100921 | 20071128 | 20071128 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 5 | 4 | 6 | 10 | 3 | 5 | 6 | 7 | 8 | 8 |
| BOTTOM DEPTH | 7 | 6 | 4 | 6 | 10 | 3 | 5 | 6 | 7 | 8 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-06 | 5.4E-07 | | | 4.7E-07 | 8.0E-07 | 3.3E-07 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | 3.8E-09 | 3.6E-10 | 1.2E-10 | 1.3E-10 | | | | | | | |
| AROCLOR-1260 | | | 1.9E-08 | 1.9E-08 | | | | | | | |
| ARSENIC | | | 7.7E-07 | 6.6E-07 | | | | | | | |
| COBALT | | | 1.2E-09 | 5.9E-10 | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 3.1E-07 | 2.2E-07 | | | | | | | |
| TOTAL CANCER RISK | 5.6E-06 | 5.4E-07 | 1.1E-06 | 9.0E-07 | 4.7E-07 | 8.0E-07 | 3.3E-07 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.2E-04 | 1.2E-05 | | | 1.0E-05 | 1.7E-05 | 7.1E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | | | 6.2E-10 | 6.4E-10 | | | | | | | |
| AROCLOR-1260 | | | 9.4E-08 | 9.7E-08 | | | | | | | |
| ARSENIC | | | 6.0E-06 | 5.1E-06 | | | | | | | |
| COBALT | | | 6.2E-09 | 3.0E-09 | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 4.7E-06 | 3.3E-06 | | | | | | | |
| TOTAL CANCER RISK | 1.2E-04 | 1.2E-05 | 1.1E-05 | 8.5E-06 | 1.0E-05 | 1.7E-05 | 7.1E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-091 | SB-091 | SB-091A | SB-091A | SB-091A | SB-091A | SB-091A | SB-091A | SB-091B | SB-091B |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91RE-8-D | G-SB-91RE-9 | G-SB-91REA-3 | G-SB-91REA-5 | G-SB-91REA-7 | G-SB-91REA-7-AVG | G-SB-91REA-7-D | G-SB-91REA-9 | G-SB-91REB-3 | G-SB-91REB-5 |
| SAMPLE DATE | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091030 | 20091102 | 20091102 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 8 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 8 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 1.0E-06 | 2.4E-09 | 6.0E-06 | 8.3E-08 | 9.3E-08 | 1.0E-07 | 1.3E-05 | 1.3E-07 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 1.0E-06 | 2.4E-09 | 6.0E-06 | 8.3E-08 | 9.3E-08 | 1.0E-07 | 1.3E-05 | 1.3E-07 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 2.2E-05 | 5.3E-08 | 1.3E-04 | 1.8E-06 | 2.0E-06 | 2.2E-06 | 2.8E-04 | 2.8E-06 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 2.2E-05 | 5.3E-08 | 1.3E-04 | 1.8E-06 | 2.0E-06 | 2.2E-06 | 2.8E-04 | 2.8E-06 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-091B | SB-091B | SB-091C | SB-091C | SB-091C | SB-091C | SB-092 | SB-092 | SB-092 | SB-092 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REB-7 | G-SB-91REB-9 | G-SB-91REC-3 | G-SB-91REC-5 | G-SB-91REC-7 | G-SB-91REC-9 | G-SB-92RE-10 | G-SB-92RE-3 | G-SB-92RE-4 | G-SB-92RE-5 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 10 | 3 | 4 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 5 | 7 | 9 | 10 | 3 | 4 | 5 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 1.2E-06 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 1.5E-06 | 2.5E-07 | 7.5E-07 | 9.5E-08 | 3.1E-05 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | 1.2E-06 | 7.7E-07 | 1.5E-06 | 1.2E-06 |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 1.2E-06 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 1.5E-06 | 1.4E-06 | 1.5E-06 | 1.6E-06 | 3.2E-05 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 2.7E-05 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 3.3E-05 | 5.4E-06 | 1.6E-05 | 2.1E-06 | 6.8E-04 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | 9.1E-06 | 6.0E-06 | 1.2E-05 | 9.1E-06 |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 2.7E-05 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 3.3E-05 | 1.5E-05 | 2.2E-05 | 1.4E-05 | 6.9E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092C | SB-092C | SB-092C | SB-092C |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RE-6 | G-SB-92RE-7 | G-SB-92RE-7-AVG | G-SB-92RE-7-D | G-SB-92RE-8 | G-SB-92RE-9 | G-SB-92REC-3 | G-SB-92REC-5 | G-SB-92REC-7 | G-SB-92REC-9 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091102 | 20091102 | 20091102 | 20091102 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 7 | 7 | 8 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 6 | 7 | 7 | 7 | 8 | 9 | 3 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.4E-06 | 2.4E-07 | 2.3E-07 | 2.2E-07 | 2.6E-09 | 8.1E-05 | 3.9E-08 | 1.3E-06 | 2.6E-09 | 1.1E-07 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | 2.5E-06 | 3.1E-06 | 2.5E-06 | 1.9E-06 | 5.9E-07 | 3.0E-06 | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 5.9E-06 | 3.4E-06 | 2.8E-06 | 2.2E-06 | 5.9E-07 | 8.4E-05 | 3.9E-08 | 1.3E-06 | 2.6E-09 | 1.1E-07 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.4E-05 | 5.2E-06 | 5.0E-06 | 4.7E-06 | 5.6E-08 | 1.8E-03 | 8.4E-07 | 2.9E-05 | 5.6E-08 | 2.3E-06 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | 2.0E-05 | 2.4E-05 | 2.0E-05 | 1.5E-05 | 4.6E-06 | 2.4E-05 | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 9.4E-05 | 2.9E-05 | 2.5E-05 | 2.0E-05 | 4.6E-06 | 1.8E-03 | 8.4E-07 | 2.9E-05 | 5.6E-08 | 2.3E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-092D | SB-092D | SB-092D | SB-092D | SB-181 | SB-182 | SB-184 | SB-185 | SB-186 | SB-187 | SB-188 | SB-189 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RED-3 | G-SB-92RED-5 | G-SB-92RED-7 | G-SB-92RED-9 | SB-181-05 | SB-182-05 | SB-184-05 | SB-185-05 | SB-186-05 | SB-187-05 | SB-188-05 | SB-189-05 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20041102 | 20041102 | 20041103 | 20041103 | 20041103 | 20041105 | 20041105 | 20041105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.9E-08 | 4.7E-06 | 2.8E-09 | 1.6E-05 | | | | | | | | |
| NAPHTHALENE | | | | | 2.2E-11 | 2.2E-11 | 2.2E-11 | 2.2E-11 | 2.2E-11 | 8.7E-11 | 2.2E-11 | 2.2E-11 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.9E-08 | 4.7E-06 | 2.8E-09 | 1.6E-05 | 2.2E-11 | 2.2E-11 | 2.2E-11 | 2.2E-11 | 2.2E-11 | 8.7E-11 | 2.2E-11 | 2.2E-11 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-06 | 1.0E-04 | 6.0E-08 | 3.5E-04 | | | | | | | | |
| NAPHTHALENE | | | | | 1.1E-10 | 1.1E-10 | 1.1E-10 | 1.1E-10 | 1.1E-10 | 4.4E-10 | 1.1E-10 | 1.1E-10 |
| AROCLOR-1260 | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-06 | 1.0E-04 | 6.0E-08 | 3.5E-04 | 1.1E-10 | 1.1E-10 | 1.1E-10 | 1.1E-10 | 1.1E-10 | 4.4E-10 | 1.1E-10 | 1.1E-10 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-190 | SB-191 | SB-192 | SB-194 | SB-194 | SB-195 | SB-195 | SB-196 | SB-196 | SB-197 | SB-197 | SB-198 | SB-198 | SB-199 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-190-05 | SB-191-05 | SB-192-05 | SB-194-05 | SB-194-10 | SB-195-05 | SB-195-10 | SB-196-05 | SB-196-10 | SB-197-05 | SB-197-10 | SB-198-05 | SB-198-10 | SB-199-05 |
| SAMPLE DATE | 20041109 | 20041109 | 20041109 | 20050511 | 20050511 | 20050510 | 20050510 | 20050511 | 20050511 | 20050511 | 20050511 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | 1.4E-07 | 1.3E-07 | 6.3E-06 | 1.0E-06 | 1.7E-06 | 5.0E-07 | 1.2E-06 | 1.4E-07 | 3.8E-07 | 1.5E-07 | 3.2E-06 |
| NAPHTHALENE | 6.1E-09 | 2.2E-11 | 8.7E-11 | 4.8E-11 | 4.5E-11 | 2.7E-11 | 5.0E-11 | 4.5E-11 | 5.4E-11 | 4.8E-11 | 5.0E-11 | 5.4E-11 | 4.1E-11 | 4.5E-10 |
| AROCLOR-1260 | | | | 1.9E-08 | 1.8E-08 | 8.1E-09 | 1.4E-08 | 1.8E-08 | 2.1E-08 | 1.8E-08 | 1.9E-08 | 2.1E-08 | 2.0E-08 | 1.9E-08 |
| ARSENIC | | | | 1.8E-06 | 1.8E-07 | 1.5E-06 | 1.8E-06 | 3.7E-07 | 1.8E-07 | 1.8E-06 | 1.8E-06 | 9.1E-07 | 2.2E-06 | 5.5E-07 |
| COBALT | | | | 1.2E-09 | 6.4E-10 | 2.1E-09 | 3.0E-09 | 9.1E-10 | 6.6E-10 | 1.5E-08 | 3.2E-09 | 1.2E-09 | 1.7E-09 | 1.3E-09 |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | 2.5E-07 | 1.9E-07 | 7.7E-07 | 8.0E-07 | 4.5E-07 | 3.4E-07 | 3.4E-07 | 8.8E-07 | 1.1E-06 | 9.8E-07 | 4.5E-07 |
| TOTAL CANCER RISK | 6.1E-09 | 2.2E-11 | 8.7E-11 | 2.2E-06 | 5.3E-07 | 8.5E-06 | 3.7E-06 | 2.6E-06 | 1.0E-06 | 3.4E-06 | 2.9E-06 | 2.4E-06 | 3.3E-06 | 4.2E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | 3.1E-06 | 2.9E-06 | 1.4E-04 | 2.2E-05 | 3.8E-05 | 1.1E-05 | 2.7E-05 | 3.1E-06 | 8.2E-06 | 3.2E-06 | 6.9E-05 |
| NAPHTHALENE | 3.1E-08 | 1.1E-10 | 4.4E-10 | 2.4E-10 | 2.3E-10 | 1.4E-10 | 2.5E-10 | 2.3E-10 | 2.7E-10 | 2.4E-10 | 2.5E-10 | 2.7E-10 | 2.1E-10 | 2.2E-09 |
| AROCLOR-1260 | | | | 9.4E-08 | 9.2E-08 | 4.0E-08 | 6.9E-08 | 9.2E-08 | 1.1E-07 | 8.9E-08 | 9.7E-08 | 1.1E-07 | 9.9E-08 | 9.4E-08 |
| ARSENIC | | | | 1.4E-05 | 1.4E-06 | 1.1E-05 | 1.4E-05 | 2.8E-06 | 1.4E-06 | 1.4E-05 | 1.4E-05 | 7.1E-06 | 1.7E-05 | 4.3E-06 |
| COBALT | | | | 6.1E-09 | 3.2E-09 | 1.1E-08 | 1.5E-08 | 4.6E-09 | 3.3E-09 | 7.8E-08 | 1.6E-08 | 6.3E-09 | 8.7E-09 | 6.4E-09 |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | 3.7E-06 | 2.9E-06 | 1.2E-05 | 1.2E-05 | 6.7E-06 | 5.2E-06 | 5.0E-06 | 1.3E-05 | 1.7E-05 | 1.5E-05 | 6.7E-06 |
| TOTAL CANCER RISK | 3.1E-08 | 1.1E-10 | 4.4E-10 | 2.1E-05 | 7.3E-06 | 1.6E-04 | 4.9E-05 | 4.7E-05 | 1.8E-05 | 4.6E-05 | 3.1E-05 | 3.2E-05 | 3.5E-05 | 8.0E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-199 | SB-262 | SB-262 | SB-263 | SB-263 | SB-264 | SB-264 | SB-410 | SB-410 | SB-410 | SB-410 | SB-411 | SB-411 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-199-10 | SB-262-05 | SB-262-10 | SB-263-05 | SB-263-10 | SB-264-05 | SB-264-10 | SB-410-0203 | SB-410-0304 | SB-410-0506 | SB-410-0708 | SB-411-0203 | SB-411-0304 |
| SAMPLE DATE | 20050511 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 3 | 4 | 6 | 8 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.4E-07 | | | | | | | 3.5E-08 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | 5.0E-11 | 7.8E-09 | 6.6E-09 | 7.3E-09 | 7.4E-09 | 7.0E-09 | 7.7E-09 | | | | | | |
| AROCLOR-1260 | 2.0E-08 | | | | | | | | | | | | |
| ARSENIC | 3.7E-07 | | | | | | | | | | | | |
| COBALT | 2.7E-09 | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 6.0E-07 | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.3E-06 | 7.8E-09 | 6.6E-09 | 7.3E-09 | 7.4E-09 | 7.0E-09 | 7.7E-09 | 3.5E-08 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.4E-06 | | | | | | | 7.5E-07 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | 2.5E-10 | 4.0E-08 | 3.3E-08 | 3.7E-08 | 3.7E-08 | 3.5E-08 | 3.9E-08 | | | | | | |
| AROCLOR-1260 | 9.9E-08 | | | | | | | | | | | | |
| ARSENIC | 2.8E-06 | | | | | | | | | | | | |
| COBALT | 1.4E-08 | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 9.0E-06 | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-05 | 4.0E-08 | 3.3E-08 | 3.7E-08 | 3.7E-08 | 3.5E-08 | 3.9E-08 | 7.5E-07 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-411 | SB-411 | SB-412 | SB-412 | SB-412 | SB-412 | SB-413 | SB-413 | SB-413 | SB-413 | SB-414 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-411-0506 | SB-411-0708 | SB-412-0203 | SB-412-0304 | SB-412-0506 | SB-412-0708 | SB-413-0203 | SB-413-0304 | SB-413-0506 | SB-413-0708 | SB-414-0203 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-06 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 5.5E-08 | 2.8E-09 | 9.4E-08 | 1.5E-07 | 2.8E-09 | 2.8E-09 | 5.5E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-06 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 5.5E-08 | 2.8E-09 | 9.4E-08 | 1.5E-07 | 2.8E-09 | 2.8E-09 | 5.5E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.2E-05 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 1.2E-06 | 6.0E-08 | 2.0E-06 | 3.2E-06 | 6.0E-08 | 6.0E-08 | 1.2E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.2E-05 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 1.2E-06 | 6.0E-08 | 2.0E-06 | 3.2E-06 | 6.0E-08 | 6.0E-08 | 1.2E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-414 | SB-414 | SB-414 | SB-415 | SB-415 | SB-415 | SB-415 | SB-416 | SB-416 | SB-416 | SB-416 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-414-0304 | SB-414-0506 | SB-414-0708 | SB-415-0203 | SB-415-0304 | SB-415-0506 | SB-415-0708 | SB-416-0203 | SB-416-0304 | SB-416-0506 | SB-416-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-08 | 2.8E-09 | 2.8E-09 | 3.3E-08 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-08 | 2.8E-09 | 2.8E-09 | 3.3E-08 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-07 | 6.0E-08 | 6.0E-08 | 7.1E-07 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-07 | 6.0E-08 | 6.0E-08 | 7.1E-07 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-417 | SB-417 | SB-417 | SB-417 | SB-418 | SB-418 | SB-418 | SB-418 | SB-419 | SB-419 | SB-419 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-417-0203 | SB-417-0304 | SB-417-0506 | SB-417-0708 | SB-418-0203 | SB-418-0304 | SB-418-0506 | SB-418-0708 | SB-419-0203 | SB-419-0304 | SB-419-0506 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 1.1E-07 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 1.1E-07 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 2.4E-06 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 2.4E-06 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-419 | SB-420 | SB-420 | SB-420 | SB-420 | SB-421 | SB-421 | SB-421 | SB-421 | SB-422 | SB-422 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-419-0708 | SB-420-0203 | SB-420-0304 | SB-420-0506 | SB-420-0708 | SB-421-0203 | SB-421-0304 | SB-421-0506 | SB-421-0708 | SB-422-0203 | SB-422-0304 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.4E-09 | 2.4E-09 | 2.6E-09 | 2.8E-09 | 3.5E-08 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.4E-09 | 2.4E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.4E-09 | 2.4E-09 | 2.6E-09 | 2.8E-09 | 3.5E-08 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.4E-09 | 2.4E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.3E-08 | 5.3E-08 | 5.6E-08 | 6.0E-08 | 7.5E-07 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.3E-08 | 5.3E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.3E-08 | 5.3E-08 | 5.6E-08 | 6.0E-08 | 7.5E-07 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.3E-08 | 5.3E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-422 | SB-422 | SB-423 | SB-423 | SB-423 | SB-423 | SB-424 | SB-424 | SB-424 | SB-424 | SB-425 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-422-0506 | SB-422-0708 | SB-423-0203 | SB-423-0304 | SB-423-0506 | SB-423-0708 | SB-424-0203 | SB-424-0304 | SB-424-0506 | SB-424-0708 | SB-425-0203 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.1E-07 | 2.6E-09 | 6.2E-08 | 2.6E-09 | 2.4E-09 | 2.8E-09 | 1.4E-05 | 5.5E-06 | 6.6E-08 | 2.6E-09 | 2.4E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.1E-07 | 2.6E-09 | 6.2E-08 | 2.6E-09 | 2.4E-09 | 2.8E-09 | 1.4E-05 | 5.5E-06 | 6.6E-08 | 2.6E-09 | 2.4E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.6E-06 | 5.6E-08 | 1.4E-06 | 5.6E-08 | 5.3E-08 | 6.0E-08 | 3.0E-04 | 1.2E-04 | 1.4E-06 | 5.6E-08 | 5.3E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.6E-06 | 5.6E-08 | 1.4E-06 | 5.6E-08 | 5.3E-08 | 6.0E-08 | 3.0E-04 | 1.2E-04 | 1.4E-06 | 5.6E-08 | 5.3E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-425 | SB-425 | SB-425 | SB-426 | SB-426 | SB-426 | SB-426 | SB-427 | SB-427 | SB-427 | SB-427 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-425-0304 | SB-425-0506 | SB-425-0708 | SB-426-0203 | SB-426-0304 | SB-426-0506 | SB-426-0708 | SB-427-0203 | SB-427-0304 | SB-427-0506 | SB-427-0708 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 | 20071017 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.4E-09 | 2.8E-09 | 2.9E-09 | 3.3E-06 | 2.8E-09 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.4E-09 | 2.8E-09 | 2.9E-09 | 3.3E-06 | 2.8E-09 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.3E-08 | 6.0E-08 | 6.4E-08 | 7.2E-05 | 6.0E-08 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.3E-08 | 6.0E-08 | 6.4E-08 | 7.2E-05 | 6.0E-08 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-428 | SB-428 | SB-428 | SB-428 | SB-429 | SB-429 | SB-429 | SB-429 | SB-430 | SB-430 | SB-430 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-428-0203 | SB-428-0304 | SB-428-0506 | SB-428-0708 | SB-429-0203 | SB-429-0304 | SB-429-0506 | SB-429-0708 | SB-430-0203 | SB-430-0304 | SB-430-0506 |
| SAMPLE DATE | 20071017 | 20071017 | 20071017 | 20071017 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 1.2E-07 | 2.6E-09 | 2.6E-09 | 2.4E-09 | 2.4E-09 | 2.4E-09 | 2.6E-09 | 5.9E-08 | 2.4E-09 | 3.1E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 1.2E-07 | 2.6E-09 | 2.6E-09 | 2.4E-09 | 2.4E-09 | 2.4E-09 | 2.6E-09 | 5.9E-08 | 2.4E-09 | 3.1E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 2.6E-06 | 5.6E-08 | 5.6E-08 | 5.3E-08 | 5.3E-08 | 5.3E-08 | 5.6E-08 | 1.3E-06 | 5.3E-08 | 6.7E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 2.6E-06 | 5.6E-08 | 5.6E-08 | 5.3E-08 | 5.3E-08 | 5.3E-08 | 5.6E-08 | 1.3E-06 | 5.3E-08 | 6.7E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-430 | SB-431 | SB-431 | SB-431 | SB-431 | SB-432 | SB-432 | SB-432 | SB-432 | SB-433 | SB-433 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-430-0708 | SB-431-0203 | SB-431-0304 | SB-431-0506 | SB-431-0708 | SB-432-0203 | SB-432-0304 | SB-432-0506 | SB-432-0708 | SB-433-0203 | SB-433-0304 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.9E-08 | 3.2E-07 | 2.9E-08 | 2.6E-09 | 3.1E-09 | 2.6E-09 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 5.9E-08 | 2.4E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.9E-08 | 3.2E-07 | 2.9E-08 | 2.6E-09 | 3.1E-09 | 2.6E-09 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 5.9E-08 | 2.4E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-06 | 7.0E-06 | 6.2E-07 | 5.6E-08 | 6.8E-08 | 5.6E-08 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 1.3E-06 | 5.3E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-06 | 7.0E-06 | 6.2E-07 | 5.6E-08 | 6.8E-08 | 5.6E-08 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 1.3E-06 | 5.3E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-433 | SB-433 | SB-434 | SB-434 | SB-434 | SB-434 | SB-435 | SB-435 | SB-435 | SB-435 | SB-436 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-433-0506 | SB-433-0708 | SB-434-0203 | SB-434-0304 | SB-434-0506 | SB-434-0708 | SB-435-0203 | SB-435-0304 | SB-435-0506 | SB-435-0708 | SB-436-0203 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 4.5E-08 | 2.8E-09 | 2.8E-09 | 5.9E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 4.5E-08 | 2.8E-09 | 2.8E-09 | 5.9E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.3E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 9.8E-07 | 6.0E-08 | 6.0E-08 | 1.3E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.3E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 9.8E-07 | 6.0E-08 | 6.0E-08 | 1.3E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-436 | SB-436 | SB-436 | SB-437 | SB-437 | SB-437 | SB-437 | SB-438 | SB-438 | SB-438 | SB-438 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-436-0304 | SB-436-0506 | SB-436-0708 | SB-437-0203 | SB-437-0304 | SB-437-0506 | SB-437-0708 | SB-438-0203 | SB-438-0304 | SB-438-0506 | SB-438-0708 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 | 20071018 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.2E-08 | 6.2E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.4E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.2E-08 | 6.2E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.4E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.9E-07 | 1.4E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.3E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.9E-07 | 1.4E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.3E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-439 | SB-439 | SB-439 | SB-439 | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-085 | SB-086 | SB-086 | SB-087 | SB-088 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-439-0203 | SB-439-0304 | SB-439-0506 | SB-439-0708 | SB-81-05 | SB-82-05 | SB-83-05 | SB-84-05 | SB-85-05 | SB-85-10 | SB-86-05 | SB-86-10 | SB-87-05 | SB-88-05 |
| SAMPLE DATE | 20071018 | 20071018 | 20071018 | 20071018 | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20041115 | 20041115 | 20041105 | 20041105 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 5 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 5 | 5 | 5 | 5 | 5 | 10 | 5 | 10 | 5 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.9E-09 | 2.8E-09 | 2.8E-09 | 6.8E-07 | 6.9E-07 | 6.9E-07 | 7.1E-07 | 7.1E-07 | 6.6E-07 | 6.8E-07 | 6.6E-07 | | |
| NAPHTHALENE | | | | | 1.3E-10 | 1.3E-10 | 1.3E-10 | 2.7E-08 | 6.9E-09 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 2.2E-11 | 1.2E-08 |
| AROCLOR-1260 | | | | | 1.4E-07 | 1.5E-07 | 1.4E-07 | 1.5E-07 | 1.5E-07 | 1.4E-07 | 1.4E-07 | 1.4E-07 | | |
| ARSENIC | | | | | 9.1E-07 | 4.4E-07 | 7.0E-07 | 1.2E-06 | 8.1E-07 | 9.7E-08 | 2.6E-07 | 2.2E-07 | | |
| COBALT | | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 2.7E-07 | 2.1E-07 | 2.1E-07 | 5.2E-07 | 7.7E-07 | 2.6E-07 | 5.0E-07 | 8.5E-07 | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.9E-09 | 2.8E-09 | 2.8E-09 | 2.0E-06 | 1.5E-06 | 1.7E-06 | 2.7E-06 | 2.4E-06 | 1.2E-06 | 1.6E-06 | 1.9E-06 | 2.2E-11 | 1.2E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 6.4E-08 | 6.0E-08 | 6.0E-08 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 | 1.4E-05 | 1.5E-05 | 1.4E-05 | | |
| NAPHTHALENE | | | | | 6.5E-10 | 6.5E-10 | 6.5E-10 | 1.4E-07 | 3.5E-08 | 6.5E-10 | 6.5E-10 | 6.5E-10 | 1.1E-10 | 5.9E-08 |
| AROCLOR-1260 | | | | | 7.2E-07 | 7.4E-07 | 7.2E-07 | 7.4E-07 | 7.4E-07 | 6.9E-07 | 7.2E-07 | 6.9E-07 | | |
| ARSENIC | | | | | 7.1E-06 | 3.4E-06 | 5.4E-06 | 9.7E-06 | 6.3E-06 | 7.6E-07 | 2.0E-06 | 1.7E-06 | | |
| COBALT | | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 4.1E-06 | 3.1E-06 | 3.1E-06 | 7.9E-06 | 1.2E-05 | 3.8E-06 | 7.4E-06 | 1.3E-05 | | |
| TOTAL CANCER RISK | 5.6E-08 | 6.4E-08 | 6.0E-08 | 6.0E-08 | 2.7E-05 | 2.2E-05 | 2.4E-05 | 3.4E-05 | 3.4E-05 | 2.0E-05 | 2.5E-05 | 3.0E-05 | 1.1E-10 | 5.9E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-089 | SB-090 | SB-091 | SB-092 | SB-440 | SB-440 | SB-440 | SB-441 | SB-441 | SB-441 | SB-441 | SB-442 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-89-05 | SB-90-05 | SB-91-05 | SB-92-04 | SB-440-0203 | SB-440-0304 | SB-440-0506 | SB-441-0203 | SB-441-0304 | SB-441-0506 | SB-441-0708 | SB-442-0203 |
| SAMPLE DATE | 20041105 | 20041103 | 20040927 | 20040927 | 20071018 | 20071018 | 20071018 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 4 | 2 | 3 | 5 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 5 | 5 | 5 | 4 | 3 | 4 | 6 | 3 | 4 | 6 | 8 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | 2.1E-10 | 2.8E-09 | 2.8E-09 | 2.9E-09 | 2.5E-07 | 1.1E-07 | 3.1E-06 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | 7.4E-09 | 2.2E-11 | 1.3E-10 | 1.3E-10 | | | | | | | | |
| AROCLOR-1260 | | | 1.4E-07 | 1.4E-07 | | | | | | | | |
| ARSENIC | | | 8.8E-07 | 5.1E-07 | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 5.5E-07 | 7.2E-07 | | | | | | | | |
| TOTAL CANCER RISK | 7.4E-09 | 2.2E-11 | 1.6E-06 | 1.4E-06 | 2.8E-09 | 2.8E-09 | 2.9E-09 | 2.5E-07 | 1.1E-07 | 3.1E-06 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | 4.5E-09 | 6.0E-08 | 6.0E-08 | 6.4E-08 | 5.4E-06 | 2.3E-06 | 6.8E-05 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | 3.7E-08 | 1.1E-10 | 6.5E-10 | 6.5E-10 | | | | | | | | |
| AROCLOR-1260 | | | 7.2E-07 | 7.2E-07 | | | | | | | | |
| ARSENIC | | | 6.8E-06 | 4.0E-06 | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | 8.3E-06 | 1.1E-05 | | | | | | | | |
| TOTAL CANCER RISK | 3.7E-08 | 1.1E-10 | 1.6E-05 | 1.5E-05 | 6.0E-08 | 6.0E-08 | 6.4E-08 | 5.4E-06 | 2.3E-06 | 6.8E-05 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-442 | SB-442 | SB-442 | SB-443 | SB-443 | SB-443 | SB-443 | SB-444 | SB-444 | SB-444 | SB-444 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-442-0304 | SB-442-0506 | SB-442-0708 | SB-443-0203 | SB-443-0304 | SB-443-0506 | SB-443-0708 | SB-444-0203 | SB-444-0304 | SB-444-0506 | SB-444-0708 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 1.1E-07 | 2.6E-09 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 1.1E-07 | 2.6E-09 | 2.8E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 2.4E-06 | 5.6E-08 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 2.4E-06 | 5.6E-08 | 6.0E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-445 | SB-445 | SB-445 | SB-445 | SB-446 | SB-446 | SB-446 | SB-446 | SB-447 | SB-448 | SB-448 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-445-0203 | SB-445-0304 | SB-445-0506 | SB-445-0708 | SB-446-0203 | SB-446-0304 | SB-446-0506 | SB-446-0708 | SB-447-0203 | SB-448-0203 | SB-448-0304 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 2 | 3 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 9.7E-08 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 9.7E-08 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 2.1E-06 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 2.1E-06 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-448 | SB-448 | SB-449 | SB-449 | SB-449 | SB-449 | SB-450 | SB-450 | SB-450 | SB-450 | SB-451 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-448-0506 | SB-448-0708 | SB-449-0203 | SB-449-0304 | SB-449-0506 | SB-449-0708 | SB-450-0203 | SB-450-0304 | SB-450-0506 | SB-450-0708 | SB-451-0203 |
| SAMPLE DATE | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071019 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 7.3E-08 | 2.4E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.9E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 7.3E-08 | 2.4E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.9E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 1.6E-06 | 5.3E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 6.4E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 1.6E-06 | 5.3E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 6.4E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-451 | SB-451 | SB-451 | SB-452 | SB-452 | SB-452 | SB-452 | SB-453 | SB-453 | SB-453 | SB-453 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-451-0304 | SB-451-0506 | SB-451-0708 | SB-452-0203 | SB-452-0304 | SB-452-0506 | SB-452-0708 | SB-453-0203 | SB-453-0304 | SB-453-0506 | SB-453-0708 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 2.6E-09 | 7.6E-08 | 1.3E-07 | 2.6E-09 | 2.6E-09 | 9.7E-08 | 2.2E-06 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.8E-09 | 2.6E-09 | 7.6E-08 | 1.3E-07 | 2.6E-09 | 2.6E-09 | 9.7E-08 | 2.2E-06 | 2.8E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 5.6E-08 | 1.7E-06 | 2.9E-06 | 5.6E-08 | 5.6E-08 | 2.1E-06 | 4.8E-05 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 6.0E-08 | 5.6E-08 | 1.7E-06 | 2.9E-06 | 5.6E-08 | 5.6E-08 | 2.1E-06 | 4.8E-05 | 6.0E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-454 | SB-454 | SB-454 | SB-454 | SB-455 | SB-455 | SB-455 | SB-455 | SB-456 | SB-456 | SB-456 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-454-0203 | SB-454-0304 | SB-454-0506 | SB-454-0708 | SB-455-0203 | SB-455-0304 | SB-455-0506 | SB-455-0708 | SB-456-0203 | SB-456-0304 | SB-456-0506 |
| SAMPLE DATE | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 | 20071022 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-456 |
|---|---|
| SAMPLE ID | SB-456-0708 |
| SAMPLE DATE | 20071022 |
| SAMPLE CODE | NORMAL |
| MATRIX | SO |
| SAMPLE TYPE | NORMAL |
| SUBMATRIX | SB |
| TOP DEPTH | 7 |
| BOTTOM DEPTH | 8 |
| **INDUSTRIAL** | |
| BAP EQUIVALENT-HALFND | 1.1E-06 |
| NAPHTHALENE | |
| AROCLOR-1260 | |
| ARSENIC | |
| COBALT | |
| IRON | |
| LEAD | |
| MANGANESE | |
| MERCURY | |
| VANADIUM | |
| HEXAVALENT CHROMIUM | |
| TOTAL CANCER RISK | 1.1E-06 |
| **RESIDENTIAL** | |
| BAP EQUIVALENT-HALFND | 2.3E-05 |
| NAPHTHALENE | |
| AROCLOR-1260 | |
| ARSENIC | |
| COBALT | |
| IRON | |
| LEAD | |
| MANGANESE | |
| MERCURY | |
| VANADIUM | |
| HEXAVALENT CHROMIUM | |
| TOTAL CANCER RISK | 2.3E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-803 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 | SB-804 | SB-805 | SB-805 | SB-806 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-803-03 | G-SB-803-05 | G-SB-803-07 | G-SB-803-09 | G-SB-804-03 | G-SB-804-05 | G-SB-804-07 | G-SB-804-09 | G-SB-805-07 | G-SB-805-09 | G-SB-806-03 |
| SAMPLE DATE | 20100826 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 | 20100823 | 20100824 | 20100824 | 20100824 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 2.4E-06 | 2.4E-06 | 2.3E-06 | 2.6E-06 | 2.4E-06 | 2.6E-06 | 2.4E-06 | 1.0E-05 | 2.5E-06 | 2.8E-06 | 2.6E-06 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.4E-06 | 2.4E-06 | 2.3E-06 | 2.6E-06 | 2.4E-06 | 2.6E-06 | 2.4E-06 | 1.0E-05 | 2.5E-06 | 2.8E-06 | 2.6E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 | 4.7E-05 | 1.2E-05 | 1.3E-05 | 1.2E-05 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 | 4.7E-05 | 1.2E-05 | 1.3E-05 | 1.2E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-806 | SB-806 | SB-806 | SB-806 | SB-806 | SB-807 | SB-807 | SB-807 | SB-807 | SB-807 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-806-05 | G-SB-806-07 | G-SB-806-07-AVG | G-SB-806-07-D | G-SB-806-09 | G-SB-807-03 | G-SB-807-03-AVG | G-SB-807-03-D | G-SB-807-05 | G-SB-807-07 |
| SAMPLE DATE | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 3 | 3 | 5 | 7 |
| BOTTOM DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 3 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | |
| NAPHTHALENE | 2.4E-06 | 2.4E-06 | 2.5E-06 | 2.6E-06 | 6.4E-04 | 2.3E-06 | 2.3E-06 | 2.3E-06 | 2.4E-06 | 2.4E-06 |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.4E-06 | 2.4E-06 | 2.5E-06 | 2.6E-06 | 6.4E-04 | 2.3E-06 | 2.3E-06 | 2.3E-06 | 2.4E-06 | 2.4E-06 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | |
| NAPHTHALENE | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 | 3.0E-03 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 |
| AROCLOR-1260 | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 | 3.0E-03 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-807 | SB-808 | SB-808 | SB-808 | SB-808 | SB-809 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-807-09 | G-SB-808-03 | G-SB-808-05 | G-SB-808-07 | G-SB-808-09 | G-SB-809-03 | G-SB-809-05 | G-SB-809-07 | G-SB-809-09 | G-SB-810-03 | G-SB-810-05 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 2.7E-06 | 2.3E-06 | 2.8E-05 | 2.3E-06 | 2.3E-05 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.5E-06 | 2.6E-06 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.7E-06 | 2.3E-06 | 2.8E-05 | 2.3E-06 | 2.3E-05 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.5E-06 | 2.6E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.3E-05 | 1.1E-05 | 1.3E-04 | 1.1E-05 | 1.1E-04 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.3E-05 | 1.1E-05 | 1.3E-04 | 1.1E-05 | 1.1E-04 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-810 | SB-810 | SB-811 | SB-811 | SB-811 | SB-811 | SB-811 | SB-812 | SB-812 | SB-812 | SB-812 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-810-07 | G-SB-810-09 | G-SB-811-05 | G-SB-811-07 | G-SB-811-07-AVG | G-SB-811-07-D | G-SB-811-09 | G-SB-812-03 | G-SB-812-05 | G-SB-812-07 | G-SB-812-09 |
| SAMPLE DATE | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 | 20100824 | 20100824 | 20100824 | 20100824 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 7 | 9 | 5 | 7 | 7 | 7 | 9 | 3 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 2.3E-06 | 2.6E-06 | 1.0E-05 | 2.5E-06 | 2.5E-06 | 2.4E-06 | 2.8E-06 | 2.4E-06 | 2.6E-06 | 2.4E-06 | 5.0E-05 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.3E-06 | 2.6E-06 | 1.0E-05 | 2.5E-06 | 2.5E-06 | 2.4E-06 | 2.8E-06 | 2.4E-06 | 2.6E-06 | 2.4E-06 | 5.0E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.1E-05 | 1.2E-05 | 4.7E-05 | 1.2E-05 | 1.2E-05 | 1.1E-05 | 1.3E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 | 2.3E-04 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.1E-05 | 1.2E-05 | 4.7E-05 | 1.2E-05 | 1.2E-05 | 1.1E-05 | 1.3E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 | 2.3E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-813 | SB-813 | SB-813 | SB-813 | G-TP-1 | G-TP-1 | G-TP-1 | G-TP-2 | G-TP-2 | OW-5 | OW-5 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-813-03 | G-SB-813-05 | G-SB-813-07 | G-SB-813-09 | G-TP-1-1-7-8 | G-TP-1-5-2-3 | G-TP-1-7-5-7 | G-TP-2-3-6-7 | G-TP-2-8-5-6 | OW-5-4 | OW-5-6 |
| SAMPLE DATE | 20100826 | 20100826 | 20100826 | 20100826 | 20100921 | 20100921 | 20100921 | 20100921 | 20100921 | 20071128 | 20071128 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 7 | 2 | 5 | 6 | 5 | 4 | 6 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 8 | 3 | 7 | 7 | 6 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 2.4E-06 | 2.5E-06 | 2.4E-06 | 2.8E-04 | 2.6E-06 | 2.4E-06 | 2.5E-06 | 1.1E-04 | 1.1E-05 | 3.6E-06 | 3.7E-06 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | 4.8E-03 | 4.1E-03 |
| COBALT | | | | | | | | | | 1.0E-02 | 4.8E-03 |
| IRON | | | | | | | | | | 1.4E-02 | 1.2E-02 |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | 1.1E-02 | 6.0E-03 |
| MERCURY | | | | | | | | | | 4.5E-05 | 4.7E-05 |
| VANADIUM | | | | | | | | | | 1.7E-03 | 1.5E-03 |
| HEXAVALENT CHROMIUM | | | | | | | | | | 5.8E-04 | 4.1E-04 |
| TOTAL HAZARD INDEX | 2.4E-06 | 2.5E-06 | 2.4E-06 | 2.8E-04 | 2.6E-06 | 2.4E-06 | 2.5E-06 | 1.1E-04 | 1.1E-05 | 4.2E-02 | 2.9E-02 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.1E-05 | 1.2E-05 | 1.1E-05 | 1.3E-03 | 1.2E-05 | 1.1E-05 | 1.2E-05 | 5.1E-04 | 4.9E-05 | 1.7E-05 | 1.7E-05 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | 9.7E-02 | 8.3E-02 |
| COBALT | | | | | | | | | | 2.4E-01 | 1.1E-01 |
| IRON | | | | | | | | | | 3.2E-01 | 2.9E-01 |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | 1.1E-01 | 6.1E-02 |
| MERCURY | | | | | | | | | | 5.7E-04 | 6.0E-04 |
| VANADIUM | | | | | | | | | | 4.1E-02 | 3.5E-02 |
| HEXAVALENT CHROMIUM | | | | | | | | | | 5.2E-03 | 3.6E-03 |
| TOTAL HAZARD INDEX | 1.1E-05 | 1.2E-05 | 1.1E-05 | 1.3E-03 | 1.2E-05 | 1.1E-05 | 1.2E-05 | 5.1E-04 | 4.9E-05 | 8.2E-01 | 5.9E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-181 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RE-10 | G-SB-92RE-3 | G-SB-92RE-4 | G-SB-92RE-5 | G-SB-92RE-6 | G-SB-92RE-7 | G-SB-92RE-7-AVG | G-SB-92RE-7-D | G-SB-92RE-8 | G-SB-92RE-9 | SB-181-05 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20041102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 5 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | 6.3E-07 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | 7.3E-03 | 4.8E-03 | 9.4E-03 | 7.3E-03 | 1.6E-02 | 1.9E-02 | 1.6E-02 | 1.2E-02 | 3.7E-03 | 1.9E-02 | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 7.3E-03 | 4.8E-03 | 9.4E-03 | 7.3E-03 | 1.6E-02 | 1.9E-02 | 1.6E-02 | 1.2E-02 | 3.7E-03 | 1.9E-02 | 6.3E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | 2.9E-06 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | 1.5E-01 | 9.7E-02 | 1.9E-01 | 1.5E-01 | 3.2E-01 | 3.9E-01 | 3.2E-01 | 2.4E-01 | 7.4E-02 | 3.8E-01 | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.5E-01 | 9.7E-02 | 1.9E-01 | 1.5E-01 | 3.2E-01 | 3.9E-01 | 3.2E-01 | 2.4E-01 | 7.4E-02 | 3.8E-01 | 2.9E-06 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-182 | SB-184 | SB-185 | SB-186 | SB-187 | SB-188 | SB-189 | SB-190 | SB-191 | SB-192 | SB-194 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-182-05 | SB-184-05 | SB-185-05 | SB-186-05 | SB-187-05 | SB-188-05 | SB-189-05 | SB-190-05 | SB-191-05 | SB-192-05 | SB-194-05 |
| SAMPLE DATE | 20041102 | 20041103 | 20041103 | 20041103 | 20041105 | 20041105 | 20041105 | 20041109 | 20041109 | 20041109 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| BOTTOM DEPTH | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 2.5E-06 | 6.3E-07 | 6.3E-07 | 1.8E-04 | 6.3E-07 | 2.5E-06 | 1.4E-06 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | 1.1E-02 |
| COBALT | | | | | | | | | | | 9.8E-03 |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | 4.7E-05 |
| VANADIUM | | | | | | | | | | | 2.1E-03 |
| HEXAVALENT CHROMIUM | | | | | | | | | | | 4.6E-04 |
| TOTAL HAZARD INDEX | 6.3E-07 | 6.3E-07 | 6.3E-07 | 6.3E-07 | 2.5E-06 | 6.3E-07 | 6.3E-07 | 1.8E-04 | 6.3E-07 | 2.5E-06 | 2.4E-02 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 2.9E-06 | 2.9E-06 | 2.9E-06 | 2.9E-06 | 1.2E-05 | 2.9E-06 | 2.9E-06 | 8.2E-04 | 2.9E-06 | 1.2E-05 | 6.5E-06 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | 2.3E-01 |
| COBALT | | | | | | | | | | | 2.3E-01 |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | 6.0E-04 |
| VANADIUM | | | | | | | | | | | 4.9E-02 |
| HEXAVALENT CHROMIUM | | | | | | | | | | | 4.0E-03 |
| TOTAL HAZARD INDEX | 2.9E-06 | 2.9E-06 | 2.9E-06 | 2.9E-06 | 1.2E-05 | 2.9E-06 | 2.9E-06 | 8.2E-04 | 2.9E-06 | 1.2E-05 | 5.2E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-194 | SB-195 | SB-195 | SB-196 | SB-196 | SB-197 | SB-197 | SB-198 | SB-198 | SB-199 | SB-199 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-194-10 | SB-195-05 | SB-195-10 | SB-196-05 | SB-196-10 | SB-197-05 | SB-197-10 | SB-198-05 | SB-198-10 | SB-199-05 | SB-199-10 |
| SAMPLE DATE | 20050511 | 20050510 | 20050510 | 20050511 | 20050511 | 20050511 | 20050511 | 20050511 | 20050511 | 20050511 | 20050511 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.3E-06 | 7.8E-07 | 1.4E-06 | 1.3E-06 | 1.6E-06 | 1.4E-06 | 1.4E-06 | 1.6E-06 | 1.2E-06 | 1.3E-05 | 1.4E-06 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | 1.1E-03 | 9.1E-03 | 1.1E-02 | 2.3E-03 | 1.1E-03 | 1.1E-02 | 1.1E-02 | 5.7E-03 | 1.4E-02 | 3.4E-03 | 2.3E-03 |
| COBALT | 5.2E-03 | 1.7E-02 | 2.5E-02 | 7.4E-03 | 5.4E-03 | 1.3E-01 | 2.6E-02 | 1.0E-02 | 1.4E-02 | 1.0E-02 | 2.2E-02 |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 9.4E-05 | 4.2E-05 | 3.8E-05 | 3.8E-05 | 4.2E-05 | 3.3E-05 | 3.3E-05 | 1.4E-04 | 4.2E-05 | 4.7E-05 | 4.7E-05 |
| VANADIUM | 1.5E-03 | 7.5E-03 | 8.1E-03 | 3.6E-03 | 2.2E-03 | 2.8E-03 | 5.1E-03 | 5.8E-03 | 6.5E-03 | 4.1E-03 | 4.2E-03 |
| HEXAVALENT CHROMIUM | 3.5E-04 | 1.4E-03 | 1.5E-03 | 8.3E-04 | 6.4E-04 | 6.3E-04 | 1.6E-03 | 2.0E-03 | 1.8E-03 | 8.4E-04 | 1.1E-03 |
| TOTAL HAZARD INDEX | 8.3E-03 | 3.5E-02 | 4.6E-02 | 1.4E-02 | 9.4E-03 | 1.4E-01 | 4.4E-02 | 2.4E-02 | 3.6E-02 | 1.9E-02 | 3.0E-02 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 6.2E-06 | 3.6E-06 | 6.7E-06 | 6.2E-06 | 7.3E-06 | 6.5E-06 | 6.7E-06 | 7.3E-06 | 5.6E-06 | 6.0E-05 | 6.7E-06 |
| AROCLOR-1260 | | | | | | | | | | | |
| ARSENIC | 2.3E-02 | 1.8E-01 | 2.3E-01 | 4.6E-02 | 2.3E-02 | 2.3E-01 | 2.3E-01 | 1.2E-01 | 2.8E-01 | 6.9E-02 | 4.6E-02 |
| COBALT | 1.2E-01 | 4.1E-01 | 5.9E-01 | 1.8E-01 | 1.3E-01 | 3.0E+00 | 6.1E-01 | 2.4E-01 | 3.3E-01 | 2.5E-01 | 5.3E-01 |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | 1.2E-03 | 5.4E-04 | 4.8E-04 | 4.8E-04 | 5.4E-04 | 4.2E-04 | 4.2E-04 | 1.8E-03 | 5.4E-04 | 6.0E-04 | 6.0E-04 |
| VANADIUM | 3.7E-02 | 1.8E-01 | 1.9E-01 | 8.5E-02 | 5.3E-02 | 6.6E-02 | 1.2E-01 | 1.4E-01 | 1.6E-01 | 9.6E-02 | 1.0E-01 |
| HEXAVALENT CHROMIUM | 3.1E-03 | 1.3E-02 | 1.3E-02 | 7.3E-03 | 5.6E-03 | 5.5E-03 | 1.5E-02 | 1.8E-02 | 1.6E-02 | 7.4E-03 | 9.8E-03 |
| TOTAL HAZARD INDEX | 1.9E-01 | 7.8E-01 | 1.0E+00 | 3.1E-01 | 2.1E-01 | 3.3E+00 | 9.8E-01 | 5.1E-01 | 7.8E-01 | 4.2E-01 | 6.9E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-262 | SB-262 | SB-263 | SB-263 | SB-264 | SB-264 | SB-081 | SB-082 | SB-083 | SB-084 | SB-085 | SB-085 | SB-086 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-262-05 | SB-262-10 | SB-263-05 | SB-263-10 | SB-264-05 | SB-264-10 | SB-81-05 | SB-82-05 | SB-83-05 | SB-84-05 | SB-85-05 | SB-85-10 | SB-86-05 |
| SAMPLE DATE | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20050510 | 20041109 | 20041109 | 20041102 | 20041103 | 20041105 | 20041115 | 20041115 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 10 | 5 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 5 | 5 | 5 | 5 | 10 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 2.3E-04 | 1.9E-04 | 2.1E-04 | 2.1E-04 | 2.0E-04 | 2.2E-04 | 3.8E-06 | 3.8E-06 | 3.8E-06 | 7.8E-04 | 2.0E-04 | 3.8E-06 | 3.8E-06 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | | | | | | | 5.7E-03 | 2.7E-03 | 4.3E-03 | 7.8E-03 | 5.0E-03 | 6.0E-04 | 1.6E-03 |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | 2.6E-04 | 2.4E-04 | 2.4E-04 | 2.8E-04 | 2.6E-04 | 2.6E-04 | 2.6E-04 |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | 5.1E-04 | 3.9E-04 | 3.9E-04 | 9.7E-04 | 1.4E-03 | 4.8E-04 | 9.2E-04 |
| TOTAL HAZARD INDEX | 2.3E-04 | 1.9E-04 | 2.1E-04 | 2.1E-04 | 2.0E-04 | 2.2E-04 | 6.5E-03 | 3.4E-03 | 5.0E-03 | 9.8E-03 | 6.9E-03 | 1.3E-03 | 2.8E-03 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 1.1E-03 | 8.9E-04 | 9.9E-04 | 1.0E-03 | 9.5E-04 | 1.0E-03 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 3.6E-03 | 9.4E-04 | 1.8E-05 | 1.8E-05 |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ARSENIC | | | | | | | 1.2E-01 | 5.5E-02 | 8.8E-02 | 1.6E-01 | 1.0E-01 | 1.2E-02 | 3.2E-02 |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | 3.3E-03 | 3.0E-03 | 3.0E-03 | 3.6E-03 | 3.3E-03 | 3.3E-03 | 3.3E-03 |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | 4.5E-03 | 3.4E-03 | 3.4E-03 | 8.6E-03 | 1.3E-02 | 4.2E-03 | 8.1E-03 |
| TOTAL HAZARD INDEX | 1.1E-03 | 8.9E-04 | 9.9E-04 | 1.0E-03 | 9.5E-04 | 1.0E-03 | 1.2E-01 | 6.2E-02 | 9.4E-02 | 1.7E-01 | 1.2E-01 | 2.0E-02 | 4.4E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK F**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-086 | SB-087 | SB-088 | SB-089 | SB-090 | SB-091 | SB-092 |
|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-86-10 | SB-87-05 | SB-88-05 | SB-89-05 | SB-90-05 | SB-91-05 | SB-92-04 |
| SAMPLE DATE | 20041115 | 20041105 | 20041105 | 20041105 | 20041103 | 20040927 | 20040927 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 5 | 5 | 5 | 5 | 5 | 4 |
| BOTTOM DEPTH | 10 | 5 | 5 | 5 | 5 | 5 | 4 |
| **INDUSTRIAL** | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | |
| NAPHTHALENE | 3.8E-06 | 6.3E-07 | 3.4E-04 | 2.1E-04 | 6.3E-07 | 3.8E-06 | 3.8E-06 |
| AROCLOR-1260 | | | | | | | |
| ARSENIC | 1.4E-03 | | | | | 5.5E-03 | 3.2E-03 |
| COBALT | | | | | | | |
| IRON | | | | | | | |
| LEAD | | | | | | | |
| MANGANESE | | | | | | | |
| MERCURY | 2.6E-04 | | | | | 2.6E-04 | 2.8E-04 |
| VANADIUM | | | | | | | |
| HEXAVALENT CHROMIUM | 1.6E-03 | | | | | 1.0E-03 | 1.3E-03 |
| TOTAL HAZARD INDEX | 3.2E-03 | 6.3E-07 | 3.4E-04 | 2.1E-04 | 6.3E-07 | 6.8E-03 | 4.8E-03 |
| **RESIDENTIAL** | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | |
| NAPHTHALENE | 1.8E-05 | 2.9E-06 | 1.6E-03 | 1.0E-03 | 2.9E-06 | 1.8E-05 | 1.8E-05 |
| AROCLOR-1260 | | | | | | | |
| ARSENIC | 2.8E-02 | | | | | 1.1E-01 | 6.5E-02 |
| COBALT | | | | | | | |
| IRON | | | | | | | |
| LEAD | | | | | | | |
| MANGANESE | | | | | | | |
| MERCURY | 3.3E-03 | | | | | 3.3E-03 | 3.6E-03 |
| VANADIUM | | | | | | | |
| HEXAVALENT CHROMIUM | 1.4E-02 | | | | | 9.0E-03 | 1.2E-02 |
| TOTAL HAZARD INDEX | 4.6E-02 | 2.9E-06 | 1.6E-03 | 1.0E-03 | 2.9E-06 | 1.2E-01 | 8.0E-02 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-195 | SB-195 | SB-195 | SB-195 | SB-195 | SB-196 | SB-196 | SB-196 | SB-657 | SB-657 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-195RE-11 | G-SB-195RE-12 | G-SB-195RE-13 | G-SB-195RE-14 | G-SB-195RE-15 | G-SB-196RE-11 | G-SB-196RE-12 | G-SB-196RE-13 | G-SB-657-11 | G-SB-657-11-AVG |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091020 | 20091020 | 20091020 | 20091002 | 20091002 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 11 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 11 | 11 |
| **INDUSTRIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.9E-07 | 9.8E-07 | 4.8E-05 | 8.4E-05 | 9.6E-07 | 2.8E-09 | 3.4E-08 | 2.8E-09 | 2.9E-06 | 1.8E-06 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 7.9E-07 | 9.8E-07 | 4.8E-05 | 8.4E-05 | 9.6E-07 | 2.8E-09 | 3.4E-08 | 2.8E-09 | 2.9E-06 | 1.8E-06 |
| **RESIDENTIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-05 | 2.1E-05 | 1.0E-03 | 1.8E-03 | 2.1E-05 | 6.0E-08 | 7.4E-07 | 6.0E-08 | 6.3E-05 | 3.9E-05 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-05 | 2.1E-05 | 1.0E-03 | 1.8E-03 | 2.1E-05 | 6.0E-08 | 7.4E-07 | 6.0E-08 | 6.3E-05 | 3.9E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-657 | SB-657 | SB-657 | SB-657 | SB-657 | SB-657A | SB-657A | SB-657A | SB-657B | SB-657B | SB-657B | SB-657D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657-11-D | G-SB-657-12 | G-SB-657-13 | G-SB-657-14 | G-SB-657-15 | G-SB-657A-11 | G-SB-657A-13 | G-SB-657A-15 | G-SB-657B-11 | G-SB-657B-13 | G-SB-657B-15 | G-SB-657D-11 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.7E-07 | 9.0E-07 | 1.1E-05 | 8.4E-08 | 1.5E-08 | 2.9E-05 | 5.1E-06 | 2.3E-07 | 9.7E-08 | 7.4E-06 | 1.1E-06 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.7E-07 | 9.0E-07 | 1.1E-05 | 8.4E-08 | 1.5E-08 | 2.9E-05 | 5.1E-06 | 2.3E-07 | 9.7E-08 | 7.4E-06 | 1.1E-06 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-05 | 1.9E-05 | 2.4E-04 | 1.8E-06 | 3.2E-07 | 6.2E-04 | 1.1E-04 | 5.0E-06 | 2.1E-06 | 1.6E-04 | 2.4E-05 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-05 | 1.9E-05 | 2.4E-04 | 1.8E-06 | 3.2E-07 | 6.2E-04 | 1.1E-04 | 5.0E-06 | 2.1E-06 | 1.6E-04 | 2.4E-05 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-657D | SB-657D | SB-658 | SB-658 | SB-658 | SB-658 | SB-658 | SB-658 | SB-658 | SB-658B | SB-658B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-657D-13 | G-SB-657D-15 | G-SB-658-11 | G-SB-658-11-AVG | G-SB-658-11-D | G-SB-658-12 | G-SB-658-13 | G-SB-658-14 | G-SB-658-15 | G-SB-658B-11 | G-SB-658B-15 |
| SAMPLE DATE | 20091028 | 20091028 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091028 | 20091028 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 11 | 11 | 12 | 13 | 14 | 15 | 11 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 11 | 11 | 12 | 13 | 14 | 15 | 11 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.0E-07 | 3.0E-07 | 8.5E-07 | 5.5E-07 | 2.5E-07 | 1.2E-06 | 8.0E-07 | 7.0E-07 | 1.9E-07 | 2.6E-09 | 1.2E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.0E-07 | 3.0E-07 | 8.5E-07 | 5.5E-07 | 2.5E-07 | 1.2E-06 | 8.0E-07 | 7.0E-07 | 1.9E-07 | 2.6E-09 | 1.2E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-05 | 6.4E-06 | 1.8E-05 | 1.2E-05 | 5.5E-06 | 2.6E-05 | 1.7E-05 | 1.5E-05 | 4.1E-06 | 5.6E-08 | 2.6E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-05 | 6.4E-06 | 1.8E-05 | 1.2E-05 | 5.5E-06 | 2.6E-05 | 1.7E-05 | 1.5E-05 | 4.1E-06 | 5.6E-08 | 2.6E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-658C | SB-658C | SB-658C | SB-658C | SB-658C | SB-659 | SB-659 | SB-659 | SB-659 | SB-659 | SB-659C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-658C-11 | G-SB-658C-13 | G-SB-658C-13-AVG | G-SB-658C-13-D | G-SB-658C-15 | G-SB-659-11 | G-SB-659-12 | G-SB-659-13 | G-SB-659-14 | G-SB-659-15 | G-SB-659C-11 |
| SAMPLE DATE | 20091028 | 20091028 | 20091028 | 20091028 | 20091028 | 20091002 | 20091002 | 20091002 | 20091002 | 20091002 | 20091029 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 13 | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| BOTTOM DEPTH | 11 | 13 | 13 | 13 | 15 | 11 | 12 | 13 | 14 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 3.6E-05 | 2.6E-05 | 1.7E-05 | 2.8E-07 | 9.2E-07 | 2.1E-06 | 8.0E-06 | 2.6E-06 | 6.5E-08 | 9.3E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 3.6E-05 | 2.6E-05 | 1.7E-05 | 2.8E-07 | 9.2E-07 | 2.1E-06 | 8.0E-06 | 2.6E-06 | 6.5E-08 | 9.3E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 7.9E-04 | 5.7E-04 | 3.6E-04 | 6.0E-06 | 2.0E-05 | 4.5E-05 | 1.7E-04 | 5.6E-05 | 1.4E-06 | 2.0E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 7.9E-04 | 5.7E-04 | 3.6E-04 | 6.0E-06 | 2.0E-05 | 4.5E-05 | 1.7E-04 | 5.6E-05 | 1.4E-06 | 2.0E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-659C | SB-659C | SB-659D | SB-659D | SB-659D | SB-660 | SB-660 | SB-662 | SB-662 | SB-662 | SB-662A | SB-662B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-659C-13 | G-SB-659C-15 | G-SB-659D-11 | G-SB-659D-13 | G-SB-659D-15 | G-SB-660-11 | G-SB-660-12 | G-SB-662-11 | G-SB-662-12 | G-SB-662-13 | G-SB-662A-11 | G-SB-662B-11 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091029 | 20091002 | 20091002 | 20091020 | 20091020 | 20091020 | 20091029 | 20091029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 13 | 11 | 11 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 12 | 11 | 12 | 13 | 11 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.6E-05 | 6.3E-07 | 2.6E-09 | 1.5E-06 | 2.6E-09 | 1.4E-07 | 5.4E-08 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 8.6E-06 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.6E-05 | 6.3E-07 | 2.6E-09 | 1.5E-06 | 2.6E-09 | 1.4E-07 | 5.4E-08 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 8.6E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.5E-04 | 1.4E-05 | 5.6E-08 | 3.4E-05 | 5.6E-08 | 3.1E-06 | 1.2E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 1.9E-04 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.5E-04 | 1.4E-05 | 5.6E-08 | 3.4E-05 | 5.6E-08 | 3.1E-06 | 1.2E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 1.9E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-662C | SB-671 | SB-671 | SB-671 | SB-671B | SB-671C | SB-671D | SB-704 | SB-704 | SB-704 | SB-706 | SB-706 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-662C-11 | G-SB-671RE-11 | G-SB-671RE-12 | G-SB-671RE-13 | G-SB-671B-11 | G-SB-671C-11 | G-SB-671D-11 | G-SB-704-11 | G-SB-704-12 | G-SB-704-15 | G-SB-706-11 | G-SB-706-12 |
| SAMPLE DATE | 20091029 | 20091029 | 20091029 | 20091029 | 20091111 | 20091111 | 20091111 | 20090923 | 20090923 | 20090923 | 20090922 | 20090922 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 11 | 12 | 13 | 11 | 11 | 11 | 11 | 12 | 15 | 11 | 12 |
| BOTTOM DEPTH | 11 | 11 | 12 | 13 | 11 | 11 | 11 | 11 | 12 | 15 | 11 | 12 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 4.1E-08 | 2.9E-09 | 2.8E-09 | 2.6E-09 | 2.9E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 4.1E-08 | 2.9E-09 | 2.8E-09 | 2.6E-09 | 2.9E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 8.8E-07 | 6.4E-08 | 6.0E-08 | 5.6E-08 | 6.4E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 8.8E-07 | 6.4E-08 | 6.0E-08 | 5.6E-08 | 6.4E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-706 | SB-706 | SB-706 | SB-716 | SB-716 | SB-716 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 | SB-726 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-706-13 | G-SB-706-14 | G-SB-706-15 | G-SB-716-11 | G-SB-716-12 | G-SB-716-15 | G-SB-726-11 | G-SB-726-12 | G-SB-726-13 | G-SB-726-14 | G-SB-726-15 | G-SB-726-15-AVG |
| SAMPLE DATE | 20090922 | 20090922 | 20090922 | 20090923 | 20090923 | 20090923 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 | 20091008 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 14 | 15 | 11 | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 15 |
| BOTTOM DEPTH | 13 | 14 | 15 | 11 | 12 | 15 | 11 | 12 | 13 | 14 | 15 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 3.8E-09 | 3.8E-09 | 8.8E-09 | 3.2E-08 | 4.0E-09 | 3.9E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 3.8E-09 | 3.8E-09 | 8.8E-09 | 3.2E-08 | 4.0E-09 | 3.9E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 8.3E-08 | 8.3E-08 | 1.9E-07 | 6.8E-07 | 8.6E-08 | 8.5E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 8.3E-08 | 8.3E-08 | 1.9E-07 | 6.8E-07 | 8.6E-08 | 8.5E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-726 | SB-735 | SB-735B | SB-735C | SB-736B | SB-736C | SB-736C | SB-736C | SB-761 | SB-761 | SB-761 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-726-15-D | G-SB-735-11 | G-SB-735B-11 | G-SB-735C-11 | G-SB-736B-11 | G-SB-736C-11 | G-SB-736C-11-AVG | G-SB-736C-11-D | G-SB-761-11 | G-SB-761-13 | G-SB-761-15 |
| SAMPLE DATE | 20091008 | 20091103 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20091112 | 20090930 | 20090930 | 20090930 |
| SAMPLE CODE | DUP | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | ORIG |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.8E-09 | 4.8E-08 | 6.0E-08 | 7.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.2E-04 | 2.8E-06 | 2.8E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.8E-09 | 4.8E-08 | 6.0E-08 | 7.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.2E-04 | 2.8E-06 | 2.8E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.3E-08 | 1.0E-06 | 1.3E-06 | 1.7E-07 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.7E-03 | 6.0E-05 | 6.1E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.3E-08 | 1.0E-06 | 1.3E-06 | 1.7E-07 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.7E-03 | 6.0E-05 | 6.1E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-761 | SB-761 | SB-761A | SB-761A | SB-761A | SB-761B | SB-761B | SB-761C | SB-761C | SB-761D | SB-761D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761-15-AVG | G-SB-761-15-D | G-SB-761A-11 | G-SB-761A-13 | G-SB-761A-15 | G-SB-761B-11 | G-SB-761B-15 | G-SB-761C-11 | G-SB-761C-15 | G-SB-761D-11 | G-SB-761D-13 |
| SAMPLE DATE | 20090930 | 20090930 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 | 20091022 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 15 | 11 | 13 | 15 | 11 | 15 | 11 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 15 | 11 | 13 | 15 | 11 | 15 | 11 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.0E-06 | 1.2E-06 | 3.3E-07 | 7.7E-06 | 1.9E-06 | 9.7E-08 | 1.9E-06 | 1.6E-07 | 3.6E-06 | 8.1E-07 | 3.9E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.0E-06 | 1.2E-06 | 3.3E-07 | 7.7E-06 | 1.9E-06 | 9.7E-08 | 1.9E-06 | 1.6E-07 | 3.6E-06 | 8.1E-07 | 3.9E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.3E-05 | 2.5E-05 | 7.1E-06 | 1.7E-04 | 4.1E-05 | 2.1E-06 | 4.1E-05 | 3.4E-06 | 7.8E-05 | 1.8E-05 | 8.5E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.3E-05 | 2.5E-05 | 7.1E-06 | 1.7E-04 | 4.1E-05 | 2.1E-06 | 4.1E-05 | 3.4E-06 | 7.8E-05 | 1.8E-05 | 8.5E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-761D | G-TP-2 | MRC-MW12A | MRC-MW95D | OW-4 | OW-4 | OW-6 | OW-6 | SB-085 | SB-086 | SB-091 | SB-091 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-761D-15 | G-TP-2-5-13-14 | MRC-MW12[1213] | MRC-MW95D-SO-214 | OW-4-26 | OW-4-30 | OW-6-20 | OW-6-30 | SB-85-12 | SB-86-12 | G-SB-91RE-11 | G-SB-91RE-12 |
| SAMPLE DATE | 20091022 | 20100921 | 20050517 | 20100513 | 20071127 | 20071127 | 20071129 | 20071129 | 20041115 | 20041115 | 20090930 | 20090930 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 13 | 12 | 214 | 26 | 30 | 20 | 30 | 12 | 12 | 11 | 12 |
| BOTTOM DEPTH | 15 | 14 | 13 | 214 | 26 | 30 | 20 | 30 | 12 | 12 | 11 | 12 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | 7.9E-13 | 1.5E-11 | 1.5E-11 | 1.6E-11 | 1.5E-11 | 1.5E-11 | 1.5E-11 | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | 2.5E-11 | 1.9E-10 | 1.9E-10 | 2.0E-10 | 1.9E-10 | 1.9E-10 | 1.9E-10 | | |
| BAP EQUIVALENT-HALFND | 2.2E-05 | 1.1E-07 | | | | | | | 6.8E-07 | 1.4E-06 | 2.6E-09 | 6.7E-08 |
| NAPHTHALENE | | 8.4E-11 | | 8.0E-12 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | 1.3E-10 | | |
| AROCLOR-1254 | | | | | 2.0E-08 | 1.9E-08 | | | 1.4E-07 | 1.4E-07 | | |
| AROCLOR-1260 | | | | | 2.0E-08 | 1.9E-08 | | | 1.4E-07 | 1.4E-07 | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | 1.2E-07 | 7.0E-08 | 4.0E-07 | 8.8E-08 | 3.6E-07 | 9.3E-08 | | |
| CADMIUM | | | | | 2.7E-13 | 1.9E-13 | 5.5E-12 | 1.8E-13 | 5.9E-11 | 5.9E-11 | | |
| COBALT | | | | | 7.0E-10 | 6.6E-10 | 1.8E-09 | 4.8E-10 | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | 4.3E-11 | 3.4E-11 | 1.1E-10 | 3.0E-11 | 1.7E-10 | 8.5E-11 | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 2.5E-07 | 2.5E-07 | 2.9E-07 | 2.5E-07 | 3.9E-07 | 3.0E-07 | | |
| TOTAL CANCER RISK | 2.2E-05 | 1.1E-07 | | 3.3E-11 | 4.0E-07 | 3.6E-07 | 7.0E-07 | 3.4E-07 | 1.7E-06 | 2.1E-06 | 2.6E-09 | 6.7E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | 7.8E-12 | 1.5E-10 | 1.5E-10 | 1.6E-10 | 1.5E-10 | 1.5E-10 | 1.5E-10 | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | 1.3E-10 | 9.8E-10 | 9.6E-10 | 1.0E-09 | 9.8E-10 | 9.8E-10 | 9.8E-10 | | |
| BAP EQUIVALENT-HALFND | 4.8E-04 | 2.4E-06 | | | | | | | 1.5E-05 | 3.1E-05 | 5.6E-08 | 1.5E-06 |
| NAPHTHALENE | | 4.3E-10 | | 4.0E-11 | 6.5E-10 | 6.4E-10 | 6.8E-10 | 6.5E-10 | 6.5E-10 | 6.5E-10 | | |
| AROCLOR-1254 | | | | | 9.9E-08 | 9.7E-08 | | | 6.9E-07 | 6.9E-07 | | |
| AROCLOR-1260 | | | | | 9.9E-08 | 9.7E-08 | | | 6.9E-07 | 6.9E-07 | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | 9.1E-07 | 5.4E-07 | 3.1E-06 | 6.8E-07 | 2.8E-06 | 7.3E-07 | | |
| CADMIUM | | | | | 5.5E-13 | 3.9E-13 | 1.1E-11 | 3.7E-13 | 1.2E-10 | 1.2E-10 | | |
| COBALT | | | | | 1.4E-09 | 1.3E-09 | 3.7E-09 | 9.6E-10 | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | 8.7E-11 | 6.9E-11 | 2.2E-10 | 6.0E-11 | 3.4E-10 | 1.7E-10 | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 3.7E-06 | 3.7E-06 | 4.4E-06 | 3.7E-06 | 5.8E-06 | 4.5E-06 | | |
| TOTAL CANCER RISK | 4.8E-04 | 2.4E-06 | | 1.7E-10 | 4.8E-06 | 4.5E-06 | 7.5E-06 | 4.4E-06 | 2.5E-05 | 3.8E-05 | 5.6E-08 | 1.5E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-091 | SB-091 | SB-091 | SB-091A | SB-091A | SB-091A | SB-091B | SB-091B | SB-091B | SB-091C | SB-091C |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91RE-13 | G-SB-91RE-14 | G-SB-91RE-15 | G-SB-91REA-11 | G-SB-91REA-13 | G-SB-91REA-15 | G-SB-91REB-11 | G-SB-91REB-13 | G-SB-91REB-15 | G-SB-91REC-11 | G-SB-91REC-13 |
| SAMPLE DATE | 20090930 | 20090930 | 20090930 | 20091030 | 20091030 | 20091030 | 20091102 | 20091102 | 20091102 | 20091102 | 20091102 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 13 | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.1E-06 | 3.8E-07 | 2.8E-09 | 2.6E-09 | 2.9E-07 | 2.8E-09 | 6.6E-08 | 2.2E-06 | 2.8E-09 | 2.4E-07 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.1E-06 | 3.8E-07 | 2.8E-09 | 2.6E-09 | 2.9E-07 | 2.8E-09 | 6.6E-08 | 2.2E-06 | 2.8E-09 | 2.4E-07 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-04 | 8.2E-06 | 6.0E-08 | 5.6E-08 | 6.3E-06 | 6.0E-08 | 1.4E-06 | 4.7E-05 | 6.0E-08 | 5.2E-06 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-04 | 8.2E-06 | 6.0E-08 | 5.6E-08 | 6.3E-06 | 6.0E-08 | 1.4E-06 | 4.7E-05 | 6.0E-08 | 5.2E-06 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-091C | SB-091C | SB-091C | SB-092 | SB-092 | SB-092 | SB-092 | SB-092 | SB-092C | SB-092C |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-91REC-15 | G-SB-91REC-15-AVG | G-SB-91REC-15-D | G-SB-92RE-11 | G-SB-92RE-12 | G-SB-92RE-13 | G-SB-92RE-14 | G-SB-92RE-15 | G-SB-92REC-11 | G-SB-92REC-13 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20091102 | 20091102 |
| SAMPLE CODE | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 15 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 13 |
| BOTTOM DEPTH | 15 | 15 | 15 | 11 | 12 | 13 | 14 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.1E-07 | 6.6E-07 | 6.0E-07 | 2.8E-09 | 2.6E-09 | 1.1E-06 | 3.3E-06 | 2.2E-06 | 2.8E-09 | 3.6E-07 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | 1.2E-06 | 7.7E-07 | 1.4E-06 | 1.5E-06 | 2.0E-06 | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 7.1E-07 | 6.6E-07 | 6.0E-07 | 1.2E-06 | 7.7E-07 | 2.4E-06 | 4.8E-06 | 4.3E-06 | 2.8E-09 | 3.6E-07 |
| **RESIDENTIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-05 | 1.4E-05 | 1.3E-05 | 6.0E-08 | 5.6E-08 | 2.3E-05 | 7.1E-05 | 4.9E-05 | 6.0E-08 | 7.8E-06 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | 9.7E-06 | 6.0E-06 | 1.1E-05 | 1.2E-05 | 1.6E-05 | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-05 | 1.4E-05 | 1.3E-05 | 9.7E-06 | 6.0E-06 | 3.4E-05 | 8.3E-05 | 6.5E-05 | 6.0E-08 | 7.8E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-092C | SB-092D | SB-092D | SB-092D | SB-762 | SB-762 | SB-762 | SB-762A | SB-762A | SB-762A | SB-762B |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92REC-15 | G-SB-92RED-11 | G-SB-92RED-13 | G-SB-92RED-15 | G-SB-762-11 | G-SB-762-13 | G-SB-762-15 | G-SB-762A-11 | G-SB-762A-13 | G-SB-762A-15 | G-SB-762B-11 |
| SAMPLE DATE | 20091102 | 20091102 | 20091102 | 20091102 | 20091001 | 20091001 | 20091001 | 20091022 | 20091022 | 20091022 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 1.5E-07 | 5.0E-06 | 7.0E-07 | 1.4E-06 | 1.7E-05 | 2.3E-07 | 4.3E-07 | 3.1E-07 | 4.6E-05 | 7.6E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 1.5E-07 | 5.0E-06 | 7.0E-07 | 1.4E-06 | 1.7E-05 | 2.3E-07 | 4.3E-07 | 3.1E-07 | 4.6E-05 | 7.6E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 3.2E-06 | 1.1E-04 | 1.5E-05 | 3.0E-05 | 3.6E-04 | 5.0E-06 | 9.4E-06 | 6.6E-06 | 1.0E-03 | 1.6E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 3.2E-06 | 1.1E-04 | 1.5E-05 | 3.0E-05 | 3.6E-04 | 5.0E-06 | 9.4E-06 | 6.6E-06 | 1.0E-03 | 1.6E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-762B | SB-762B | SB-762B | SB-762B | SB-762D | SB-762D | SB-762D | SB-763 | SB-763 | SB-763 | SB-763A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-762B-11-AVG | G-SB-762B-11-D | G-SB-762B-13 | G-SB-762B-15 | G-SB-762D-11 | G-SB-762D-13 | G-SB-762D-15 | G-SB-763-11 | G-SB-763-13 | G-SB-763-15 | G-SB-763A-11 |
| SAMPLE DATE | 20091023 | 20091023 | 20091023 | 20091023 | 20091022 | 20091022 | 20091022 | 20091001 | 20091002 | 20091002 | 20091023 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.3E-07 | 7.0E-07 | 1.1E-06 | 7.6E-06 | 4.0E-05 | 9.4E-06 | 2.1E-07 | 2.9E-07 | 3.4E-06 | 9.9E-06 | 1.2E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.3E-07 | 7.0E-07 | 1.1E-06 | 7.6E-06 | 4.0E-05 | 9.4E-06 | 2.1E-07 | 2.9E-07 | 3.4E-06 | 9.9E-06 | 1.2E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.6E-05 | 1.5E-05 | 2.4E-05 | 1.6E-04 | 8.6E-04 | 2.0E-04 | 4.5E-06 | 6.3E-06 | 7.5E-05 | 2.2E-04 | 2.5E-04 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.6E-05 | 1.5E-05 | 2.4E-05 | 1.6E-04 | 8.6E-04 | 2.0E-04 | 4.5E-06 | 6.3E-06 | 7.5E-05 | 2.2E-04 | 2.5E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-763A | SB-763A | SB-763B | SB-763B | SB-763B | SB-763C | SB-763C | SB-763C | SB-763D | SB-763D | SB-763D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-763A-13 | G-SB-763A-15 | G-SB-763B-11 | G-SB-763B-13 | G-SB-763B-15 | G-SB-763C-11 | G-SB-763C-13 | G-SB-763C-15 | G-SB-763D-11 | G-SB-763D-13 | G-SB-763D-15 |
| SAMPLE DATE | 20091023 | 20091023 | 20091027 | 20091027 | 20091027 | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 | 20091023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 6.4E-08 | 1.0E-07 | 1.7E-07 | 6.4E-07 | 1.2E-05 | 4.2E-05 | 3.0E-05 | 2.8E-09 | 2.8E-09 | 3.1E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 6.4E-08 | 1.0E-07 | 1.7E-07 | 6.4E-07 | 1.2E-05 | 4.2E-05 | 3.0E-05 | 2.8E-09 | 2.8E-09 | 3.1E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 1.4E-06 | 2.2E-06 | 3.7E-06 | 1.4E-05 | 2.5E-04 | 9.1E-04 | 6.6E-04 | 6.0E-08 | 6.0E-08 | 6.8E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 1.4E-06 | 2.2E-06 | 3.7E-06 | 1.4E-05 | 2.5E-04 | 9.1E-04 | 6.6E-04 | 6.0E-08 | 6.0E-08 | 6.8E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-764 | SB-764 | SB-764 | SB-764A | SB-764C | SB-764D | SB-765 | SB-765 | SB-765 | SB-803 | SB-803 | SB-803 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-764-11 | G-SB-764-13 | G-SB-764-15 | G-SB-764A-11 | G-SB-764C-11 | G-SB-764D-11 | G-SB-765-11 | G-SB-765-13 | G-SB-765-15 | G-SB-803-11 | G-SB-803-13 | G-SB-803-15 |
| SAMPLE DATE | 20091002 | 20091002 | 20091002 | 20091027 | 20091027 | 20091027 | 20091002 | 20091002 | 20091002 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 11 | 11 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 11 | 11 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.3E-07 | 9.3E-08 | 2.8E-09 | 8.6E-06 | 1.5E-07 | 2.0E-07 | 2.6E-09 | 5.9E-08 | 2.9E-09 | 6.6E-09 | 1.2E-06 | 7.6E-07 |
| NAPHTHALENE | | | | | | | | | | 8.2E-11 | 9.5E-11 | 8.4E-11 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.3E-07 | 9.3E-08 | 2.8E-09 | 8.6E-06 | 1.5E-07 | 2.0E-07 | 2.6E-09 | 5.9E-08 | 2.9E-09 | 6.7E-09 | 1.2E-06 | 7.6E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.0E-06 | 2.0E-06 | 6.0E-08 | 1.9E-04 | 3.3E-06 | 4.3E-06 | 5.6E-08 | 1.3E-06 | 6.4E-08 | 1.4E-07 | 2.6E-05 | 1.6E-05 |
| NAPHTHALENE | | | | | | | | | | 4.1E-10 | 4.8E-10 | 4.3E-10 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.0E-06 | 2.0E-06 | 6.0E-08 | 1.9E-04 | 3.3E-06 | 4.3E-06 | 5.6E-08 | 1.3E-06 | 6.4E-08 | 1.4E-07 | 2.6E-05 | 1.6E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-804 | SB-804 | SB-804 | SB-805 | SB-805 | SB-805 | SB-806 | SB-806 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-804-11 | G-SB-804-13 | G-SB-804-15 | G-SB-805-11 | G-SB-805-13 | G-SB-805-15 | G-SB-806-11 | G-SB-806-15 | G-SB-807-11 | G-SB-807-13 | G-SB-807-15 | G-SB-808-11 | G-SB-808-13 |
| SAMPLE DATE | 20100823 | 20100823 | 20100823 | 20100824 | 20100824 | 20100824 | 20100824 | 20100824 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 15 | 11 | 13 | 15 | 11 | 13 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 15 | 11 | 13 | 15 | 11 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.5E-07 | 2.3E-06 | 4.3E-06 | 6.9E-09 | 7.1E-09 | 7.1E-09 | 3.2E-07 | 2.7E-06 | 6.9E-09 | 2.6E-07 | 7.3E-09 | 4.4E-07 | 5.0E-06 |
| NAPHTHALENE | 9.1E-11 | 1.7E-10 | 2.2E-10 | 8.7E-11 | 8.9E-11 | 8.9E-11 | 8.7E-11 | 1.6E-09 | 8.7E-11 | 8.9E-11 | 9.1E-11 | 8.0E-11 | 1.6E-10 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.5E-07 | 2.3E-06 | 4.3E-06 | 7.0E-09 | 7.2E-09 | 7.2E-09 | 3.2E-07 | 2.7E-06 | 7.0E-09 | 2.6E-07 | 7.4E-09 | 4.4E-07 | 5.0E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-05 | 5.0E-05 | 9.3E-05 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 6.9E-06 | 5.9E-05 | 1.5E-07 | 5.6E-06 | 1.6E-07 | 9.5E-06 | 1.1E-04 |
| NAPHTHALENE | 4.6E-10 | 8.5E-10 | 1.1E-09 | 4.4E-10 | 4.5E-10 | 4.5E-10 | 4.4E-10 | 8.1E-09 | 4.4E-10 | 4.5E-10 | 4.6E-10 | 4.0E-10 | 8.2E-10 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.4E-05 | 5.0E-05 | 9.3E-05 | 1.5E-07 | 1.5E-07 | 1.5E-07 | 6.9E-06 | 5.9E-05 | 1.5E-07 | 5.6E-06 | 1.6E-07 | 9.5E-06 | 1.1E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-808 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 | SB-811 | SB-811 | SB-811 | SB-812 | SB-812 | SB-813 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-808-15 | G-SB-809-11 | G-SB-809-13 | G-SB-809-15 | G-SB-810-11 | G-SB-810-13 | G-SB-810-15 | G-SB-811-11 | G-SB-811-13 | G-SB-811-15 | G-SB-812-11 | G-SB-812-15 | G-SB-813-11 |
| SAMPLE DATE | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 | 20100823 | 20100824 | 20100824 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 15 | 11 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.9E-09 | 6.6E-09 | 6.3E-06 | 2.0E-08 | 7.3E-09 | 5.4E-08 | 7.4E-08 | 7.4E-09 | 8.2E-08 | 7.1E-09 | 7.1E-09 | 1.4E-06 | 6.9E-09 |
| NAPHTHALENE | 8.7E-11 | 8.2E-11 | 1.1E-09 | 9.3E-11 | 9.1E-11 | 8.7E-11 | 8.9E-11 | 9.3E-11 | 8.4E-11 | 8.9E-11 | 8.9E-11 | 8.2E-10 | 8.7E-11 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.0E-09 | 6.7E-09 | 6.3E-06 | 2.0E-08 | 7.4E-09 | 5.4E-08 | 7.5E-08 | 7.5E-09 | 8.2E-08 | 7.2E-09 | 7.2E-09 | 1.4E-06 | 7.0E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.4E-07 | 1.4E-04 | 4.4E-07 | 1.6E-07 | 1.2E-06 | 1.6E-06 | 1.6E-07 | 1.8E-06 | 1.5E-07 | 1.5E-07 | 3.1E-05 | 1.5E-07 |
| NAPHTHALENE | 4.4E-10 | 4.1E-10 | 5.5E-09 | 4.7E-10 | 4.6E-10 | 4.4E-10 | 4.5E-10 | 4.7E-10 | 4.3E-10 | 4.5E-10 | 4.5E-10 | 4.1E-09 | 4.4E-10 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-07 | 1.4E-07 | 1.4E-04 | 4.4E-07 | 1.6E-07 | 1.2E-06 | 1.6E-06 | 1.6E-07 | 1.8E-06 | 1.5E-07 | 1.5E-07 | 3.1E-05 | 1.5E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-813 | SB-813 | SB-813 | SB-813 |
|---|---|---|---|---|
| SAMPLE ID | G-SB-813-13 | G-SB-813-15 | G-SB-813-15-AVG | G-SB-813-15-D |
| SAMPLE DATE | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 15 | 15 |
| BOTTOM DEPTH | 13 | 15 | 15 | 15 |
| **INDUSTRIAL** | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | |
| 1,3-DICHLOROBENZENE | | | | |
| 1,4-DICHLOROBENZENE | | | | |
| BAP EQUIVALENT-HALFND | 2.1E-06 | 6.8E-06 | 6.8E-06 | |
| NAPHTHALENE | 5.6E-10 | 3.7E-10 | 3.7E-10 | |
| AROCLOR-1254 | | | | |
| AROCLOR-1260 | | | | |
| ANTIMONY | | | | |
| ARSENIC | | | | |
| CADMIUM | | | | |
| COBALT | | | | |
| IRON | | | | |
| LEAD | | | | |
| MANGANESE | | | | |
| MERCURY | | | | |
| MOLYBDENUM | | | | |
| NICKEL | | | | |
| VANADIUM | | | | |
| HEXAVALENT CHROMIUM | | | | |
| TOTAL CANCER RISK | 2.1E-06 | 6.8E-06 | 6.8E-06 | |
| **RESIDENTIAL** | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | |
| 1,3-DICHLOROBENZENE | | | | |
| 1,4-DICHLOROBENZENE | | | | |
| BAP EQUIVALENT-HALFND | 4.6E-05 | 1.5E-04 | 1.5E-04 | |
| NAPHTHALENE | 2.8E-09 | 1.9E-09 | 1.9E-09 | |
| AROCLOR-1254 | | | | |
| AROCLOR-1260 | | | | |
| ANTIMONY | | | | |
| ARSENIC | | | | |
| CADMIUM | | | | |
| COBALT | | | | |
| IRON | | | | |
| LEAD | | | | |
| MANGANESE | | | | |
| MERCURY | | | | |
| MOLYBDENUM | | | | |
| NICKEL | | | | |
| VANADIUM | | | | |
| HEXAVALENT CHROMIUM | | | | |
| TOTAL CANCER RISK | 4.6E-05 | 1.5E-04 | 1.5E-04 | |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-4.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | G-TP-2 | MRC-MW95D | OW-4 | OW-4 | OW-6 | OW-6 | SB-085 | SB-086 | SB-092 | SB-092 | SB-092 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-TP-2-5-13-14 | MRC-MW95D-SO-214 | OW-4-26 | OW-4-30 | OW-6-20 | OW-6-30 | SB-85-12 | SB-86-12 | G-SB-92RE-11 | G-SB-92RE-12 | G-SB-92RE-13 |
| SAMPLE DATE | 20100921 | 20100513 | 20071127 | 20071127 | 20071129 | 20071129 | 20041115 | 20041115 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 214 | 26 | 30 | 20 | 30 | 12 | 12 | 11 | 12 | 13 |
| BOTTOM DEPTH | 14 | 214 | 26 | 30 | 20 | 30 | 12 | 12 | 11 | 12 | 13 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | 1.3E-07 | 1.8E-06 | 1.8E-06 | 1.9E-06 | 1.8E-06 | 1.8E-06 | 1.8E-06 | | | |
| 1,2,4-TRICHLOROBENZENE | | 4.4E-07 | 8.5E-06 | 8.4E-06 | 8.8E-06 | 8.5E-06 | 8.5E-06 | 8.5E-06 | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | 1.1E-08 | 8.9E-08 | 8.7E-08 | 9.2E-08 | 8.9E-08 | 8.9E-08 | 8.9E-08 | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 2.4E-06 | 2.3E-07 | 3.8E-06 | 3.7E-06 | 3.9E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 | | | |
| AROCLOR-1254 | | | 1.4E-03 | 1.4E-03 | | | 9.8E-03 | 9.8E-03 | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | 6.4E-04 | 1.1E-04 | 1.4E-04 | 1.1E-04 | 3.0E-03 | 3.0E-03 | | | |
| ARSENIC | | | 7.3E-04 | 4.3E-04 | 2.5E-03 | 5.5E-04 | 2.2E-03 | 5.8E-04 | 7.8E-03 | 4.8E-03 | 8.4E-03 |
| CADMIUM | | | 7.5E-06 | 5.3E-06 | 1.5E-04 | 5.0E-06 | 1.6E-03 | 1.6E-03 | | | |
| COBALT | | | 5.8E-03 | 5.4E-03 | 1.5E-02 | 3.9E-03 | | | | | |
| IRON | | | 1.7E-02 | 6.6E-03 | 8.1E-03 | 4.8E-03 | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | 1.4E-02 | 6.8E-03 | 1.2E-02 | 2.7E-03 | | | | | |
| MERCURY | | | 4.7E-05 | 4.7E-05 | 4.9E-05 | 4.7E-05 | 2.6E-04 | 2.4E-04 | | | |
| MOLYBDENUM | | | 1.1E-05 | 4.5E-06 | 9.4E-06 | 4.4E-06 | | | | | |
| NICKEL | | | 7.0E-04 | 5.5E-04 | 1.8E-03 | 4.8E-04 | 2.8E-03 | 1.4E-03 | | | |
| VANADIUM | | | 1.1E-03 | 1.3E-03 | 2.1E-03 | 2.1E-03 | | | | | |
| HEXAVALENT CHROMIUM | | | 4.6E-04 | 4.7E-04 | 5.4E-04 | 4.7E-04 | 7.2E-04 | 5.6E-04 | | | |
| TOTAL HAZARD INDEX | 2.4E-06 | 8.2E-07 | 4.2E-02 | 2.3E-02 | 4.3E-02 | 1.5E-02 | 2.0E-02 | 1.7E-02 | 7.8E-03 | 4.8E-03 | 8.4E-03 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | 3.5E-06 | 4.8E-05 | 4.7E-05 | 5.0E-05 | 4.8E-05 | 4.8E-05 | 4.8E-05 | | | |
| 1,2,4-TRICHLOROBENZENE | | 2.0E-06 | 3.9E-05 | 3.8E-05 | 4.0E-05 | 3.9E-05 | 3.9E-05 | 3.9E-05 | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | 1.1E-07 | 8.4E-07 | 8.3E-07 | 8.7E-07 | 8.4E-07 | 8.4E-07 | 8.4E-07 | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.1E-05 | 1.1E-06 | 1.8E-05 | 1.7E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 | | | |
| AROCLOR-1254 | | | 1.8E-02 | 1.7E-02 | | | 1.2E-01 | 1.2E-01 | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | 1.1E-02 | 1.8E-03 | 2.3E-03 | 1.8E-03 | 4.9E-02 | 4.9E-02 | | | |
| ARSENIC | | | 1.5E-02 | 8.8E-03 | 5.1E-02 | 1.1E-02 | 4.5E-02 | 1.2E-02 | 1.6E-01 | 9.7E-02 | 1.7E-01 |
| CADMIUM | | | 1.6E-04 | 1.1E-04 | 3.2E-03 | 1.1E-04 | 3.5E-02 | 3.5E-02 | | | |
| COBALT | | | 1.4E-01 | 1.3E-01 | 3.6E-01 | 9.2E-02 | | | | | |
| IRON | | | 4.1E-01 | 1.6E-01 | 1.9E-01 | 1.1E-01 | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | 1.4E-01 | 6.9E-02 | 1.2E-01 | 2.8E-02 | | | | | |
| MERCURY | | | 6.0E-04 | 6.0E-04 | 6.3E-04 | 6.0E-04 | 3.3E-03 | 3.0E-03 | | | |
| MOLYBDENUM | | | 2.5E-04 | 1.1E-04 | 2.2E-04 | 1.0E-04 | | | | | |
| NICKEL | | | 7.2E-03 | 5.7E-03 | 1.9E-02 | 4.9E-03 | 2.8E-02 | 1.4E-02 | | | |
| VANADIUM | | | 2.7E-02 | 3.1E-02 | 4.9E-02 | 5.0E-02 | | | | | |
| HEXAVALENT CHROMIUM | | | 4.0E-03 | 4.1E-03 | 4.8E-03 | 4.1E-03 | 6.3E-03 | 5.0E-03 | | | |
| TOTAL HAZARD INDEX | 1.1E-05 | 6.7E-06 | 7.7E-01 | 4.2E-01 | 8.0E-01 | 3.1E-01 | 2.9E-01 | 2.4E-01 | 1.6E-01 | 9.7E-02 | 1.7E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-092 | SB-092 | SB-803 | SB-803 | SB-803 | SB-804 | SB-804 | SB-804 | SB-805 | SB-805 | SB-805 | SB-806 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-92RE-14 | G-SB-92RE-15 | G-SB-803-11 | G-SB-803-13 | G-SB-803-15 | G-SB-804-11 | G-SB-804-13 | G-SB-804-15 | G-SB-805-11 | G-SB-805-13 | G-SB-805-15 | G-SB-806-11 |
| SAMPLE DATE | 20090929 | 20090929 | 20100826 | 20100826 | 20100826 | 20100823 | 20100823 | 20100823 | 20100824 | 20100824 | 20100824 | 20100824 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 14 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | 2.4E-06 | 2.8E-06 | 2.4E-06 | 2.6E-06 | 4.9E-06 | 6.3E-06 | 2.5E-06 | 2.6E-06 | 2.6E-06 | 2.5E-06 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 9.4E-03 | 1.3E-02 | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.4E-03 | 1.3E-02 | 2.4E-06 | 2.8E-06 | 2.4E-06 | 2.6E-06 | 4.9E-06 | 6.3E-06 | 2.5E-06 | 2.6E-06 | 2.6E-06 | 2.5E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | 1.1E-05 | 1.3E-05 | 1.1E-05 | 1.2E-05 | 2.3E-05 | 2.9E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 1.9E-01 | 2.6E-01 | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.9E-01 | 2.6E-01 | 1.1E-05 | 1.3E-05 | 1.1E-05 | 1.2E-05 | 2.3E-05 | 2.9E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-806 | SB-807 | SB-807 | SB-807 | SB-808 | SB-808 | SB-808 | SB-809 | SB-809 | SB-809 | SB-810 | SB-810 | SB-810 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-806-15 | G-SB-807-11 | G-SB-807-13 | G-SB-807-15 | G-SB-808-11 | G-SB-808-13 | G-SB-808-15 | G-SB-809-11 | G-SB-809-13 | G-SB-809-15 | G-SB-810-11 | G-SB-810-13 | G-SB-810-15 |
| SAMPLE DATE | 20100824 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100825 | 20100823 | 20100823 | 20100823 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 4.6E-05 | 2.5E-06 | 2.6E-06 | 2.6E-06 | 2.3E-06 | 4.7E-06 | 2.5E-06 | 2.4E-06 | 3.1E-05 | 2.7E-06 | 2.6E-06 | 2.5E-06 | 2.6E-06 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.6E-05 | 2.5E-06 | 2.6E-06 | 2.6E-06 | 2.3E-06 | 4.7E-06 | 2.5E-06 | 2.4E-06 | 3.1E-05 | 2.7E-06 | 2.6E-06 | 2.5E-06 | 2.6E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| NAPHTHALENE | 2.2E-04 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.1E-05 | 2.2E-05 | 1.2E-05 | 1.1E-05 | 1.5E-04 | 1.3E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 |
| AROCLOR-1254 | | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.2E-04 | 1.2E-05 | 1.2E-05 | 1.2E-05 | 1.1E-05 | 2.2E-05 | 1.2E-05 | 1.1E-05 | 1.5E-04 | 1.3E-05 | 1.2E-05 | 1.2E-05 | 1.2E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-4.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATUATED SOIL**
**BLOCK G**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-811 | SB-811 | SB-811 | SB-812 | SB-812 | SB-813 | SB-813 | SB-813 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | G-SB-811-11 | G-SB-811-13 | G-SB-811-15 | G-SB-812-11 | G-SB-812-15 | G-SB-813-11 | G-SB-813-13 | G-SB-813-15 |
| SAMPLE DATE | 20100823 | 20100823 | 20100823 | 20100824 | 20100824 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 15 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 15 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | |
| NAPHTHALENE | 2.7E-06 | 2.4E-06 | 2.6E-06 | 2.6E-06 | 2.4E-05 | 2.5E-06 | 1.6E-05 | 1.1E-05 |
| AROCLOR-1254 | | | | | | | | |
| AROCLOR-1260 | | | | | | | | |
| ANTIMONY | | | | | | | | |
| ARSENIC | | | | | | | | |
| CADMIUM | | | | | | | | |
| COBALT | | | | | | | | |
| IRON | | | | | | | | |
| LEAD | | | | | | | | |
| MANGANESE | | | | | | | | |
| MERCURY | | | | | | | | |
| MOLYBDENUM | | | | | | | | |
| NICKEL | | | | | | | | |
| VANADIUM | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | |
| TOTAL HAZARD INDEX | 2.7E-06 | 2.4E-06 | 2.6E-06 | 2.6E-06 | 2.4E-05 | 2.5E-06 | 1.6E-05 | 1.1E-05 |
| **RESIDENTIAL** | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | |
| NAPHTHALENE | 1.3E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 | 1.1E-04 | 1.2E-05 | 7.6E-05 | 5.0E-05 |
| AROCLOR-1254 | | | | | | | | |
| AROCLOR-1260 | | | | | | | | |
| ANTIMONY | | | | | | | | |
| ARSENIC | | | | | | | | |
| CADMIUM | | | | | | | | |
| COBALT | | | | | | | | |
| IRON | | | | | | | | |
| LEAD | | | | | | | | |
| MANGANESE | | | | | | | | |
| MERCURY | | | | | | | | |
| MOLYBDENUM | | | | | | | | |
| NICKEL | | | | | | | | |
| VANADIUM | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | |
| TOTAL HAZARD INDEX | 1.3E-05 | 1.1E-05 | 1.2E-05 | 1.2E-05 | 1.1E-04 | 1.2E-05 | 7.6E-05 | 5.0E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

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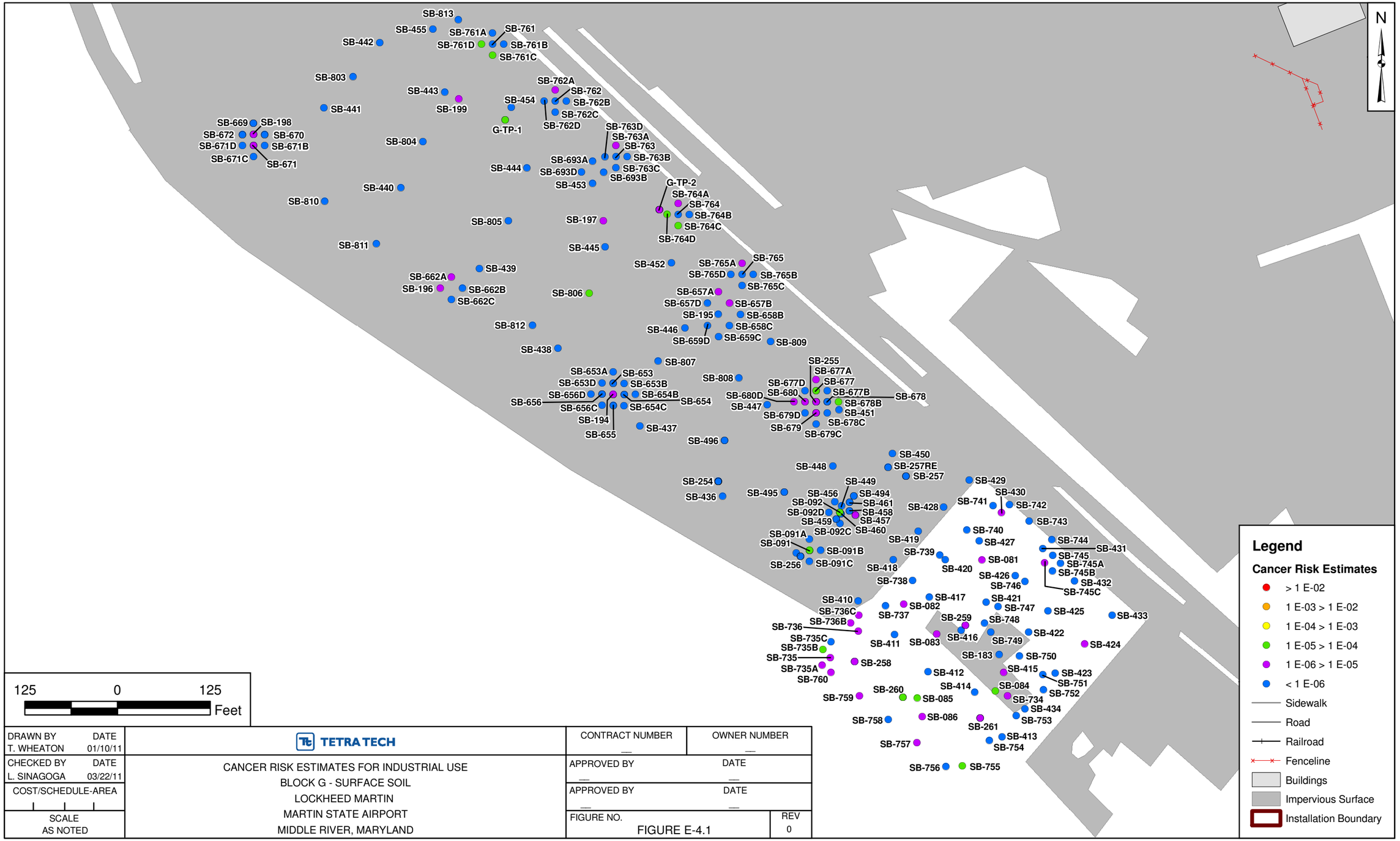


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | CANCER RISK ESTIMATES FOR INDUSTRIAL USE<br>BLOCK G - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-4.1 / REV 0 |

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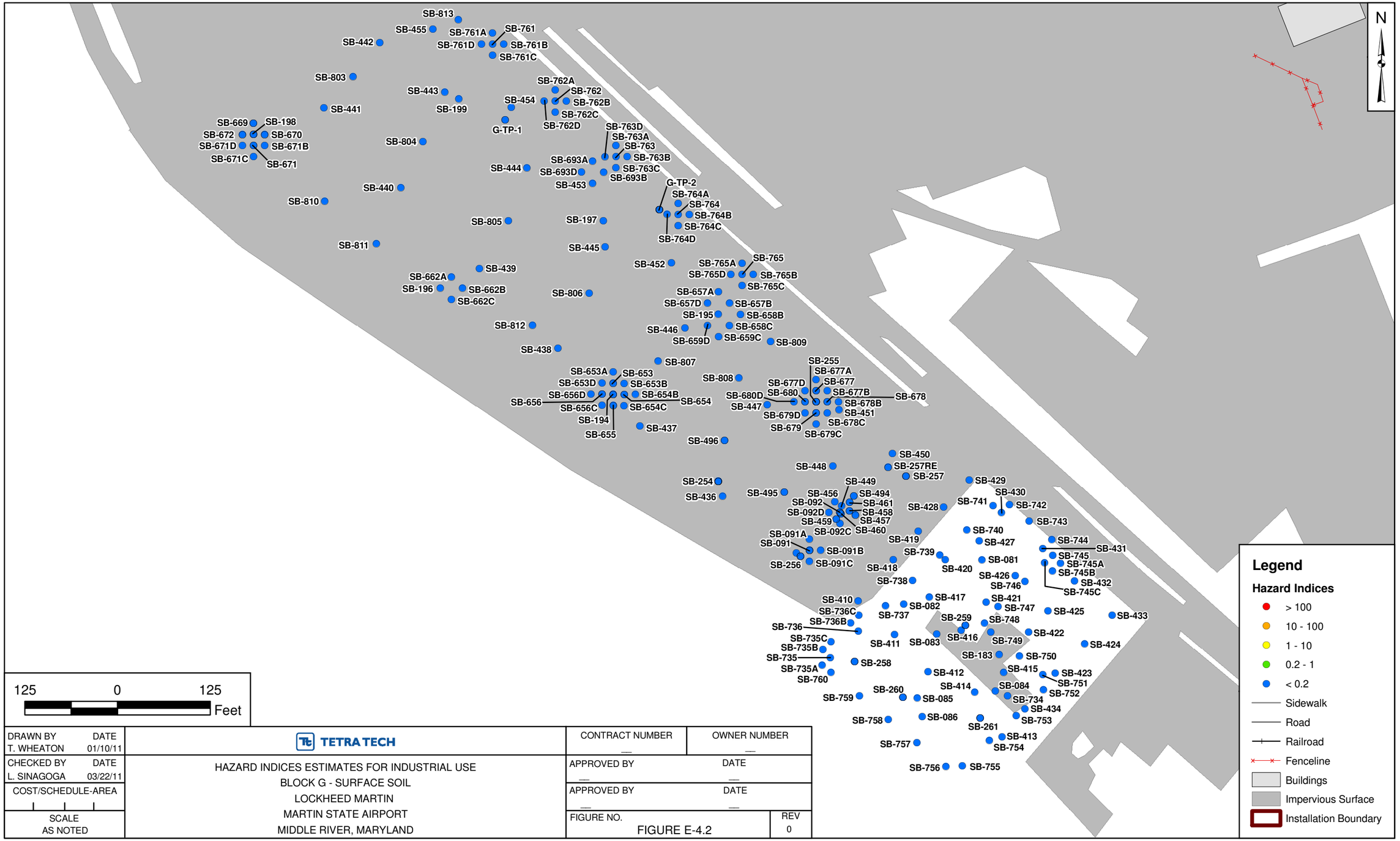


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE<br>BLOCK G - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-4.2 / REV 0 |

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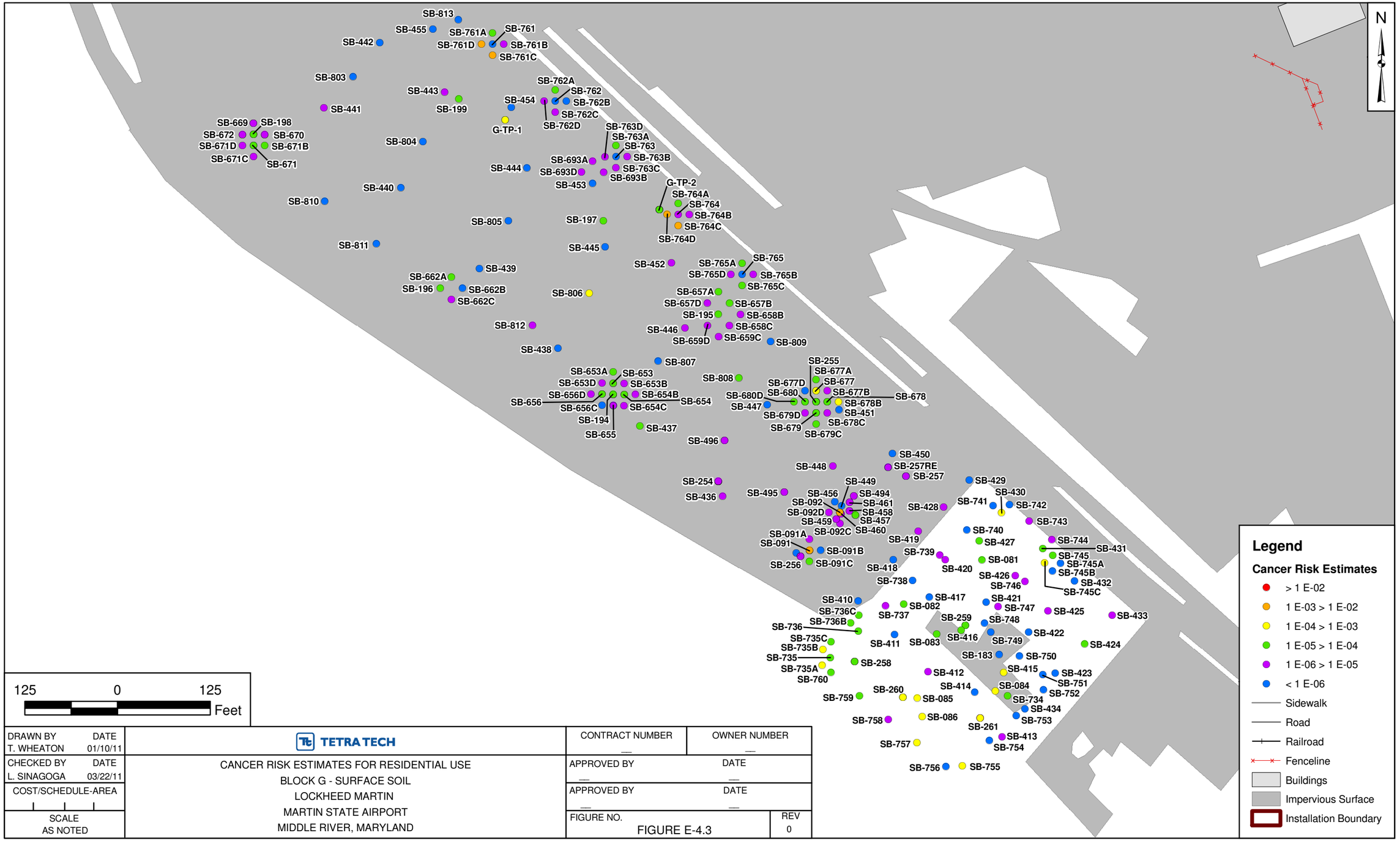


## Legend

**Cancer Risk Estimates**

- > 1 E-02
- 1 E-03 > 1 E-02
- 1 E-04 > 1 E-03
- 1 E-05 > 1 E-04
- 1 E-06 > 1 E-05
- < 1 E-06
- Sidewalk
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

125 0 125 Feet

| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | CANCER RISK ESTIMATES FOR RESIDENTIAL USE | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | BLOCK G - SURFACE SOIL | APPROVED BY — / DATE — |
| SCALE AS NOTED | | LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | FIGURE NO. FIGURE E-4.3 / REV 0 |

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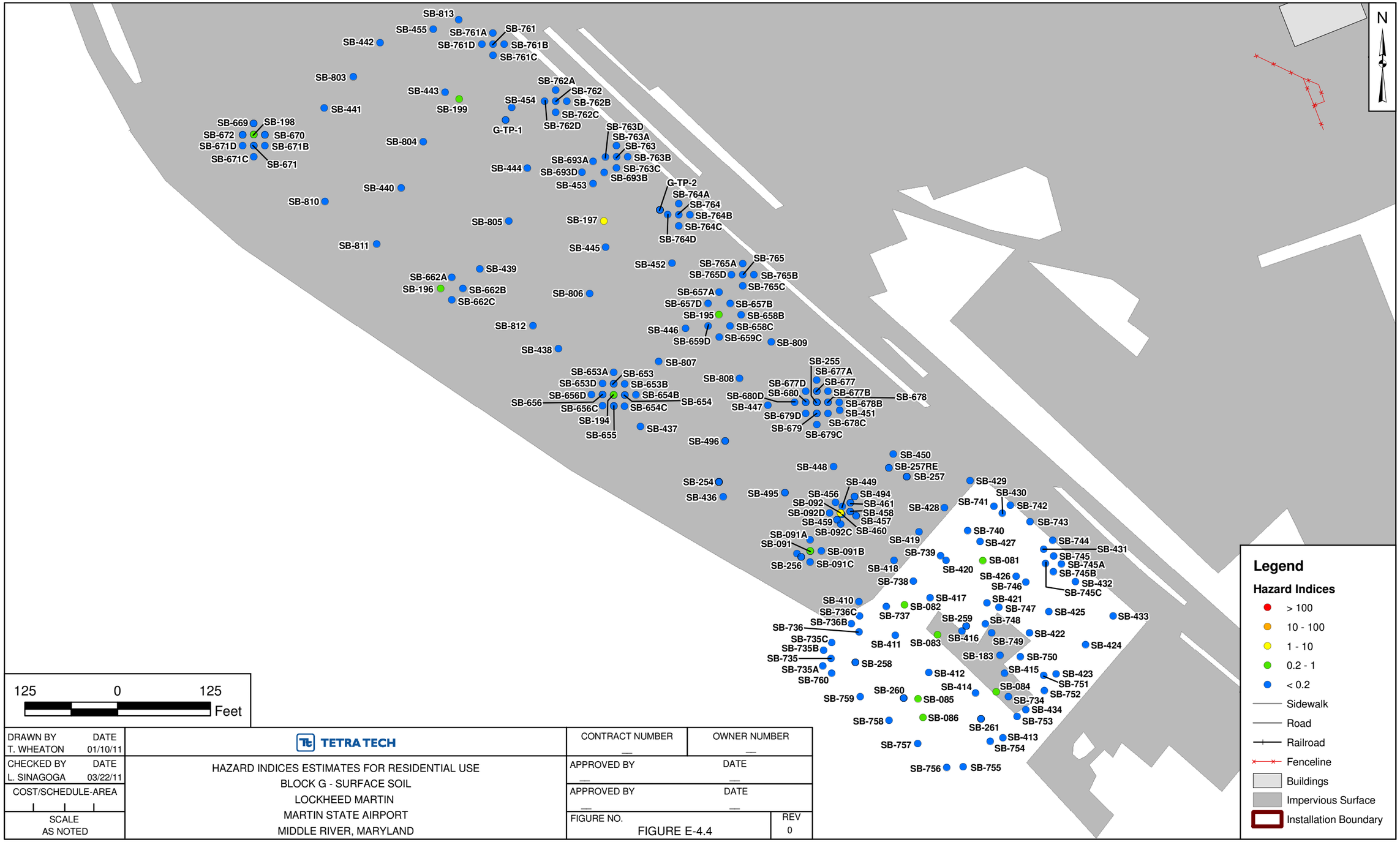


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE<br>BLOCK G - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-4.4 / REV 0 |

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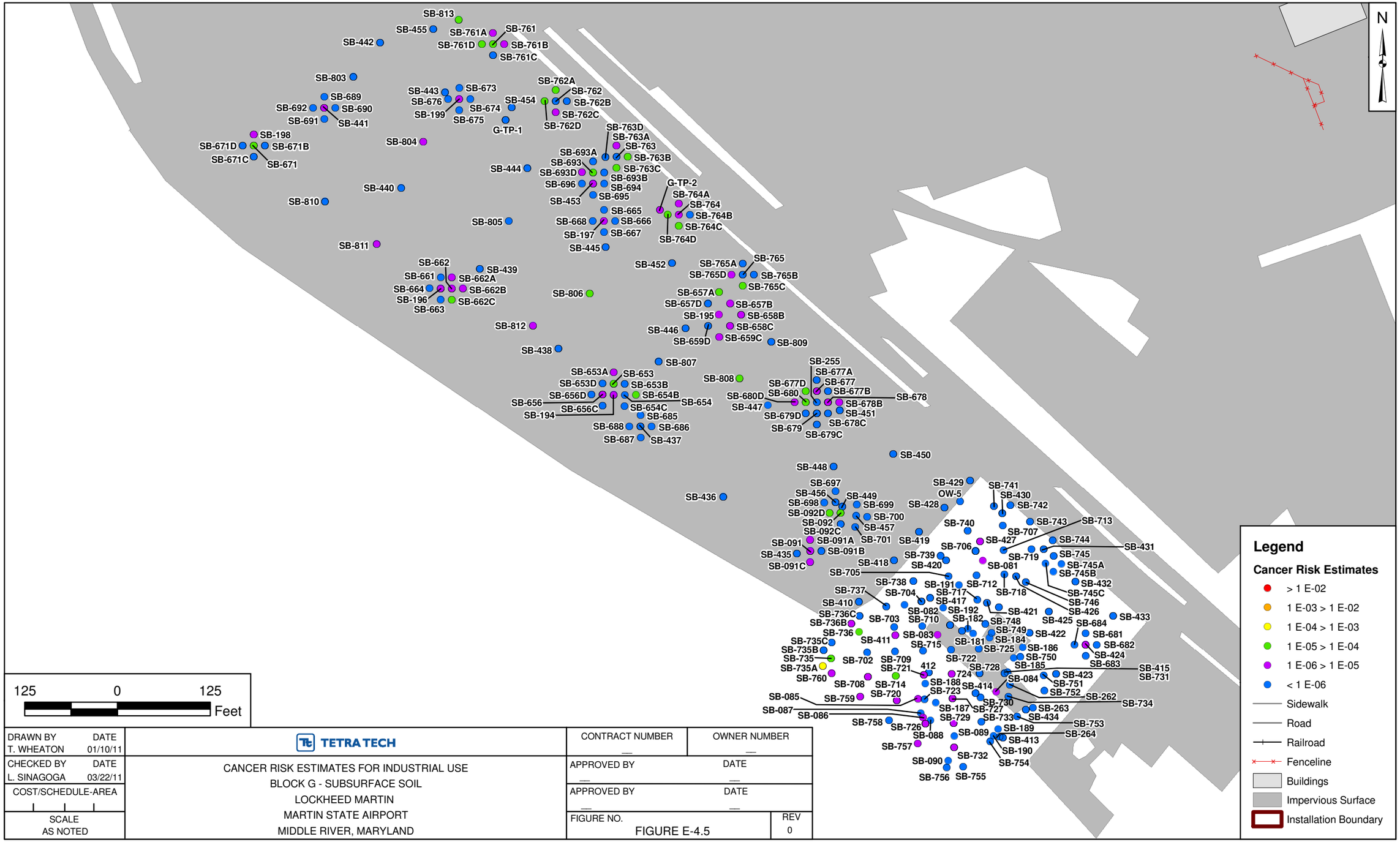


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | CANCER RISK ESTIMATES FOR INDUSTRIAL USE<br>BLOCK G - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-4.5 / REV 0 |

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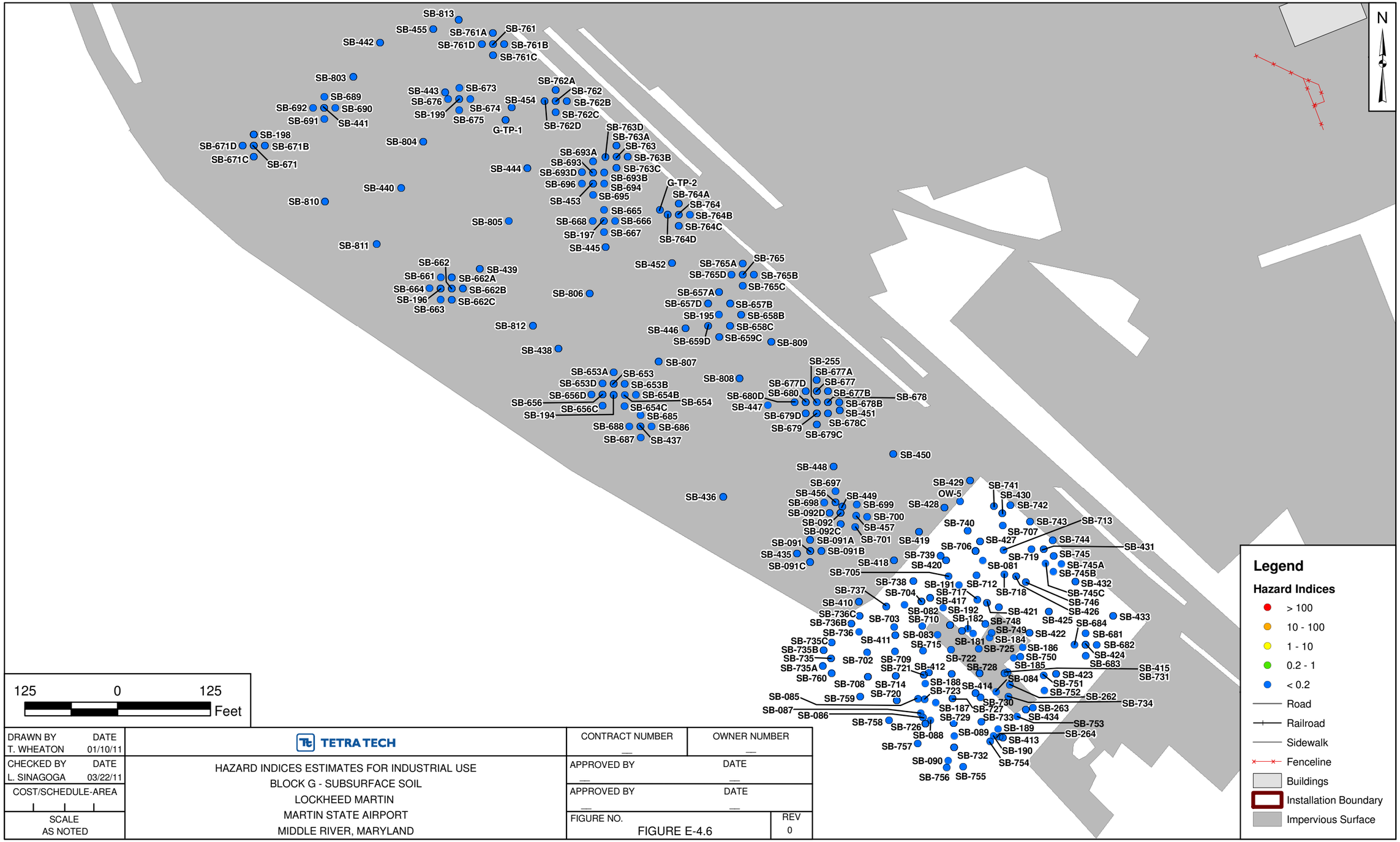


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE<br>BLOCK G - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-4.6 / REV 0 |

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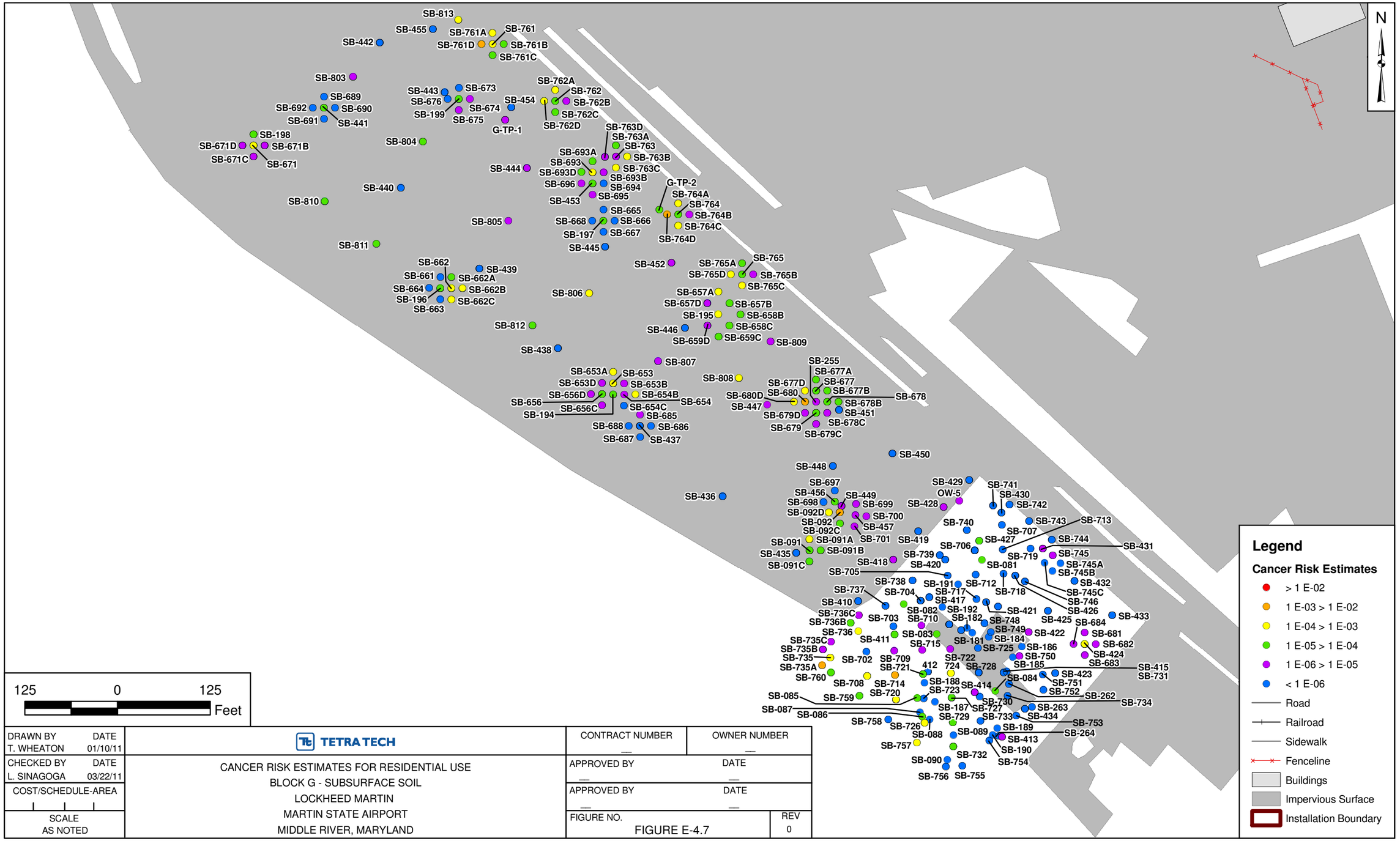


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | CANCER RISK ESTIMATES FOR RESIDENTIAL USE<br>BLOCK G - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-4.7 / REV 0 |

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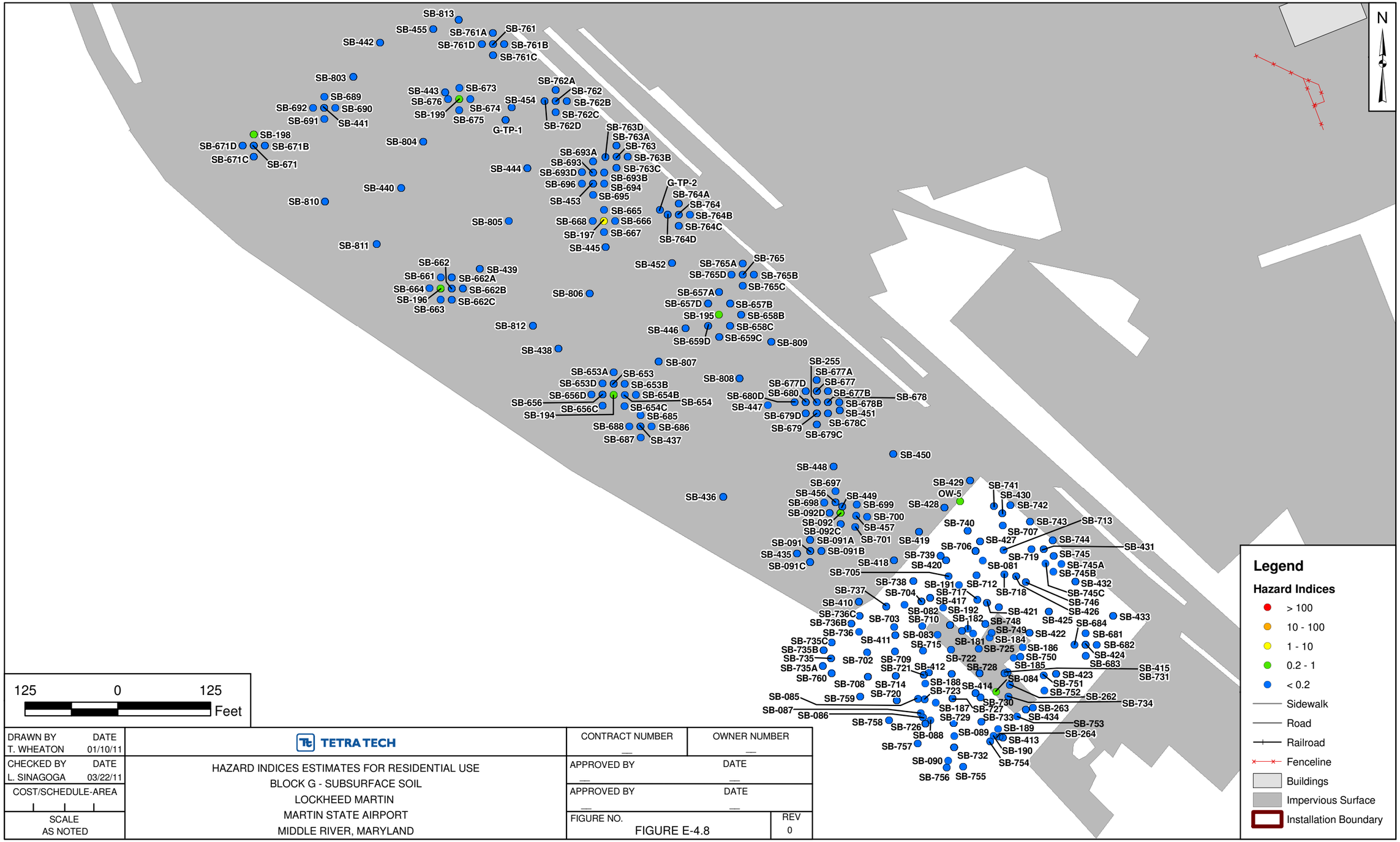


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE<br>BLOCK G - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-4.8 / REV 0 |

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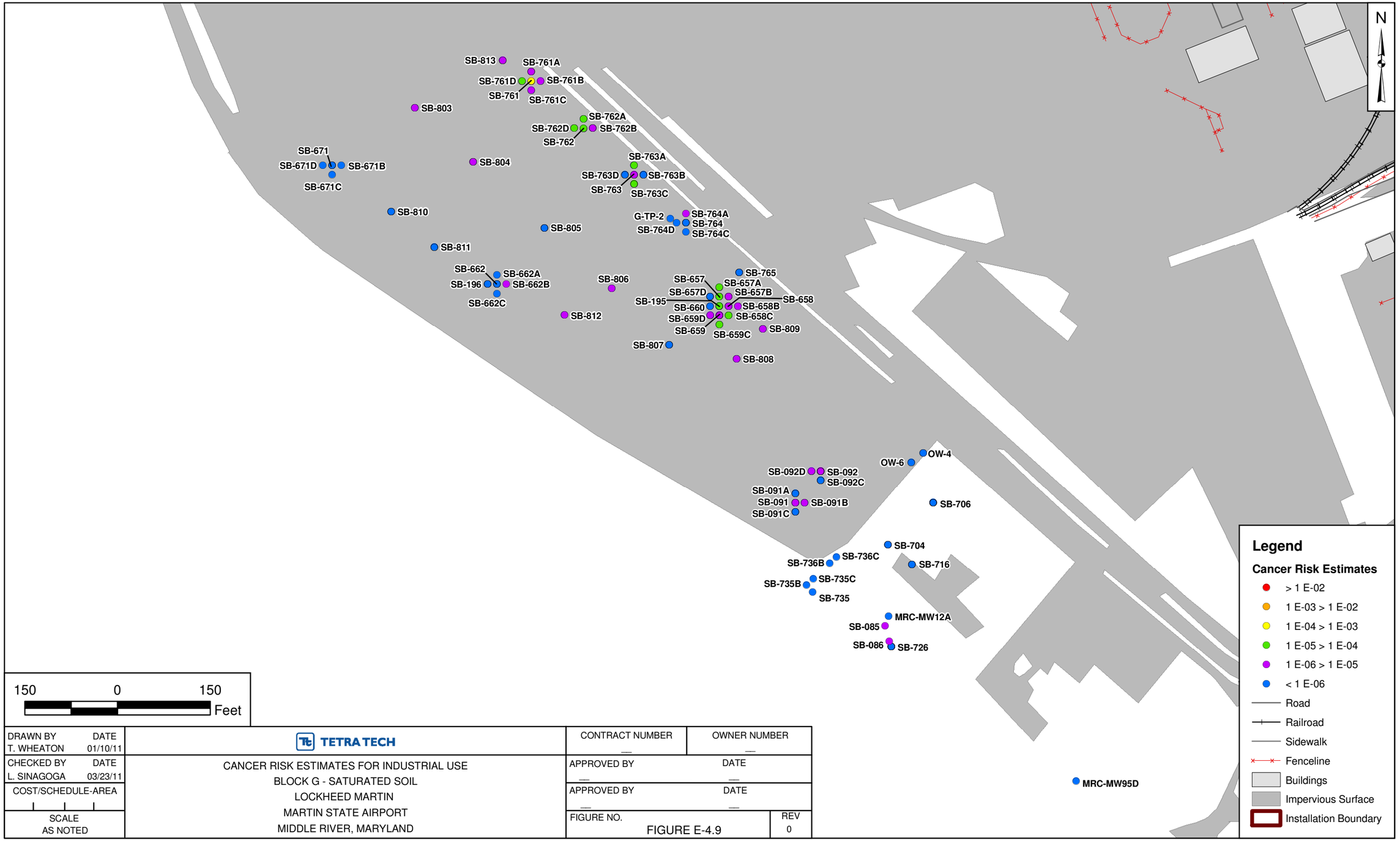


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | CANCER RISK ESTIMATES FOR INDUSTRIAL USE<br>BLOCK G - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-4.9 / REV 0 |

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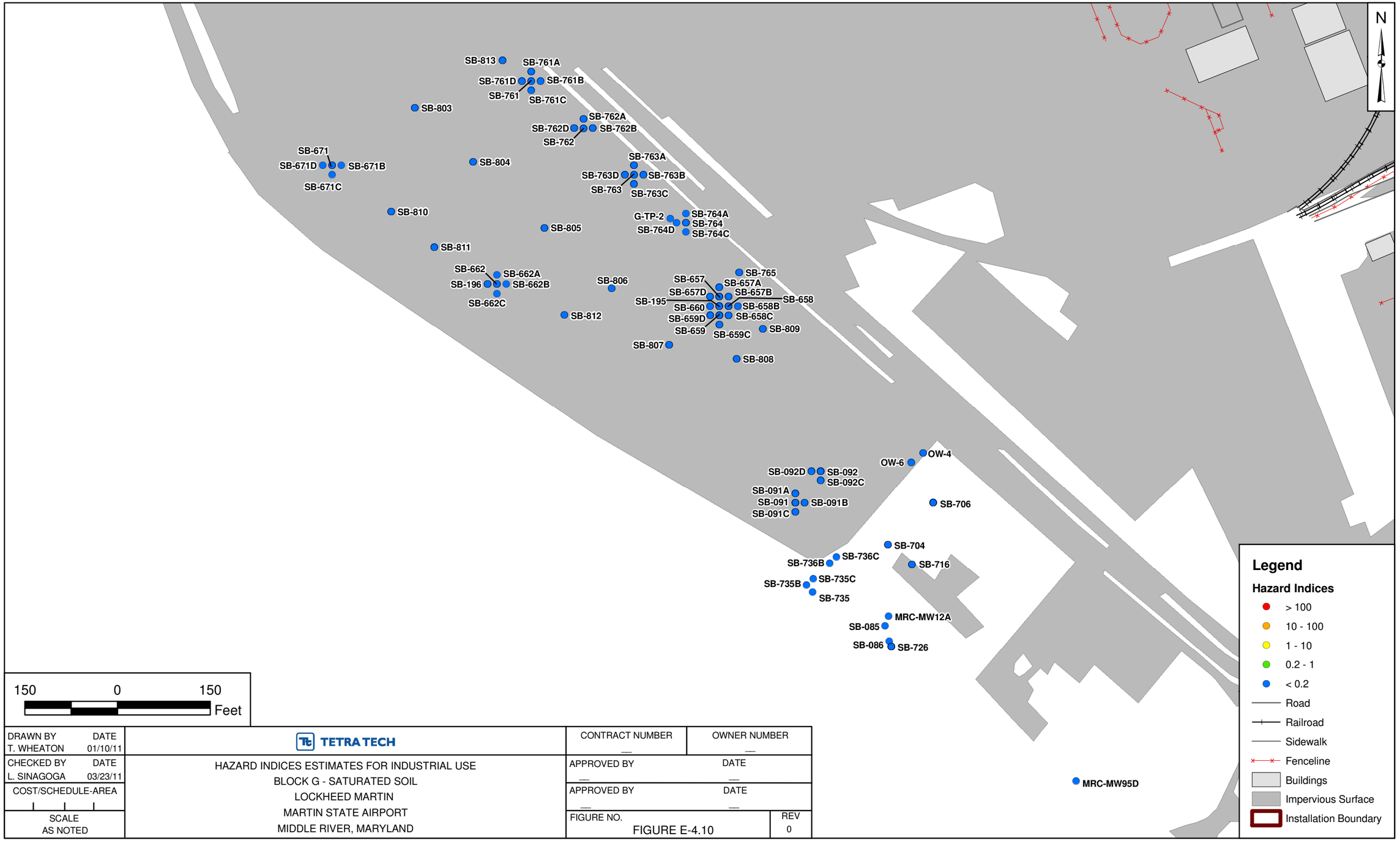


150 0 150 Feet

| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE<br>BLOCK G - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-4.10 / REV 0 |

P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\TAX_BLOCKS\BLOCKG_SATSOIL_RESIDENTIAL_CR.MXD 03/23/11 TW

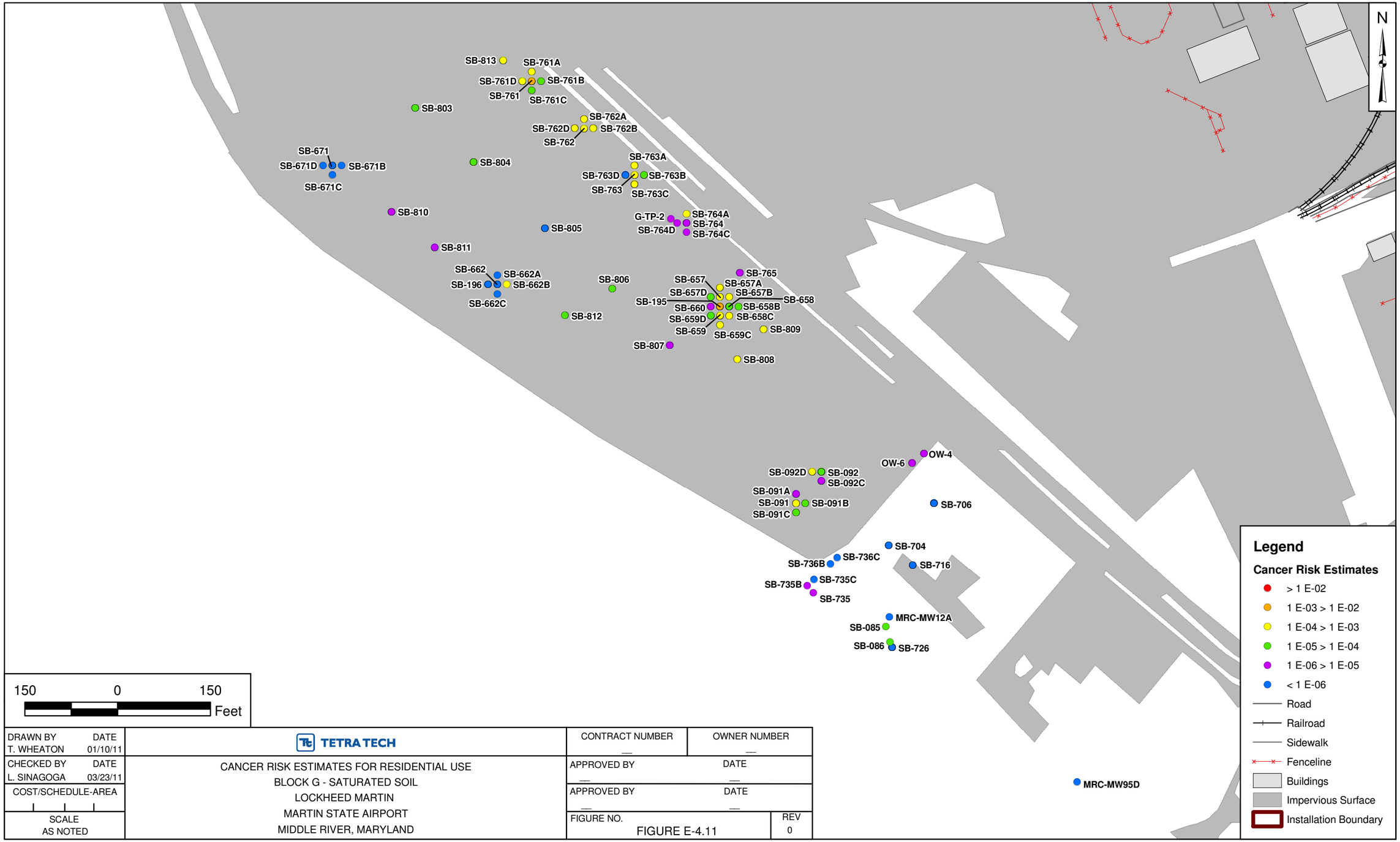


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | CANCER RISK ESTIMATES FOR RESIDENTIAL USE<br>BLOCK G - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-4.11 / REV 0 |

P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\TAX_BLOCKS\BLOCKG_SATSOIL_RESIDENTIAL_HI.MXD 03/23/11 TW

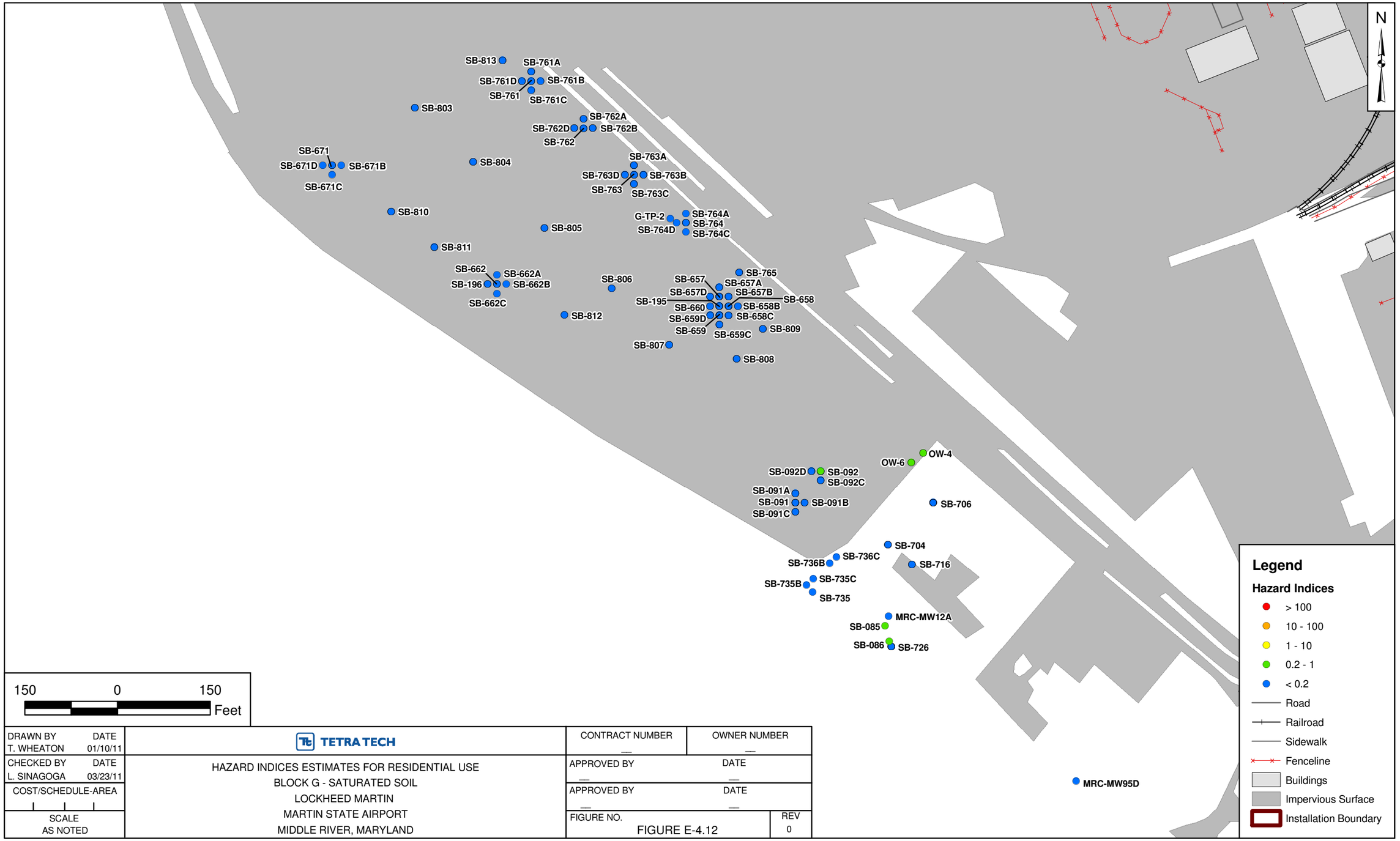


150 0 150 Feet

| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/10/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE<br>BLOCK G - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-4.12 / REV 0 |

**APPENDIX E.5**

**BLOCK H**

## TABLES


E-5.1 Cancer Risks for Individual Sample Locations – Surface Soil - Block H

E-5.2 Hazard Indices for Individual Sample Locations – Surface Soil - Block H

E-5.3 Cancer Risks for Individual Sample Locations – Subsurface Soil - Block H

E-5.4 Hazard Indices for Individual Sample Locations – Subsurface Soil - Block H

E-5.5 Cancer Risks for Individual Sample Locations – Saturated Soil - Block H

E-5.6 Hazard Indices for Individual Sample Locations – Saturated Soil - Block H


## FIGURES


E-5.1 Cancer Risk Estimates for Industrial Use – Block H – Surface Soil

E-5.2 Hazard Indices Estimates for Industrial Use – Block H – Surface Soil

E-5.3 Cancer Risk Estimates for Residential Use – Block H – Surface Soil

E-5.4 Hazard Indices Estimates for Residential Use – Block H – Surface Soil

E-5.5 Cancer Risk Estimates for Industrial Use – Block H – Subsurface Soil

E-5.6 Hazard Indices Estimates for Industrial Use – Block H – Subsurface Soil

E-5.7 Cancer Risk Estimates for Residential Use – Block H – Subsurface Soil

E-5.8 Hazard Indices Estimates for Residential Use – Block H – Subsurface Soil

E-5.9 Cancer Risk Estimates for Industrial Use – Block H – Saturated Soil

E-5.10 Hazard Indices Estimates for Industrial Use – Block H – Saturated Soil

E-5.11 Cancer Risk Estimates for Residential Use – Block H – Saturated Soil

E-5.12 Hazard Indices Estimates for Residential Use – Block H – Saturated Soil

**TABLE E-5.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-200 | SB-201 | SB-202 | SB-203 | SB-282 | SB-282 | SB-282 | SB-282A | SB-282B | SB-282C | SB-282D | SB-283 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-200-SS | SB-201-SS | SB-202-SS | SB-203-SS | H-SB-282RE-1 | H-SB-282RE-2 | SB-282-0102 | H-SB-282REA-1 | H-SB-282REB-1 | H-SB-282REC-1 | H-SB-282RED-1 | SB-283-0102 |
| SAMPLE DATE | 20050513 | 20050513 | 20050513 | 20050513 | 20090929 | 20090929 | 20051026 | 20091110 | 20091110 | 20091110 | 20091110 | 20051027 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SS | SS | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | | | | | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 1 | 1 | 1 | 1 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-06 | 3.5E-07 | 1.4E-07 | 3.8E-07 | 5.7E-07 | 5.0E-07 | | 8.3E-05 | 1.1E-07 | 2.4E-07 | 7.4E-05 | 2.0E-06 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 1.3E-07 | 2.2E-06 | 2.6E-07 | 3.7E-07 | | | 2.2E-06 | | | | | 3.7E-07 |
| CADMIUM | 4.1E-12 | 2.3E-11 | 9.1E-12 | 2.7E-12 | | | 9.1E-13 | | | | | 9.1E-13 |
| COBALT | 6.4E-10 | 4.5E-09 | 7.5E-10 | 1.9E-09 | | | 1.4E-09 | | | | | 1.0E-09 |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 4.6E-11 | 7.2E-11 | 4.6E-11 | 8.5E-11 | | | 7.6E-11 | | | | | 3.9E-11 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.4E-07 | 1.1E-07 | 2.1E-07 | 3.3E-07 | | | 6.6E-07 | | | | | 3.1E-07 |
| TOTAL CANCER RISK | 2.1E-06 | 2.7E-06 | 6.1E-07 | 1.1E-06 | 5.7E-07 | 5.0E-07 | 2.9E-06 | 8.3E-05 | 1.1E-07 | 2.4E-07 | 7.4E-05 | 2.6E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.7E-05 | 7.5E-06 | 3.0E-06 | 8.1E-06 | 1.2E-05 | 1.1E-05 | | 1.8E-03 | 2.4E-06 | 5.1E-06 | 1.6E-03 | 4.2E-05 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 1.0E-06 | 1.7E-05 | 2.0E-06 | 2.8E-06 | | | 1.7E-05 | | | | | 2.8E-06 |
| CADMIUM | 8.2E-12 | 4.6E-11 | 1.8E-11 | 5.5E-12 | | | 1.8E-12 | | | | | 1.8E-12 |
| COBALT | 1.3E-09 | 9.0E-09 | 1.5E-09 | 3.9E-09 | | | 2.7E-09 | | | | | 2.1E-09 |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 9.3E-11 | 1.5E-10 | 9.3E-11 | 1.7E-10 | | | 1.5E-10 | | | | | 7.9E-11 |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.6E-06 | 1.6E-06 | 3.2E-06 | 5.0E-06 | | | 9.8E-06 | | | | | 4.6E-06 |
| TOTAL CANCER RISK | 4.2E-05 | 2.6E-05 | 8.2E-06 | 1.6E-05 | 1.2E-05 | 1.1E-05 | 2.7E-05 | 1.8E-03 | 2.4E-06 | 5.1E-06 | 1.6E-03 | 5.0E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-284 | SB-285 | SB-286 | SB-293 | SB-294 | SB-462 | SB-463 | SB-464 | SB-465 | SB-466 | SB-467 | SB-468 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-284-0102 | SB-285-0102 | SB-286-0102 | SB-293-0102 | SB-294-0001 | SB-462-0102 | SB-463-0102 | SB-464-0102 | SB-465-0102 | SB-466-0102 | SB-467-0102 | SB-468-0102 |
| SAMPLE DATE | 20051027 | 20051027 | 20051027 | 20051028 | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.4E-06 | 6.9E-07 | 6.4E-07 | 6.2E-07 | 6.2E-07 | 9.0E-08 | 2.4E-07 | 2.4E-09 | 2.6E-09 | 3.8E-08 | 2.6E-09 | 2.6E-09 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 2.2E-07 | 8.8E-07 | 5.1E-07 | 6.2E-07 | 7.3E-07 | | | | | | | |
| CADMIUM | 9.1E-13 | 1.6E-12 | 6.8E-13 | 8.2E-12 | 9.5E-12 | | | | | | | |
| COBALT | 1.2E-09 | 1.5E-09 | 1.7E-09 | 1.0E-09 | 6.6E-10 | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 5.3E-11 | 9.8E-11 | 3.3E-11 | 6.1E-11 | 4.9E-11 | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.5E-07 | 6.2E-07 | 8.5E-07 | 3.2E-07 | 3.1E-07 | | | | | | | |
| TOTAL CANCER RISK | 1.9E-06 | 2.2E-06 | 2.0E-06 | 1.6E-06 | 1.7E-06 | 9.0E-08 | 2.4E-07 | 2.4E-09 | 2.6E-09 | 3.8E-08 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.1E-05 | 1.5E-05 | 1.4E-05 | 1.4E-05 | 1.4E-05 | 2.0E-06 | 5.2E-06 | 5.3E-08 | 5.6E-08 | 8.3E-07 | 5.6E-08 | 5.6E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | 1.7E-06 | 6.8E-06 | 4.0E-06 | 4.8E-06 | 5.7E-06 | | | | | | | |
| CADMIUM | 1.8E-12 | 3.2E-12 | 1.4E-12 | 1.6E-11 | 1.9E-11 | | | | | | | |
| COBALT | 2.5E-09 | 3.0E-09 | 3.4E-09 | 2.0E-09 | 1.3E-09 | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | 1.1E-10 | 2.0E-10 | 6.7E-11 | 1.2E-10 | 9.9E-11 | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.7E-06 | 9.2E-06 | 1.3E-05 | 4.8E-06 | 4.6E-06 | | | | | | | |
| TOTAL CANCER RISK | 3.7E-05 | 3.1E-05 | 3.1E-05 | 2.3E-05 | 2.4E-05 | 2.0E-06 | 5.2E-06 | 5.3E-08 | 5.6E-08 | 8.3E-07 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-469 | SB-470 | SB-471 | SB-472 | SB-473 | SB-474 | SB-475 | SB-476 | SB-477 | SB-478 | SB-479 | SB-480 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-469-0102 | SB-470-0102 | SB-471-0102 | SB-472-0102 | SB-473-0102 | SB-474-0102 | SB-475-0102 | SB-476-0102 | SB-477-0102 | SB-478-0102 | SB-479-0102 | SB-480-0102 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071024 | 20071024 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.2E-08 | 1.8E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 8.3E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.4E-09 | 5.2E-08 | 2.6E-09 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.2E-08 | 1.8E-07 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 8.3E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.4E-09 | 5.2E-08 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-06 | 3.9E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 1.8E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.3E-08 | 1.1E-06 | 5.6E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-06 | 3.9E-06 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 1.8E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.3E-08 | 1.1E-06 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-481 | SB-482 | SB-483 | SB-484 | SB-485 | SB-486 | SB-487 | SB-488 | SB-604A | SB-604B | SB-604D | SB-610B |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-481-0102 | SB-482-0102 | SB-483-0102 | SB-484-0102 | SB-485-0102 | SB-486-0102 | SB-487-0102 | SB-488-0102 | H-SB-604A-1 | H-SB-604B-1 | H-SB-604D-1 | H-SB-610B-1 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20091109 | 20091110 | 20091110 | 20091109 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-07 | 4.5E-08 | 1.1E-07 | 7.3E-08 | 3.5E-08 | 6.4E-07 | 6.4E-07 | 3.1E-08 | 5.9E-08 | 5.7E-07 | 1.6E-04 | 5.2E-08 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-07 | 4.5E-08 | 1.1E-07 | 7.3E-08 | 3.5E-08 | 6.4E-07 | 6.4E-07 | 3.1E-08 | 5.9E-08 | 5.7E-07 | 1.6E-04 | 5.2E-08 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.3E-06 | 9.8E-07 | 2.4E-06 | 1.6E-06 | 7.5E-07 | 1.4E-05 | 1.4E-05 | 6.8E-07 | 1.3E-06 | 1.2E-05 | 3.4E-03 | 1.1E-06 |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.3E-06 | 9.8E-07 | 2.4E-06 | 1.6E-06 | 7.5E-07 | 1.4E-05 | 1.4E-05 | 6.8E-07 | 1.3E-06 | 1.2E-05 | 3.4E-03 | 1.1E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.1**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-610C | SB-610D | SB-611A | SB-611D | SB-814 | SB-815 | SB-816 | SB-816 | SB-817 |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-610C-1 | H-SB-610D-1 | H-SB-611A-1 | H-SB-611D-1 | H-SB-814-SS | H-SB-815-SS | H-SB-816-SS | H-SB-816-SS-AVG | H-SB-817-SS |
| SAMPLE DATE | 20091109 | 20091109 | 20091109 | 20091109 | 20100826 | 20100826 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SS | SS | SS | SS | SS |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **INDUSTRIAL** | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.1E-07 | 8.6E-08 | 1.8E-07 | 2.1E-06 | 6.8E-09 | 6.6E-09 | 2.0E-07 | 2.0E-07 | 6.4E-09 |
| ANTIMONY | | | | | | | | | |
| ARSENIC | | | | | | | | | |
| CADMIUM | | | | | | | | | |
| COBALT | | | | | | | | | |
| LEAD | | | | | | | | | |
| MERCURY | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | |
| NICKEL | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 1.1E-07 | 8.6E-08 | 1.8E-07 | 2.1E-06 | 6.8E-09 | 6.6E-09 | 2.0E-07 | 2.0E-07 | 6.4E-09 |
| **RESIDENTIAL** | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.3E-06 | 1.9E-06 | 4.0E-06 | 4.6E-05 | 1.5E-07 | 1.4E-07 | 4.3E-06 | 4.3E-06 | 1.4E-07 |
| ANTIMONY | | | | | | | | | |
| ARSENIC | | | | | | | | | |
| CADMIUM | | | | | | | | | |
| COBALT | | | | | | | | | |
| LEAD | | | | | | | | | |
| MERCURY | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | |
| NICKEL | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 2.3E-06 | 1.9E-06 | 4.0E-06 | 4.6E-05 | 1.5E-07 | 1.4E-07 | 4.3E-06 | 4.3E-06 | 1.4E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-200 | SB-201 | SB-201RE | SB-201RE | SB-202 | SB-203 | SB-282 | SB-283 | SB-284 | SB-285 | SB-286 | SB-293 | SB-294 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-200-SS | SB-201-SS | H-SB-201RE-1 | H-SB-201RE-2 | SB-202-SS | SB-203-SS | SB-282-0102 | SB-283-0102 | SB-284-0102 | SB-285-0102 | SB-286-0102 | SB-293-0102 | SB-294-0001 |
| SAMPLE DATE | 20050513 | 20050513 | 20090924 | 20090924 | 20050513 | 20050513 | 20051026 | 20051027 | 20051027 | 20051027 | 20051027 | 20051028 | 20051028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SS | SS | SB | SB | SS | SS | SB | SB | SB | SB | SB | SB | SS |
| TOP DEPTH | | | 1 | 2 | | | 1 | 1 | 1 | 1 | 1 | 1 | |
| BOTTOM DEPTH | 1 | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 1 |
| **INDUSTRIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| ANTIMONY | 2.1E-03 | 2.3E-03 | | | 1.4E-03 | 2.3E-03 | | 9.2E-04 | 8.7E-04 | 1.6E-03 | 8.0E-04 | 3.9E-04 | 4.5E-04 |
| ARSENIC | 8.0E-04 | 1.4E-02 | | | 1.6E-03 | 2.3E-03 | 1.4E-02 | 2.3E-03 | 1.4E-03 | 5.5E-03 | 3.2E-03 | 3.9E-03 | 4.6E-03 |
| CADMIUM | 1.1E-04 | 6.2E-04 | | | 2.5E-04 | 7.5E-05 | 2.5E-05 | 2.5E-05 | 2.5E-05 | 4.4E-05 | 1.9E-05 | 2.2E-04 | 2.6E-04 |
| COBALT | 5.2E-03 | 3.7E-02 | | | 6.1E-03 | 1.6E-02 | 1.1E-02 | 8.4E-03 | 1.0E-02 | 1.2E-02 | 1.4E-02 | 8.2E-03 | 5.4E-03 |
| LEAD | | | | | | | | | | | | | |
| MERCURY | 1.9E-03 | 5.4E-03 | 7.1E-04 | 4.5E-05 | 2.8E-04 | 1.9E-04 | 4.7E-05 | 2.4E-05 | 9.4E-05 | 2.4E-05 | 4.7E-05 | 1.4E-04 | 4.7E-05 |
| MOLYBDENUM | 3.3E-05 | 5.0E-05 | | | 2.2E-05 | 2.8E-05 | 3.3E-05 | 3.3E-05 | 2.2E-05 | 4.2E-05 | 6.0E-05 | 3.8E-05 | 6.1E-05 |
| NICKEL | 7.4E-04 | 1.2E-03 | | | 7.4E-04 | 1.4E-03 | 1.2E-03 | 6.4E-04 | 8.6E-04 | 1.6E-03 | 5.4E-04 | 9.9E-04 | 7.9E-04 |
| VANADIUM | 1.6E-03 | 3.8E-03 | | | 1.5E-03 | 2.3E-03 | 3.6E-03 | 2.1E-03 | 1.6E-03 | 4.2E-03 | 2.1E-03 | 1.9E-03 | 1.7E-03 |
| HEXAVALENT CHROMIUM | 4.5E-04 | 2.0E-04 | | | 4.0E-04 | 6.2E-04 | 1.2E-03 | 5.7E-04 | 4.6E-04 | 1.1E-03 | 1.6E-03 | 6.0E-04 | 5.7E-04 |
| TOTAL HAZRD INDEX | 1.3E-02 | 6.4E-02 | 7.1E-04 | 4.5E-05 | 1.2E-02 | 2.5E-02 | 3.1E-02 | 1.5E-02 | 1.5E-02 | 2.6E-02 | 2.2E-02 | 1.6E-02 | 1.4E-02 |
| **RESIDENTIAL** | | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | | |
| ANTIMONY | 3.4E-02 | 3.8E-02 | | | 2.3E-02 | 3.8E-02 | | 1.5E-02 | 1.4E-02 | 2.7E-02 | 1.3E-02 | 6.4E-03 | 7.4E-03 |
| ARSENIC | 1.6E-02 | 2.8E-01 | | | 3.2E-02 | 4.6E-02 | 2.8E-01 | 4.6E-02 | 2.8E-02 | 1.1E-01 | 6.5E-02 | 7.9E-02 | 9.2E-02 |
| CADMIUM | 2.4E-03 | 1.4E-02 | | | 5.4E-03 | 1.6E-03 | 5.4E-04 | 5.4E-04 | 5.4E-04 | 9.5E-04 | 4.1E-04 | 4.9E-03 | 5.7E-03 |
| COBALT | 1.2E-01 | 8.6E-01 | | | 1.4E-01 | 3.7E-01 | 2.6E-01 | 2.0E-01 | 2.4E-01 | 2.9E-01 | 3.2E-01 | 1.9E-01 | 1.3E-01 |
| LEAD | | | | | | | | | | | | | |
| MERCURY | 2.4E-02 | 6.8E-02 | 9.0E-03 | 5.7E-04 | 3.6E-03 | 2.4E-03 | 6.0E-04 | 3.0E-04 | 1.2E-03 | 3.0E-04 | 6.0E-04 | 1.8E-03 | 6.0E-04 |
| MOLYBDENUM | 7.9E-04 | 1.2E-03 | | | 5.3E-04 | 6.6E-04 | 7.9E-04 | 7.9E-04 | 5.3E-04 | 1.0E-03 | 1.4E-03 | 8.9E-04 | 1.4E-03 |
| NICKEL | 7.6E-03 | 1.2E-02 | | | 7.6E-03 | 1.4E-02 | 1.3E-02 | 6.5E-03 | 8.8E-03 | 1.6E-02 | 5.6E-03 | 1.0E-02 | 8.2E-03 |
| VANADIUM | 3.8E-02 | 9.1E-02 | | | 3.4E-02 | 5.4E-02 | 8.6E-02 | 5.1E-02 | 3.7E-02 | 1.0E-01 | 4.9E-02 | 4.6E-02 | 4.1E-02 |
| HEXAVALENT CHROMIUM | 4.0E-03 | 1.8E-03 | | | 3.5E-03 | 5.5E-03 | 1.1E-02 | 5.1E-03 | 4.0E-03 | 1.0E-02 | 1.4E-02 | 5.3E-03 | 5.0E-03 |
| TOTAL HAZRD INDEX | 2.5E-01 | 1.4E+00 | 9.0E-03 | 5.7E-04 | 2.5E-01 | 5.3E-01 | 6.6E-01 | 3.2E-01 | 3.3E-01 | 5.6E-01 | 4.7E-01 | 3.5E-01 | 2.9E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-462 | SB-463 | SB-464 | SB-465 | SB-466 | SB-467 | SB-468 | SB-469 | SB-470 | SB-471 | SB-472 | SB-473 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-462-0102 | SB-463-0102 | SB-464-0102 | SB-465-0102 | SB-466-0102 | SB-467-0102 | SB-468-0102 | SB-469-0102 | SB-470-0102 | SB-471-0102 | SB-472-0102 | SB-473-0102 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071024 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 4.3E-04 | 1.7E-04 | 4.5E-05 | 1.9E-04 | 4.7E-05 | 4.5E-05 | 4.5E-05 | 4.5E-05 | 2.3E-03 | 9.9E-05 | 8.9E-05 | 8.9E-05 |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZRD INDEX | 4.3E-04 | 1.7E-04 | 4.5E-05 | 1.9E-04 | 4.7E-05 | 4.5E-05 | 4.5E-05 | 4.5E-05 | 2.3E-03 | 9.9E-05 | 8.9E-05 | 8.9E-05 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 5.4E-03 | 2.1E-03 | 5.7E-04 | 2.4E-03 | 6.0E-04 | 5.7E-04 | 5.7E-04 | 5.7E-04 | 2.9E-02 | 1.3E-03 | 1.1E-03 | 1.1E-03 |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZRD INDEX | 5.4E-03 | 2.1E-03 | 5.7E-04 | 2.4E-03 | 6.0E-04 | 5.7E-04 | 5.7E-04 | 5.7E-04 | 2.9E-02 | 1.3E-03 | 1.1E-03 | 1.1E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-474 | SB-475 | SB-476 | SB-477 | SB-478 | SB-479 | SB-480 | SB-481 | SB-482 | SB-483 | SB-484 | SB-485 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-474-0102 | SB-475-0102 | SB-476-0102 | SB-477-0102 | SB-478-0102 | SB-479-0102 | SB-480-0102 | SB-481-0102 | SB-482-0102 | SB-483-0102 | SB-484-0102 | SB-485-0102 |
| SAMPLE DATE | 20071024 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| BOTTOM DEPTH | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 4.7E-05 | 4.5E-05 | 4.5E-05 | 4.5E-05 | 4.2E-05 | 4.5E-05 | 4.5E-05 | 1.7E-04 | 3.0E-04 | 2.5E-04 | 1.3E-04 | 4.5E-05 |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZRD INDEX | 4.7E-05 | 4.5E-05 | 4.5E-05 | 4.5E-05 | 4.2E-05 | 4.5E-05 | 4.5E-05 | 1.7E-04 | 3.0E-04 | 2.5E-04 | 1.3E-04 | 4.5E-05 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 6.0E-04 | 5.7E-04 | 5.7E-04 | 5.7E-04 | 5.4E-04 | 5.7E-04 | 5.7E-04 | 2.1E-03 | 3.8E-03 | 3.2E-03 | 1.7E-03 | 5.7E-04 |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZRD INDEX | 6.0E-04 | 5.7E-04 | 5.7E-04 | 5.7E-04 | 5.4E-04 | 5.7E-04 | 5.7E-04 | 2.1E-03 | 3.8E-03 | 3.2E-03 | 1.7E-03 | 5.7E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.2**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-486 | SB-487 | SB-488 | SB-600 | SB-600 | SB-601 | SB-601 | SB-602 | SB-602 | SB-603 | SB-603 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-486-0102 | SB-487-0102 | SB-488-0102 | H-SB-600-1 | H-SB-600-2 | H-SB-601-1 | H-SB-601-2 | H-SB-602-1 | H-SB-602-2 | H-SB-603-1 | H-SB-603-2 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| BOTTOM DEPTH | 2 | 2 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 4.5E-05 | 4.5E-05 | 4.5E-05 | 1.6E-04 | 4.5E-05 | 1.8E-04 | 1.1E-04 | 1.6E-04 | 1.4E-04 | 1.5E-03 | 1.2E-04 |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZRD INDEX | 4.5E-05 | 4.5E-05 | 4.5E-05 | 1.6E-04 | 4.5E-05 | 1.8E-04 | 1.1E-04 | 1.6E-04 | 1.4E-04 | 1.5E-03 | 1.2E-04 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 5.7E-04 | 5.7E-04 | 5.7E-04 | 2.0E-03 | 5.7E-04 | 2.3E-03 | 1.4E-03 | 2.0E-03 | 1.7E-03 | 1.8E-02 | 1.5E-03 |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZRD INDEX | 5.7E-04 | 5.7E-04 | 5.7E-04 | 2.0E-03 | 5.7E-04 | 2.3E-03 | 1.4E-03 | 2.0E-03 | 1.7E-03 | 1.8E-02 | 1.5E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RE-10 | H-SB-282RE-3 | H-SB-282RE-4 | H-SB-282RE-5 | H-SB-282RE-6 | H-SB-282RE-7 | H-SB-282RE-7-AVG | H-SB-282RE-7-D | H-SB-282RE-8 | H-SB-282RE-9 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 |
| BOTTOM DEPTH | 10 | 3 | 4 | 5 | 6 | 7 | 7 | 7 | 8 | 9 |
| **INDUSTRIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.7E-06 | 5.2E-07 | 6.3E-07 | 3.7E-06 | 1.9E-06 | 6.2E-07 | 3.6E-07 | 1.0E-07 | 2.5E-07 | 1.2E-05 |
| NAPHTHALENE | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 3.7E-06 | 5.2E-07 | 6.3E-07 | 3.7E-06 | 1.9E-06 | 6.2E-07 | 3.6E-07 | 1.0E-07 | 2.5E-07 | 1.2E-05 |
| **RESIDENTIAL** | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.1E-05 | 1.1E-05 | 1.4E-05 | 8.0E-05 | 4.0E-05 | 1.4E-05 | 7.9E-06 | 2.3E-06 | 5.4E-06 | 2.7E-04 |
| NAPHTHALENE | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 8.1E-05 | 1.1E-05 | 1.4E-05 | 8.0E-05 | 4.0E-05 | 1.4E-05 | 7.9E-06 | 2.3E-06 | 5.4E-06 | 2.7E-04 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B | SB-282B |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REA-3 | H-SB-282REA-5 | H-SB-282REA-7 | H-SB-282REA-9 | H-SB-282REA-9-AVG | H-SB-282REA-9-D | H-SB-282REB-3 | H-SB-282REB-5 | H-SB-282REB-7 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 | 7 |
| **INDUSTRIAL** | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 8.5E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.2E-08 | 2.8E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | |
| ARSENIC | | | | | | | | | |
| COBALT | | | | | | | | | |
| LEAD | | | | | | | | | |
| MERCURY | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 8.5E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.2E-08 | 2.8E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 1.8E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.6E-07 | 6.0E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | |
| ARSENIC | | | | | | | | | |
| COBALT | | | | | | | | | |
| LEAD | | | | | | | | | |
| MERCURY | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 1.8E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.6E-07 | 6.0E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-282B | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282C | SB-282D | SB-282D |
|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REB-9 | H-SB-282REC-3 | H-SB-282REC-5 | H-SB-282REC-7 | H-SB-282REC-9 | H-SB-282REC-9-AVG | H-SB-282REC-9-D | H-SB-282RED-3 | H-SB-282RED-5 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 |
| BOTTOM DEPTH | 9 | 3 | 5 | 7 | 9 | 9 | 9 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.7E-06 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | |
| ARSENIC | | | | | | | | | |
| COBALT | | | | | | | | | |
| LEAD | | | | | | | | | |
| MERCURY | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 5.7E-06 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.2E-04 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | |
| ARSENIC | | | | | | | | | |
| COBALT | | | | | | | | | |
| LEAD | | | | | | | | | |
| MERCURY | | | | | | | | | |
| VANADIUM | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | |
| TOTAL CANCER RISK | 1.2E-04 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-282D | SB-282D | SB-283 | SB-283 | SB-284 | SB-284 | SB-474 | SB-474 | SB-604 | SB-604 | SB-604 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RED-7 | H-SB-282RED-9 | H-SB-283RE-3 | H-SB-283RE-4 | H-SB-284RE-3 | H-SB-284RE-4 | H-SB-474RE-5 | H-SB-474RE-6 | H-SB-604-3 | H-SB-604-4 | H-SB-604-5 |
| SAMPLE DATE | 20091110 | 20091110 | 20090924 | 20090924 | 20090925 | 20090925 | 20090928 | 20090928 | 20090924 | 20090924 | 20090924 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 9 | 3 | 4 | 3 | 4 | 5 | 6 | 3 | 4 | 5 |
| BOTTOM DEPTH | 7 | 9 | 3 | 4 | 3 | 4 | 5 | 6 | 3 | 4 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 1.1E-06 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 4.6E-08 | 5.5E-08 | 2.6E-09 | 6.7E-07 | 2.8E-09 | 1.3E-06 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 1.1E-06 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 4.6E-08 | 5.5E-08 | 2.6E-09 | 6.7E-07 | 2.8E-09 | 1.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 2.3E-05 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 9.9E-07 | 1.2E-06 | 5.6E-08 | 1.5E-05 | 6.0E-08 | 2.7E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 2.3E-05 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 9.9E-07 | 1.2E-06 | 5.6E-08 | 1.5E-05 | 6.0E-08 | 2.7E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-604 | SB-604 | SB-604A | SB-604A | SB-604A | SB-604B | SB-604B | SB-604B | SB-604D | SB-604D | SB-604D |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604-6 | H-SB-604-7 | H-SB-604A-3 | H-SB-604A-5 | H-SB-604A-7 | H-SB-604B-3 | H-SB-604B-5 | H-SB-604B-7 | H-SB-604D-3 | H-SB-604D-3-AVG | H-SB-604D-3-D |
| SAMPLE DATE | 20090924 | 20090924 | 20091109 | 20091109 | 20091109 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 3 | 3 |
| BOTTOM DEPTH | 6 | 7 | 3 | 5 | 7 | 3 | 5 | 7 | 3 | 3 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 4.3E-07 | 2.6E-09 | 2.8E-09 | 1.2E-07 | 2.8E-09 | 2.6E-09 | 6.0E-06 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 4.3E-07 | 2.6E-09 | 2.8E-09 | 1.2E-07 | 2.8E-09 | 2.6E-09 | 6.0E-06 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 9.4E-06 | 5.6E-08 | 6.0E-08 | 2.6E-06 | 6.0E-08 | 5.6E-08 | 1.3E-04 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 9.4E-06 | 5.6E-08 | 6.0E-08 | 2.6E-06 | 6.0E-08 | 5.6E-08 | 1.3E-04 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-604D | SB-604D | SB-605 | SB-605 | SB-606 | SB-606 | SB-607 | SB-607 | SB-608 | SB-608 | SB-608 | SB-608 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-604D-5 | H-SB-604D-7 | H-SB-605-3 | H-SB-605-4 | H-SB-606-3 | H-SB-606-4 | H-SB-607-3 | H-SB-607-4 | H-SB-608-3 | H-SB-608-4 | H-SB-608-4-AVG | H-SB-608-4-D |
| SAMPLE DATE | 20091110 | 20091110 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090924 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 |
| BOTTOM DEPTH | 5 | 7 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.9E-09 | 2.9E-09 | 8.1E-08 | 2.6E-09 | 8.9E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 9.3E-09 | 6.1E-09 | 2.9E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.9E-09 | 2.9E-09 | 8.1E-08 | 2.6E-09 | 8.9E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 9.3E-09 | 6.1E-09 | 2.9E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.4E-08 | 6.4E-08 | 1.8E-06 | 5.6E-08 | 1.9E-07 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 2.0E-07 | 1.3E-07 | 6.4E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.4E-08 | 6.4E-08 | 1.8E-06 | 5.6E-08 | 1.9E-07 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 2.0E-07 | 1.3E-07 | 6.4E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-609 | SB-609 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610 | SB-610B | SB-610B | SB-610B | SB-610B | SB-610C |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-609-3 | H-SB-609-4 | H-SB-610-3 | H-SB-610-4 | H-SB-610-5 | H-SB-610-6 | H-SB-610-7 | H-SB-610B-3 | H-SB-610B-5 | H-SB-610B-5-AVG | H-SB-610B-5-D | H-SB-610C-3 |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20091109 | 20091109 | 20091109 | 20091109 | 20091109 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 5 | 5 | 3 |
| BOTTOM DEPTH | 3 | 4 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 5 | 5 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.1E-08 | 1.6E-07 | 1.7E-06 | 2.2E-07 | 6.8E-08 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.7E-09 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.1E-08 | 1.6E-07 | 1.7E-06 | 2.2E-07 | 6.8E-08 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.7E-09 | 2.8E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-06 | 3.5E-06 | 3.6E-05 | 4.7E-06 | 1.5E-06 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.8E-08 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-06 | 3.5E-06 | 3.6E-05 | 4.7E-06 | 1.5E-06 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.8E-08 | 6.0E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-610C | SB-610D | SB-610D | SB-611 | SB-611 | SB-611 | SB-611 | SB-611 | SB-611A | SB-611A | SB-611D | SB-611D |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-610C-5 | H-SB-610D-3 | H-SB-610D-5 | H-SB-611-3 | H-SB-611-4 | H-SB-611-5 | H-SB-611-6 | H-SB-611-7 | H-SB-611A-3 | H-SB-611A-5 | H-SB-611D-3 | H-SB-611D-5 |
| SAMPLE DATE | 20091109 | 20091109 | 20091109 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20091109 | 20091109 | 20091109 | 20091109 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 3 | 5 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 3 | 5 |
| BOTTOM DEPTH | 5 | 3 | 5 | 3 | 4 | 5 | 6 | 7 | 3 | 5 | 3 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.5E-06 | 2.8E-09 | 3.6E-08 | 2.8E-09 | 2.6E-09 | 1.0E-07 | 1.1E-06 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.5E-06 | 2.8E-09 | 3.6E-08 | 2.8E-09 | 2.6E-09 | 1.0E-07 | 1.1E-06 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.5E-05 | 6.0E-08 | 7.7E-07 | 6.0E-08 | 5.6E-08 | 2.2E-06 | 2.4E-05 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.5E-05 | 6.0E-08 | 7.7E-07 | 6.0E-08 | 5.6E-08 | 2.2E-06 | 2.4E-05 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-611D | SB-611D | SB-614 | MRC-MW08A | SB-200 | SB-200 | SB-201 | SB-201 | SB-202 | SB-202 | SB-203 | SB-203 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-611D-5-AVG | H-SB-611D-5-D | H-SB-614-10 | MRC-MW08[0809] | SB-200-05 | SB-200-10 | SB-201-05 | SB-201-10 | SB-202-05 | SB-202-10 | SB-203-05 | SB-203-10 |
| SAMPLE DATE | 20091109 | 20091109 | 20090925 | 20050524 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 5 | 10 | 8 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| BOTTOM DEPTH | 5 | 5 | 10 | 9 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 1.8E-05 | | 5.7E-07 | 3.3E-06 | 1.4E-07 | 3.4E-07 | 1.4E-07 | 4.1E-07 | 1.4E-07 | 1.4E-07 |
| NAPHTHALENE | | | | | | 1.1E-08 | | | | | | |
| ARSENIC | | | | | 1.8E-06 | 1.5E-06 | 1.1E-06 | 3.7E-07 | 1.5E-06 | 7.3E-07 | 1.1E-06 | 1.5E-06 |
| COBALT | | | | | 6.2E-09 | 2.5E-09 | 5.5E-10 | 1.8E-09 | 3.4E-09 | 2.4E-09 | 7.0E-09 | 1.9E-09 |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 1.1E-07 | 1.1E-07 | 5.0E-07 | 4.0E-07 | 1.1E-07 | 8.3E-08 | 8.8E-07 | 5.7E-07 |
| TOTAL CANCER RISK | 2.8E-09 | 2.8E-09 | 1.8E-05 | | 2.5E-06 | 4.9E-06 | 1.7E-06 | 1.1E-06 | 1.7E-06 | 1.2E-06 | 2.1E-06 | 2.2E-06 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 4.0E-04 | | 1.2E-05 | 7.1E-05 | 3.1E-06 | 7.5E-06 | 3.1E-06 | 9.0E-06 | 3.1E-06 | 3.0E-06 |
| NAPHTHALENE | | | | | | 5.7E-08 | | | | | | |
| ARSENIC | | | | | 1.4E-05 | 1.1E-05 | 8.5E-06 | 2.8E-06 | 1.1E-05 | 5.7E-06 | 8.5E-06 | 1.1E-05 |
| COBALT | | | | | 3.1E-08 | 1.2E-08 | 2.7E-09 | 9.3E-09 | 1.7E-08 | 1.2E-08 | 3.5E-08 | 9.5E-09 |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | 1.7E-06 | 1.7E-06 | 7.4E-06 | 6.0E-06 | 1.7E-06 | 1.2E-06 | 1.3E-05 | 8.5E-06 |
| TOTAL CANCER RISK | 6.0E-08 | 6.0E-08 | 4.0E-04 | | 2.8E-05 | 8.4E-05 | 1.9E-05 | 1.6E-05 | 1.6E-05 | 1.6E-05 | 2.5E-05 | 2.3E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| > 1E-2 |
| 1E-03 < 1E-02 |
| 1E-04 < 1E-03 |
| 1E-05 < 1E-04 |
| 1E-06 < 1E-05 |
| < 1E-06 |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-282 | SB-282 | SB-283 | SB-283 | SB-284 | SB-284 | SB-285 | SB-285 | SB-286 | SB-286 | SB-293 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-282-0405 | SB-282-0910 | SB-283-0405 | SB-283-0910 | SB-284-0405 | SB-284-0910 | SB-285-0405 | SB-285-0910 | SB-286-0405 | SB-286-0910 | SB-293-0405 |
| SAMPLE DATE | 20051026 | 20051026 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | 6.5E-07 | 6.9E-07 | 6.8E-07 | 8.1E-07 | 6.8E-07 | 4.9E-06 | 3.1E-06 | 7.6E-07 | 2.2E-06 | 6.9E-07 |
| NAPHTHALENE | | | | | 1.1E-08 | | 5.2E-08 | 2.0E-08 | | 4.8E-09 | |
| ARSENIC | 1.3E-06 | 1.9E-06 | 2.9E-07 | 2.7E-06 | 9.7E-07 | 3.5E-07 | 9.0E-07 | 9.5E-07 | 9.9E-08 | 1.4E-07 | 9.9E-07 |
| COBALT | 1.5E-09 | 9.1E-10 | 1.9E-09 | 4.2E-09 | 1.9E-09 | 4.0E-09 | 1.8E-09 | 1.7E-09 | 4.1E-10 | 6.8E-10 | 7.5E-10 |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 5.1E-07 | 5.4E-07 | 1.1E-06 | 7.4E-07 | 8.0E-07 | 6.7E-07 | 8.6E-07 | 7.4E-07 | 2.5E-06 | 1.5E-06 | 3.5E-07 |
| TOTAL CANCER RISK | 1.8E-06 | 3.1E-06 | 2.1E-06 | 4.1E-06 | 2.6E-06 | 1.7E-06 | 6.7E-06 | 4.8E-06 | 3.4E-06 | 3.8E-06 | 2.0E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | 1.4E-05 | 1.5E-05 | 1.5E-05 | 1.8E-05 | 1.5E-05 | 1.1E-04 | 6.7E-05 | 1.7E-05 | 4.8E-05 | 1.5E-05 |
| NAPHTHALENE | | | | | 5.5E-08 | | 2.6E-07 | 1.0E-07 | | 2.4E-08 | |
| ARSENIC | 1.0E-05 | 1.5E-05 | 2.3E-06 | 2.1E-05 | 7.6E-06 | 2.7E-06 | 7.0E-06 | 7.4E-06 | 7.7E-07 | 1.1E-06 | 7.7E-06 |
| COBALT | 7.7E-09 | 4.6E-09 | 9.6E-09 | 2.1E-08 | 9.6E-09 | 2.0E-08 | 9.3E-09 | 8.7E-09 | 2.1E-09 | 3.4E-09 | 3.8E-09 |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 7.6E-06 | 8.1E-06 | 1.6E-05 | 1.1E-05 | 1.2E-05 | 1.0E-05 | 1.3E-05 | 1.1E-05 | 3.7E-05 | 2.2E-05 | 5.2E-06 |
| TOTAL CANCER RISK | 1.8E-05 | 3.7E-05 | 3.4E-05 | 4.7E-05 | 3.7E-05 | 2.8E-05 | 1.3E-04 | 8.6E-05 | 5.5E-05 | 7.1E-05 | 2.8E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-293 | SB-294 | SB-294 | SB-462 | SB-462 | SB-462 | SB-462 | SB-463 | SB-463 | SB-463 | SB-463 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-293-0910 | SB-294-0405 | SB-294-0910 | SB-462-0203 | SB-462-0304 | SB-462-0506 | SB-462-0708 | SB-463-0203 | SB-463-0304 | SB-463-0506 | SB-463-0708 |
| SAMPLE DATE | 20051028 | 20051028 | 20051028 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 4 | 9 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 10 | 5 | 10 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-07 | 6.8E-07 | 6.9E-07 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 3.1E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | 6.2E-07 | 8.8E-07 | 1.2E-06 | | | | | | | | |
| COBALT | 4.1E-10 | 5.9E-10 | 6.8E-10 | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 2.1E-07 | 2.6E-07 | 4.6E-07 | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-06 | 1.8E-06 | 2.4E-06 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 3.1E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-05 | 1.5E-05 | 1.5E-05 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.8E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | 4.8E-06 | 6.8E-06 | 9.7E-06 | | | | | | | | |
| COBALT | 2.1E-09 | 3.0E-09 | 3.4E-09 | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | 3.1E-06 | 3.9E-06 | 6.9E-06 | | | | | | | | |
| TOTAL CANCER RISK | 2.3E-05 | 2.5E-05 | 3.2E-05 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.8E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-464 | SB-464 | SB-464 | SB-464 | SB-465 | SB-465 | SB-465 | SB-465 | SB-466 | SB-466 | SB-466 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-464-0203 | SB-464-0304 | SB-464-0506 | SB-464-0708 | SB-465-0203 | SB-465-0304 | SB-465-0506 | SB-465-0708 | SB-466-0203 | SB-466-0304 | SB-466-0506 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.4E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.4E-09 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.4E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.4E-09 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.3E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.3E-08 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.3E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.3E-08 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-466 | SB-467 | SB-467 | SB-467 | SB-467 | SB-468 | SB-468 | SB-468 | SB-468 | SB-469 | SB-469 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-466-0708 | SB-467-0203 | SB-467-0304 | SB-467-0506 | SB-467-0708 | SB-468-0203 | SB-468-0304 | SB-468-0506 | SB-468-0708 | SB-469-0203 | SB-469-0304 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-469 | SB-469 | SB-620 | SB-620 | SB-620 | SB-620 | SB-621 | SB-621 | SB-622 | SB-622 | SB-623 | SB-623 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-469-0506 | SB-469-0708 | H-SB-620-5 | H-SB-620-6 | H-SB-620-6-AVG | H-SB-620-6-D | H-SB-621-5 | H-SB-621-6 | H-SB-622-5 | H-SB-622-6 | H-SB-623-5 | H-SB-623-6 |
| SAMPLE DATE | 20071023 | 20071023 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 5 | 6 | 6 | 6 | 5 | 6 | 5 | 6 | 5 | 6 |
| BOTTOM DEPTH | 6 | 8 | 5 | 6 | 6 | 6 | 5 | 6 | 5 | 6 | 5 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.6E-09 | 7.9E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 7.5E-08 | 2.6E-09 | 1.2E-08 | 2.6E-09 | 1.2E-07 | 1.5E-07 |
| NAPHTHALENE | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.6E-09 | 7.9E-08 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 7.5E-08 | 2.6E-09 | 1.2E-08 | 2.6E-09 | 1.2E-07 | 1.5E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 5.6E-08 | 1.7E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.6E-06 | 5.6E-08 | 2.7E-07 | 5.6E-08 | 2.6E-06 | 3.3E-06 |
| NAPHTHALENE | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 5.6E-08 | 1.7E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.6E-06 | 5.6E-08 | 2.7E-07 | 5.6E-08 | 2.6E-06 | 3.3E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-814 | SB-814 | SB-814 | SB-814 | SB-815 | SB-815 | SB-815 | SB-815 | SB-816 | SB-816 | SB-816 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-814-03 | H-SB-814-05 | H-SB-814-07 | H-SB-814-09 | H-SB-815-03 | H-SB-815-05 | H-SB-815-07 | H-SB-815-09 | H-SB-816-03 | H-SB-816-03-AVG | H-SB-816-03-D |
| SAMPLE DATE | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 3 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 5 | 7 | 9 | 3 | 3 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.8E-09 | 6.4E-09 | 6.8E-09 | 2.5E-06 | 6.1E-09 | 3.9E-08 | 6.8E-09 | 2.0E-07 | 6.4E-09 | 6.5E-09 | 6.6E-09 |
| NAPHTHALENE | 8.4E-11 | 8.0E-11 | 8.4E-11 | 1.2E-09 | 7.6E-11 | 8.4E-11 | 8.4E-11 | 8.9E-11 | 8.0E-11 | 8.1E-11 | 8.2E-11 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.8E-09 | 6.5E-09 | 6.8E-09 | 2.5E-06 | 6.1E-09 | 3.9E-08 | 6.8E-09 | 2.0E-07 | 6.5E-09 | 6.6E-09 | 6.7E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-07 | 1.4E-07 | 1.5E-07 | 5.4E-05 | 1.3E-07 | 8.5E-07 | 1.5E-07 | 4.4E-06 | 1.4E-07 | 1.4E-07 | 1.4E-07 |
| NAPHTHALENE | 4.3E-10 | 4.0E-10 | 4.3E-10 | 6.1E-09 | 3.8E-10 | 4.3E-10 | 4.3E-10 | 4.5E-10 | 4.0E-10 | 4.1E-10 | 4.1E-10 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-07 | 1.4E-07 | 1.5E-07 | 5.4E-05 | 1.3E-07 | 8.5E-07 | 1.5E-07 | 4.4E-06 | 1.4E-07 | 1.4E-07 | 1.4E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-816 | SB-816 | SB-816 | SB-817 | SB-817 | SB-817 | SB-817 | SB-817 | SB-817 | SB-470 | SB-470 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-816-05 | H-SB-816-07 | H-SB-816-09 | H-SB-817-03 | H-SB-817-05 | H-SB-817-07 | H-SB-817-07-AVG | H-SB-817-07-D | H-SB-817-09 | SB-470-0203 | SB-470-0304 |
| SAMPLE DATE | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 2 | 3 |
| BOTTOM DEPTH | 5 | 7 | 9 | 3 | 5 | 7 | 7 | 7 | 9 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.8E-08 | 6.6E-09 | 2.7E-07 | 6.4E-09 | 1.3E-07 | 6.6E-09 | 6.6E-09 | 6.6E-09 | 6.8E-09 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | 8.2E-11 | 8.2E-11 | 8.9E-11 | 8.0E-11 | 8.7E-11 | 8.2E-11 | 8.2E-11 | 8.2E-11 | 8.4E-11 | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.8E-08 | 6.7E-09 | 2.8E-07 | 6.5E-09 | 1.3E-07 | 6.7E-09 | 6.7E-09 | 6.7E-09 | 6.8E-09 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.9E-06 | 1.4E-07 | 6.0E-06 | 1.4E-07 | 2.8E-06 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.5E-07 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | 4.1E-10 | 4.1E-10 | 4.5E-10 | 4.0E-10 | 4.4E-10 | 4.1E-10 | 4.1E-10 | 4.1E-10 | 4.3E-10 | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.9E-06 | 1.4E-07 | 6.0E-06 | 1.4E-07 | 2.8E-06 | 1.4E-07 | 1.4E-07 | 1.4E-07 | 1.5E-07 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-470 | SB-470 | SB-471 | SB-471 | SB-471 | SB-471 | SB-472 | SB-472 | SB-472 | SB-472 | SB-473 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-470-0506 | SB-470-0708 | SB-471-0203 | SB-471-0304 | SB-471-0506 | SB-471-0708 | SB-472-0203 | SB-472-0304 | SB-472-0506 | SB-472-0708 | SB-473-0203 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071024 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 7.3E-08 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.8E-09 | 7.3E-08 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 1.6E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 6.0E-08 | 1.6E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-473 | SB-473 | SB-473 | SB-474 | SB-474 | SB-474 | SB-474 | SB-475 | SB-475 | SB-475 | SB-475 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-473-0304 | SB-473-0506 | SB-473-0708 | SB-474-0203 | SB-474-0304 | SB-474-0506 | SB-474-0708 | SB-475-0203 | SB-475-0304 | SB-475-0506 | SB-475-0708 |
| SAMPLE DATE | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.9E-09 | 2.8E-09 | 1.1E-07 | 1.7E-06 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.9E-09 | 2.8E-09 | 1.1E-07 | 1.7E-06 | 2.4E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 6.4E-08 | 6.0E-08 | 2.3E-06 | 3.7E-05 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 6.4E-08 | 6.0E-08 | 2.3E-06 | 3.7E-05 | 5.3E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-476 | SB-476 | SB-476 | SB-476 | SB-477 | SB-477 | SB-477 | SB-477 | SB-478 | SB-478 | SB-478 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-476-0203 | SB-476-0304 | SB-476-0506 | SB-476-0708 | SB-477-0203 | SB-477-0304 | SB-477-0506 | SB-477-0708 | SB-478-0203 | SB-478-0304 | SB-478-0506 |
| SAMPLE DATE | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.9E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.6E-09 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.9E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.4E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 5.6E-08 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 6.4E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-478 | SB-479 | SB-479 | SB-479 | SB-479 | SB-480 | SB-480 | SB-480 | SB-480 | SB-481 | SB-481 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-478-0708 | SB-479-0203 | SB-479-0304 | SB-479-0506 | SB-479-0708 | SB-480-0203 | SB-480-0304 | SB-480-0506 | SB-480-0708 | SB-481-0203 | SB-481-0304 |
| SAMPLE DATE | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 3.5E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.6E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 3.5E-08 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 7.5E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 5.6E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 7.5E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-481 | SB-481 | SB-482 | SB-482 | SB-482 | SB-482 | SB-483 | SB-483 | SB-483 | SB-483 | SB-484 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-481-0506 | SB-481-0708 | SB-482-0203 | SB-482-0304 | SB-482-0506 | SB-482-0708 | SB-483-0203 | SB-483-0304 | SB-483-0506 | SB-483-0708 | SB-484-0203 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 9.7E-08 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 | 2.6E-09 | 2.8E-09 | 9.7E-08 | 2.8E-09 | 2.8E-09 | 2.8E-09 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 2.1E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 | 5.6E-08 | 6.0E-08 | 2.1E-06 | 6.0E-08 | 6.0E-08 | 6.0E-08 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-484 | SB-484 | SB-484 | SB-485 | SB-485 | SB-485 | SB-485 | SB-486 | SB-486 | SB-486 | SB-486 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-484-0304 | SB-484-0506 | SB-484-0708 | SB-485-0203 | SB-485-0304 | SB-485-0506 | SB-485-0708 | SB-486-0203 | SB-486-0304 | SB-486-0506 | SB-486-0708 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.6E-09 | 2.6E-09 | 1.5E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 6.6E-07 | 6.8E-07 | 7.1E-07 | 6.8E-07 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.6E-09 | 2.6E-09 | 1.5E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 6.6E-07 | 6.8E-07 | 7.1E-07 | 6.8E-07 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 5.6E-08 | 5.6E-08 | 3.2E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.4E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 5.6E-08 | 5.6E-08 | 3.2E-06 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 1.4E-05 | 1.5E-05 | 1.5E-05 | 1.5E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.3**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-487 | SB-487 | SB-487 | SB-487 | SB-488 | SB-488 | SB-488 | SB-488 |
|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-487-0203 | SB-487-0304 | SB-487-0506 | SB-487-0708 | SB-488-0203 | SB-488-0304 | SB-488-0506 | SB-488-0708 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.9E-07 | 6.6E-07 | 6.8E-07 | 6.8E-07 | 6.4E-07 | 6.6E-07 | 6.9E-07 | 6.8E-07 |
| NAPHTHALENE | | | | | | | | |
| ARSENIC | | | | | | | | |
| COBALT | | | | | | | | |
| LEAD | | | | | | | | |
| MERCURY | | | | | | | | |
| VANADIUM | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | |
| TOTAL CANCER RISK | 6.9E-07 | 6.6E-07 | 6.8E-07 | 6.8E-07 | 6.4E-07 | 6.6E-07 | 6.9E-07 | 6.8E-07 |
| **RESIDENTIAL** | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.5E-05 | 1.4E-05 | 1.5E-05 | 1.5E-05 | 1.4E-05 | 1.4E-05 | 1.5E-05 | 1.5E-05 |
| NAPHTHALENE | | | | | | | | |
| ARSENIC | | | | | | | | |
| COBALT | | | | | | | | |
| LEAD | | | | | | | | |
| MERCURY | | | | | | | | |
| VANADIUM | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | |
| TOTAL CANCER RISK | 1.5E-05 | 1.4E-05 | 1.5E-05 | 1.5E-05 | 1.4E-05 | 1.4E-05 | 1.5E-05 | 1.5E-05 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-200 | SB-200 | SB-201 | SB-201 | SB-202 | SB-202 | SB-203 | SB-203 | SB-282 | SB-282 | SB-283 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-200-05 | SB-200-10 | SB-201-05 | SB-201-10 | SB-202-05 | SB-202-10 | SB-203-05 | SB-203-10 | SB-282-0405 | SB-282-0910 | SB-283-0405 |
| SAMPLE DATE | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20050513 | 20051026 | 20051026 | 20051027 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 4 | 9 | 4 |
| BOTTOM DEPTH | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 3.5E-05 | 3.3E-04 | 7.0E-07 | 1.3E-06 | 1.3E-06 | 1.3E-06 | 1.5E-06 | 1.3E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 |
| ARSENIC | 1.1E-02 | 9.1E-03 | 6.8E-03 | 2.3E-03 | 9.1E-03 | 4.6E-03 | 6.8E-03 | 9.1E-03 | 8.0E-03 | 1.2E-02 | 1.8E-03 |
| COBALT | 5.0E-02 | 2.0E-02 | 4.5E-03 | 1.5E-02 | 2.8E-02 | 1.9E-02 | 5.7E-02 | 1.5E-02 | 1.2E-02 | 7.4E-03 | 1.6E-02 |
| LEAD | | | | | | | | | | | |
| MERCURY | 9.4E-05 | 4.7E-05 | 1.1E-03 | 8.0E-04 | | | 9.4E-05 | 1.4E-04 | 2.4E-05 | 2.4E-05 | 2.4E-05 |
| VANADIUM | 5.1E-03 | 5.9E-03 | 3.8E-03 | 2.8E-03 | 5.8E-03 | 4.4E-03 | 5.4E-03 | 4.3E-03 | 3.0E-03 | 3.8E-03 | 2.3E-03 |
| HEXAVALENT CHROMIUM | 2.0E-04 | 2.0E-04 | 9.2E-04 | 7.4E-04 | 2.0E-04 | 1.5E-04 | 1.6E-03 | 1.1E-03 | 9.5E-04 | 1.0E-03 | 2.0E-03 |
| TOTAL HAZARD INDEX | 6.7E-02 | 3.6E-02 | 1.7E-02 | 2.2E-02 | 4.3E-02 | 2.8E-02 | 7.1E-02 | 3.0E-02 | 2.4E-02 | 2.4E-02 | 2.2E-02 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.6E-04 | 1.5E-03 | 3.3E-06 | 6.2E-06 | 6.2E-06 | 5.9E-06 | 7.0E-06 | 5.9E-06 | 1.8E-05 | 1.8E-05 | 1.8E-05 |
| ARSENIC | 2.3E-01 | 1.8E-01 | 1.4E-01 | 4.6E-02 | 1.8E-01 | 9.2E-02 | 1.4E-01 | 1.8E-01 | 1.6E-01 | 2.4E-01 | 3.7E-02 |
| COBALT | 1.2E+00 | 4.7E-01 | 1.1E-01 | 3.6E-01 | 6.5E-01 | 4.6E-01 | 1.4E+00 | 3.6E-01 | 2.9E-01 | 1.8E-01 | 3.7E-01 |
| LEAD | | | | | | | | | | | |
| MERCURY | 1.2E-03 | 6.0E-04 | 1.4E-02 | 1.0E-02 | | | 1.2E-03 | 1.8E-03 | 3.0E-04 | 3.0E-04 | 3.0E-04 |
| VANADIUM | 1.2E-01 | 1.4E-01 | 8.9E-02 | 6.8E-02 | 1.4E-01 | 1.0E-01 | 1.3E-01 | 1.0E-01 | 7.1E-02 | 9.0E-02 | 5.4E-02 |
| HEXAVALENT CHROMIUM | 1.8E-03 | 1.8E-03 | 8.1E-03 | 6.5E-03 | 1.8E-03 | 1.4E-03 | 1.4E-02 | 9.3E-03 | 8.4E-03 | 8.9E-03 | 1.8E-02 |
| TOTAL HAZARD INDEX | 1.5E+00 | 8.0E-01 | 3.6E-01 | 4.9E-01 | 9.8E-01 | 6.5E-01 | 1.6E+00 | 6.6E-01 | 5.4E-01 | 5.2E-01 | 4.8E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-283 | SB-284 | SB-284 | SB-285 | SB-285 | SB-286 | SB-286 | SB-293 | SB-293 | SB-294 | SB-294 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-283-0910 | SB-284-0405 | SB-284-0910 | SB-285-0405 | SB-285-0910 | SB-286-0405 | SB-286-0910 | SB-293-0405 | SB-293-0910 | SB-294-0405 | SB-294-0910 |
| SAMPLE DATE | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051027 | 20051028 | 20051028 | 20051028 | 20051028 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 | 4 | 9 |
| BOTTOM DEPTH | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 | 5 | 10 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 3.8E-06 | 3.1E-04 | 6.3E-06 | 1.5E-03 | 5.8E-04 | 1.5E-05 | 1.4E-04 | 7.5E-06 | 3.8E-06 | 3.8E-06 | 3.8E-06 |
| ARSENIC | 1.7E-02 | 6.0E-03 | 2.2E-03 | 5.6E-03 | 5.9E-03 | 6.2E-04 | 8.8E-04 | 6.2E-03 | 3.9E-03 | 5.5E-03 | 7.8E-03 |
| COBALT | 3.4E-02 | 1.6E-02 | 3.3E-02 | 1.5E-02 | 1.4E-02 | 3.3E-03 | 5.6E-03 | 6.1E-03 | 3.3E-03 | 4.8E-03 | 5.6E-03 |
| LEAD | | | | | | | | | | | |
| MERCURY | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 2.4E-05 | 9.4E-05 | 2.4E-05 | 4.7E-05 | 2.4E-05 |
| VANADIUM | 5.1E-03 | 4.9E-03 | 3.4E-03 | 3.9E-03 | 4.7E-03 | 2.7E-03 | 6.3E-04 | 3.2E-03 | 1.5E-03 | 2.0E-03 | 2.9E-03 |
| HEXAVALENT CHROMIUM | 1.4E-03 | 1.5E-03 | 1.3E-03 | 1.6E-03 | 1.4E-03 | 4.6E-03 | 2.8E-03 | 6.5E-04 | 3.8E-04 | 4.8E-04 | 8.5E-04 |
| TOTAL HAZARD INDEX | 5.8E-02 | 2.8E-02 | 3.9E-02 | 2.8E-02 | 2.7E-02 | 1.1E-02 | 1.0E-02 | 1.6E-02 | 9.2E-03 | 1.3E-02 | 1.7E-02 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.8E-05 | 1.5E-03 | 2.9E-05 | 7.0E-03 | 2.7E-03 | 7.0E-05 | 6.5E-04 | 3.5E-05 | 1.8E-05 | 1.8E-05 | 1.8E-05 |
| ARSENIC | 3.4E-01 | 1.2E-01 | 4.4E-02 | 1.1E-01 | 1.2E-01 | 1.2E-02 | 1.8E-02 | 1.2E-01 | 7.9E-02 | 1.1E-01 | 1.6E-01 |
| COBALT | 8.1E-01 | 3.7E-01 | 7.7E-01 | 3.6E-01 | 3.3E-01 | 7.9E-02 | 1.3E-01 | 1.4E-01 | 7.9E-02 | 1.1E-01 | 1.3E-01 |
| LEAD | | | | | | | | | | | |
| MERCURY | 3.0E-04 | 3.0E-04 | 3.0E-04 | 3.0E-04 | 3.0E-04 | 3.0E-04 | 3.0E-04 | 1.2E-03 | 3.0E-04 | 6.0E-04 | 3.0E-04 |
| VANADIUM | 1.2E-01 | 1.2E-01 | 8.0E-02 | 9.4E-02 | 1.1E-01 | 6.5E-02 | 1.5E-02 | 7.5E-02 | 3.6E-02 | 4.7E-02 | 6.9E-02 |
| HEXAVALENT CHROMIUM | 1.2E-02 | 1.3E-02 | 1.1E-02 | 1.4E-02 | 1.2E-02 | 4.1E-02 | 2.4E-02 | 5.7E-03 | 3.4E-03 | 4.2E-03 | 7.5E-03 |
| TOTAL HAZARD INDEX | 1.3E+00 | 6.2E-01 | 9.0E-01 | 5.8E-01 | 5.8E-01 | 2.0E-01 | 1.9E-01 | 3.5E-01 | 2.0E-01 | 2.8E-01 | 3.7E-01 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-462 | SB-462 | SB-462 | SB-462 | SB-463 | SB-463 | SB-463 | SB-463 | SB-464 | SB-464 | SB-464 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-462-0203 | SB-462-0304 | SB-462-0506 | SB-462-0708 | SB-463-0203 | SB-463-0304 | SB-463-0506 | SB-463-0708 | SB-464-0203 | SB-464-0304 | SB-464-0506 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 9.9E-04 | 4.5E-05 | 4.9E-05 | 4.7E-05 | 3.0E-04 | 4.9E-05 | 4.9E-05 | 4.9E-05 | 4.5E-05 | 4.9E-05 | 4.9E-05 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.9E-04 | 4.5E-05 | 4.9E-05 | 4.7E-05 | 3.0E-04 | 4.9E-05 | 4.9E-05 | 4.9E-05 | 4.5E-05 | 4.9E-05 | 4.9E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 1.3E-02 | 5.7E-04 | 6.3E-04 | 6.0E-04 | 3.8E-03 | 6.3E-04 | 6.3E-04 | 6.3E-04 | 5.7E-04 | 6.3E-04 | 6.3E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.3E-02 | 5.7E-04 | 6.3E-04 | 6.0E-04 | 3.8E-03 | 6.3E-04 | 6.3E-04 | 6.3E-04 | 5.7E-04 | 6.3E-04 | 6.3E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-464 | SB-465 | SB-465 | SB-465 | SB-465 | SB-466 | SB-466 | SB-466 | SB-466 | SB-467 | SB-467 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-464-0708 | SB-465-0203 | SB-465-0304 | SB-465-0506 | SB-465-0708 | SB-466-0203 | SB-466-0304 | SB-466-0506 | SB-466-0708 | SB-467-0203 | SB-467-0304 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.5E-05 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.5E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 5.7E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 5.7E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-467 | SB-467 | SB-468 | SB-468 | SB-468 | SB-468 | SB-469 | SB-469 | SB-469 | SB-469 | SB-620 | SB-620 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-467-0506 | SB-467-0708 | SB-468-0203 | SB-468-0304 | SB-468-0506 | SB-468-0708 | SB-469-0203 | SB-469-0304 | SB-469-0506 | SB-469-0708 | H-SB-620-5 | H-SB-620-6 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20090928 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | ORIG |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 5 | 6 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 5 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | | |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | | |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-620 | SB-620 | SB-621 | SB-621 | SB-622 | SB-622 | SB-623 | SB-623 | SB-814 | SB-814 | SB-814 | SB-814 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-620-6-AVG | H-SB-620-6-D | H-SB-621-5 | H-SB-621-6 | H-SB-622-5 | H-SB-622-6 | H-SB-623-5 | H-SB-623-6 | H-SB-814-03 | H-SB-814-05 | H-SB-814-07 | H-SB-814-09 |
| SAMPLE DATE | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20100826 | 20100826 | 20100826 | 20100826 |
| SAMPLE CODE | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 6 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 3 | 5 | 7 | 9 |
| BOTTOM DEPTH | 6 | 6 | 5 | 6 | 5 | 6 | 5 | 6 | 3 | 5 | 7 | 9 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | 2.4E-06 | 2.3E-06 | 2.4E-06 | 3.5E-05 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | | | | | | | | | 2.4E-06 | 2.3E-06 | 2.4E-06 | 3.5E-05 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.6E-04 |
| ARSENIC | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL HAZARD INDEX | | | | | | | | | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.6E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-815 | SB-815 | SB-815 | SB-815 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-816 | SB-817 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-815-03 | H-SB-815-05 | H-SB-815-07 | H-SB-815-09 | H-SB-816-03 | H-SB-816-03-AVG | H-SB-816-03-D | H-SB-816-05 | H-SB-816-07 | H-SB-816-09 | H-SB-817-03 |
| SAMPLE DATE | 20100826 | 20100826 | 20100826 | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| BOTTOM DEPTH | 3 | 5 | 7 | 9 | 3 | 3 | 3 | 5 | 7 | 9 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 2.2E-06 | 2.4E-06 | 2.4E-06 | 2.6E-06 | 2.3E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.6E-06 | 2.3E-06 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.2E-06 | 2.4E-06 | 2.4E-06 | 2.6E-06 | 2.3E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.6E-06 | 2.3E-06 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.0E-05 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.0E-05 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.2E-05 | 1.1E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-817 | SB-817 | SB-817 | SB-817 | SB-817 | SB-470 | SB-470 | SB-470 | SB-470 | SB-471 | SB-471 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-817-05 | H-SB-817-07 | H-SB-817-07-AVG | H-SB-817-07-D | H-SB-817-09 | SB-470-0203 | SB-470-0304 | SB-470-0506 | SB-470-0708 | SB-471-0203 | SB-471-0304 |
| SAMPLE DATE | 20100827 | 20100827 | 20100827 | 20100827 | 20100827 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 |
| SAMPLE CODE | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 7 | 7 | 9 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 5 | 7 | 7 | 7 | 9 | 3 | 4 | 6 | 8 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 2.5E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | 1.1E-04 | 8.9E-05 | 9.4E-05 | 9.4E-05 | 9.9E-05 | 9.9E-05 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.5E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 1.1E-04 | 8.9E-05 | 9.4E-05 | 9.4E-05 | 9.9E-05 | 9.9E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | 1.2E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | | | | | | 1.4E-03 | 1.1E-03 | 1.2E-03 | 1.2E-03 | 1.3E-03 | 1.3E-03 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.2E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.4E-03 | 1.1E-03 | 1.2E-03 | 1.2E-03 | 1.3E-03 | 1.3E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-471 | SB-471 | SB-472 | SB-472 | SB-472 | SB-472 | SB-473 | SB-473 | SB-473 | SB-473 | SB-474 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-471-0506 | SB-471-0708 | SB-472-0203 | SB-472-0304 | SB-472-0506 | SB-472-0708 | SB-473-0203 | SB-473-0304 | SB-473-0506 | SB-473-0708 | SB-474-0203 |
| SAMPLE DATE | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071023 | 20071024 | 20071024 | 20071024 | 20071024 | 20071024 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 9.4E-05 | 9.4E-05 | 8.9E-05 | 9.4E-05 | 9.4E-05 | 9.4E-05 | 8.9E-05 | 9.4E-05 | 1.0E-04 | 9.9E-05 | 1.2E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 9.4E-05 | 9.4E-05 | 8.9E-05 | 9.4E-05 | 9.4E-05 | 9.4E-05 | 8.9E-05 | 9.4E-05 | 1.0E-04 | 9.9E-05 | 1.2E-04 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 1.2E-03 | 1.2E-03 | 1.1E-03 | 1.2E-03 | 1.2E-03 | 1.2E-03 | 1.1E-03 | 1.2E-03 | 1.3E-03 | 1.3E-03 | 1.5E-03 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.2E-03 | 1.2E-03 | 1.1E-03 | 1.2E-03 | 1.2E-03 | 1.2E-03 | 1.1E-03 | 1.2E-03 | 1.3E-03 | 1.3E-03 | 1.5E-03 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-474 | SB-474 | SB-474 | SB-475 | SB-475 | SB-475 | SB-475 | SB-476 | SB-476 | SB-476 | SB-476 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-474-0304 | SB-474-0506 | SB-474-0708 | SB-475-0203 | SB-475-0304 | SB-475-0506 | SB-475-0708 | SB-476-0203 | SB-476-0304 | SB-476-0506 | SB-476-0708 |
| SAMPLE DATE | 20071024 | 20071024 | 20071024 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 4.5E-04 | 4.2E-05 | 4.5E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.9E-05 | 4.7E-05 | 4.7E-05 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.5E-04 | 4.2E-05 | 4.5E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.9E-05 | 4.7E-05 | 4.7E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 5.7E-03 | 5.4E-04 | 5.7E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 6.3E-04 | 6.0E-04 | 6.0E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 5.7E-03 | 5.4E-04 | 5.7E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 6.3E-04 | 6.0E-04 | 6.0E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-477 | SB-477 | SB-477 | SB-477 | SB-478 | SB-478 | SB-478 | SB-478 | SB-479 | SB-479 | SB-479 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-477-0203 | SB-477-0304 | SB-477-0506 | SB-477-0708 | SB-478-0203 | SB-478-0304 | SB-478-0506 | SB-478-0708 | SB-479-0203 | SB-479-0304 | SB-479-0506 |
| SAMPLE DATE | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 4.9E-05 | 4.9E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.9E-05 | 4.9E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 6.3E-04 | 6.3E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.3E-04 | 6.3E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-479 | SB-480 | SB-480 | SB-480 | SB-480 | SB-481 | SB-481 | SB-481 | SB-481 | SB-482 | SB-482 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-479-0708 | SB-480-0203 | SB-480-0304 | SB-480-0506 | SB-480-0708 | SB-481-0203 | SB-481-0304 | SB-481-0506 | SB-481-0708 | SB-482-0203 | SB-482-0304 |
| SAMPLE DATE | 20071025 | 20071025 | 20071025 | 20071025 | 20071025 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 |
| BOTTOM DEPTH | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 4.5E-05 | 4.5E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 | 9.9E-04 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.5E-05 | 4.5E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 | 9.9E-04 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.7E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 5.7E-04 | 5.7E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 | 1.3E-02 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 5.7E-04 | 5.7E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 | 1.3E-02 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 6.0E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-482 | SB-482 | SB-483 | SB-483 | SB-483 | SB-483 | SB-484 | SB-484 | SB-484 | SB-484 | SB-485 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-482-0506 | SB-482-0708 | SB-483-0203 | SB-483-0304 | SB-483-0506 | SB-483-0708 | SB-484-0203 | SB-484-0304 | SB-484-0506 | SB-484-0708 | SB-485-0203 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 |
| BOTTOM DEPTH | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 4.7E-05 | 4.7E-05 | 1.6E-04 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.7E-05 | 4.7E-05 | 1.6E-04 | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 6.0E-04 | 6.0E-04 | 2.1E-03 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.0E-04 | 6.0E-04 | 2.1E-03 | 6.0E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-485 | SB-485 | SB-485 | SB-486 | SB-486 | SB-486 | SB-486 | SB-487 | SB-487 | SB-487 | SB-487 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | SB-485-0304 | SB-485-0506 | SB-485-0708 | SB-486-0203 | SB-486-0304 | SB-486-0506 | SB-486-0708 | SB-487-0203 | SB-487-0304 | SB-487-0506 | SB-487-0708 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB | SB |
| TOP DEPTH | 3 | 5 | 7 | 2 | 3 | 5 | 7 | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 4 | 6 | 8 | 3 | 4 | 6 | 8 | 3 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 4.7E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 |
| **RESIDENTIAL** | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | | |
| NAPHTHALENE | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MERCURY | 6.0E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL HAZARD INDEX | 6.0E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.4**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SUBSURFACE SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-488 | SB-488 | SB-488 | SB-488 |
|---|---|---|---|---|
| SAMPLE ID | SB-488-0203 | SB-488-0304 | SB-488-0506 | SB-488-0708 |
| SAMPLE DATE | 20071029 | 20071029 | 20071029 | 20071029 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL |
| MATRIX | SO | SO | SO | SO |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL |
| SUBMATRIX | SB | SB | SB | SB |
| TOP DEPTH | 2 | 3 | 5 | 7 |
| BOTTOM DEPTH | 3 | 4 | 6 | 8 |
| **INDUSTRIAL** | | | | |
| BAP EQUIVALENT-HALFND | | | | |
| NAPHTHALENE | | | | |
| ARSENIC | | | | |
| COBALT | | | | |
| LEAD | | | | |
| MERCURY | 4.5E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 |
| VANADIUM | | | | |
| HEXAVALENT CHROMIUM | | | | |
| TOTAL HAZARD INDEX | 4.5E-05 | 4.5E-05 | 4.7E-05 | 4.7E-05 |
| **RESIDENTIAL** | | | | |
| BAP EQUIVALENT-HALFND | | | | |
| NAPHTHALENE | | | | |
| ARSENIC | | | | |
| COBALT | | | | |
| LEAD | | | | |
| MERCURY | 5.7E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 |
| VANADIUM | | | | |
| HEXAVALENT CHROMIUM | | | | |
| TOTAL HAZARD INDEX | 5.7E-04 | 5.7E-04 | 6.0E-04 | 6.0E-04 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

**TABLE E-5.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-200RE | SB-200RE | SB-200RE | SB-200RE | SB-200RE | SB-282 | SB-282 | SB-282 | SB-282 | SB-282 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-200RE-11 | H-SB-200RE-12 | H-SB-200RE-13 | H-SB-200RE-14 | H-SB-200RE-15 | H-SB-282RE-11 | H-SB-282RE-12 | H-SB-282RE-13 | H-SB-282RE-14 | H-SB-282RE-15 |
| SAMPLE DATE | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090929 | 20090929 | 20090929 | 20090929 | 20090929 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 |
| BOTTOM DEPTH | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 |
| **INDUSTRIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.3E-07 | 5.7E-07 | 2.9E-06 | 4.9E-08 | 4.1E-07 | 2.8E-09 | 5.4E-08 | 5.1E-06 | 1.8E-08 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 2.3E-07 | 5.7E-07 | 2.9E-06 | 4.9E-08 | 4.1E-07 | 2.8E-09 | 5.4E-08 | 5.1E-06 | 1.8E-08 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 5.0E-06 | 1.2E-05 | 6.4E-05 | 1.1E-06 | 9.0E-06 | 6.0E-08 | 1.2E-06 | 1.1E-04 | 4.0E-07 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 5.0E-06 | 1.2E-05 | 6.4E-05 | 1.1E-06 | 9.0E-06 | 6.0E-08 | 1.2E-06 | 1.1E-04 | 4.0E-07 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-282A | SB-282A | SB-282A | SB-282B | SB-282B | SB-282B | SB-282C | SB-282C | SB-282C | SB-282D |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282REA-11 | H-SB-282REA-13 | H-SB-282REA-15 | H-SB-282REB-11 | H-SB-282REB-13 | H-SB-282REB-15 | H-SB-282REC-11 | H-SB-282REC-13 | H-SB-282REC-15 | H-SB-282RED-11 |
| SAMPLE DATE | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 | 20091110 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 13 | 15 | 11 |
| **INDUSTRIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 1.4E-06 | 1.1E-07 | 1.7E-07 | 1.3E-06 | 2.8E-09 | 7.4E-06 | 4.3E-06 | 1.0E-06 | 2.6E-09 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 1.4E-06 | 1.1E-07 | 1.7E-07 | 1.3E-06 | 2.8E-09 | 7.4E-06 | 4.3E-06 | 1.0E-06 | 2.6E-09 |
| **RESIDENTIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 3.1E-05 | 2.5E-06 | 3.6E-06 | 2.8E-05 | 6.0E-08 | 1.6E-04 | 9.4E-05 | 2.2E-05 | 5.6E-08 |
| NAPHTHALENE | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 3.1E-05 | 2.5E-06 | 3.6E-06 | 2.8E-05 | 6.0E-08 | 1.6E-04 | 9.4E-05 | 2.2E-05 | 5.6E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-282D | SB-282D | SB-285 | SB-285 | SB-286RE | SB-286RE | SB-286RE | SB-596 | SB-596 | SB-597 | SB-597 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-282RED-13 | H-SB-282RED-15 | H-SB-285RE-11 | H-SB-285RE-12 | H-SB-286RE-11 | H-SB-286RE-12 | H-SB-286RE-15 | H-SB-596-11 | H-SB-596-12 | H-SB-597-11 | H-SB-597-12 |
| SAMPLE DATE | 20091110 | 20091110 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090929 | 20090929 | 20090928 | 20090928 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 13 | 15 | 11 | 12 | 11 | 12 | 15 | 11 | 12 | 11 | 12 |
| BOTTOM DEPTH | 13 | 15 | 11 | 12 | 11 | 12 | 15 | 11 | 12 | 11 | 12 |
| **INDUSTRIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 7.8E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.2E-07 | 5.7E-08 | 2.8E-09 | 9.1E-09 | 4.5E-07 | 2.6E-09 | 2.8E-09 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 7.8E-07 | 2.6E-09 | 2.6E-09 | 2.6E-09 | 1.2E-07 | 5.7E-08 | 2.8E-09 | 9.1E-09 | 4.5E-07 | 2.6E-09 | 2.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 1.7E-05 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.5E-06 | 1.2E-06 | 6.0E-08 | 2.0E-07 | 9.8E-06 | 5.6E-08 | 6.0E-08 |
| NAPHTHALENE | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | |
| COBALT | | | | | | | | | | | |
| IRON | | | | | | | | | | | |
| LEAD | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | |
| TOTAL CANCER RISK | 1.7E-05 | 5.6E-08 | 5.6E-08 | 5.6E-08 | 2.5E-06 | 1.2E-06 | 6.0E-08 | 2.0E-07 | 9.8E-06 | 5.6E-08 | 6.0E-08 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-598 | SB-598 | SB-599 | SB-599 | SB-612 | SB-612 | SB-612 | SB-612 | SB-613 | SB-613 | SB-614 | SB-614 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-598-11 | H-SB-598-12 | H-SB-599-11 | H-SB-599-12 | H-SB-612-11 | H-SB-612-11-AVG | H-SB-612-11-D | H-SB-612-12 | H-SB-613-11 | H-SB-613-12 | H-SB-614-11 | H-SB-614-12 |
| SAMPLE DATE | 20090929 | 20090929 | 20090929 | 20090929 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090928 | 20090925 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 12 | 11 | 12 | 11 | 11 | 11 | 12 | 11 | 12 | 11 | 12 |
| BOTTOM DEPTH | 11 | 12 | 11 | 12 | 11 | 11 | 11 | 12 | 11 | 12 | 11 | 12 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.8E-09 | 5.1E-08 | 1.2E-07 | 3.3E-08 | 2.0E-07 | 3.7E-07 | 2.8E-09 | 3.1E-07 | 1.5E-07 | 1.2E-07 | 3.5E-07 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.8E-09 | 5.1E-08 | 1.2E-07 | 3.3E-08 | 2.0E-07 | 3.7E-07 | 2.8E-09 | 3.1E-07 | 1.5E-07 | 1.2E-07 | 3.5E-07 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 6.0E-08 | 1.1E-06 | 2.7E-06 | 7.1E-07 | 4.4E-06 | 8.1E-06 | 6.0E-08 | 6.7E-06 | 3.2E-06 | 2.6E-06 | 7.5E-06 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 6.0E-08 | 1.1E-06 | 2.7E-06 | 7.1E-07 | 4.4E-06 | 8.1E-06 | 6.0E-08 | 6.7E-06 | 3.2E-06 | 2.6E-06 | 7.5E-06 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-615 | SB-615 | SB-616 | SB-616 | SB-616 | SB-616 | SB-617 | SB-617 | SB-617 | SB-617 | SB-618 | SB-618 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-615-11 | H-SB-615-12 | H-SB-616-11 | H-SB-616-11-AVG | H-SB-616-11-D | H-SB-616-12 | H-SB-617-11 | H-SB-617-11-AVG | H-SB-617-11-D | H-SB-617-12 | H-SB-618-11 | H-SB-618-12 |
| SAMPLE DATE | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 | 20090925 |
| SAMPLE CODE | NORMAL | NORMAL | ORIG | AVG | DUP | NORMAL | ORIG | AVG | DUP | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 12 | 11 | 11 | 11 | 12 | 11 | 11 | 11 | 12 | 11 | 12 |
| BOTTOM DEPTH | 11 | 12 | 11 | 11 | 11 | 12 | 11 | 11 | 11 | 12 | 11 | 12 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 3.9E-08 | 7.4E-08 | 4.0E-07 | 2.1E-07 | 1.4E-08 | 2.6E-09 | 2.8E-09 | 2.3E-08 | 4.4E-08 | 5.4E-08 | 2.6E-09 | 9.9E-09 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 3.9E-08 | 7.4E-08 | 4.0E-07 | 2.1E-07 | 1.4E-08 | 2.6E-09 | 2.8E-09 | 2.3E-08 | 4.4E-08 | 5.4E-08 | 2.6E-09 | 9.9E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 8.5E-07 | 1.6E-06 | 8.8E-06 | 4.5E-06 | 2.9E-07 | 5.6E-08 | 6.0E-08 | 5.0E-07 | 9.5E-07 | 1.2E-06 | 5.6E-08 | 2.2E-07 |
| NAPHTHALENE | | | | | | | | | | | | |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 8.5E-07 | 1.6E-06 | 8.8E-06 | 4.5E-06 | 2.9E-07 | 5.6E-08 | 6.0E-08 | 5.0E-07 | 9.5E-07 | 1.2E-06 | 5.6E-08 | 2.2E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.5**
**CANCER RISK FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-619 | SB-619 | SB-814 | SB-814 | SB-814 | SB-815 | SB-815 | SB-815 | SB-816 | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-619-11 | H-SB-619-12 | H-SB-814-11 | H-SB-814-13 | H-SB-814-15 | H-SB-815-11 | H-SB-815-13 | H-SB-815-15 | H-SB-816-11 | H-SB-817-11 | H-SB-817-13 | H-SB-817-15 |
| SAMPLE DATE | 20090925 | 20090925 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 12 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 12 | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 2.8E-09 | 2.6E-09 | 6.9E-09 | 1.7E-07 | 5.7E-08 | 5.4E-08 | 9.3E-07 | 6.9E-09 | 7.0E-07 | 6.8E-09 | 6.8E-09 | 6.8E-09 |
| NAPHTHALENE | | | 8.7E-11 | 8.9E-11 | 8.4E-11 | 8.4E-11 | 4.3E-10 | 8.7E-11 | 8.4E-11 | 8.4E-11 | 8.4E-11 | 8.4E-11 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 2.8E-09 | 2.6E-09 | 7.0E-09 | 1.7E-07 | 5.7E-08 | 5.4E-08 | 9.3E-07 | 7.0E-09 | 7.0E-07 | 6.8E-09 | 6.8E-09 | 6.8E-09 |
| **RESIDENTIAL** | | | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | 6.0E-08 | 5.6E-08 | 1.5E-07 | 3.6E-06 | 1.2E-06 | 1.2E-06 | 2.0E-05 | 1.5E-07 | 1.5E-05 | 1.5E-07 | 1.5E-07 | 1.5E-07 |
| NAPHTHALENE | | | 4.4E-10 | 4.5E-10 | 4.3E-10 | 4.3E-10 | 2.2E-09 | 4.4E-10 | 4.3E-10 | 4.3E-10 | 4.3E-10 | 4.3E-10 |
| AROCLOR-1254 | | | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | | | |
| ARSENIC | | | | | | | | | | | | |
| CADMIUM | | | | | | | | | | | | |
| COBALT | | | | | | | | | | | | |
| IRON | | | | | | | | | | | | |
| LEAD | | | | | | | | | | | | |
| MANGANESE | | | | | | | | | | | | |
| MERCURY | | | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | | | |
| NICKEL | | | | | | | | | | | | |
| VANADIUM | | | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | | | |
| TOTAL CANCER RISK | 6.0E-08 | 5.6E-08 | 1.5E-07 | 3.6E-06 | 1.2E-06 | 1.2E-06 | 2.0E-05 | 1.5E-07 | 1.5E-05 | 1.5E-07 | 1.5E-07 | 1.5E-07 |

**Legend**
Cancer Risk Values

| |
|---|
| **> 1E-2** |
| **1E-03 < 1E-02** |
| **1E-04 < 1E-03** |
| **1E-05 < 1E-04** |
| **1E-06 < 1E-05** |
| **< 1E-06** |

**TABLE E-5.6**
**HAZARD INDICES FOR INDIVIDUAL SAMPLE LOCATIONS - SATURATED SOIL**
**BLOCK H**
**LOCKHEED MARTIN, MIDDLE RIVER COMPLEX**
**MIDDLE RIVER, MARYLAND**


| LOCATION | SB-814 | SB-814 | SB-814 | SB-815 | SB-815 | SB-815 | SB-816 | SB-817 | SB-817 | SB-817 |
|---|---|---|---|---|---|---|---|---|---|---|
| SAMPLE ID | H-SB-814-11 | H-SB-814-13 | H-SB-814-15 | H-SB-815-11 | H-SB-815-13 | H-SB-815-15 | H-SB-816-11 | H-SB-817-11 | H-SB-817-13 | H-SB-817-15 |
| SAMPLE DATE | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100826 | 20100827 | 20100827 | 20100827 | 20100827 |
| SAMPLE CODE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| SAMPLE TYPE | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL | NORMAL |
| TOP DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 13 | 15 |
| BOTTOM DEPTH | 11 | 13 | 15 | 11 | 13 | 15 | 11 | 11 | 13 | 15 |
| **INDUSTRIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | |
| NAPHTHALENE | 2.5E-06 | 2.6E-06 | 2.4E-06 | 2.4E-06 | 1.3E-05 | 2.5E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL HAZARD INDEX | 2.5E-06 | 2.6E-06 | 2.4E-06 | 2.4E-06 | 1.3E-05 | 2.5E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 | 2.4E-06 |
| **RESIDENTIAL** | | | | | | | | | | |
| 1,2,3-TRICHLOROBENZENE | | | | | | | | | | |
| 1,2,4-TRICHLOROBENZENE | | | | | | | | | | |
| 1,3-DICHLOROBENZENE | | | | | | | | | | |
| 1,4-DICHLOROBENZENE | | | | | | | | | | |
| BAP EQUIVALENT-HALFND | | | | | | | | | | |
| NAPHTHALENE | 1.2E-05 | 1.2E-05 | 1.1E-05 | 1.1E-05 | 5.9E-05 | 1.2E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 |
| AROCLOR-1254 | | | | | | | | | | |
| AROCLOR-1260 | | | | | | | | | | |
| ANTIMONY | | | | | | | | | | |
| ARSENIC | | | | | | | | | | |
| CADMIUM | | | | | | | | | | |
| COBALT | | | | | | | | | | |
| IRON | | | | | | | | | | |
| LEAD | | | | | | | | | | |
| MANGANESE | | | | | | | | | | |
| MERCURY | | | | | | | | | | |
| MOLYBDENUM | | | | | | | | | | |
| NICKEL | | | | | | | | | | |
| VANADIUM | | | | | | | | | | |
| HEXAVALENT CHROMIUM | | | | | | | | | | |
| TOTAL HAZARD INDEX | 1.2E-05 | 1.2E-05 | 1.1E-05 | 1.1E-05 | 5.9E-05 | 1.2E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 | 1.1E-05 |

**Legend**
Hazard Index Values

| |
|---|
| **> 1E+2** |
| **1E+1 < 1E+2** |
| **1E+0 < 1E+1** |
| **2E-1 < 1E+0** |
| **<2E-1** |

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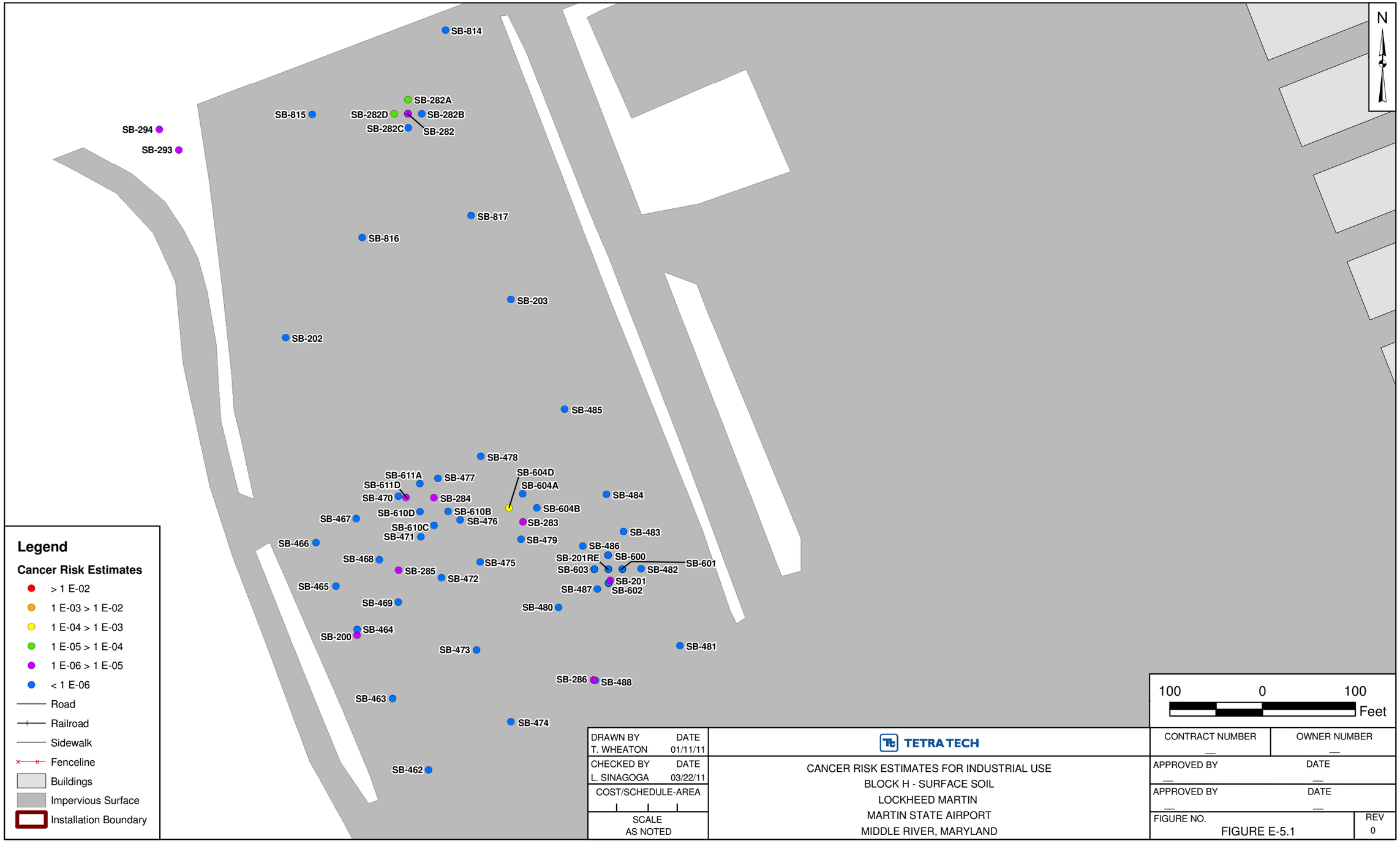


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/11/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | CANCER RISK ESTIMATES FOR INDUSTRIAL USE<br>BLOCK H - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-5.1 / REV 0 |

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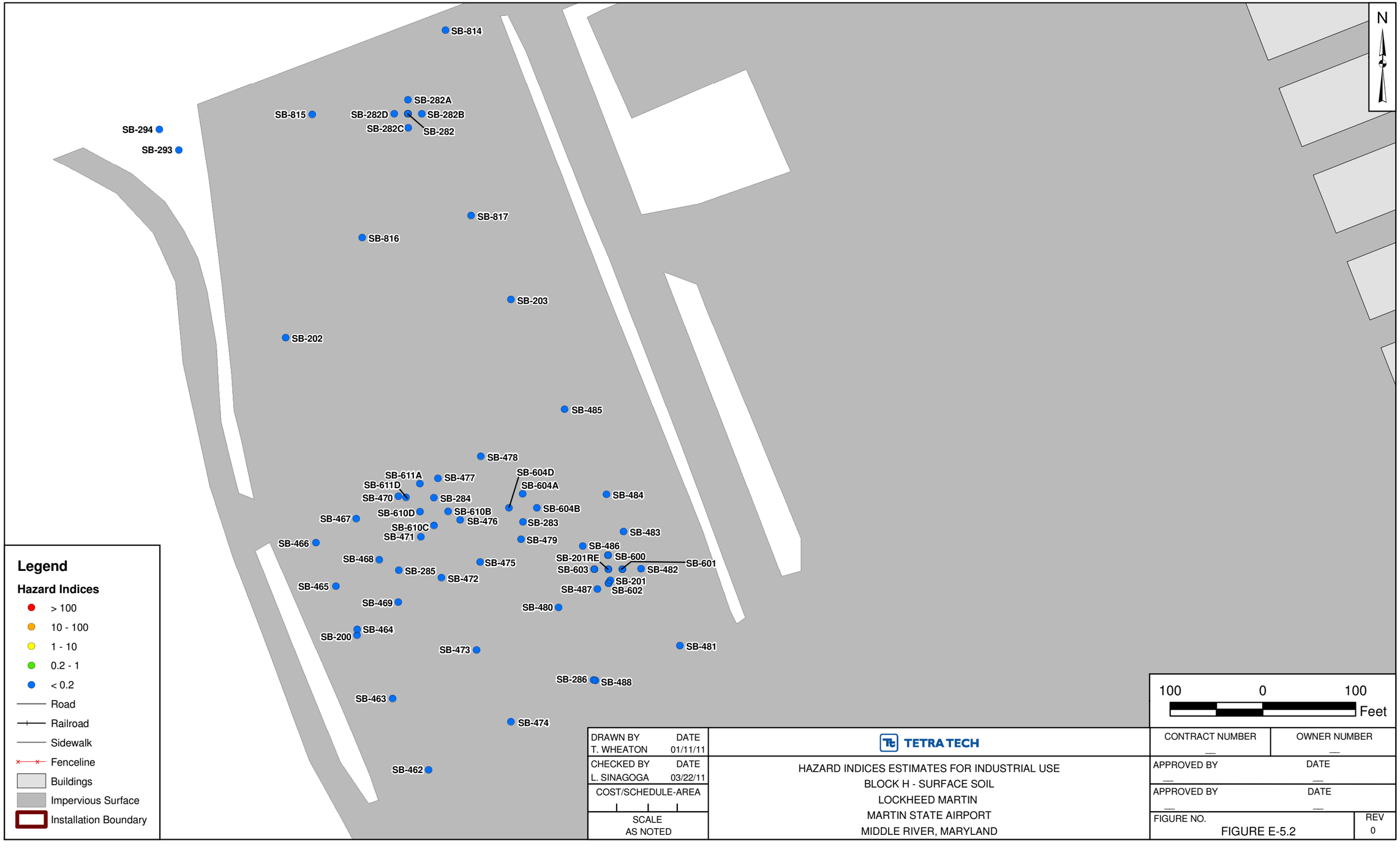


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/11/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE<br>BLOCK H - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-5.2 / REV 0 |

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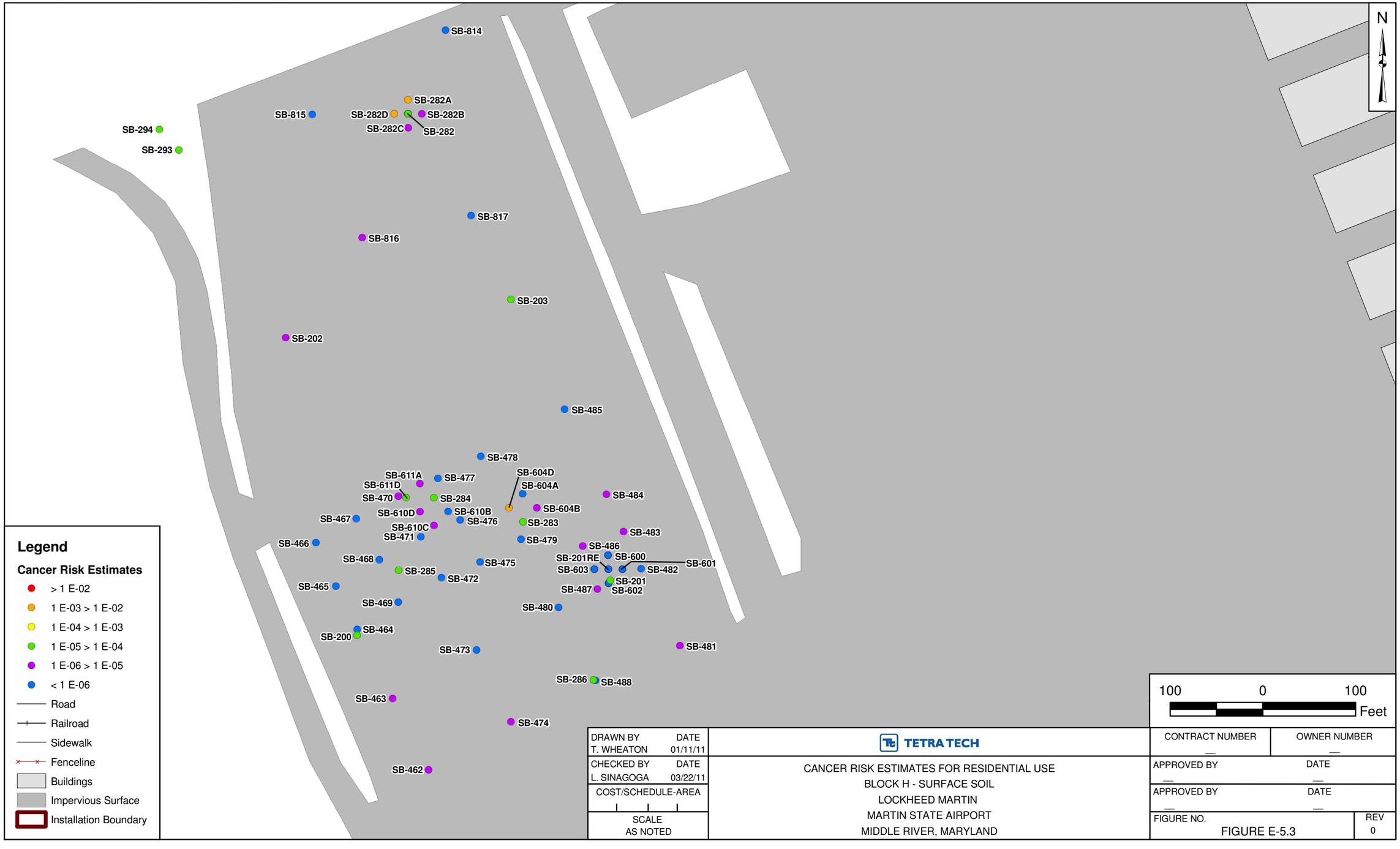


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/11/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | CANCER RISK ESTIMATES FOR RESIDENTIAL USE<br>BLOCK H - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-5.3 / REV 0 |

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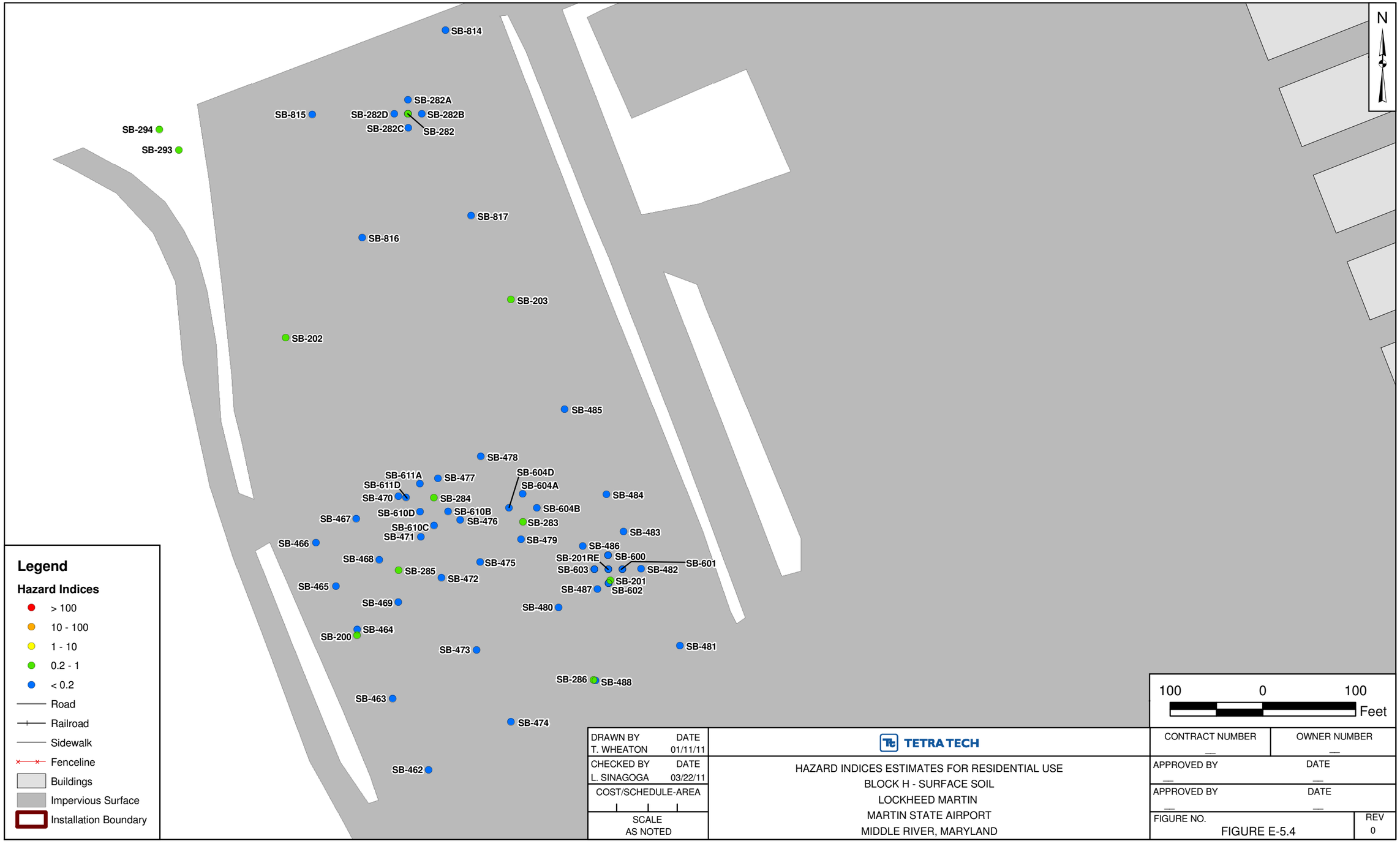


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/11/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE<br>BLOCK H - SURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-5.4 / REV 0 |

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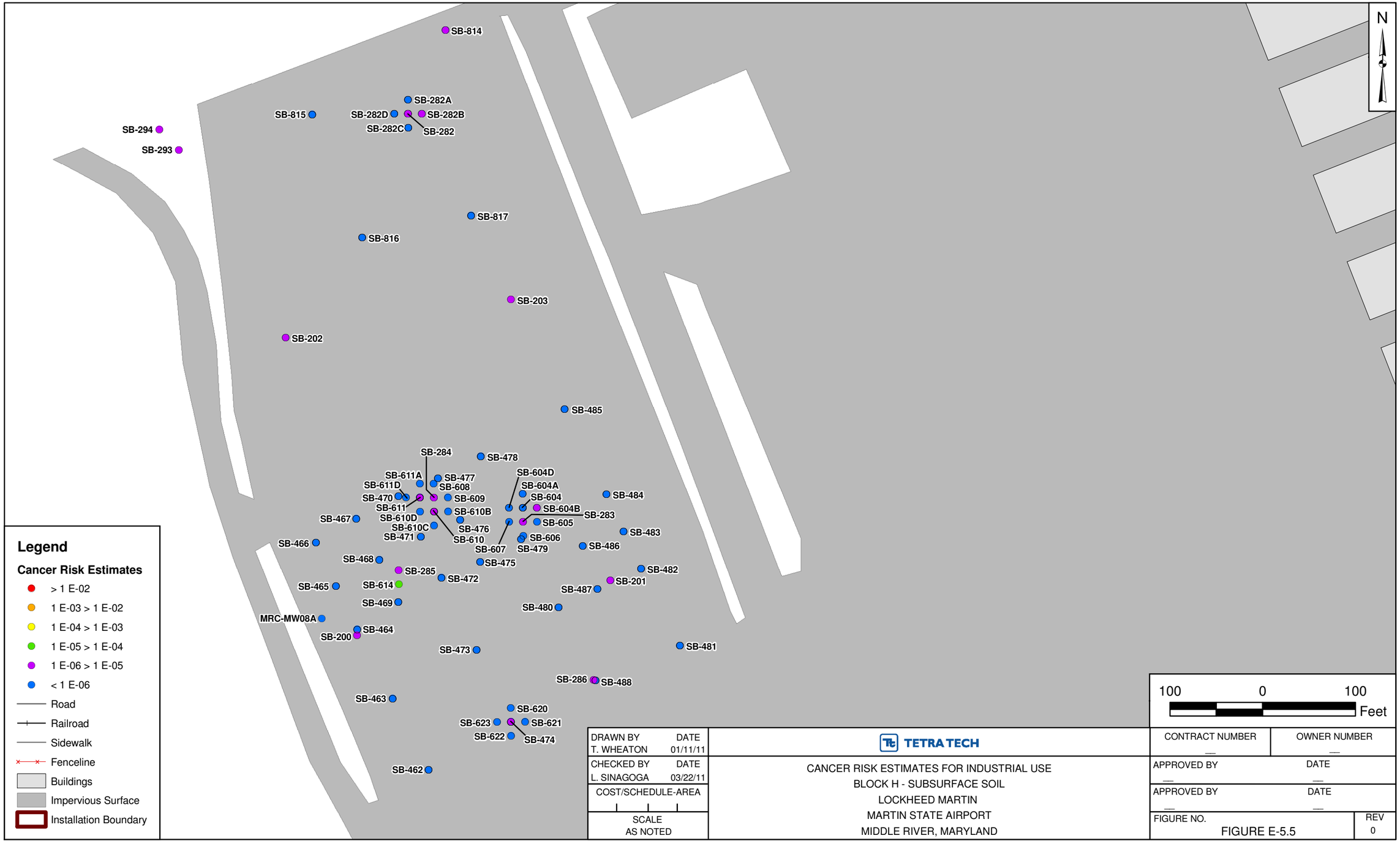


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/11/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | CANCER RISK ESTIMATES FOR INDUSTRIAL USE<br>BLOCK H - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-5.5 / REV 0 |

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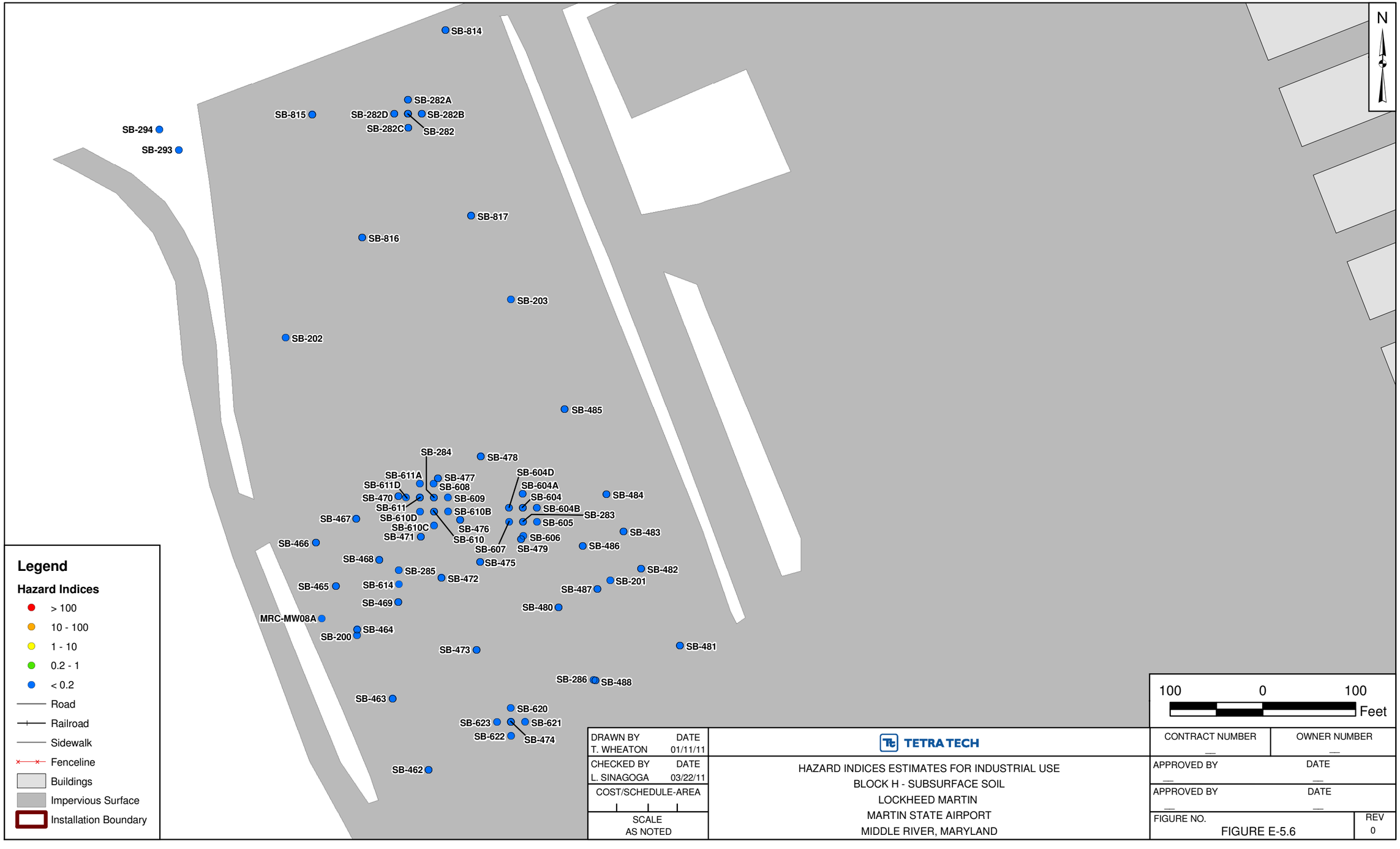


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/11/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE<br>BLOCK H - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-5.6 / REV 0 |

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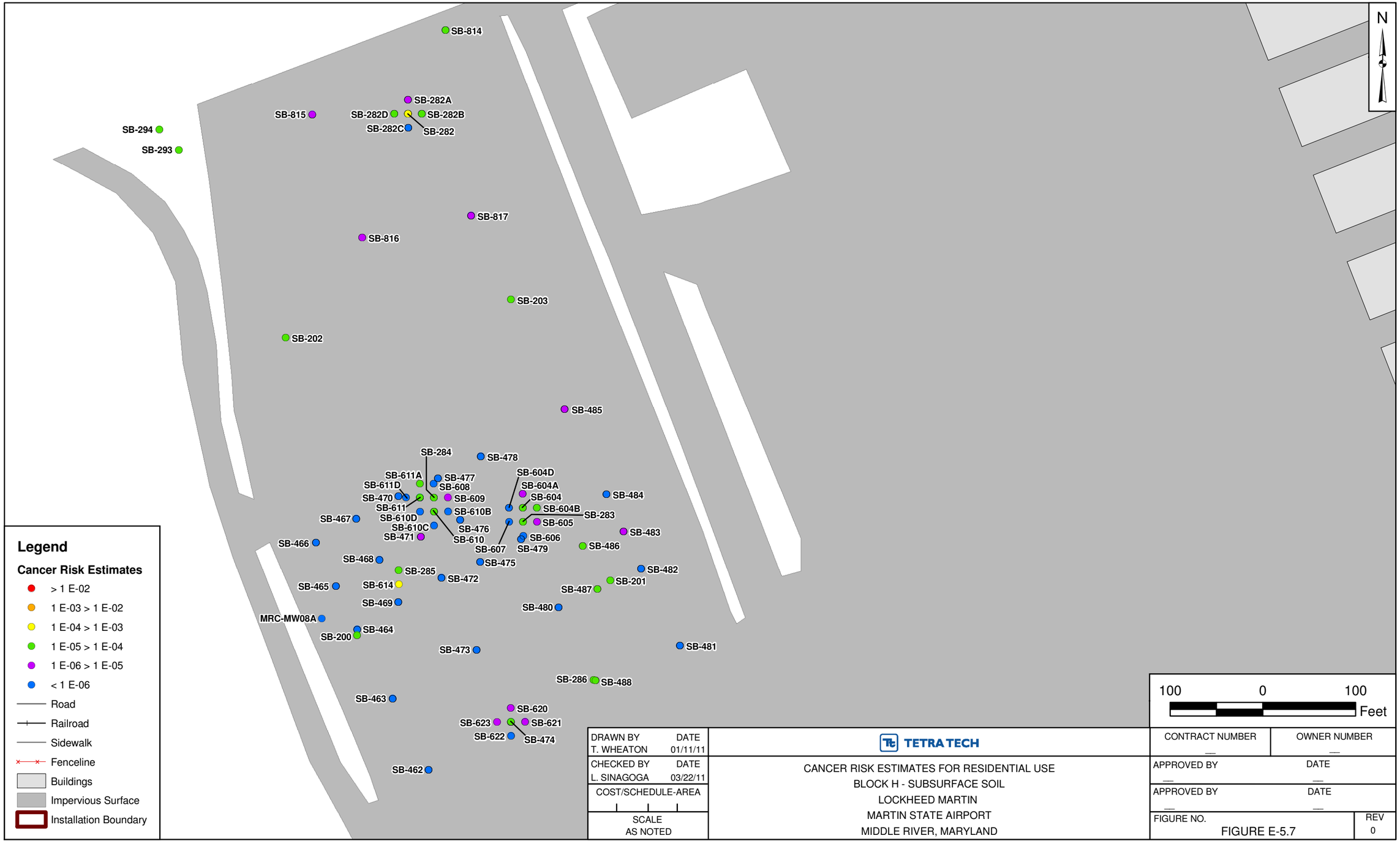


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/11/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | CANCER RISK ESTIMATES FOR RESIDENTIAL USE<br>BLOCK H - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-5.7 / REV 0 |

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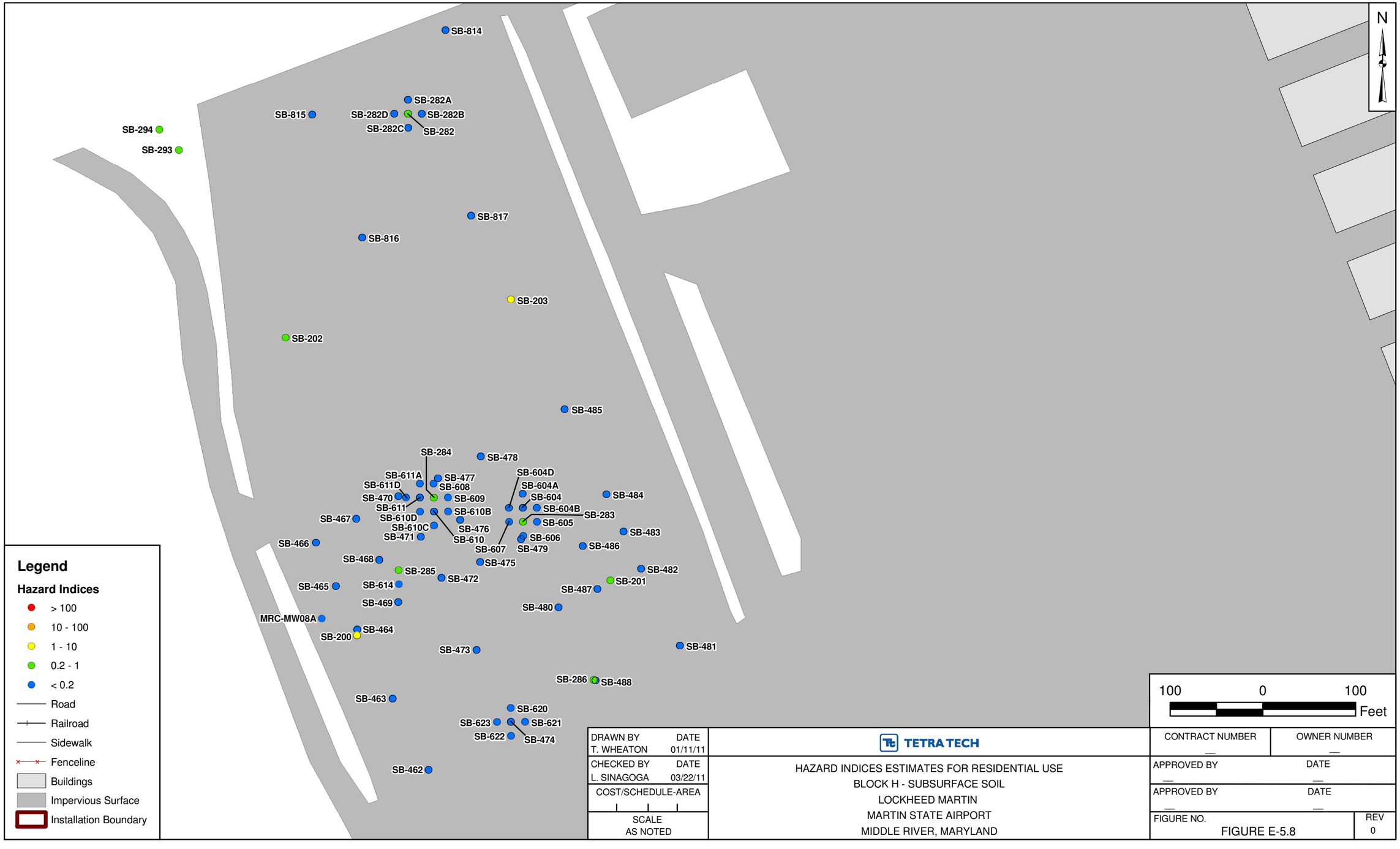


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/11/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/22/11 | HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE<br>BLOCK H - SUBSURFACE SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-5.8 / REV 0 |

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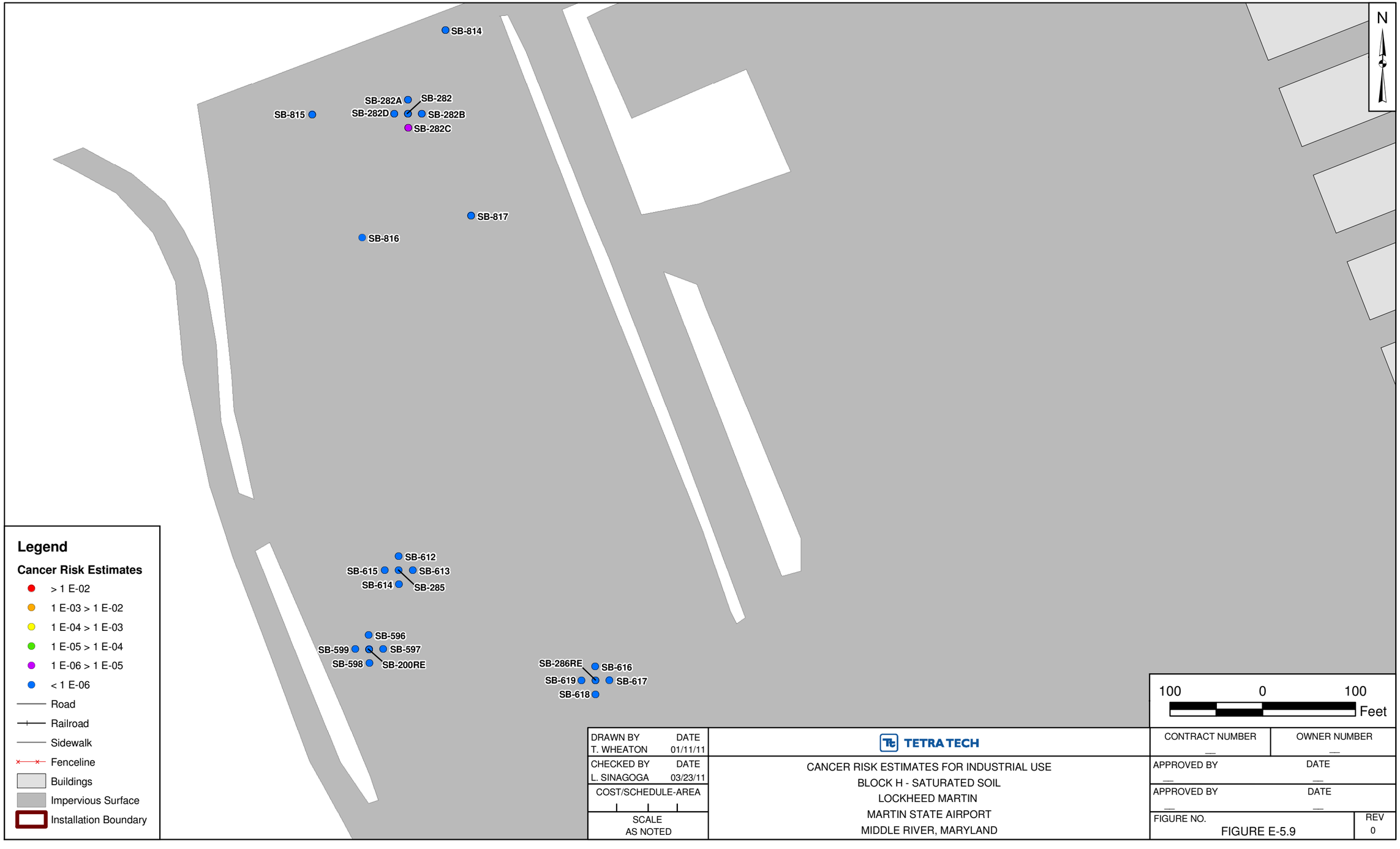


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/11/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | CANCER RISK ESTIMATES FOR INDUSTRIAL USE<br>BLOCK H - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-5.9 / REV 0 |

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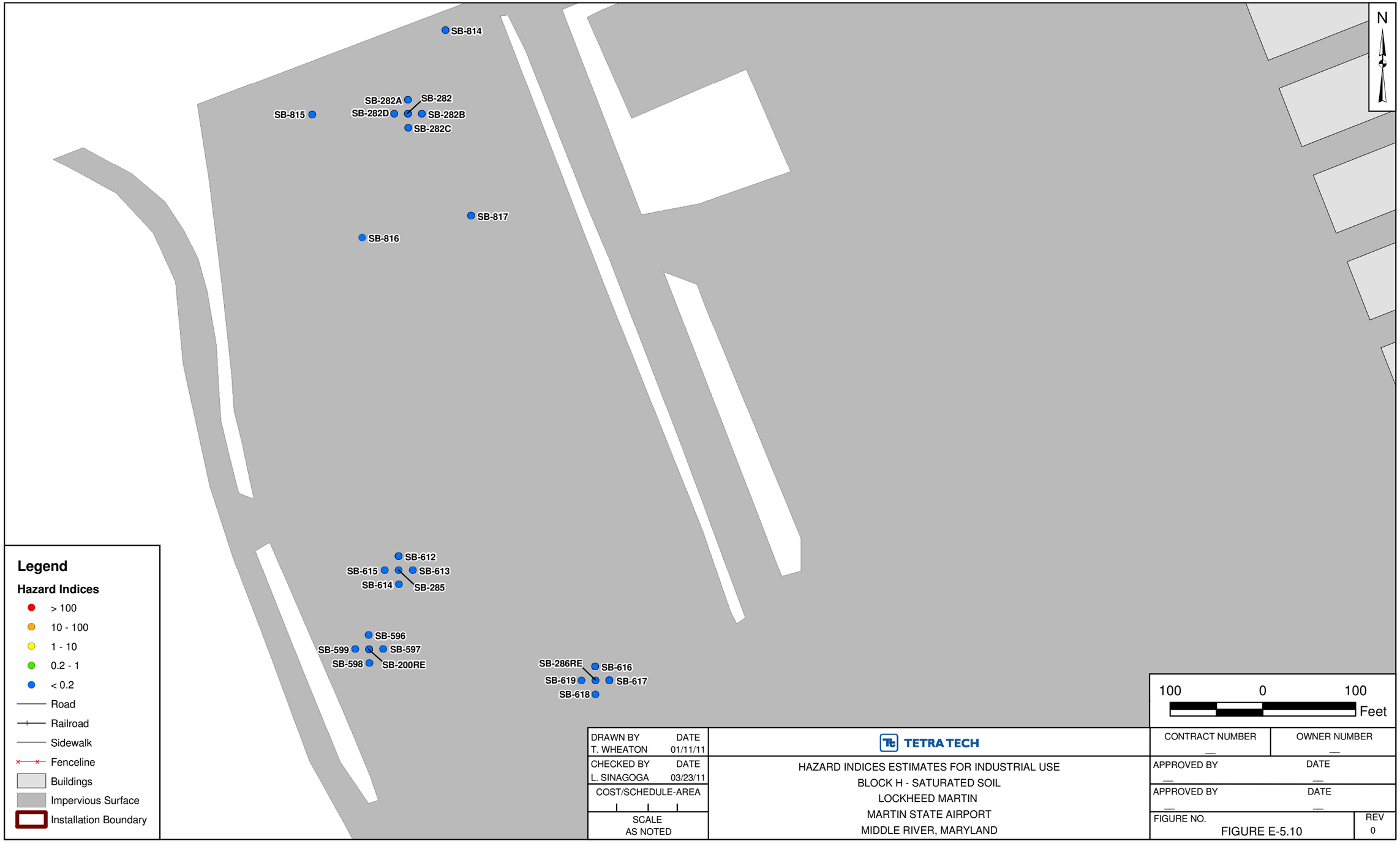


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/11/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | HAZARD INDICES ESTIMATES FOR INDUSTRIAL USE<br>BLOCK H - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-5.10 / REV 0 |

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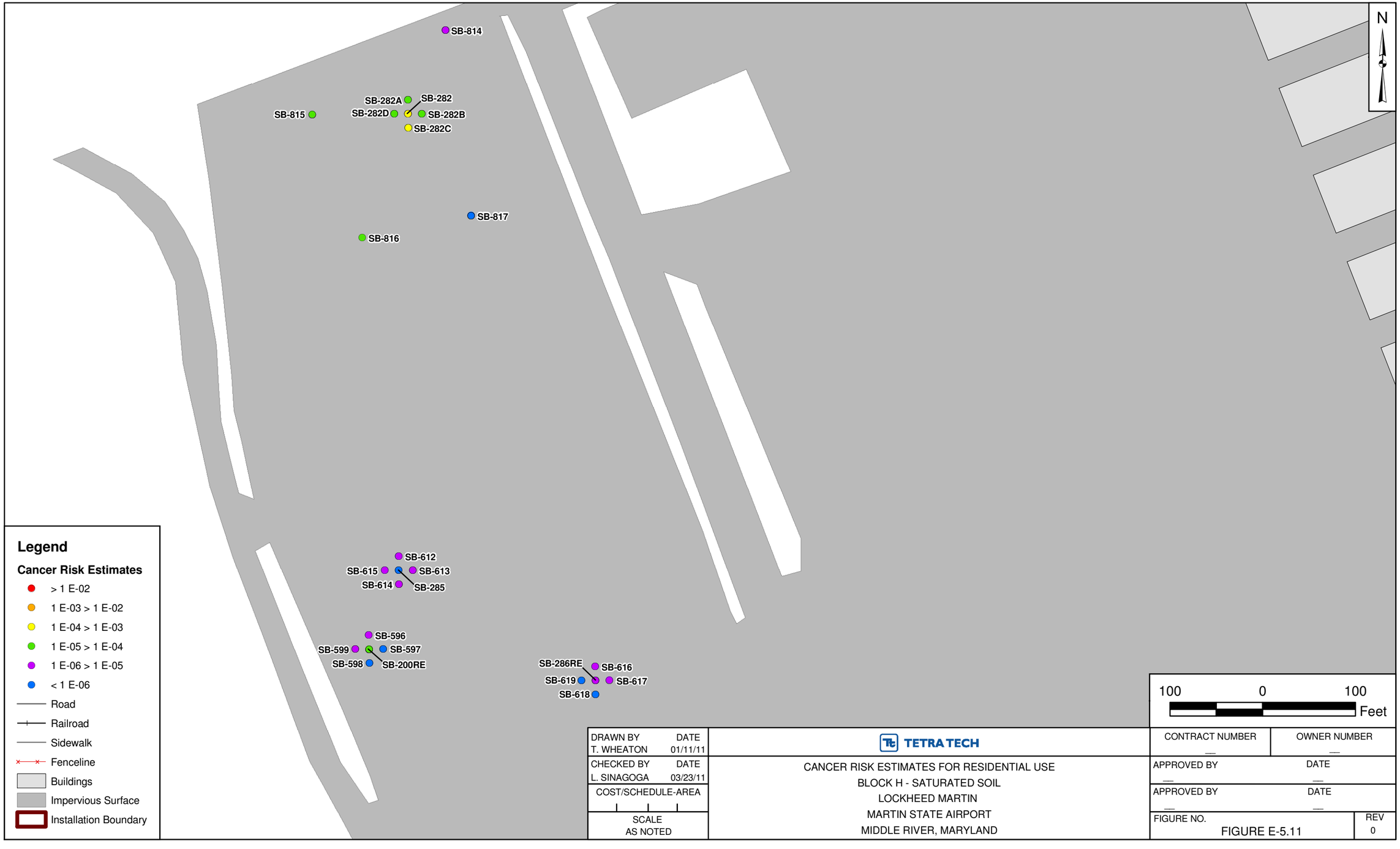


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/11/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | CANCER RISK ESTIMATES FOR RESIDENTIAL USE<br>BLOCK H - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-5.11 / REV 0 |

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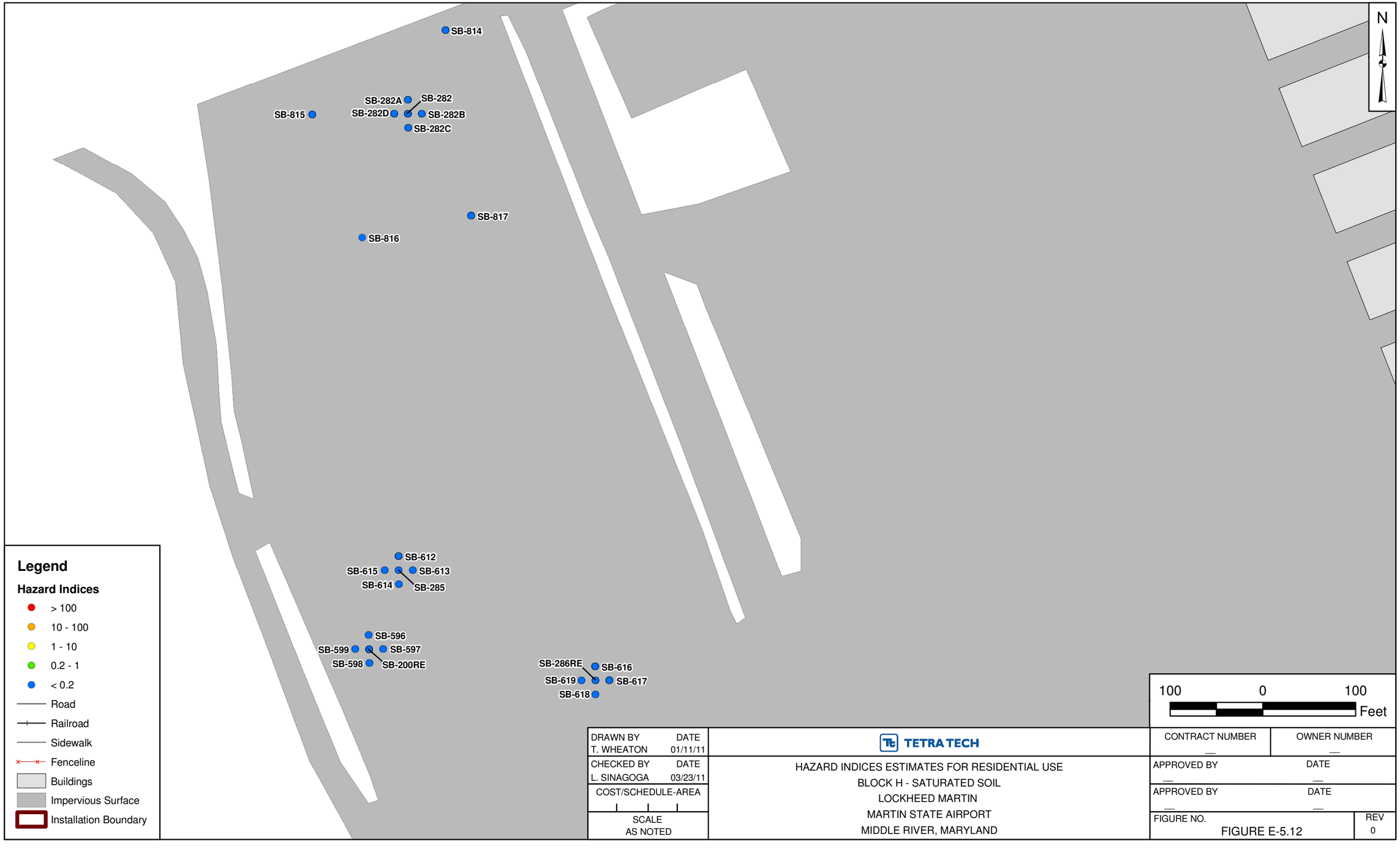


| | | | |
|---|---|---|---|
| DRAWN BY T. WHEATON | DATE 01/11/11 | TETRA TECH | CONTRACT NUMBER — / OWNER NUMBER — |
| CHECKED BY L. SINAGOGA | DATE 03/23/11 | HAZARD INDICES ESTIMATES FOR RESIDENTIAL USE<br>BLOCK H - SATURATED SOIL<br>LOCKHEED MARTIN<br>MARTIN STATE AIRPORT<br>MIDDLE RIVER, MARYLAND | APPROVED BY — / DATE — |
| COST/SCHEDULE-AREA | | | APPROVED BY — / DATE — |
| SCALE AS NOTED | | | FIGURE NO. FIGURE E-5.12 / REV 0 |

SB-059
[15-15] 2.8

SB-067
[15-15] 2.5
[20-20] 1.2 K
[25-25] 0.52 U

SB-062
[15-15] 0.71

SB-058
[15-15] 5.3 L
[20-20] 2.5 L

SB-057
[15-15] 0.66 L

SB-248
[15-15] 2 B

SB-791
[11-11] 3.9 L
[13-13] 2.8 L
[15-15] 8.2 L

SB-065
[15-15] 0.57 UL
[20-20] 0.57 U

SB-786
[11-11] 2.5
[13-13] 1.3
[15-15] 0.88 L

SB-782
[11-11] 3.9 J
[13-13] 4.6 J
[15-15] 2.6 J

SB-788
[11-11] 5.6
[13-13] 7.5
[15-15] 5.2

SB-783
[11-11] 2.1 J
[13-13] 2.4 J
[15-15] 4.3 J

SB-784
[11-11] 1.3 J
[13-13] 2.5 J
[15-15] 7.2 J

SB-789
[11-11] 2.8
[13-13] 6.8
[15-15] 4.5

SB-787
[11-11] 5 L
[13-13] 5.4 L
[15-15] 1.7 L

SB-796
[11-11] 1.3
[13-13] 0.43 J
[15-15] 7.3

SB-792
[11-11] 3.3 L
[13-13] 5 J
[15-15] 0.65 L

SB-793
[11-11] 4.6 J
[13-13] 2.7 J
[15-15] 2.1 J

SB-794
[11-11] 1.5 J
[13-13] 7 J
[15-15] 2.3 J

SB-795
[11-11] 2.3 J
[13-13] 4.2 J
[15-15] 3.2 J

SB-790
[11-11] 2.1
[13-13] 5
[15-15] 3.3

SB-785
[11-11] 3.2 L
[13-13] 3.1 L
[15-15] 3.8 L

# FIGURE D-3A

## ARSENIC IN DEEPER SOIL
## BLOCK D

### Legend

**Arsenic Concentrations (mg/kg)**

- Not Detected
- Not Analyzed
- 0.43 or Less (No Exceedance)
- > 0.43 (MDE residential soil cleanup standard 1x10 $^{-6}$ )
- > 1.9 (MDE non-residential soil cleanup standard, 1x10 $^{-6}$ )
- > 3.5 (Residential RGO, 1x10 $^{-5}$ )
- > 6 (95% UCL Background Concentration)
- > 11 (Commercial Receptor RGO, 1x10 $^{-5}$ )
- > 12 (Upper Bound Background Concentration)
- > 27 (Typical Industrial Worker RGO, 1x10 $^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
L Positive Result Considered Biased Low
B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/02/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

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SB-061
[5-5] 1.8
[10-10] 0.51 U

SB-060
[5-5] 1 K
[10-10] 2.4

SB-066
[5-5] 1.4
[10-10] 1.5

SB-059
[5-5] 3.9
[10-10] 2.5

SB-032
[5-5] 2.5 L

SB-064
[5-5] 0.79 K

SB-067
[5-5] 1.2 K
[10-10] 1.2 K

SB-063
[5-5] 1.2 K
[10-10] 0.65 U

SB-062
[5-5] 1.7
[10-10] 0.53 U

SB-058
[5-5] 2.3 L
[10-10] 4.1 L

SB-057
[5-5] 0.65 L
[10-10] 1.8 L

SB-031
[5-5] 0.59 UR

SB-247
[5-5] 4
[10-10] 0.8 U

SB-033
[5-5] 4.9 L

SB-248
[5-5] 6
[10-10] 8

SB-249
[5-5] 3 B
[10-10] 7

SB-065
[5-5] 2 L
[10-10] 0.58 UL

SB-786
[3-3] 3.9
[5-5] 7.7
[7-7] 14.3
[9-9] 3.6

SB-782
[3-3] 2.1 J
[5-5] 2.5 J
[7-7] 7.5 J
[9-9] 5 J

SB-787
[3-3] 4.6 L
[5-5] 5.3 L
[7-7] 6.6
[9-9] 6.8 L

SB-783
[3-3] 5 J
[5-5] 6.1 J
[7-7] 9.2 J
[9-9] 1.8 J

SB-788
[3-3] 1.9
[5-5] 5
[7-7] 2.8
[9-9] 4.8

SB-784
[3-3] 3 J
[5-5] 8 J
[7-7] 5.8 J
[9-9] 2.6 J

SB-785
[3-3] 4.6
[5-5] 5.8
[7-7] 3.2
[9-9] 3.6 L

SB-791
[3-3] 5.4 L
[5-5] 3.7 L
[7-7] 7.9 L
[9-9] 5 L

SB-796
[3-3] 3.4
[5-5] 9.4
[7-7] 3.1
[9-9] 4.3

SB-792
[3-3] 5.4 L
[5-5] 4.4 L
[7-7] 2.9 L
[9-9] 3.8 L

SB-793
[3-3] 5.6 L
[5-5] 3.6 L
[7-7] 4.1 L
[9-9] 3.6 J

SB-794
[3-3] 5.5 J
[5-5] 7 J
[7-7] 6.1 J
[9-9] 5.6 J

SB-795
[3-3] 5.8 J
[5-5] 3.9 J
[7-7] 5.7 J
[9-9] 4.4 J

SB-790
[3-3] 4.5
[5-5] 4.9
[7-7] 6.3
[9-9] 4.1

SB-789
[3-3] 3.1
[5-5] 5.5
[7-7] 8.8
[9-9] 4

# FIGURE D-2A

## ARSENIC IN SUBSURFACE SOIL
## BLOCK D

## Legend

**Arsenic Concentrations (mg/kg)**

- Not Detected
- Not Analyzed
- 0.43 or Less (No Exceedance)
- > 0.43 (MDE residential soil cleanup standard $1x10^{-6}$)
- > 1.9 (MDE non-residential soil cleanup standard, $1x10^{-6}$)
- > 3.5 (Residential RGO, $1x10^{-5}$)
- > 6 (95% UCL Background Concentration)
- > 11 (Commercial Receptor RGO, $1x10^{-5}$)
- > 12 (Upper Bound Background Concentration)
- > 27 (Typical Industrial Worker RGO, $1x10^{-5}$)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
L Positive Result Considered Biased Low
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/02/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

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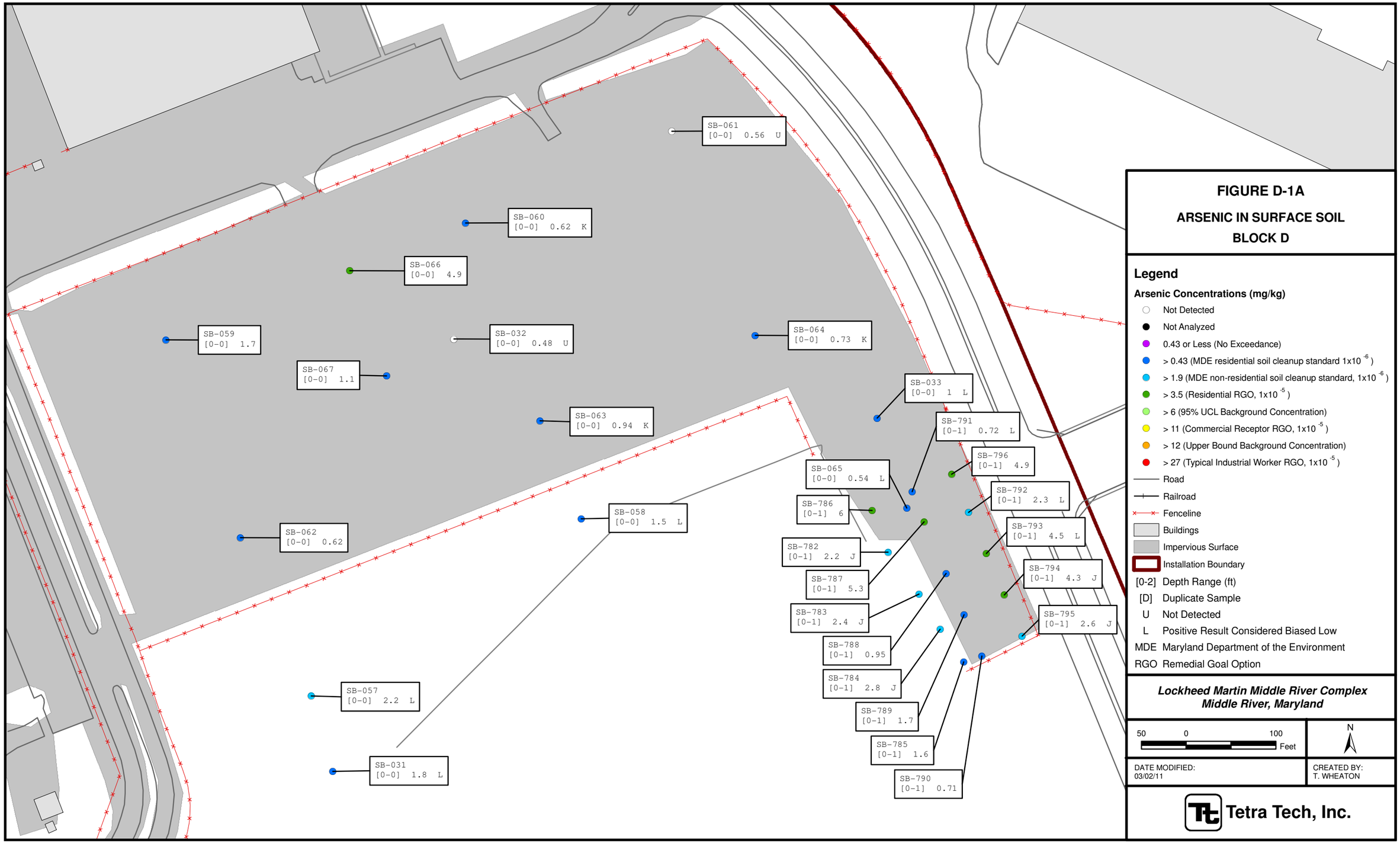


# FIGURE D-1A

## ARSENIC IN SURFACE SOIL
## BLOCK D

### Legend

**Arsenic Concentrations (mg/kg)**

- Not Detected
- Not Analyzed
- 0.43 or Less (No Exceedance)
- > 0.43 (MDE residential soil cleanup standard 1x10 $^{-6}$ )
- > 1.9 (MDE non-residential soil cleanup standard, 1x10 $^{-6}$ )
- > 3.5 (Residential RGO, 1x10 $^{-5}$ )
- > 6 (95% UCL Background Concentration)
- > 11 (Commercial Receptor RGO, 1x10 $^{-5}$ )
- > 12 (Upper Bound Background Concentration)
- > 27 (Typical Industrial Worker RGO, 1x10 $^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary
- [0-2] Depth Range (ft)
- [D] Duplicate Sample
- U Not Detected
- L Positive Result Considered Biased Low
- MDE Maryland Department of the Environment
- RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
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T. WHEATON

Tetra Tech, Inc.

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SB-003
[5-5] 1.5 L
[10-10] 1.6 L

SB-003A

SB-512
[4-6] 0.59 J
[8-10] 0.76 J
[8-10] 1.4 L [D]

SB-510
[4-6] 0.26 J
[8-10] 0.36 J
[8-10] 0.26 J [D]

SB-002
[5-5] 2.1 L
[10-10] 0.87 L

SB-002A

SB-514
[4-6] 0.39 J
[8-10] 1.3 J
[8-10] 0.42 L [D]

SB-511
[4-6] 0.58 J
[8-10] 0.35 J

SB-509
[4-6] 1.7 J
[8-10] 2.5 J

SB-001
[5-5] 5.5 L
[10-10] 1.8 L

SB-001A

SB-508
[4-6] 1.4
[4-6] 1 L [D]
[8-10] 0.42 L

SB-006A

SB-006
[5-5] 0.77 L
[10-10] 2 L

SB-513
[4-6] 2.3 J
[8-10] 0.46 J

SB-500
[4-6] 0.31 L
[8-10] 0.73 L

SB-518
[4-6] 2.2 L
[8-10] 0.43 L

SB-005
[5-5] 1.4 L
[10-10] 1.1 L

SB-005A

SB-036
[5-5] 1.3

SB-507
[4-6] 2.3
[8-10] 1.1 L

SB-515
[4-6] 0.62 L
[8-10] 0.22 L

SB-035
[4-4] 1.6

SB-501
[4-6] 1.1 L
[8-10] 0.94 L

SB-004A

SB-004
[5-5] 4.9 L
[10-10] 2.4 L

SB-519
[4-6] 0.61 L
[8-10] 1.2 L

SB-502
[4-6] 1.3 L
[8-10] 0.55 L

SB-503
[4-6] 0.42 L
[10-12] 1.7

SB-833
[9-9] 0.61 J

SB-516

SB-505
[4-6] 1.2 L
[8-10] 1.7

SB-506
[4-6] 1.6
[8-10] 1 L

SB-517
[4-6] 0.55 L
[8-10] 0.75 L

SB-520
[4-6] 1.2 L
[8-10] 1.3 L

SB-504
[4-6] 2
[8-10] 1.2 L

# FIGURE E-2A

## ARSENIC IN SUBSURFACE SOIL
## BLOCK E

### Legend

**Arsenic Concentrations (mg/kg)**

- Not Detected
- Not Analyzed
- 0.43 or Less (No Exceedance)
- > 0.43 (MDE residential soil cleanup standard 1x10 $^{-6}$ )
- > 1.9 (MDE non-residential soil cleanup standard, 1x10 $^{-6}$ )
- > 3.5 (Residential RGO, 1x10 $^{-5}$ )
- > 6 (95% UCL Background Concentration)
- > 11 (Commercial Receptor RGO, 1x10 $^{-5}$ )
- > 12 (Upper Bound Background Concentration)
- > 27 (Typical Industrial Worker RGO, 1x10 $^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary
- [0-2] Depth Range (ft)
- [D] Duplicate Sample
- U Not Detected
- L Positive Result Considered Biased Low
- MDE Maryland Department of the Environment
- RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

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Tetra Tech, Inc.

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SB-003
SB-003A
[0-0] 1.5
SB-512
[0-1] 1.5 J
SB-510
[0-1] 9.6 J
SB-002
SB-002A
[1-1] 0.98
SB-511
[0-1] 0.52 J
SB-514
[0-1] 1.5 J
SB-001
SB-001A
[0-0] 1.1
SB-513
[0-1] 1.7 J
SB-006A
[0-0] 1.7
SB-006
SB-509
[0-1] 1.5 J
SB-508
[0-1] 2.5
SB-518
[0-1] 2.2 L
SB-005A
[0-0] 1.1
SB-005
SB-500
[0-1] 1.3 L
SB-507
[0-1] 2.1
SB-036
[0-0] 1.2
SB-515
[0-1] 0.99 J
SB-035
[0-0] 0.92
SB-501
[0-1] 3.4 L
SB-004A
[0-0] 1.5
SB-004
SB-502
[0-1] 1.8 L
SB-519
[0-1] 1.6 L
SB-503
[0-1] 2.6 L
[0-1] 2.3 [D]
SB-833
SB-516
[0-1] 0.94 L
SB-505
[0-1] 3.5
SB-506
[0-1] 1.8
[0-1] 1.7 [D]
SB-504
[0-1] 0.53 L
SB-517
[0-1] 1.1 L
SB-520
[0-1] 0.82 L

# FIGURE E-1A

## ARSENIC IN SURFACE SOIL
## BLOCK E

### Legend

**Arsenic Concentrations (mg/kg)**

- Not Detected
- Not Analyzed
- 0.43 or Less (No Exceedance)
- > 0.43 (MDE residential soil cleanup standard 1x10 $^{-6}$ )
- > 1.9 (MDE non-residential soil cleanup standard, 1x10 $^{-6}$ )
- > 3.5 (Residential RGO, 1x10 $^{-5}$ )
- > 6 (95% UCL Background Concentration)
- > 11 (Commercial Receptor RGO, 1x10 $^{-5}$ )
- > 12 (Upper Bound Background Concentration)
- > 27 (Typical Industrial Worker RGO, 1x10 $^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
L Positive Result Considered Biased Low
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/02/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

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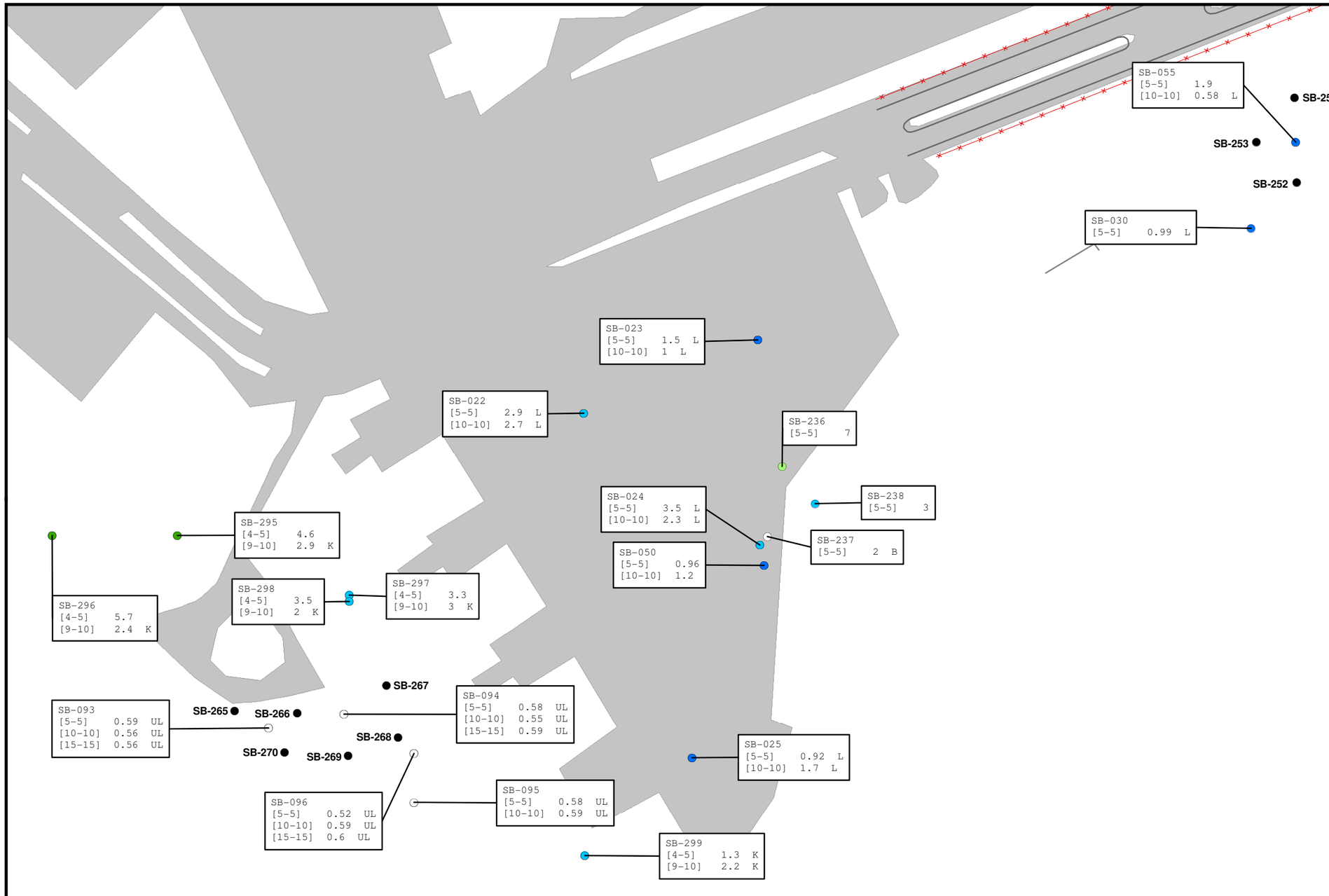


# FIGURE F-2A

## ARSENIC IN SUBSURFACE SOIL
## BLOCK F

### Legend

**Arsenic Concentrations (mg/kg)**

- Not Detected
- Not Analyzed
- 0.43 or Less (No Exceedance)
- > 0.43 (MDE residential soil cleanup standard 1x10 $^{-6}$ )
- > 1.9 (MDE non-residential soil cleanup standard, 1x10 $^{-6}$ )
- > 3.5 (Residential RGO, 1x10 $^{-5}$ )
- > 6 (95% UCL Background Concentration)
- > 11 (Commercial Receptor RGO, 1x10 $^{-5}$ )
- > 12 (Upper Bound Background Concentration)
- > 27 (Typical Industrial Worker RGO, 1x10 $^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
L Positive Result Considered Biased Low
K Positive Result Considered Biased High
B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/02/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKF_SUBSURFACE_ARSENIC.MXD 03/02/11 TW

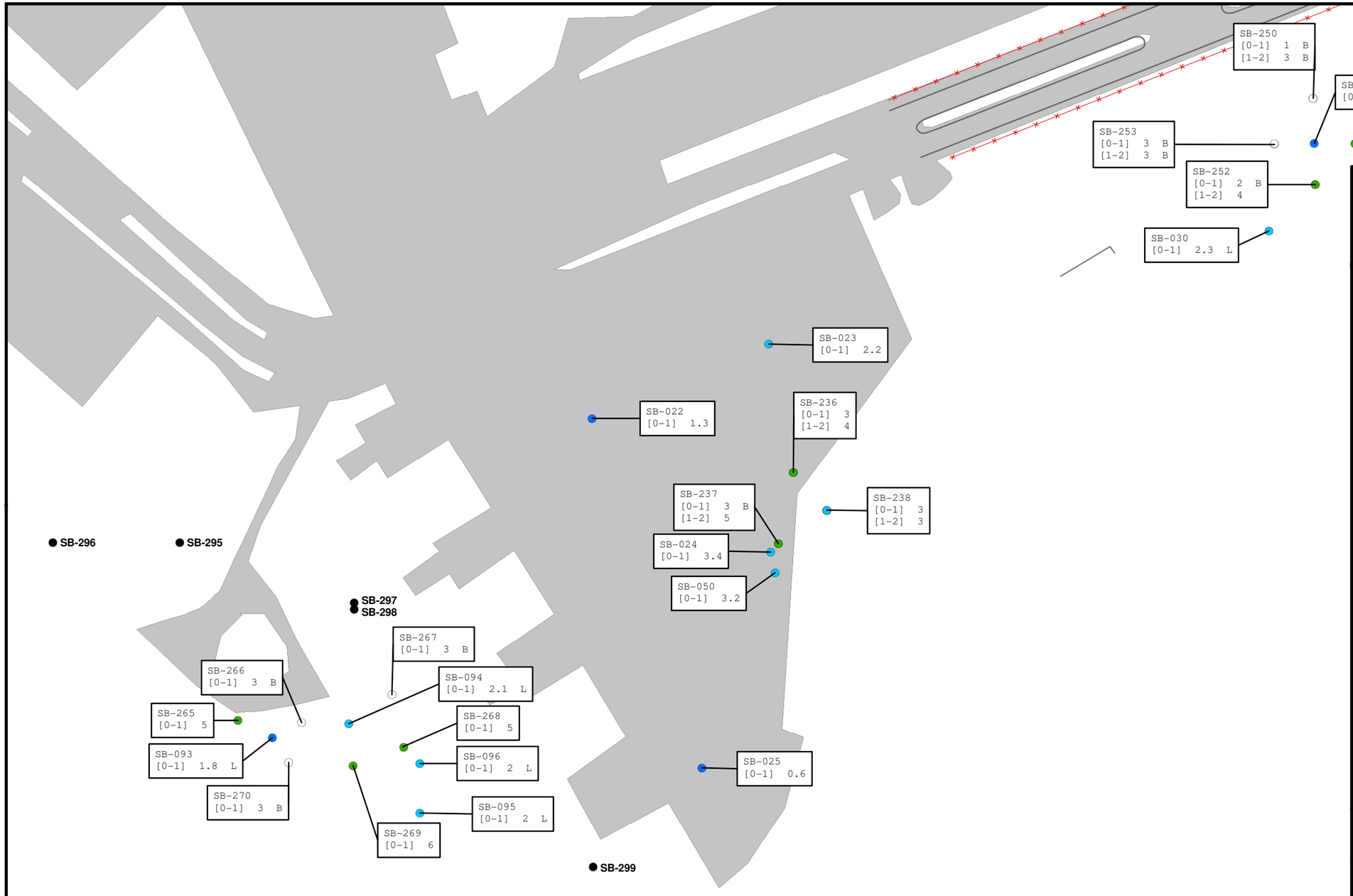


# FIGURE F-1A

## ARSENIC IN SURFACE SOIL

## BLOCK F

### Legend

**Arsenic Concentrations (mg/kg)**

- Not Detected
- Not Analyzed
- 0.43 or Less (No Exceedance)
- > 0.43 (MDE residential soil cleanup standard 1x10 $^{-6}$ )
- > 1.9 (MDE non-residential soil cleanup standard, 1x10 $^{-6}$ )
- > 3.5 (Residential RGO, 1x10 $^{-5}$ )
- > 6 (95% UCL Background Concentration)
- > 11 (Commercial Receptor RGO, 1x10 $^{-5}$ )
- > 12 (Upper Bound Background Concentration)
- > 27 (Typical Industrial Worker RGO, 1x10 $^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
L Positive Result Considered Biased Low
B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/02/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKF_SURFACE_ARSENIC.MXD 03/02/11 TW

SB-199
[5-5] 3 B
[10-10] 2 B

SB-198
[5-5] 5 B
[10-10] 6

SB-197
[5-5] 5
[10-10] 5

SB-196
[5-5] 2 B
[10-10] 1 B

SB-195
[5-5] 4
[10-10] 5

SB-194
[5-5] 5
[10-10] 1 B

SB-496

SB-092
[3-3] 2.1
[4-4] 4.1
[4-4] 1.4
[5-5] 3.2
[6-6] 6.9
[7-7] 8.5
[7-7] 5.3 [D]
[8-8] 1.6
[9-9] 8.3
[10-10] 3.2
[11-11] 3.4
[12-12] 2.1
[13-13] 3.7
[14-14] 4.1
[15-15] 5.6

OW-4
[26-26] 0.32 L
[30-30] 0.19 L

OW-5
[4-4] 2.1 L
[6-6] 1.8 L

SB-495

SB-494
SB-461
SB-458
SB-457
SB-459
SB-460

SB-091
[5-5] 2.4

SB-081
[5-5] 2.5

OW-6
[20-20] 1.1 L
[30-30] 0.24 L

SB-082
[5-5] 1.2

SB-083
[5-5] 1.9

SB-085
[5-5] 2.2
[10-10] 0.53 U
[12-12] 0.98

SB-084
[5-5] 3.4

SB-086
[5-5] 0.7
[10-10] 0.61
[12-12] 0.51 U

# FIGURE G-2A

## ARSENIC IN SUBSURFACE SOIL
## BLOCK G

### Legend

**Arsenic Concentrations (mg/kg)**

- Not Detected
- Not Analyzed
- 0.43 or Less (No Exceedance)
- > 0.43 (MDE residential soil cleanup standard $1x10^{-6}$)
- > 1.9 (MDE non-residential soil cleanup standard, $1x10^{-6}$)
- > 3.5 (Residential RGO, $1x10^{-5}$)
- > 6 (95% UCL Background Concentration)
- > 11 (Commercial Receptor RGO, $1x10^{-5}$)
- > 12 (Upper Bound Background Concentration)
- > 27 (Typical Industrial Worker RGO, $1x10^{-5}$)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
L Positive Result Considered Biased Low
B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
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SB-198
[0-1] 2 B

SB-199
[0-1] 3 B

SB-197
[0-1] 5

SB-196
[0-1] 1 B

SB-195
[0-1] 2 B

SB-194
[0-1] 2 B

SB-461
[0-0] 0.8 L
[1-2] 2.5 L

SB-458
[0-0] 2.3
[1-2] 2.4

SB-496
[0-0] 1.2 L
[1-2] 1.1 L

SB-092
[0-0] 37
[1-1] 5.4
[2-2] 3.3

SB-494
[0-0] 1.3 L
[1-2] 1.6 L

SB-495
[0-0] 0.92 L
[1-2] 0.92 L

OW-4
OW-6
OW-5

SB-459
[0-0] 0.91 L
[1-2] 1.8 L

SB-457
[0-0] 1.4
[1-2] 1.6

SB-091
[0-0] 2.1

SB-081
[0-0] 3.6

SB-460
[0-0] 0.99 L
[1-2] 1.9 L

SB-082
[0-0] 2

SB-083
[0-0] 0.93

SB-084
[0-0] 2.7

SB-085
[0-0] 3

SB-086
[0-0] 3.2

# FIGURE G-1A

## ARSENIC IN SURFACE SOIL
## BLOCK G

### Legend

**Arsenic Concentrations (mg/kg)**

- Not Detected
- Not Analyzed
- 0.43 or Less (No Exceedance)
- > 0.43 (MDE residential soil cleanup standard 1x10 $^{-6}$ )
- > 1.9 (MDE non-residential soil cleanup standard, 1x10 $^{-6}$ )
- > 3.5 (Residential RGO, 1x10 $^{-5}$ )
- > 6 (95% UCL Background Concentration)
- > 11 (Commercial Receptor RGO, 1x10 $^{-5}$ )
- > 12 (Upper Bound Background Concentration)
- > 27 (Typical Industrial Worker RGO, 1x10 $^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
L Positive Result Considered Biased Low
B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
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Tetra Tech, Inc.

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SB-294
[4-5] 2.4
[9-10] 3.4

SB-293
[4-5] 2.7
[9-10] 1.7

SB-282
[4-5] 3.5
[9-10] 5.2

SB-203
[5-5] 3
[10-10] 4

SB-202
[5-5] 4
[10-10] 2

SB-284
[4-5] 5.3 B
[9-10] 1.9 B

SB-283
[4-5] 1.6 B
[9-10] 7.4

SB-285
[4-5] 4.9 B
[9-10] 5.2 B

SB-201
[5-5] 3
[10-10] 1

SB-200
[5-5] 5
[10-10] 4

SB-286
[4-5] 0.54 B
[9-10] 0.77 B

# FIGURE H-2A

## ARSENIC IN SUBSURFACE SOIL
## BLOCK H

### Legend

**Arsenic Concentrations (mg/kg)**

- Not Detected
- Not Analyzed
- 0.43 or Less (No Exceedance)
- > 0.43 (MDE residential soil cleanup standard 1x10 $^{-6}$ )
- > 1.9 (MDE non-residential soil cleanup standard, 1x10 $^{-6}$ )
- > 3.5 (Residential RGO, 1x10 $^{-5}$ )
- > 6 (95% UCL Background Concentration)
- > 11 (Commercial Receptor RGO, 1x10 $^{-5}$ )
- > 12 (Upper Bound Background Concentration)
- > 27 (Typical Industrial Worker RGO, 1x10 $^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary
- [0-2] Depth Range (ft)
- [D] Duplicate Sample
- U Not Detected
- L Positive Result Considered Biased Low
- B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
- MDE Maryland Department of the Environment
- RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

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Tetra Tech, Inc.

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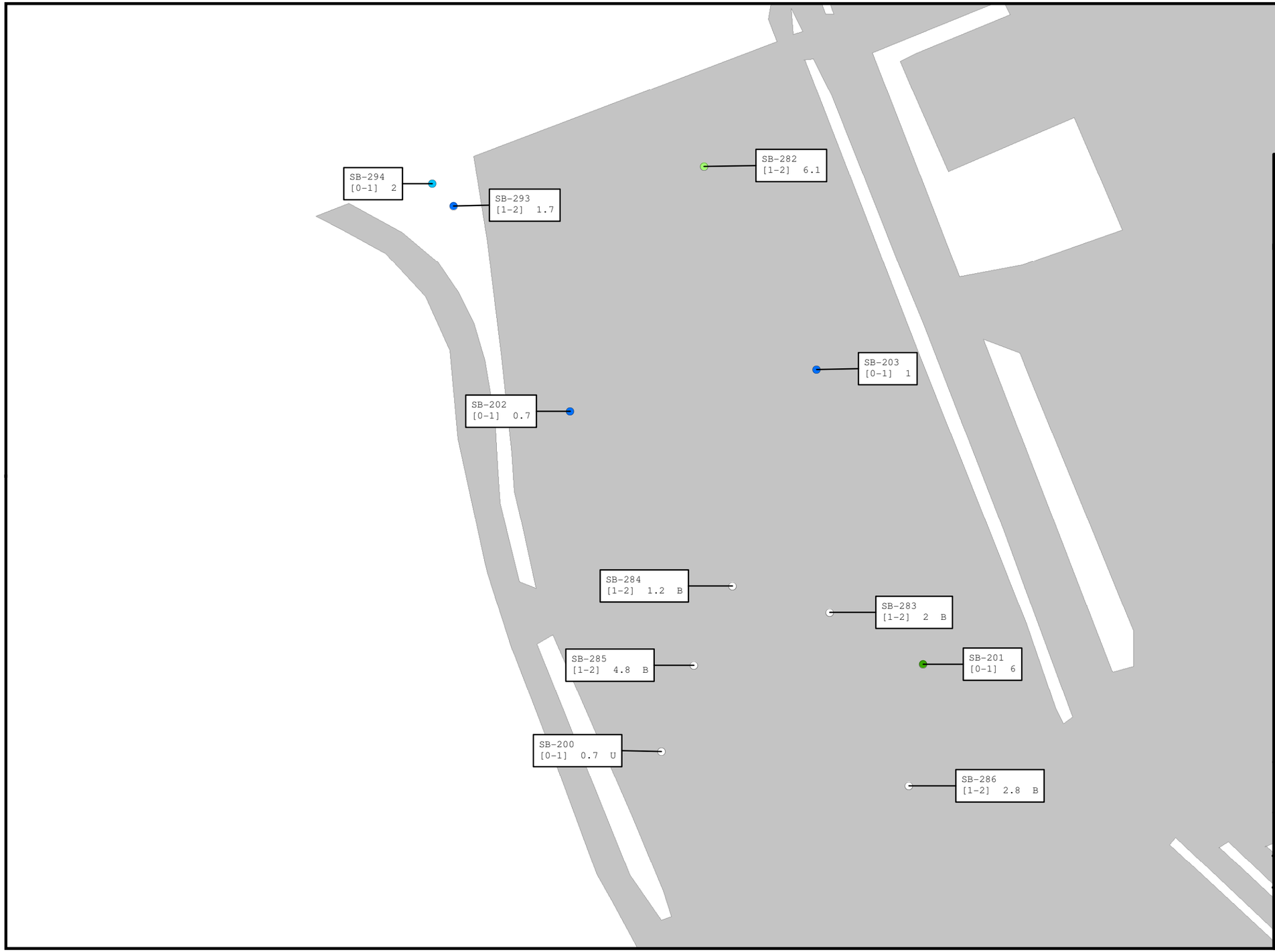


# FIGURE H-1A

## ARSENIC IN SURFACE SOIL
## BLOCK H

### Legend

**Arsenic Concentrations (mg/kg)**

- Not Detected
- Not Analyzed
- 0.43 or Less (No Exceedance)
- > 0.43 (MDE residential soil cleanup standard 1x10 $^{-6}$ )
- > 1.9 (MDE non-residential soil cleanup standard, 1x10 $^{-6}$ )
- > 3.5 (Residential RGO, 1x10 $^{-5}$ )
- > 6 (95% UCL Background Concentration)
- > 11 (Commercial Receptor RGO, 1x10 $^{-5}$ )
- > 12 (Upper Bound Background Concentration)
- > 27 (Typical Industrial Worker RGO, 1x10 $^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
L Positive Result Considered Biased Low
B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

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SB-778
[11-11] 4 U
[13-13] 6217
[15-15] 13.2

SB-061
[11-11] 19.8 [RE]
[12-12] 1.5 U [RE]
[13-13] 181 [RE]
[14-14] 577 [RE]
[15-15] 1.5 U [RE]

SB-061A
[11-11] 168
[13-13] 1.5 U
[15-15] 1.5 U

SB-242

SB-061B
[11-11] 154
[13-13] 1078
[15-15] 15.1

SB-061D
[11-11] 1.5 U
[13-13] 429
[15-15] 45.7

SB-061C
[11-11] 1.5 U
[13-13] 8.2
[15-15] 1.5 U

SB-779
[11-11] 4.2 U
[13-13] 43.1
[15-15] 3.9 U

SB-060
[11-11] 1.5 U [RE]
[12-12] 1.5 U [RE]
[13-13] 25.6 [RE]
[14-14] 1.5 U [RE]
[15-15] 1.5 U [RE]

SB-060A
SB-060D
SB-060B
SB-060C

SB-772
[11-11] 27.6
[13-13] 77.7
[15-15] 1341

SB-066
[11-11] 43 [RE]
[12-12] 44.7 [RE]
[15-15] 41.8 [RE]

SB-066A
SB-066D
SB-066B
SB-066C

SB-335
SB-334
SB-331
SB-330
SB-328
SB-329
SB-327
SB-332
SB-333

SB-776
[11-11] 88.1
[13-13] 96.8
[15-15] 3.9 U

SB-780
[11-11] 3.8 U
[13-13] 198
[15-15] 24

SB-766
[11-11] 710
[13-13] 121
[15-15] 4.4 U

SB-240A
[11-11] 1.5 U
[13-13] 1.6 U
[15-15] 19.9

SB-775
[11-11] 113
[13-13] 173
[15-15] 4.2 U

SB-241
SB-323
SB-324
SB-322
SB-321
SB-319
SB-320
SB-318
SB-325
SB-326

SB-767
[11-11] 4.1 U
[13-13] 251
[15-15] 4 U

SB-032

SB-240D
[11-11] 284
[11-11] 33 [D]
[13-13] 622
[15-15] 1.6 U

SB-240B
[11-11] 1.7 U
[13-13] 2 U

SB-243A
SB-243D
SB-243B
SB-243C

SB-064

SB-781
[11-11] 3.7 U
[13-13] 129
[15-15] 3.9 U

SB-059
[15-15] 876

SB-240C
[11-11] 1.6 U
[13-13] 57.1
[15-15] 1.9 U

SB-243
[11-11] 1.6 U [RE]
[12-12] 1.6 U [RE]
[13-13] 90.9 [RE]
[14-14] 1.6 U [RE]
[15-15] 1.6 U [RE]

SB-240
[11-11] 198 [RE]
[12-12] 41.6 [RE]
[13-13] 337 [RE]
[14-14] 24.4 [RE]
[15-15] 20.9 [RE]

SB-067
[15-15] 410 U
[20-20] 431
[25-25] 410 U

SB-063
[11-11] 1.6 U [RE]
[12-12] 1.5 U [RE]
[13-13] 124 [RE]
[14-14] 1.6 U [RE]
[15-15] 1.5 U [RE]

SB-063A
SB-063D
SB-063B
SB-063C

SB-342
SB-341
SB-033
SB-337
SB-336
SB-344
SB-343
SB-340
SB-339
SB-338

SB-791
[11-11] 3.8 U
[13-13] 3.9 U
[15-15] 4.1 U

SB-770
[13-13] 1871
[15-15] 298

SB-768
[11-11] 3.9 U
[13-13] 360
[15-15] 4 U

SB-239
[11-11] 185
[12-12] 121

SB-773
[11-11] 4.1 U
[13-13] 4.1 U
[15-15] 40.9

D-TP-2

SB-777
[11-11] 19.7
[13-13] 269
[15-15] 3.9 U

SB-065
[11-11] 1.5 U [RE]
[12-12] 1.5 U [RE]
[13-13] 1.6 U [RE]
[14-14] 1.5 U [RE]
[15-15] 1.6 U [RE]
[20-20] 390 U

SB-787
[11-11] 3.8 U
[13-13] 3.9 U
[15-15] 3.7 U

SB-796
[11-11] 3.8 U
[13-13] 4 U
[15-15] 3.8 U

SB-058A
[12-12] 51.1
[14-14] 1.5 U

SB-058B
[12-12] 2.1 U
[14-14] 498

SB-062A
[11-11] 147
[11-11] 100 [D]
[13-13] 89.7
[15-15] 9.8

SB-592A
SB-592
SB-592D
SB-592B
SB-595
SB-593
SB-594

SB-058D
[12-12] 48.9
[14-14] 49.4

SB-058C
[12-12] 43.3
[14-14] 263

SB-058
[11-11] 4.4 [RE]
[12-12] 1433 [RE]
[13-13] 37 [RE]
[14-14] 1.6 U [RE]
[15-15] 1.6 U [RE]
[20-20] 440 U

SB-786
[11-11] 3.8 U
[13-13] 4 U
[15-15] 3.7 U

SB-792
[11-11] 3.8 U
[13-13] 4.1 U
[15-15] 3.8 U

SB-062D
[11-11] 1.5 U
[13-13] 1.5 U
[15-15] 1.5 U

SB-062B
[11-11] 1.5 U
[13-13] 1.5 U
[15-15] 1.5 U

SB-782
[11-11] 3.8 U
[13-13] 1.3
[15-15] 3.8 U

SB-794
[11-11] 3.9 U
[13-13] 4 U
[15-15] 3.9 U

SB-793
[11-11] 3.9 U
[13-13] 3.9 U
[15-15] 4 U

SB-769
[11-11] 4 U
[13-13] 44.1
[15-15] 4 U

D-TP-1

SB-062C
[11-11] 1.5 U
[13-13] 100
[15-15] 1.5 U

SB-062
[11-11] 1.5 U [RE]
[12-12] 1.7 U [RE]
[13-13] 2212 [RE]
[14-14] 72.7 [RE]
[15-15] 479 [RE]

SB-774
[11-11] 96.5
[13-13] 888
[15-15] 499
[15-15] 399 [D]

SB-783
[11-11] 3.9 U
[13-13] 4 U
[15-15] 4 U

SB-788
[11-11] 4 U
[13-13] 4.1 U
[15-15] 3.8 U

SB-784
[11-11] 3.9 U
[13-13] 3.8 U
[15-15] 4.1 U

SB-789
[11-11] 3.9 U
[13-13] 4 U
[15-15] 3.8 U

SB-785
[11-11] 3.9 U
[13-13] 15.8
[15-15] 3.9 U

SB-790
[11-11] 4.1 U
[13-13] 4 U
[15-15] 3.8 U

SB-795
[11-11] 3.9 U
[13-13] 4 U
[15-15] 4 U

SB-771
[11-11] 4 U
[13-13] 4.1 U
[15-15] 4 U

SB-057
[11-11] 1.6 U [RE]
[12-12] 1.6 U [RE]
[13-13] 1.6 U [RE]
[14-14] 1.6 U [RE]
[15-15] 1.6 U [RE]

SB-031

Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

# FIGURE D-3

## BAP EQUIVALENTS IN DEEPER SOIL BLOCK D

**Legend**

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$)
- > 140 (Residential RGO, $1x10^{-5}$)
- > 370 (Commercial Receptor RGO, $1x10^{-5}$)
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$)
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$)

Road
Railroad
Fenceline
Buildings
Impervious Surface
Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

30 0 60 Feet

N

DATE MODIFIED: 03/01/11

CREATED BY: T. WHEATON

Tetra Tech, Inc.

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SB-778
[3-3] 3.8 U
[5-5] 133
[7-7] 25
[9-9] 29.6

SB-061
[3-3] 1.3 [RE]
[4-4] 1.6 [RE]
[5-5] 101 [RE]
[6-6] 1.6 U [RE]
[7-7] 1.5 U [RE]
[8-8] 1.6 U [RE]
[9-9] 1.5 U [RE]
[10-10] 346 [RE]

SB-061A
[3-3] 1.5 U
[3-3] 1.6 U [D]
[5-5] 1.5 U
[7-7] 1.5 U
[9-9] 47.3

SB-242

SB-060A
[3-3] 361
[3-3] 1343 [D]
[5-5] 18.9
[7-7] 1.5 U

SB-061D
[3-3] 1.6 U
[5-5] 9.5
[7-7] 1.5 U
[9-9] 30.4

SB-061B
[3-3] 1.5 U
[5-5] 1.5 U
[7-7] 1.5 U
[9-9] 256

SB-060C
[3-3] 1.6 U
[5-5] 12.8
[7-7] 1.5 U

SB-060
[3-3] 1.8 [RE]
[4-4] 26.5 [RE]
[5-5] 2034 [RE]
[6-6] 1.6 U [RE]
[7-7] 1.7 U [RE]
[8-8] 1.7 U [RE]
[8-8] 1.6 U [D][RE]
[9-9] 1.5 U [RE]
[10-10] 1.5 U [RE]

SB-060B
[3-3] 1.5 U
[5-5] 44
[7-7] 31.9

SB-335
[2-3] 20
[5-6] 13
[8-9] 400 U

SB-061C
[3-3] 1.5 U
[5-5] 13.2
[7-7] 1.5 U
[9-9] 656

SB-779
[3-3] 4 U
[5-5] 72.1
[7-7] 3.8 U
[9-9] 4 U

SB-066
[3-3] 1.5 U [RE]
[4-4] 1.5 U [RE]
[5-5] 46.1 [RE]
[6-6] 44.6 [RE]
[7-7] 1.6 U [RE]
[8-8] 1.5 U [RE]
[8-8] 1.6 U [D][RE]
[10-10] 400 U

SB-060D
[3-3] 203
[5-5] 42.3
[7-7] 1.6 U
[7-7] 1.5 U [D]

SB-334
[2-3] 88
[5-6] 64
[8-9] 30

SB-329
[2-3] 27
[5-6] 410 U
[8-9] 390 U

SB-776
[3-3] 58.8
[5-5] 21.7
[7-7] 3.9 U
[9-9] 70.1
[9-9] 4 U [D]

SB-766
[3-3] 3.6 U
[5-5] 95.6
[7-7] 3.7 U
[9-9] 472

SB-323
[2-3] 1.5 U
[5-6] 1.5 U
[8-9] 1.6 U

SB-320
[2-3] 1.5 U
[5-6] 1.5 U
[8-9] 1.5 U

SB-066A
[4-4] 1.5 U

SB-331
[2-3] 20
[5-6] 390 U
[8-9] 400 U

SB-328
[2-3] 170
[5-6] 400 U
[8-9] 35

SB-780
[3-3] 3.7 U
[5-5] 13.3
[7-7] 3.9 U
[9-9] 121

SB-066D
[3-3] 62.2
[4-4] 1.5 U
[4-4] 15.2 [D]

SB-066B
[4-4] 1.7

SB-066C
[4-4] 1.5 U

SB-324
[2-3] 1.5 U
[5-6] 1.5 U
[8-9] 1.5 U

SB-321
[2-3] 940
[5-6] 1.5 U
[8-9] 1.5 U

SB-330
[2-3] 110
[5-6] 110
[8-9] 380 U

SB-332
[2-3] 38
[5-6] 410 U
[8-9] 64

SB-327
[2-3] 130
[5-6] 380 U
[8-9] 390 U

SB-243
[3-3] 60.9 [RE]
[4-4] 20.7 [RE]
[5-5] 19.6 [RE]
[6-6] 31.4 [RE]
[7-7] 14.4 [RE]
[8-8] 1.6 U [RE]
[8-8] 2.3 [D] [RE]
[9-9] 1.7 U [RE]
[10-10] 1.6 U [RE]

SB-064
[5-5] 410 U

SB-319
[2-3] 15
[5-6] 1.5 U
[8-9] 1.5 U

SB-241

SB-322
[2-3] 13
[5-6] 1.5 U
[8-9] 1.5 U

SB-333
[2-3] 410 U
[5-6] 380 U
[8-9] 380 U

SB-240
[3-3] 203 [RE]
[4-4] 135 [RE]
[6-6] 187 [RE]
[7-7] 5503 [RE]
[8-8] 0.99 [RE]
[8-8] 27.6 [D] [RE]
[10-10] 112 [RE]

SB-240A
[3-3] 46
[5-5] 326
[7-7] 2.9
[7-7] 14.5 [D]
[9-9] 1.8

SB-032
[5-5] 216

SB-243A
[4-4] 85.9

SB-341
[2-3] 23
[5-6] 25
[8-9] 38

SB-340
[2-3] 110
[5-6] 30
[8-9] 1.7 U

SB-318
[2-3] 1.5 U
[5-6] 1.5 U
[8-9] 1.5 U

SB-326
[2-3] 25
[5-6] 1.5 U
[8-9] 110

SB-240D
[3-3] 48.8
[5-5] 5759
[7-7] 13.2
[9-9] 809

SB-240B
[3-3] 37.1
[5-5] 0.79
[7-7] 1.6 U
[9-9] 1.5 U

SB-775
[3-3] 3.9 U
[5-5] 274
[7-7] 25.6
[9-9] 3.9 U

SB-243D
[4-4] 24.8
[4-4] 16.8 [D]

SB-243B
[4-4] 0.86

SB-781
[3-3] 4 U
[5-5] 808
[7-7] 4 U
[9-9] 3.8 U

SB-342
[2-3] 78
[5-6] 17
[8-9] 2.1 U

SB-343
[2-3] 11
[5-6] 1.7 U
[8-9] 1.6 U

SB-059
[5-5] 799
[10-10] 773

SB-325
[2-3] 72
[5-6] 1.5 U
[8-9] 1.5 U

SB-770
[3-3] 667
[5-5] 4 U
[7-7] 148
[9-9] 4 U

SB-772
[3-3] 3.9 U
[5-5] 4 U
[7-7] 20.1
[9-9] 92.8

SB-240C
[3-3] 108
[3-3] 25.9 [D]
[5-5] 4899
[7-7] 1.5 U
[9-9] 16.3

SB-067
[5-5] 490 U
[10-10] 410 U

SB-063A
[4-4] 10.5
[6-6] 1.5 U

SB-063
[3-3] 379 [RE]
[4-4] 157 [RE]
[5-5] 149
[5-5] 8.4 [RE]
[6-6] 1.7 U [RE]
[7-7] 39.7 [RE]
[8-8] 20 [RE]
[9-9] 1.7 U [RE]
[10-10] 1.7 U [RE]

SB-243C
[4-4] 1.7 U

SB-033
[5-5] 696

SB-344
[2-3] 1.6 U
[5-6] 1.6 U
[8-9] 1.8 U

SB-337
[2-3] 13
[5-6] 700
[8-9] 4200 U

SB-339
[2-3] 14
[5-6] 1.6 U
[8-9] 1.5 U

SB-767
[3-3] 3.8 U
[5-5] 3.9 U
[7-7] 4.4 U
[9-9] 3.9 U

SB-592D
[4-4] 51.6
[6-6] 510
[8-8] 208

SB-592A
[4-4] 14.6
[6-6] 623
[8-8] 239

SB-063D
[4-4] 1.6 U
[6-6] 1.5 U

SB-063C
[4-4] 45.5
[6-6] 1.5 U

SB-063B
[4-4] 1.6 U
[6-6] 1.6 U

SB-777
[3-3] 1013
[5-5] 171
[7-7] 4873
[9-9] 197

SB-336
[2-3] 380 U
[5-6] 420 U
[8-9] 24

SB-796
[3-3] 72.8
[5-5] 4.5 U
[7-7] 3.9 U
[9-9] 3.8 U

SB-768
[3-3] 3.8 U
[5-5] 84.6
[7-7] 4 U
[9-9] 3.9 U

SB-592
[3-3] 851
[4-4] 931
[5-5] 693
[6-6] 113
[9-9] 4.4
[10-10] 5.8
[10-10] 27.8 [D]

SB-773
[3-3] 36
[5-5] 3.9 U
[5-5] 4.1 U [D]
[9-9] 0.99

SB-058A
[4-4] 15
[6-6] 121
[8-8] 29
[10-10] 26.4

D-TP-2
[6-7]3 680
[6-7]5 4.1 U
[8-10]1 503
[8-10]4 3.8 U

SB-791
[3-3] 58.2
[5-5] 4.2 U
[7-7] 3.9 U
[9-9] 3.8 U

SB-338
[2-3] 40
[5-6] 50
[8-9] 400 U

SB-065
[3-3] 14.3 [RE]
[5-5] 1.6 U [RE]
[5-5] 1.6 U [D][RE]
[6-6] 1.5 U [RE]
[7-7] 1.5 U [RE]
[8-8] 1.5 U [RE]
[9-9] 1.6 U [RE]
[10-10] 1.5 U [RE]

SB-595
[3-3] 18.8

SB-062A
[3-3] 60.5
[5-5] 4212
[7-7] 239
[9-9] 4863

SB-058B
[4-4] 39.8
[4-4] 18.3 [D]
[6-6] 84.8
[8-8] 0.9
[10-10] 14.6

SB-786
[3-3] 161
[5-5] 50
[7-7] 58.2
[9-9] 3.9 U

SB-592B
[4-4] 185
[6-6] 193
[6-6] 438 [D]
[8-8] 25.1

SB-058D
[4-4] 91.9
[6-6] 475
[8-8] 37.2
[10-10] 15.8

SB-787
[3-3] 772
[5-5] 4.2 U
[7-7] 4 U
[9-9] 3.9 U

SB-792
[3-3] 0.8
[5-5] 4 U
[7-7] 3.9 U
[9-9] 3.9 U

SB-062D
[5-5] 57.3
[7-7] 9.9
[9-9] 1.5 U

SB-769
[3-3] 4 U
[5-5] 3.9 U
[7-7] 3.9 U
[9-9] 4.1 U

SB-593
[3-3] 86.6

SB-058
[3-3] 1.6 U [RE]
[4-4] 1.5 U [RE]
[5-5] 100
[5-5] 1.5 U [RE]
[6-6] 1.5 U [RE]
[7-7] 157 [RE]
[8-8] 1.6 U [RE]
[8-8] 10.7 [D][RE]
[9-9] 437 [RE]
[10-10] 40.7 [RE]

SB-058C
[4-4] 24.2
[6-6] 42.8
[8-8] 3.2
[10-10] 15.7

SB-782
[3-3] 59.7
[5-5] 4 U
[7-7] 4 U
[9-9] 4 U

SB-793
[3-3] 20.6
[5-5] 4.1 U
[7-7] 4 U
[9-9] 3.9 U

D-TP-1
[4-6]1 3.8 U
[4-6]4 69.6
[4-6]5 3.7 U
[8-10]2 3.9 U
[8-10]3 64.8
[8-10]6 177

SB-239
[3-3] 1.7
[4-4] 26.2
[5-5] 22.9
[6-6] 208
[7-7] 417
[8-8] 367
[9-9] 1801
[10-10] 21.2

SB-594
[3-3] 83.1

SB-774
[3-3] 24437
[5-5] 192
[7-7] 566
[9-9] 169

SB-062B
[3-3] 61.5
[5-5] 282
[7-7] 434
[7-7] 94.8 [D]
[9-9] 1.5 U

SB-788
[3-3] 51.1
[5-5] 4.1 U
[7-7] 4.1 U
[9-9] 4 U

SB-794
[3-3] 135
[5-5] 4.1 U
[7-7] 4.1 U
[9-9] 3.8 U

SB-062
[3-3] 43.3 [RE]
[4-4] 68.7 [RE]
[5-5] 152 [RE]
[6-6] 213 [RE]
[7-7] 76.4 [RE]
[8-8] 64.8 [RE]
[9-9] 1346 [RE]
[10-10] 1.5 U [RE]

SB-062C
[3-3] 174
[5-5] 45.1
[7-7] 121
[9-9] 1.5 U

SB-771
[3-3] 131
[5-5] 223
[7-7] 10.9
[9-9] 4 U

SB-783
[3-3] 3.7 U
[5-5] 4.1 U
[7-7] 3.9 U
[9-9] 3.9 U

SB-057
[3-3] 1.4 U [RE]
[4-4] 1.6 U [RE]
[5-5] 1.6 U [RE]
[6-6] 1.6 U [RE]
[7-7] 1.6 U [RE]
[8-8] 1.6 U [RE]
[9-9] 1.6 U [RE]
[10-10] 1.7 U [RE]

SB-784
[3-3] 3.9 U
[5-5] 4.1 U
[7-7] 3.9 U
[9-9] 3.8 U

SB-789
[3-3] 15.1
[5-5] 4 U
[7-7] 4.1 U
[9-9] 3.9 U

SB-795
[3-3] 17
[5-5] 1.9
[7-7] 4.1 U
[9-9] 3.9 U

SB-785
[3-3] 38.6
[5-5] 4 U
[7-7] 12.2
[9-9] 4 U

SB-790
[3-3] 224
[5-5] 1345
[7-7] 70.7
[9-9] 4.2 U

SB-031
[5-5] 400 U

Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

# FIGURE D-2

## BAP EQUIVALENTS IN SUBSURFACE SOIL BLOCK D

**Legend**

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$ )
- > 140 (Residential RGO, $1x10^{-5}$ )
- > 370 (Commercial Receptor RGO, $1x10^{-5}$ )
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$ )
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

30 0 60 Feet

N

DATE MODIFIED: 03/01/11

CREATED BY: T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKD_SUBSURFACE_BAP.MXD 03/01/11 TW

# FIGURE D-1

## BAP EQUIVALENTS IN SURFACE SOIL BLOCK D

SB-241 [0.5-0.5] 89.1 [1-1] 77.1 [1.5-1.5] 135
SB-766 [0-1] 3.6 U
SB-066 [0-0] 0.64 [1-1] 51.9 [RE] [2-2] 1461 [RE]
SB-066A [2-2] 16.6
SB-066D [2-2] 1.5 U
SB-772 [0-1] 43.2
SB-066B [2-2] 0.94
SB-066C [2-2] 37.3
SB-240A [1-1] 372
SB-240B [1-1] 13461
SB-240C [1-1] 43.3
SB-240D [1-1] 44
SB-770 [0-1] 16
SB-240 [0.5-0.5] 72.3 [1-1] 82.5 [1.5-1.5] 175 [1-1] 2378 [RE] [2-2] 1.5 U [RE]
SB-767 [0-1] 29
SB-059 [0-0] 3500 U
SB-592D [2-2] 52.1
SB-595 [2-2] 84.6
SB-062A [1-1] 44.1
SB-062D [1-1] 16660
SB-768 [0-1] 75.9
SB-769 [0-1] 37.2
SB-062 [0-0] 7569 [1-1] 6410 [RE] [2-2] 1065 [RE]
SB-062C [1-1] 2578
SB-062B [1-1] 546
SB-592A [2-2] 0.052
SB-592 [2-2] 35.9
SB-592B [2-2] 30.7
SB-593 [2-2] 31.7
SB-239 [0.5-0.5] 130 [1-1] 340 [1.5-1.5] 537 [2-2] 297 [2-2] 18 [D]
SB-594 [2-2] 92.3
SB-067 [0-0] 9391
SB-771 [0-1] 11308
SB-057 [0-0] 0.06 [1-1] 19.6 [RE] [2-2] 1.5 U [RE] [2-2] 1.5 U [D][RE]
SB-031 [0-0] 370 U
SB-060D [1-1] 9774
SB-060A [1-1] 17997
SB-060 [0-0] 43.7 [1-1] 22517 [RE] [2-2] 45.3 [RE]
SB-060B [1-1] 22.9
SB-060C [1-1] 646
SB-063A [2-2] 16.6
SB-063D [2-2] 1.6 U
SB-063C [2-2] 0.98
SB-773 [0-1] 3.9 U
SB-058A [2-2] 33.2 [2-2] 209 [D]
SB-058D [2-2] 131
SB-774 [0-1] 11379
SB-032 [0-0] 3700 U
SB-775 [0-1] 4 U
SB-243D [2-2] 15.2
SB-243C [2-2] 13.6
SB-063B [2-2] 1.5 U
SB-058B [2-2] 3019
SB-058 [1-1] 714 [RE] [2-2] 8591 [RE]
SB-058C [2-2] 6424
SB-243A [2-2] 134
SB-061D [1-1] 81.5
SB-242 [0.5-0.5] 100 [1-1] 61.9 [1.5-1.5] 161 U
SB-061A [1-1] 153
SB-061C [1-1] 386
SB-776 [0-1] 4 U
SB-243 [0.5-0.5] 84.8 [1-1] 163 [1.5-1.5] 90.9 [1-1] 3300 [RE] [2-2] 19.6 [RE]
SB-243B [2-2] 1.6 U
SB-777 [0-1] 452
SB-063 [0-0] 0.53 [1-1] 138 [RE] [2-2] 106 [RE] [2-2] 26.4 [D][RE]
SB-778 [0-1] 3.8 U
SB-061 [1-1] 16.5 [RE] [2-2] 1.6 U [RE] [2-2] 10.1 [D][RE]
SB-061B [1-1] 22.2
SB-779 [0-1] 0.9
SB-780 [0-1] 4 U
SB-781 [0-1] 8311
SB-064 [0-0] 2007
SB-065 [1-1] 1.4 U [RE] [2-2] 17.8 [RE]
SB-786 [0-1] 574
SB-782 [0-1] 130
SB-783 [0-1] 216
SB-784 [0-1] 38.6
SB-789 [0-1] 20.3
SB-785 [0-1] 3.6 U
SB-790 [0-1] 16.4
SB-033 [0-0] 3600 U
SB-791 [0-1] 3.5 U
SB-787 [0-1] 72.4
SB-796 [0-1] 77.3
SB-792 [0-1] 0.0072
SB-793 [0-1] 14.9
SB-788 [0-1] 105
SB-794 [0-1] 711
SB-795 [0-1] 37
SB-323
SB-320
SB-324
SB-322
SB-321
SB-318
SB-325
SB-319
SB-326
SB-329
SB-335
SB-331
SB-334
SB-330
SB-327
SB-332
SB-328
SB-333
SB-342
SB-341
SB-344
SB-337
SB-343
SB-336
SB-339
SB-340
SB-338
D-TP-1
D-TP-2

Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

### Legend

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$ )
- > 140 (Residential RGO, $1x10^{-5}$ )
- > 370 (Commercial Receptor RGO, $1x10^{-5}$ )
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$ )
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED: 02/28/11

CREATED BY: T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKD_SURFACE_BAP.MXD 02/28/11 TW

SB-003
[5-5] 440 U
[10-10] 440 U

SB-003A

SB-512
[4-6] 380 U
[8-10] 96
[8-10] 456 [D]

SB-510
[4-6] 380 U
[8-10] 46.4
[8-10] 28.8 [D]

SB-002
[5-5] 440 U
[10-10] 440 U

SB-002A

SB-509
[4-6] 380 U
[8-10] 380 U

SB-514
[4-6] 400 U
[8-10] 390 U
[8-10] 390 U [D]

SB-001
[5-5] 480 U
[10-10] 450 U

SB-511
[4-6] 1.9
[8-10] 410 U

SB-006
[5-5] 430 U
[10-10] 440 U

SB-513
[4-6] 1
[8-10] 390 U

SB-001A

SB-006A

SB-833B
[4-4] 3.9 U
[6-6] 4.1 U
[8-8] 3.8 U
[10-10] 3.9 U

SB-518
[4-6] 400 U
[8-10] 430 U

SB-507
[4-6] 410 U
[8-10] 380 U

SB-508
[4-6] 390 U
[4-6] 390 U [D]
[8-10] 400 U

SB-833N
[4-4] 40 U
[6-6] 240
[8-8] 16
[10-10] 16 U

SB-833A
[6-6] 340
[10-10] 200 U

SB-833C
[4-4] 3.8 U
[6-6] 3.9 U
[8-8] 4 U
[10-10] 4.1 U

SB-005
[5-5] 420 U
[10-10] 450 U

SB-005A

SB-036
[5-5] 400 U

SB-500
[4-6] 370 U
[8-10] 400 U

SB-833I
[8-8] 40 U
[10-10] 155

SB-515
[4-6] 400 U
[8-10] 1.4

SB-004
[5-5] 0.052
[10-10] 450 U

SB-035
[4-4] 390 U

SB-501
[4-6] 370 U
[8-10] 390 U

SB-004A

SB-519
[4-6] 380 U
[8-10] 380 U

SB-833M
[4-4] 4 U
[6-6] 3.8 U
[8-8] 4 U
[10-10] 4 U

SB-502
[4-6] 22.3
[8-10] 3800 U

SB-833D
[4-4] 4 U
[6-6] 4.2 U
[8-8] 3.9 U
[10-10] 4.3 U

SB-503
[4-6] 34.5
[10-12] 390 U

SB-833J
[4-4] 3.8 U
[6-6] 4 U
[8-8] 3.9 U
[10-10] 4.1 U

SB-833K
[6-6] 39 U
[8-8] 3.9 U
[10-10] 120

SB-505
[4-6] 380 U
[8-10] 13.2

SB-516

SB-833E
[6-6] 77 U
[10-10] 3.9 U

SB-833H
[6-6] 3.9 U
[8-8] 3.8 U
[10-10] 4 U

SB-504
[4-6] 2167
[8-10] 97.1

SB-506
[4-6] 380 U
[8-10] 420 U

SB-833L
[4-4] 3.9 U
[6-6] 4 U
[8-8] 38 U

SB-517
[4-6] 400 U
[8-10] 39.6

SB-520
[4-6] 400 U
[8-10] 2.1

SB-833F
[4-4] 3.9 U
[6-6] 4 U
[8-8] 4.1 U
[10-10] 4.1 U

SB-833G
[6-6] 4.2 U
[8-8] 4 U
[10-10] 3.9 U

SB-833
[9-9] 33242

Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

# FIGURE E-2

## BAP EQUIVALENTS IN SUBSURFACE SOIL BLOCK E

**Legend**

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$ )
- > 140 (Residential RGO, $1x10^{-5}$ )
- > 370 (Commercial Receptor RGO, $1x10^{-5}$ )
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$ )
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/01/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKE_SUBSURFACE_BAP.MXD 03/01/11 TW

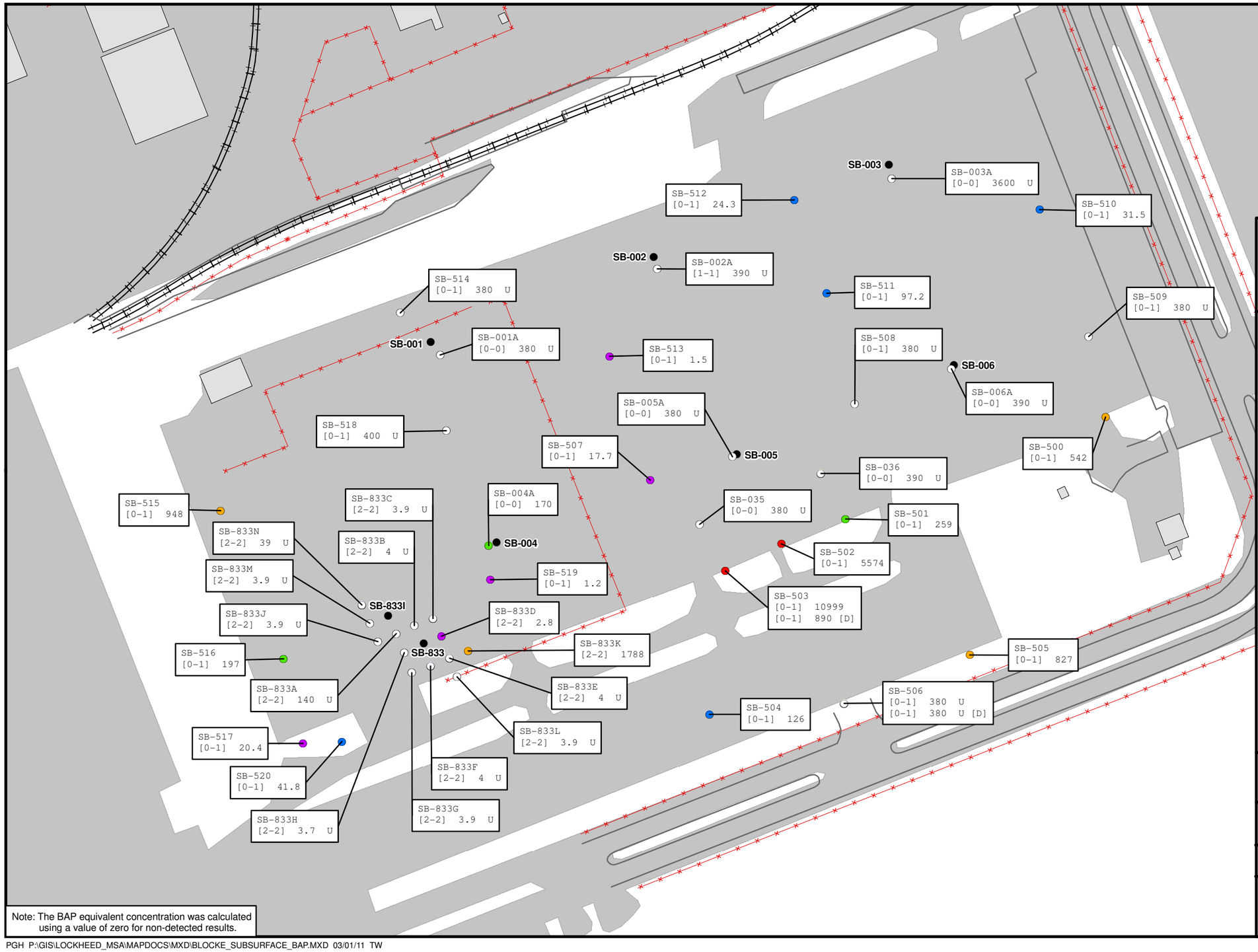


Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

# FIGURE E-1

## BAP EQUIVALENTS IN SURFACE SOIL BLOCK E

**Legend**

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$ )
- > 140 (Residential RGO, $1x10^{-5}$ )
- > 370 (Commercial Receptor RGO, $1x10^{-5}$ )
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$ )
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/01/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKE_SUBSURFACE_BAP.MXD 03/01/11 TW

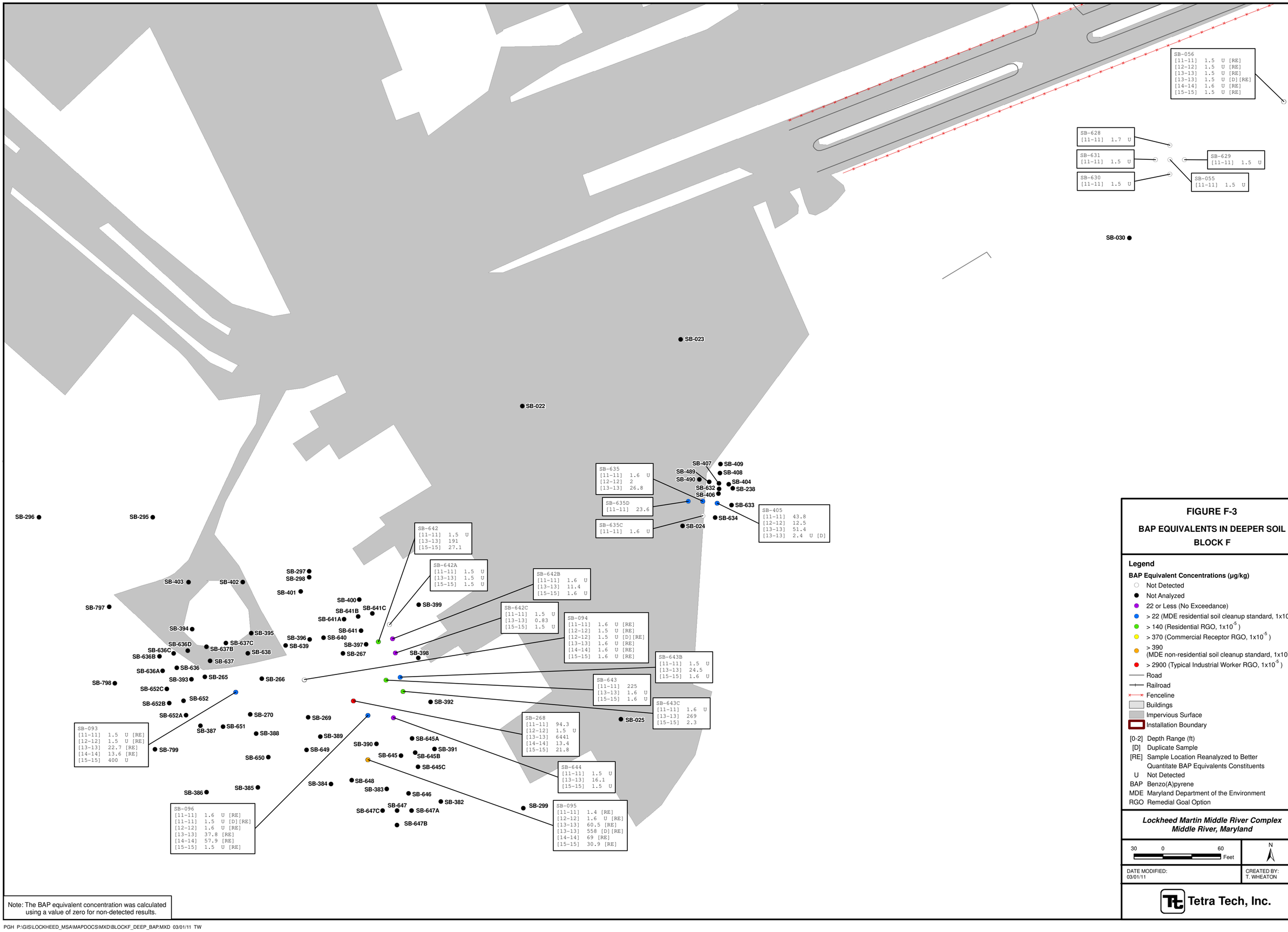


Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

# FIGURE F-3

## BAP EQUIVALENTS IN DEEPER SOIL BLOCK F

**Legend**

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$ )
- > 140 (Residential RGO, $1x10^{-5}$ )
- > 370 (Commercial Receptor RGO, $1x10^{-5}$ )
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$ )
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

30 0 60 Feet

N

DATE MODIFIED: 03/01/11

CREATED BY: T. WHEATON

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PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKF_DEEP_BAP.MXD 03/01/11 TW

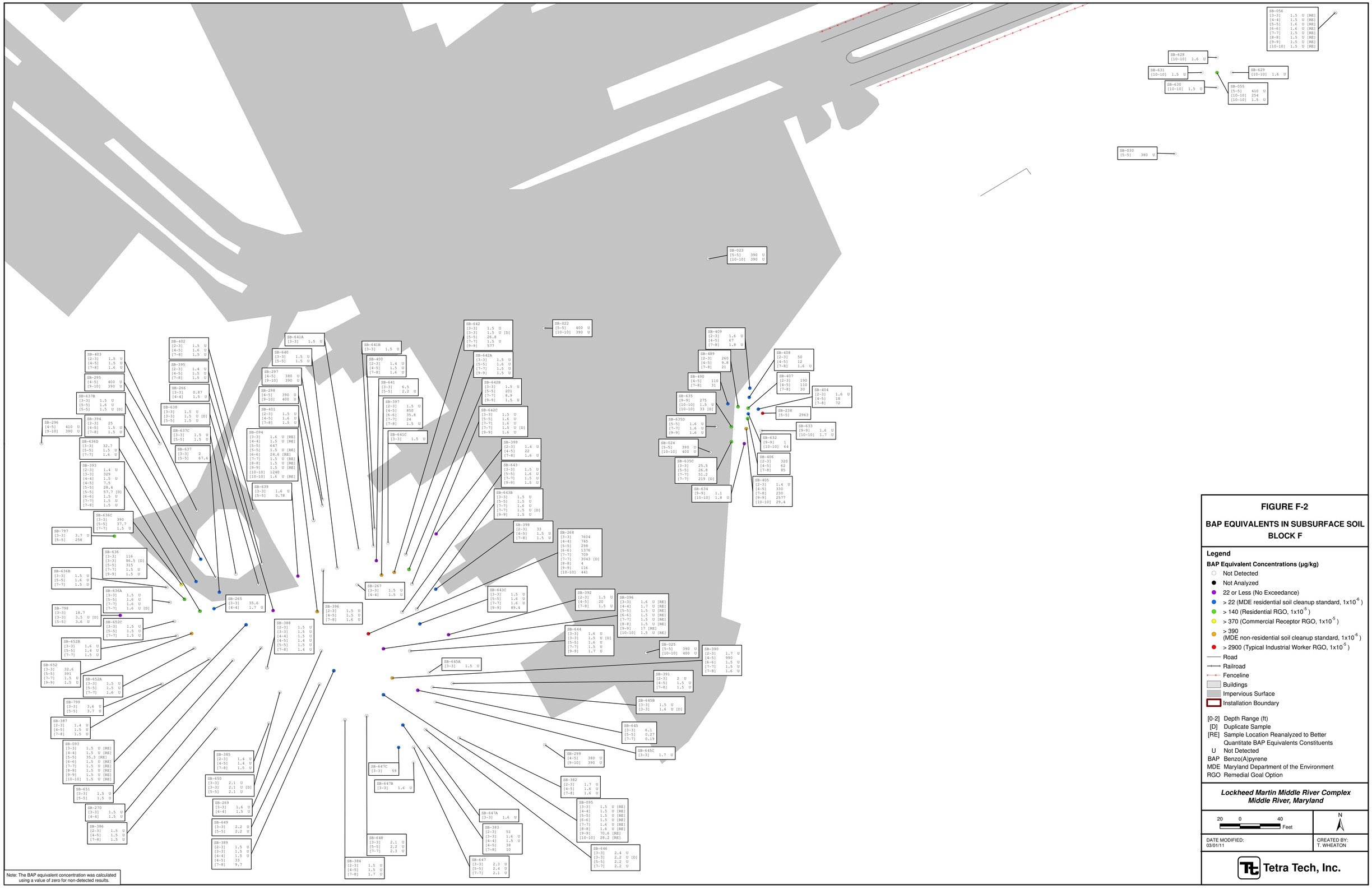


Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKF_SURFACE_BAP.MXD 03/01/11 TW

# FIGURE F-2

## BAP EQUIVALENTS IN SUBSURFACE SOIL BLOCK F

**Legend**

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$)
- > 140 (Residential RGO, $1x10^{-5}$)
- > 370 (Commercial Receptor RGO, $1x10^{-5}$)
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$)
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$)

Road
Railroad
Fenceline
Buildings
Impervious Surface
Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

20 0 40 Feet

N

DATE MODIFIED: 03/01/11

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Tetra Tech, Inc.

SB-056
[1-1] 22 [RE]
[2-2] 1.5 U [RE]

SB-628
SB-631
SB-629
SB-630
SB-055
[0-1] 121

SB-030
[0-1] 4.8

SB-023
[0-1] 380 U

SB-022
[0-1] 430 U

SB-407
[1-2] 130
SB-409
[1-2] 39
SB-489
[1-2] 9.6
SB-408
[1-2] 87
SB-404
[1-2] 1.5 U
SB-490
SB-632
SB-635
SB-238
[0-1] 424
[1-2] 98.2
SB-635D
[1-1] 19.5
SB-633
SB-406
[1-2] 510
SB-024
[0-1] 77.6
SB-634
SB-405
[1-2] 36
SB-635C
[1-1] 1267

SB-637B
[1-1] 6953
SB-637
[1-1] 1186
SB-403
[1-2] 1.5 U
SB-637C
[1-1] 2075
SB-296
SB-295
SB-394
[1-2] 140
SB-402
[1-2] 37
SB-638
[1-1] 1.4 U
SB-265
[0-1] 2545
[1-2] 602
SB-297
SB-298
SB-636D
[1-1] 6757
SB-395
[1-2] 1.6 U
SB-401
[1-2] 25
SB-797
[1-1] 3496
SB-636C
[1-1] 7120
SB-266
[0-1] 1344
[1-2] 151
SB-636B
[1-1] 1412
SB-636
[1-1] 163
SB-636A
[1-1] 410
SB-639
[1-1] 77.8
SB-798
[1-1] 3.7 U
SB-393
[1-2] 450
SB-652C
[1-1] 17.7
SB-652B
[1-1] 505
SB-652
[1-1] 342
SB-652A
[1-1] 228
SB-093
[0-1] 1939
[1-1] 1190 [RE]
[2-2] 150 [RE]
SB-799
[1-1] 10.9
SB-387
[1-2] 12
SB-651
[1-1] 13
SB-270
[0-1] 369
[1-2] 81
SB-388
[1-2] 380
SB-386
[1-2] 1.4 U
SB-094
[0-1] 1074
[1-1] 184 [RE]
[2-2] 95.4 [RE]

SB-396
[1-2] 80
SB-640
[1-1] 73
SB-641A
[1-1] 40.6
SB-400
[1-2] 9.1
SB-641B
[1-1] 289
SB-643C
[1-1] 1.4 U
SB-385
[1-2] 1.4 U
SB-650
[1-1] 3.1
SB-269
[0-1] 1883
[1-2] 82 U
SB-649
[1-1] 2.2 U
SB-389
[1-2] 220
SB-384
[1-2] 1.5 U
SB-268
[0-1] 38098
[1-2] 4262

SB-641C
[1-1] 9111
SB-641
[1-1] 1364
SB-642A
[1-1] 1.5 U
SB-399
[1-2] 1.4 U
SB-397
[1-2] 80
SB-642
[1-1] 1495
SB-642B
[1-1] 55.8
SB-267
[0-1] 313
[1-2] 104
SB-642C
[1-1] 0.012
SB-398
[1-2] 29
SB-643B
[1-1] 118
SB-643
[1-1] 708
SB-392
[1-2] 1.4 U
SB-096
[1-1] 602 [RE]
[2-2] 1.6 U [RE]
SB-025
[0-1] 400 U
SB-644
[1-1] 69.6
SB-645A
[1-1] 111
SB-391
[1-2] 1.6 U
SB-645B
[1-1] 112
SB-645
[1-1] 26715
SB-299
SB-645C
[1-1] 369
SB-390
[1-2] 9.9
SB-382
[1-2] 1.5 U
SB-646
[1-1] 22.7
SB-647A
[1-1] 3838
SB-383
[1-2] 19000
SB-647C
[1-1] 5140
SB-095
[0-1] 2132
[1-1] 49963 [RE]
[2-2] 0.85 [RE]
SB-647
[1-1] 284
SB-647B
[1-1] 283
SB-648
[1-1] 2.2 U

Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKF_SURFACE_BAP.MXD 03/01/11 TW

# FIGURE F-1

## BAP EQUIVALENTS IN SURFACE SOIL BLOCK F

**Legend**

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$)
- > 140 (Residential RGO, $1x10^{-5}$)
- > 370 (Commercial Receptor RGO, $1x10^{-5}$)
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$)
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

30 0 60 Feet

N

DATE MODIFIED: 03/01/11

CREATED BY: T. WHEATON

Tetra Tech, Inc.

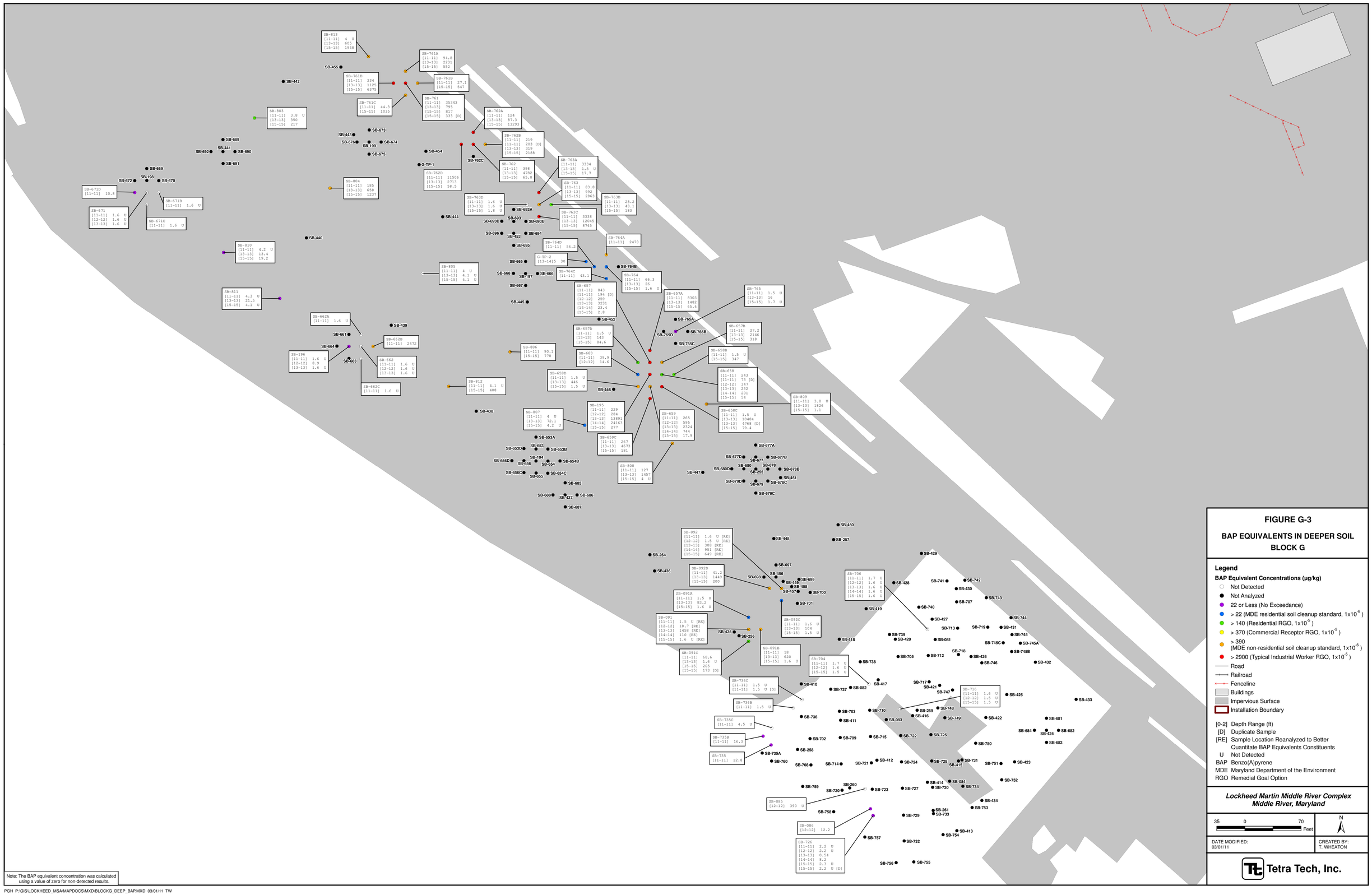


Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKG_DEEP_BAP.MXD 03/01/11 TW

# FIGURE G-3

## BAP EQUIVALENTS IN DEEPER SOIL BLOCK G

**Legend**

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$)
- > 140 (Residential RGO, $1x10^{-5}$)
- > 370 (Commercial Receptor RGO, $1x10^{-5}$)
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$)
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

35 0 70 Feet

N

DATE MODIFIED: 03/01/11

CREATED BY: T. WHEATON

Tetra Tech, Inc.

# FIGURE G-2

## BAP EQUIVALENTS IN SUBSURFACE SOIL BLOCK G

### Legend

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$ )
- > 140 (Residential RGO, $1x10^{-5}$ )
- > 370 (Commercial Receptor RGO, $1x10^{-5}$ )
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$ )
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

35 0 70 Feet

N

DATE MODIFIED: 03/01/11

CREATED BY: T. WHEATON

**Tetra Tech, Inc.**

Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKG_SUBSURFACE_BAP.MXD 03/01/11 TW

# FIGURE G-1

## BAP EQUIVALENTS IN SURFACE SOIL BLOCK G

### Legend

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$ )
- > 140 (Residential RGO, $1x10^{-5}$ )
- > 370 (Commercial Receptor RGO, $1x10^{-5}$ )
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$ )
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$ )

Road
Railroad
Fenceline
Buildings
Impervious Surface
Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

35 0 70 Feet

N

DATE MODIFIED: 03/01/11

CREATED BY: T. WHEATON

**Tetra Tech, Inc.**

Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKG_SURFACE_BAP.MXD 03/01/11 TW

SB-814
[11-11] 4 U
[13-13] 46.3
[15-15] 14.5

SB-815
[11-11] 13.1
[13-13] 268
[15-15] 4 U

SB-282D
[11-11] 1.5 U
[13-13] 225
[15-15] 1.5 U

SB-282A
[11-11] 1.6 U
[13-13] 409
[15-15] 32.2

SB-282B
[11-11] 47.8
[13-13] 373
[15-15] 1.6 U

SB-282
[11-11] 1.6 U [RE]
[12-12] 14.7 [RE]
[13-13] 1462 [RE]
[14-14] 3.8 [RE]
[15-15] 1.6 U [RE]

SB-282C
[11-11] 2121
[13-13] 1249
[15-15] 288

SB-817
[11-11] 3.9 U
[13-13] 3.9 U
[15-15] 3.9 U

SB-816
[11-11] 201

SB-294
SB-293
SB-203
SB-202
SB-485
SB-478
SB-611
SB-611A
SB-611D
SB-477
SB-608
SB-604D
SB-604A
SB-470
SB-609
SB-604
SB-484
SB-284
SB-610D
SB-610B
SB-604B
SB-467
SB-610
SB-607
SB-605
SB-610C
SB-283
SB-483
SB-471
SB-606
SB-466
SB-479
SB-486
SB-476
SB-468
SB-475
SB-201
SB-482
SB-472
SB-465
SB-487
SB-469
SB-480
SB-464
SB-200
SB-481
SB-473
SB-488
SB-463
SB-620
SB-474
SB-621
SB-623
SB-622
SB-462

SB-612
[11-11] 8.4
[11-11] 107 [D]
[12-12] 1.6 U

SB-285
[11-11] 1.5 U [RE]
[12-12] 1.5 U [RE]

SB-615
[11-11] 10.4
[12-12] 20.6

SB-614
[11-11] 34.5
[12-12] 99.4

SB-599
[11-11] 14
[12-12] 34.9

SB-200
[11-11] 66.1
[12-12] 165
[13-13] 848
[14-14] 13.3
[15-15] 119

SB-598
[11-11] 1.6 U
[12-12] 1.6 U

SB-596
[11-11] 0.96
[12-12] 130

SB-613
[11-11] 88
[12-12] 42.4

SB-619
[11-11] 1.6 U
[12-12] 1.5 U

SB-597
[11-11] 1.5 U
[12-12] 1.6 U

SB-618
[11-11] 1.5 U
[12-12] 0.98

SB-616
[11-11] 115
[11-11] 2.2 [D]
[12-12] 1.5 U

SB-617
[11-11] 1.6 U
[11-11] 11.7 [D]
[12-12] 31 U

SB-286
[11-11] 32.2
[12-12] 33 U
[15-15] 1.6 U

Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

# FIGURE H-3

## BAP EQUIVALENTS IN DEEPER SOIL BLOCK H

**Legend**

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$)
- > 140 (Residential RGO, $1x10^{-5}$)
- > 370 (Commercial Receptor RGO, $1x10^{-5}$)
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$)
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

45 0 90 Feet

N

DATE MODIFIED:
03/01/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

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SB-814
[3-3] 3.9 U
[5-5] 3.7 U
[7-7] 3.9 U
[9-9] 722

SB-282A
[3-3] 1.5 U
[5-5] 23.7
[7-7] 1.5 U
[9-9] 1.5 U
[9-9] 1.5 U [D]

SB-294
[4-5] 390 U
[9-10] 400 U

SB-293
[4-5] 400 U
[9-10] 390 U

SB-815
[3-3] 3.5 U
[5-5] 8.7
[7-7] 3.9 U
[9-9] 56.3

SB-282D
[3-3] 1.5 U
[5-5] 1.5 U
[7-7] 1.6 U
[9-9] 307

SB-282B
[3-3] 1.9
[5-5] 1.6 U
[7-7] 1.5 U
[9-9] 1657

SB-282
[3-3] 149 [RE]
[4-4] 182 [RE]
[5-5] 1063 [RE]
[6-6] 539 [RE]
[7-7] 180 [RE]
[7-7] 29.5 [D][RE]
[8-8] 71.3 [RE]
[9-9] 3534 [RE]
[9-10] 188
[10-10] 1080 [RE]

SB-282C
[3-3] 1.5 U
[5-5] 1.5 U
[7-7] 1.5 U
[9-9] 1.5 U
[9-9] 1.5 U [D]

SB-817
[3-3] 3.7 U
[5-5] 35.7
[7-7] 3.8 U
[7-7] 3.8 U [D]
[9-9] 3.9 U

SB-816
[3-3] 3.7 U
[3-3] 3.8 U [D]
[5-5] 23
[7-7] 3.8 U
[9-9] 77.3

SB-609
[3-3] 19.5
[4-4] 45.9

SB-476
[2-3] 1.5 U
[3-4] 1.6 U
[5-6] 1.6 U
[7-8] 1.6 U

SB-610B
[3-3] 1.6 U
[5-5] 1.5 U
[5-5] 1.6 U [D]

SB-203
[5-5] 83 U
[10-10] 80 U

SB-477
[2-3] 1.7 U
[3-4] 1.6 U
[5-6] 1.5 U
[7-8] 1.5 U

SB-202
[5-5] 83 U
[10-10] 75.1

SB-478
[2-3] 1.5 U
[3-4] 1.5 U
[5-6] 1.5 U
[7-8] 1.6 U

SB-608
[3-3] 1.6 U
[4-4] 0.9
[4-4] 1.7 U [D]

SB-604D
[3-3] 1.6 U
[3-3] 1.6 U [D]
[5-5] 1.7 U
[7-7] 1.7 U

SB-611
[3-3] 736
[4-4] 1.6 U
[5-5] 9.3
[6-6] 1.6 U
[7-7] 1.5 U

SB-284
[3-3] 1.6 U [RE]
[4-4] 12.3 [RE]
[4-5] 470 U
[9-10] 390 U

SB-485
[2-3] 43
[3-4] 1.5 U
[5-6] 1.5 U
[7-8] 1.5 U

SB-604
[3-3] 195
[4-4] 1.6 U
[5-5] 364
[6-6] 124
[7-7] 1.5 U

SB-610
[3-3] 477
[4-4] 61.3
[5-5] 18.8
[6-6] 1.6 U
[7-7] 1.5 U

SB-611A
[3-3] 29
[5-5] 323

SB-607
[3-3] 1.6 U
[4-4] 1.6 U

SB-604B
[3-3] 1.5 U
[5-5] 1728
[7-7] 1.5 U

SB-604A
[3-3] 1.6 U
[5-5] 33.5
[7-7] 1.6 U

SB-611D
[3-3] 1.5 U
[5-5] 1.6 U
[5-5] 1.6 U [D]

SB-283
[3-3] 1.5 U [RE]
[4-4] 1.5 U [RE]
[4-5] 400 U
[9-10] 390 U

SB-470
[2-3] 1.5 U
[3-4] 1.5 U
[5-6] 1.6 U
[7-8] 1.6 U

SB-610D
[3-3] 1.6 U
[5-5] 1.5 U

SB-605
[3-3] 22.6
[4-4] 1.5 U

SB-484
[2-3] 1.5 U
[3-4] 1.6 U
[5-6] 1.5 U
[7-8] 1.5 U

SB-483
[2-3] 28
[3-4] 1.6 U
[5-6] 1.6 U
[7-8] 1.6 U

SB-467
[2-3] 1.5 U
[3-4] 1.5 U
[5-6] 1.6 U
[7-8] 1.5 U

SB-466
[2-3] 1.4 U
[3-4] 1.5 U
[5-6] 1.6 U
[7-8] 1.5 U

SB-610C
[3-3] 1.6 U
[5-5] 1.5 U

SB-486
[2-3] 380 U
[3-4] 390 U
[5-6] 410 U
[7-8] 390 U

SB-482
[2-3] 1.6 U
[3-4] 1.5 U
[5-6] 1.5 U
[7-8] 1.6 U

SB-471
[2-3] 21
[3-4] 1.6 U
[5-6] 1.6 U
[7-8] 1.6 U

SB-612
SB-615
SB-613

SB-201
[5-5] 82 U
[10-10] 2.3

SB-468
[2-3] 1.5 U
[3-4] 1.5 U
[5-6] 1.5 U
[7-8] 1.5 U

SB-285
[4-5] 1210
[9-10] 704

SB-475
[2-3] 1.5 U
[3-4] 1.6 U
[5-6] 1.6 U
[7-8] 1.6 U

SB-487
[2-3] 400 U
[3-4] 380 U
[5-6] 390 U
[7-8] 390 U

SB-472
[2-3] 1.5 U
[3-4] 1.6 U
[5-6] 1.6 U
[7-8] 1.6 U

SB-606
[3-3] 0.9
[4-4] 1.5 U

SB-465
[2-3] 1.4 U
[3-4] 1.5 U
[5-6] 1.6 U
[7-8] 1.5 U

SB-596
SB-599
SB-597
SB-598

SB-614
[10-10] 5330

SB-473
[2-3] 1.5 U
[3-4] 1.5 U
[5-6] 1.7 U
[7-8] 1.6 U

SB-481
[2-3] 1.5 U
[3-4] 10
[5-6] 1.6 U
[7-8] 1.6 U

SB-469
[2-3] 1.5 U
[3-4] 1.6 U
[5-6] 1.6 U
[7-8] 1.5 U

SB-200
[5-5] 124
[10-10] 943

SB-620
[5-5] 21.9
[6-6] 1.5 U
[6-6] 1.5 U [D]

SB-479
[2-3] 1.5 U
[3-4] 1.6 U
[5-6] 1.5 U
[7-8] 1.5 U

SB-616
SB-619
SB-617
SB-618

SB-464
[2-3] 1.5 U
[3-4] 1.6 U
[5-6] 1.6 U
[7-8] 1.5 U

SB-200
[5-5] 124
[10-10] 943

SB-463
[2-3] 1.8 U
[3-4] 1.6 U
[5-6] 1.6 U
[7-8] 1.6 U

SB-623
[5-5] 33.4
[6-6] 43.3

SB-621
[5-5] 20.9
[6-6] 1.5 U

SB-286
[4-5] 440 U
[9-10] 433

SB-480
[2-3] 1.5 U
[3-4] 1.5 U
[5-6] 1.5 U
[7-8] 1.5 U

SB-488
[2-3] 370 U
[3-4] 380 U
[5-6] 400 U
[7-8] 390 U

SB-462
[2-3] 1.5 U
[3-4] 1.5 U
[5-6] 1.6 U
[7-8] 1.6 U

SB-622
[5-5] 2
[6-6] 1.5 U

SB-474
[2-3] 31
[3-4] 490
[5-5] 15 [RE]
[5-6] 1.4 U
[6-6] 1.5 U [RE]
[7-8] 1.5 U

Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

# FIGURE H-2

## BAP EQUIVALENTS IN SUBSURFACE SOIL BLOCK H

**Legend**

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$)
- > 140 (Residential RGO, $1x10^{-5}$)
- > 370 (Commercial Receptor RGO, $1x10^{-5}$)
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$)
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

30 0 60 Feet

N

DATE MODIFIED: 03/01/11

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Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKH_SUBSURFACE_BAP.MXD 03/01/11 TW

SB-814
[1-1] 3.9 U

SB-815
[1-1] 3.8 U

SB-282A
[1-1] 23981

SB-294
[0-1] 360 U

SB-282B
[1-1] 30.6

SB-293
[1-2] 360 U

SB-282D
[1-1] 21468

SB-282
[1-1] 165 [RE]
[2-2] 145 [RE]

SB-282C
[1-1] 67.6

SB-817
[1-1] 3.7 U

SB-816
[1-1] 55.6

SB-203
[0-1] 69.9

SB-202
[0-1] 80 U

SB-477
[1-2] 1.5 U

SB-478
[1-2] 1.4 U

SB-284
[1-2] 206

SB-475
[1-2] 1.5 U

SB-485
[1-2] 10

SB-611A
[1-1] 52.5

SB-611D
[1-1] 616

SB-604D
[1-1] 45883

SB-604B
[1-1] 163

SB-470
[1-2] 52

SB-604A
[1-1] 16

SB-611

SB-608

SB-609

SB-610D
[1-1] 24

SB-283
[1-2] 367

SB-604

SB-484
[1-2] 21

SB-467
[1-2] 1.5 U

SB-610

SB-607

SB-605

SB-606

SB-483
[1-2] 32

SB-466
[1-2] 11

SB-471
[1-2] 1.6 U

SB-486
[1-2] 370 U

SB-468
[1-2] 1.5 U

SB-612

SB-615

SB-613

SB-482
[1-2] 13

SB-465
[1-2] 1.5 U

SB-614

SB-476
[1-2] 1.5 U

SB-201
[0-1] 48.6

SB-285
[1-2] 400 U

SB-610B
[1-1] 14

SB-487
[1-2] 370 U

SB-469
[1-2] 15

SB-596

SB-599

SB-597

SB-610C
[1-1] 30.3

SB-481
[1-2] 31

SB-464
[1-2] 1.4 U

SB-598

SB-616

SB-619

SB-617

SB-618

SB-479
[1-2] 15

SB-200
[0-1] 499

SB-488
[1-2] 9

SB-463
[1-2] 69

SB-620

SB-480
[1-2] 1.5 U

SB-623

SB-621

SB-472
[1-2] 1.5 U

SB-622

SB-286
[1-2] 370 U

SB-474
[1-2] 24

SB-473
[1-2] 1.5 U

SB-462
[1-2] 26

Note: The BAP equivalent concentration was calculated using a value of zero for non-detected results.

# FIGURE H-1

## BAP EQUIVALENTS IN SURFACE SOIL BLOCK H

**Legend**

**BAP Equivalent Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 22 or Less (No Exceedance)
- > 22 (MDE residential soil cleanup standard, $1x10^{-6}$ )
- > 140 (Residential RGO, $1x10^{-5}$ )
- > 370 (Commercial Receptor RGO, $1x10^{-5}$ )
- > 390 (MDE non-residential soil cleanup standard, $1x10^{-6}$ )
- > 2900 (Typical Industrial Worker RGO, $1x10^{-5}$ )
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
[RE] Sample Location Reanalyzed to Better Quantitate BAP Equivalents Constituents
U Not Detected
BAP Benzo(A)pyrene
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

45 0 90 Feet

N

DATE MODIFIED:
03/01/11

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Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKH_SURFACE_BAP.MXD 03/01/11 TW

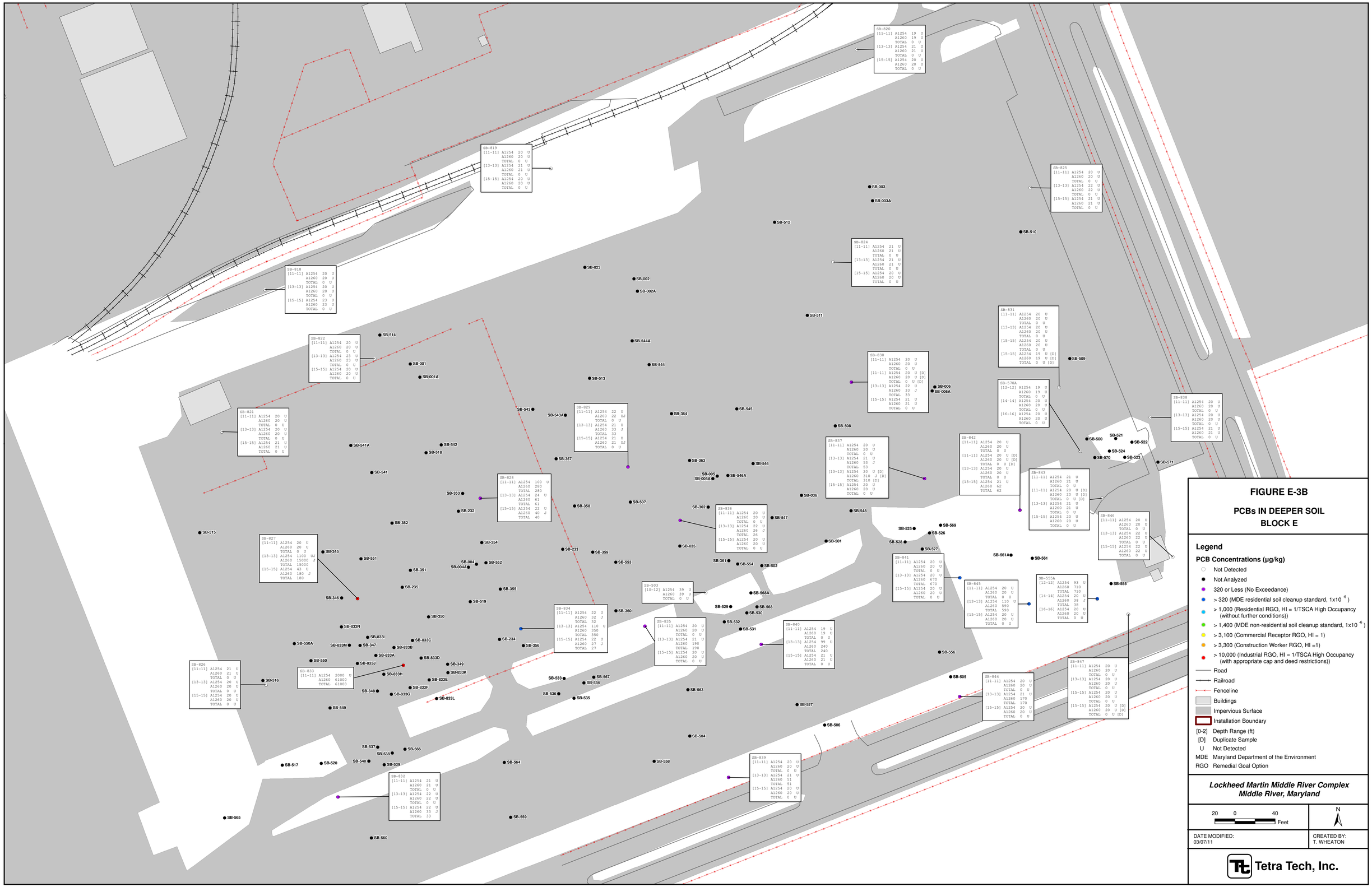


# FIGURE E-3B

## PCBs IN DEEPER SOIL
## BLOCK E

### Legend

**PCB Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 320 or Less (No Exceedance)
- > 320 (MDE residential soil cleanup standard, 1x10 $^{-6}$ )
- > 1,000 (Residential RGO, HI = 1/TSCA High Occupancy (without further conditions))
- > 1,400 (MDE non-residential soil cleanup standard, 1x10 $^{-6}$ )
- > 3,100 (Commercial Receptor RGO, HI = 1)
- > 3,300 (Construction Worker RGO, HI =1)
- > 10,000 (Industrial RGO, HI = 1/TSCA High Occupancy (with appropriate cap and deed restrictions))
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

20 0 40 Feet

N

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PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKE_DEEP_PCB.MXD 03/07/11 TW

SB-512
[4-6] 5.7 U
[8-10] 6.3 U
[8-10] 6.3 U [D]

SB-003
[5-5] 7 U
[10-10] 7 U

SB-003A

SB-002
[5-5] 7 U
[10-10] 7 U

SB-002A

SB-510
[4-6] 5.8 U
[8-10] 5.8 U
[8-10] 5.8 U [D]

SB-514
[4-6] 6 U
[8-10] 5.9 U
[8-10] 5.9 U [D]

SB-833B
[4-4] 0.48 U
[6-6] 0.57 U
[8-8] 0.52 U
[10-10] 0.6 U

SB-001
[5-5] 7 U
[10-10] 7 U

SB-001A

SB-513
[4-6] 5.9 U
[8-10] 5.8 U

SB-511
[4-6] 5.9 U
[8-10] 6.3 U

SB-508
[4-6] 5.8 U
[4-6] 5.9 U [D]
[8-10] 6 U

SB-006
[5-5] 7 U
[10-10] 7 U

SB-006A

SB-509
[4-6] 5.8 U
[8-10] 5.7 U

SB-833A
[6-6] 17000
[10-10] 28000 J

SB-833I
[8-8] 2900 J
[10-10] 2300 J

SB-833
[9-9] 130000 J

SB-518
[4-6] 6 U
[8-10] 6.5 U

SB-507
[4-6] 6.2 U
[8-10] 5.8 U

SB-500
[4-6] 5.6 U
[8-10] 6 U

SB-833N
[4-4] 0.56 U
[6-6] 0.62 U
[8-8] 0.63 U
[10-10] 0.61 U

SB-005
[5-5] 6 U
[10-10] 7 U

SB-005A

SB-833C
[4-4] 0.57 U
[6-6] 0.57 U
[8-8] 0.62 U
[10-10] 0.51 U

SB-036
[5-5] 6 U

SB-035
[4-4] 6 U

SB-515
[4-6] 6.1 U
[8-10] 6.2 U

SB-501
[4-6] 17 J
[8-10] 640 J

SB-833M
[4-4] 0.62 U
[6-6] 0.51 U
[8-8] 0.62 U
[10-10] 0.57 U

SB-004
[5-5] 7 U
[10-10] 7 U

SB-004A

SB-833J
[4-4] 0.61 U
[6-6] 0.54 U
[8-8] 0.55 U
[10-10] 20 J

SB-519
[4-6] 5.8 U
[8-10] 5.8 U

SB-502
[4-6] 5.8 U
[8-10] 290 U

SB-503
[4-6] 6.1 U
[10-12] 5.9 U

SB-833H
[6-6] 30
[8-8] 140 J
[10-10] 9.9

SB-516

SB-833K
[6-6] 1500 J
[8-8] 98 J
[10-10] 250 J

SB-505
[4-6] 5.8 U
[8-10] 6.3 U

SB-833G
[6-6] 1.6 J
[8-8] 38
[10-10] 18

SB-833D
[4-4] 0.55 U
[6-6] 0.63 U
[8-8] 14
[10-10] 8.2 J

SB-506
[4-6] 5.8 U
[8-10] 6.4 U

SB-520
[4-6] 6.1 U
[8-10] 6 U

SB-504
[4-6] 5.7 U
[8-10] 5.8 U

SB-517
[4-6] 6.1 U
[8-10] 6.1 U

SB-833F
[4-4] 89 J
[6-6] 110 J
[8-8] 93 J
[10-10] 58 J

SB-833L
[4-4] 67 J
[6-6] 27 J
[8-8] 4300 J

SB-833E
[6-6] 2700 J
[10-10] 140 J

# FIGURE E-2E
## 1,4-DICHLOROBENZENE IN SUBSURFACE SOIL
## BLOCK E

## Legend

**1,4-Dichlorobenzene Concentration (µg/kg)**

- Not Detected
- Not Analyzed
- 27,000 or Less (No Exceedance)
- > 27,000 (MDE residential soil cleanup standard)
- > 31,000 (Residential RGO, 1x10 $^{-5}$ )
- > 120,000 (MDE non-residential soil cleanup standard)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary
- [0-2] Depth Range (ft)
- [D] Duplicate Sample
- U Not Detected
- J Estimated Result
- B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
- MDE Maryland Department of the Environment
- RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/08/11

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T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKE_SUBSURFACE_14-DCB.MXD 03/08/11 TW

SB-003
[5-5] 7 U
[10-10] 7 U

SB-003A

SB-512
[4-6] 5.7 U
[8-10] 6.3 U
[8-10] 6.3 U [D]

SB-510
[4-6] 5.8 U
[8-10] 5.8 U
[8-10] 5.8 U [D]

SB-002
[5-5] 7 U
[10-10] 7 U

SB-002A

SB-514
[4-6] 6 U
[8-10] 5.9 U
[8-10] 5.9 U [D]

SB-001
[5-5] 7 U
[10-10] 7 U

SB-511
[4-6] 5.9 U
[8-10] 6.3 U

SB-006
[5-5] 7 U
[10-10] 7 U

SB-509
[4-6] 5.8 U
[8-10] 5.7 U

SB-001A

SB-833A
[6-6] 18000
[10-10] 140000

SB-513
[4-6] 5.9 U
[8-10] 5.8 U

SB-006A

SB-833B
[4-4] 0.28 U
[6-6] 2.2 J
[8-8] 2.1 J
[10-10] 0.34 U

SB-508
[4-6] 5.8 U
[4-6] 5.9 U [D]
[8-10] 6 U

SB-500
[4-6] 5.6 U
[8-10] 6 U

SB-833I
[8-8] 21000 J
[10-10] 11000 J

SB-518
[4-6] 6 U
[8-10] 6.5 U

SB-005
[5-5] 6 U
[10-10] 7 U

SB-833N
[4-4] 0.32 U
[6-6] 0.35 U
[8-8] 0.36 U
[10-10] 1.4 B

SB-833C
[4-4] 0.33 U
[6-6] 0.33 U
[8-8] 0.36 U
[10-10] 0.29 U

SB-005A

SB-036
[5-5] 6 U

SB-507
[4-6] 6.2 U
[8-10] 5.8 U

SB-501
[4-6] 2100
[8-10] 14000

SB-515
[4-6] 6.1 U
[8-10] 6.2 U

SB-833M
[4-4] 0.36 U
[6-6] 5.4
[8-8] 0.36 U
[10-10] 0.33 U

SB-004
[5-5] 7 U
[10-10] 7 U

SB-004A

SB-502
[4-6] 21
[8-10] 710

SB-519
[4-6] 5.8 U
[8-10] 5.8 U

SB-833J
[4-4] 0.35 U
[6-6] 0.31 U
[8-8] 0.31 U
[10-10] 89 J

SB-833
[9-9] 2200000

SB-503
[4-6] 6.1 U
[10-12] 5.9 U

SB-833D
[4-4] 0.31 U
[6-6] 0.6 J
[8-8] 65
[10-10] 11 B

SB-833H
[6-6] 5.9
[8-8] 180 J
[10-10] 19 J

SB-035
[4-4] 6 U

SB-505
[4-6] 5.8 U
[8-10] 6.3 U

SB-516

SB-833F
[4-4] 340 J
[6-6] 380 J
[8-8] 320 J
[10-10] 150 J

SB-833K
[6-6] 22000 J
[8-8] 370 J
[10-10] 5800

SB-506
[4-6] 5.8 U
[8-10] 6.4 U

SB-833G
[6-6] 2 J
[8-8] 4.1 J
[10-10] 0.32 U

SB-833L
[4-4] 420 J
[6-6] 230 J
[8-8] 77000 J

SB-504
[4-6] 5.7 U
[8-10] 5.8 U

SB-517
[4-6] 6.1 U
[8-10] 6.1 U

SB-833E
[6-6] 52000 J
[10-10] 910 J

SB-520
[4-6] 6.1 U
[8-10] 6 U

# FIGURE E-2C
# 1,2,3-TRICHLOROBENZENE IN SUBSURFACE SOIL
# BLOCK E

## Legend

**1,2,3-Trichlorobenzene Concentration (µg/kg)**

- Not Detected
- Not Analyzed
- 29,000 or Less (No Exceedance)
- > 29,000 (Residential RGO, HI=0.5)
- > 58,000 (Residential RGO, HI=1)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary
- [0-2] Depth Range (ft)
- [D] Duplicate Sample
- U Not Detected
- J Estimated Result
- B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
- RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/07/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKE_SUBSURFACE_123TCB.MXD 03/07/11 TW

SB-514
[4-6] 6 U
[8-10] 5.9 U
[8-10] 5.9 U [D]

SB-512
[4-6] 5.7 U
[8-10] 6.3 U
[8-10] 6.3 U [D]

SB-003
[5-5] 7 U
[10-10] 7 U

SB-003A

SB-833B
[4-4] 0.69 B
[6-6] 12
[8-8] 11
[10-10] 1.4 B

SB-001
[5-5] 7 U
[10-10] 7 U

SB-002
[5-5] 7 U
[10-10] 7 U

SB-002A

SB-511
[4-6] 5.9 U
[8-10] 6.3 U

SB-510
[4-6] 5.8 U
[8-10] 5.8 U
[8-10] 5.8 U [D]

SB-833A
[6-6] 140000
[10-10] 830000

SB-833I
[8-8] 110000
[10-10] 66000

SB-001A

SB-513
[4-6] 5.9 U
[8-10] 5.8 U

SB-508
[4-6] 5.8 U
[4-6] 5.9 U [D]
[8-10] 6 U

SB-509
[4-6] 5.8 U
[8-10] 5.7 U

SB-006A

SB-006
[5-5] 7 U
[10-10] 7 U

SB-833N
[4-4] 0.23 U
[6-6] 0.25 U
[8-8] 0.51 B
[10-10] 5.9 J

SB-833C
[4-4] 0.66 B
[6-6] 0.94 B
[8-8] 0.79 B
[10-10] 0.49 B

SB-518
[4-6] 6 U
[8-10] 6.5 U

SB-507
[4-6] 6.2 U
[8-10] 5.8 U

SB-500
[4-6] 5.6 U
[8-10] 6 U

SB-833M
[4-4] 0.98 B
[6-6] 25
[8-8] 0.68 B
[10-10] 0.68 B

SB-005
[5-5] 6 U
[10-10] 7 U

SB-005A

SB-833D
[4-4] 0.57 B
[6-6] 2.7 B
[8-8] 110 J
[10-10] 52 B

SB-036
[5-5] 6 U

SB-515
[4-6] 6.1 U
[8-10] 6.2 U

SB-035
[4-4] 6 U

SB-501
[4-6] 4800
[8-10] 69000

SB-833J
[4-4] 1.1 B
[6-6] 1.1 B
[8-8] 0.46 B
[10-10] 520

SB-004
[5-5] 7 U
[10-10] 7 U

SB-004A

SB-519
[4-6] 5.8 U
[8-10] 5.8 U

SB-502
[4-6] 71
[8-10] 3700

SB-833H
[6-6] 38
[8-8] 970
[10-10] 96

SB-503
[4-6] 6.1 U
[10-12] 5.9 U

SB-833K
[6-6] 120000 J
[8-8] 1700 J
[10-10] 28000

SB-516

SB-505
[4-6] 5.8 U
[8-10] 0.45 B

SB-833G
[6-6] 7.5
[8-8] 21
[10-10] 0.67 B

SB-833E
[6-6] 260000
[10-10] 4700

SB-506
[4-6] 5.8 U
[8-10] 6.4 U

SB-517
[4-6] 6.1 U
[8-10] 6.1 U

SB-833L
[4-4] 1900
[6-6] 1000
[8-8] 410000 J

SB-833F
[4-4] 1500
[6-6] 1800
[8-8] 1500
[10-10] 720

SB-504
[4-6] 0.95 B
[8-10] 0.63 B

SB-520
[4-6] 6.1 U
[8-10] 6 U

SB-833
[9-9] 9600000

# FIGURE E-2D
# 1,2,4-TRICHLOROBENZENE IN SUBSURFACE SOIL
# BLOCK E

## Legend

**1,2,4-Trichlorobenzene Concentration (µg/kg)**

- Not Detected
- Not Analyzed
- 38,000 or Less (No Exceedance)
- > 38,000 (Residential RGO, HI = 0.5)
- > 78,000 (MDE residential soil cleanup standard)
- > 175,000 (Typical Industrial Worker RGO, HI = 0.5)
- > 400,000 (Commercial Receptor RGO, HI = 0.5)
- > 1,000,000 (MDE non-residential soil cleanup standard)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary
- [0-2] Depth Range (ft)
- [D] Duplicate Sample
- U Not Detected
- J Estimated Result
- B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
- MDE Maryland Department of the Environment
- RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/08/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKE_SUBSURFACE_124TCB.MXD 03/08/11 TW

# FIGURE E-2B

## PCBs IN SUBSURFACE SOIL
## BLOCK E

### Legend

**PCB Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 320 or Less (No Exceedance)
- > 320 (MDE residential soil cleanup standard, 1x10 $^{-6}$)
- > 1,000 (Residential RGO, HI = 1/TSCA High Occupancy (without further conditions))
- > 1,400 (MDE non-residential soil cleanup standard, 1x10 $^{-6}$)
- > 3,100 (Commercial Receptor RGO, HI = 1)
- > 3,300 (Construction Worker RGO, HI =1)
- > 10,000 (Industrial RGO, HI = 1/TSCA High Occupancy (with appropriate cap and deed restrictions))

- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

30 0 60 Feet

N

DATE MODIFIED: 03/07/11

CREATED BY: T. WHEATON

**Tetra Tech, Inc.**

PGH: P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKE_SUBSURFACE_PCB.MXD 03/07/11 TW

SB-003
[5-5] 1,2,3-TCB 7 U
1,2,4-TCB 7 U
1,4-DCB 7 U
[10-10] 1,2,3-TCB 7 U
1,2,4-TCB 7 U
1,4-DCB 7 U

SB-003A

SB-512
[4-6] 1,2,3-TCB 5.7 U
1,2,4-TCB 5.7 U
1,4-DCB 5.7 U
[8-10] 1,2,3-TCB 6.3 U
1,2,4-TCB 6.3 U
1,4-DCB 6.3 U
[8-10] 1,2,3-TCB 6.3 U [D]
1,2,4-TCB 6.3 U [D]
1,4-DCB 6.3 U [D]

SB-510
[4-6] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
[8-10] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
[8-10] 1,2,3-TCB 5.8 U [D]
1,2,4-TCB 5.8 U [D]
1,4-DCB 5.8 U [D]

SB-002
[5-5] 1,2,3-TCB 7 U
1,2,4-TCB 7 U
1,4-DCB 7 U
[10-10] 1,2,3-TCB 7 U
1,2,4-TCB 7 U
1,4-DCB 7 U

SB-002A

SB-509
[4-6] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
[8-10] 1,2,3-TCB 5.7 U
1,2,4-TCB 5.7 U
1,4-DCB 5.7 U

SB-511
[4-6] 1,2,3-TCB 5.9 U
1,2,4-TCB 5.9 U
1,4-DCB 5.9 U
[8-10] 1,2,3-TCB 6.3 U
1,2,4-TCB 6.3 U
1,4-DCB 6.3 U

SB-514
[4-6] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U
[8-10] 1,2,3-TCB 5.9 U
1,2,4-TCB 5.9 U
1,4-DCB 5.9 U
[8-10] 1,2,3-TCB 5.9 U [D]
1,2,4-TCB 5.9 U [D]
1,4-DCB 5.9 U [D]

SB-001
[5-5] 1,2,3-TCB 7 U
1,2,4-TCB 7 U
1,4-DCB 7 U
[10-10] 1,2,3-TCB 7 U
1,2,4-TCB 7 U
1,4-DCB 7 U

SB-001A

SB-006
[5-5] 1,2,3-TCB 7 U
1,2,4-TCB 7 U
1,4-DCB 7 U
[10-10] 1,2,3-TCB 7 U
1,2,4-TCB 7 U
1,4-DCB 7 U

SB-006A

SB-518
[4-6] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U
[8-10] 1,2,3-TCB 6.5 U
1,2,4-TCB 6.5 U
1,4-DCB 6.5 U

SB-513
[4-6] 1,2,3-TCB 5.9 U
1,2,4-TCB 5.9 U
1,4-DCB 5.9 U
[8-10] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U

SB-833B
[4-4] 1,2,3-TCB 0.28 U
1,2,4-TCB 0.69 B
1,4-DCB 0.48 U
[6-6] 1,2,3-TCB 2.2 J
1,2,4-TCB 12
1,4-DCB 0.57 U
[8-8] 1,2,3-TCB 2.1 J
1,2,4-TCB 11
1,4-DCB 0.52 U
[10-10] 1,2,3-TCB 0.34 U
1,2,4-TCB 1.4 B
1,4-DCB 0.6 U

SB-833C
[4-4] 1,2,3-TCB 0.33 U
1,2,4-TCB 0.66 B
1,4-DCB 0.57 U
[6-6] 1,2,3-TCB 0.33 U
1,2,4-TCB 0.94 B
1,4-DCB 0.57 U
[8-8] 1,2,3-TCB 0.36 U
1,2,4-TCB 0.79 B
1,4-DCB 0.62 U
[10-10] 1,2,3-TCB 0.29 U
1,2,4-TCB 0.49 B
1,4-DCB 0.51 U

SB-507
[4-6] 1,2,3-TCB 6.2 U
1,2,4-TCB 6.2 U
1,4-DCB 6.2 U
[8-10] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U

SB-005
[5-5] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U
[10-10] 1,2,3-TCB 7 U
1,2,4-TCB 7 U
1,4-DCB 7 U

SB-005A

SB-508
[4-6] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
[4-6] 1,2,3-TCB 5.9 U [D]
1,2,4-TCB 5.9 U [D]
1,4-DCB 5.9 U [D]
[8-10] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U

SB-833I
[8-8] 1,2,3-TCB 21000 J
1,2,4-TCB 110000
1,4-DCB 2900 J
[10-10] 1,2,3-TCB 11000 J
1,2,4-TCB 66000
1,4-DCB 2300 J

SB-833N
[4-4] 1,2,3-TCB 0.32 U
1,2,4-TCB 0.23 U
1,4-DCB 0.56 U
[6-6] 1,2,3-TCB 0.35 U
1,2,4-TCB 0.25 U
1,4-DCB 0.62 U
[8-8] 1,2,3-TCB 0.36 U
1,2,4-TCB 0.51 B
1,4-DCB 0.63 U
[10-10] 1,2,3-TCB 1.4 B
1,2,4-TCB 5.9 J
1,4-DCB 0.61 U

SB-833A
[6-6] 1,2,3-TCB 18000
1,2,4-TCB 140000
1,4-DCB 17000
[10-10] 1,2,3-TCB 140000
1,2,4-TCB 830000
1,4-DCB 28000 J

SB-833
[9-9] 1,2,3-TCB 2200000
1,2,4-TCB 9600000
1,4-DCB 130000 J

SB-036
[5-5] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U

SB-500
[4-6] 1,2,3-TCB 5.6 U
1,2,4-TCB 5.6 U
1,4-DCB 5.6 U
[8-10] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U

SB-035
[4-4] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U

SB-501
[4-6] 1,2,3-TCB 2100
1,2,4-TCB 4800
1,4-DCB 17 J
[8-10] 1,2,3-TCB 14000
1,2,4-TCB 69000
1,4-DCB 640 J

SB-004
[5-5] 1,2,3-TCB 7 U
1,2,4-TCB 7 U
1,4-DCB 7 U
[10-10] 1,2,3-TCB 7 U
1,2,4-TCB 7 U
1,4-DCB 7 U

SB-004A

SB-515
[4-6] 1,2,3-TCB 6.1 U
1,2,4-TCB 6.1 U
1,4-DCB 6.1 U
[8-10] 1,2,3-TCB 6.2 U
1,2,4-TCB 6.2 U
1,4-DCB 6.2 U

SB-833M
[4-4] 1,2,3-TCB 0.36 U
1,2,4-TCB 0.98 B
1,4-DCB 0.62 U
[6-6] 1,2,3-TCB 5.4
1,2,4-TCB 25
1,4-DCB 0.51 U
[8-8] 1,2,3-TCB 0.36 U
1,2,4-TCB 0.68 B
1,4-DCB 0.62 U
[10-10] 1,2,3-TCB 0.33 U
1,2,4-TCB 0.68 B
1,4-DCB 0.57 U

SB-519
[4-6] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
[8-10] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U

SB-502
[4-6] 1,2,3-TCB 21
1,2,4-TCB 71
1,4-DCB 5.8 U
[8-10] 1,2,3-TCB 710
1,2,4-TCB 3700
1,4-DCB 290 U

SB-833J
[4-4] 1,2,3-TCB 0.35 U
1,2,4-TCB 1.1 B
1,4-DCB 0.61 U
[6-6] 1,2,3-TCB 0.31 U
1,2,4-TCB 1.1 B
1,4-DCB 0.54 U
[8-8] 1,2,3-TCB 0.31 U
1,2,4-TCB 0.46 B
1,4-DCB 0.55 U
[10-10] 1,2,3-TCB 89 J
1,2,4-TCB 520
1,4-DCB 20 J

SB-833H
[6-6] 1,2,3-TCB 5.9
1,2,4-TCB 38
1,4-DCB 30
[8-8] 1,2,3-TCB 180 J
1,2,4-TCB 970
1,4-DCB 140 J
[10-10] 1,2,3-TCB 19 J
1,2,4-TCB 96
1,4-DCB 9.9

SB-516

SB-833D
[4-4] 1,2,3-TCB 0.31 U
1,2,4-TCB 0.57 B
1,4-DCB 0.55 U
[6-6] 1,2,3-TCB 0.6 J
1,2,4-TCB 2.7 B
1,4-DCB 0.63 U
[8-8] 1,2,3-TCB 65
1,2,4-TCB 110 J
1,4-DCB 14
[10-10] 1,2,3-TCB 11 B
1,2,4-TCB 52 B
1,4-DCB 8.2 J

SB-503
[4-6] 1,2,3-TCB 6.1 U
1,2,4-TCB 6.1 U
1,4-DCB 6.1 U
[10-12] 1,2,3-TCB 5.9 U
1,2,4-TCB 5.9 U
1,4-DCB 5.9 U

SB-505
[4-6] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
[8-10] 1,2,3-TCB 6.3 U
1,2,4-TCB 0.45 B
1,4-DCB 6.3 U

SB-833G
[6-6] 1,2,3-TCB 2 J
1,2,4-TCB 7.5
1,4-DCB 1.6 J
[8-8] 1,2,3-TCB 4.1 J
1,2,4-TCB 21
1,4-DCB 38
[10-10] 1,2,3-TCB 0.32 U
1,2,4-TCB 0.67 B
1,4-DCB 18

SB-833K
[6-6] 1,2,3-TCB 22000 J
1,2,4-TCB 120000 J
1,4-DCB 1500 J
[8-8] 1,2,3-TCB 370 J
1,2,4-TCB 1700 J
1,4-DCB 98 J
[10-10] 1,2,3-TCB 5800
1,2,4-TCB 28000
1,4-DCB 250 J

SB-506
[4-6] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
[8-10] 1,2,3-TCB 6.4 U
1,2,4-TCB 6.4 U
1,4-DCB 6.4 U

SB-517
[4-6] 1,2,3-TCB 6.1 U
1,2,4-TCB 6.1 U
1,4-DCB 6.1 U
[8-10] 1,2,3-TCB 6.1 U
1,2,4-TCB 6.1 U
1,4-DCB 6.1 U

SB-833F
[4-4] 1,2,3-TCB 340 J
1,2,4-TCB 1500
1,4-DCB 89 J
[6-6] 1,2,3-TCB 380 J
1,2,4-TCB 1800
1,4-DCB 110 J
[8-8] 1,2,3-TCB 320 J
1,2,4-TCB 1500
1,4-DCB 93 J
[10-10] 1,2,3-TCB 150 J
1,2,4-TCB 720
1,4-DCB 58 J

SB-833L
[4-4] 1,2,3-TCB 420 J
1,2,4-TCB 1900
1,4-DCB 67 J
[6-6] 1,2,3-TCB 230 J
1,2,4-TCB 1000
1,4-DCB 27 J
[8-8] 1,2,3-TCB 77000 J
1,2,4-TCB 410000 J
1,4-DCB 4300 J

SB-504
[4-6] 1,2,3-TCB 5.7 U
1,2,4-TCB 0.95 B
1,4-DCB 5.7 U
[8-10] 1,2,3-TCB 5.8 U
1,2,4-TCB 0.63 B
1,4-DCB 5.8 U

SB-520
[4-6] 1,2,3-TCB 6.1 U
1,2,4-TCB 6.1 U
1,4-DCB 6.1 U
[8-10] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U

SB-833E
[6-6] 1,2,3-TCB 52000 J
1,2,4-TCB 260000
1,4-DCB 2700 J
[10-10] 1,2,3-TCB 910 J
1,2,4-TCB 4700
1,4-DCB 140 J

# FIGURE E-2F

## SELECT VOCs IN SUBSURFACE SOIL BLOCK E

### Legend

**Select VOC Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- Location with Detected VOC Concentration
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
J Estimated Result
B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

25 0 50 Feet

N

DATE MODIFIED:
03/08/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKE_SUBSURFACE_VOCs.MXD 03/08/11 TW

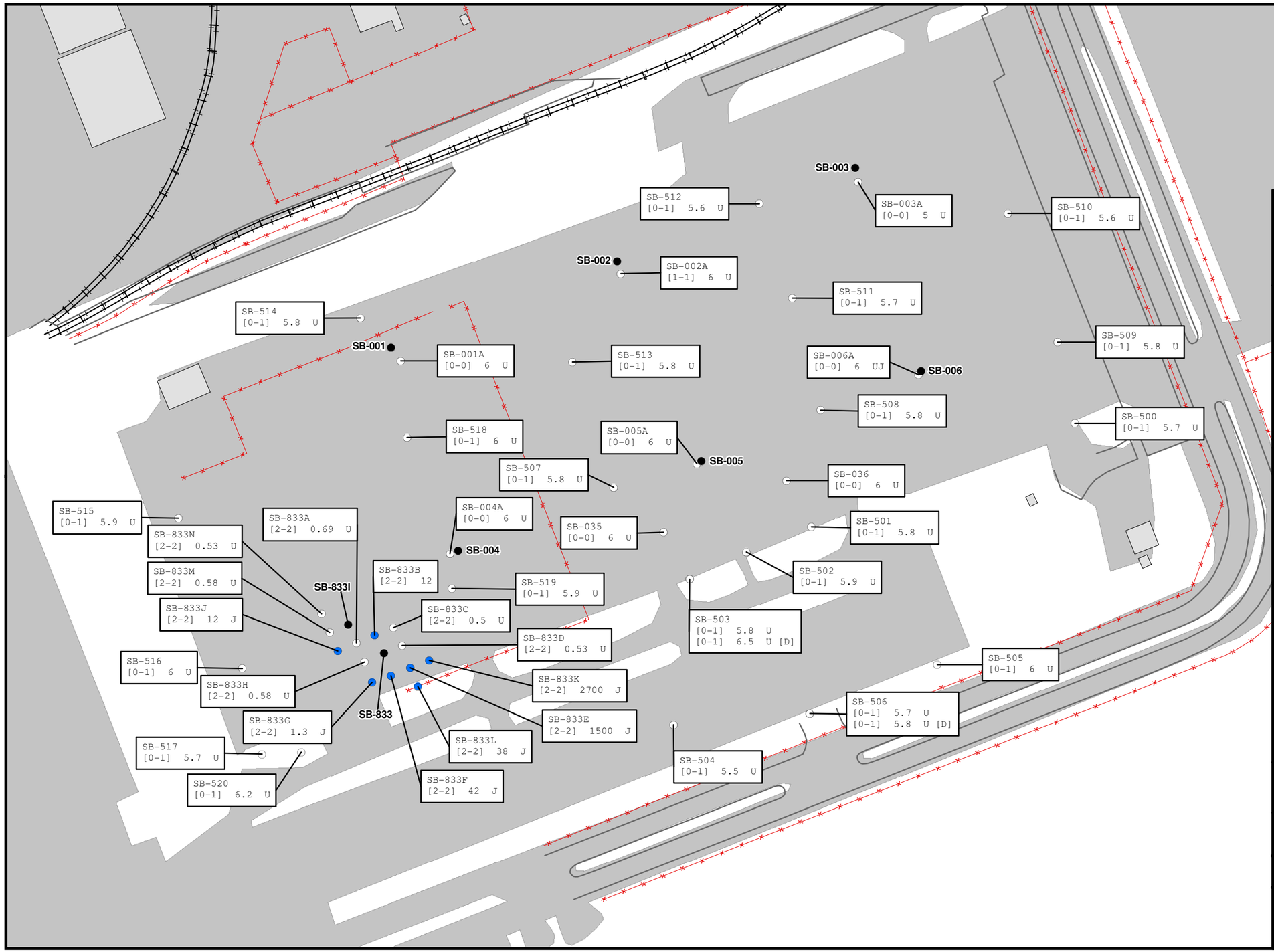


# FIGURE E-1E
# 1,4-DICHLOROBENZENE IN SURFACE SOIL
# BLOCK E

## Legend

**1,4-Dichlorobenzene Concentration (µg/kg)**

- Not Detected
- Not Analyzed
- 27,000 or Less (No Exceedance)
- > 27,000 (MDE residential soil cleanup standard)
- > 31,000 (Residential RGO, $1x10^{-5}$)
- > 120,000 (MDE non-residential soil cleanup standard)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary
- [0-2] Depth Range (ft)
- [D] Duplicate Sample
- U Not Detected
- J Estimated Result
- B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
- MDE Maryland Department of the Environment
- RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED: 03/08/11

CREATED BY: T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKE_SURFACE_14-DCB.MXD 03/08/11 TW

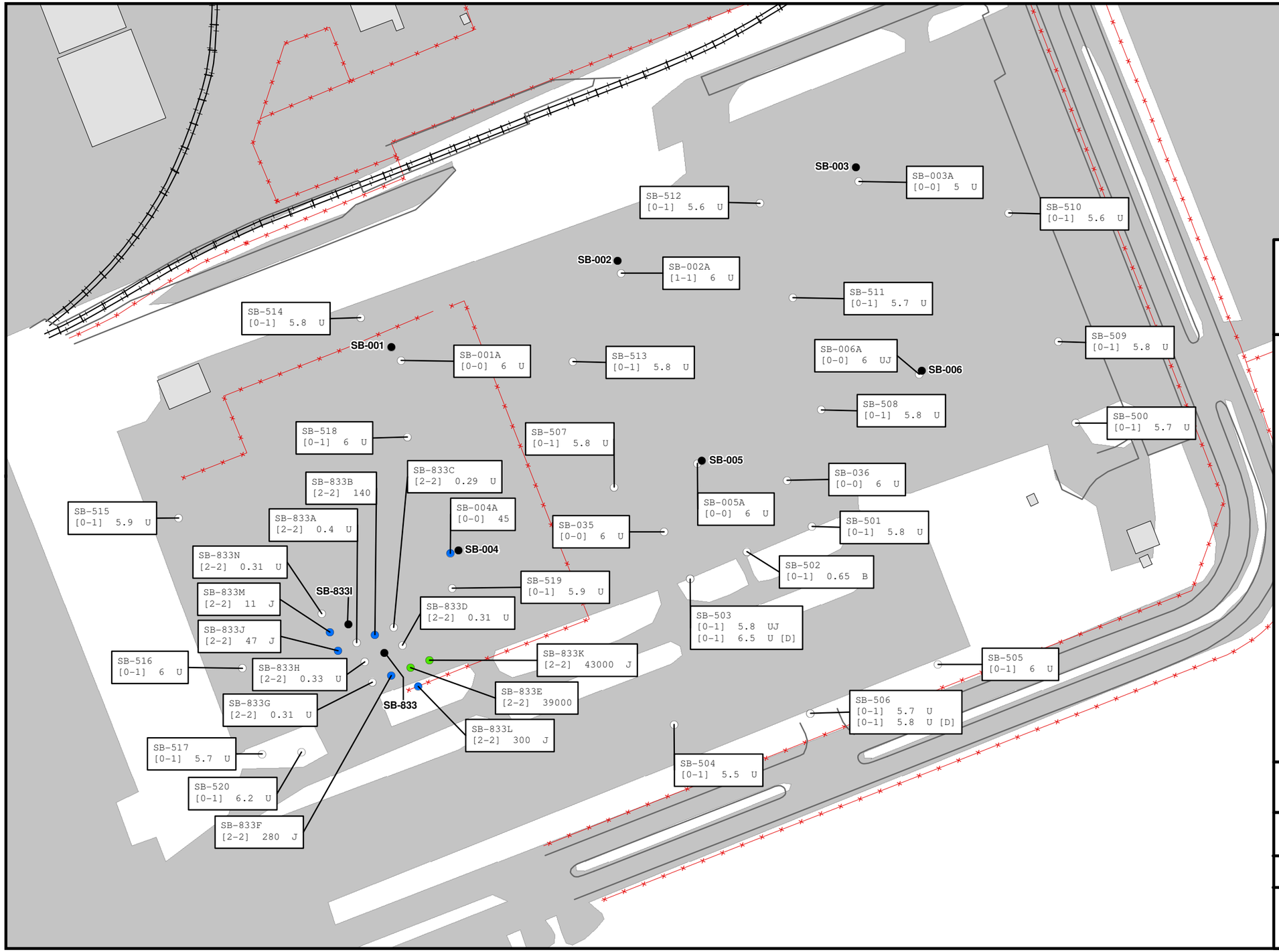


# FIGURE E-1C
# 1,2,3-TRICHLOROBENZENE IN SURFACE SOIL
# BLOCK E

## Legend

**1,2,3-Trichlorobenzene Concentration (µg/kg)**

- Not Detected
- Not Analyzed
- 29,000 or Less (No Exceedance)
- > 29,000 (Residential RGO, HI=0.5)
- > 58,000 (Residential RGO, HI=1)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary
- [0-2] Depth Range (ft)
- [D] Duplicate Sample
- U Not Detected
- J Estimated Result
- B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
- RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/07/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

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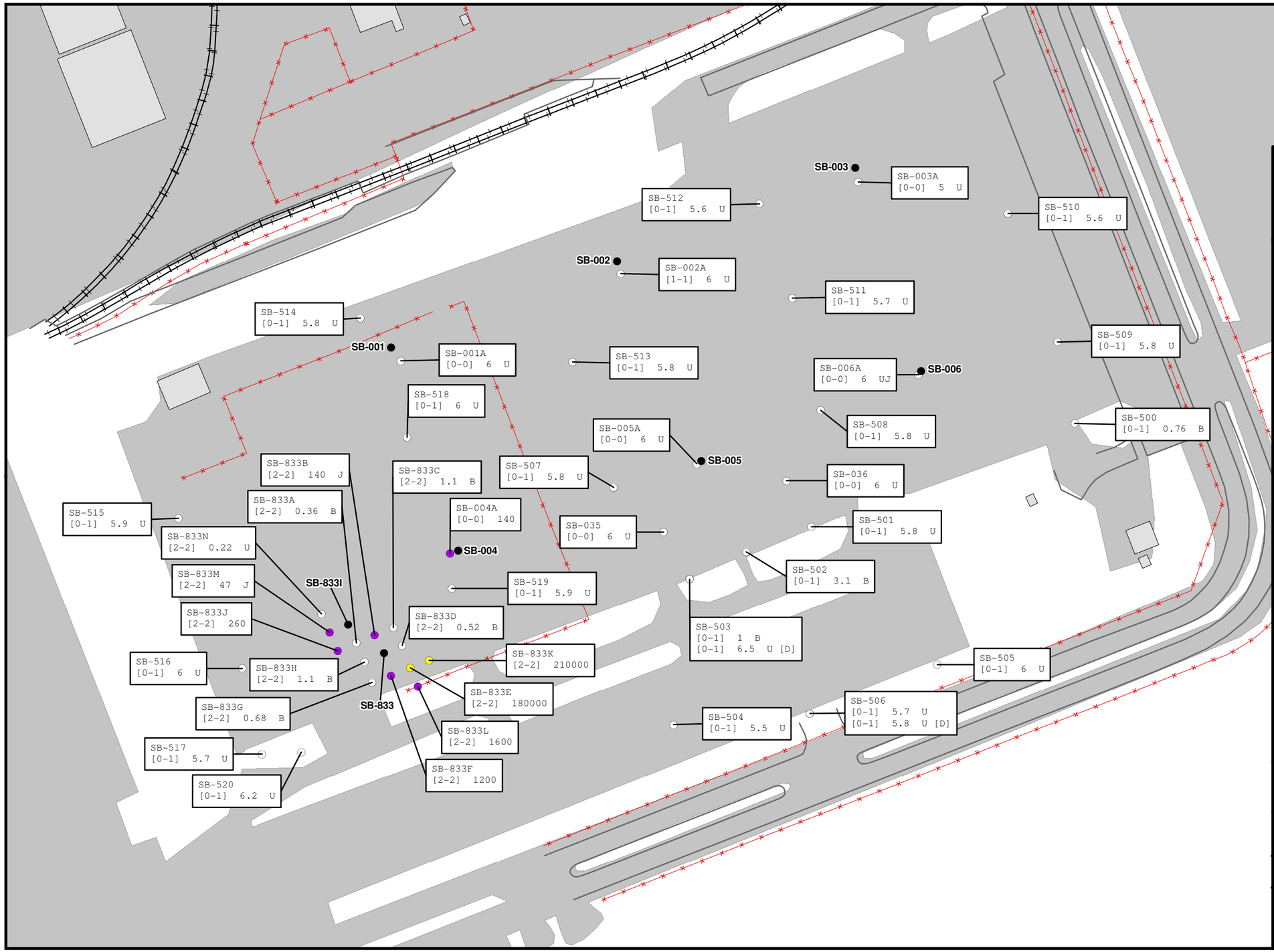


# FIGURE E-1D
# 1,2,4-TRICHLOROBENZENE IN SURFACE SOIL
# BLOCK E

## Legend

**1,2,4-Trichlorobenzene Concentration (µg/kg)**

- Not Detected
- Not Analyzed
- 38,000 or Less (No Exceedance)
- > 38,000 (Residential RGO, HI = 0.5)
- > 78,000 (MDE residential soil cleanup standard)
- > 175,000 (Typical Industrial Worker RGO, HI = 0.5)
- > 400,000 (Commercial Receptor RGO, HI = 0.5)
- > 1,000,000 (MDE non-residential soil cleanup standard)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
J Estimated Result
B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/08/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKE_SURFACE_124TCB.MXD 03/08/11 TW

# FIGURE E-1B

## PCBs IN SURFACE SOIL
## BLOCK E

### Legend

**PCB Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 320 or Less (No Exceedance)
- > 320 (MDE residential soil cleanup standard, 1x10 $^{-6}$ )
- > 1,000 (Residential RGO, HI = 1/TSCA High Occupancy (without further conditions))
- > 1,400 (MDE non-residential soil cleanup standard, 1x10 $^{-6}$ )
- > 3,100 (Commercial Receptor RGO, HI = 1)
- > 3,300 (Construction Worker RGO, HI =1)
- > 10,000 (Industrial RGO, HI = 1/TSCA High Occupancy (with appropriate cap and deed restrictions))

Road
Railroad
Fenceline
Buildings
Impervious Surface
Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

30 0 60 Feet

N

DATE MODIFIED:
03/07/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

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SB-003
SB-003A
[0-0] 1,2,3-TCB 5 U
1,2,4-TCB 5 U
1,4-DCB 5 U
SB-512
[0-1] 1,2,3-TCB 5.6 U
1,2,4-TCB 5.6 U
1,4-DCB 5.6 U
SB-510
[0-1] 1,2,3-TCB 5.6 U
1,2,4-TCB 5.6 U
1,4-DCB 5.6 U
SB-002
SB-002A
[1-1] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U
SB-511
[0-1] 1,2,3-TCB 5.7 U
1,2,4-TCB 5.7 U
1,4-DCB 5.7 U
SB-514
[0-1] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
SB-001
SB-001A
[0-0] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U
SB-513
[0-1] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
SB-509
[0-1] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
SB-006A
[0-0] 1,2,3-TCB 6 UJ
1,2,4-TCB 6 UJ
1,4-DCB 6 UJ
SB-006
SB-508
[0-1] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
SB-500
[0-1] 1,2,3-TCB 5.7 U
1,2,4-TCB 0.76 B
1,4-DCB 5.7 U
SB-518
[0-1] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U
SB-005A
[0-0] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U
SB-005
SB-036
[0-0] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U
SB-507
[0-1] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
SB-833N
[2-2] 1,2,3-TCB 0.31 U
1,2,4-TCB 0.22 U
1,4-DCB 0.53 U
SB-004A
[0-0] 1,2,3-TCB 45
1,2,4-TCB 140
1,4-DCB 6 U
SB-035
[0-0] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U
SB-501
[0-1] 1,2,3-TCB 5.8 U
1,2,4-TCB 5.8 U
1,4-DCB 5.8 U
SB-515
[0-1] 1,2,3-TCB 5.9 U
1,2,4-TCB 5.9 U
1,4-DCB 5.9 U
SB-833M
[2-2] 1,2,3-TCB 11 J
1,2,4-TCB 47 J
1,4-DCB 0.58 U
SB-833A
[2-2] 1,2,3-TCB 0.4 U
1,2,4-TCB 0.36 B
1,4-DCB 0.69 U
SB-833B
[2-2] 1,2,3-TCB 140
1,2,4-TCB 140 J
1,4-DCB 12
SB-004
SB-833C
[2-2] 1,2,3-TCB 0.29 U
1,2,4-TCB 1.1 B
1,4-DCB 0.5 U
SB-502
[0-1] 1,2,3-TCB 0.65 B
1,2,4-TCB 3.1 B
1,4-DCB 5.9 U
SB-833H
[2-2] 1,2,3-TCB 0.33 U
1,2,4-TCB 1.1 B
1,4-DCB 0.58 U
SB-519
[0-1] 1,2,3-TCB 5.9 U
1,2,4-TCB 5.9 U
1,4-DCB 5.9 U
SB-833J
[2-2] 1,2,3-TCB 47 J
1,2,4-TCB 260
1,4-DCB 12 J
SB-833D
[2-2] 1,2,3-TCB 0.31 U
1,2,4-TCB 0.52 B
1,4-DCB 0.53 U
SB-503
[0-1] 1,2,3-TCB 5.8 UJ
1,2,4-TCB 1 B
1,4-DCB 5.8 U
[0-1] 1,2,3-TCB 6.5 U [D]
1,2,4-TCB 6.5 U [D]
1,4-DCB 6.5 U [D]
SB-833I
SB-505
[0-1] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U
SB-833F
[2-2] 1,2,3-TCB 280 J
1,2,4-TCB 1200
1,4-DCB 42 J
SB-833
SB-833K
[2-2] 1,2,3-TCB 43000 J
1,2,4-TCB 210000
1,4-DCB 2700 J
SB-516
[0-1] 1,2,3-TCB 6 U
1,2,4-TCB 6 U
1,4-DCB 6 U
SB-833G
[2-2] 1,2,3-TCB 0.31 U
1,2,4-TCB 0.68 B
1,4-DCB 1.3 J
SB-506
[0-1] 1,2,3-TCB 5.7 U
1,2,4-TCB 5.7 U
1,4-DCB 5.7 U
[0-1] 1,2,3-TCB 5.8 U [D]
1,2,4-TCB 5.8 U [D]
1,4-DCB 5.8 U [D]
SB-504
[0-1] 1,2,3-TCB 5.5 U
1,2,4-TCB 5.5 U
1,4-DCB 5.5 U
SB-833E
[2-2] 1,2,3-TCB 39000
1,2,4-TCB 180000
1,4-DCB 1500 J
SB-517
[0-1] 1,2,3-TCB 5.7 U
1,2,4-TCB 5.7 U
1,4-DCB 5.7 U
SB-520
[0-1] 1,2,3-TCB 6.2 U
1,2,4-TCB 6.2 U
1,4-DCB 6.2 U
SB-833L
[2-2] 1,2,3-TCB 300 J
1,2,4-TCB 1600
1,4-DCB 38 J

# FIGURE E-1F

## SELECT VOCs IN SURFACE SOIL BLOCK E

### Legend

**Select VOC Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- Location with Detected VOC Concentration
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
J Estimated Result
B Positive Result Considered an Artifact of Blank Contamination and Not Considered Present
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

25 0 50 Feet

N

DATE MODIFIED:
03/08/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKE_SURFACE_VOCs.MXD 03/08/11 TW

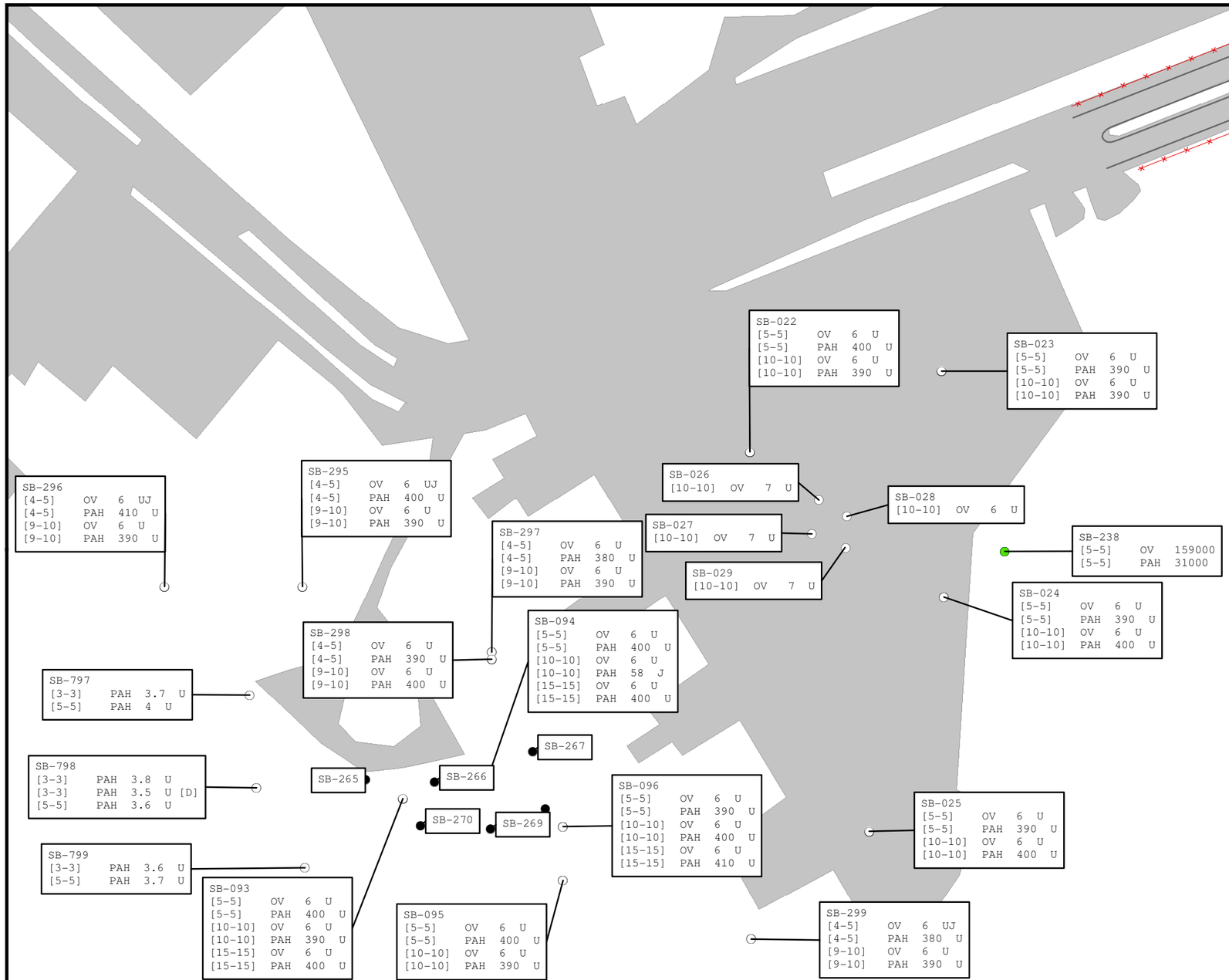


# FIGURE F-2B

## NAPHTHALENE IN SUBSURFACE SOIL
## BLOCK F

### Legend

**Naphthalene Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 46,000 or Less (No Exceedance)
- > 46,000 (Residential RGO, 1x10 $^{-5}$ )
- > 160,000 (MDE residential soil cleanup standard)
- > 2,000,000 (MDE non-residential soil cleanup standard)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary

[0-2] Depth Range (ft)
[D] Duplicate Sample
U Not Detected
J Estimated Result
MDE Maryland Department of the Environment
RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/09/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKF_SUBSURFACE_NAPHTHALENE.MXD 03/09/11 TW

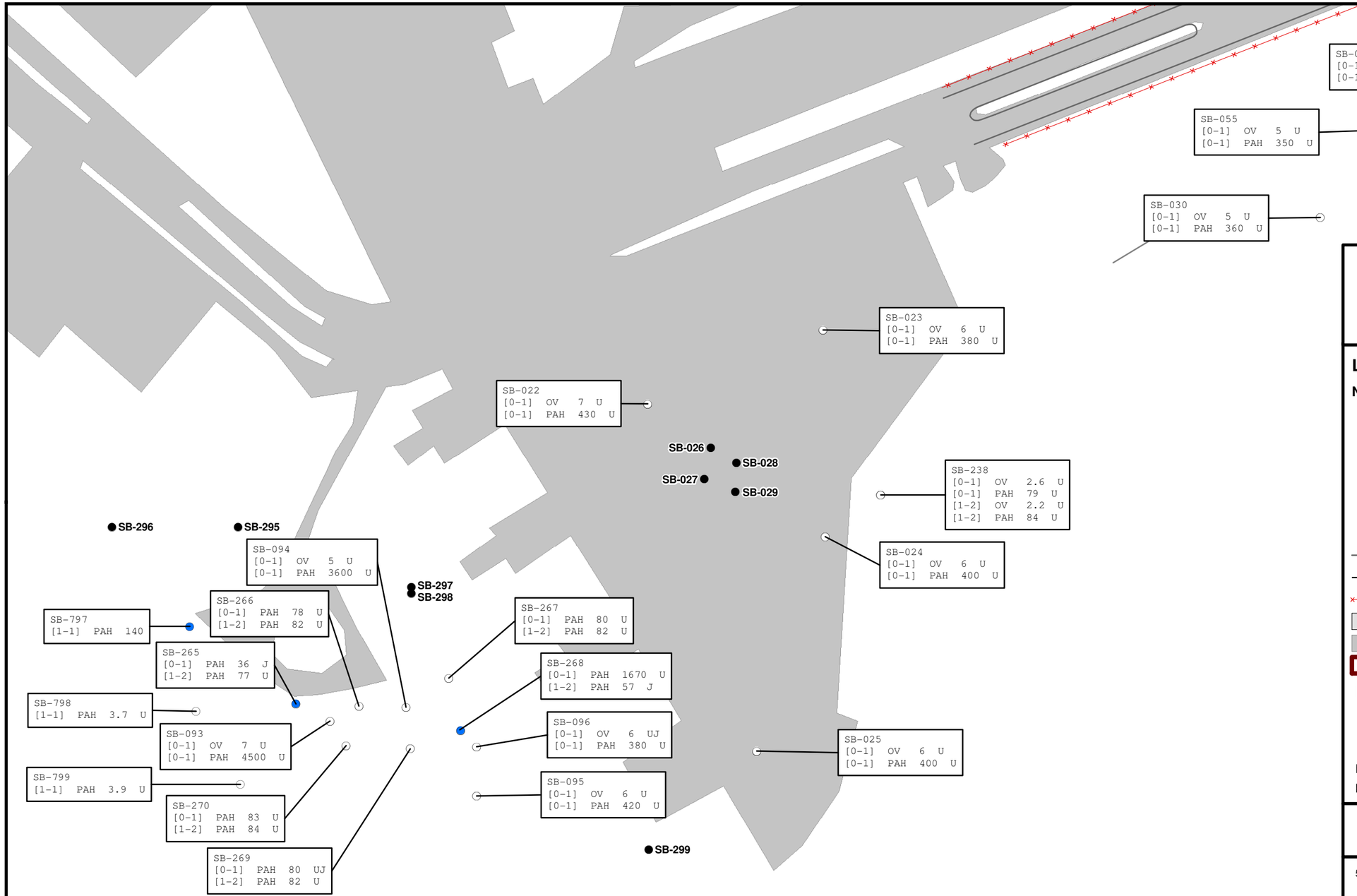


# FIGURE F-1B

## NAPHTHALENE IN SURFACE SOIL
## BLOCK F

### Legend

**Naphthalene Concentrations (µg/kg)**

- Not Detected
- Not Analyzed
- 46,000 or Less (No Exceedance)
- > 46,000 (Residential RGO, 1x10 $^{-5}$ )
- > 160,000 (MDE residential soil cleanup standard)
- > 2,000,000 (MDE non-residential soil cleanup standard)
- Road
- Railroad
- Fenceline
- Buildings
- Impervious Surface
- Installation Boundary
- [0-2] Depth Range (ft)
- [D] Duplicate Sample
- U Not Detected
- J Estimated Result
- MDE Maryland Department of the Environment
- RGO Remedial Goal Option

***Lockheed Martin Middle River Complex***
***Middle River, Maryland***

50 0 100 Feet

N

DATE MODIFIED:
03/09/11

CREATED BY:
T. WHEATON

Tetra Tech, Inc.

PGH P:\GIS\LOCKHEED_MSA\MAPDOCS\MXD\BLOCKF_SURFACE_NAPHTHALENE.MXD 03/09/11 TW

# Attachment C

TABLE 3.1.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current
Medium: Surface Soil
Exposure Medium: Surface Soil

| Exposure Point | Chemical of Potential Concern | Units | Arithmetic Mean | 95% UCL (Distribution) | Maximum Concentration (Qualifier) | Exposure Point Concentration | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Value | Units | Statistic | Rationale |
| Block H | Benzo(a)pyrene Equivalents | mg/kg | 0.068 | 0.120 (AL) | 0.616 | 0.120 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 5.0.00 |
| | Antimony | mg/kg | 0.455 | 0.712 (N) | 1 | 0.712 | mg/kg | 95% KM (t) UCL | ProUCL 5.0.00 |
| | Cadmium | mg/kg | 0.122 | 0.187 (N) | 0.5 | 0.187 | mg/kg | 95% KM (t) UCL | ProUCL 5.0.00 |
| | Cobalt | mg/kg | 5.96 | 8.77 (AN) | 19.7 | 8.77 | mg/kg | 95% Student's-t UCL | ProUCL 5.0.00 |
| | Mercury | mg/kg | 0.071 | 0.124 (NP) | 1.14 L | 0.124 | mg/kg | 95% KM (BCA) UCL | ProUCL 5.0.00 |
| | Molybdenum | mg/kg | 0.331 | 0.429 (N) | 0.55 K | 0.429 | mg/kg | 95% KM (t) UCL | ProUCL 5.0.00 |
| | Nickel | mg/kg | 8.11 | 10.3 (N) | 15 | 10.3 | mg/kg | 95% Student's-t UCL | ProUCL 5.0.00 |
| | Vanadium | mg/kg | 20.6 | 26.3 (AG) | 37.9 | 26.3 | mg/kg | 95% Adjusted Gamma UCL | ProUCL 5.0.00 |
| | Hexavalent Chromium | mg/kg | 0.610 | 1.12 (AL) | 1.535 | 1.12 | mg/kg | 95% KM (Chebyshev) UCL | ProUCL 5.0.00 |

AN = Approximate Normal
AL = Approximate Lognormal
AG = Approximate Gamma
N = Normal
NP = Non-parametric

TABLE 4.1.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - INDUSTRIAL WORKERS - SOIL

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Medium: Surface Soil/Subsurface Soil
Exposure Medium: Surface/Subsurface Soil

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Ingestion | Industrial Workers | Adult | Block H | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Intake (mg/kg/day) = |
| | | | | IR-S | Ingestion Rate | 50 | mg/day | USEPA, 2014 | |
| | | | | RBA | Relative Bioavailability | Chemical Specific | unitless | USEPA, 1989 | |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | CS x IRS x CF3 x FI x EF x ED |
| | | | | FI | Fraction Ingested | 1 | unitless | USEPA, 2014 | BW x AT |
| | | | | EF | Exposure Frequency | 250 | days/year | USEPA, 2014 | |
| | | | | ED | Exposure Duration | 25 | years | USEPA, 2014 | |
| | | | | BW | Body Weight | 80 | kg | USEPA, 2014 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 2014 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 9125 | days | USEPA, 2014 | |
| Dermal | Industrial Workers | Adult | Block H | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002 | Dermally Absorbed Dose (mg/kg/day) = |
| | | | | CF3 | Conversion Factor 3 | 0.000001 | kg/mg | -- | |
| | | | | SA | Skin Surface Available for Contact | 3,527 | cm2 | USEPA, 2014 | CS x CF3 x SA x SSAF x DABS x EV x EF x ED |
| | | | | SSAF | Soil to Skin Adherence Factor | 0.12 | mg/cm2/event | USEPA, 2014 | BW x AT |
| | | | | DABS | Absorption Factor | Chemical Specific | unitless | USEPA, 2004 | |
| | | | | EV | Events Frequency | 1 | events/day | USEPA, 2014 | |
| | | | | EF | Exposure Frequency | 250 | days/year | USEPA, 2014 | |
| | | | | ED | Exposure Duration | 25 | years | USEPA, 2014 | |
| | | | | BW | Body Weight | 80 | kg | USEPA, 2014 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 2014 | |
| | | | | AT-N | Averaging Time (Non-Cancer) | 9125 | days | USEPA, 2014 | |

Sources:

USEPA, 1989: Risk Assessment Guidance for Superfund. Vol 1: Human Health Evaluation Manual, Part A.

USEPA, 2002:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. EPA/540/R/99/005.

USEPA, 2014: Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors. OSWER 9200.1-120.

**Unit Intake Calculations**

Incidental Ingestion Intake = (IR-S x CF3 x FI x EF x ED)/(BW x AT)

Dermal Intake = (CF3 x SA x SSAF x EF x ED)/(BW x AT)

Cancer Ingestion Intake = 1.53E-07 Cancer Dermal Intake = 1.29E-06

Noncancer Ingestion Intake = 4.28E-07 Noncancer Dermal Intake = 3.62E-06

Cancer risk from ingestion = Soil concentration x Cancer Ingestion Intake x Oral Cancer Slope Factor

Cancer risk from dermal contact = Soil concentration x Cancer Dermal Intake x Absorption Factor x Dermal Cancer Slope Factor

Hazard Index from ingestion = Soil concentration x Noncancer Ingestion Intake / Oral Reference Dose

Hazard Index from dermal contact = Soil concentration x Noncancer Dermal Intake x Absorption Factor / Dermal Reference Dose

TABLE 4.2.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE - INDUSTRIAL WORKERS - SOIL TO AIR

LOCKHEED MARTIN, MARTIN MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Future
Medium: Surface/Subsurface Soil
Exposure Medium: Air

| Exposure Route | Receptor Population | Receptor Age | Exposure Point | Parameter Code | Parameter Definition | Value | Units | Rationale/ Reference | Intake Equation/ Model Name |
|---|---|---|---|---|---|---|---|---|---|
| Inhalation | Industrial Workers | Adult | Block H | CA | Chemical concentration in air | Calculated | mg/m3 | USEPA, 2002a | Exposure Concentration ($mg/m^3$) = |
| | | | | CS | Chemical concentration in soil | Max or 95% UCL | mg/kg | USEPA, 2002b | |
| | | | | ET | Exposure Time | 8 | hours/day | (1) | $\frac{CA \times ET \times EF \times ED}{AT \times 24\ hours/day}$ |
| | | | | EF | Exposure Frequency | 250 | days/year | USEPA, 2014 | |
| | | | | ED | Exposure Duration | 25 | years | USEPA, 2014 | |
| | | | | AT-C | Averaging Time (Cancer) | 25,550 | days | USEPA, 2014 | $CA = (1/PEF + 1/VF) \times Cs$ |
| | | | | AT-N | Averaging Time (Non-Cancer) | 9125 | days | USEPA, 2014 | |
| | | | | PEF | Particulate Emission Factor | 3.23E+09 | m3/kg | USEPA, 2015 | |
| | | | | VF | Volatilization Factor | Chemical-specific | m3/kg | USEPA, 2002a | |
| | | | | Q/C | Inverse of mean concentration at center of source | 87.36898 | g/m2-s per kg/m3 | USEPA, 2015 | |
| | | | | Ut | Equivalent threshold of wind velocity at 7m. | 11.32 | m/sec | USEPA, 2015 | |
| | | | | Um | Mean annual wind speed | 4.29 | m/sec | USEPA, 2015 | |
| | | | | V | Fraction of vegetative cover | 0.5 | unitless | USEPA, 2015 | |
| | | | | F(x) | Function dependent of Um/Ut | 0.0993 | unitless | USEPA, 2015 | |

Notes:

1 - Length of typical work day.

Sources:

USEPA, 2002a: Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24.

USEPA, 2002b:Calculating Upper Confidence Limits for Exposure Point Concentrations at Hazardous Waste Sites. OSWER 9285.6-10, December.

USEPA, 2014: Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors. OSWER 9200.1-120.

USEPA, 2015: Regional Screening Level Internet site at http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/index.htm. Site-specific values for Philadelphia, PA.

**Unit Intake Calculations**

Unit Exposure Concentration = (ET x EF x ED)/(AT x 24 hours/day)

Cancer Inhalation Intake = 8.15E-02 Noncancer Inhalation Intake = 2.28E-01

Cancer risk from inhalation = Air concentration x Cancer Inhalation Intake x Inhalation Cancer Slope Factor

Hazard Index from inhalation = Air concentration x Noncancer Inhalation Intake / Inhalation Reference Dose

TABLE 5.1
NON-CANCER TOXICITY DATA -- ORAL/DERMAL
BLOCK H
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

| Chemical of Potential Concern | Chronic/ Subchronic | Oral RfD | | Oral Absorption Efficiency for Dermal[1] | Absorbed RfD for Dermal[2] | | Primary Target Organ(s) | Combined Uncertainty/Modifying Factors | RfD:Target Organ(s) | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Value | Units | | Value | Units | | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | | |
| Benzo(a)pyrene | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Metals** | | | | | | | | | | |
| Antimony | Chronic | 4.0E-04 | mg/kg/day | 0.15 | 6.0E-05 | mg/kg/day | Blood | 1000/1 | IRIS | 10/30/2015 |
| Cadmium[3] | Chronic | 1.0E-03 | mg/kg/day | 0.03 | 2.5E-05 | mg/kg/day | Kidney | 10/1 | IRIS | 10/30/2015 |
| Cobalt | Chronic | 3.0E-04 | mg/kg/day | 1 | 3.0E-04 | mg/kg/day | Blood | NA | PPRTV | 8/25/2008 |
| Mercury[4] | Chronic | 3.0E-04 | mg/kg/day | 0.07 | 2.1E-05 | mg/kg/day | Autoimmune | 1000/1 | IRIS | 10/30/2015 |
| Molybdenum | Chronic | 5.0E-03 | mg/kg/day | 1 | 5.0E-03 | mg/kg/day | Gout | 30/1 | IRIS | 10/30/2015 |
| Nickel | Chronic | 2.0E-02 | mg/kg/day | 0.04 | 8.0E-04 | mg/kg/day | Body Weight | 300/1 | IRIS | 10/30/2015 |
| Vanadium | Chronic | 5.0E-03 | mg/kg/day | 1 | 5.0E-03 | mg/kg/day | Kidney | 300 | RSL | 5/2014 |
| **Miscellaneous Parameters** | | | | | | | | | | |
| Hexavalent Chromium | Chronic | 3.0E-03 | mg/kg/day | 0.025 | 7.5E-05 | mg/kg/day | None Reported | 300/3 | IRIS | 10/30/2015 |

Notes:
1 - U.S. EPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
2 - Adjusted dermal RfD = Oral RfD x Oral Absorption Efficiency for Dermal.
3 - Values are for cadmium - diet.
4 - Values are for mercuric chloride.

Definitions:
IRIS = Integrated Risk Information System.
NA = Not available.
RSL = USEPA Regional Screening Levels for Chemical Contaminants at Superfund Sites, June 2015.
PPRTV = Provisional Peer Reviewed Toxicity Value.

TABLE 5.2
NON-CANCER TOXICITY DATA -- INHALATION
BLOCK H
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

| Chemical of Potential Concern | Chronic/ Subchronic | Inhalation RfC | | Extrapolated RfD[1] | | Primary Target Organ(s) | Combined Uncertainty/Modifying Factors | RfC : Target Organ(s) | |
|---|---|---|---|---|---|---|---|---|---|
| | | Value | Units | Value | Units | | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | | |
| Benzo(a)pyrene | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Metals** | | | | | | | | | |
| Antimony | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Cadmium | Chronic | 1.0E-05 | mg/m3 | 2.9E-06 | (mg/kg/day) | Kidney | NA | ATSDR | 9/2008 |
| Cobalt | Chronic | 6.0E-06 | $mg/m^3$ | 1.7E-06 | (mg/kg/day) | Lungs | NA | PPRTV | 8/25/2008 |
| Mercury[2] | Chronic | 3.0E-05 | $mg/m^3$ | 8.6E-06 | (mg/kg/day) | Autoimmune | NA | Cal EPA | 11/2010 |
| Molybdenum | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Nickel | Chronic | 9.0E-05 | $mg/m^3$ | 2.6E-05 | (mg/kg/day) | Body Weight | NA | ASTDR | 9/2005 |
| Vanadium | Chronic | 1.0E-04 | mg/m3 | 2.9E-05 | (mg/kg/day) | Kidney | Respiratory | ATSDR | 9/2012 |
| **Miscellaneous Parameters** | | | | | | | | | |
| Hexavalent Chromium | Chronic | 1.0E-04 | $mg/m^3$ | 2.9E-05 | (mg/kg/day) | Lungs | 300/1 | IRIS | 10/30/2015 |

Notes:
1 - Extrapolated RfD = RfC *$20m^3$/day / 70 kg
2 - Value is for mercuric chloride.
Definitions:
ATSDR = Agency for Toxic Substances and Disease Registry.
Cal EPA = California Environmental Protection Agency.
IRIS = Integrated Risk Information System.
NA = Not available.

TABLE 6.1
CANCER TOXICITY DATA -- ORAL/DERMAL
BLOCK H
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

| Chemical of Potential Concern | Oral Cancer Slope Factor | | Oral Absorption Efficiency for Dermal[1] | Absorbed Cancer Slope Factor for Dermal[2] | | Weight of Evidence/ Cancer Guideline Description | Oral CSF | |
|---|---|---|---|---|---|---|---|---|
| | Value | Units | | Value | Units | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | | |
| Benzo(a)pyrene[3] | 7.3E+00 | $(mg/kg/day)^{-1}$ | 1 | 7.3E+00 | $(mg/kg/day)^{-1}$ | B2 / Probable human carcinogen | IRIS | 10/30/2015 |
| **Metals** | | | | | | | | |
| Antimony | NA | NA | NA | NA | NA | NA | NA | NA |
| Cadmium | NA | NA | NA | NA | NA | B1 / Probable human carcinogen | IRIS | 10/30/2015 |
| Cobalt | NA | NA | NA | NA | NA | NA | NA | NA |
| Mercury | NA | NA | NA | NA | NA | C / Possible human carcinogen | IRIS | 10/30/2015 |
| Molybdenum | NA | NA | NA | NA | NA | NA | NA | NA |
| Nickel | NA | NA | NA | NA | NA | NA | NA | NA |
| Vanadium | NA | NA | NA | NA | NA | NA | NA | NA |
| **Miscellaneous Parameters** | | | | | | | | |
| Hexavalent Chromium[3] | 5.0E-01 | $(mg/kg/day)^{-1}$ | 0.025 | 2.0E+01 | $(mg/kg/day)^{-1}$ | A / Known human carcinogen | NJ | 4/8/2009 |

Notes:
1 - USEPA, 2004: Risk Assessment Guidance for Superfund (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. EPA/540/R/99/005.
2 - Adjusted cancer slope factor for dermal = Oral cancer slope factor / Oral Absorption Efficiency for Dermal.
3 - Several PAHs and hexavalent chromium are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).
IRIS = Integrated Risk Information System.
NA = Not available.
NJ = New Jersey.
PPRTV = Provisional Peer Reviwed Toxicity Value.

TABLE 6.2
CANCER TOXICITY DATA -- INHALATION
BLOCK H
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX
MIDDLE RIVER, MARYLAND

| Chemical of Potential Concern | Unit Risk | | Inhalation Cancer Slope Factor[1] | | Weight of Evidence/ Cancer Guideline Description | Unit Risk : Inhalation CSF | |
|---|---|---|---|---|---|---|---|
| | Value | Units | Value | Units | | Source(s) | Date(s) (MM/DD/YYYY) |
| **Polycyclic Aromatic Hydrocarbons** | | | | | | | |
| Benzo(a)pyrene[2] | 1.1E-03 | $(ug/m^3)^{-1}$ | 3.9E+00 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 9/2009 |
| **Metals** | | | | | | | |
| Antimony | NA | NA | NA | NA | NA | NA | NA |
| Cadmium | 1.8E-03 | $(ug/m^3)^{-1}$ | 6.3E+00 | $(mg/kg/day)^{-1}$ | B1 / Probable human carcinogen | IRIS | 10/30/2015 |
| Cobalt | 9.0E-03 | $(ug/m^3)^{-1}$ | 3.2E+01 | $(mg/kg/day)^{-1}$ | NA | PPRTV | 8/25/2008 |
| Mercury | NA | NA | NA | NA | C / Possible human carcinogen | IRIS | 10/30/2015 |
| Molybdenum | NA | NA | NA | NA | NA | NA | NA |
| Nickel | 2.6E-04 | $(ug/m^3)^{-1}$ | 9.1E-01 | $(mg/kg/day)^{-1}$ | NA | Cal EPA | 9/2009 |
| Vanadium | NA | NA | NA | NA | NA | NA | NA |
| **Miscellaneous Parameters** | | | | | | | |
| Hexavalent Chromium[2] | 8.4E-02 | $(ug/m^3)^{-1}$ | 2.9E+02 | $(mg/kg/day)^{-1}$ | A / Known human carcinogen | IRIS | 10/30/2015 |

Notes:

1 - Inhalation CSF = Unit Risk * 70 kg / $20m^3$/day.

2 - Several PAHs and hexavalent chromium are considered to act via the mutagenic mode of action. These chemicals are evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

Definitions:

Cal EPA = California Environmental Protection Agency.

IRIS = Integrated Risk Information System.

NA = Not available.

PPRTV = Provisional Peer Reviewed Toxicity Value.

TABLE 7.1.RME
CALCULATION OF CHEMICAL CANCER RISKS AND NON-CANCER HAZARDS
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Receptor Population: Industrial Workers
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Exposure Route | Chemical of Potential Concern | EPC | | Cancer Risk Calculations | | | | | Non-Cancer Hazard Calculations | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Value | Units | Intake/Exposure Concentration | | CSF/Unit Risk | | Cancer Risk | Intake/Exposure Concentration | | RfD/RfC | | Hazard Quotient |
| | | | | | | | Value | Units | Value | Units | | Value | Units | Value | Units | |
| Surface Soil | Surface Soil | Block H | Ingestion | Benzo(a)pyrene Equivalents | 0.12 | mg/kg | 1.8E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)-1 | 1.3E-07 | 5.1E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | Antimony | 0.712 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 3.0E-07 | (mg/kg/day) | 4.0E-04 | (mg/kg/day) | 0.0008 |
| | | | | Cadmium | 0.187 | mg/kg | 2.9E-08 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 8.0E-08 | (mg/kg/day) | 1.0E-03 | (mg/kg/day) | 0.00008 |
| | | | | Cobalt | 8.77 | mg/kg | 1.3E-06 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 3.8E-06 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.01 |
| | | | | Mercury | 0.124 | mg/kg | 1.9E-08 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 5.3E-08 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.0002 |
| | | | | Molybdenum | 0.429 | mg/kg | 6.6E-08 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 1.8E-07 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.00004 |
| | | | | Nickel | 10.3 | mg/kg | 1.6E-06 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 4.4E-06 | (mg/kg/day) | 2.0E-02 | (mg/kg/day) | 0.0002 |
| | | | | Vanadium | 26.3 | mg/kg | 4.0E-06 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 1.1E-05 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.002 |
| | | | | Hexavalent Chromium | 1.12 | mg/kg | 1.7E-07 | (mg/kg/day) | 5.0E-01 | (mg/kg/day)-1 | 8.6E-08 | 4.8E-07 | (mg/kg/day) | 3.0E-03 | (mg/kg/day) | 0.0002 |
| | | | Exp. Route Total | | | | | | | | 2.2E-07 | | | | | 0.02 |
| | | | Dermal | Benzo(a)pyrene Equivalents | 0.12 | mg/kg | 2.0E-08 | (mg/kg/day) | 7.3E+00 | (mg/kg/day)-1 | 1.5E-07 | 5.7E-08 | (mg/kg/day) | NA | (mg/kg/day) | -- |
| | | | | Antimony | 0.712 | mg/kg | 9.2E-09 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 2.6E-08 | (mg/kg/day) | 6.0E-05 | (mg/kg/day) | 0.0004 |
| | | | | Cadmium | 0.187 | mg/kg | 2.4E-10 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 6.8E-10 | (mg/kg/day) | 2.5E-05 | (mg/kg/day) | 0.00003 |
| | | | | Cobalt | 8.77 | mg/kg | 1.1E-07 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 3.2E-07 | (mg/kg/day) | 3.0E-04 | (mg/kg/day) | 0.001 |
| | | | | Mercury | 0.124 | mg/kg | 1.6E-09 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 4.5E-09 | (mg/kg/day) | 2.1E-05 | (mg/kg/day) | 0.0002 |
| | | | | Molybdenum | 0.429 | mg/kg | 5.6E-09 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 1.6E-08 | (mg/kg/day) | 5.0E-03 | (mg/kg/day) | 0.000003 |
| | | | | Nickel | 10.3 | mg/kg | 1.3E-07 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 3.7E-07 | (mg/kg/day) | 8.0E-04 | (mg/kg/day) | 0.0005 |
| | | | | Vanadium | 26.3 | mg/kg | 3.4E-07 | (mg/kg/day) | NA | (mg/kg/day)-1 | - - | 9.5E-07 | (mg/kg/day) | 1.3E-04 | (mg/kg/day) | 0.007 |
| | | | | Hexavalent Chromium | 1.12 | mg/kg | 1.4E-08 | (mg/kg/day) | 2.0E+01 | (mg/kg/day)-1 | 2.9E-07 | 4.1E-08 | (mg/kg/day) | 7.5E-05 | (mg/kg/day) | 0.0005 |
| | | | Exp. Route Total | | | | | | | | 4.4E-07 | | | | | 0.01 |
| | | Exposure Point Total | | | | | | | | | 6.6E-07 | | | | | 0.03 |
| | Exposure Medium Total | | | | | | | | | | 6.6E-07 | | | | | 0.03 |
| | Air | Block H | Inhalation | Benzo(a)pyrene Equivalents | 3.6E-11 | mg/m3 | 3.0E-12 | (mg/m3) | 1.1E-03 | (ug/m3)-1 | 3.3E-12 | 8.3E-12 | (mg/m3) | NA | (mg/m3) | -- |
| | | | | Antimony | 2.2E-10 | mg/m3 | 1.8E-11 | (mg/m3) | NA | (ug/m3)-1 | - - | 4.9E-11 | (mg/m3) | NA | (mg/m3) | -- |
| | | | | Cadmium | 5.7E-11 | mg/m3 | 4.6E-12 | (mg/m3) | 1.8E-03 | (ug/m3)-1 | 8.3E-12 | 1.3E-11 | (mg/m3) | 1.0E-05 | (mg/m3) | 0.000001 |
| | | | | Cobalt | 2.7E-09 | mg/m3 | 2.2E-10 | (mg/m3) | 9.0E-03 | (ug/m3)-1 | 2.0E-09 | 6.1E-10 | (mg/m3) | 6.0E-06 | (mg/m3) | 0.0001 |
| | | | | Mercury | 3.8E-11 | mg/m3 | 3.1E-12 | (mg/m3) | NA | (ug/m3)-1 | - - | 8.6E-12 | (mg/m3) | 3.0E-04 | (mg/m3) | 2.9E-8 |
| | | | | Molybdenum | 1.3E-10 | mg/m3 | 1.1E-11 | (mg/m3) | NA | (ug/m3)-1 | - - | 3.0E-11 | (mg/m3) | NA | (mg/m3) | -- |
| | | | | Nickel | 3.1E-09 | mg/m3 | 2.6E-10 | (mg/m3) | 2.6E-04 | (ug/m3)-1 | 6.6E-11 | 7.1E-10 | (mg/m3) | 9.0E-05 | (mg/m3) | 0.000008 |
| | | | | Vanadium | 8.0E-09 | mg/m3 | 6.5E-10 | (mg/m3) | NA | (ug/m3)-1 | - - | 1.8E-09 | (mg/m3) | 1.0E-04 | (mg/m3) | 0.00002 |
| | | | | Hexavalent Chromium | 3.4E-10 | mg/m3 | 2.8E-11 | (mg/m3) | 8.4E-02 | (ug/m3)-1 | 2.3E-09 | 7.8E-11 | (mg/m3) | 1.0E-04 | (mg/m3) | 7.8E-7 |
| | | | Exp. Route Total | | | | | | | | 4.4E-09 | | | | | 0.0001 |
| | | Exposure Point Total | | | | | | | | | 4.4E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | | | | 4.4E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | | | | 6.6E-07 | | | | | 0.03 |
| | | | | | | | | | | Total of Receptor Risks Across All Media | 6.6E-07 | | | Total of Receptor Hazards Across All Media | | 0.03 |

Notes:

1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

TABLE 9.1.RME
SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs
REASONABLE MAXIMUM EXPOSURES
LOCKHEED MARTIN, MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

Scenario Timeframe: Current/Future
Receptor Population: Industrial Workers
Receptor Age: Adult

| Medium | Exposure Medium | Exposure Point | Chemical of Potential Concern | Carcinogenic Risk | | | | | Non-Carcinogenic Hazard Quotient | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ingestion | Inhalation | Dermal | External (Radiation) | Exposure Routes Total | Primary Target Organ(s) | Ingestion | Inhalation | Dermal | Exposure Routes Total |
| Surface Soil | Surface Soil | Block H | Benzo(a)pyrene Equivalents | 1E-07 | -- | 1E-07 | -- | 3E-07 | NA | -- | -- | -- | -- |
| | | | Antimony | - - | -- | - - | -- | - - | Hematologic | 0.0008 | -- | 0.0004 | 0.001 |
| | | | Cadmium | - - | -- | - - | -- | - - | Urinary | 0.00008 | -- | 0.00003 | 0.0001 |
| | | | Cobalt | - - | -- | - - | -- | - - | Thyroid | 0.01 | -- | 0.001 | 0.01 |
| | | | Mercury | - - | -- | - - | -- | - - | Immune, Urinary | 0.0002 | -- | 0.0002 | 0.0004 |
| | | | Molybdenum | - - | -- | - - | -- | - - | Urinary | 0.00004 | -- | 0.000003 | 0.00004 |
| | | | Nickel | - - | -- | - - | -- | - - | Body Weight | 0.0002 | -- | 0.0005 | 0.0007 |
| | | | Vanadium | - - | -- | - - | -- | - - | Kidney | 0.002 | -- | 0.007 | 0.010 |
| | | | Hexavalent Chromium | 9E-08 | -- | 3E-07 | -- | 4E-07 | None Specified | 0.0002 | -- | 0.0005 | 0.0007 |
| | | | Chemical Total | 2E-07 | -- | 4E-07 | -- | 7E-07 | | 0.02 | -- | 0.01 | 0.03 |
| | | Exposure Point Total | | | | | | 7E-07 | | | | | 0.03 |
| | Exposure Medium Total | | | | | | | 7E-07 | | | | | 0.03 |
| | Air | Block H | Benzo(a)pyrene Equivalents | -- | 3E-12 | -- | -- | 3E-12 | NA | -- | -- | -- | -- |
| | | | Antimony | -- | - - | -- | -- | - - | NA | -- | -- | -- | -- |
| | | | Cadmium | -- | 8E-12 | -- | -- | 8E-12 | Kidney | -- | 0.000001 | -- | 0.000001 |
| | | | Cobalt | -- | 2E-09 | -- | -- | 2E-09 | Respiratory | -- | 0.0001 | -- | 0.0001 |
| | | | Mercury | -- | - - | -- | -- | - - | Respiratory, Kidney, Nervous System | -- | 3E-8 | -- | 3E-8 |
| | | | Molybdenum | -- | - - | -- | -- | - - | NA | -- | -- | -- | -- |
| | | | Nickel | -- | 7E-11 | -- | -- | 7E-11 | Respiratory | -- | 0.000008 | -- | 0.000008 |
| | | | Vanadium | -- | - - | -- | -- | - - | Respiratory | -- | 0.00002 | -- | 0.00002 |
| | | | Hexavalent Chromium | -- | 2E-09 | -- | -- | 2E-09 | Respiratory | -- | 0.0000008 | -- | 0.0000008 |
| | | | Chemical Total | -- | 4E-09 | -- | -- | 4E-09 | | - - | 0.0001 | - - | 0.0001 |
| | | Exposure Point Total | | | | | | 4E-09 | | | | | 0.0001 |
| | Exposure Medium Total | | | | | | | 4E-09 | | | | | 0.0001 |
| Medium Total | | | | | | | | 7E-07 | | | | | 0.03 |
| Receptor Total | | | | | | | Receptor Risk Total | 7E-07 | | | | Receptor HI Total | 0.03 |

Notes:
1 - Mutagenic chemicals were evaluated in accordance with USEPA's Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens (2005).

# Attachment D

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

FEB - 6 2014

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

**OSWER Directive 9200.1-120**

**MEMORANDUM**

**SUBJECT:** Human Health Evaluation Manual, Supplemental Guidance: Update of Standard Default Exposure Factors

**FROM:** Dana Stalcup, Acting Director
Assessment and Remediation Division
Office of Superfund Remediation and Technology Innovation

**TO:** Superfund National Policy Managers, Regions 1 - 10

**Purpose**

The mission of the Superfund program is to protect human health and the environment consistent with the Comprehensive Environmental Response, Compensation and Liability Act, as amended, (CERCLA) and as implemented by the National Oil and Hazardous Substances Pollution Contingency Plan. The purpose of this directive is to update the Interim Final Standard Exposure Factors Guidance (1991), which is reflected in the attached table and is to be used:

- in the CERCLA remedial investigation and feasibility study process (e.g., assessing baseline health risks, developing preliminary remediation goals, evaluating risks of remedial alternatives),
- to evaluate health risks in the CERCLA removal program, and
- in the process of five-year reviews of selected remedies.

This guidance update supplements the *Risk Assessment Guidance for Superfund: Human Health Evaluation Manual, Part A* (RAGS, Part A) that was issued October 13, 1989. This guidance supersedes and replaces certain portions of OSWER Directive 9285.6-03, issued March 25, 1991 and updates the *Risk Assessment Guidance for Superfund, Part E,* issued July 2004 (RAGS, Part E). Other cleanup programs in the Office of Solid Waste and Emergency Response (OSWER) are welcome and encouraged to adopt the recommended exposure factors, much as they have historically adopted other aspects of the *Risk Assessment Guidance for Superfund* (RAGS).

## Background

In September 2011, EPA's National Center for Environmental Assessment, Office of Research and Development (ORD/NCEA) issued a substantive update to its exposure assessment recommendations. *Exposure Factors Handbook – 2011 Edition*, referred to as EFH 2011 herein, provides information and recommendations on various physiological and behavioral factors commonly used in assessing exposure of adults and children to environmental chemicals. ORD/NCEA's recommended values for exposure factors are based on the results of studies deemed to be the most up-to-date and scientifically sound, based upon data available up to July 2011, and incorporates revisions made to the *Child-Specific Exposure Factors Handbook*, which was last updated and published in 2008. EFH 2011 is not a Superfund-specific document; rather, it provides a summary of the latest developments in exposure science and provides recommendations for a broad range of EPA programs.

Following the publication of EFH 2011, regional risk assessors received inquiries from other EPA program offices, states, the regulated community, and other interested parties regarding the applicability of the ORD/NCEA's recommendations for use in human health risk assessments. During the October 2011 to August 2012 period, the OSWER Human Health Regional Risk Assessors Forum (OHHRRAF) reviewed the recommendations in EFH 2011 in the context of the default exposure factors used in the Superfund program and to derive Regional screening levels. As a result of a consensus-driven process, the OHHRRAF identified several Superfund-specific default exposure factors that warranted updating, based upon recommendations from ORD/NCEA in EFH 2011. This guidance incorporates and adopts the updates recommended by the OHHRRAF.

## Objective

This guidance has been developed to reduce variability and uncertainty in the exposure assumptions used by Regional Superfund staff to characterize exposures to human populations for human health risk assessments.

## Implementation

This guidance supplements the *Risk Assessment Guidance for Superfund: Human Health Evaluation Manual* (RAGS), Part A through E. Where numerical values differ from those presented in Part A or E, the factors presented in this guidance should be considered updates to the older values. As new data become available, this Directive may be modified accordingly.

This report can be found at www.epa.gov/oswer/riskassessment/superfund_hh_exposure.htm Please contact Richard Kapuscinski at (703) 305-7411 if you have questions or concerns.

Attachment

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Regional Superfund Branch Chiefs, Regions 1 – 10
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OSWER/OSRTI Human Health Regional Risk Assessors Forum

CITATIONS

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# Attachment 1. Recommended Default Exposure Factors (2014)

| Symbol | Definition (units) | Previous Default Value | Currently Recommended Value | Source of current recommendation | Source of previous recommendation |
|---|---|---|---|---|---|
| **Ingestion and Dermal Contact Rates** | | | | | |
| $IRW_c$ | Resident Drinking Water Ingestion Rate - Child (L/day) | 1 | 0.78 | U.S. EPA 2011a, Tables 3-15 and 3-33; weighted average of 90th percentile consumer-only ingestion of drinking water (birth to <6 years) | U.S. EPA 1989 (Exhibit 6-11) |
| $IRW_a$ | Resident Drinking Water Ingestion Rate - Adult (L/day) | 2 | 2.5 | U.S. EPA 2011a, Table 3-33; 90th percentile of consumer-only ingestion of drinking water ( ≥ 21 years) | U.S. EPA 1989 (Exhibit 6-11) |
| $IRS_c$ | Resident Soil Ingestion Rate - Child (mg/day) | 200 | 200 | U.S. EPA 2011a (Table 5-1); "upper-bound values" accounting for both soil and dust ingestion | U.S. EPA 1991a (pg. 15) |
| $IRS_a$ | Resident Soil Ingestion Rate - Adult (mg/day) | 100 | 100 | U.S. EPA 1991a (pp. 6 and 15); EFH 2011 only provides a central tendency value | U.S. EPA 1991a (pg. 15) |
| $IR_{iw}$ | Indoor Worker Soil Ingestion Rate (mg/day) | 50 | 50 | U.S. EPA 1991a (pp. 9-10, 15); EFH 2011 values not provided | U.S. EPA 1991a (pg. 15) |
| $IR_{ow}$ | Outdoor Worker Soil Ingestion Rate (mg/day) | 100 | 100 | U.S. EPA 1991a (pg. 15), same as adult resident; EFH 2011 value not provided | U.S. EPA 1991a (pg. 15) |
| $SA_c$ | Resident skin surface area - child ($cm^2$) | 2,800 | 2,373 | U.S. EPA 2011a, Tables 7-2 and 7-8; weighted average of mean values for head, hands, forearms, lower legs, and feet (male and female, birth to < 6 years)(forearm and lower leg-specific data used when available, ratios for nearest available age group used elsewhere (per EPA 2011b)) | U.S. EPA 2002 (Exhibit 1-2) |
| $SA_a$ | Resident skin surface area - adult ($cm^2$) | 5,700 | 6,032 | U.S. EPA 2011a, Tables 7-2 and 7-12; weighted average of mean values for head, hands, forearms, and lower legs (male and female, 21+ years)(forearm and lower leg-specific data used for males and female lower leg; ratio of male forearm to arm applied to female arm data) | U.S. EPA 2002 (Exhibit 1-2) |
| $SA_{ow}$ | Worker skin surface area - adult ($cm^2$) | 3,300 | 3,527 | US EPA 2011a, Table 7-2; weighted average of mean values for head, hands, and forearms (male and female, 21+years) (similar assumptions for forearms as used in EPA 2011b) | U.S. EPA 2002 (Exhibit 1-2) |
| $SA_c$ | Resident Water Surface area - child ($cm^2$) | 6,600 | 6,378 | U.S. EPA 2011a, Table 7.10; weighted average of mean values for children <6 years. | U.S. EPA 2004 (Exhibit 3-2) |
| $SA_a$ | Resident Water Surface area - adult ($cm^2$) | 18,000 | 20,900 | U.S. EPA 2011a, Table 7.10; weighted average of mean values for adults, male and female 21+. | U.S. EPA 2004 (Exhibit 3-2) |
| $AF_c$ | Resident soil adherence factor - child ($mg/cm^2$) | 0.2 | 0.2 | U.S. EPA 2004 (Exhibit 3-5), RAGS Part E | U.S. EPA 2002 (Exhibit 1-2) |
| $AF_a$ | Resident soil adherence factor - adult ($mg/cm^2$) | 0.07 | 0.07 | U.S. EPA 2004 (Exhibit 3-5), RAGS Part E | U.S. EPA 2002 (Exhibit 1-2) |
| $AF_{ow}$ | Worker soil adherence factor - adult ($mg/cm^2$) | 0.2 | 0.12 | U.S. EPA 2011a, Table 7-20 and Section 7.2.2; arithmetic mean of weighted average of body part-specific (hands, forearms, and face) mean adherence factors for adult commercial/industrial activities | U.S. EPA 2002 (Exhibit 1-2) |
| $BW_c$ | Resident Body Weight - child (kg) | 15 | 15 | U.S. EPA 2011a, Table 8-1; weighted average of mean body weights (birth to <6 years) | U.S. EPA 1991a (pg. 15) |

# Attachment 1. Recommended Default Exposure Factors (2014)

| Symbol | Definition (units) | Previous Default Value | Currently Recommended Value | Source of current recommendation | Source of previous recommendation |
|---|---|---|---|---|---|
| $BW_a$ | Resident Body Weight - adult (kg) | 70 | 80 | U.S. EPA 2011a, Table 8-3; weighted mean values for adults 21 – 78 | U.S. EPA 1991a (pg. 15) |
| $Bw_w$ | Worker Body Weight (kg) | 70 | 80 | U.S. EPA 2011a, Table 8-3; weighted mean values for adults 21 – 78 | U.S. EPA 1991a (pg. 15) |
| **Exposure Frequency, Exposure Duration, and Exposure Time Variables** | | | | | |
| $EF_r$ | Resident Exposure Frequency (days/yr) | 350 | 350 | U.S. EPA 1991a (pg. 15); value not provided in EFH 2011 | U.S. EPA 1991a (pg. 15) |
| $EF_w$ | Worker Exposure Frequency (days/yr) | 250 | 250 | U.S. EPA 1991a (pg. 15); value not provided in EFH 2011 | U.S. EPA 1991a (pg. 15) |
| $EF_{iw}$ | Indoor Worker Exposure Frequency (days/yr) | 250 | 250 | U.S. EPA 1991a (pg. 15); value not provided in EFH 2011 | U.S. EPA 1991a (pg. 15) |
| $EF_{ow}$ | Outdoor Worker Exposure Frequency (days/yr) | 225 | 225 | U.S. EPA 2002; value not provided in EFH 2011 | U.S. EPA 1991a (pg. 15) |
| $ED_r$ | Resident Exposure Duration (yr) | 30 | 26 | EPA 2011a, Table 16-108; 90th percentile for current residence time. | U.S. EPA 1991a (pg. 15) |
| $ED_c$ | Resident Exposure Duration - child (yr) | 6 | 6 | U.S. EPA 1991a, Pages 6 and 15 | U.S. EPA 1991a (pg. 15) |
| $ED_a$ | Resident Exposure Duration - adult (yr) | 24 | 20 | EDr (26 years) - EDc (6 years) | U.S. EPA 1991a (pg. 15) |
| $ED_w$ | Worker Exposure Duration - (yr) | 25 | 25 | U.S. EPA 1991a (pg. 15); EFH 2011 only provides a central tendency value | U.S. EPA 1991a (pg. 15) |
| $ED_{iw}$ | Indoor Worker Exposure Duration - (yr) | 25 | 25 | U.S. EPA 1991a (pg. 15); EFH 2011 only provides a central tendency value | U.S. EPA 1991a (pg. 15) |
| $ED_{ow}$ | Outdoor Worker Exposure Duration (yr) | 25 | 25 | U.S. EPA 1991a (pg. 15); EFH 2011 only provides a central tendency value | U.S. EPA 1991a (pg. 15) |
| $ET_{ra}$ | Resident Air Exposure Time (hours/day) | 24 | 24 | The whole day | The whole day |
| $ET_{rs}$ | Resident Soil Exposure Time (hours/day) | 24 | 24 | The whole day | The whole day |
| $ET_w$ | Worker Air Exposure Time (hr/hr) | 8 | 8 | The work day | The work day |
| $ET_{ws}$ | Worker Soil Exposure Time (hours/day) | 8 | 8 | The work day | The work day |
| $ET_{rw}$ | Resident Water Exposure Time (hours/day) | 24 | 24 | The whole day | The whole day |
| $ET_{rwc}$ | Resident Water Exposure Time - child (hours/event) | 1 | 0.54 | U.S. EPA 2011a, Table 16-28; weighted average of 90th percentile time spent bathing (birth to <6 years) | U.S. EPA 2004 |
| $ET_{rwa}$ | Resident Water Exposure Time - adult (hours/event) | 0.58 | 0.71 | U.S. EPA 2011a, Tables 16-30 and 16-31; weighted average of adult (21 to 78) 90th percentile of time spent bathing/ showering in a day, divided by mean number of baths/showers taken in a day. | U.S. EPA 2004 |
| **Miscellaneous Variables; values not provided in EFH 2011** | | | | | |

# Attachment 1. Recommended Default Exposure Factors (2014)

| Symbol | Definition (units) | Previous Default Value | Currently Recommended Value | Source of current recommendation | Source of previous recommendation |
|---|---|---|---|---|---|
| $AT_r$ | Averaging time - resident (days/year) | 365 | 365 | U.S. EPA 1989 (pg. 6-23) | U.S. EPA 1989 (pg. 6-23) |
| $AT_w$ | Averaging time - composite worker (days/year) | 365 | 365 | U.S. EPA 1989 (pg. 6-23) | U.S. EPA 1989 (pg. 6-23) |
| $AT_{iw}$ | Averaging time - indoor worker (days/year) | 365 | 365 | U.S. EPA 1989 (pg. 6-23) | U.S. EPA 1989 (pg. 6-23) |
| $AT_{ow}$ | Averaging time - outdoor worker (days/year) | 365 | 365 | U.S. EPA 1989 (pg. 6-23) | U.S. EPA 1989 (pg. 6-23) |
| LT | Lifetime (years) | 70 | 70 | U.S. EPA 1989 (pg. 6-22), pending additional input from NCEA | U.S. EPA 1989 (pg. 6-22) |
| $IR_{fish}$ | Fish Ingestion Rate (mg/day) | $5.4 \times 10^4$ | ** | Recommend using site-specific values | U.S. EPA 1991a (pg. 15) |
| $IR_{produce}$ | Consumption of homegrown produce (g/day) | 42 (fruit); 80 (veg) | ** | Recommend using site-specific values | U.S. EPA 1990 |

*References for Cited Sources:*


U.S. EPA 1989. Risk assessment guidance for Superfund. Volume I: Human health evaluation manual (Part A). Interim Final. Office of Emergency and Remedial Response. EPA/540/1-89/002.

U.S. EPA 1990. Exposure Factors Handbook. Office of Health and Environmental Assessment. EPA / 8-89 / 043, March 1990.

U.S. EPA 1991a. Human health evaluation manual, supplemental guidance: "Standard default exposure factors". OSWER Directive 9285.6-03.

U.S. EPA 1991b. Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part B, Development of Risk-Based Preliminary Remediation Goals). Office of Emergency and Remedial

U.S. EPA. 1996a. Soil Screening Guidance: User's Guide. Office of Emergency and Remedial Response. Washington, DC. OSWER No. 9355.4-

U.S. EPA. 1996b. Soil Screening Guidance: Technical Background Document. Office of Emergency and Remedial Response. Washington, DC. OSWER No. 9355.4-

U.S. EPA. 1997a. Exposure Factors Handbook. Office of Research and Development, Washington, DC. EPA/600/P-95/002Fa.

U.S. EPA 2000. Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Part I: Estimating Exposure to Dioxin-Like Compounds. Volume 3--

U.S. EPA, 2001. WATER9. Version 1.0.0. Office of Air Quality Planning and Standards, Research Triangle Park, NC.

U.S. EPA 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. OSWER 9355.4-24. December 2002.http://www.epa.gov/superfund/health/conmedia/soil/index.htm

U.S. EPA 2004. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Final. OSWER 9285.7-02EP.July

U.S. EPA, 2005. Guidance on Selecting Age Groupsfor Monitoring and Assessing Childhood Exposures to Environmental Contaminants. EPA/630/P-03/003F, November, 2005.

U.S. EPA 2009. Risk Assessment Guidance for Superfund Volume I: Human Health Evaluation Manual (Part F, Supplemental Guidance for Inhalation Risk Assessment) Final. OSWER 9285.7-82.2009.

U.S. EPA 2011a. Exposure Factors Handbook: 2011 Edition. EPA/ 600/ R-090/052F, September 2011.

EPA. 2011b. "Regional Screening Levels (Formerly PRGs), User's Guide." November. On-Line Address: http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/usersguide.htm


*Footnote:* Users are directed to the *Exposure Factors Handbook* (2011) as a source for specific age-group exposure factors as described in EPA, 2005.

# APPENDIX H—BACKFILL AND COMPACTION DOCUMENTATION

HILLIS-CARNES ENGINEERING ASSOCIATES, INC

NUCLEAR COMPACTION TEST DATA

Project Name: Middle River Ground Water Remediation

Job No:: 13319A

Date: 05/27/15

Taken By: Leroy Marshall

| TEST NUMBER | 1 | 2 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| LOCATION | Tax Block H | Tax Block H | | | | | | | | |
| OFFSET | Excavation A | Excavation B | | | | | | | | |
| ELEVATION | SG | SG | | | | | | | | |
| DEPTH | | | | | | | | | | |
| DENSITY CT. | | | | | | | | | | |
| WET DENSITY | 147.9 | 151.6 | | | | | | | | |
| MOISTURE CT. | | | | | | | | | | |
| MOISTURE PCF | | | | | | | | | | |
| DRY DENSITY | 142.21 | 145.77 | | | | | | | | |
| % MOISTURE | 4 | 4 | | | | | | | | |
| MAX DENSITY | 144.35 | 144.35 | | | | | | | | |
| OPT MOISTURE | | | | | | | | | | |
| % COMPACTION | 98.5 | 101 | | | | | | | | |
| MSTRE. CORR. | | | | | | | | | | |

ONE POINT PROCTOR VERIFICATION

| | | | | |
|---|---|---|---|---|
| 1. WT. OF MOLD PLUS SOIL | | | | |
| 2. WEIGHT OF MOLD | | | | |
| 3. WT. OF WET SOIL IN MOLD(LINE 1 - LINE 2) | 0 | 0 | 0 | 0 |
| 4. DENSITY OF SOIL IN MOLD(LINE 3 X 30) | 0 | 0 | 0 | 0 |
| 5. DRY DENSITY OF SOIL IN MOLD LINE 4/(100 + LINE 12) X 100 | 0 | 0 | 0 | 0 |
| 6. MAXIMUM DRY DENSITY | | | | |

MOISTURE DETERMINATION

| | | | | |
|---|---|---|---|---|
| 7. WEIGHT OF PAN | | | | |
| 8. WT. WET SOIL & PAN | | | | |
| 9. WT. DRY SOIL & PAN | | | | |
| 10. WT. OF MOISTURE (LINE 8 - LINE 9) | 0 | 0 | 0 | 0 |
| 11. WT. OF DRY SOIL - PAN (LINE 9 - LINE 7) | 0 | 0 | 0 | 0 |
| 12. % MOISTURE (LINE 10 /LINE 11) X 100 | 0 | 0 | 0 | 0 |

GAUGE NUMBER:

DENSITY COUNT:

MOISTURE COUNT:

REMARKS:

CR-6 Supplied by Camz
Maximum Dry Density 144.35
Optimum Moisture 4.0

V3.0

BLUEGRASS
MATERIALS COMPANY

Maryland Market Area
Quality Control Laboratory

August 20, 2014

Camz
Attn: Bill

RE: Preserve @ Windlass Project

Gentlemen:

This is to certify that the brown CR-6 dolomitic marble Crusher Run, as produced at our Texas, Maryland Quarry, meets the specifications of the 2001 Maryland State Highway Administration, Section 901.01 and ASTM 2008 Book of Standards, volume 04.03 D2940-98 Graded Aggregate Material for Bases and Subbases for Highways or Airports. This material also meets the Baltimore County 2000 Specification for Crusher Run Aggregate Table 901A test method T 27 and the City of Baltimore requirements for this type material.

This material is free of hazardous contaminants and is a naturally occurring product of nature containing crushed dolomitic marble. No controlled hazardous substances or oil is used in the extraction, production, or loading processes. Therefore, to the best of my knowledge, the CR-6 material from the Texas, Maryland facility has not been contaminated by controlled hazardous substance or petroleum products.

CR-6 CRUSHER RUN

| SIEVE SIZE | AVERAGE GRADATION | CR-6 Specs. |
|---|---|---|
| 2" | 100.0 | 100 |
| 1 1/2" | 100.0 | 90-100 |
| 1" | 92.0 | |
| 3/4" | 82.0 | 60-90 |
| 1/2" | 68.0 | |
| 3/8" | 61.0 | |
| ¼ | 53.0* | |
| #4 | 49.0 | 30-60 |
| #8 | 43.0 | |
| #10 | 40.0* | |
| #16 | 38.0 | |
| #30 | 32.0 | |
| #40 | 26.0* | |
| #50 | 22.0 | |
| #100 | 14.0 | |
| #200(wet) | 8.5 | 0-15 |

*Estimated from Mineral Aggregate Gradation Curve

10,000 Beaver Dam Road - Cockeysville Maryland 21030
Phone: 443-506-0535
Email: MMcgarity@bluegrassmaterials.com

BLUEGRASS
MATERIALS COMPANY

Maryland Market Area
Quality Control Laboratory

Maximum Dry Density
(T-180 Method D) - 144.35 pcf
2.00 ton/cy
Optimum Moisture Content - 4.0%
Sodium Sulfate Soundness - 2.6% loss (AASHTO T104)
Liquid Limit - 19 (AASHTO T89)
Plasticity Index - Non-Plastic (AASHTO T90)
Absorption (1 1/2"-#4) - 0.5%

This material complies with other specifications as set forth in the ASTM and Maryland State Highway Administration requirements, regarding deleterious substances, abrasion and soundness. The information provided in this certification is to be used as a guide line. The material is subject to change due to the nature and geological formation of the quarry.

Sincerely,

Lynn McGarity

Lynn McGarity (Parry)
Quality Control Manager - Aggregates
Maryland Market Area

10,000 Beaver Dam Road - Cockeysville Maryland 21030
Phone: 443-506-0535
Email: MMcgarity@bluegrassmaterials.com

# SELECT BORROW

# MOISTURE DENSITY RELATIONSHIP TEST REPORT
## ASTM D 1557-07 Method B Modified

**Project No.:** 01632x1 **Date:**

**Project:** Honeygo Run Reclamation Center

**Client:** Honeygo Run Reclamation Center, LLC

**Source of Sample:** PO# 4659589

**Sample Number:** Select Backfill

**Remarks:**

### MATERIAL DESCRIPTION

**Description:** Silty SAND

**Classifications -** **USCS:** SM **AASHTO:** A-2-4(0)

**Nat. Moist. =** 7.3 % **Sp.G. =** 2.75

**Liquid Limit =** NP **Plasticity Index =** NP

**% < No.200 =** 27.5 %

| TEST RESULTS |
|---|
| Maximum dry density = 126.1 pcf |
| Optimum moisture = 9.3 % |

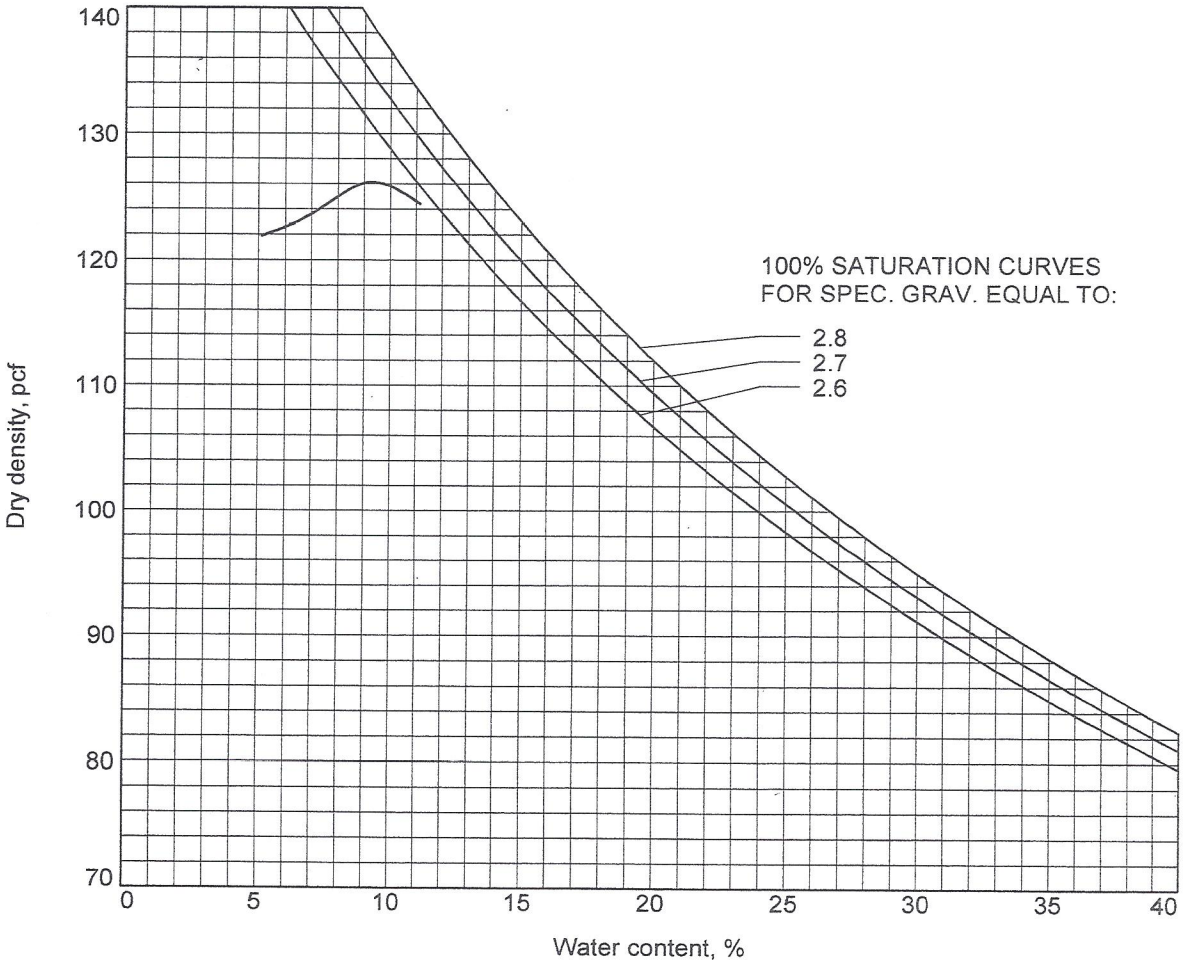


ASTM Specifications performed may include: D421, D422, D2216, D2217, and D4318.

Geo-Technology Associates, Inc.

**Tested By:** J. Watkins **Checked By:** T. Wirth

# Particle Size Distribution Report

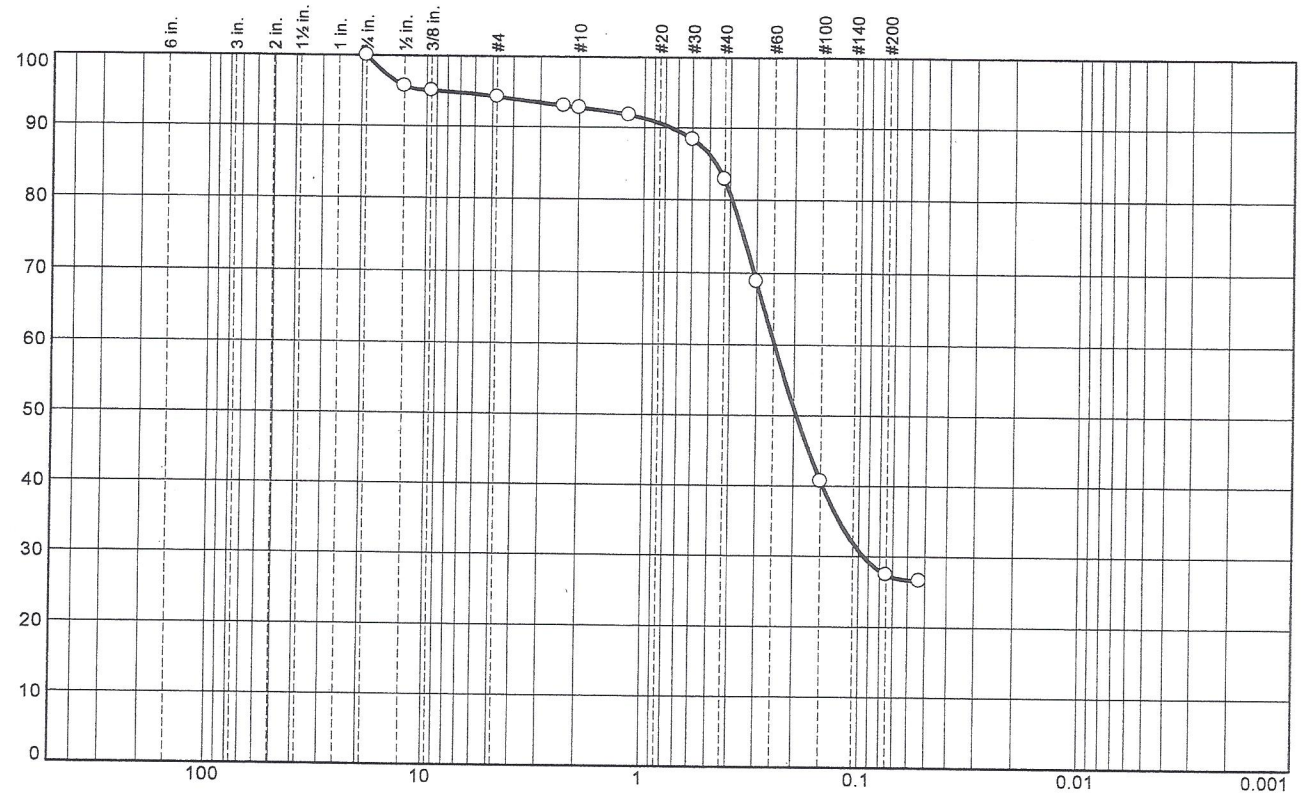


| % +3" | % Gravel | | % Sand | | | % Fines | |
|---|---|---|---|---|---|---|---|
| | Coarse | Fine | Coarse | Medium | Fine | Silt | Clay |
| 0.0 | 0.0 | 5.8 | 1.5 | 9.8 | 55.4 | 27.5 | |

| SIEVE SIZE | PERCENT FINER | SPEC.* PERCENT | PASS? (X=NO) |
|---|---|---|---|
| .75 | 100.0 | | |
| .5 | 95.6 | | |
| .375 | 95.0 | | |
| #4 | 94.2 | | |
| #8 | 93.0 | | |
| #10 | 92.7 | | |
| #16 | 91.8 | | |
| #30 | 88.4 | | |
| #40 | 82.9 | | |
| #50 | 68.9 | | |
| #100 | 40.7 | | |
| #200 | 27.5 | | |
| #270 | 26.6 | | |

* (no specification provided)

**Soil Description**

Silty SAND

**Atterberg Limits**

PL= NP LL= NP PI= NP NM= 7.3

**Coefficients**

$D_{90}$= 0.7506 $D_{85}$= 0.4639 $D_{60}$= 0.2464
$D_{50}$= 0.1943 $D_{30}$= 0.0949 $D_{15}$=
$D_{10}$= $C_u$= $C_c$=

**Classification**

USCS= SM AASHTO= A-2-4(0)

**Remarks**

**Source of Sample:** PO# 4659589
**Sample Number:** Select Backfill

**Date:** 11/6/14

ASTM Specifications performed may include: D421, D422, D2216, D2217, and D4318.

GEO-TECHNOLOGY ASSOCIATES, INC.
3445-A Box Hill Corporate Center Drive
Abingdon, MD 21009

**Client:** Honeygo Run Reclamation Center, LLC
**Project:** Honeygo Run Reclamation Center
**Project No:** 01632x1

**Tested By:** J. Watkins **Checked By:** T. Wirth

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

Job Number: 240-49010-1

Job Description: MRC-Middle River

For:
Tetra Tech, Inc.
20251 Century Blvd
Suite 200
Germantown, MD 20874

Attention: Tony Apanavage



Approved for release.
John McFadden
Project Manager I
4/14/2015 3:31 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
04/14/2015

cc: Samantha Brenner
Ms. Kelly Carper
Tobrena Sedlmyer

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

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# CASE NARRATIVE

## Client: Tetra Tech, Inc.

## Project: MRC-Middle River

## Report Number: 240-49010-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The Bulk Asbestos analysis was performed at the EMLab P&K Denver laboratory.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

**RECEIPT**

The samples were received on 4/7/2015 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9º C.

**VOLATILE ORGANIC COMPOUNDS (GCMS)**

Sample TB-040615 (240-49010-2) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The sample was analyzed on 04/09/2015.

Methylene Chloride and Naphthalene were detected in method blank MB 240-175483/8 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Acetone was detected in method blank MB 240-175730/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**VOLATILE ORGANIC COMPOUNDS (GCMS)**

Sample FILL-001 (240-49010-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The sample was prepared and analyzed on 04/08/2015.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)**

Sample FILL-001 (240-49010-1) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The sample was prepared on 04/08/2015 and analyzed on 04/10/2015.

Bis(2-ethylhexyl) phthalate was detected in method blank MB 240-175545/18-A at a level exceeding the reporting limit. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**GASOLINE RANGE ORGANICS**

Sample FILL-001 (240-49010-1) was analyzed for gasoline range organics in accordance with EPA SW-846 Method 8015C - GRO. The sample was prepared on 04/08/2015 and analyzed on 04/09/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**DIESEL RANGE ORGANICS (DRO)**

Sample FILL-001 (240-49010-1) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015C - DRO. The sample was prepared on 04/08/2015 and analyzed on 04/10/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**POLYCHLORINATED BIPHENYLS (PCBS)**

Sample FILL-001 (240-49010-1) was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The sample was prepared on 04/08/2015 and analyzed on 04/10/2015.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required. All of the samples in this data set analyzed for PCBs were subjected to the sulfuric acid cleanup procedure before instrumental analysis, per EPA Method 3665A.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**TOTAL METALS (ICP)**

Sample FILL-001 (240-49010-1) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The sample was prepared on 04/08/2015 and analyzed on 04/09/2015 and 04/10/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**TOTAL MERCURY**

Sample FILL-001 (240-49010-1) was analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The sample was prepared on 04/08/2015 and analyzed on 04/09/2015.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

**PERCENT SOLIDS**

Sample FILL-001 (240-49010-1) was analyzed for percent solids in accordance with EPA Method 160.3 MOD. The sample was analyzed on 04/07/2015.

Percent Moisture exceeded the RPD limit for the duplicate of sample FILL-001DU (240-49010-1).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 173591

Lab Sample ID: STD5 240-173591/2 IC Client Sample ID:

Date Analyzed: 03/25/15 09:23 Lab File ID: 50325002.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,4-Dioxane | 3.25 | Poor Chromatography | ulmanm | 03/25/15 10:14 |
| Benzaldehyde | 6.08 | Poor Chromatography | ulmanm | 03/25/15 10:14 |
| Benzoic acid | 7.29 | Poor Chromatography | ulmanm | 03/25/15 10:14 |
| 4-Chloroaniline | 7.63 | Poor Chromatography | ulmanm | 03/25/15 10:14 |
| Benzo[k]fluoranthene | 14.03 | Poor Chromatography | ulmanm | 03/25/15 10:14 |

Lab Sample ID: STD4 240-173591/3 IC Client Sample ID:

Date Analyzed: 03/25/15 09:48 Lab File ID: 50325003.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,4-Dioxane | 3.26 | Poor Chromatography | ulmanm | 03/25/15 10:15 |
| N-Nitrosodimethylamine | 3.72 | Poor Chromatography | ulmanm | 03/25/15 10:15 |
| Benzoic acid | 7.28 | Poor Chromatography | ulmanm | 03/25/15 10:19 |

Lab Sample ID: STD3 240-173591/4 IC Client Sample ID:

Date Analyzed: 03/25/15 10:13 Lab File ID: 50325004.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,4-Dioxane | 3.25 | Poor Chromatography | ulmanm | 03/25/15 10:41 |
| N-Nitrosodimethylamine | 3.71 | Poor Chromatography | ulmanm | 03/25/15 10:41 |
| Benzoic acid | 7.27 | Poor Chromatography | ulmanm | 03/25/15 10:41 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 173591

Lab Sample ID: STD2 240-173591/5 IC Client Sample ID:

Date Analyzed: 03/25/15 10:38 Lab File ID: 50325005.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,4-Dioxane | 3.25 | Poor Chromatography | ulmanm | 03/25/15 11:08 |
| Pyridine | 3.78 | Poor Chromatography | ulmanm | 03/25/15 11:08 |
| Pentachlorophenol | 10.21 | Poor Chromatography | ulmanm | 03/25/15 11:08 |
| Dibenz(a,h)anthracene | 16.64 | Poor Chromatography | ulmanm | 03/25/15 11:08 |

Lab Sample ID: STD1 240-173591/6 IC Client Sample ID:

Date Analyzed: 03/25/15 11:04 Lab File ID: 50325006.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Indeno[1,2,3-cd]pyrene | 16.63 | Poor Chromatography | ulmanm | 03/25/15 11:35 |
| Dibenz(a,h)anthracene | 16.65 | Poor Chromatography | ulmanm | 03/25/15 11:35 |
| Benzo[g,h,i]perylene | 17.27 | Poor Chromatography | ulmanm | 03/25/15 11:35 |

Lab Sample ID: STD9 240-173591/7 IC Client Sample ID:

Date Analyzed: 03/25/15 11:29 Lab File ID: 50325007.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzoic acid | 7.35 | Poor Chromatography | ulmanm | 03/25/15 12:19 |
| Caprolactam | 7.94 | Poor Chromatography | ulmanm | 03/25/15 12:19 |

Lab Sample ID: STD8 240-173591/8 IC Client Sample ID:

Date Analyzed: 03/25/15 11:54 Lab File ID: 50325008.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Caprolactam | 7.94 | Poor Chromatography | ulmanm | 03/25/15 12:21 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 173591

Lab Sample ID: STD7 240-173591/9 IC Client Sample ID:

Date Analyzed: 03/25/15 12:20 Lab File ID: 50325009.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Caprolactam | 7.93 | Poor Chromatography | ulmanm | 03/25/15 12:48 |

Lab Sample ID: STD6 240-173591/10 ICIS Client Sample ID:

Date Analyzed: 03/25/15 12:45 Lab File ID: 50325010.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Caprolactam | 7.92 | Poor Chromatography | ulmanm | 03/25/15 13:11 |

Lab Sample ID: ICV 240-173591/11 Client Sample ID:

Date Analyzed: 03/25/15 14:02 Lab File ID: 50325011.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,4-Dioxane | 3.25 | Poor Chromatography | ulmanm | 03/25/15 14:34 |
| N-Nitrosodimethylamine | 3.71 | Poor Chromatography | ulmanm | 03/25/15 14:34 |
| Benzoic acid | 7.30 | Poor Chromatography | ulmanm | 03/25/15 14:34 |
| Caprolactam | 7.92 | Poor Chromatography | ulmanm | 03/25/15 14:34 |

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A4HP9 Analysis Batch Number: 175891

Lab Sample ID: CCV 240-175891/2 CCVIS Client Sample ID:

Date Analyzed: 04/10/15 08:11 Lab File ID: 50410002.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,4-Dioxane | 2.66 | Poor Chromatography | ulmanm | 04/10/15 08:42 |
| Benzoic acid | 7.20 | Poor Chromatography | ulmanm | 04/10/15 08:42 |

Lab Sample ID: LCS 240-175545/19-A Client Sample ID:

Date Analyzed: 04/10/15 09:52 Lab File ID: 50410006.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| 1,4-Dioxane | 2.67 | Poor Chromatography | ulmanm | 04/10/15 10:23 |

Lab Sample ID: 240-49010-1 Client Sample ID: FILL-001

Date Analyzed: 04/10/15 16:57 Lab File ID: 50410023.D GC Column: RXI-5SILMS ID: 0.45(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Benzo[b]fluoranthene | 13.75 | Poor Chromatography | ulmanm | 04/13/15 08:05 |
| Benzo[k]fluoranthene | 13.77 | Poor Chromatography | ulmanm | 04/13/15 08:05 |

PCBS MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A2HP4 Analysis Batch Number: 175923

Lab Sample ID: CCV 240-175923/3 CCVRT Client Sample ID:

Date Analyzed: 04/10/15 11:01 Lab File ID: P4000003.D GC Column: CLP-2 ID: 0.53(mm)

| COMPOUND NAME | RETENTION TIME | MANUAL INTEGRATION | | |
|---|---|---|---|---|
| | | REASON | ANALYST | DATE |
| Tetrachloro-m-xylene | 1.75 | Baseline Event | bosworthh | 04/10/15 13:04 |

## SAMPLE SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-49010-1

| Lab Sample ID | Client Sample ID | Client Matrix | Date/Time Sampled | Date/Time Received |
|---|---|---|---|---|
| 240-49010-1 | FILL-001 | Solid | 04/06/2015 1500 | 04/07/2015 0915 |
| 240-49010-2TB | TB-040615 | Water | 04/06/2015 0000 | 04/07/2015 0915 |

## EXECUTIVE SUMMARY - Detections

Client: Tetra Tech, Inc. Job Number: 240-49010-1

| Lab Sample ID / Analyte | Client Sample ID | Result | Qualifier | Reporting Limit | Units | Method |
|---|---|---|---|---|---|---|
| **240-49010-1** | **FILL-001** | | | | | |
| Anthracene | | 3.9 | J | 7.3 | ug/Kg | 8270D |
| Benzo[a]anthracene | | 8.0 | | 7.3 | ug/Kg | 8270D |
| Benzo[a]pyrene | | 7.7 | | 7.3 | ug/Kg | 8270D |
| Benzo[b]fluoranthene | | 8.9 | | 7.3 | ug/Kg | 8270D |
| Benzo[k]fluoranthene | | 4.2 | J | 7.3 | ug/Kg | 8270D |
| Bis(2-ethylhexyl) phthalate | | 24 | J B | 76 | ug/Kg | 8270D |
| Chrysene | | 9.3 | | 7.3 | ug/Kg | 8270D |
| Fluoranthene | | 16 | | 7.3 | ug/Kg | 8270D |
| Phenanthrene | | 11 | | 7.3 | ug/Kg | 8270D |
| Pyrene | | 15 | | 7.3 | ug/Kg | 8270D |
| Total Petroleum Hydrocarbons (C10-C32) | | 18 | | 18 | mg/Kg | 8015C |
| Arsenic | | 0.40 | J | 1.3 | mg/Kg | 6010C |
| Barium | | 2.6 | J | 18 | mg/Kg | 6010C |
| Cobalt | | 0.054 | J | 0.89 | mg/Kg | 6010C |
| Chromium | | 11 | | 0.89 | mg/Kg | 6010C |
| Copper | | 1.1 | J | 2.2 | mg/Kg | 6010C |
| Molybdenum | | 0.13 | J | 3.6 | mg/Kg | 6010C |
| Nickel | | 0.21 | J | 3.6 | mg/Kg | 6010C |
| Lead | | 0.39 | J | 0.89 | mg/Kg | 6010C |
| Vanadium | | 21 | | 0.89 | mg/Kg | 6010C |
| Zinc | | 1.3 | J | 4.5 | mg/Kg | 6010C |
| Percent Solids | | 93 | | 0.10 | % | Moisture |
| Percent Moisture | | 7.4 | | 0.10 | % | Moisture |

# METHOD SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-49010-1

| Description | Lab Location | Method | Preparation Method |
|---|---|---|---|
| **Matrix: Solid** | | | |
| General Sub Contract Method | | Subcontract | |
| Volatile Organic Compounds by GC/MS | TAL CAN | SW846 8260C | |
| Purge and Trap | TAL CAN | | SW846 5030C |
| Semivolatile Organic Compounds (GC/MS) | TAL CAN | SW846 8270D | |
| Soxhlet Extraction | TAL CAN | | SW846 3540C |
| Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics) | TAL CAN | SW846 8015C | |
| Purge and Trap | TAL CAN | | SW846 5030A |
| Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics) | TAL CAN | SW846 8015C | |
| Soxhlet Extraction | TAL CAN | | SW846 3540C |
| Polychlorinated Biphenyls (PCBs) by Gas Chromatography | TAL CAN | SW846 8082A | |
| Soxhlet Extraction | TAL CAN | | SW846 3540C |
| Metals (Custom List) | TAL CAN | SW846 6010C | |
| Preparation, Metals | TAL CAN | | SW846 3050B |
| Mercury (CVAA) | TAL CAN | SW846 7471A | |
| Preparation, Mercury | TAL CAN | | SW846 7471A |
| Percent Moisture | TAL CAN | EPA Moisture | |
| **Matrix: Water** | | | |
| Volatile Organic Compounds (GC/MS) | TAL CAN | SW846 8260B | |
| Purge and Trap | TAL CAN | | SW846 5030B |

**Lab References:**

TAL CAN = TestAmerica Canton

**Method References:**

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

## METHOD / ANALYST SUMMARY

Client: Tetra Tech, Inc. Job Number: 240-49010-1

| Method | Analyst | Analyst ID |
|---|---|---|
| SW846 8260B | Quayle, Rick | RJQ |
| SW846 8260C | Macenczak, Steven | SAM |
| SW846 8270D | Ulman, Mark | MRU |
| SW846 8015C | Reed, Rachel T | RTR |
| SW846 8015C | Bolgrin, Deborah | DEB |
| SW846 8082A | Bosworth, Heather M | HMB |
| SW846 6010C | Counts, Karen | KLC |
| SW846 6010C | Sutherland, Aaron | ADS |
| SW846 7471A | Walpole, Barbara | BW |
| EPA Moisture | Matheny, Sarah | SEM |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Client Sample ID:** **TB-040615**

Lab Sample ID: 240-49010-2TB Date Sampled: 04/06/2015 0000
Client Matrix: Water Date Received: 04/07/2015 0915

**8260B Volatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8260B | Analysis Batch: | 240-175730 | Instrument ID: | A3UX16 |
| Prep Method: | 5030B | Prep Batch: | N/A | Lab File ID: | UXM7102.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 5 mL |
| Analysis Date: | 04/09/2015 1834 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/09/2015 1834 | | | | |

| Analyte | Result (ug/L) | Qualifier | MDL | RL |
|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.28 | U | 0.28 | 1.0 |
| 1,1,1-Trichloroethane | 0.44 | U | 0.44 | 1.0 |
| 1,1,2,2-Tetrachloroethane | 0.22 | U | 0.22 | 1.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.45 | U | 0.45 | 1.0 |
| 1,1-Dichloroethane | 0.30 | U | 0.30 | 1.0 |
| 1,1-Dichloroethene | 0.45 | U | 0.45 | 1.0 |
| 1,1-Dichloropropene | 0.42 | U | 0.42 | 1.0 |
| 1,2,3-Trichlorobenzene | 0.37 | U | 0.37 | 1.0 |
| 1,2,3-Trichloropropane | 0.44 | U | 0.44 | 1.0 |
| 1,2,3-Trimethylbenzene | 0.47 | U | 0.47 | 5.0 |
| 1,2,4-Trichlorobenzene | 0.32 | U | 0.32 | 1.0 |
| 1,2,4-Trimethylbenzene | 0.41 | U | 0.41 | 1.0 |
| 1,2-Dibromo-3-Chloropropane | 0.82 | U | 0.82 | 2.0 |
| 1,2-Dichlorobenzene | 0.25 | U | 0.25 | 1.0 |
| 1,2-Dichloroethane | 0.23 | U | 0.23 | 1.0 |
| 1,2-Dichloropropane | 0.25 | U | 0.25 | 1.0 |
| 1,3-Dichlorobenzene | 0.19 | U | 0.19 | 1.0 |
| 1,3-Dichloropropane | 0.19 | U | 0.19 | 1.0 |
| 1,4-Dichlorobenzene | 0.27 | U | 0.27 | 1.0 |
| 2,2-Dichloropropane | 0.26 | U | 0.26 | 1.0 |
| 2-Chloroethyl vinyl ether | 0.59 | U | 0.59 | 10 |
| 2-Chlorotoluene | 0.40 | U | 0.40 | 1.0 |
| 2-Hexanone | 0.48 | U | 0.48 | 10 |
| Bromobenzene | 0.35 | U | 0.35 | 1.0 |
| Bromochloromethane | 0.50 | U | 0.50 | 1.0 |
| 4-Chlorotoluene | 0.29 | U | 0.29 | 1.0 |
| p-Isopropyltoluene | 0.43 | U | 0.43 | 1.0 |
| Acetone | 0.94 | U | 0.94 | 10 |
| Benzene | 0.35 | U | 0.35 | 1.0 |
| Bromoform | 0.56 | U | 0.56 | 1.0 |
| Bromomethane | 0.44 | U | 0.44 | 1.0 |
| Carbon disulfide | 0.38 | U | 0.38 | 1.0 |
| Carbon tetrachloride | 0.43 | U | 0.43 | 1.0 |
| Chlorobenzene | 0.25 | U | 0.25 | 1.0 |
| Chloroethane | 0.32 | U | 0.32 | 1.0 |
| Chloroform | 0.25 | U | 0.25 | 1.0 |
| Chloromethane | 0.44 | U | 0.44 | 1.0 |
| cis-1,2-Dichloroethene | 0.26 | U | 0.26 | 1.0 |
| cis-1,3-Dichloropropene | 0.46 | U | 0.46 | 1.0 |
| Hexachlorobutadiene | 0.35 | U | 0.35 | 1.0 |
| Dibromomethane | 0.42 | U | 0.42 | 1.0 |
| Bromodichloromethane | 0.29 | U | 0.29 | 1.0 |
| Dichlorodifluoromethane | 0.32 | U | 0.32 | 1.0 |
| Ethylbenzene | 0.25 | U | 0.25 | 1.0 |
| 1,2-Dibromoethane | 0.32 | U | 0.32 | 1.0 |
| Diisopropyl ether | 0.50 | U | 0.50 | 10 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Client Sample ID:** **TB-040615**

Lab Sample ID: 240-49010-2TB Date Sampled: 04/06/2015 0000
Client Matrix: Water Date Received: 04/07/2015 0915

**8260B Volatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8260B | Analysis Batch: | 240-175730 | Instrument ID: | A3UX16 |
| Prep Method: | 5030B | Prep Batch: | N/A | Lab File ID: | UXM7102.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 5 mL |
| Analysis Date: | 04/09/2015 1834 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/09/2015 1834 | | | | |

| Analyte | Result (ug/L) | Qualifier | MDL | RL |
|---|---|---|---|---|
| Naphthalene | 0.45 | U | 0.45 | 1.0 |
| m-Xylene & p-Xylene | 0.24 | U | 0.24 | 2.0 |
| n-Butylbenzene | 0.31 | U | 0.31 | 1.0 |
| Isopropylbenzene | 0.35 | U | 0.35 | 1.0 |
| N-Propylbenzene | 0.40 | U | 0.40 | 1.0 |
| 2-Butanone (MEK) | 0.53 | U | 0.53 | 10 |
| 4-Methyl-2-pentanone (MIBK) | 0.99 | U | 0.99 | 10 |
| sec-Butylbenzene | 0.48 | U | 0.48 | 1.0 |
| Methyl tert-butyl ether | 0.20 | U | 0.20 | 1.0 |
| Tert-amyl methyl ether | 0.30 | U | 0.30 | 5.0 |
| Methylene Chloride | 0.33 | U | 0.33 | 1.0 |
| o-Xylene | 0.25 | U | 0.25 | 1.0 |
| Styrene | 0.45 | U | 0.45 | 1.0 |
| Ethyl t-butyl ether | 0.23 | U | 0.23 | 5.0 |
| tert-Butylbenzene | 0.41 | U | 0.41 | 1.0 |
| Tetrachloroethene | 0.31 | U | 0.31 | 1.0 |
| Toluene | 0.23 | U | 0.23 | 1.0 |
| trans-1,2-Dichloroethene | 0.30 | U | 0.30 | 1.0 |
| trans-1,3-Dichloropropene | 0.56 | U | 0.56 | 1.0 |
| Trichloroethene | 0.22 | U | 0.22 | 1.0 |
| Trichlorofluoromethane | 0.49 | U | 0.49 | 1.0 |
| Vinyl acetate | 0.41 | U | 0.41 | 2.0 |
| Vinyl chloride | 0.29 | U | 0.29 | 1.0 |
| tert-Butyl alcohol (TBA) | 4.9 | U | 4.9 | 50 |
| Xylenes, Total | 0.52 | U | 0.52 | 2.0 |
| Dibromochloromethane | 0.43 | U | 0.43 | 1.0 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 95 | | 63 - 129 |
| 4-Bromofluorobenzene (Surr) | 100 | | 66 - 120 |
| Toluene-d8 (Surr) | 94 | | 74 - 120 |
| Dibromofluoromethane (Surr) | 92 | | 75 - 121 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Client Sample ID:** **FILL-001**

Lab Sample ID: 240-49010-1 Date Sampled: 04/06/2015 1500
Client Matrix: Solid % Moisture: 7.4 Date Received: 04/07/2015 0915

**8260C Volatile Organic Compounds by GC/MS**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8260C | Analysis Batch: | 240-175483 | Instrument ID: | A3UX8 |
| Prep Method: | 5030C | Prep Batch: | 240-175488 | Lab File ID: | UX86865.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 5.14 g |
| Analysis Date: | 04/08/2015 1106 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 0523 | | | | |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | | 0.65 | U | 0.65 | 5.3 |
| 1,1,1-Trichloroethane | | 0.59 | U | 0.59 | 5.3 |
| 1,1,2,2-Tetrachloroethane | | 0.36 | U | 0.36 | 5.3 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | | 1.4 | U | 1.4 | 5.3 |
| 1,1-Dichloroethane | | 0.38 | U | 0.38 | 5.3 |
| 1,1-Dichloroethene | | 0.55 | U | 0.55 | 5.3 |
| 1,1-Dichloropropene | | 0.32 | U | 0.32 | 5.3 |
| 1,2,3-Trichlorobenzene | | 0.40 | U | 0.40 | 5.3 |
| 1,2,3-Trichloropropane | | 0.95 | U | 0.95 | 5.3 |
| 1,2,3-Trimethylbenzene | | 0.18 | U | 0.18 | 5.3 |
| 1,2,4-Trichlorobenzene | | 0.28 | U | 0.28 | 5.3 |
| 1,2,4-Trimethylbenzene | | 0.68 | U | 0.68 | 5.3 |
| 1,2-Dibromo-3-Chloropropane | | 1.4 | U | 1.4 | 11 |
| 1,2-Dichlorobenzene | | 0.38 | U | 0.38 | 5.3 |
| 1,2-Dichloroethane | | 0.36 | U | 0.36 | 5.3 |
| 1,2-Dichloropropane | | 0.72 | U | 0.72 | 5.3 |
| 1,3-Dichlorobenzene | | 0.37 | U | 0.37 | 5.3 |
| 1,3-Dichloropropane | | 0.36 | U | 0.36 | 5.3 |
| 1,4-Dichlorobenzene | | 0.69 | U | 0.69 | 5.3 |
| 2,2-Dichloropropane | | 0.99 | U | 0.99 | 5.3 |
| 2-Chloroethyl vinyl ether | | 1.5 | U | 1.5 | 53 |
| 2-Chlorotoluene | | 0.42 | U | 0.42 | 5.3 |
| 2-Hexanone | | 0.66 | U | 0.66 | 21 |
| Bromobenzene | | 0.35 | U | 0.35 | 5.3 |
| Bromochloromethane | | 0.75 | U | 0.75 | 5.3 |
| 4-Chlorotoluene | | 0.43 | U | 0.43 | 5.3 |
| p-Isopropyltoluene | | 0.22 | U | 0.22 | 5.3 |
| Acetone | | 6.6 | U | 6.6 | 21 |
| Benzene | | 0.24 | U | 0.24 | 5.3 |
| Bromoform | | 0.35 | U | 0.35 | 5.3 |
| Bromomethane | | 0.57 | U | 0.57 | 5.3 |
| Carbon disulfide | | 0.46 | U | 0.46 | 5.3 |
| Carbon tetrachloride | | 0.39 | U | 0.39 | 5.3 |
| Chlorobenzene | | 0.35 | U | 0.35 | 5.3 |
| Chloroethane | | 0.90 | U | 0.90 | 5.3 |
| Chloroform | | 0.30 | U | 0.30 | 5.3 |
| Chloromethane | | 0.43 | U | 0.43 | 5.3 |
| cis-1,2-Dichloroethene | | 0.38 | U | 0.38 | 5.3 |
| cis-1,3-Dichloropropene | | 0.36 | U | 0.36 | 5.3 |
| Hexachlorobutadiene | | 1.3 | U | 1.3 | 5.3 |
| Dibromomethane | | 0.66 | U | 0.66 | 5.3 |
| Bromodichloromethane | | 0.29 | U | 0.29 | 5.3 |
| Dichlorodifluoromethane | | 0.53 | U | 0.53 | 5.3 |
| Ethylbenzene | | 0.27 | U | 0.27 | 5.3 |
| 1,2-Dibromoethane | | 0.53 | U | 0.53 | 5.3 |
| Diisopropyl ether | | 1.6 | U | 1.6 | 11 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Client Sample ID:** **FILL-001**

Lab Sample ID: 240-49010-1 Date Sampled: 04/06/2015 1500
Client Matrix: Solid % Moisture: 7.4 Date Received: 04/07/2015 0915

**8260C Volatile Organic Compounds by GC/MS**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8260C | Analysis Batch: | 240-175483 | Instrument ID: | A3UX8 |
| Prep Method: | 5030C | Prep Batch: | 240-175488 | Lab File ID: | UX86865.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 5.14 g |
| Analysis Date: | 04/08/2015 1106 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 0523 | | | | |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Naphthalene | | 0.20 | U | 0.20 | 5.3 |
| m-Xylene & p-Xylene | | 1.3 | U | 1.3 | 11 |
| n-Butylbenzene | | 0.24 | U | 0.24 | 5.3 |
| Isopropylbenzene | | 0.17 | U | 0.17 | 5.3 |
| N-Propylbenzene | | 0.42 | U | 0.42 | 5.3 |
| 2-Butanone (MEK) | | 1.5 | U | 1.5 | 21 |
| 4-Methyl-2-pentanone (MIBK) | | 0.57 | U | 0.57 | 21 |
| sec-Butylbenzene | | 0.19 | U | 0.19 | 5.3 |
| Methyl tert-butyl ether | | 0.45 | U | 0.45 | 5.3 |
| Tert-amyl methyl ether | | 0.39 | U | 0.39 | 5.3 |
| Methylene Chloride | | 0.70 | U | 0.70 | 5.3 |
| o-Xylene | | 0.37 | U | 0.37 | 5.3 |
| Styrene | | 0.16 | U | 0.16 | 5.3 |
| Ethyl-t-butyl ether (ETBE) | | 0.23 | U | 0.23 | 5.3 |
| tert-Butylbenzene | | 0.30 | U | 0.30 | 5.3 |
| Tetrachloroethene | | 0.55 | U | 0.55 | 5.3 |
| Toluene | | 0.28 | U | 0.28 | 5.3 |
| trans-1,2-Dichloroethene | | 0.43 | U | 0.43 | 5.3 |
| trans-1,3-Dichloropropene | | 0.57 | U | 0.57 | 5.3 |
| Trichloroethene | | 0.44 | U | 0.44 | 5.3 |
| Trichlorofluoromethane | | 0.36 | U | 0.36 | 5.3 |
| Vinyl acetate | | 0.26 | U F1 F2 | 0.26 | 11 |
| Vinyl chloride | | 0.41 | U | 0.41 | 5.3 |
| tert-Butyl alcohol (TBA) | | 8.0 | U | 8.0 | 210 |
| Xylenes, Total | | 0.37 | U | 0.37 | 11 |
| Dibromochloromethane | | 0.58 | U | 0.58 | 5.3 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 82 | | 58 - 123 |
| 4-Bromofluorobenzene (Surr) | 88 | | 52 - 136 |
| Toluene-d8 (Surr) | 98 | | 67 - 125 |
| Dibromofluoromethane (Surr) | 89 | | 37 - 132 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Client Sample ID:** **FILL-001**

Lab Sample ID: 240-49010-1 Date Sampled: 04/06/2015 1500
Client Matrix: Solid % Moisture: 7.4 Date Received: 04/07/2015 0915

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-175891 | Instrument ID: | A4HP9 |
| Prep Method: | 3540C | Prep Batch: | 240-175545 | Lab File ID: | 50410023.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 29.69 g |
| Analysis Date: | 04/10/2015 1657 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 04/08/2015 0916 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| 1,1'-Biphenyl | | 3.8 | U | 3.8 | 55 |
| 1,4-Dioxane | | 24 | U | 24 | 110 |
| 2,4,6-Trichlorophenol | | 9.7 | U | 9.7 | 160 |
| 2,4,5-Trichlorophenol | | 27 | U | 27 | 160 |
| 2,4-Dichlorophenol | | 22 | U | 22 | 160 |
| 2,4-Dimethylphenol | | 22 | U | 22 | 160 |
| 2,4-Dinitrophenol | | 23 | U | 23 | 360 |
| 2,4-Dinitrotoluene | | 19 | U | 19 | 220 |
| 2-Chloronaphthalene | | 0.49 | U | 0.49 | 55 |
| 2-Chlorophenol | | 8.9 | U | 8.9 | 55 |
| 2-Methylnaphthalene | | 0.55 | U | 0.55 | 7.3 |
| 2-Methylphenol | | 12 | U | 12 | 220 |
| 2-Nitroaniline | | 9.9 | U | 9.9 | 220 |
| 2-Nitrophenol | | 9.1 | U | 9.1 | 55 |
| 3 & 4 Methylphenol | | 22 | U | 22 | 440 |
| 3,3'-Dichlorobenzidine | | 20 | U | 20 | 110 |
| 3-Nitroaniline | | 17 | U | 17 | 220 |
| 4,6-Dinitro-2-methylphenol | | 10 | U | 10 | 160 |
| 4-Bromophenyl phenyl ether | | 14 | U | 14 | 55 |
| 4-Chloro-3-methylphenol | | 23 | U | 23 | 160 |
| 4-Chloroaniline | | 19 | U | 19 | 160 |
| 4-Chlorophenyl phenyl ether | | 14 | U | 14 | 55 |
| 4-Nitroaniline | | 28 | U | 28 | 220 |
| Acenaphthene | | 0.83 | U | 0.83 | 7.3 |
| Acenaphthylene | | 0.38 | U | 0.38 | 7.3 |
| Acetophenone | | 10 | U | 10 | 110 |
| Anthracene | | 3.9 | J | 0.85 | 7.3 |
| Atrazine | | 9.9 | U | 9.9 | 220 |
| Benzaldehyde | | 13 | U | 13 | 110 |
| Benzo[a]anthracene | | 8.0 | | 0.69 | 7.3 |
| Benzo[a]pyrene | | 7.7 | | 0.70 | 7.3 |
| Benzo[b]fluoranthene | | 8.9 | | 0.64 | 7.3 |
| Benzo[g,h,i]perylene | | 0.38 | U | 0.38 | 7.3 |
| Benzo[k]fluoranthene | | 4.2 | J | 0.74 | 7.3 |
| Bis(2-chloroethoxy)methane | | 24 | U | 24 | 110 |
| Bis(2-chloroethyl)ether | | 2.2 | U | 2.2 | 110 |
| Bis(2-ethylhexyl) phthalate | | 24 | J B | 21 | 76 |
| Butyl benzyl phthalate | | 11 | U | 11 | 76 |
| Caprolactam | | 40 | U | 40 | 360 |
| Carbazole | | 29 | U | 29 | 55 |
| Chrysene | | 9.3 | | 1.2 | 7.3 |
| Di-n-butyl phthalate | | 16 | U | 16 | 76 |
| Di-n-octyl phthalate | | 8.6 | U | 8.6 | 76 |
| Dibenz(a,h)anthracene | | 0.72 | U | 0.72 | 7.3 |
| Dibenzofuran | | 0.72 | U | 0.72 | 55 |
| Diethyl phthalate | | 17 | U | 17 | 76 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Client Sample ID:** **FILL-001**

Lab Sample ID: 240-49010-1 Date Sampled: 04/06/2015 1500
Client Matrix: Solid % Moisture: 7.4 Date Received: 04/07/2015 0915

**8270D Semivolatile Organic Compounds (GC/MS)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8270D | Analysis Batch: | 240-175891 | Instrument ID: | A4HP9 |
| Prep Method: | 3540C | Prep Batch: | 240-175545 | Lab File ID: | 50410023.D |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 29.69 g |
| Analysis Date: | 04/10/2015 1657 | | | Final Weight/Volume: | 2 mL |
| Prep Date: | 04/08/2015 0916 | | | Injection Volume: | 1 uL |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Dimethyl phthalate | | 19 | U | 19 | 76 |
| Fluoranthene | | 16 | | 0.60 | 7.3 |
| Fluorene | | 0.58 | U | 0.58 | 7.3 |
| Hexachlorobenzene | | 2.3 | U | 2.3 | 7.3 |
| Hexachlorobutadiene | | 6.1 | U | 6.1 | 55 |
| Hexachlorocyclopentadiene | | 8.8 | U | 8.8 | 360 |
| Hexachloroethane | | 9.8 | U | 9.8 | 55 |
| Indeno[1,2,3-cd]pyrene | | 0.38 | U | 0.38 | 7.3 |
| Isophorone | | 14 | U | 14 | 55 |
| N-Nitrosodi-n-propylamine | | 6.9 | U | 6.9 | 55 |
| N-Nitrosodimethylamine | | 17 | U | 17 | 110 |
| N-Nitrosodiphenylamine | | 23 | U | 23 | 55 |
| Naphthalene | | 0.89 | U | 0.89 | 7.3 |
| Nitrobenzene | | 2.4 | U | 2.4 | 110 |
| Pentachlorophenol | | 9.9 | U | 9.9 | 160 |
| Phenanthrene | | 11 | | 0.80 | 7.3 |
| Phenol | | 8.0 | U | 8.0 | 55 |
| Pyrene | | 15 | | 0.48 | 7.3 |
| 2,2'-oxybis[1-chloropropane] | | 10 | U | 10 | 110 |
| 2,6-Dinitrotoluene | | 23 | U | 23 | 220 |
| 4-Nitrophenol | | 19 | U | 19 | 360 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Terphenyl-d14 (Surr) | 77 | | 36 - 110 |
| Phenol-d5 (Surr) | 73 | | 26 - 110 |
| Nitrobenzene-d5 (Surr) | 63 | | 20 - 110 |
| 2-Fluorophenol (Surr) | 66 | | 24 - 110 |
| 2-Fluorobiphenyl (Surr) | 77 | | 24 - 110 |
| 2,4,6-Tribromophenol (Surr) | 36 | | 10 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Client Sample ID:** **FILL-001**

Lab Sample ID: 240-49010-1 Date Sampled: 04/06/2015 1500
Client Matrix: Solid % Moisture: 7.4 Date Received: 04/07/2015 0915

**8015C Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8015C | Analysis Batch: | 240-175575 | Instrument ID: | YPID |
| Prep Method: | 5030A | Prep Batch: | 240-175570 | Initial Weight/Volume: | 5.01 g |
| Dilution: | 1.0 | | | Final Weight/Volume: | 5 mL |
| Analysis Date: | 04/09/2015 0634 | | | Injection Volume: | 5 mL |
| Prep Date: | 04/08/2015 1104 | | | Result Type: | PRIMARY |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | | 50 | U | 50 | 110 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Trifluorotoluene (Surr) | 86 | | 40 - 139 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Client Sample ID:** **FILL-001**

Lab Sample ID: 240-49010-1 Date Sampled: 04/06/2015 1500
Client Matrix: Solid % Moisture: 7.4 Date Received: 04/07/2015 0915

**8015C Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8015C | Analysis Batch: | 240-175823 | Instrument ID: | A2HP5F |
| Prep Method: | 3540C | Prep Batch: | 240-175550 | Initial Weight/Volume: | 30.15 g |
| Dilution: | 1.0 | | | Final Weight/Volume: | 5 mL |
| Analysis Date: | 04/10/2015 0024 | | | Injection Volume: | 1 uL |
| Prep Date: | 04/08/2015 0935 | | | Result Type: | PRIMARY |

| Analyte | DryWt Corrected: Y | Result (mg/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C10-C32) | | 18 | | 4.4 | 18 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| o-Terphenyl (Surr) | 100 | | 40 - 160 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Client Sample ID:** **FILL-001**

Lab Sample ID: 240-49010-1 Date Sampled: 04/06/2015 1500
Client Matrix: Solid % Moisture: 7.4 Date Received: 04/07/2015 0915

**8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 8082A | Analysis Batch: | 240-175923 | Instrument ID: | A2HP4 |
| Prep Method: | 3540C | Prep Batch: | 240-175553 | Initial Weight/Volume: | 30.00 g |
| Dilution: | 1.0 | | | Final Weight/Volume: | 10 mL |
| Analysis Date: | 04/10/2015 1527 | | | Injection Volume: | 1 uL |
| Prep Date: | 04/08/2015 0949 | | | Result Type: | PRIMARY |

| Analyte | DryWt Corrected: Y | Result (ug/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Aroclor-1016 | | 13 | U | 13 | 36 |
| Aroclor-1221 | | 17 | U | 17 | 36 |
| Aroclor-1232 | | 22 | U | 22 | 36 |
| Aroclor-1242 | | 12 | U | 12 | 36 |
| Aroclor-1248 | | 8.6 | U | 8.6 | 36 |
| Aroclor-1254 | | 15 | U | 15 | 36 |
| Aroclor-1260 | | 9.7 | U | 9.7 | 36 |

| Surrogate | %Rec | Qualifier | Acceptance Limits |
|---|---|---|---|
| Tetrachloro-m-xylene | 88 | | 29 - 151 |
| DCB Decachlorobiphenyl | 104 | | 14 - 163 |

**Client Sample ID:** **FILL-001**

Lab Sample ID: 240-49010-1 Date Sampled: 04/06/2015 1500
Client Matrix: Solid % Moisture: 7.4 Date Received: 04/07/2015 0915

**6010C Metals (Custom List)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 6010C | Analysis Batch: | 240-175886 | Instrument ID: | I12 |
| Prep Method: | 3050B | Prep Batch: | 240-175558 | Lab File ID: | I12040915A.asc |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 1.21 g |
| Analysis Date: | 04/09/2015 1004 | | | Final Weight/Volume: | 100 mL |
| Prep Date: | 04/08/2015 1026 | | | | |

| Analyte | DryWt Corrected: Y | Result (mg/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Silver | | 0.056 | U | 0.056 | 0.89 |
| Arsenic | | 0.40 | J | 0.37 | 1.3 |
| Barium | | 2.6 | J | 0.37 | 18 |
| Beryllium | | 0.023 | U | 0.023 | 0.45 |
| Cadmium | | 0.019 | U | 0.019 | 0.45 |
| Cobalt | | 0.054 | J | 0.042 | 0.89 |
| Chromium | | 11 | | 0.067 | 0.89 |
| Molybdenum | | 0.13 | J | 0.053 | 3.6 |
| Nickel | | 0.21 | J | 0.071 | 3.6 |
| Lead | | 0.39 | J | 0.020 | 0.89 |
| Selenium | | 0.30 | U | 0.30 | 1.8 |
| Vanadium | | 21 | | 0.18 | 0.89 |
| Zinc | | 1.3 | J | 0.50 | 4.5 |
| Antimony | | 0.43 | U | 0.43 | 1.8 |
| Thallium | | 0.12 | U | 0.12 | 1.8 |

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 6010C | Analysis Batch: | 240-175933 | Instrument ID: | I9 |
| Prep Method: | 3050B | Prep Batch: | 240-175558 | Lab File ID: | I9041015A.asc |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 1.21 g |
| Analysis Date: | 04/10/2015 1009 | | | Final Weight/Volume: | 100 mL |
| Prep Date: | 04/08/2015 1026 | | | | |

| Analyte | DryWt Corrected: Y | Result (mg/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Copper | | 1.1 | J | 0.21 | 2.2 |

**7471A Mercury (CVAA)**

| | | | | | |
|---|---|---|---|---|---|
| Analysis Method: | 7471A | Analysis Batch: | 240-175776 | Instrument ID: | H4 |
| Prep Method: | 7471A | Prep Batch: | 240-175585 | Lab File ID: | 040915AHG4.PRN |
| Dilution: | 1.0 | | | Initial Weight/Volume: | 0.59 g |
| Analysis Date: | 04/09/2015 1046 | | | Final Weight/Volume: | 100 mL |
| Prep Date: | 04/08/2015 1500 | | | | |

| Analyte | DryWt Corrected: Y | Result (mg/Kg) | Qualifier | MDL | RL |
|---|---|---|---|---|---|
| Mercury | | 0.015 | U | 0.015 | 0.11 |

**General Chemistry**

**Client Sample ID:** **FILL-001**

Lab Sample ID: 240-49010-1 Date Sampled: 04/06/2015 1500

Client Matrix: Solid Date Received: 04/07/2015 0915

| Analyte | Result | Qual | Units | MDL | RL | Dil | Method |
|---|---|---|---|---|---|---|---|
| Percent Solids | 93 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-175452 | Analysis Date: 04/07/2015 1517 | | | | | | DryWt Corrected: N |
| Percent Moisture | 7.4 | | % | 0.10 | 0.10 | 1.0 | Moisture |
| Analysis Batch: 240-175452 | Analysis Date: 04/07/2015 1517 | | | | | | DryWt Corrected: N |

Client: Tetra Tech, Inc.

Job Number: 240-49010-1

## Surrogate Recovery Report

**8260B Volatile Organic Compounds (GC/MS)**

**Client Matrix: Water**

| Lab Sample ID | Client Sample ID | DBFM %Rec | DCA %Rec | TOL %Rec | BFB %Rec |
|---|---|---|---|---|---|
| 240-49010-2 | TB-040615 | 92 | 95 | 94 | 100 |
| MB 240-175730/6 | | 93 | 94 | 96 | 98 |
| LCS 240-175730/4 | | 94 | 93 | 96 | 98 |
| 240-49022-A-1 MS | | 92 | 93 | 95 | 99 |
| 240-49022-D-1 MSD | | 94 | 92 | 97 | 101 |

| Surrogate | Acceptance Limits |
|---|---|
| DBFM = Dibromofluoromethane (Surr) | 75-121 |
| DCA = 1,2-Dichloroethane-d4 (Surr) | 63-129 |
| TOL = Toluene-d8 (Surr) | 74-120 |
| BFB = 4-Bromofluorobenzene (Surr) | 66-120 |

Client: Tetra Tech, Inc.

Job Number: 240-49010-1

## Surrogate Recovery Report

**8260C Volatile Organic Compounds by GC/MS**

**Client Matrix: Solid**

| Lab Sample ID | Client Sample ID | DBFM %Rec | DCA %Rec | TOL %Rec | BFB %Rec |
|---|---|---|---|---|---|
| 240-49010-1 | FILL-001 | 89 | 82 | 98 | 88 |
| MB 240-175483/8 | | 94 | 91 | 98 | 90 |
| LCS 240-175483/6 | | 97 | 90 | 100 | 97 |
| 240-49010-1 MS | FILL-001 MS | 97 | 88 | 106 | 98 |
| 240-49010-1 MSD | FILL-001 MSD | 93 | 86 | 98 | 91 |

| Surrogate | Acceptance Limits |
|---|---|
| DBFM = Dibromofluoromethane (Surr) | 37-132 |
| DCA = 1,2-Dichloroethane-d4 (Surr) | 58-123 |
| TOL = Toluene-d8 (Surr) | 67-125 |
| BFB = 4-Bromofluorobenzene (Surr) | 52-136 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

## Surrogate Recovery Report

**8270D Semivolatile Organic Compounds (GC/MS)**

**Client Matrix: Solid**

| Lab Sample ID | Client Sample ID | 2FP %Rec | PHL %Rec | NBZ %Rec | FBP %Rec | TBP %Rec | TPH %Rec |
|---|---|---|---|---|---|---|---|
| 240-49010-1 | FILL-001 | 66 | 73 | 63 | 77 | 36 | 77 |
| MB 240-175545/18-A | | 77 | 81 | 75 | 82 | 42 | 78 |
| LCS 240-175545/19-A | | 83 | 85 | 83 | 82 | 72 | 76 |

| Surrogate | Acceptance Limits |
|---|---|
| 2FP = 2-Fluorophenol (Surr) | 24-110 |
| PHL = Phenol-d5 (Surr) | 26-110 |
| NBZ = Nitrobenzene-d5 (Surr) | 20-110 |
| FBP = 2-Fluorobiphenyl (Surr) | 24-110 |
| TBP = 2,4,6-Tribromophenol (Surr) | 10-110 |
| TPH = Terphenyl-d14 (Surr) | 36-110 |

Client: Tetra Tech, Inc.

Job Number: 240-49010-1

## Surrogate Recovery Report

**8015C Nonhalogenated Organics using GC/FID -Modified (Gasoline Range Organics)**

**Client Matrix: Solid**

| Lab Sample ID | Client Sample ID | TFT1 %Rec |
|---|---|---|
| 240-49010-1 | FILL-001 | 86 |
| MB 240-175570/1-A | | 81 |
| LCS 240-175570/2-A | | 100 |
| 180-42592-G-10-C MS | | 81 |
| 180-42592-G-10-D MSD | | 90 |

| Surrogate | Acceptance Limits |
|---|---|
| TFT = Trifluorotoluene (Surr) | 40-139 |

Client: Tetra Tech, Inc.

Job Number: 240-49010-1

## Surrogate Recovery Report

**8015C Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)**

**Client Matrix: Solid**

| Lab Sample ID | Client Sample ID | OTPH1 %Rec |
|---|---|---|
| 240-49010-1 | FILL-001 | 100 |
| MB 240-175550/7-A | | 92 |
| LCS 240-175550/8-A | | 87 |
| 240-49010-1 MS | FILL-001 MS | 93 |
| 240-49010-1 MSD | FILL-001 MSD | 87 |

| Surrogate | Acceptance Limits |
|---|---|
| OTPH = o-Terphenyl (Surr) | 40-160 |

Client: Tetra Tech, Inc.

Job Number: 240-49010-1

## Surrogate Recovery Report

**8082A Polychlorinated Biphenyls (PCBs) by Gas Chromatography**

**Client Matrix: Solid**

| Lab Sample ID | Client Sample ID | TCX1 %Rec | DCB1 %Rec |
|---|---|---|---|
| 240-49010-1 | FILL-001 | 88 | 104 |
| MB 240-175553/17-A | | 61 | 95 |
| LCS 240-175553/18-A | | 64 | 101 |

| Surrogate | Acceptance Limits |
|---|---|
| TCX = Tetrachloro-m-xylene | 29-151 |
| DCB = DCB Decachlorobiphenyl | 14-163 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Method Blank - Batch: 240-175730**

**Method: 8260B**
**Preparation: 5030B**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-175730/6 | Analysis Batch: | 240-175730 | Instrument ID: | A3UX16 |
| Client Matrix: | Water | Prep Batch: | N/A | Lab File ID: | UXM7085.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 mL |
| Analysis Date: | 04/09/2015 1206 | Units: | ug/L | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/09/2015 1206 | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.28 | U | 0.28 | 1.0 |
| 1,1,1-Trichloroethane | 0.44 | U | 0.44 | 1.0 |
| 1,1,2,2-Tetrachloroethane | 0.22 | U | 0.22 | 1.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.45 | U | 0.45 | 1.0 |
| 1,1-Dichloroethane | 0.30 | U | 0.30 | 1.0 |
| 1,1-Dichloroethene | 0.45 | U | 0.45 | 1.0 |
| 1,1-Dichloropropene | 0.42 | U | 0.42 | 1.0 |
| 1,2,3-Trichlorobenzene | 0.37 | U | 0.37 | 1.0 |
| 1,2,3-Trichloropropane | 0.44 | U | 0.44 | 1.0 |
| 1,2,3-Trimethylbenzene | 0.47 | U | 0.47 | 5.0 |
| 1,2,4-Trichlorobenzene | 0.32 | U | 0.32 | 1.0 |
| 1,2,4-Trimethylbenzene | 0.41 | U | 0.41 | 1.0 |
| 1,2-Dibromo-3-Chloropropane | 0.82 | U | 0.82 | 2.0 |
| 1,2-Dichlorobenzene | 0.25 | U | 0.25 | 1.0 |
| 1,2-Dichloroethane | 0.23 | U | 0.23 | 1.0 |
| 1,2-Dichloropropane | 0.25 | U | 0.25 | 1.0 |
| 1,3-Dichlorobenzene | 0.19 | U | 0.19 | 1.0 |
| 1,3-Dichloropropane | 0.19 | U | 0.19 | 1.0 |
| 1,4-Dichlorobenzene | 0.27 | U | 0.27 | 1.0 |
| 2,2-Dichloropropane | 0.26 | U | 0.26 | 1.0 |
| 2-Chloroethyl vinyl ether | 0.59 | U | 0.59 | 10 |
| 2-Chlorotoluene | 0.40 | U | 0.40 | 1.0 |
| 2-Hexanone | 0.48 | U | 0.48 | 10 |
| Bromobenzene | 0.35 | U | 0.35 | 1.0 |
| Bromochloromethane | 0.50 | U | 0.50 | 1.0 |
| 4-Chlorotoluene | 0.29 | U | 0.29 | 1.0 |
| p-Isopropyltoluene | 0.43 | U | 0.43 | 1.0 |
| Acetone | 1.64 | J | 0.94 | 10 |
| Benzene | 0.35 | U | 0.35 | 1.0 |
| Bromoform | 0.56 | U | 0.56 | 1.0 |
| Bromomethane | 0.44 | U | 0.44 | 1.0 |
| Carbon disulfide | 0.38 | U | 0.38 | 1.0 |
| Carbon tetrachloride | 0.43 | U | 0.43 | 1.0 |
| Chlorobenzene | 0.25 | U | 0.25 | 1.0 |
| Chloroethane | 0.32 | U | 0.32 | 1.0 |
| Chloroform | 0.25 | U | 0.25 | 1.0 |
| Chloromethane | 0.44 | U | 0.44 | 1.0 |
| cis-1,2-Dichloroethene | 0.26 | U | 0.26 | 1.0 |
| cis-1,3-Dichloropropene | 0.46 | U | 0.46 | 1.0 |
| Hexachlorobutadiene | 0.35 | U | 0.35 | 1.0 |
| Dibromomethane | 0.42 | U | 0.42 | 1.0 |
| Bromodichloromethane | 0.29 | U | 0.29 | 1.0 |
| Dichlorodifluoromethane | 0.32 | U | 0.32 | 1.0 |
| Ethylbenzene | 0.25 | U | 0.25 | 1.0 |
| 1,2-Dibromoethane | 0.32 | U | 0.32 | 1.0 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Method Blank - Batch: 240-175730**

**Method: 8260B**
**Preparation: 5030B**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-175730/6 | Analysis Batch: | 240-175730 | Instrument ID: | A3UX16 |
| Client Matrix: | Water | Prep Batch: | N/A | Lab File ID: | UXM7085.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 mL |
| Analysis Date: | 04/09/2015 1206 | Units: | ug/L | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/09/2015 1206 | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| Diisopropyl ether | 0.50 | U | 0.50 | 10 |
| Naphthalene | 0.45 | U | 0.45 | 1.0 |
| m-Xylene & p-Xylene | 0.24 | U | 0.24 | 2.0 |
| n-Butylbenzene | 0.31 | U | 0.31 | 1.0 |
| Isopropylbenzene | 0.35 | U | 0.35 | 1.0 |
| N-Propylbenzene | 0.40 | U | 0.40 | 1.0 |
| 2-Butanone (MEK) | 0.53 | U | 0.53 | 10 |
| 4-Methyl-2-pentanone (MIBK) | 0.99 | U | 0.99 | 10 |
| sec-Butylbenzene | 0.48 | U | 0.48 | 1.0 |
| Methyl tert-butyl ether | 0.20 | U | 0.20 | 1.0 |
| Tert-amyl methyl ether | 0.30 | U | 0.30 | 5.0 |
| Methylene Chloride | 0.33 | U | 0.33 | 1.0 |
| o-Xylene | 0.25 | U | 0.25 | 1.0 |
| Styrene | 0.45 | U | 0.45 | 1.0 |
| Ethyl t-butyl ether | 0.23 | U | 0.23 | 5.0 |
| tert-Butylbenzene | 0.41 | U | 0.41 | 1.0 |
| Tetrachloroethene | 0.31 | U | 0.31 | 1.0 |
| Toluene | 0.23 | U | 0.23 | 1.0 |
| trans-1,2-Dichloroethene | 0.30 | U | 0.30 | 1.0 |
| trans-1,3-Dichloropropene | 0.56 | U | 0.56 | 1.0 |
| Trichloroethene | 0.22 | U | 0.22 | 1.0 |
| Trichlorofluoromethane | 0.49 | U | 0.49 | 1.0 |
| Vinyl acetate | 0.41 | U | 0.41 | 2.0 |
| Vinyl chloride | 0.29 | U | 0.29 | 1.0 |
| tert-Butyl alcohol (TBA) | 4.9 | U | 4.9 | 50 |
| Xylenes, Total | 0.52 | U | 0.52 | 2.0 |
| Dibromochloromethane | 0.43 | U | 0.43 | 1.0 |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 94 | 63 - 129 |
| 4-Bromofluorobenzene (Surr) | 98 | 66 - 120 |
| Toluene-d8 (Surr) | 96 | 74 - 120 |
| Dibromofluoromethane (Surr) | 93 | 75 - 121 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Lab Control Sample - Batch: 240-175730**

**Method: 8260B**
**Preparation: 5030B**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-175730/4 | Analysis Batch: | 240-175730 | Instrument ID: | A3UX16 |
| Client Matrix: | Water | Prep Batch: | N/A | Lab File ID: | UXM7083.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 mL |
| Analysis Date: | 04/09/2015 1120 | Units: | ug/L | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/09/2015 1120 | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 10.0 | 10.1 | 101 | 72 - 120 | |
| 1,1,1-Trichloroethane | 10.0 | 10.4 | 104 | 74 - 120 | |
| 1,1,2,2-Tetrachloroethane | 10.0 | 9.71 | 97 | 68 - 120 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.0 | 11.0 | 110 | 74 - 151 | |
| 1,1-Dichloroethane | 10.0 | 10.5 | 105 | 80 - 120 | |
| 1,1-Dichloroethene | 10.0 | 10.7 | 107 | 78 - 131 | |
| 1,1-Dichloropropene | 10.0 | 10.8 | 108 | 80 - 120 | |
| 1,2,3-Trichlorobenzene | 10.0 | 9.59 | 96 | 54 - 126 | |
| 1,2,3-Trichloropropane | 10.0 | 10.2 | 102 | 73 - 129 | |
| 1,2,4-Trichlorobenzene | 10.0 | 9.73 | 97 | 48 - 135 | |
| 1,2,4-Trimethylbenzene | 10.0 | 9.75 | 97 | 76 - 120 | |
| 1,2-Dibromo-3-Chloropropane | 10.0 | 10.2 | 102 | 42 - 136 | |
| 1,2-Dichlorobenzene | 10.0 | 9.77 | 98 | 80 - 120 | |
| 1,2-Dichloroethane | 10.0 | 10.4 | 104 | 71 - 127 | |
| 1,2-Dichloropropane | 10.0 | 10.1 | 101 | 80 - 120 | |
| 1,3-Dichlorobenzene | 10.0 | 9.82 | 98 | 80 - 120 | |
| 1,3-Dichloropropane | 10.0 | 9.62 | 96 | 79 - 120 | |
| 1,4-Dichlorobenzene | 10.0 | 9.90 | 99 | 80 - 120 | |
| 2,2-Dichloropropane | 10.0 | 10.2 | 102 | 50 - 129 | |
| 2-Chloroethyl vinyl ether | 12.0 | 12.4 | 103 | 52 - 131 | |
| 2-Chlorotoluene | 10.0 | 10.1 | 101 | 76 - 120 | |
| 2-Hexanone | 20.0 | 19.2 | 96 | 55 - 133 | |
| Bromobenzene | 10.0 | 10.1 | 101 | 76 - 120 | |
| Bromochloromethane | 10.0 | 9.90 | 99 | 77 - 120 | |
| 4-Chlorotoluene | 10.0 | 9.62 | 96 | 77 - 120 | |
| p-Isopropyltoluene | 10.0 | 9.88 | 99 | 74 - 120 | |
| Acetone | 20.0 | 17.4 | 87 | 43 - 136 | |
| Benzene | 10.0 | 10.1 | 101 | 80 - 120 | |
| Bromoform | 10.0 | 9.74 | 97 | 40 - 131 | |
| Bromomethane | 10.0 | 8.58 | 86 | 11 - 185 | |
| Carbon disulfide | 10.0 | 10.9 | 109 | 62 - 142 | |
| Carbon tetrachloride | 10.0 | 10.8 | 108 | 66 - 128 | |
| Chlorobenzene | 10.0 | 9.79 | 98 | 80 - 120 | |
| Chloroethane | 10.0 | 8.70 | 87 | 25 - 153 | |
| Chloroform | 10.0 | 10.1 | 101 | 79 - 120 | |
| Chloromethane | 10.0 | 8.18 | 82 | 44 - 126 | |
| cis-1,2-Dichloroethene | 10.0 | 10.1 | 101 | 80 - 120 | |
| cis-1,3-Dichloropropene | 10.0 | 10.5 | 105 | 61 - 120 | |
| Hexachlorobutadiene | 10.0 | 9.48 | 95 | 36 - 134 | |
| Dibromomethane | 10.0 | 10.2 | 102 | 80 - 120 | |
| Bromodichloromethane | 10.0 | 9.81 | 98 | 72 - 121 | |
| Dichlorodifluoromethane | 10.0 | 7.10 | 71 | 19 - 129 | |
| Ethylbenzene | 10.0 | 10.1 | 101 | 80 - 120 | |
| 1,2-Dibromoethane | 10.0 | 10.0 | 100 | 79 - 120 | |
| Naphthalene | 10.0 | 9.44 | 94 | 32 - 141 | |
| m-Xylene & p-Xylene | 10.0 | 9.83 | 98 | 80 - 120 | |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Lab Control Sample - Batch: 240-175730**

**Method: 8260B**
**Preparation: 5030B**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-175730/4 | Analysis Batch: | 240-175730 | Instrument ID: | A3UX16 |
| Client Matrix: | Water | Prep Batch: | N/A | Lab File ID: | UXM7083.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 mL |
| Analysis Date: | 04/09/2015 1120 | Units: | ug/L | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/09/2015 1120 | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| n-Butylbenzene | 10.0 | 9.90 | 99 | 66 - 125 | |
| Isopropylbenzene | 10.0 | 9.91 | 99 | 75 - 120 | |
| N-Propylbenzene | 10.0 | 10.3 | 103 | 74 - 121 | |
| 2-Butanone (MEK) | 20.0 | 19.9 | 100 | 60 - 126 | |
| 4-Methyl-2-pentanone (MIBK) | 20.0 | 20.1 | 100 | 63 - 128 | |
| sec-Butylbenzene | 10.0 | 9.99 | 100 | 70 - 120 | |
| Methyl tert-butyl ether | 10.0 | 10.3 | 103 | 52 - 144 | |
| Methylene Chloride | 10.0 | 10.5 | 105 | 66 - 131 | |
| o-Xylene | 10.0 | 10.1 | 101 | 80 - 120 | |
| Styrene | 10.0 | 9.36 | 94 | 79 - 120 | |
| tert-Butylbenzene | 10.0 | 10.1 | 101 | 71 - 120 | |
| Tetrachloroethene | 10.0 | 10.1 | 101 | 79 - 120 | |
| Toluene | 10.0 | 10.0 | 100 | 80 - 120 | |
| trans-1,2-Dichloroethene | 10.0 | 10.6 | 106 | 80 - 120 | |
| trans-1,3-Dichloropropene | 10.0 | 10.8 | 108 | 58 - 120 | |
| Trichloroethene | 10.0 | 10.4 | 104 | 76 - 120 | |
| Trichlorofluoromethane | 10.0 | 10.0 | 100 | 49 - 157 | |
| Vinyl acetate | 10.0 | 7.85 | 78 | 46 - 161 | |
| Vinyl chloride | 10.0 | 8.68 | 87 | 53 - 127 | |
| tert-Butyl alcohol (TBA) | 100 | 95.3 | 95 | 70 - 130 | |
| Xylenes, Total | 20.0 | 19.9 | 100 | 80 - 120 | |
| Dibromochloromethane | 10.0 | 10.0 | 100 | 64 - 120 | |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 93 | 63 - 129 |
| 4-Bromofluorobenzene (Surr) | 98 | 66 - 120 |
| Toluene-d8 (Surr) | 96 | 74 - 120 |
| Dibromofluoromethane (Surr) | 94 | 75 - 121 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175730**

**Method: 8260B**
**Preparation: 5030B**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49022-A-1 MS | Analysis Batch: | 240-175730 | Instrument ID: | A3UX16 |
| Client Matrix: | Water | Prep Batch: | N/A | Lab File ID: | UXM7106.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 mL |
| Analysis Date: | 04/09/2015 2005 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/09/2015 2005 | | | | 5 mL |
| Leach Date: | N/A | | | | |

| | | | | | |
|---|---|---|---|---|---|
| MSD Lab Sample ID: | 240-49022-D-1 MSD | Analysis Batch: | 240-175730 | Instrument ID: | A3UX16 |
| Client Matrix: | Water | Prep Batch: | N/A | Lab File ID: | UXM7107.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 mL |
| Analysis Date: | 04/09/2015 2028 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/09/2015 2028 | | | | 5 mL |
| Leach Date: | N/A | | | | |

| | % Rec. | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | MS | MSD | Limit | RPD | RPD Limit | MS Qual | MSD Qual |
| 1,1,1-Trichloroethane | 95 | 95 | 68 - 121 | 1 | 30 | | |
| 1,1,2,2-Tetrachloroethane | 93 | 92 | 63 - 122 | 1 | 30 | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 95 | 103 | 70 - 152 | 8 | 30 | | |
| 1,1-Dichloroethane | 99 | 100 | 79 - 120 | 1 | 30 | | |
| 1,1-Dichloroethene | 98 | 98 | 74 - 135 | 0 | 30 | | |
| 1,2,4-Trichlorobenzene | 74 | 81 | 38 - 138 | 9 | 30 | | |
| 1,2-Dibromo-3-Chloropropane | 93 | 91 | 32 - 139 | 3 | 30 | | |
| 1,2-Dichlorobenzene | 83 | 84 | 75 - 120 | 2 | 30 | | |
| 1,2-Dichloroethane | 98 | 97 | 68 - 129 | 1 | 30 | | |
| 1,2-Dichloropropane | 94 | 94 | 78 - 120 | 0 | 30 | | |
| 1,3-Dichlorobenzene | 79 | 83 | 73 - 120 | 5 | 30 | | |
| 1,4-Dichlorobenzene | 80 | 83 | 75 - 120 | 4 | 30 | | |
| 2-Hexanone | 94 | 99 | 47 - 139 | 6 | 30 | | |
| Acetone | 74 | 76 | 33 - 145 | 3 | 30 | | |
| Benzene | 95 | 94 | 72 - 121 | 1 | 30 | | |
| Bromoform | 86 | 87 | 32 - 128 | 1 | 30 | | |
| Bromomethane | 82 | 93 | 10 - 186 | 13 | 30 | | |
| Carbon disulfide | 97 | 101 | 57 - 147 | 4 | 30 | | |
| Carbon tetrachloride | 98 | 101 | 59 - 129 | 3 | 30 | | |
| Chlorobenzene | 86 | 87 | 80 - 120 | 1 | 30 | | |
| Chloroethane | 83 | 86 | 21 - 165 | 3 | 30 | | |
| Chloroform | 95 | 94 | 76 - 120 | 1 | 30 | | |
| Chloromethane | 80 | 82 | 33 - 132 | 2 | 30 | | |
| cis-1,2-Dichloroethene | 95 | 96 | 70 - 120 | 1 | 30 | | |
| cis-1,3-Dichloropropene | 92 | 92 | 51 - 120 | 1 | 30 | | |
| Bromodichloromethane | 90 | 92 | 67 - 120 | 2 | 30 | | |
| Dichlorodifluoromethane | 63 | 67 | 17 - 128 | 6 | 30 | | |
| Ethylbenzene | 87 | 90 | 75 - 120 | 3 | 30 | | |
| 1,2-Dibromoethane | 95 | 96 | 74 - 120 | 1 | 30 | | |
| m-Xylene & p-Xylene | 85 | 88 | 75 - 120 | 4 | 30 | | |
| Isopropylbenzene | 83 | 88 | 68 - 120 | 5 | 30 | | |
| 2-Butanone (MEK) | 93 | 93 | 54 - 129 | 0 | 30 | | |
| 4-Methyl-2-pentanone (MIBK) | 103 | 102 | 56 - 131 | 1 | 30 | | |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175730**

**Method: 8260B**
**Preparation: 5030B**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49022-A-1 MS | Analysis Batch: | 240-175730 | Instrument ID: | A3UX16 |
| Client Matrix: | Water | Prep Batch: | N/A | Lab File ID: | UXM7106.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 mL |
| Analysis Date: | 04/09/2015 2005 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/09/2015 2005 | | | | 5 mL |
| Leach Date: | N/A | | | | |

| | | | | | |
|---|---|---|---|---|---|
| MSD Lab Sample ID: | 240-49022-D-1 MSD | Analysis Batch: | 240-175730 | Instrument ID: | A3UX16 |
| Client Matrix: | Water | Prep Batch: | N/A | Lab File ID: | UXM7107.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 mL |
| Analysis Date: | 04/09/2015 2028 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/09/2015 2028 | | | | 5 mL |
| Leach Date: | N/A | | | | |

| | % Rec. | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | MS | MSD | Limit | RPD | RPD Limit | MS Qual | MSD Qual |
| Methyl tert-butyl ether | 101 | 99 | 46 - 144 | 2 | 30 | | |
| Methylene Chloride | 93 | 92 | 63 - 128 | 1 | 30 | | |
| o-Xylene | 88 | 91 | 76 - 120 | 3 | 30 | | |
| Styrene | 75 | 76 | 71 - 120 | 2 | 30 | | |
| Tetrachloroethene | 87 | 89 | 70 - 120 | 3 | 30 | | |
| Toluene | 90 | 92 | 78 - 120 | 1 | 30 | | |
| trans-1,2-Dichloroethene | 94 | 97 | 80 - 120 | 3 | 30 | | |
| trans-1,3-Dichloropropene | 96 | 98 | 46 - 120 | 1 | 30 | | |
| Trichloroethene | 92 | 94 | 66 - 120 | 2 | 30 | | |
| Trichlorofluoromethane | 90 | 97 | 46 - 157 | 8 | 30 | | |
| Vinyl chloride | 80 | 80 | 49 - 130 | 1 | 30 | | |
| Xylenes, Total | 87 | 90 | 76 - 120 | 3 | 30 | | |
| Dibromochloromethane | 90 | 90 | 56 - 120 | 1 | 30 | | |

| Surrogate | MS % Rec | MSD % Rec | Acceptance Limits |
|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 93 | 92 | 63 - 129 |
| 4-Bromofluorobenzene (Surr) | 99 | 101 | 66 - 120 |
| Toluene-d8 (Surr) | 95 | 97 | 74 - 120 |
| Dibromofluoromethane (Surr) | 92 | 94 | 75 - 121 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175730**

**Method: 8260B**
**Preparation: 5030B**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49022-A-1 MS | Units: ug/L | MSD Lab Sample ID: | 240-49022-D-1 MSD | |
| Client Matrix: | Water | | Client Matrix: | Water | |
| Dilution: | 1.0 | | Dilution: | 1.0 | |
| Analysis Date: | 04/09/2015 2005 | | Analysis Date: | 04/09/2015 2028 | |
| Prep Date: | 04/09/2015 2005 | | Prep Date: | 04/09/2015 2028 | |
| Leach Date: | N/A | | Leach Date: | N/A | |

| Analyte | Sample Result/Qual | | MS Spike Amount | MSD Spike Amount | MS Result/Qual | MSD Result/Qual |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 0.44 | U | 10.0 | 10.0 | 9.52 | 9.46 |
| 1,1,2,2-Tetrachloroethane | 0.22 | U | 10.0 | 10.0 | 9.34 | 9.21 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.45 | U | 10.0 | 10.0 | 9.50 | 10.3 |
| 1,1-Dichloroethane | 0.30 | U | 10.0 | 10.0 | 9.95 | 10.0 |
| 1,1-Dichloroethene | 0.45 | U | 10.0 | 10.0 | 9.80 | 9.82 |
| 1,2,4-Trichlorobenzene | 0.32 | U | 10.0 | 10.0 | 7.42 | 8.11 |
| 1,2-Dibromo-3-Chloropropane | 0.82 | U | 10.0 | 10.0 | 9.35 | 9.10 |
| 1,2-Dichlorobenzene | 0.25 | U | 10.0 | 10.0 | 8.31 | 8.43 |
| 1,2-Dichloroethane | 0.23 | U | 10.0 | 10.0 | 9.78 | 9.68 |
| 1,2-Dichloropropane | 0.25 | U | 10.0 | 10.0 | 9.42 | 9.38 |
| 1,3-Dichlorobenzene | 0.19 | U | 10.0 | 10.0 | 7.90 | 8.32 |
| 1,4-Dichlorobenzene | 0.27 | U | 10.0 | 10.0 | 7.99 | 8.34 |
| 2-Hexanone | 0.48 | U | 20.0 | 20.0 | 18.8 | 19.9 |
| Acetone | 1.8 | J | 20.0 | 20.0 | 16.6 | 17.0 |
| Benzene | 0.35 | U | 10.0 | 10.0 | 9.51 | 9.43 |
| Bromoform | 0.56 | U | 10.0 | 10.0 | 8.57 | 8.66 |
| Bromomethane | 0.44 | U | 10.0 | 10.0 | 8.15 | 9.27 |
| Carbon disulfide | 0.38 | U | 10.0 | 10.0 | 9.72 | 10.1 |
| Carbon tetrachloride | 0.43 | U | 10.0 | 10.0 | 9.81 | 10.1 |
| Chlorobenzene | 0.25 | U | 10.0 | 10.0 | 8.56 | 8.68 |
| Chloroethane | 0.32 | U | 10.0 | 10.0 | 8.31 | 8.58 |
| Chloroform | 0.25 | U | 10.0 | 10.0 | 9.50 | 9.36 |
| Chloromethane | 0.44 | U | 10.0 | 10.0 | 8.01 | 8.20 |
| cis-1,2-Dichloroethene | 0.26 | U | 10.0 | 10.0 | 9.51 | 9.63 |
| cis-1,3-Dichloropropene | 0.46 | U | 10.0 | 10.0 | 9.20 | 9.25 |
| Bromodichloromethane | 0.29 | U | 10.0 | 10.0 | 9.04 | 9.20 |
| Dichlorodifluoromethane | 0.32 | U | 10.0 | 10.0 | 6.26 | 6.65 |
| Ethylbenzene | 0.25 | U | 10.0 | 10.0 | 8.69 | 8.98 |
| 1,2-Dibromoethane | 0.32 | U | 10.0 | 10.0 | 9.49 | 9.57 |
| m-Xylene & p-Xylene | 0.24 | U | 10.0 | 10.0 | 8.48 | 8.80 |
| Isopropylbenzene | 0.35 | U | 10.0 | 10.0 | 8.31 | 8.78 |
| 2-Butanone (MEK) | 0.53 | U | 20.0 | 20.0 | 18.6 | 18.7 |
| 4-Methyl-2-pentanone (MIBK) | 0.99 | U | 20.0 | 20.0 | 20.6 | 20.3 |
| Methyl tert-butyl ether | 0.20 | U | 10.0 | 10.0 | 10.1 | 9.86 |
| Methylene Chloride | 0.33 | U | 10.0 | 10.0 | 9.26 | 9.21 |
| o-Xylene | 0.25 | U | 10.0 | 10.0 | 8.84 | 9.13 |
| Styrene | 0.45 | U | 10.0 | 10.0 | 7.49 | 7.62 |
| Tetrachloroethene | 0.31 | U | 10.0 | 10.0 | 8.67 | 8.92 |
| Toluene | 0.23 | U | 10.0 | 10.0 | 9.03 | 9.17 |
| trans-1,2-Dichloroethene | 0.30 | U | 10.0 | 10.0 | 9.38 | 9.71 |
| trans-1,3-Dichloropropene | 0.56 | U | 10.0 | 10.0 | 9.63 | 9.77 |
| Trichloroethene | 0.22 | U | 10.0 | 10.0 | 9.24 | 9.44 |
| Trichlorofluoromethane | 0.49 | U | 10.0 | 10.0 | 8.96 | 9.75 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175730**

**Method: 8260B**
**Preparation: 5030B**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49022-A-1 MS | Units: | ug/L | MSD Lab Sample ID: | 240-49022-D-1 MSD |
| Client Matrix: | Water | | | Client Matrix: | Water |
| Dilution: | 1.0 | | | Dilution: | 1.0 |
| Analysis Date: | 04/09/2015 2005 | | | Analysis Date: | 04/09/2015 2028 |
| Prep Date: | 04/09/2015 2005 | | | Prep Date: | 04/09/2015 2028 |
| Leach Date: | N/A | | | Leach Date: | N/A |

| Analyte | Sample Result/Qual | | MS Spike Amount | MSD Spike Amount | MS Result/Qual | MSD Result/Qual |
|---|---|---|---|---|---|---|
| Vinyl chloride | 0.29 | U | 10.0 | 10.0 | 8.04 | 7.97 |
| Xylenes, Total | 0.52 | U | 20.0 | 20.0 | 17.3 | 17.9 |
| Dibromochloromethane | 0.43 | U | 10.0 | 10.0 | 9.03 | 8.96 |

**Method Blank - Batch: 240-175483**

**Method: 8260C**
**Preparation: N/A**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-175483/8 | Analysis Batch: | 240-175483 | Instrument ID: | A3UX8 |
| Client Matrix: | Solid | Prep Batch: | N/A | Lab File ID: | UX86844.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 g |
| Analysis Date: | 04/08/2015 0314 | Units: | ug/Kg | Final Weight/Volume: | 5 mL |
| Prep Date: | N/A | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.62 | U | 0.62 | 5.0 |
| 1,1,1-Trichloroethane | 0.56 | U | 0.56 | 5.0 |
| 1,1,2,2-Tetrachloroethane | 0.34 | U | 0.34 | 5.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 1.3 | U | 1.3 | 5.0 |
| 1,1-Dichloroethane | 0.36 | U | 0.36 | 5.0 |
| 1,1-Dichloroethene | 0.52 | U | 0.52 | 5.0 |
| 1,1-Dichloropropene | 0.30 | U | 0.30 | 5.0 |
| 1,2,3-Trichlorobenzene | 0.38 | U | 0.38 | 5.0 |
| 1,2,3-Trichloropropane | 0.90 | U | 0.90 | 5.0 |
| 1,2,3-Trimethylbenzene | 0.17 | U | 0.17 | 5.0 |
| 1,2,4-Trichlorobenzene | 0.27 | U | 0.27 | 5.0 |
| 1,2,4-Trimethylbenzene | 0.65 | U | 0.65 | 5.0 |
| 1,2-Dibromo-3-Chloropropane | 1.3 | U | 1.3 | 10 |
| 1,2-Dichlorobenzene | 0.36 | U | 0.36 | 5.0 |
| 1,2-Dichloroethane | 0.34 | U | 0.34 | 5.0 |
| 1,2-Dichloropropane | 0.69 | U | 0.69 | 5.0 |
| 1,3-Dichlorobenzene | 0.35 | U | 0.35 | 5.0 |
| 1,3-Dichloropropane | 0.34 | U | 0.34 | 5.0 |
| 1,4-Dichlorobenzene | 0.66 | U | 0.66 | 5.0 |
| 2,2-Dichloropropane | 0.94 | U | 0.94 | 5.0 |
| 2-Chloroethyl vinyl ether | 1.4 | U | 1.4 | 50 |
| 2-Chlorotoluene | 0.40 | U | 0.40 | 5.0 |
| 2-Hexanone | 0.63 | U | 0.63 | 20 |
| Bromobenzene | 0.33 | U | 0.33 | 5.0 |
| Bromochloromethane | 0.71 | U | 0.71 | 5.0 |
| 4-Chlorotoluene | 0.41 | U | 0.41 | 5.0 |
| p-Isopropyltoluene | 0.21 | U | 0.21 | 5.0 |
| Acetone | 6.3 | U | 6.3 | 20 |
| Benzene | 0.23 | U | 0.23 | 5.0 |
| Bromoform | 0.33 | U | 0.33 | 5.0 |
| Bromomethane | 0.54 | U | 0.54 | 5.0 |
| Carbon disulfide | 0.44 | U | 0.44 | 5.0 |
| Carbon tetrachloride | 0.37 | U | 0.37 | 5.0 |
| Chlorobenzene | 0.33 | U | 0.33 | 5.0 |
| Chloroethane | 0.86 | U | 0.86 | 5.0 |
| Chloroform | 0.29 | U | 0.29 | 5.0 |
| Chloromethane | 0.41 | U | 0.41 | 5.0 |
| cis-1,2-Dichloroethene | 0.36 | U | 0.36 | 5.0 |
| cis-1,3-Dichloropropene | 0.34 | U | 0.34 | 5.0 |
| Hexachlorobutadiene | 1.2 | U | 1.2 | 5.0 |
| Dibromomethane | 0.63 | U | 0.63 | 5.0 |
| Bromodichloromethane | 0.28 | U | 0.28 | 5.0 |
| Dichlorodifluoromethane | 0.50 | U | 0.50 | 5.0 |
| Ethylbenzene | 0.26 | U | 0.26 | 5.0 |
| 1,2-Dibromoethane | 0.50 | U | 0.50 | 5.0 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Method Blank - Batch: 240-175483**

**Method: 8260C**
**Preparation: N/A**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-175483/8 | Analysis Batch: | 240-175483 | Instrument ID: | A3UX8 |
| Client Matrix: | Solid | Prep Batch: | N/A | Lab File ID: | UX86844.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 g |
| Analysis Date: | 04/08/2015 0314 | Units: | ug/Kg | Final Weight/Volume: | 5 mL |
| Prep Date: | N/A | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| Diisopropyl ether | 1.5 | U | 1.5 | 10 |
| Naphthalene | 0.412 | J | 0.19 | 5.0 |
| m-Xylene & p-Xylene | 1.2 | U | 1.2 | 10 |
| n-Butylbenzene | 0.23 | U | 0.23 | 5.0 |
| Isopropylbenzene | 0.16 | U | 0.16 | 5.0 |
| N-Propylbenzene | 0.40 | U | 0.40 | 5.0 |
| 2-Butanone (MEK) | 1.4 | U | 1.4 | 20 |
| 4-Methyl-2-pentanone (MIBK) | 0.54 | U | 0.54 | 20 |
| sec-Butylbenzene | 0.18 | U | 0.18 | 5.0 |
| Methyl tert-butyl ether | 0.43 | U | 0.43 | 5.0 |
| Tert-amyl methyl ether | 0.37 | U | 0.37 | 5.0 |
| Methylene Chloride | 0.696 | J | 0.67 | 5.0 |
| o-Xylene | 0.35 | U | 0.35 | 5.0 |
| Styrene | 0.15 | U | 0.15 | 5.0 |
| Ethyl-t-butyl ether (ETBE) | 0.22 | U | 0.22 | 5.0 |
| tert-Butylbenzene | 0.29 | U | 0.29 | 5.0 |
| Tetrachloroethene | 0.52 | U | 0.52 | 5.0 |
| Toluene | 0.27 | U | 0.27 | 5.0 |
| trans-1,2-Dichloroethene | 0.41 | U | 0.41 | 5.0 |
| trans-1,3-Dichloropropene | 0.54 | U | 0.54 | 5.0 |
| Trichloroethene | 0.42 | U | 0.42 | 5.0 |
| Trichlorofluoromethane | 0.34 | U | 0.34 | 5.0 |
| Vinyl acetate | 0.25 | U | 0.25 | 10 |
| Vinyl chloride | 0.39 | U | 0.39 | 5.0 |
| tert-Butyl alcohol (TBA) | 7.6 | U | 7.6 | 200 |
| Xylenes, Total | 0.35 | U | 0.35 | 10 |
| Dibromochloromethane | 0.55 | U | 0.55 | 5.0 |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 91 | 58 - 123 |
| 4-Bromofluorobenzene (Surr) | 90 | 52 - 136 |
| Toluene-d8 (Surr) | 98 | 67 - 125 |
| Dibromofluoromethane (Surr) | 94 | 37 - 132 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Lab Control Sample - Batch: 240-175483**

**Method: 8260C**
**Preparation: N/A**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-175483/6 | Analysis Batch: | 240-175483 | Instrument ID: | A3UX8 |
| Client Matrix: | Solid | Prep Batch: | N/A | Lab File ID: | UX86842.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 g |
| Analysis Date: | 04/08/2015 0231 | Units: | ug/Kg | Final Weight/Volume: | 5 mL |
| Prep Date: | N/A | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 50.0 | 51.1 | 102 | 80 - 120 | |
| 1,1,1-Trichloroethane | 50.0 | 47.9 | 96 | 77 - 126 | |
| 1,1,2,2-Tetrachloroethane | 50.0 | 53.4 | 107 | 77 - 123 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 50.0 | 48.0 | 96 | 80 - 138 | |
| 1,1-Dichloroethane | 50.0 | 47.0 | 94 | 76 - 120 | |
| 1,1-Dichloroethene | 50.0 | 46.9 | 94 | 75 - 135 | |
| 1,1-Dichloropropene | 50.0 | 52.6 | 105 | 80 - 120 | |
| 1,2,3-Trichlorobenzene | 50.0 | 43.9 | 88 | 61 - 121 | |
| 1,2,3-Trichloropropane | 50.0 | 55.7 | 111 | 80 - 126 | |
| 1,2,4-Trichlorobenzene | 50.0 | 47.3 | 95 | 64 - 124 | |
| 1,2,4-Trimethylbenzene | 50.0 | 50.9 | 102 | 80 - 129 | |
| 1,2-Dibromo-3-Chloropropane | 50.0 | 58.8 | 118 | 61 - 132 | |
| 1,2-Dichlorobenzene | 50.0 | 47.5 | 95 | 76 - 120 | |
| 1,2-Dichloroethane | 50.0 | 44.7 | 89 | 72 - 120 | |
| 1,2-Dichloropropane | 50.0 | 47.8 | 96 | 80 - 120 | |
| 1,3-Dichlorobenzene | 50.0 | 48.1 | 96 | 78 - 120 | |
| 1,3-Dichloropropane | 50.0 | 49.9 | 100 | 80 - 120 | |
| 1,4-Dichlorobenzene | 50.0 | 46.4 | 93 | 75 - 120 | |
| 2,2-Dichloropropane | 50.0 | 44.0 | 88 | 69 - 135 | |
| 2-Chloroethyl vinyl ether | 60.0 | 79.2 | 132 | 28 - 173 | |
| 2-Chlorotoluene | 50.0 | 51.1 | 102 | 78 - 120 | |
| 2-Hexanone | 100 | 114 | 114 | 64 - 136 | |
| Bromobenzene | 50.0 | 50.3 | 101 | 80 - 120 | |
| Bromochloromethane | 50.0 | 48.7 | 97 | 79 - 120 | |
| 4-Chlorotoluene | 50.0 | 50.8 | 102 | 79 - 120 | |
| p-Isopropyltoluene | 50.0 | 51.8 | 104 | 77 - 131 | |
| Acetone | 100 | 104 | 104 | 41 - 137 | |
| Benzene | 50.0 | 47.9 | 96 | 79 - 120 | |
| Bromoform | 50.0 | 49.5 | 99 | 62 - 133 | |
| Bromomethane | 50.0 | 50.1 | 100 | 42 - 136 | |
| Carbon disulfide | 50.0 | 51.2 | 102 | 62 - 146 | |
| Carbon tetrachloride | 50.0 | 49.9 | 100 | 71 - 129 | |
| Chlorobenzene | 50.0 | 47.4 | 95 | 78 - 120 | |
| Chloroethane | 50.0 | 48.0 | 96 | 58 - 120 | |
| Chloroform | 50.0 | 46.3 | 93 | 77 - 120 | |
| Chloromethane | 50.0 | 37.9 | 76 | 50 - 120 | |
| cis-1,2-Dichloroethene | 50.0 | 50.0 | 100 | 76 - 120 | |
| cis-1,3-Dichloropropene | 50.0 | 54.0 | 108 | 74 - 128 | |
| Hexachlorobutadiene | 50.0 | 45.0 | 90 | 54 - 131 | |
| Dibromomethane | 50.0 | 49.6 | 99 | 80 - 120 | |
| Bromodichloromethane | 50.0 | 51.3 | 103 | 80 - 122 | |
| Dichlorodifluoromethane | 50.0 | 31.9 | 64 | 26 - 120 | |
| Ethylbenzene | 50.0 | 49.2 | 98 | 79 - 120 | |
| 1,2-Dibromoethane | 50.0 | 53.3 | 107 | 80 - 120 | |
| Naphthalene | 50.0 | 52.1 | 104 | 65 - 123 | |
| m-Xylene & p-Xylene | 50.0 | 50.8 | 102 | 80 - 120 | |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Lab Control Sample - Batch: 240-175483**

**Method: 8260C**
**Preparation: N/A**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-175483/6 | Analysis Batch: | 240-175483 | Instrument ID: | A3UX8 |
| Client Matrix: | Solid | Prep Batch: | N/A | Lab File ID: | UX86842.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 g |
| Analysis Date: | 04/08/2015 0231 | Units: | ug/Kg | Final Weight/Volume: | 5 mL |
| Prep Date: | N/A | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| n-Butylbenzene | 50.0 | 51.8 | 104 | 68 - 135 | |
| Isopropylbenzene | 50.0 | 52.6 | 105 | 76 - 122 | |
| N-Propylbenzene | 50.0 | 54.6 | 109 | 80 - 129 | |
| 2-Butanone (MEK) | 100 | 101 | 101 | 52 - 131 | |
| 4-Methyl-2-pentanone (MIBK) | 100 | 114 | 114 | 67 - 135 | |
| sec-Butylbenzene | 50.0 | 52.5 | 105 | 74 - 129 | |
| Methyl tert-butyl ether | 50.0 | 49.5 | 99 | 49 - 165 | |
| Methylene Chloride | 50.0 | 50.2 | 100 | 75 - 120 | |
| o-Xylene | 50.0 | 51.6 | 103 | 80 - 120 | |
| Styrene | 50.0 | 51.2 | 102 | 80 - 120 | |
| tert-Butylbenzene | 50.0 | 58.2 | 116 | 76 - 126 | |
| Tetrachloroethene | 50.0 | 47.1 | 94 | 79 - 120 | |
| Toluene | 50.0 | 47.8 | 96 | 75 - 120 | |
| trans-1,2-Dichloroethene | 50.0 | 50.5 | 101 | 78 - 120 | |
| trans-1,3-Dichloropropene | 50.0 | 56.2 | 112 | 73 - 131 | |
| Trichloroethene | 50.0 | 49.9 | 100 | 79 - 120 | |
| Trichlorofluoromethane | 50.0 | 46.8 | 94 | 57 - 146 | |
| Vinyl acetate | 50.0 | 36.8 | 74 | 70 - 130 | |
| Vinyl chloride | 50.0 | 41.4 | 83 | 57 - 120 | |
| tert-Butyl alcohol (TBA) | 500 | 571 | 114 | 60 - 125 | |
| Xylenes, Total | 100 | 102 | 102 | 80 - 120 | |
| Dibromochloromethane | 50.0 | 53.7 | 107 | 72 - 127 | |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 90 | 58 - 123 |
| 4-Bromofluorobenzene (Surr) | 97 | 52 - 136 |
| Toluene-d8 (Surr) | 100 | 67 - 125 |
| Dibromofluoromethane (Surr) | 97 | 37 - 132 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175488**

**Method: 8260C**
**Preparation: 5030C**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49010-1 | Analysis Batch: | 240-175483 | Instrument ID: | A3UX8 |
| Client Matrix: | Solid | Prep Batch: | 240-175488 | Lab File ID: | UX86866.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5.08 g |
| Analysis Date: | 04/08/2015 1127 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 0523 | | | | 5 mL |
| Leach Date: | N/A | | | | |

| | | | | | |
|---|---|---|---|---|---|
| MSD Lab Sample ID: | 240-49010-1 | Analysis Batch: | 240-175483 | Instrument ID: | A3UX8 |
| Client Matrix: | Solid | Prep Batch: | 240-175488 | Lab File ID: | UX86867.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5.21 g |
| Analysis Date: | 04/08/2015 1148 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 0523 | | | | 5 mL |
| Leach Date: | N/A | | | | |

| | % Rec. | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | MS | MSD | Limit | RPD | RPD Limit | MS Qual | MSD Qual |
| 1,1,1,2-Tetrachloroethane | 94 | 85 | 34 - 135 | 12 | 30 | | |
| 1,1,1-Trichloroethane | 85 | 80 | 51 - 128 | 9 | 30 | | |
| 1,1,2,2-Tetrachloroethane | 92 | 85 | 16 - 179 | 10 | 30 | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 85 | 80 | 50 - 147 | 8 | 30 | | |
| 1,1-Dichloroethane | 89 | 82 | 54 - 122 | 10 | 30 | | |
| 1,1-Dichloroethene | 87 | 82 | 49 - 157 | 9 | 30 | | |
| 1,1-Dichloropropene | 92 | 87 | 50 - 122 | 9 | 30 | | |
| 1,2,3-Trichlorobenzene | 63 | 55 | 10 - 120 | 16 | 30 | | |
| 1,2,3-Trichloropropane | 95 | 91 | 32 - 174 | 7 | 30 | | |
| 1,2,4-Trichlorobenzene | 70 | 60 | 10 - 120 | 18 | 30 | | |
| 1,2,4-Trimethylbenzene | 86 | 75 | 10 - 173 | 17 | 30 | | |
| 1,2-Dibromo-3-Chloropropane | 89 | 83 | 10 - 153 | 9 | 30 | | |
| 1,2-Dichlorobenzene | 83 | 73 | 17 - 122 | 15 | 30 | | |
| 1,2-Dichloroethane | 81 | 78 | 49 - 123 | 7 | 30 | | |
| 1,2-Dichloropropane | 88 | 82 | 61 - 120 | 10 | 30 | | |
| 1,3-Dichlorobenzene | 82 | 74 | 16 - 126 | 13 | 30 | | |
| 1,3-Dichloropropane | 91 | 86 | 54 - 128 | 8 | 30 | | |
| 1,4-Dichlorobenzene | 79 | 70 | 15 - 121 | 14 | 30 | | |
| 2,2-Dichloropropane | 81 | 69 | 49 - 132 | 18 | 30 | | |
| 2-Chloroethyl vinyl ether | 140 | 135 | 10 - 162 | 7 | 30 | J | J |
| 2-Chlorotoluene | 93 | 83 | 11 - 162 | 14 | 30 | | |
| 2-Hexanone | 84 | 83 | 37 - 147 | 4 | 30 | | |
| Bromobenzene | 93 | 81 | 24 - 144 | 16 | 30 | | |
| Bromochloromethane | 90 | 86 | 53 - 120 | 7 | 30 | | |
| 4-Chlorotoluene | 89 | 81 | 15 - 149 | 12 | 30 | | |
| p-Isopropyltoluene | 84 | 72 | 10 - 165 | 17 | 30 | | |
| Acetone | 71 | 76 | 24 - 140 | 4 | 30 | | |
| Benzene | 89 | 83 | 53 - 120 | 9 | 30 | | |
| Bromoform | 77 | 70 | 18 - 129 | 11 | 30 | | |
| Bromomethane | 93 | 78 | 33 - 130 | 19 | 30 | | |
| Carbon disulfide | 88 | 83 | 20 - 151 | 8 | 30 | | |
| Carbon tetrachloride | 84 | 80 | 32 - 137 | 7 | 30 | | |
| Chlorobenzene | 89 | 82 | 37 - 120 | 11 | 30 | | |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175488**

**Method: 8260C**
**Preparation: 5030C**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49010-1 | Analysis Batch: | 240-175483 | Instrument ID: | A3UX8 |
| Client Matrix: | Solid | Prep Batch: | 240-175488 | Lab File ID: | UX86866.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5.08 g |
| Analysis Date: | 04/08/2015 1127 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 0523 | | | | 5 mL |
| Leach Date: | N/A | | | | |

| | | | | | |
|---|---|---|---|---|---|
| MSD Lab Sample ID: | 240-49010-1 | Analysis Batch: | 240-175483 | Instrument ID: | A3UX8 |
| Client Matrix: | Solid | Prep Batch: | 240-175488 | Lab File ID: | UX86867.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5.21 g |
| Analysis Date: | 04/08/2015 1148 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 0523 | | | | 5 mL |
| Leach Date: | N/A | | | | |

| | % Rec. | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | MS | MSD | Limit | RPD | RPD Limit | MS Qual | MSD Qual |
| Chloroethane | 88 | 75 | 45 - 120 | 18 | 30 | | |
| Chloroform | 88 | 80 | 53 - 120 | 12 | 30 | | |
| Chloromethane | 73 | 64 | 34 - 120 | 15 | 30 | | |
| cis-1,2-Dichloroethene | 95 | 86 | 50 - 120 | 12 | 30 | | |
| cis-1,3-Dichloropropene | 92 | 85 | 27 - 133 | 11 | 30 | | |
| Hexachlorobutadiene | 64 | 51 | 10 - 131 | 26 | 30 | | |
| Dibromomethane | 92 | 84 | 52 - 123 | 12 | 30 | | |
| Bromodichloromethane | 89 | 85 | 35 - 132 | 8 | 30 | | |
| Dichlorodifluoromethane | 55 | 49 | 17 - 120 | 14 | 30 | | |
| Ethylbenzene | 89 | 81 | 30 - 131 | 12 | 30 | | |
| 1,2-Dibromoethane | 97 | 91 | 45 - 127 | 9 | 30 | | |
| Naphthalene | 78 | 73 | 10 - 124 | 10 | 30 | | |
| m-Xylene & p-Xylene | 90 | 82 | 29 - 131 | 11 | 30 | | |
| n-Butylbenzene | 79 | 65 | 10 - 148 | 22 | 30 | | |
| Isopropylbenzene | 93 | 83 | 21 - 134 | 14 | 30 | | |
| N-Propylbenzene | 93 | 82 | 10 - 178 | 14 | 30 | | |
| 2-Butanone (MEK) | 83 | 82 | 30 - 143 | 4 | 30 | | |
| 4-Methyl-2-pentanone (MIBK) | 89 | 88 | 43 - 147 | 3 | 30 | | |
| sec-Butylbenzene | 89 | 76 | 10 - 172 | 18 | 30 | | |
| Methyl tert-butyl ether | 90 | 84 | 51 - 157 | 10 | 30 | | |
| Methylene Chloride | 99 | 89 | 54 - 120 | 14 | 30 | | |
| o-Xylene | 97 | 84 | 29 - 134 | 17 | 30 | | |
| Styrene | 90 | 80 | 27 - 127 | 14 | 30 | | |
| tert-Butylbenzene | 104 | 82 | 10 - 163 | 26 | 30 | | |
| Tetrachloroethene | 86 | 76 | 31 - 135 | 15 | 30 | | |
| Toluene | 91 | 83 | 39 - 129 | 12 | 30 | | |
| trans-1,2-Dichloroethene | 92 | 87 | 50 - 123 | 8 | 30 | | |
| trans-1,3-Dichloropropene | 92 | 85 | 28 - 137 | 11 | 30 | | |
| Trichloroethene | 90 | 85 | 10 - 177 | 9 | 30 | | |
| Trichlorofluoromethane | 84 | 76 | 36 - 142 | 13 | 30 | | |
| Vinyl acetate | 4 | 1 | 70 - 130 | 106 | 30 | J F1 | J F1 F2 |
| Vinyl chloride | 77 | 71 | 42 - 120 | 12 | 30 | | |
| tert-Butyl alcohol (TBA) | 86 | 90 | 60 - 125 | 2 | 30 | | |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175488**

**Method: 8260C**
**Preparation: 5030C**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49010-1 | Analysis Batch: | 240-175483 | Instrument ID: | A3UX8 |
| Client Matrix: | Solid | Prep Batch: | 240-175488 | Lab File ID: | UX86866.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5.08 g |
| Analysis Date: | 04/08/2015 1127 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 0523 | | | | 5 mL |
| Leach Date: | N/A | | | | |

| | | | | | |
|---|---|---|---|---|---|
| MSD Lab Sample ID: | 240-49010-1 | Analysis Batch: | 240-175483 | Instrument ID: | A3UX8 |
| Client Matrix: | Solid | Prep Batch: | 240-175488 | Lab File ID: | UX86867.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5.21 g |
| Analysis Date: | 04/08/2015 1148 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 0523 | | | | 5 mL |
| Leach Date: | N/A | | | | |

| | % Rec. | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | MS | MSD | Limit | RPD | RPD Limit | MS Qual | MSD Qual |
| Xylenes, Total | 93 | 83 | 30 - 131 | 14 | 30 | | |
| Dibromochloromethane | 94 | 82 | 29 - 135 | 16 | 30 | | |

| Surrogate | MS % Rec | MSD % Rec | Acceptance Limits |
|---|---|---|---|
| 1,2-Dichloroethane-d4 (Surr) | 88 | 86 | 58 - 123 |
| 4-Bromofluorobenzene (Surr) | 98 | 91 | 52 - 136 |
| Toluene-d8 (Surr) | 106 | 98 | 67 - 125 |
| Dibromofluoromethane (Surr) | 97 | 93 | 37 - 132 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175488**

**Method: 8260C**
**Preparation: 5030C**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49010-1 | Units: | ug/Kg | MSD Lab Sample ID: | 240-49010-1 |
| Client Matrix: | Solid | | | Client Matrix: | Solid |
| Dilution: | 1.0 | | | Dilution: | 1.0 |
| Analysis Date: | 04/08/2015 1127 | | | Analysis Date: | 04/08/2015 1148 |
| Prep Date: | 04/08/2015 0523 | | | Prep Date: | 04/08/2015 0523 |
| Leach Date: | N/A | | | Leach Date: | N/A |

| Analyte | Sample Result/Qual | | MS Spike Amount | MSD Spike Amount | MS Result/Qual | | MSD Result/Qual | |
|---|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 0.65 | U | 26.6 | 25.9 | 24.9 | | 22.1 | |
| 1,1,1-Trichloroethane | 0.59 | U | 26.6 | 25.9 | 22.7 | | 20.8 | |
| 1,1,2,2-Tetrachloroethane | 0.36 | U | 26.6 | 25.9 | 24.5 | | 22.1 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 1.4 | U | 26.6 | 25.9 | 22.5 | | 20.8 | |
| 1,1-Dichloroethane | 0.38 | U | 26.6 | 25.9 | 23.7 | | 21.3 | |
| 1,1-Dichloroethene | 0.55 | U | 26.6 | 25.9 | 23.2 | | 21.2 | |
| 1,1-Dichloropropene | 0.32 | U | 26.6 | 25.9 | 24.6 | | 22.5 | |
| 1,2,3-Trichlorobenzene | 0.40 | U | 26.6 | 25.9 | 16.8 | | 14.2 | |
| 1,2,3-Trichloropropane | 0.95 | U | 26.6 | 25.9 | 25.4 | | 23.7 | |
| 1,2,4-Trichlorobenzene | 0.28 | U | 26.6 | 25.9 | 18.6 | | 15.6 | |
| 1,2,4-Trimethylbenzene | 0.68 | U | 26.6 | 25.9 | 23.0 | | 19.4 | |
| 1,2-Dibromo-3-Chloropropane | 1.4 | U | 26.6 | 25.9 | 23.6 | | 21.5 | |
| 1,2-Dichlorobenzene | 0.38 | U | 26.6 | 25.9 | 22.0 | | 19.0 | |
| 1,2-Dichloroethane | 0.36 | U | 26.6 | 25.9 | 21.6 | | 20.1 | |
| 1,2-Dichloropropane | 0.72 | U | 26.6 | 25.9 | 23.4 | | 21.2 | |
| 1,3-Dichlorobenzene | 0.37 | U | 26.6 | 25.9 | 21.7 | | 19.1 | |
| 1,3-Dichloropropane | 0.36 | U | 26.6 | 25.9 | 24.3 | | 22.4 | |
| 1,4-Dichlorobenzene | 0.69 | U | 26.6 | 25.9 | 21.0 | | 18.3 | |
| 2,2-Dichloropropane | 0.99 | U | 26.6 | 25.9 | 21.4 | | 17.9 | |
| 2-Chloroethyl vinyl ether | 1.5 | U | 31.9 | 31.1 | 44.8 | J | 41.8 | J |
| 2-Chlorotoluene | 0.42 | U | 26.6 | 25.9 | 24.6 | | 21.4 | |
| 2-Hexanone | 0.66 | U | 53.1 | 51.8 | 44.9 | | 43.3 | |
| Bromobenzene | 0.35 | U | 26.6 | 25.9 | 24.7 | | 21.0 | |
| Bromochloromethane | 0.75 | U | 26.6 | 25.9 | 24.0 | | 22.4 | |
| 4-Chlorotoluene | 0.43 | U | 26.6 | 25.9 | 23.7 | | 20.9 | |
| p-Isopropyltoluene | 0.22 | U | 26.6 | 25.9 | 22.2 | | 18.7 | |
| Acetone | 6.6 | U | 53.1 | 51.8 | 37.8 | | 39.3 | |
| Benzene | 0.24 | U | 26.6 | 25.9 | 23.6 | | 21.4 | |
| Bromoform | 0.35 | U | 26.6 | 25.9 | 20.4 | | 18.3 | |
| Bromomethane | 0.57 | U | 26.6 | 25.9 | 24.6 | | 20.3 | |
| Carbon disulfide | 0.46 | U | 26.6 | 25.9 | 23.4 | | 21.5 | |
| Carbon tetrachloride | 0.39 | U | 26.6 | 25.9 | 22.3 | | 20.8 | |
| Chlorobenzene | 0.35 | U | 26.6 | 25.9 | 23.7 | | 21.1 | |
| Chloroethane | 0.90 | U | 26.6 | 25.9 | 23.3 | | 19.4 | |
| Chloroform | 0.30 | U | 26.6 | 25.9 | 23.5 | | 20.9 | |
| Chloromethane | 0.43 | U | 26.6 | 25.9 | 19.4 | | 16.7 | |
| cis-1,2-Dichloroethene | 0.38 | U | 26.6 | 25.9 | 25.1 | | 22.3 | |
| cis-1,3-Dichloropropene | 0.36 | U | 26.6 | 25.9 | 24.5 | | 21.9 | |
| Hexachlorobutadiene | 1.3 | U | 26.6 | 25.9 | 17.1 | | 13.2 | |
| Dibromomethane | 0.66 | U | 26.6 | 25.9 | 24.5 | | 21.8 | |
| Bromodichloromethane | 0.29 | U | 26.6 | 25.9 | 23.7 | | 21.9 | |
| Dichlorodifluoromethane | 0.53 | U | 26.6 | 25.9 | 14.7 | | 12.8 | |
| Ethylbenzene | 0.27 | U | 26.6 | 25.9 | 23.6 | | 20.9 | |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175488**

**Method: 8260C**
**Preparation: 5030C**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49010-1 | Units: | ug/Kg | MSD Lab Sample ID: | 240-49010-1 |
| Client Matrix: | Solid | | | Client Matrix: | Solid |
| Dilution: | 1.0 | | | Dilution: | 1.0 |
| Analysis Date: | 04/08/2015 1127 | | | Analysis Date: | 04/08/2015 1148 |
| Prep Date: | 04/08/2015 0523 | | | Prep Date: | 04/08/2015 0523 |
| Leach Date: | N/A | | | Leach Date: | N/A |

| Analyte | Sample Result/Qual | | MS Spike Amount | MSD Spike Amount | MS Result/Qual | | MSD Result/Qual | |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromoethane | 0.53 | U | 26.6 | 25.9 | 25.8 | | 23.6 | |
| Naphthalene | 0.20 | U | 26.6 | 25.9 | 20.8 | | 18.8 | |
| m-Xylene & p-Xylene | 1.3 | U | 26.6 | 25.9 | 23.9 | | 21.3 | |
| n-Butylbenzene | 0.24 | U | 26.6 | 25.9 | 20.9 | | 16.8 | |
| Isopropylbenzene | 0.17 | U | 26.6 | 25.9 | 24.6 | | 21.4 | |
| N-Propylbenzene | 0.42 | U | 26.6 | 25.9 | 24.7 | | 21.4 | |
| 2-Butanone (MEK) | 1.5 | U | 53.1 | 51.8 | 44.2 | | 42.7 | |
| 4-Methyl-2-pentanone (MIBK) | 0.57 | U | 53.1 | 51.8 | 47.2 | | 45.8 | |
| sec-Butylbenzene | 0.19 | U | 26.6 | 25.9 | 23.6 | | 19.6 | |
| Methyl tert-butyl ether | 0.45 | U | 26.6 | 25.9 | 24.0 | | 21.8 | |
| Methylene Chloride | 0.70 | U | 26.6 | 25.9 | 26.4 | | 23.0 | |
| o-Xylene | 0.37 | U | 26.6 | 25.9 | 25.7 | | 21.7 | |
| Styrene | 0.16 | U | 26.6 | 25.9 | 24.0 | | 20.8 | |
| tert-Butylbenzene | 0.30 | U | 26.6 | 25.9 | 27.5 | | 21.1 | |
| Tetrachloroethene | 0.55 | U | 26.6 | 25.9 | 22.9 | | 19.6 | |
| Toluene | 0.28 | U | 26.6 | 25.9 | 24.2 | | 21.4 | |
| trans-1,2-Dichloroethene | 0.43 | U | 26.6 | 25.9 | 24.4 | | 22.4 | |
| trans-1,3-Dichloropropene | 0.57 | U | 26.6 | 25.9 | 24.4 | | 21.9 | |
| Trichloroethene | 0.44 | U | 26.6 | 25.9 | 24.0 | | 21.9 | |
| Trichlorofluoromethane | 0.36 | U | 26.6 | 25.9 | 22.4 | | 19.6 | |
| Vinyl acetate | 0.26 | U | 26.6 | 25.9 | 0.970 | J F1 | 0.300 | J F1 F2 |
| Vinyl chloride | 0.41 | U | 26.6 | 25.9 | 20.6 | | 18.3 | |
| tert-Butyl alcohol (TBA) | 8.0 | U | 266 | 259 | 228 | | 233 | |
| Xylenes, Total | 0.37 | U | 53.1 | 51.8 | 49.6 | | 43.0 | |
| Dibromochloromethane | 0.58 | U | 26.6 | 25.9 | 24.9 | | 21.2 | |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Method Blank - Batch: 240-175545**

**Method: 8270D**
**Preparation: 3540C**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-175545/18-A | Analysis Batch: | 240-175891 | Instrument ID: | A4HP9 |
| Client Matrix: | Solid | Prep Batch: | 240-175545 | Lab File ID: | 50410005.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30 g |
| Analysis Date: | 04/10/2015 0927 | Units: | ug/Kg | Final Weight/Volume: | 2 mL |
| Prep Date: | 04/08/2015 0916 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | | |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| 1,1'-Biphenyl | 3.5 | U | 3.5 | 50 |
| 1,4-Dioxane | 22 | U | 22 | 100 |
| 2,4,6-Trichlorophenol | 8.9 | U | 8.9 | 150 |
| 2,4,5-Trichlorophenol | 25 | U | 25 | 150 |
| 2,4-Dichlorophenol | 20 | U | 20 | 150 |
| 2,4-Dimethylphenol | 20 | U | 20 | 150 |
| 2,4-Dinitrophenol | 21 | U | 21 | 330 |
| 2,4-Dinitrotoluene | 17 | U | 17 | 200 |
| 2-Chloronaphthalene | 0.45 | U | 0.45 | 50 |
| 2-Chlorophenol | 8.2 | U | 8.2 | 50 |
| 2-Methylnaphthalene | 0.50 | U | 0.50 | 6.7 |
| 2-Methylphenol | 11 | U | 11 | 200 |
| 2-Nitroaniline | 9.1 | U | 9.1 | 200 |
| 2-Nitrophenol | 8.3 | U | 8.3 | 50 |
| 3 & 4 Methylphenol | 20 | U | 20 | 400 |
| 3,3'-Dichlorobenzidine | 18 | U | 18 | 100 |
| 3-Nitroaniline | 16 | U | 16 | 200 |
| 4,6-Dinitro-2-methylphenol | 9.2 | U | 9.2 | 150 |
| 4-Bromophenyl phenyl ether | 13 | U | 13 | 50 |
| 4-Chloro-3-methylphenol | 21 | U | 21 | 150 |
| 4-Chloroaniline | 17 | U | 17 | 150 |
| 4-Chlorophenyl phenyl ether | 13 | U | 13 | 50 |
| 4-Nitroaniline | 26 | U | 26 | 200 |
| Acenaphthene | 0.76 | U | 0.76 | 6.7 |
| Acenaphthylene | 0.35 | U | 0.35 | 6.7 |
| Acetophenone | 9.2 | U | 9.2 | 100 |
| Anthracene | 0.78 | U | 0.78 | 6.7 |
| Atrazine | 9.1 | U | 9.1 | 200 |
| Benzaldehyde | 12 | U | 12 | 100 |
| Benzo[a]anthracene | 0.63 | U | 0.63 | 6.7 |
| Benzo[a]pyrene | 0.64 | U | 0.64 | 6.7 |
| Benzo[b]fluoranthene | 0.59 | U | 0.59 | 6.7 |
| Benzo[g,h,i]perylene | 0.35 | U | 0.35 | 6.7 |
| Benzo[k]fluoranthene | 0.68 | U | 0.68 | 6.7 |
| Bis(2-chloroethoxy)methane | 22 | U | 22 | 100 |
| Bis(2-chloroethyl)ether | 2.0 | U | 2.0 | 100 |
| Bis(2-ethylhexyl) phthalate | 91.6 | | 19 | 70 |
| Butyl benzyl phthalate | 10 | U | 10 | 70 |
| Caprolactam | 37 | U | 37 | 330 |
| Carbazole | 27 | U | 27 | 50 |
| Chrysene | 1.1 | U | 1.1 | 6.7 |
| Di-n-butyl phthalate | 15 | U | 15 | 70 |
| Di-n-octyl phthalate | 7.9 | U | 7.9 | 70 |
| Dibenz(a,h)anthracene | 0.66 | U | 0.66 | 6.7 |
| Dibenzofuran | 0.66 | U | 0.66 | 50 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Method Blank - Batch: 240-175545**

**Method: 8270D**
**Preparation: 3540C**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-175545/18-A | Analysis Batch: | 240-175891 | Instrument ID: | A4HP9 |
| Client Matrix: | Solid | Prep Batch: | 240-175545 | Lab File ID: | 50410005.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30 g |
| Analysis Date: | 04/10/2015 0927 | Units: | ug/Kg | Final Weight/Volume: | 2 mL |
| Prep Date: | 04/08/2015 0916 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | | |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| Diethyl phthalate | 16 | U | 16 | 70 |
| Dimethyl phthalate | 17 | U | 17 | 70 |
| Fluoranthene | 0.55 | U | 0.55 | 6.7 |
| Fluorene | 0.53 | U | 0.53 | 6.7 |
| Hexachlorobenzene | 2.1 | U | 2.1 | 6.7 |
| Hexachlorobutadiene | 5.6 | U | 5.6 | 50 |
| Hexachlorocyclopentadiene | 8.1 | U | 8.1 | 330 |
| Hexachloroethane | 9.0 | U | 9.0 | 50 |
| Indeno[1,2,3-cd]pyrene | 0.35 | U | 0.35 | 6.7 |
| Isophorone | 13 | U | 13 | 50 |
| N-Nitrosodi-n-propylamine | 6.3 | U | 6.3 | 50 |
| N-Nitrosodimethylamine | 16 | U | 16 | 100 |
| N-Nitrosodiphenylamine | 21 | U | 21 | 50 |
| Naphthalene | 0.82 | U | 0.82 | 6.7 |
| Nitrobenzene | 2.2 | U | 2.2 | 100 |
| Pentachlorophenol | 9.1 | U | 9.1 | 150 |
| Phenanthrene | 0.73 | U | 0.73 | 6.7 |
| Phenol | 7.3 | U | 7.3 | 50 |
| Pyrene | 0.44 | U | 0.44 | 6.7 |
| 2,2'-oxybis[1-chloropropane] | 9.5 | U | 9.5 | 100 |
| 2,6-Dinitrotoluene | 21 | U | 21 | 200 |
| 4-Nitrophenol | 17 | U | 17 | 330 |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| Terphenyl-d14 (Surr) | 78 | 36 - 110 |
| Phenol-d5 (Surr) | 81 | 26 - 110 |
| Nitrobenzene-d5 (Surr) | 75 | 20 - 110 |
| 2-Fluorophenol (Surr) | 77 | 24 - 110 |
| 2-Fluorobiphenyl (Surr) | 82 | 24 - 110 |
| 2,4,6-Tribromophenol (Surr) | 42 | 10 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Lab Control Sample - Batch: 240-175545**

**Method: 8270D**
**Preparation: 3540C**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-175545/19-A | Analysis Batch: | 240-175891 | Instrument ID: | A4HP9 |
| Client Matrix: | Solid | Prep Batch: | 240-175545 | Lab File ID: | 50410006.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30 g |
| Analysis Date: | 04/10/2015 0952 | Units: | ug/Kg | Final Weight/Volume: | 2 mL |
| Prep Date: | 04/08/2015 0916 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | | |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| 1,1'-Biphenyl | 667 | 532 | 80 | 35 - 110 | |
| 1,4-Dioxane | 667 | 336 | 50 | 10 - 110 | |
| 2,4,6-Trichlorophenol | 667 | 491 | 74 | 12 - 110 | |
| 2,4,5-Trichlorophenol | 667 | 479 | 72 | 25 - 110 | |
| 2,4-Dichlorophenol | 667 | 557 | 83 | 39 - 110 | |
| 2,4-Dimethylphenol | 667 | 427 | 64 | 29 - 110 | |
| 2,4-Dinitrophenol | 1330 | 577 | 43 | 10 - 110 | |
| 2,4-Dinitrotoluene | 667 | 584 | 88 | 48 - 110 | |
| 2-Chloronaphthalene | 667 | 551 | 83 | 32 - 110 | |
| 2-Chlorophenol | 667 | 546 | 82 | 37 - 110 | |
| 2-Methylnaphthalene | 667 | 539 | 81 | 36 - 110 | |
| 2-Methylphenol | 667 | 515 | 77 | 41 - 110 | |
| 2-Nitroaniline | 667 | 560 | 84 | 45 - 110 | |
| 2-Nitrophenol | 667 | 570 | 85 | 34 - 110 | |
| 3 & 4 Methylphenol | 667 | 544 | 82 | 40 - 110 | |
| 3,3'-Dichlorobenzidine | 1330 | 1040 | 78 | 28 - 110 | |
| 3-Nitroaniline | 667 | 563 | 84 | 44 - 110 | |
| 4,6-Dinitro-2-methylphenol | 1330 | 811 | 61 | 10 - 110 | |
| 4-Bromophenyl phenyl ether | 667 | 566 | 85 | 39 - 110 | |
| 4-Chloro-3-methylphenol | 667 | 552 | 83 | 48 - 110 | |
| 4-Chloroaniline | 667 | 489 | 73 | 30 - 110 | |
| 4-Chlorophenyl phenyl ether | 667 | 541 | 81 | 40 - 110 | |
| 4-Nitroaniline | 667 | 560 | 84 | 48 - 110 | |
| Acenaphthene | 667 | 529 | 79 | 38 - 110 | |
| Acenaphthylene | 667 | 509 | 76 | 40 - 110 | |
| Acetophenone | 667 | 545 | 82 | 40 - 110 | |
| Anthracene | 667 | 525 | 79 | 48 - 110 | |
| Atrazine | 1330 | 1060 | 80 | 66 - 127 | |
| Benzaldehyde | 1330 | 1290 | 97 | 32 - 110 | |
| Benzo[a]anthracene | 667 | 527 | 79 | 50 - 110 | |
| Benzo[a]pyrene | 667 | 533 | 80 | 44 - 110 | |
| Benzo[b]fluoranthene | 667 | 521 | 78 | 43 - 110 | |
| Benzo[g,h,i]perylene | 667 | 625 | 94 | 51 - 110 | |
| Benzo[k]fluoranthene | 667 | 573 | 86 | 38 - 105 | |
| Bis(2-chloroethoxy)methane | 667 | 557 | 83 | 32 - 110 | |
| Bis(2-chloroethyl)ether | 667 | 540 | 81 | 34 - 110 | |
| Bis(2-ethylhexyl) phthalate | 667 | 576 | 86 | 50 - 110 | |
| Butyl benzyl phthalate | 667 | 524 | 79 | 51 - 110 | |
| Caprolactam | 1330 | 1230 | 92 | 44 - 114 | |
| Carbazole | 667 | 549 | 82 | 50 - 110 | |
| Chrysene | 667 | 568 | 85 | 50 - 110 | |
| Di-n-butyl phthalate | 667 | 584 | 88 | 51 - 110 | |
| Di-n-octyl phthalate | 667 | 524 | 79 | 48 - 110 | |
| Dibenz(a,h)anthracene | 667 | 593 | 89 | 51 - 110 | |
| Dibenzofuran | 667 | 540 | 81 | 43 - 110 | |
| Diethyl phthalate | 667 | 543 | 81 | 52 - 110 | |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Lab Control Sample - Batch: 240-175545**

**Method: 8270D**
**Preparation: 3540C**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-175545/19-A | Analysis Batch: | 240-175891 | Instrument ID: | A4HP9 |
| Client Matrix: | Solid | Prep Batch: | 240-175545 | Lab File ID: | 50410006.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30 g |
| Analysis Date: | 04/10/2015 0952 | Units: | ug/Kg | Final Weight/Volume: | 2 mL |
| Prep Date: | 04/08/2015 0916 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | | |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| Dimethyl phthalate | 667 | 557 | 84 | 50 - 110 | |
| Fluoranthene | 667 | 561 | 84 | 51 - 110 | |
| Fluorene | 667 | 512 | 77 | 46 - 110 | |
| Hexachlorobenzene | 667 | 535 | 80 | 43 - 110 | |
| Hexachlorobutadiene | 667 | 580 | 87 | 29 - 110 | |
| Hexachlorocyclopentadiene | 667 | 379 | 57 | 12 - 110 | |
| Hexachloroethane | 667 | 533 | 80 | 30 - 110 | |
| Indeno[1,2,3-cd]pyrene | 667 | 602 | 90 | 50 - 110 | |
| Isophorone | 667 | 545 | 82 | 36 - 110 | |
| N-Nitrosodi-n-propylamine | 667 | 563 | 84 | 38 - 110 | |
| N-Nitrosodimethylamine | 667 | 536 | 80 | 31 - 110 | |
| N-Nitrosodiphenylamine | 1330 | 1000 | 75 | 46 - 110 | |
| Naphthalene | 667 | 527 | 79 | 36 - 110 | |
| Nitrobenzene | 667 | 560 | 84 | 32 - 110 | |
| Pentachlorophenol | 1330 | 755 | 57 | 10 - 110 | |
| Phenanthrene | 667 | 522 | 78 | 49 - 110 | |
| Phenol | 667 | 559 | 84 | 38 - 110 | |
| Pyrene | 667 | 549 | 82 | 49 - 110 | |
| 2,2'-oxybis[1-chloropropane] | 667 | 491 | 74 | 29 - 110 | |
| 2,6-Dinitrotoluene | 667 | 584 | 88 | 45 - 110 | |
| 4-Nitrophenol | 1330 | 1140 | 86 | 28 - 110 | |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| Terphenyl-d14 (Surr) | 76 | 36 - 110 |
| Phenol-d5 (Surr) | 85 | 26 - 110 |
| Nitrobenzene-d5 (Surr) | 83 | 20 - 110 |
| 2-Fluorophenol (Surr) | 83 | 24 - 110 |
| 2-Fluorobiphenyl (Surr) | 82 | 24 - 110 |
| 2,4,6-Tribromophenol (Surr) | 72 | 10 - 110 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Method Blank - Batch: 240-175570**

**Method: 8015C**
**Preparation: 5030A**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-175570/1-A | Analysis Batch: | 240-175575 | Instrument ID: | YPID |
| Client Matrix: | Solid | Prep Batch: | 240-175570 | Lab File ID: | Y0040825.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 g |
| Analysis Date: | 04/09/2015 0156 | Units: | ug/Kg | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 1104 | | | Injection Volume: | 5 mL |
| Leach Date: | N/A | | | Column ID: | PRIMARY |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | 46 | U | 46 | 100 |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| Trifluorotoluene (Surr) | 81 | 40 - 139 |

**Lab Control Sample - Batch: 240-175570**

**Method: 8015C**
**Preparation: 5030A**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-175570/2-A | Analysis Batch: | 240-175575 | Instrument ID: | YPID |
| Client Matrix: | Solid | Prep Batch: | 240-175570 | Lab File ID: | Y0040826.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5 g |
| Analysis Date: | 04/09/2015 0231 | Units: | ug/Kg | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 1104 | | | Injection Volume: | 5 mL |
| Leach Date: | N/A | | | Column ID: | PRIMARY |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | 800 | 769 | 96 | 74 - 120 | |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| Trifluorotoluene (Surr) | 100 | 40 - 139 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175570**

**Method: 8015C**
**Preparation: 5030A**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 180-42592-G-10-C MS | Analysis Batch: | 240-175575 | Instrument ID: | YPID |
| Client Matrix: | Solid | Prep Batch: | 240-175570 | Lab File ID: | Y0040828.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5.05 g |
| Analysis Date: | 04/09/2015 0340 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 1104 | | | Injection Volume: | 5 mL |
| Leach Date: | N/A | | | Column ID: | PRIMARY |

| | | | | | |
|---|---|---|---|---|---|
| MSD Lab Sample ID: | 180-42592-G-10-D MSD | Analysis Batch: | 240-175575 | Instrument ID: | YPID |
| Client Matrix: | Solid | Prep Batch: | 240-175570 | Lab File ID: | Y0040829.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 5.04 g |
| Analysis Date: | 04/09/2015 0414 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 1104 | | | Injection Volume: | 5 mL |
| Leach Date: | N/A | | | Column ID: | PRIMARY |

| | % Rec. | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | MS | MSD | Limit | RPD | RPD Limit | MS Qual | MSD Qual |
| Gasoline Range Organics [C6 - C10] | 63 | 67 | 10 - 136 | 6 | 40 | | |

| Surrogate | MS % Rec | MSD % Rec | Acceptance Limits |
|---|---|---|---|
| Trifluorotoluene (Surr) | 81 | 90 | 40 - 139 |

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175570**

**Method: 8015C**
**Preparation: 5030A**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 180-42592-G-10-C MS | Units: | ug/Kg | MSD Lab Sample ID: | 180-42592-G-10-D MSD |
| Client Matrix: | Solid | | | Client Matrix: | Solid |
| Dilution: | 1.0 | | | Dilution: | 1.0 |
| Analysis Date: | 04/09/2015 0340 | | | Analysis Date: | 04/09/2015 0414 |
| Prep Date: | 04/08/2015 1104 | | | Prep Date: | 04/08/2015 1104 |
| Leach Date: | N/A | | | Leach Date: | N/A |

| Analyte | Sample Result/Qual | | MS Spike Amount | MSD Spike Amount | MS Result/Qual | MSD Result/Qual |
|---|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | 54 | U | 928 | 930 | 587 | 624 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Method Blank - Batch: 240-175550**

**Method: 8015C**
**Preparation: 3540C**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-175550/7-A | Analysis Batch: | 240-175823 | Instrument ID: | A2HP5F |
| Client Matrix: | Solid | Prep Batch: | 240-175550 | Lab File ID: | P5F40916.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30 g |
| Analysis Date: | 04/09/2015 2223 | Units: | mg/Kg | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 0935 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | Column ID: | PRIMARY |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| Total Petroleum Hydrocarbons (C10-C32) | 4.1 | U | 4.1 | 17 |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl (Surr) | 92 | 40 - 160 |

**Lab Control Sample - Batch: 240-175550**

**Method: 8015C**
**Preparation: 3540C**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-175550/8-A | Analysis Batch: | 240-175823 | Instrument ID: | A2HP5F |
| Client Matrix: | Solid | Prep Batch: | 240-175550 | Lab File ID: | P5F40917.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30 g |
| Analysis Date: | 04/09/2015 2253 | Units: | mg/Kg | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 0935 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | Column ID: | PRIMARY |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| Diesel | 83.3 | 70.4 | 85 | 52 - 120 | |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| o-Terphenyl (Surr) | 87 | 40 - 160 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175550**

**Method: 8015C**
**Preparation: 3540C**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49010-1 | Analysis Batch: | 240-175823 | Instrument ID: | A2HP5F |
| Client Matrix: | Solid | Prep Batch: | 240-175550 | Lab File ID: | P5F40921.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30.38 g |
| Analysis Date: | 04/10/2015 0055 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 0935 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | Column ID: | PRIMARY |

| | | | | | |
|---|---|---|---|---|---|
| MSD Lab Sample ID: | 240-49010-1 | Analysis Batch: | 240-175823 | Instrument ID: | A2HP5F |
| Client Matrix: | Solid | Prep Batch: | 240-175550 | Lab File ID: | P5F40922.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30.29 g |
| Analysis Date: | 04/10/2015 0125 | | | Final Weight/Volume: | 5 mL |
| Prep Date: | 04/08/2015 0935 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | Column ID: | PRIMARY |

| | % Rec. | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | MS | MSD | Limit | RPD | RPD Limit | MS Qual | MSD Qual |
| Diesel | 73 | 66 | 10 - 124 | 9 | 40 | | |

| Surrogate | MS % Rec | MSD % Rec | Acceptance Limits |
|---|---|---|---|
| o-Terphenyl (Surr) | 93 | 87 | 40 - 160 |

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175550**

**Method: 8015C**
**Preparation: 3540C**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49010-1 | Units: | mg/Kg | MSD Lab Sample ID: | 240-49010-1 |
| Client Matrix: | Solid | | | Client Matrix: | Solid |
| Dilution: | 1.0 | | | Dilution: | 1.0 |
| Analysis Date: | 04/10/2015 0055 | | | Analysis Date: | 04/10/2015 0125 |
| Prep Date: | 04/08/2015 0935 | | | Prep Date: | 04/08/2015 0935 |
| Leach Date: | N/A | | | Leach Date: | N/A |

| Analyte | Sample Result/Qual | | MS Spike Amount | MSD Spike Amount | MS Result/Qual | MSD Result/Qual |
|---|---|---|---|---|---|---|
| Diesel | 9.1 | J | 88.9 | 89.1 | 74.4 | 68.3 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Method Blank - Batch: 240-175553**

**Method: 8082A**
**Preparation: 3540C**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-175553/17-A | Analysis Batch: | 240-175923 | Instrument ID: | A2HP4 |
| Client Matrix: | Solid | Prep Batch: | 240-175553 | Lab File ID: | P4000008.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30 g |
| Analysis Date: | 04/10/2015 1219 | Units: | ug/Kg | Final Weight/Volume: | 10 mL |
| Prep Date: | 04/08/2015 0949 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | Column ID: | PRIMARY |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| Aroclor-1016 | 12 | U | 12 | 33 |
| Aroclor-1221 | 16 | U | 16 | 33 |
| Aroclor-1232 | 20 | U | 20 | 33 |
| Aroclor-1242 | 11 | U | 11 | 33 |
| Aroclor-1248 | 8.0 | U | 8.0 | 33 |
| Aroclor-1254 | 14 | U | 14 | 33 |
| Aroclor-1260 | 9.0 | U | 9.0 | 33 |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| Tetrachloro-m-xylene | 61 | 29 - 151 |
| DCB Decachlorobiphenyl | 95 | 14 - 163 |

**Lab Control Sample - Batch: 240-175553**

**Method: 8082A**
**Preparation: 3540C**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-175553/18-A | Analysis Batch: | 240-175923 | Instrument ID: | A2HP4 |
| Client Matrix: | Solid | Prep Batch: | 240-175553 | Lab File ID: | P4000009.D |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 30 g |
| Analysis Date: | 04/10/2015 1235 | Units: | ug/Kg | Final Weight/Volume: | 10 mL |
| Prep Date: | 04/08/2015 0949 | | | Injection Volume: | 1 uL |
| Leach Date: | N/A | | | Column ID: | PRIMARY |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| Aroclor-1016 | 333 | 252 | 76 | 62 - 120 | |
| Aroclor-1260 | 333 | 311 | 93 | 56 - 122 | |

| Surrogate | % Rec | Acceptance Limits |
|---|---|---|
| Tetrachloro-m-xylene | 64 | 29 - 151 |
| DCB Decachlorobiphenyl | 101 | 14 - 163 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Method Blank - Batch: 240-175558** **Method: 6010C**
**Preparation: 3050B**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-175558/1-A | Analysis Batch: | 240-175886 | Instrument ID: | I12 |
| Client Matrix: | Solid | Prep Batch: | 240-175558 | Lab File ID: | I12040915A.asc |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 1.00 g |
| Analysis Date: | 04/09/2015 0956 | Units: | mg/Kg | Final Weight/Volume: | 100 mL |
| Prep Date: | 04/08/2015 1026 | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| Silver | 0.063 | U | 0.063 | 1.0 |
| Arsenic | 0.41 | U | 0.41 | 1.5 |
| Barium | 0.41 | U | 0.41 | 20 |
| Beryllium | 0.026 | U | 0.026 | 0.50 |
| Cadmium | 0.021 | U | 0.021 | 0.50 |
| Cobalt | 0.047 | U | 0.047 | 1.0 |
| Chromium | 0.075 | U | 0.075 | 1.0 |
| Molybdenum | 0.059 | U | 0.059 | 4.0 |
| Nickel | 0.080 | U | 0.080 | 4.0 |
| Lead | 0.022 | U | 0.022 | 1.0 |
| Selenium | 0.34 | U | 0.34 | 2.0 |
| Vanadium | 0.20 | U | 0.20 | 1.0 |
| Zinc | 0.56 | U | 0.56 | 5.0 |
| Antimony | 0.48 | U | 0.48 | 2.0 |
| Thallium | 0.13 | U | 0.13 | 2.0 |

**Method Blank - Batch: 240-175558** **Method: 6010C**
**Preparation: 3050B**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-175558/1-A | Analysis Batch: | 240-175933 | Instrument ID: | I9 |
| Client Matrix: | Solid | Prep Batch: | 240-175558 | Lab File ID: | I9041015A.asc |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 1.00 g |
| Analysis Date: | 04/10/2015 1001 | Units: | mg/Kg | Final Weight/Volume: | 100 mL |
| Prep Date: | 04/08/2015 1026 | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| Copper | 0.23 | U | 0.23 | 2.5 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Lab Control Sample - Batch: 240-175558**

**Method: 6010C**
**Preparation: 3050B**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-175558/2-A | Analysis Batch: | 240-175886 | Instrument ID: | I12 |
| Client Matrix: | Solid | Prep Batch: | 240-175558 | Lab File ID: | I12040915A.asc |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 1.00 g |
| Analysis Date: | 04/09/2015 1000 | Units: | mg/Kg | Final Weight/Volume: | 100 mL |
| Prep Date: | 04/08/2015 1026 | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| Silver | 5.00 | 4.75 | 95 | 80 - 120 | |
| Arsenic | 200 | 198 | 99 | 80 - 120 | |
| Barium | 200 | 193 | 97 | 80 - 120 | |
| Beryllium | 5.00 | 4.68 | 94 | 80 - 120 | |
| Cadmium | 5.00 | 5.13 | 103 | 80 - 120 | |
| Cobalt | 50.0 | 47.7 | 95 | 80 - 120 | |
| Chromium | 20.0 | 19.2 | 96 | 80 - 120 | |
| Molybdenum | 100 | 99.9 | 100 | 80 - 120 | |
| Nickel | 50.0 | 48.9 | 98 | 80 - 120 | |
| Lead | 50.0 | 47.7 | 95 | 80 - 120 | |
| Selenium | 200 | 194 | 97 | 80 - 120 | |
| Vanadium | 50.0 | 49.1 | 98 | 80 - 120 | |
| Zinc | 50.0 | 48.9 | 98 | 80 - 120 | |
| Antimony | 50.0 | 50.8 | 102 | 80 - 120 | |
| Thallium | 200 | 190 | 95 | 80 - 120 | |

**Lab Control Sample - Batch: 240-175558**

**Method: 6010C**
**Preparation: 3050B**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-175558/2-A | Analysis Batch: | 240-175933 | Instrument ID: | I9 |
| Client Matrix: | Solid | Prep Batch: | 240-175558 | Lab File ID: | I9041015A.asc |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 1.00 g |
| Analysis Date: | 04/10/2015 1006 | Units: | mg/Kg | Final Weight/Volume: | 100 mL |
| Prep Date: | 04/08/2015 1026 | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| Copper | 25.0 | 24.5 | 98 | 80 - 120 | |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Method Blank - Batch: 240-175585**

**Method: 7471A**
**Preparation: 7471A**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | MB 240-175585/1-A | Analysis Batch: | 240-175776 | Instrument ID: | H4 |
| Client Matrix: | Solid | Prep Batch: | 240-175585 | Lab File ID: | 040915AHG4.PRN |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 0.60 g |
| Analysis Date: | 04/09/2015 1003 | Units: | mg/Kg | Final Weight/Volume: | 100 mL |
| Prep Date: | 04/08/2015 1500 | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Result | Qual | MDL | RL |
|---|---|---|---|---|
| Mercury | 0.014 | U | 0.014 | 0.10 |

**Lab Control Sample - Batch: 240-175585**

**Method: 7471A**
**Preparation: 7471A**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | LCS 240-175585/2-A | Analysis Batch: | 240-175776 | Instrument ID: | H4 |
| Client Matrix: | Solid | Prep Batch: | 240-175585 | Lab File ID: | 040915AHG4.PRN |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 0.60 g |
| Analysis Date: | 04/09/2015 1008 | Units: | mg/Kg | Final Weight/Volume: | 100 mL |
| Prep Date: | 04/08/2015 1500 | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Spike Amount | Result | % Rec. | Limit | Qual |
|---|---|---|---|---|---|
| Mercury | 0.833 | 0.790 | 95 | 80 - 120 | |

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175585**

**Method: 7471A**
**Preparation: 7471A**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49031-G-7-M MS | Analysis Batch: | 240-175776 | Instrument ID: | H4 |
| Client Matrix: | Solid | Prep Batch: | 240-175585 | Lab File ID: | 040915AHG4.PRN |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 0.55 g |
| Analysis Date: | 04/09/2015 1012 | | | Final Weight/Volume: | 100 mL |
| Prep Date: | 04/08/2015 1500 | | | | |
| Leach Date: | N/A | | | | |

| | | | | | |
|---|---|---|---|---|---|
| MSD Lab Sample ID: | 240-49031-G-7-N MSD | Analysis Batch: | 240-175776 | Instrument ID: | H4 |
| Client Matrix: | Solid | Prep Batch: | 240-175585 | Lab File ID: | 040915AHG4.PRN |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | 0.55 g |
| Analysis Date: | 04/09/2015 1014 | | | Final Weight/Volume: | 100 mL |
| Prep Date: | 04/08/2015 1500 | | | | |
| Leach Date: | N/A | | | | |

| | % Rec. | | | | | | |
|---|---|---|---|---|---|---|---|
| Analyte | MS | MSD | Limit | RPD | RPD Limit | MS Qual | MSD Qual |
| Mercury | 107 | 107 | 80 - 120 | 0 | 20 | | |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Matrix Spike/**
**Matrix Spike Duplicate Recovery Report - Batch: 240-175585**

**Method: 7471A**
**Preparation: 7471A**

| | | | | | |
|---|---|---|---|---|---|
| MS Lab Sample ID: | 240-49031-G-7-M MS | Units: | mg/Kg | MSD Lab Sample ID: | 240-49031-G-7-N MSD |
| Client Matrix: | Solid | | | Client Matrix: | Solid |
| Dilution: | 1.0 | | | Dilution: | 1.0 |
| Analysis Date: | 04/09/2015 1012 | | | Analysis Date: | 04/09/2015 1014 |
| Prep Date: | 04/08/2015 1500 | | | Prep Date: | 04/08/2015 1500 |
| Leach Date: | N/A | | | Leach Date: | N/A |

| Analyte | Sample Result/Qual | | MS Spike Amount | MSD Spike Amount | MS Result/Qual | MSD Result/Qual |
|---|---|---|---|---|---|---|
| Mercury | 0.016 | U | 0.217 | 0.217 | 0.231 | 0.232 |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

**Duplicate - Batch: 240-175452**

**Method: Moisture**
**Preparation: N/A**

| | | | | | |
|---|---|---|---|---|---|
| Lab Sample ID: | 240-49010-1 | Analysis Batch: | 240-175452 | Instrument ID: | No Equipment Assigned |
| Client Matrix: | Solid | Prep Batch: | N/A | Lab File ID: | N/A |
| Dilution: | 1.0 | Leach Batch: | N/A | Initial Weight/Volume: | |
| Analysis Date: | 04/07/2015 1517 | Units: | % | Final Weight/Volume: | |
| Prep Date: | N/A | | | | |
| Leach Date: | N/A | | | | |

| Analyte | Sample Result/Qual | Result | RPD | Limit | Qual |
|---|---|---|---|---|---|
| Percent Solids | 93 | 89 | 4 | 20 | |
| Percent Moisture | 7.4 | 11 | 41 | 20 | F3 |

## DATA REPORTING QUALIFIERS

Client: Tetra Tech, Inc. Job Number: 240-49010-1

| Lab Section | Qualifier | Description |
|---|---|---|
| GC/MS VOA | | |
| | U | Indicates the analyte was analyzed for but not detected. |
| | F1 | MS and/or MSD Recovery exceeds the control limits |
| | F2 | MS/MSD RPD exceeds control limits |
| | J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| GC/MS Semi VOA | | |
| | B | Compound was found in the blank and sample. |
| | U | Indicates the analyte was analyzed for but not detected. |
| | J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| GC VOA | | |
| | U | Indicates the analyte was analyzed for but not detected. |
| GC Semi VOA | | |
| | U | Indicates the analyte was analyzed for but not detected. |
| Metals | | |
| | ^ | ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits. |
| | U | Indicates the analyte was analyzed for but not detected. |
| | J | Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value. |
| General Chemistry | | |
| | F3 | Duplicate RPD exceeds the control limit |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

## QC Association Summary

| Lab Sample ID | Client Sample ID | Report Basis | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| **GC/MS VOA** | | | | | |
| **Analysis Batch:240-175483** | | | | | |
| LCS 240-175483/6 | Lab Control Sample | T | Solid | 8260C | |
| MB 240-175483/8 | Method Blank | T | Solid | 8260C | |
| 240-49010-1 | FILL-001 | T | Solid | 8260C | 240-175488 |
| 240-49010-1MS | Matrix Spike | T | Solid | 8260C | 240-175488 |
| 240-49010-1MSD | Matrix Spike Duplicate | T | Solid | 8260C | 240-175488 |
| **Prep Batch: 240-175488** | | | | | |
| 240-49010-1 | FILL-001 | T | Solid | 5030C | |
| 240-49010-1MS | Matrix Spike | T | Solid | 5030C | |
| 240-49010-1MSD | Matrix Spike Duplicate | T | Solid | 5030C | |
| **Analysis Batch:240-175730** | | | | | |
| LCS 240-175730/4 | Lab Control Sample | T | Water | 8260B | |
| MB 240-175730/6 | Method Blank | T | Water | 8260B | |
| 240-49010-2TB | TB-040615 | T | Water | 8260B | |
| 240-49022-A-1 MS | Matrix Spike | T | Water | 8260B | |
| 240-49022-D-1 MSD | Matrix Spike Duplicate | T | Water | 8260B | |

**Report Basis**
T = Total

**GC/MS Semi VOA**

| | | | | | |
|---|---|---|---|---|---|
| **Prep Batch: 240-175545** | | | | | |
| LCS 240-175545/19-A | Lab Control Sample | T | Solid | 3540C | |
| MB 240-175545/18-A | Method Blank | T | Solid | 3540C | |
| 240-49010-1 | FILL-001 | T | Solid | 3540C | |
| **Analysis Batch:240-175891** | | | | | |
| LCS 240-175545/19-A | Lab Control Sample | T | Solid | 8270D | 240-175545 |
| MB 240-175545/18-A | Method Blank | T | Solid | 8270D | 240-175545 |
| 240-49010-1 | FILL-001 | T | Solid | 8270D | 240-175545 |

**Report Basis**
T = Total

Client: Tetra Tech, Inc. Job Number: 240-49010-1

## QC Association Summary

| Lab Sample ID | Client Sample ID | Report Basis | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| **GC VOA** | | | | | |
| **Prep Batch: 240-175570** | | | | | |
| LCS 240-175570/2-A | Lab Control Sample | T | Solid | 5030A | |
| MB 240-175570/1-A | Method Blank | T | Solid | 5030A | |
| 180-42592-G-10-C MS | Matrix Spike | T | Solid | 5030A | |
| 180-42592-G-10-D MSD | Matrix Spike Duplicate | T | Solid | 5030A | |
| 240-49010-1 | FILL-001 | T | Solid | 5030A | |
| **Analysis Batch:240-175575** | | | | | |
| LCS 240-175570/2-A | Lab Control Sample | T | Solid | 8015C | 240-175570 |
| MB 240-175570/1-A | Method Blank | T | Solid | 8015C | 240-175570 |
| 180-42592-G-10-C MS | Matrix Spike | T | Solid | 8015C | 240-175570 |
| 180-42592-G-10-D MSD | Matrix Spike Duplicate | T | Solid | 8015C | 240-175570 |
| 240-49010-1 | FILL-001 | T | Solid | 8015C | 240-175570 |

**Report Basis**

T = Total

Client: Tetra Tech, Inc. Job Number: 240-49010-1

## QC Association Summary

| Lab Sample ID | Client Sample ID | Report Basis | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| **GC Semi VOA** | | | | | |
| **Prep Batch: 240-175550** | | | | | |
| LCS 240-175550/8-A | Lab Control Sample | T | Solid | 3540C | |
| MB 240-175550/7-A | Method Blank | T | Solid | 3540C | |
| 240-49010-1 | FILL-001 | T | Solid | 3540C | |
| 240-49010-1MS | Matrix Spike | T | Solid | 3540C | |
| 240-49010-1MSD | Matrix Spike Duplicate | T | Solid | 3540C | |
| **Prep Batch: 240-175553** | | | | | |
| LCS 240-175553/18-A | Lab Control Sample | T | Solid | 3540C | |
| MB 240-175553/17-A | Method Blank | T | Solid | 3540C | |
| 240-49010-1 | FILL-001 | T | Solid | 3540C | |
| **Analysis Batch:240-175823** | | | | | |
| LCS 240-175550/8-A | Lab Control Sample | T | Solid | 8015C | 240-175550 |
| MB 240-175550/7-A | Method Blank | T | Solid | 8015C | 240-175550 |
| 240-49010-1 | FILL-001 | T | Solid | 8015C | 240-175550 |
| 240-49010-1MS | Matrix Spike | T | Solid | 8015C | 240-175550 |
| 240-49010-1MSD | Matrix Spike Duplicate | T | Solid | 8015C | 240-175550 |
| **Analysis Batch:240-175923** | | | | | |
| LCS 240-175553/18-A | Lab Control Sample | T | Solid | 8082A | 240-175553 |
| MB 240-175553/17-A | Method Blank | T | Solid | 8082A | 240-175553 |
| 240-49010-1 | FILL-001 | T | Solid | 8082A | 240-175553 |

**Report Basis**
T = Total

Client: Tetra Tech, Inc. Job Number: 240-49010-1

## QC Association Summary

| Lab Sample ID | Client Sample ID | Report Basis | Client Matrix | Method | Prep Batch |
|---|---|---|---|---|---|
| **Metals** | | | | | |
| **Prep Batch: 240-175558** | | | | | |
| LCS 240-175558/2-A | Lab Control Sample | T | Solid | 3050B | |
| MB 240-175558/1-A | Method Blank | T | Solid | 3050B | |
| 240-49010-1 | FILL-001 | T | Solid | 3050B | |
| **Prep Batch: 240-175585** | | | | | |
| LCS 240-175585/2-A | Lab Control Sample | T | Solid | 7471A | |
| MB 240-175585/1-A | Method Blank | T | Solid | 7471A | |
| 240-49010-1 | FILL-001 | T | Solid | 7471A | |
| 240-49031-G-7-M MS | Matrix Spike | T | Solid | 7471A | |
| 240-49031-G-7-N MSD | Matrix Spike Duplicate | T | Solid | 7471A | |
| **Analysis Batch:240-175776** | | | | | |
| LCS 240-175585/2-A | Lab Control Sample | T | Solid | 7471A | 240-175585 |
| MB 240-175585/1-A | Method Blank | T | Solid | 7471A | 240-175585 |
| 240-49010-1 | FILL-001 | T | Solid | 7471A | 240-175585 |
| 240-49031-G-7-M MS | Matrix Spike | T | Solid | 7471A | 240-175585 |
| 240-49031-G-7-N MSD | Matrix Spike Duplicate | T | Solid | 7471A | 240-175585 |
| **Analysis Batch:240-175886** | | | | | |
| LCS 240-175558/2-A | Lab Control Sample | T | Solid | 6010C | 240-175558 |
| MB 240-175558/1-A | Method Blank | T | Solid | 6010C | 240-175558 |
| 240-49010-1 | FILL-001 | T | Solid | 6010C | 240-175558 |
| **Analysis Batch:240-175933** | | | | | |
| LCS 240-175558/2-A | Lab Control Sample | T | Solid | 6010C | 240-175558 |
| MB 240-175558/1-A | Method Blank | T | Solid | 6010C | 240-175558 |
| 240-49010-1 | FILL-001 | T | Solid | 6010C | 240-175558 |

**Report Basis**
T = Total

**General Chemistry**

| | | | | | |
|---|---|---|---|---|---|
| **Analysis Batch:240-175452** | | | | | |
| 240-49010-1 | FILL-001 | T | Solid | Moisture | |
| 240-49010-1DU | Duplicate | T | Solid | Moisture | |

**Report Basis**
T = Total

Client: Tetra Tech, Inc. Job Number: 240-49010-1

## Laboratory Chronicle

**Lab ID:** 240-49010-1 **Client ID:** FILL-001

Sample Date/Time: 04/06/2015 15:00 Received Date/Time: 04/07/2015 09:15

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:5030C | 240-49010-B-1-A | | 240-175483 | 240-175488 | 04/08/2015 05:23 | 1 | TAL CAN | TJL2 |
| A:8260C | 240-49010-B-1-A | | 240-175483 | 240-175488 | 04/08/2015 11:06 | 1 | TAL CAN | SAM |
| P:3540C | 240-49010-E-1-A | | 240-175891 | 240-175545 | 04/08/2015 09:16 | 1 | TAL CAN | SDE |
| A:8270D | 240-49010-E-1-A | | 240-175891 | 240-175545 | 04/10/2015 16:57 | 1 | TAL CAN | MRU |
| P:5030A | 240-49010-C-1-A | | 240-175575 | 240-175570 | 04/08/2015 11:04 | 1 | TAL CAN | RTR |
| A:8015C | 240-49010-C-1-A | | 240-175575 | 240-175570 | 04/09/2015 06:34 | 1 | TAL CAN | RTR |
| P:3540C | 240-49010-E-1-B | | 240-175823 | 240-175550 | 04/08/2015 09:35 | 1 | TAL CAN | SDE |
| A:8015C | 240-49010-E-1-B | | 240-175823 | 240-175550 | 04/10/2015 00:24 | 1 | TAL CAN | DEB |
| P:3540C | 240-49010-E-1-E | | 240-175923 | 240-175553 | 04/08/2015 09:49 | 1 | TAL CAN | SDE |
| A:8082A | 240-49010-E-1-E | | 240-175923 | 240-175553 | 04/10/2015 15:27 | 1 | TAL CAN | HMB |
| P:3050B | 240-49010-E-1-F | | 240-175886 | 240-175558 | 04/08/2015 10:26 | 1 | TAL CAN | DEE |
| A:6010C | 240-49010-E-1-F | | 240-175886 | 240-175558 | 04/09/2015 10:04 | 1 | TAL CAN | ADS |
| P:3050B | 240-49010-E-1-F | | 240-175933 | 240-175558 | 04/08/2015 10:26 | 1 | TAL CAN | DEE |
| A:6010C | 240-49010-E-1-F | | 240-175933 | 240-175558 | 04/10/2015 10:09 | 1 | TAL CAN | KLC |
| P:7471A | 240-49010-E-1-G | | 240-175776 | 240-175585 | 04/08/2015 15:00 | 1 | TAL CAN | DEE |
| A:7471A | 240-49010-E-1-G | | 240-175776 | 240-175585 | 04/09/2015 10:46 | 1 | TAL CAN | BW |
| A:Moisture | 240-49010-A-1 | | 240-175452 | | 04/07/2015 15:17 | 1 | TAL CAN | SEM |

**Lab ID:** 240-49010-1 MS **Client ID:** FILL-001

Sample Date/Time: 04/06/2015 15:00 Received Date/Time: 04/07/2015 09:15

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:5030C | 240-49010-B-1-B MS | | 240-175483 | 240-175488 | 04/08/2015 05:23 | 1 | TAL CAN | TJL2 |
| A:8260C | 240-49010-B-1-B MS | | 240-175483 | 240-175488 | 04/08/2015 11:27 | 1 | TAL CAN | SAM |
| P:3540C | 240-49010-E-1-C MS | | 240-175823 | 240-175550 | 04/08/2015 09:35 | 1 | TAL CAN | SDE |
| A:8015C | 240-49010-E-1-C MS | | 240-175823 | 240-175550 | 04/10/2015 00:55 | 1 | TAL CAN | DEB |

**Lab ID:** 240-49010-1 MSD **Client ID:** FILL-001

Sample Date/Time: 04/06/2015 15:00 Received Date/Time: 04/07/2015 09:15

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:5030C | 240-49010-B-1-C MSD | | 240-175483 | 240-175488 | 04/08/2015 05:23 | 1 | TAL CAN | TJL2 |
| A:8260C | 240-49010-B-1-C MSD | | 240-175483 | 240-175488 | 04/08/2015 11:48 | 1 | TAL CAN | SAM |
| P:3540C | 240-49010-E-1-D MSD | | 240-175823 | 240-175550 | 04/08/2015 09:35 | 1 | TAL CAN | SDE |
| A:8015C | 240-49010-E-1-D MSD | | 240-175823 | 240-175550 | 04/10/2015 01:25 | 1 | TAL CAN | DEB |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

## Laboratory Chronicle

**Lab ID:** 240-49010-1 DU **Client ID:** FILL-001

Sample Date/Time: 04/06/2015 15:00 Received Date/Time: 04/07/2015 09:15

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| A:Moisture | 240-49010-A-1 DU | | 240-175452 | | 04/07/2015 15:17 | 1 | TAL CAN | SEM |

**Lab ID:** 240-49010-2 **Client ID:** TB-040615

Sample Date/Time: 04/06/2015 00:00 Received Date/Time: 04/07/2015 09:15

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:5030B | 240-49010-A-2 | | 240-175730 | | 04/09/2015 18:34 | 1 | TAL CAN | RJQ |
| A:8260B | 240-49010-A-2 | | 240-175730 | | 04/09/2015 18:34 | 1 | TAL CAN | RJQ |

**Lab ID:** MB **Client ID:** N/A

Sample Date/Time: N/A Received Date/Time: N/A

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:5030B | MB 240-175730/6 | | 240-175730 | | 04/09/2015 12:06 | 1 | TAL CAN | RJQ |
| A:8260B | MB 240-175730/6 | | 240-175730 | | 04/09/2015 12:06 | 1 | TAL CAN | RJQ |
| A:8260C | MB 240-175483/8 | | 240-175483 | | 04/08/2015 03:14 | 1 | TAL CAN | SAM |
| P:3540C | MB 240-175545/18-A | | 240-175891 | 240-175545 | 04/08/2015 09:16 | 1 | TAL CAN | SDE |
| A:8270D | MB 240-175545/18-A | | 240-175891 | 240-175545 | 04/10/2015 09:27 | 1 | TAL CAN | MRU |
| P:5030A | MB 240-175570/1-A | | 240-175575 | 240-175570 | 04/08/2015 11:04 | 1 | TAL CAN | RTR |
| A:8015C | MB 240-175570/1-A | | 240-175575 | 240-175570 | 04/09/2015 01:56 | 1 | TAL CAN | RTR |
| P:3540C | MB 240-175550/7-A | | 240-175823 | 240-175550 | 04/08/2015 09:35 | 1 | TAL CAN | SDE |
| A:8015C | MB 240-175550/7-A | | 240-175823 | 240-175550 | 04/09/2015 22:23 | 1 | TAL CAN | DEB |
| P:3540C | MB 240-175553/17-A | | 240-175923 | 240-175553 | 04/08/2015 09:49 | 1 | TAL CAN | SDE |
| A:8082A | MB 240-175553/17-A | | 240-175923 | 240-175553 | 04/10/2015 12:19 | 1 | TAL CAN | HMB |
| P:3050B | MB 240-175558/1-A | | 240-175886 | 240-175558 | 04/08/2015 10:26 | 1 | TAL CAN | DEE |
| A:6010C | MB 240-175558/1-A | | 240-175886 | 240-175558 | 04/09/2015 09:56 | 1 | TAL CAN | ADS |
| P:3050B | MB 240-175558/1-A | | 240-175933 | 240-175558 | 04/08/2015 10:26 | 1 | TAL CAN | DEE |
| A:6010C | MB 240-175558/1-A | | 240-175933 | 240-175558 | 04/10/2015 10:01 | 1 | TAL CAN | KLC |
| P:7471A | MB 240-175585/1-A | | 240-175776 | 240-175585 | 04/08/2015 15:00 | 1 | TAL CAN | DEE |
| A:7471A | MB 240-175585/1-A | | 240-175776 | 240-175585 | 04/09/2015 10:03 | 1 | TAL CAN | BW |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

## Laboratory Chronicle

**Lab ID: LCS** **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:5030B | LCS 240-175730/4 | | 240-175730 | | 04/09/2015 11:20 | 1 | TAL CAN | RJQ |
| A:8260B | LCS 240-175730/4 | | 240-175730 | | 04/09/2015 11:20 | 1 | TAL CAN | RJQ |
| A:8260C | LCS 240-175483/6 | | 240-175483 | | 04/08/2015 02:31 | 1 | TAL CAN | SAM |
| P:3540C | LCS 240-175545/19-A | | 240-175891 | 240-175545 | 04/08/2015 09:16 | 1 | TAL CAN | SDE |
| A:8270D | LCS 240-175545/19-A | | 240-175891 | 240-175545 | 04/10/2015 09:52 | 1 | TAL CAN | MRU |
| P:5030A | LCS 240-175570/2-A | | 240-175575 | 240-175570 | 04/08/2015 11:04 | 1 | TAL CAN | RTR |
| A:8015C | LCS 240-175570/2-A | | 240-175575 | 240-175570 | 04/09/2015 02:31 | 1 | TAL CAN | RTR |
| P:3540C | LCS 240-175550/8-A | | 240-175823 | 240-175550 | 04/08/2015 09:35 | 1 | TAL CAN | SDE |
| A:8015C | LCS 240-175550/8-A | | 240-175823 | 240-175550 | 04/09/2015 22:53 | 1 | TAL CAN | DEB |
| P:3540C | LCS 240-175553/18-A | | 240-175923 | 240-175553 | 04/08/2015 09:49 | 1 | TAL CAN | SDE |
| A:8082A | LCS 240-175553/18-A | | 240-175923 | 240-175553 | 04/10/2015 12:35 | 1 | TAL CAN | HMB |
| P:3050B | LCS 240-175558/2-A | | 240-175886 | 240-175558 | 04/08/2015 10:26 | 1 | TAL CAN | DEE |
| A:6010C | LCS 240-175558/2-A | | 240-175886 | 240-175558 | 04/09/2015 10:00 | 1 | TAL CAN | ADS |
| P:3050B | LCS 240-175558/2-A | | 240-175933 | 240-175558 | 04/08/2015 10:26 | 1 | TAL CAN | DEE |
| A:6010C | LCS 240-175558/2-A | | 240-175933 | 240-175558 | 04/10/2015 10:06 | 1 | TAL CAN | KLC |
| P:7471A | LCS 240-175585/2-A | | 240-175776 | 240-175585 | 04/08/2015 15:00 | 1 | TAL CAN | DEE |
| A:7471A | LCS 240-175585/2-A | | 240-175776 | 240-175585 | 04/09/2015 10:08 | 1 | TAL CAN | BW |

**Lab ID: MS** **Client ID: N/A**

Sample Date/Time: 04/06/2015 12:30 Received Date/Time: 04/07/2015 09:15

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:5030B | 240-49022-A-1 MS | | 240-175730 | | 04/09/2015 20:05 | 1 | TAL CAN | RJQ |
| A:8260B | 240-49022-A-1 MS | | 240-175730 | | 04/09/2015 20:05 | 1 | TAL CAN | RJQ |
| P:5030A | 180-42592-G-10-C MS | | 240-175575 | 240-175570 | 04/08/2015 11:04 | 1 | TAL CAN | RTR |
| A:8015C | 180-42592-G-10-C MS | | 240-175575 | 240-175570 | 04/09/2015 03:40 | 1 | TAL CAN | RTR |
| P:7471A | 240-49031-G-7-M MS | | 240-175776 | 240-175585 | 04/08/2015 15:00 | 1 | TAL CAN | DEE |
| A:7471A | 240-49031-G-7-M MS | | 240-175776 | 240-175585 | 04/09/2015 10:12 | 1 | TAL CAN | BW |

Client: Tetra Tech, Inc. Job Number: 240-49010-1

## Laboratory Chronicle

**Lab ID:** **MSD** **Client ID:** **N/A**

Sample Date/Time: 04/06/2015 12:30 Received Date/Time: 04/07/2015 09:15

| Method | Bottle ID | Run | Analysis Batch | Prep Batch | Date Prepared / Analyzed | Dil | Lab | Analyst |
|---|---|---|---|---|---|---|---|---|
| P:5030B | 240-49022-D-1 MSD | | 240-175730 | | 04/09/2015 20:28 | 1 | TAL CAN | RJQ |
| A:8260B | 240-49022-D-1 MSD | | 240-175730 | | 04/09/2015 20:28 | 1 | TAL CAN | RJQ |
| P:5030A | 180-42592-G-10-D MSD | | 240-175575 | 240-175570 | 04/08/2015 11:04 | 1 | TAL CAN | RTR |
| A:8015C | 180-42592-G-10-D MSD | | 240-175575 | 240-175570 | 04/09/2015 04:14 | 1 | TAL CAN | RTR |
| P:7471A | 240-49031-G-7-N MSD | | 240-175776 | 240-175585 | 04/08/2015 15:00 | 1 | TAL CAN | DEE |
| A:7471A | 240-49031-G-7-N MSD | | 240-175776 | 240-175585 | 04/09/2015 10:14 | 1 | TAL CAN | BW |

**Lab References:**
TAL CAN = TestAmerica Canton

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **EX10PPMSPK_00015** | 12/06/15 | 08/28/14 | MEOH, Lot 0000085233 | 1000 mL | EXPCB1016_00005 | 2 mL | Aroclor-1016 | 10 ug/mL |
| | | | | | EXPCB1260_00006 | 2 mL | Aroclor-1260 | 10 ug/mL |
| .EXPCB1016_00005 | 12/06/15 | AccuStandard, Inc., Lot B5120059 | | | (Purchased Reagent) | | Aroclor-1016 | 5000 ug/mL |
| .EXPCB1260_00006 | 01/25/23 | AccuStandard, Lot B3060258-1A | | | (Purchased Reagent) | | Aroclor-1260 | 5000 ug/mL |
| **EX2/.2SURRW_00053** | 06/10/16 | 03/24/15 | MEOH, Lot 0000085233 | 2000 mL | EXPESTSURR_00001 | 2 mL | DCB Decachlorobiphenyl | 0.2 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 0.2 ug/mL |
| .EXPESTSURR_00001 | 05/31/21 | Restek, Lot A0108779 | | | (Purchased Reagent) | | DCB Decachlorobiphenyl | 200 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 200 ug/mL |
| **EXBenzaldehyd_00019** | 05/28/15 | 03/23/15 | MEOH, Lot 0000085233 | 200 mL | SMLIST1 S8_00002 | 4 mL | Benzaldehyde | 40 ug/mL |
| | | | | | | | Benzoic acid | 40 ug/mL |
| | | | | | | | Indene | 40 ug/mL |
| .SMLIST1 S8_00002 | 05/28/15 | Restek, Lot A0103145 | | | (Purchased Reagent) | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| **EXBNASPIKE_00038** | 07/30/15 | 03/25/15 | MEOH, Lot 0000085233 | 200 mL | SMLIST1 S1_00004 | 4 mL | 1,1'-Biphenyl | 20 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 20 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 20 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 20 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 20 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,4-Dioxane | 20 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 20 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 20 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 20 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 20 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 20 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 20 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 20 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 40 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 20 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 20 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 20 ug/mL |
| | | | | | | | 2-Chlorophenol | 20 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 20 ug/mL |
| | | | | | | | 2-Methylphenol | 20 ug/mL |
| | | | | | | | 2-Nitroaniline | 20 ug/mL |
| | | | | | | | 2-Nitrophenol | 20 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 20 ug/mL |
| | | | | | | | 3-Nitroaniline | 20 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 40 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 20 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 20 ug/mL |
| | | | | | | | 4-Chloroaniline | 20 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 20 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4-Nitroaniline | 20 ug/mL |
| | | | | | | | 4-Nitrophenol | 40 ug/mL |
| | | | | | | | Acenaphthene | 20 ug/mL |
| | | | | | | | Acenaphthylene | 20 ug/mL |
| | | | | | | | Acetophenone | 20 ug/mL |
| | | | | | | | Aniline | 20 ug/mL |
| | | | | | | | Anthracene | 20 ug/mL |
| | | | | | | | Azobenzene | 20 ug/mL |
| | | | | | | | Benzo[a]anthracene | 20 ug/mL |
| | | | | | | | Benzo[a]pyrene | 20 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 20 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 20 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 20 ug/mL |
| | | | | | | | Benzyl alcohol | 20 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 20 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 20 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 20 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 20 ug/mL |
| | | | | | | | Carbazole | 20 ug/mL |
| | | | | | | | Chrysene | 20 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 20 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 20 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 20 ug/mL |
| | | | | | | | Dibenzofuran | 20 ug/mL |
| | | | | | | | Diethyl phthalate | 20 ug/mL |
| | | | | | | | Dimethyl phthalate | 20 ug/mL |
| | | | | | | | Fluoranthene | 20 ug/mL |
| | | | | | | | Fluorene | 20 ug/mL |
| | | | | | | | Hexachlorobenzene | 20 ug/mL |
| | | | | | | | Hexachlorobutadiene | 20 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 20 ug/mL |
| | | | | | | | Hexachloroethane | 20 ug/mL |
| | | | | | | | Hexadecane | 20 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 20 ug/mL |
| | | | | | | | Isophorone | 20 ug/mL |
| | | | | | | | n-Decane | 20 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 20 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 20 ug/mL |
| | | | | | | | n-Octadecane | 20 ug/mL |
| | | | | | | | Naphthalene | 20 ug/mL |
| | | | | | | | Nitrobenzene | 20 ug/mL |
| | | | | | | | Pentachlorophenol | 40 ug/mL |
| | | | | | | | Phenanthrene | 20 ug/mL |
| | | | | | | | Phenol | 20 ug/mL |
| | | | | | | | Pyrene | 20 ug/mL |
| | | | | | | | Pyridine | 20 ug/mL |
| | | | | | SMLIST1 S2_00008 | 4 mL | 3,3'-Dichlorobenzidine | 40 ug/mL |
| | | | | | | | Atrazine | 40 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzidine | 40 ug/mL |
| | | | | | | | Caprolactam | 40 ug/mL |
| | | | | | SMLIST1 S7_00001 | 4 mL | N-Nitrosodiphenylamine | 40 ug/mL |
| .SMLIST1 S1_00004 | 08/31/15 | | Restek, Lot A0101615 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| .SMLIST1 S2_00008 | 07/30/15 | | Restek, Lot A0100824 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| .SMLIST1 S7_00001 | 02/28/17 | | Restek, Lot A0101573 | | (Purchased Reagent) | | N-Nitrosodiphenylamine | 2000 ug/mL |
| **EXBNASURR W_00021** | 06/10/16 | 03/16/15 | MEOH, Lot 85233 | 2000 mL | SMLIST1 SURR_00003 | 8 mL | 2,4,6-Tribromophenol (Surr) | 20 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 20 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 20 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 20 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 20 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 20 ug/mL |
| .SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **EXDIESELSPKW_00062** | 02/06/16 | 03/10/15 | MECL2, Lot 0000098052 | 100 mL | EXDIESELSPK_00012 | 5 mL | Diesel | 2500 ug/mL |
| .EXDIESELSPK_00012 | 08/31/18 | | ULTRA, Lot CL-2929 | | (Purchased Reagent) | | Diesel | 50000 ug/mL |
| **EXOTPSURRW_00001** | 06/10/16 | 03/27/15 | MEOH, Lot 0000085233 | 1000 mL | EXSURROTP_00003 | 20 mL | o-Terphenyl (Surr) | 200 ug/mL |
| .EXSURROTP_00003 | 03/31/18 | | Restek, Lot A0105442 | | (Purchased Reagent) | | o-Terphenyl (Surr) | 10000 ug/mL |
| **Gas Surr Cali_00011** | 04/01/15 | 01/02/15 | MeoH, Lot 1823933 | 10 mL | VGGASURROGATE_00028 | 1 mL | Trifluorotoluene (Surr) | 5 ug/mL |
| .VGGASURROGATE_00028 | 03/02/15 | 12/02/14 | MEOH, Lot 49909 | 50 mL | VGSURRSTKGAS_00019 | 1.25 mL | Trifluorotoluene (Surr) | 50 ug/mL |
| ..VGSURRSTKGAS_00019 | 08/31/16 | | ULTRA SCIENTIFIC, Lot CE-1903A | | (Purchased Reagent) | | Trifluorotoluene (Surr) | 2000 ug/mL |
| **MT1TO1HN03_00942** | 04/08/15 | 04/08/15 | DIWATER, Lot DI WATER | 500 mL | MTTMHNO3_00053 | 250 mL | Nitric acid | 0.5 mL/mL |
| .MTTMHNO3_00053 | 03/24/17 | | Macron/Avantor, Lot 0000093717 | | (Purchased Reagent) | | Nitric acid | 100 % |
| **MT6500ICV_00025** | 09/03/15 | 03/03/15 | DIWATER, Lot DIWATER | 1000 mL | MTTRICV3_00006 | 6 mL | Barium | 1500 ug/L |
| | | | | | | | Beryllium | 1500 ug/L |
| | | | | | | | Chromium | 1500 ug/L |
| | | | | | | | Cobalt | 1500 ug/L |
| | | | | | | | Copper | 1500 ug/L |
| | | | | | | | Molybdenum | 1500 ug/L |
| | | | | | | | Nickel | 1500 ug/L |
| | | | | | | | Vanadium | 1500 ug/L |
| | | | | | | | Zinc | 1500 ug/L |
| | | | | | MTTRICV5_00012 | 1.5 mL | Antimony | 375 ug/L |
| | | | | | | | Arsenic | 375 ug/L |
| | | | | | | | Cadmium | 375 ug/L |
| | | | | | | | Lead | 375 ug/L |
| | | | | | | | Selenium | 375 ug/L |
| | | | | | | | Thallium | 750 ug/L |
| | | | | | MTTRICVAG_00005 | 7.5 mL | Silver | 750 ug/L |
| .MTTRICV3_00006 | 04/01/16 | | CPI, Lot 1071810 | | (Purchased Reagent) | | Barium | 250 mg/L |
| | | | | | | | Beryllium | 250 mg/L |
| | | | | | | | Chromium | 250 mg/L |
| | | | | | | | Cobalt | 250 mg/L |
| | | | | | | | Copper | 250 mg/L |
| | | | | | | | Molybdenum | 250 mg/L |
| | | | | | | | Nickel | 250 mg/L |
| | | | | | | | Vanadium | 250 mg/L |
| | | | | | | | Zinc | 250 mg/L |
| .MTTRICV5_00012 | 04/01/16 | | CPI, Lot 1071811 | | (Purchased Reagent) | | Antimony | 250 ug/mL |
| | | | | | | | Arsenic | 250 ug/mL |
| | | | | | | | Cadmium | 250 ug/mL |
| | | | | | | | Lead | 250 ug/mL |
| | | | | | | | Selenium | 250 ug/mL |
| | | | | | | | Thallium | 500 ug/mL |
| .MTTRICVAG_00005 | 10/01/15 | | CPI, Lot 1065516 | | (Purchased Reagent) | | Silver | 100 mg/L |
| **MTAGSPIKEW_00047** | 09/17/15 | 03/17/14 | DIWATER, Lot DIWATER | 1000 mL | MTAG_00005 | 2.5 mL | Silver | 2500 ug/L |
| | | | | | MTTMHNO3_00052 | 50 mL | Nitric acid | 50000000 ug/L |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| .MTAG_00005 | 12/27/15 | HIGH PURITY STANDARDS, Lot 1401302 | | | (Purchased Reagent) | | Silver | 1000 ug/mL |
| .MTTMHNO3_00052 | 03/02/17 | Macron/Avantor, Lot 0000093717 | | | (Purchased Reagent) | | Nitric acid | 100 % |
| **MTAQUAREGIA_00987** | 04/08/15 | 04/08/15 | NA, Lot NA | 200 mL | MTTMHCL_00061 | 150 mL | Hydrogen Chloride | 0.75 mL/mL |
| | | | | | MTTMHNO3_00053 | 50 mL | Nitric acid | 0.25 mL/mL |
| .MTTMHCL_00061 | 03/24/17 | Macron/Avantor, Lot 0000086340 | | | (Purchased Reagent) | | Hydrogen Chloride | 100 % |
| .MTTMHNO3_00053 | 03/24/17 | Macron/Avantor, Lot 0000093717 | | | (Purchased Reagent) | | Nitric acid | 100 % |
| **MTAQUAREGIA_00988** | 04/08/15 | 04/08/15 | NA, Lot NA | 80 mL | MTTMHCL_00061 | 60 mL | Hydrogen Chloride | 0.75 mL/mL |
| | | | | | MTTMHNO3_00053 | 20 mL | Nitric acid | 0.25 mL/mL |
| .MTTMHCL_00061 | 03/24/17 | Macron/Avantor, Lot 0000086340 | | | (Purchased Reagent) | | Hydrogen Chloride | 100 % |
| .MTTMHNO3_00053 | 03/24/17 | Macron/Avantor, Lot 0000093717 | | | (Purchased Reagent) | | Nitric acid | 100 % |
| **MTH202_00041** | 05/13/16 | Macron, Lot 0000079375 | | | (Purchased Reagent) | | Hydrogen Peroxide | 30 % |
| **MTHGCALW_00875** | 04/08/15 | 04/08/15 | DIWATER, Lot DIWATER | 100 mL | MTHGCAL_00016 | 1 mL | Mercury | 100 ug/L |
| | | | | | MTTMHNO3_00053 | 0.15 mL | Nitric acid | 1500000 ug/L |
| .MTHGCAL_00016 | 05/09/17 | INORGANIC VENTURES, Lot H2-HG02126 | | | (Purchased Reagent) | | Mercury | 10 ug/mL |
| .MTTMHNO3_00053 | 03/24/17 | Macron/Avantor, Lot 0000093717 | | | (Purchased Reagent) | | Nitric acid | 100 % |
| **MTHgStd_00011** | 07/31/15 | Teledyne Leeman, Lot 1368801 | | | (Purchased Reagent) | | Mercury | 1 ug/mL |
| **MTICP1_00039** | 09/17/15 | 03/17/15 | DIWATER, Lot DI WATER | 1000 mL | MTICPSPIKE1A_00008 | 50 mL | Al | 100000 ug/L |
| | | | | | | | Arsenic | 100000 ug/L |
| | | | | | | | B | 50000 ug/L |
| | | | | | | | Barium | 100000 ug/L |
| | | | | | | | Beryllium | 2500 ug/L |
| | | | | | | | Cadmium | 2500 ug/L |
| | | | | | | | Chromium | 10000 ug/L |
| | | | | | | | Cobalt | 25000 ug/L |
| | | | | | | | Copper | 12500 ug/L |
| | | | | | | | Fe | 50000 ug/L |
| | | | | | | | Lead | 25000 ug/L |
| | | | | | | | Mn | 25000 ug/L |
| | | | | | | | Nickel | 25000 ug/L |
| | | | | | | | Selenium | 100000 ug/L |
| | | | | | | | Thallium | 100000 ug/L |
| | | | | | | | Vanadium | 25000 ug/L |
| | | | | | | | Zinc | 25000 ug/L |
| | | | | | MTICPSPIKEB_00008 | 50 mL | Antimony | 25000 ug/L |
| | | | | | | | Molybdenum | 50000 ug/L |
| | | | | | | | Sn | 100000 ug/L |
| | | | | | | | Ti | 50000 ug/L |
| | | | | | MTICPSpikeOdd_00005 | 50 mL | Li | 50000 ug/L |
| | | | | | | | Si | 50000 ug/L |
| | | | | | | | SiO2 | 107000 ug/L |
| | | | | | | | Sr | 50000 ug/L |
| | | | | | MTTMHNO3_00052 | 50 mL | Nitric acid | 50000000 ug/L |
| .MTICPSPIKE1A_00008 | 12/15/15 | High Purity Standards, Lot 1434517 | | | (Purchased Reagent) | | Al | 2000 ug/mL |
| | | | | | | | Arsenic | 2000 ug/mL |
| | | | | | | | B | 1000 ug/mL |
| | | | | | | | Barium | 2000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Beryllium | 50 ug/mL |
| | | | | | | | Cadmium | 50 ug/mL |
| | | | | | | | Chromium | 200 ug/mL |
| | | | | | | | Cobalt | 500 ug/mL |
| | | | | | | | Copper | 250 ug/mL |
| | | | | | | | Fe | 1000 ug/mL |
| | | | | | | | Lead | 500 ug/mL |
| | | | | | | | Mn | 500 ug/mL |
| | | | | | | | Nickel | 500 ug/mL |
| | | | | | | | Selenium | 2000 ug/mL |
| | | | | | | | Thallium | 2000 ug/mL |
| | | | | | | | Vanadium | 500 ug/mL |
| | | | | | | | Zinc | 500 ug/mL |
| .MTICPSPIKEB_00008 | 12/15/15 | High Purity Standards, Lot 1434518 | | | (Purchased Reagent) | | Antimony | 500 ug/mL |
| | | | | | | | Molybdenum | 1000 ug/mL |
| | | | | | | | Sn | 2000 ug/mL |
| | | | | | | | Ti | 1000 ug/mL |
| .MTICPSpikeOdd_00005 | 12/15/15 | High Purity Standards, Lot 1434513 | | | (Purchased Reagent) | | Li | 1000 ug/mL |
| | | | | | | | Si | 1000 ug/mL |
| | | | | | | | SiO2 | 2140 ug/mL |
| | | | | | | | Sr | 1000 ug/mL |
| .MTTMHNO3_00052 | 03/02/17 | Macron/Avantor, Lot 0000093717 | | | (Purchased Reagent) | | Nitric acid | 100 % |
| **MTICP2A_00048** | 06/29/15 | 02/18/14 | DIWATER, Lot DIWATER | 1000 mL | MTTMHNO3_00050 | 50 mL | Nitric acid | 50000 mg/L |
| | | | | | MTTRCAL2_00010 | 250 mL | Ca | 2500 mg/L |
| | | | | | | | K | 2500 mg/L |
| | | | | | | | Mg | 2500 mg/L |
| | | | | | | | Na | 2500 mg/L |
| .MTTMHNO3_00050 | 01/16/17 | Macron/Avantor, Lot 0000093717 | | | (Purchased Reagent) | | Nitric acid | 100 % |
| .MTTRCAL2_00010 | 11/19/15 | HIGH PURITY STANDARDS, Lot 1424003 | | | (Purchased Reagent) | | Ca | 10000 ug/mL |
| | | | | | | | K | 10000 ug/mL |
| | | | | | | | Mg | 10000 ug/mL |
| | | | | | | | Na | 10000 ug/mL |
| **MTICPCCV_00045** | 10/02/15 | 04/02/15 | DIWATER, Lot DIWATER | 2000 mL | MTICPCCV1_00008 | 200 mL | Arsenic | 500 ug/L |
| | | | | | | | Barium | 2000 ug/L |
| | | | | | | | Beryllium | 2000 ug/L |
| | | | | | | | Cadmium | 500 ug/L |
| | | | | | | | Chromium | 2000 ug/L |
| | | | | | | | Cobalt | 2000 ug/L |
| | | | | | | | Copper | 2000 ug/L |
| | | | | | | | Lead | 500 ug/L |
| | | | | | | | Nickel | 2000 ug/L |
| | | | | | | | Selenium | 500 ug/L |
| | | | | | | | Thallium | 1000 ug/L |
| | | | | | | | Vanadium | 2000 ug/L |
| | | | | | | | Zinc | 2000 ug/L |
| | | | | | MTICPCCV2_00008 | 200 mL | Antimony | 500 ug/L |
| | | | | | | | Molybdenum | 2000 ug/L |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Silver | 1000 ug/L |
| .MTICPCCV1_00008 | 04/01/16 | INORGANIC VENTURES, Lot J2-MEB567093 | | | (Purchased Reagent) | | Arsenic | 5000 ug/L |
| | | | | | | | Barium | 20000 ug/L |
| | | | | | | | Beryllium | 20000 ug/L |
| | | | | | | | Cadmium | 5000 ug/L |
| | | | | | | | Chromium | 20000 ug/L |
| | | | | | | | Cobalt | 20000 ug/L |
| | | | | | | | Copper | 20000 ug/L |
| | | | | | | | Lead | 5000 ug/L |
| | | | | | | | Nickel | 20000 ug/L |
| | | | | | | | Selenium | 5000 ug/L |
| | | | | | | | Thallium | 10000 ug/L |
| | | | | | | | Vanadium | 20000 ug/L |
| | | | | | | | Zinc | 20000 ug/L |
| .MTICPCCV2_00008 | 04/01/16 | INORGANIC VENTURES, Lot J2-MEB567104 | | | (Purchased Reagent) | | Antimony | 5000 ug/L |
| | | | | | | | Molybdenum | 20000 ug/L |
| | | | | | | | Silver | 10000 ug/L |
| **MTICPICSABW_00007** | 09/02/15 | 03/02/15 | DIWATER, Lot DIWATER | 1000 mL | MTICPICSAB1_00003 | 100 mL | Al | 500000 ug/L |
| | | | | | | | Arsenic | 1000 ug/L |
| | | | | | | | B | 500 ug/L |
| | | | | | | | Barium | 500 ug/L |
| | | | | | | | Beryllium | 500 ug/L |
| | | | | | | | Ca | 500000 ug/L |
| | | | | | | | Cadmium | 1000 ug/L |
| | | | | | | | Chromium | 500 ug/L |
| | | | | | | | Cobalt | 500 ug/L |
| | | | | | | | Copper | 500 ug/L |
| | | | | | | | Fe | 200000 ug/L |
| | | | | | | | K | 10000 ug/L |
| | | | | | | | Lead | 1000 ug/L |
| | | | | | | | Li | 500 ug/L |
| | | | | | | | Mg | 500000 ug/L |
| | | | | | | | Mn | 500 ug/L |
| | | | | | | | Na | 10000 ug/L |
| | | | | | | | Nickel | 1000 ug/L |
| | | | | | | | Selenium | 1000 ug/L |
| | | | | | | | Sr | 1500 ug/L |
| | | | | | | | Thallium | 1000 ug/L |
| | | | | | | | Vanadium | 500 ug/L |
| | | | | | | | Zinc | 1000 ug/L |
| | | | | | MTICPICSAB2_00003 | 100 mL | Antimony | 1000 ug/L |
| | | | | | | | Molybdenum | 1000 ug/L |
| | | | | | | | Si | 10000 ug/L |
| | | | | | | | Silver | 1000 ug/L |
| | | | | | | | Sn | 500 ug/L |
| | | | | | | | Ti | 500 ug/L |
| .MTICPICSAB1_00003 | 10/01/15 | INORGANIC VENTURES, Lot H2-MEB546050 | | | (Purchased Reagent) | | Al | 5000000 ug/L |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Arsenic | 10000 ug/L |
| | | | | | | | B | 5000 ug/L |
| | | | | | | | Barium | 5000 ug/L |
| | | | | | | | Beryllium | 5000 ug/L |
| | | | | | | | Ca | 5000000 ug/L |
| | | | | | | | Cadmium | 10000 ug/L |
| | | | | | | | Chromium | 5000 ug/L |
| | | | | | | | Cobalt | 5000 ug/L |
| | | | | | | | Copper | 5000 ug/L |
| | | | | | | | Fe | 2000000 ug/L |
| | | | | | | | K | 100000 ug/L |
| | | | | | | | Lead | 10000 ug/L |
| | | | | | | | Li | 5000 ug/L |
| | | | | | | | Mg | 5000000 ug/L |
| | | | | | | | Mn | 5000 ug/L |
| | | | | | | | Na | 100000 ug/L |
| | | | | | | | Nickel | 10000 ug/L |
| | | | | | | | Selenium | 10000 ug/L |
| | | | | | | | Sr | 15000 ug/L |
| | | | | | | | Thallium | 10000 ug/L |
| | | | | | | | Vanadium | 5000 ug/L |
| | | | | | | | Zinc | 10000 ug/L |
| .MTICPICSAB2_00003 | 10/01/15 | INORGANIC VENTURES, Lot H2-MEB546051 | | | (Purchased Reagent) | | Antimony | 10000 ug/L |
| | | | | | | | Molybdenum | 10000 ug/L |
| | | | | | | | Si | 100000 ug/L |
| | | | | | | | Silver | 10000 ug/L |
| | | | | | | | Sn | 5000 ug/L |
| | | | | | | | Ti | 5000 ug/L |
| **MTKMN04W_00080** | 03/21/17 | 03/21/15 | DIWATER, Lot DIWATER | 2.5 L | MTKMN04_00020 | 125 g | Potassium Permanganate | 0.05 g/g |
| .MTKMN04_00020 | 11/24/19 | Fisher, Lot 121666 | | | (Purchased Reagent) | | Potassium Permanganate | 1 g/g |
| **MTTMHCL_00061** | 03/24/17 | Macron/Avantor, Lot 0000086340 | | | (Purchased Reagent) | | Hydrogen Chloride | 100 % |
| **MTTMHNO3_00053** | 03/24/17 | Macron/Avantor, Lot 0000093717 | | | (Purchased Reagent) | | Nitric acid | 100 % |
| **MTTRCRIC_00026** | 09/20/15 | 03/20/15 | DIWATER, Lot DIWATER | 500 mL | MTTRCRI6010C_00010 | 25 mL | Antimony | 20 ug/L |
| | | | | | | | Arsenic | 15 ug/L |
| | | | | | | | Barium | 200 ug/L |
| | | | | | | | Beryllium | 5 ug/L |
| | | | | | | | Cadmium | 5 ug/L |
| | | | | | | | Chromium | 10 ug/L |
| | | | | | | | Cobalt | 10 ug/L |
| | | | | | | | Copper | 20 ug/L |
| | | | | | | | Lead | 10 ug/L |
| | | | | | | | Molybdenum | 40 ug/L |
| | | | | | | | Nickel | 40 ug/L |
| | | | | | | | Selenium | 20 ug/L |
| | | | | | | | Silver | 10 ug/L |
| | | | | | | | Thallium | 20 ug/L |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Vanadium | 10 ug/L |
| | | | | | | | Zinc | 50 ug/L |
| .MTTRCRI6010C_00010 | 12/01/15 | Inorganic Ventures, Lot H2-MEB552050 | | | (Purchased Reagent) | | Antimony | 400 ug/L |
| | | | | | | | Arsenic | 300 ug/L |
| | | | | | | | Barium | 4000 ug/L |
| | | | | | | | Beryllium | 100 ug/L |
| | | | | | | | Cadmium | 100 ug/L |
| | | | | | | | Chromium | 200 ug/L |
| | | | | | | | Cobalt | 200 ug/L |
| | | | | | | | Copper | 400 ug/L |
| | | | | | | | Lead | 200 ug/L |
| | | | | | | | Molybdenum | 800 ug/L |
| | | | | | | | Nickel | 800 ug/L |
| | | | | | | | Selenium | 400 ug/L |
| | | | | | | | Silver | 200 ug/L |
| | | | | | | | Thallium | 400 ug/L |
| | | | | | | | Vanadium | 200 ug/L |
| | | | | | | | Zinc | 1000 ug/L |
| **MTTRICSAW_00025** | 06/01/15 | 12/23/14 | DIWATER, Lot DIWATER | 1000 mL | MTTRICSA_00012 | 100 mL | Al | 500000 ug/L |
| | | | | | | | Ca | 500000 ug/L |
| | | | | | | | Fe | 200000 ug/L |
| | | | | | | | Mg | 500000 ug/L |
| .MTTRICSA_00012 | 06/01/15 | INORGANIC VENTURES, Lot G2-MEB491156 | | | (Purchased Reagent) | | Al | 5000 ug/mL |
| | | | | | | | Ca | 5000 ug/mL |
| | | | | | | | Fe | 2000 ug/mL |
| | | | | | | | Mg | 5000 ug/mL |
| **SG1248@.05ppm_00015** | 09/09/15 | 03/10/15 | HEXANE, Lot 0000086559 | 100 mL | SG1248@10ppm_00006 | 0.5 mL | PCB-1248 Peak 1 | 0.05 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 0.05 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 0.05 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 0.05 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 0.05 ug/mL |
| .SG1248@10ppm_00006 | 09/09/15 | 09/09/14 | Hexane, Lot 0000078259 | 100 mL | SG1248_00003 | 1 mL | PCB-1248 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 10 ug/mL |
| ..SG1248_00003 | 04/30/18 | Restek, Lot A086044 | | | (Purchased Reagent) | | PCB-1248 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 1000 ug/mL |
| **SG1248@0.1PPM_00012** | 09/09/15 | 03/10/15 | HEXANE, Lot 0000086559 | 100 mL | SG1248@10ppm_00006 | 1 mL | PCB-1248 Peak 1 | 0.1 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 0.1 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 0.1 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 0.1 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 0.1 ug/mL |
| .SG1248@10ppm_00006 | 09/09/15 | 09/09/14 | Hexane, Lot 0000078259 | 100 mL | SG1248_00003 | 1 mL | PCB-1248 Peak 1 | 10 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1248 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 10 ug/mL |
| ..SG1248_00003 | 04/30/18 | | Restek, Lot A086044 | | (Purchased Reagent) | | PCB-1248 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 1000 ug/mL |
| **SG1248@0.2ppm_00012** | 09/09/15 | 03/10/15 | HEXANE, Lot 0000086559 | 100 mL | SG1248@10ppm_00006 | 2 mL | PCB-1248 Peak 1 | 0.2 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 0.2 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 0.2 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 0.2 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 0.2 ug/mL |
| .SG1248@10ppm_00006 | 09/09/15 | 09/09/14 | Hexane, Lot 0000078259 | 100 mL | SG1248_00003 | 1 mL | PCB-1248 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 10 ug/mL |
| ..SG1248_00003 | 04/30/18 | | Restek, Lot A086044 | | (Purchased Reagent) | | PCB-1248 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 1000 ug/mL |
| **SG1248@0.5ppm_00015** | 06/01/15 | 12/01/14 | HEXANE, Lot 00000078259 | 100 mL | SG1248@10ppm_00006 | 5 mL | PCB-1248 Peak 1 | 0.5 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 0.5 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 0.5 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 0.5 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 0.5 ug/mL |
| .SG1248@10ppm_00006 | 09/09/15 | 09/09/14 | Hexane, Lot 0000078259 | 100 mL | SG1248_00003 | 1 mL | PCB-1248 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 10 ug/mL |
| ..SG1248_00003 | 04/30/18 | | Restek, Lot A086044 | | (Purchased Reagent) | | PCB-1248 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 1000 ug/mL |
| **SG1248@1.0ppm_00010** | 09/09/15 | 03/10/15 | HEXANE, Lot 0000086559 | 100 mL | SG1248@10ppm_00006 | 10 mL | PCB-1248 Peak 1 | 1 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 1 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 1 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 1 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 1 ug/mL |
| .SG1248@10ppm_00006 | 09/09/15 | 09/09/14 | Hexane, Lot 0000078259 | 100 mL | SG1248_00003 | 1 mL | PCB-1248 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 10 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1248 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 10 ug/mL |
| ..SG1248_00003 | 04/30/18 | | Restek, Lot A086044 | | (Purchased Reagent) | | PCB-1248 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 1000 ug/mL |
| **SG1248@2.0ppm_00010** | 09/09/15 | 03/10/15 | HEXANE, Lot 0000086559 | 100 mL | SG1248@10ppm_00006 | 20 mL | PCB-1248 Peak 1 | 2 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 2 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 2 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 2 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 2 ug/mL |
| .SG1248@10ppm_00006 | 09/09/15 | 09/09/14 | Hexane, Lot 0000078259 | 100 mL | SG1248_00003 | 1 mL | PCB-1248 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 10 ug/mL |
| ..SG1248_00003 | 04/30/18 | | Restek, Lot A086044 | | (Purchased Reagent) | | PCB-1248 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1248 Peak 5 | 1000 ug/mL |
| **SG1660@.05PPM_00012** | 07/01/15 | 01/08/15 | HEXANE, Lot 0000086560 | 100 mL | SG1016/1260_00012 | 0.5 mL | PCB-1016 Peak 1 | 0.05 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 0.05 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 0.05 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 0.05 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 0.05 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 0.05 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 0.05 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 0.05 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 0.05 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 0.05 ug/mL |
| | | | | | SGPCGSURRSTK_00005 | 0.125 mL | DCB Decachlorobiphenyl | 0.0025 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 0.0025 ug/mL |
| .SG1016/1260_00012 | 08/25/15 | 08/25/14 | HEXANE, Lot 0000075731 | 100 mL | SG1016/1260MX_00006 | 1 mL | PCB-1016 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 10 ug/mL |
| ..SG1016/1260MX_00006 | 04/30/19 | | Restek, Lot a092844 | | (Purchased Reagent) | | PCB-1016 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1016 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 1000 ug/mL |
| .SGPCGSURRSTK_00005 | 07/31/15 | 07/31/14 | HEXANE, Lot 0000075731 | 100 mL | SGPCBSURRMX_00007 | 1 mL | DCB Decachlorobiphenyl | 2 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 2 ug/mL |
| ..SGPCBSURRMX_00007 | 03/31/19 | | restek, Lot a092533 | | (Purchased Reagent) | | DCB Decachlorobiphenyl | 200 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 200 ug/mL |
| **SG1660@0.2ppm_00011** | 07/31/15 | 02/23/15 | HEXANE, Lot 86559 | 100 mL | SG1016/1260_00013 | 2 mL | PCB-1016 Peak 1 | 0.2 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 0.2 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 0.2 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 0.2 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 0.2 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 0.2 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 0.2 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 0.2 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 0.2 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 0.2 ug/mL |
| | | | | | SGPCGSURRSTK_00005 | 0.5 mL | DCB Decachlorobiphenyl | 0.01 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 0.01 ug/mL |
| .SG1016/1260_00013 | 01/12/16 | 01/12/15 | HEXANE, Lot 0000086560 | 100 mL | SG1016/1260MX_00006 | 1 mL | PCB-1016 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 10 ug/mL |
| ..SG1016/1260MX_00006 | 04/30/19 | | Restek, Lot a092844 | | (Purchased Reagent) | | PCB-1016 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 1000 ug/mL |
| .SGPCGSURRSTK_00005 | 07/31/15 | 07/31/14 | HEXANE, Lot 0000075731 | 100 mL | SGPCBSURRMX_00007 | 1 mL | DCB Decachlorobiphenyl | 2 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 2 ug/mL |
| ..SGPCBSURRMX_00007 | 03/31/19 | | restek, Lot a092533 | | (Purchased Reagent) | | DCB Decachlorobiphenyl | 200 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 200 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **SG1660@0.5PPM_00042** | 07/31/15 | 02/04/15 | HEXANE, Lot 0000086560 | 200 mL | SG1016/1260_00013 | 10 mL | PCB-1016 Peak 1 | 0.5 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 0.5 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 0.5 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 0.5 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 0.5 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 0.5 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 0.5 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 0.5 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 0.5 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 0.5 ug/mL |
| | | | | | SGPCGSURRSTK_00005 | 2.5 mL | DCB Decachlorobiphenyl | 0.025 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 0.025 ug/mL |
| .SG1016/1260_00013 | 01/12/16 | 01/12/15 | HEXANE, Lot 0000086560 | 100 mL | SG1016/1260MX_00006 | 1 mL | PCB-1016 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 10 ug/mL |
| ..SG1016/1260MX_00006 | 04/30/19 | | Restek, Lot a092844 | | (Purchased Reagent) | | PCB-1016 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 1000 ug/mL |
| .SGPCGSURRSTK_00005 | 07/31/15 | 07/31/14 | HEXANE, Lot 0000075731 | 100 mL | SGPCBSURRMX_00007 | 1 mL | DCB Decachlorobiphenyl | 2 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 2 ug/mL |
| ..SGPCBSURRMX_00007 | 03/31/19 | | restek, Lot a092533 | | (Purchased Reagent) | | DCB Decachlorobiphenyl | 200 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 200 ug/mL |
| **SG1660@0.5PPM_00044** | 07/31/15 | 03/17/15 | HEXANE, Lot 0000086559 | 200 mL | SG1016/1260_00013 | 10 mL | Aroclor-1016 | 0.5 ug/mL |
| | | | | | | | Aroclor-1260 | 0.5 ug/mL |
| | | | | | | | PCB-1016 Peak 1 | 0.5 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 0.5 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 0.5 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 0.5 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 0.5 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 0.5 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 0.5 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 0.5 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 0.5 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1260 Peak 5 | 0.5 ug/mL |
| | | | | | SGPCGSURRSTK_00005 | 2.5 mL | DCB Decachlorobiphenyl | 0.025 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 0.025 ug/mL |
| .SG1016/1260_00013 | 01/12/16 | 01/12/15 | HEXANE, Lot 0000086560 | 100 mL | SG1016/1260MX_00006 | 1 mL | Aroclor-1016 | 10 ug/mL |
| | | | | | | | Aroclor-1260 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 10 ug/mL |
| ..SG1016/1260MX_00006 | 04/30/19 | | Restek, Lot a092844 | | (Purchased Reagent) | | Aroclor-1016 | 1000 ug/mL |
| | | | | | | | Aroclor-1260 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 1000 ug/mL |
| .SGPCGSURRSTK_00005 | 07/31/15 | 07/31/14 | HEXANE, Lot 0000075731 | 100 mL | SGPCBSURRMX_00007 | 1 mL | DCB Decachlorobiphenyl | 2 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 2 ug/mL |
| ..SGPCBSURRMX_00007 | 03/31/19 | | restek, Lot a092533 | | (Purchased Reagent) | | DCB Decachlorobiphenyl | 200 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 200 ug/mL |
| **SG1660@1.0PPM_00011** | 07/31/15 | 02/23/15 | HEXANE, Lot 86559 | 100 mL | SG1016/1260_00013 | 10 mL | PCB-1016 Peak 1 | 1 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 1 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 1 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 1 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 1 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 1 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 1 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 1 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 1 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 1 ug/mL |
| | | | | | SGPCGSURRSTK_00005 | 2.5 mL | DCB Decachlorobiphenyl | 0.05 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 0.05 ug/mL |
| .SG1016/1260_00013 | 01/12/16 | 01/12/15 | HEXANE, Lot 0000086560 | 100 mL | SG1016/1260MX_00006 | 1 mL | PCB-1016 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 10 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1016 Peak 5 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 10 ug/mL |
| ..SG1016/1260MX_00006 | 04/30/19 | | Restek, Lot a092844 | | (Purchased Reagent) | | PCB-1016 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 1000 ug/mL |
| .SGPCGSURRSTK_00005 | 07/31/15 | 07/31/14 | HEXANE, Lot 0000075731 | 100 mL | SGPCBSURRMX_00007 | 1 mL | DCB Decachlorobiphenyl | 2 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 2 ug/mL |
| ..SGPCBSURRMX_00007 | 03/31/19 | | restek, Lot a092533 | | (Purchased Reagent) | | DCB Decachlorobiphenyl | 200 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 200 ug/mL |
| **SG1660@2.0PPM_00012** | 07/31/15 | 02/23/15 | HEXANE, Lot 86559 | 100 mL | SG1016/1260_00013 | 20 mL | PCB-1016 Peak 1 | 2 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 2 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 2 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 2 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 2 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 2 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 2 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 2 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 2 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 2 ug/mL |
| | | | | | SGPCGSURRSTK_00005 | 5 mL | DCB Decachlorobiphenyl | 0.1 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 0.1 ug/mL |
| .SG1016/1260_00013 | 01/12/16 | 01/12/15 | HEXANE, Lot 0000086560 | 100 mL | SG1016/1260MX_00006 | 1 mL | PCB-1016 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 10 ug/mL |
| ..SG1016/1260MX_00006 | 04/30/19 | | Restek, Lot a092844 | | (Purchased Reagent) | | PCB-1016 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 1000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1260 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 1000 ug/mL |
| .SGPCGSURRSTK_00005 | 07/31/15 | 07/31/14 | HEXANE, Lot 0000075731 | 100 mL | SGPCBSURRMX_00007 | 1 mL | DCB Decachlorobiphenyl | 2 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 2 ug/mL |
| ..SGPCBSURRMX_00007 | 03/31/19 | | restek, Lot a092533 | | (Purchased Reagent) | | DCB Decachlorobiphenyl | 200 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 200 ug/mL |
| **SG1660ICV@1.0_00004** | 07/05/15 | 01/05/15 | HEXANE, Lot 0000086560 | 10 mL | SG1660ICV@10_00004 | 1 mL | Aroclor-1016 | 1 ug/mL |
| | | | | | | | Aroclor-1260 | 1 ug/mL |
| .SG1660ICV@10_00004 | 07/05/15 | 01/05/15 | HEXANE, Lot 0000086560 | 10 mL | SG1660ICV@100_00002 | 1 mL | Aroclor-1016 | 10 ug/mL |
| | | | | | | | Aroclor-1260 | 10 ug/mL |
| ..SG1660ICV@100_00002 | 08/22/15 | 08/22/14 | HEXANE, Lot 0000075731 | 10 mL | SG 1660 ICV_00010 | 1 mL | Aroclor-1016 | 100 ug/mL |
| | | | | | | | Aroclor-1260 | 100 ug/mL |
| ...SG 1660 ICV_00010 | 06/30/19 | | restek, Lot a094336 | | (Purchased Reagent) | | Aroclor-1016 | 1000 ug/mL |
| | | | | | | | Aroclor-1260 | 1000 ug/mL |
| **SG1660STD@0.1_00012** | 07/31/15 | 02/23/15 | HEXANE, Lot 86559 | 100 mL | SG1016/1260_00013 | 1 mL | PCB-1016 Peak 1 | 0.1 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 0.1 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 0.1 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 0.1 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 0.1 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 0.1 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 0.1 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 0.1 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 0.1 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 0.1 ug/mL |
| | | | | | SGPCGSURRSTK_00005 | 0.25 mL | DCB Decachlorobiphenyl | 0.005 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 0.005 ug/mL |
| .SG1016/1260_00013 | 01/12/16 | 01/12/15 | HEXANE, Lot 0000086560 | 100 mL | SG1016/1260MX_00006 | 1 mL | PCB-1016 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 10 ug/mL |
| ..SG1016/1260MX_00006 | 04/30/19 | | Restek, Lot a092844 | | (Purchased Reagent) | | PCB-1016 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1016 Peak 5 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 3 | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1260 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1260 Peak 5 | 1000 ug/mL |
| .SGPCGSURRSTK_00005 | 07/31/15 | 07/31/14 | HEXANE, Lot 0000075731 | 100 mL | SGPCBSURRMX_00007 | 1 mL | DCB Decachlorobiphenyl | 2 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 2 ug/mL |
| ..SGPCBSURRMX_00007 | 03/31/19 | | restek, Lot a092533 | | (Purchased Reagent) | | DCB Decachlorobiphenyl | 200 ug/mL |
| | | | | | | | Tetrachloro-m-xylene | 200 ug/mL |
| **SG2154@0.05PP_00008** | 05/22/15 | 12/22/14 | HEXANE, Lot 000078259 | 100 mL | SG2154@10ppm_00008 | 0.5 mL | PCB-1221 Peak 1 | 0.05 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 0.05 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 0.05 ug/mL |
| | | | | | | | PCB-1254 Peak 1 | 0.05 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 0.05 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 0.05 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 0.05 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 0.05 ug/mL |
| .SG2154@10ppm_00008 | 12/22/15 | 12/22/14 | HEXANE, Lot 0000078259 | 100 mL | SGPCB1221_00004 | 1 mL | PCB-1221 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 10 ug/mL |
| | | | | | SGPCB1254_00007 | 1 mL | PCB-1254 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 10 ug/mL |
| ..SGPCB1221_00004 | 12/31/18 | | RESTEK, Lot a090667 | | (Purchased Reagent) | | PCB-1221 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 1000 ug/mL |
| ..SGPCB1254_00007 | 05/30/18 | | restek, Lot A093609 | | (Purchased Reagent) | | PCB-1254 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 1000 ug/mL |
| **SG2154@0.2PPM_00009** | 05/22/15 | 12/22/14 | HEXANE, Lot 0000078259 | 100 mL | SG2154@10ppm_00008 | 2 mL | PCB-1221 Peak 1 | 0.2 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 0.2 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 0.2 ug/mL |
| | | | | | | | PCB-1254 Peak 1 | 0.2 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 0.2 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 0.2 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 0.2 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 0.2 ug/mL |
| .SG2154@10ppm_00008 | 12/22/15 | 12/22/14 | HEXANE, Lot 0000078259 | 100 mL | SGPCB1221_00004 | 1 mL | PCB-1221 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 10 ug/mL |
| | | | | | SGPCB1254_00007 | 1 mL | PCB-1254 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 10 ug/mL |
| ..SGPCB1221_00004 | 12/31/18 | | RESTEK, Lot a090667 | | (Purchased Reagent) | | PCB-1221 Peak 1 | 1000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1221 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 1000 ug/mL |
| ..SGPCB1254_00007 | 05/30/18 | | restek, Lot A093609 | | (Purchased Reagent) | | PCB-1254 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 1000 ug/mL |
| **SG2154@0.5PPM_00016** | 05/22/15 | 12/22/14 | HEXANE, Lot 00000078259 | 100 mL | SG2154@10ppm_00008 | 5 mL | PCB-1221 Peak 1 | 0.5 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 0.5 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 0.5 ug/mL |
| | | | | | | | PCB-1254 Peak 1 | 0.5 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 0.5 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 0.5 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 0.5 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 0.5 ug/mL |
| .SG2154@10ppm_00008 | 12/22/15 | 12/22/14 | HEXANE, Lot 0000078259 | 100 mL | SGPCB1221_00004 | 1 mL | PCB-1221 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 10 ug/mL |
| | | | | | SGPCB1254_00007 | 1 mL | PCB-1254 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 10 ug/mL |
| ..SGPCB1221_00004 | 12/31/18 | | RESTEK, Lot a090667 | | (Purchased Reagent) | | PCB-1221 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 1000 ug/mL |
| ..SGPCB1254_00007 | 05/30/18 | | restek, Lot A093609 | | (Purchased Reagent) | | PCB-1254 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 1000 ug/mL |
| **SG2154@1.0PPM_00010** | 05/22/15 | 12/22/14 | HEXANE, Lot 0000078259 | 100 mL | SG2154@10ppm_00008 | 10 mL | PCB-1221 Peak 1 | 1 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 1 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 1 ug/mL |
| | | | | | | | PCB-1254 Peak 1 | 1 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 1 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 1 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 1 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 1 ug/mL |
| .SG2154@10ppm_00008 | 12/22/15 | 12/22/14 | HEXANE, Lot 0000078259 | 100 mL | SGPCB1221_00004 | 1 mL | PCB-1221 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 10 ug/mL |
| | | | | | SGPCB1254_00007 | 1 mL | PCB-1254 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 10 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| ..SGPCB1221_00004 | 12/31/18 | | RESTEK, Lot a090667 | | (Purchased Reagent) | | PCB-1221 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 1000 ug/mL |
| ..SGPCB1254_00007 | 05/30/18 | | restek, Lot A093609 | | (Purchased Reagent) | | PCB-1254 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 1000 ug/mL |
| **SG2154@2.0PPM_00009** | 05/22/15 | 12/22/14 | HEXANE, Lot 0000078259 | 100 mL | SG2154@10ppm_00008 | 20 mL | PCB-1221 Peak 1 | 2 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 2 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 2 ug/mL |
| | | | | | | | PCB-1254 Peak 1 | 2 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 2 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 2 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 2 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 2 ug/mL |
| .SG2154@10ppm_00008 | 12/22/15 | 12/22/14 | HEXANE, Lot 0000078259 | 100 mL | SGPCB1221_00004 | 1 mL | PCB-1221 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 10 ug/mL |
| | | | | | SGPCB1254_00007 | 1 mL | PCB-1254 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 10 ug/mL |
| ..SGPCB1221_00004 | 12/31/18 | | RESTEK, Lot a090667 | | (Purchased Reagent) | | PCB-1221 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 1000 ug/mL |
| ..SGPCB1254_00007 | 05/30/18 | | restek, Lot A093609 | | (Purchased Reagent) | | PCB-1254 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 1000 ug/mL |
| **SG2154@O.1PPM_00010** | 05/22/15 | 12/22/14 | HEXANE, Lot 0000078259 | 100 mL | SG2154@10ppm_00008 | 1 mL | PCB-1221 Peak 1 | 0.1 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 0.1 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 0.1 ug/mL |
| | | | | | | | PCB-1254 Peak 1 | 0.1 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 0.1 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 0.1 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 0.1 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 0.1 ug/mL |
| .SG2154@10ppm_00008 | 12/22/15 | 12/22/14 | HEXANE, Lot 0000078259 | 100 mL | SGPCB1221_00004 | 1 mL | PCB-1221 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 10 ug/mL |
| | | | | | SGPCB1254_00007 | 1 mL | PCB-1254 Peak 1 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 10 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 10 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1254 Peak 5 | 10 ug/mL |
| ..SGPCB1221_00004 | 12/31/18 | | RESTEK, Lot a090667 | | (Purchased Reagent) | | PCB-1221 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1221 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1221 Peak 3 | 1000 ug/mL |
| ..SGPCB1254_00007 | 05/30/18 | | restek, Lot A093609 | | (Purchased Reagent) | | PCB-1254 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1254 Peak 5 | 1000 ug/mL |
| **SG3262@.05PPM_00002** | 05/30/15 | 12/31/14 | HEXANE, Lot 0000078259 | 100 mL | SG32/6210PPM_00001 | 0.5 mL | PCB-1232 Peak 1 | 50 ug/L |
| | | | | | | | PCB-1232 Peak 2 | 50 ug/L |
| | | | | | | | PCB-1232 Peak 3 | 50 ug/L |
| | | | | | | | PCB-1232 Peak 4 | 50 ug/L |
| | | | | | | | PCB-1232 Peak 5 | 50 ug/L |
| | | | | | | | PCB-1262 Peak 1 | 50 ug/L |
| | | | | | | | PCB-1262 Peak 2 | 50 ug/L |
| | | | | | | | PCB-1262 Peak 3 | 50 ug/L |
| | | | | | | | PCB-1262 Peak 4 | 50 ug/L |
| | | | | | | | PCB-1262 Peak 5 | 50 ug/L |
| .SG32/6210PPM_00001 | 07/11/15 | 07/11/14 | HEXANE, Lot 1561873 | 100 mL | SGPCB1232STD_00005 | 1 mL | PCB-1232 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 5 | 10000 ug/L |
| | | | | | SGPCB1262STD_00004 | 1 mL | PCB-1262 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 5 | 10000 ug/L |
| ..SGPCB1232STD_00005 | 04/30/18 | | restek, Lot A086119 | | (Purchased Reagent) | | PCB-1232 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 5 | 1000 ug/mL |
| ..SGPCB1262STD_00004 | 03/31/19 | | restek, Lot A092660 | | (Purchased Reagent) | | PCB-1262 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 5 | 1000 ug/mL |
| **SG3262@.2PPM_00002** | 05/30/15 | 12/31/14 | HEXANE, Lot 0000078259 | 100 mL | SG32/6210PPM_00001 | 2 mL | PCB-1232 Peak 1 | 200 ug/L |
| | | | | | | | PCB-1232 Peak 2 | 200 ug/L |
| | | | | | | | PCB-1232 Peak 3 | 200 ug/L |
| | | | | | | | PCB-1232 Peak 4 | 200 ug/L |
| | | | | | | | PCB-1232 Peak 5 | 200 ug/L |
| | | | | | | | PCB-1262 Peak 1 | 200 ug/L |
| | | | | | | | PCB-1262 Peak 2 | 200 ug/L |
| | | | | | | | PCB-1262 Peak 3 | 200 ug/L |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1262 Peak 4 | 200 ug/L |
| | | | | | | | PCB-1262 Peak 5 | 200 ug/L |
| .SG32/6210PPM_00001 | 07/11/15 | 07/11/14 | HEXANE, Lot 1561873 | 100 mL | SGPCB1232STD_00005 | 1 mL | PCB-1232 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 5 | 10000 ug/L |
| | | | | | SGPCB1262STD_00004 | 1 mL | PCB-1262 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 5 | 10000 ug/L |
| ..SGPCB1232STD_00005 | 04/30/18 | | restek, Lot A086119 | | (Purchased Reagent) | | PCB-1232 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 5 | 1000 ug/mL |
| ..SGPCB1262STD_00004 | 03/31/19 | | restek, Lot A092660 | | (Purchased Reagent) | | PCB-1262 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 5 | 1000 ug/mL |
| **SG3262@0.1PPM_00002** | 05/30/15 | 12/31/14 | HEXANE, Lot 0000078259 | 100 mL | SG32/6210PPM_00001 | 1 mL | PCB-1232 Peak 1 | 100 ug/L |
| | | | | | | | PCB-1232 Peak 2 | 100 ug/L |
| | | | | | | | PCB-1232 Peak 3 | 100 ug/L |
| | | | | | | | PCB-1232 Peak 4 | 100 ug/L |
| | | | | | | | PCB-1232 Peak 5 | 100 ug/L |
| | | | | | | | PCB-1262 Peak 1 | 100 ug/L |
| | | | | | | | PCB-1262 Peak 2 | 100 ug/L |
| | | | | | | | PCB-1262 Peak 3 | 100 ug/L |
| | | | | | | | PCB-1262 Peak 4 | 100 ug/L |
| | | | | | | | PCB-1262 Peak 5 | 100 ug/L |
| .SG32/6210PPM_00001 | 07/11/15 | 07/11/14 | HEXANE, Lot 1561873 | 100 mL | SGPCB1232STD_00005 | 1 mL | PCB-1232 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 5 | 10000 ug/L |
| | | | | | SGPCB1262STD_00004 | 1 mL | PCB-1262 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 5 | 10000 ug/L |
| ..SGPCB1232STD_00005 | 04/30/18 | | restek, Lot A086119 | | (Purchased Reagent) | | PCB-1232 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 5 | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| ..SGPCB1262STD_00004 | 03/31/19 | | restek, Lot A092660 | | (Purchased Reagent) | | PCB-1262 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 5 | 1000 ug/mL |
| **SG3262@0.5PPM_00004** | 05/30/15 | 12/31/14 | HEXANE, Lot 0000078259 | 100 mL | SG32/6210PPM_00001 | 5 mL | PCB-1232 Peak 1 | 500 ug/L |
| | | | | | | | PCB-1232 Peak 2 | 500 ug/L |
| | | | | | | | PCB-1232 Peak 3 | 500 ug/L |
| | | | | | | | PCB-1232 Peak 4 | 500 ug/L |
| | | | | | | | PCB-1232 Peak 5 | 500 ug/L |
| | | | | | | | PCB-1262 Peak 1 | 500 ug/L |
| | | | | | | | PCB-1262 Peak 2 | 500 ug/L |
| | | | | | | | PCB-1262 Peak 3 | 500 ug/L |
| | | | | | | | PCB-1262 Peak 4 | 500 ug/L |
| | | | | | | | PCB-1262 Peak 5 | 500 ug/L |
| .SG32/6210PPM_00001 | 07/11/15 | 07/11/14 | HEXANE, Lot 1561873 | 100 mL | SGPCB1232STD_00005 | 1 mL | PCB-1232 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 5 | 10000 ug/L |
| | | | | | SGPCB1262STD_00004 | 1 mL | PCB-1262 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 5 | 10000 ug/L |
| ..SGPCB1232STD_00005 | 04/30/18 | | restek, Lot A086119 | | (Purchased Reagent) | | PCB-1232 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 5 | 1000 ug/mL |
| ..SGPCB1262STD_00004 | 03/31/19 | | restek, Lot A092660 | | (Purchased Reagent) | | PCB-1262 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 5 | 1000 ug/mL |
| **SG3262@1.0PPM_00002** | 05/30/15 | 12/31/14 | HEXANE, Lot 0000078259 | 100 mL | SG32/6210PPM_00001 | 10 mL | PCB-1232 Peak 1 | 1000 ug/L |
| | | | | | | | PCB-1232 Peak 2 | 1000 ug/L |
| | | | | | | | PCB-1232 Peak 3 | 1000 ug/L |
| | | | | | | | PCB-1232 Peak 4 | 1000 ug/L |
| | | | | | | | PCB-1232 Peak 5 | 1000 ug/L |
| | | | | | | | PCB-1262 Peak 1 | 1000 ug/L |
| | | | | | | | PCB-1262 Peak 2 | 1000 ug/L |
| | | | | | | | PCB-1262 Peak 3 | 1000 ug/L |
| | | | | | | | PCB-1262 Peak 4 | 1000 ug/L |
| | | | | | | | PCB-1262 Peak 5 | 1000 ug/L |
| .SG32/6210PPM_00001 | 07/11/15 | 07/11/14 | HEXANE, Lot 1561873 | 100 mL | SGPCB1232STD_00005 | 1 mL | PCB-1232 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 2 | 10000 ug/L |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1232 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 5 | 10000 ug/L |
| | | | | | SGPCB1262STD_00004 | 1 mL | PCB-1262 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 5 | 10000 ug/L |
| ..SGPCB1232STD_00005 | 04/30/18 | | restek, Lot A086119 | | (Purchased Reagent) | | PCB-1232 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 5 | 1000 ug/mL |
| ..SGPCB1262STD_00004 | 03/31/19 | | restek, Lot A092660 | | (Purchased Reagent) | | PCB-1262 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 5 | 1000 ug/mL |
| **SG3262@2.0ppm_00002** | 05/30/15 | 12/31/14 | HEXANE, Lot 0000078259 | 100 mL | SG32/6210PPM_00001 | 20 mL | PCB-1232 Peak 1 | 2000 ug/L |
| | | | | | | | PCB-1232 Peak 2 | 2000 ug/L |
| | | | | | | | PCB-1232 Peak 3 | 2000 ug/L |
| | | | | | | | PCB-1232 Peak 4 | 2000 ug/L |
| | | | | | | | PCB-1232 Peak 5 | 2000 ug/L |
| | | | | | | | PCB-1262 Peak 1 | 2000 ug/L |
| | | | | | | | PCB-1262 Peak 2 | 2000 ug/L |
| | | | | | | | PCB-1262 Peak 3 | 2000 ug/L |
| | | | | | | | PCB-1262 Peak 4 | 2000 ug/L |
| | | | | | | | PCB-1262 Peak 5 | 2000 ug/L |
| .SG32/6210PPM_00001 | 07/11/15 | 07/11/14 | HEXANE, Lot 1561873 | 100 mL | SGPCB1232STD_00005 | 1 mL | PCB-1232 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1232 Peak 5 | 10000 ug/L |
| | | | | | SGPCB1262STD_00004 | 1 mL | PCB-1262 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1262 Peak 5 | 10000 ug/L |
| ..SGPCB1232STD_00005 | 04/30/18 | | restek, Lot A086119 | | (Purchased Reagent) | | PCB-1232 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1232 Peak 5 | 1000 ug/mL |
| ..SGPCB1262STD_00004 | 03/31/19 | | restek, Lot A092660 | | (Purchased Reagent) | | PCB-1262 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1262 Peak 4 | 1000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1262 Peak 5 | 1000 ug/mL |
| **SG42/68@1.0PP_00003** | 07/02/15 | 01/02/15 | HEXANE, Lot 0000078259 | 100 mL | SG42/6810PPM_00001 | 10 mL | PCB-1242 Peak 1 | 1000 ug/L |
| | | | | | | | PCB-1242 Peak 2 | 1000 ug/L |
| | | | | | | | PCB-1242 Peak 3 | 1000 ug/L |
| | | | | | | | PCB-1242 Peak 4 | 1000 ug/L |
| | | | | | | | PCB-1242 Peak 5 | 1000 ug/L |
| | | | | | | | PCB-1268 Peak 1 | 1000 ug/L |
| | | | | | | | PCB-1268 Peak 2 | 1000 ug/L |
| | | | | | | | PCB-1268 Peak 3 | 1000 ug/L |
| | | | | | | | PCB-1268 Peak 4 | 1000 ug/L |
| | | | | | | | PCB-1268 Peak 5 | 1000 ug/L |
| .SG42/6810PPM_00001 | 07/11/15 | 07/11/14 | HEXANE, Lot 0000075731 | 100 mL | SG1242_00005 | 1 mL | PCB-1242 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 5 | 10000 ug/L |
| | | | | | SGpcb1268std_00005 | 1 mL | PCB-1268 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 5 | 10000 ug/L |
| ..SG1242_00005 | 11/30/18 | | Restek, Lot A090182 | | (Purchased Reagent) | | PCB-1242 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 5 | 1000 ug/mL |
| ..SGpcb1268std_00005 | 01/31/19 | | Restek, Lot a091468 | | (Purchased Reagent) | | PCB-1268 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 5 | 1000 ug/mL |
| **SG4268@.05PPM_00003** | 07/02/15 | 01/02/15 | HEXANE, Lot 0000078259 | 100 mL | SG42/6810PPM_00001 | 0.5 mL | PCB-1242 Peak 1 | 50 ug/L |
| | | | | | | | PCB-1242 Peak 2 | 50 ug/L |
| | | | | | | | PCB-1242 Peak 3 | 50 ug/L |
| | | | | | | | PCB-1242 Peak 4 | 50 ug/L |
| | | | | | | | PCB-1242 Peak 5 | 50 ug/L |
| | | | | | | | PCB-1268 Peak 1 | 50 ug/L |
| | | | | | | | PCB-1268 Peak 2 | 50 ug/L |
| | | | | | | | PCB-1268 Peak 3 | 50 ug/L |
| | | | | | | | PCB-1268 Peak 4 | 50 ug/L |
| | | | | | | | PCB-1268 Peak 5 | 50 ug/L |
| .SG42/6810PPM_00001 | 07/11/15 | 07/11/14 | HEXANE, Lot 0000075731 | 100 mL | SG1242_00005 | 1 mL | PCB-1242 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 5 | 10000 ug/L |
| | | | | | SGpcb1268std_00005 | 1 mL | PCB-1268 Peak 1 | 10000 ug/L |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1268 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 5 | 10000 ug/L |
| ..SG1242_00005 | 11/30/18 | | Restek, Lot A090182 | | (Purchased Reagent) | | PCB-1242 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 5 | 1000 ug/mL |
| ..SGpcb1268std_00005 | 01/31/19 | | Restek, Lot a091468 | | (Purchased Reagent) | | PCB-1268 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 5 | 1000 ug/mL |
| **SG4268@.1PPM_00003** | 07/02/15 | 01/02/15 | HEXANE, Lot 0000078259 | 100 mL | SG42/6810PPM_00001 | 1 mL | PCB-1242 Peak 1 | 100 ug/L |
| | | | | | | | PCB-1242 Peak 2 | 100 ug/L |
| | | | | | | | PCB-1242 Peak 3 | 100 ug/L |
| | | | | | | | PCB-1242 Peak 4 | 100 ug/L |
| | | | | | | | PCB-1242 Peak 5 | 100 ug/L |
| | | | | | | | PCB-1268 Peak 1 | 100 ug/L |
| | | | | | | | PCB-1268 Peak 2 | 100 ug/L |
| | | | | | | | PCB-1268 Peak 3 | 100 ug/L |
| | | | | | | | PCB-1268 Peak 4 | 100 ug/L |
| | | | | | | | PCB-1268 Peak 5 | 100 ug/L |
| .SG42/6810PPM_00001 | 07/11/15 | 07/11/14 | HEXANE, Lot 0000075731 | 100 mL | SG1242_00005 | 1 mL | PCB-1242 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 5 | 10000 ug/L |
| | | | | | SGpcb1268std_00005 | 1 mL | PCB-1268 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 5 | 10000 ug/L |
| ..SG1242_00005 | 11/30/18 | | Restek, Lot A090182 | | (Purchased Reagent) | | PCB-1242 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 5 | 1000 ug/mL |
| ..SGpcb1268std_00005 | 01/31/19 | | Restek, Lot a091468 | | (Purchased Reagent) | | PCB-1268 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 5 | 1000 ug/mL |
| **SG4268@.2PPM_00002** | 07/02/15 | 01/02/15 | HEXANE, Lot 0000078259 | 100 mL | SG42/6810PPM_00001 | 2 mL | PCB-1242 Peak 1 | 200 ug/L |
| | | | | | | | PCB-1242 Peak 2 | 200 ug/L |
| | | | | | | | PCB-1242 Peak 3 | 200 ug/L |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | PCB-1242 Peak 4 | 200 ug/L |
| | | | | | | | PCB-1242 Peak 5 | 200 ug/L |
| | | | | | | | PCB-1268 Peak 1 | 200 ug/L |
| | | | | | | | PCB-1268 Peak 2 | 200 ug/L |
| | | | | | | | PCB-1268 Peak 3 | 200 ug/L |
| | | | | | | | PCB-1268 Peak 4 | 200 ug/L |
| | | | | | | | PCB-1268 Peak 5 | 200 ug/L |
| .SG42/6810PPM_00001 | 07/11/15 | 07/11/14 | HEXANE, Lot 0000075731 | 100 mL | SG1242_00005 | 1 mL | PCB-1242 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 5 | 10000 ug/L |
| | | | | | SGpcb1268std_00005 | 1 mL | PCB-1268 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 5 | 10000 ug/L |
| ..SG1242_00005 | 11/30/18 | | Restek, Lot A090182 | | (Purchased Reagent) | | PCB-1242 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 5 | 1000 ug/mL |
| ..SGpcb1268std_00005 | 01/31/19 | | Restek, Lot a091468 | | (Purchased Reagent) | | PCB-1268 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 5 | 1000 ug/mL |
| **SG4268@0.5PPM_00003** | 06/11/15 | 12/11/14 | HEXANE, Lot 0000078259 | 100 mL | SG42/6810PPM_00001 | 5 mL | PCB-1242 Peak 1 | 500 ug/L |
| | | | | | | | PCB-1242 Peak 2 | 500 ug/L |
| | | | | | | | PCB-1242 Peak 3 | 500 ug/L |
| | | | | | | | PCB-1242 Peak 4 | 500 ug/L |
| | | | | | | | PCB-1242 Peak 5 | 500 ug/L |
| | | | | | | | PCB-1268 Peak 1 | 500 ug/L |
| | | | | | | | PCB-1268 Peak 2 | 500 ug/L |
| | | | | | | | PCB-1268 Peak 3 | 500 ug/L |
| | | | | | | | PCB-1268 Peak 4 | 500 ug/L |
| | | | | | | | PCB-1268 Peak 5 | 500 ug/L |
| .SG42/6810PPM_00001 | 07/11/15 | 07/11/14 | HEXANE, Lot 0000075731 | 100 mL | SG1242_00005 | 1 mL | PCB-1242 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 5 | 10000 ug/L |
| | | | | | SGpcb1268std_00005 | 1 mL | PCB-1268 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 5 | 10000 ug/L |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| ..SG1242_00005 | 11/30/18 | | Restek, Lot A090182 | | (Purchased Reagent) | | PCB-1242 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 5 | 1000 ug/mL |
| ..SGpcb1268std_00005 | 01/31/19 | | Restek, Lot a091468 | | (Purchased Reagent) | | PCB-1268 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 5 | 1000 ug/mL |
| **SG4268@2.0PPM_00002** | 07/02/15 | 01/02/15 | HEXANE, Lot 0000078259 | 100 mL | SG42/6810PPM_00001 | 20 mL | PCB-1242 Peak 1 | 2000 ug/L |
| | | | | | | | PCB-1242 Peak 2 | 2000 ug/L |
| | | | | | | | PCB-1242 Peak 3 | 2000 ug/L |
| | | | | | | | PCB-1242 Peak 4 | 2000 ug/L |
| | | | | | | | PCB-1242 Peak 5 | 2000 ug/L |
| | | | | | | | PCB-1268 Peak 1 | 2000 ug/L |
| | | | | | | | PCB-1268 Peak 2 | 2000 ug/L |
| | | | | | | | PCB-1268 Peak 3 | 2000 ug/L |
| | | | | | | | PCB-1268 Peak 4 | 2000 ug/L |
| | | | | | | | PCB-1268 Peak 5 | 2000 ug/L |
| .SG42/6810PPM_00001 | 07/11/15 | 07/11/14 | HEXANE, Lot 0000075731 | 100 mL | SG1242_00005 | 1 mL | PCB-1242 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1242 Peak 5 | 10000 ug/L |
| | | | | | SGpcb1268std_00005 | 1 mL | PCB-1268 Peak 1 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 2 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 3 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 4 | 10000 ug/L |
| | | | | | | | PCB-1268 Peak 5 | 10000 ug/L |
| ..SG1242_00005 | 11/30/18 | | Restek, Lot A090182 | | (Purchased Reagent) | | PCB-1242 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1242 Peak 5 | 1000 ug/mL |
| ..SGpcb1268std_00005 | 01/31/19 | | Restek, Lot a091468 | | (Purchased Reagent) | | PCB-1268 Peak 1 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 2 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 3 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 4 | 1000 ug/mL |
| | | | | | | | PCB-1268 Peak 5 | 1000 ug/mL |
| **SGDROCAL_00017** | 08/20/15 | 02/20/15 | MECL2, Lot 0000096628 | 25 mL | SGDROCALSTK_00014 | 5 mL | Diesel | 10002.5 ug/mL |
| | | | | | SGDROSURROTP_00018 | 1 mL | o-Terphenyl (Surr) | 800 ug/mL |
| | | | | | SGDROSURROTP_00019 | 1 mL | o-Terphenyl (Surr) | 800 ug/mL |
| .SGDROCALSTK_00014 | 05/31/21 | | Restek, Lot A0102433 | | (Purchased Reagent) | | Diesel | 50012.4 ug/mL |
| .SGDROSURROTP_00018 | 02/28/18 | | Restek, Lot A0104523 | | (Purchased Reagent) | | o-Terphenyl (Surr) | 10000 ug/mL |
| .SGDROSURROTP_00019 | 02/28/18 | | Restek, Lot A0104523 | | (Purchased Reagent) | | o-Terphenyl (Surr) | 10000 ug/mL |
| **SGDROICV_00013** | 02/20/16 | 02/20/15 | MECL2, Lot 0000096628 | 25 mL | SGDROICVSTK_00005 | 1 mL | Diesel | 2004 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| .SGDROICVSTK_00005 | 02/28/15 | Ultra, Lot CH-0185 | | | (Purchased Reagent) | | Diesel | 50100 ug/mL |
| **SMLIST1 L1 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1PAH ST_00004 | 2 uL | 1,1'-Biphenyl | 0.1 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 0.1 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 0.1 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 0.1 ug/mL |
| | | | | | | | Acenaphthene | 0.1 ug/mL |
| | | | | | | | Acenaphthylene | 0.1 ug/mL |
| | | | | | | | Anthracene | 0.1 ug/mL |
| | | | | | | | Benzo[a]anthracene | 0.1 ug/mL |
| | | | | | | | Benzo[a]pyrene | 0.1 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 0.1 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 0.1 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 0.1 ug/mL |
| | | | | | | | Chrysene | 0.1 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 0.1 ug/mL |
| | | | | | | | Dibenzofuran | 0.1 ug/mL |
| | | | | | | | Fluoranthene | 0.1 ug/mL |
| | | | | | | | Fluorene | 0.1 ug/mL |
| | | | | | | | Hexachlorobenzene | 0.1 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 0.1 ug/mL |
| | | | | | | | Naphthalene | 0.1 ug/mL |
| | | | | | | | Phenanthrene | 0.1 ug/mL |
| | | | | | | | Pyrene | 0.1 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 0.1 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 0.1 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 0.1 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | Restek, Lot A0101020 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1PAH ST_00004 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 3 mL | SMLIST1 PAH_00004 | 300 uL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 60 uL | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 PAH_00004 | 05/31/16 | Restek, Lot A0107399 | | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | Restek, Lot A093638 | | | (Purchased Reagent) | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **SMLIST1 L2 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 10 uL | 1,1'-Biphenyl | 0.5 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 0.5 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 0.5 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 0.5 ug/mL |
| | | | | | | | 1,4-Dioxane | 0.5 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 0.5 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 0.5 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 0.5 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 0.5 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 0.5 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 0.5 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 0.5 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 1 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 0.5 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 0.5 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 0.5 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 0.5 ug/mL |
| | | | | | | | 2-Chlorophenol | 0.5 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 0.5 ug/mL |
| | | | | | | | 2-Methylphenol | 0.5 ug/mL |
| | | | | | | | 2-Nitroaniline | 0.5 ug/mL |
| | | | | | | | 2-Nitrophenol | 0.5 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 0.5 ug/mL |
| | | | | | | | 3-Nitroaniline | 0.5 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 1 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 0.5 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 0.5 ug/mL |
| | | | | | | | 4-Chloroaniline | 0.5 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 0.5 ug/mL |
| | | | | | | | 4-Nitroaniline | 0.5 ug/mL |
| | | | | | | | 4-Nitrophenol | 1 ug/mL |
| | | | | | | | Acenaphthene | 0.5 ug/mL |
| | | | | | | | Acenaphthylene | 0.5 ug/mL |
| | | | | | | | Acetophenone | 0.5 ug/mL |
| | | | | | | | Aniline | 0.5 ug/mL |
| | | | | | | | Anthracene | 0.5 ug/mL |
| | | | | | | | Azobenzene | 0.5 ug/mL |
| | | | | | | | Benzo[a]anthracene | 0.5 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzo[a]pyrene | 0.5 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 0.5 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 0.5 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 0.5 ug/mL |
| | | | | | | | Benzyl alcohol | 0.5 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 0.5 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 0.5 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 0.5 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 0.5 ug/mL |
| | | | | | | | Carbazole | 0.5 ug/mL |
| | | | | | | | Chrysene | 0.5 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 0.5 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 0.5 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 0.5 ug/mL |
| | | | | | | | Dibenzofuran | 0.5 ug/mL |
| | | | | | | | Diethyl phthalate | 0.5 ug/mL |
| | | | | | | | Dimethyl phthalate | 0.5 ug/mL |
| | | | | | | | Fluoranthene | 0.5 ug/mL |
| | | | | | | | Fluorene | 0.5 ug/mL |
| | | | | | | | Hexachlorobenzene | 0.5 ug/mL |
| | | | | | | | Hexachlorobutadiene | 0.5 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 0.5 ug/mL |
| | | | | | | | Hexachloroethane | 0.5 ug/mL |
| | | | | | | | Hexadecane | 0.5 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 0.5 ug/mL |
| | | | | | | | Isophorone | 0.5 ug/mL |
| | | | | | | | n-Decane | 0.5 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 0.5 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 0.5 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 1 ug/mL |
| | | | | | | | n-Octadecane | 0.5 ug/mL |
| | | | | | | | Naphthalene | 0.5 ug/mL |
| | | | | | | | Nitrobenzene | 0.5 ug/mL |
| | | | | | | | Pentachlorophenol | 1 ug/mL |
| | | | | | | | Phenanthrene | 0.5 ug/mL |
| | | | | | | | Phenol | 0.5 ug/mL |
| | | | | | | | Pyrene | 0.5 ug/mL |
| | | | | | | | Pyridine | 0.5 ug/mL |
| | | | | | | | Benzoic acid | 1 ug/mL |
| | | | | | | | Indene | 1 ug/mL |
| | | | | | | | Atrazine | 1 ug/mL |
| | | | | | | | Benzaldehyde | 1 ug/mL |
| | | | | | | | Caprolactam | 1 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 1 ug/mL |
| | | | | | | | Benzidine | 1 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 0.5 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 0.5 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 0.5 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Nitrobenzene-d5 (Surr) | 0.5 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 0.5 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 0.5 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | Restek, Lot A0101020 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | Restek, Lot A0108174 | | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | Restek, Lot A093638 | | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L3 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 20 uL | 1,1'-Biphenyl | 1 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1 ug/mL |
| | | | | | | | 1,4-Dioxane | 1 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1 ug/mL |
| | | | | | | | 2-Chlorophenol | 1 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1 ug/mL |
| | | | | | | | 2-Methylphenol | 1 ug/mL |
| | | | | | | | 2-Nitroaniline | 1 ug/mL |
| | | | | | | | 2-Nitrophenol | 1 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1 ug/mL |
| | | | | | | | 3-Nitroaniline | 1 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1 ug/mL |
| | | | | | | | 4-Chloroaniline | 1 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1 ug/mL |
| | | | | | | | 4-Nitroaniline | 1 ug/mL |
| | | | | | | | 4-Nitrophenol | 2 ug/mL |
| | | | | | | | Acenaphthene | 1 ug/mL |
| | | | | | | | Acenaphthylene | 1 ug/mL |
| | | | | | | | Acetophenone | 1 ug/mL |
| | | | | | | | Aniline | 1 ug/mL |
| | | | | | | | Anthracene | 1 ug/mL |
| | | | | | | | Azobenzene | 1 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1 ug/mL |
| | | | | | | | Benzyl alcohol | 1 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1 ug/mL |
| | | | | | | | Carbazole | 1 ug/mL |
| | | | | | | | Chrysene | 1 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1 ug/mL |
| | | | | | | | Dibenzofuran | 1 ug/mL |
| | | | | | | | Diethyl phthalate | 1 ug/mL |
| | | | | | | | Dimethyl phthalate | 1 ug/mL |
| | | | | | | | Fluoranthene | 1 ug/mL |
| | | | | | | | Fluorene | 1 ug/mL |
| | | | | | | | Hexachlorobenzene | 1 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1 ug/mL |
| | | | | | | | Hexachloroethane | 1 ug/mL |
| | | | | | | | Hexadecane | 1 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1 ug/mL |
| | | | | | | | Isophorone | 1 ug/mL |
| | | | | | | | n-Decane | 1 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2 ug/mL |
| | | | | | | | n-Octadecane | 1 ug/mL |
| | | | | | | | Naphthalene | 1 ug/mL |
| | | | | | | | Nitrobenzene | 1 ug/mL |
| | | | | | | | Pentachlorophenol | 2 ug/mL |
| | | | | | | | Phenanthrene | 1 ug/mL |
| | | | | | | | Phenol | 1 ug/mL |
| | | | | | | | Pyrene | 1 ug/mL |
| | | | | | | | Pyridine | 1 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzoic acid | 2 ug/mL |
| | | | | | | | Indene | 2 ug/mL |
| | | | | | | | Atrazine | 2 ug/mL |
| | | | | | | | Benzaldehyde | 2 ug/mL |
| | | | | | | | Caprolactam | 2 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 2 ug/mL |
| | | | | | | | Benzidine | 2 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 1 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 1 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 1 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 1 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 1 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 1 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L4 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 40 uL | 1,1'-Biphenyl | 2 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 2 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 2 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 2 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2 ug/mL |
| | | | | | | | 1,4-Dioxane | 2 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 2 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 2 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 2 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 2 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 2 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 2 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 2 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 4 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 2 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 2 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 2 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 2 ug/mL |
| | | | | | | | 2-Chlorophenol | 2 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Methylnaphthalene | 2 ug/mL |
| | | | | | | | 2-Methylphenol | 2 ug/mL |
| | | | | | | | 2-Nitroaniline | 2 ug/mL |
| | | | | | | | 2-Nitrophenol | 2 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 2 ug/mL |
| | | | | | | | 3-Nitroaniline | 2 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 4 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 2 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 2 ug/mL |
| | | | | | | | 4-Chloroaniline | 2 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 2 ug/mL |
| | | | | | | | 4-Nitroaniline | 2 ug/mL |
| | | | | | | | 4-Nitrophenol | 4 ug/mL |
| | | | | | | | Acenaphthene | 2 ug/mL |
| | | | | | | | Acenaphthylene | 2 ug/mL |
| | | | | | | | Acetophenone | 2 ug/mL |
| | | | | | | | Aniline | 2 ug/mL |
| | | | | | | | Anthracene | 2 ug/mL |
| | | | | | | | Azobenzene | 2 ug/mL |
| | | | | | | | Benzo[a]anthracene | 2 ug/mL |
| | | | | | | | Benzo[a]pyrene | 2 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 2 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 2 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 2 ug/mL |
| | | | | | | | Benzyl alcohol | 2 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 2 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 2 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 2 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 2 ug/mL |
| | | | | | | | Carbazole | 2 ug/mL |
| | | | | | | | Chrysene | 2 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 2 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 2 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 2 ug/mL |
| | | | | | | | Dibenzofuran | 2 ug/mL |
| | | | | | | | Diethyl phthalate | 2 ug/mL |
| | | | | | | | Dimethyl phthalate | 2 ug/mL |
| | | | | | | | Fluoranthene | 2 ug/mL |
| | | | | | | | Fluorene | 2 ug/mL |
| | | | | | | | Hexachlorobenzene | 2 ug/mL |
| | | | | | | | Hexachlorobutadiene | 2 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 2 ug/mL |
| | | | | | | | Hexachloroethane | 2 ug/mL |
| | | | | | | | Hexadecane | 2 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 2 ug/mL |
| | | | | | | | Isophorone | 2 ug/mL |
| | | | | | | | n-Decane | 2 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 2 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | N-Nitrosodimethylamine | 2 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 4 ug/mL |
| | | | | | | | n-Octadecane | 2 ug/mL |
| | | | | | | | Naphthalene | 2 ug/mL |
| | | | | | | | Nitrobenzene | 2 ug/mL |
| | | | | | | | Pentachlorophenol | 4 ug/mL |
| | | | | | | | Phenanthrene | 2 ug/mL |
| | | | | | | | Phenol | 2 ug/mL |
| | | | | | | | Pyrene | 2 ug/mL |
| | | | | | | | Pyridine | 2 ug/mL |
| | | | | | | | Benzoic acid | 4 ug/mL |
| | | | | | | | Indene | 4 ug/mL |
| | | | | | | | Atrazine | 4 ug/mL |
| | | | | | | | Benzaldehyde | 4 ug/mL |
| | | | | | | | Caprolactam | 4 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 4 ug/mL |
| | | | | | | | Benzidine | 4 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 2 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 2 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 2 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 2 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 2 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 2 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | Restek, Lot A0101020 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L5 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 100 uL | 1,1'-Biphenyl | 5 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 5 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 5 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 5 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 5 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 5 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 5 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 5 ug/mL |
| | | | | | | | 1,4-Dioxane | 5 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 5 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 5 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 5 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,4,5-Trichlorophenol | 5 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 5 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 5 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 5 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 10 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 5 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 5 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 5 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 5 ug/mL |
| | | | | | | | 2-Chlorophenol | 5 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 5 ug/mL |
| | | | | | | | 2-Methylphenol | 5 ug/mL |
| | | | | | | | 2-Nitroaniline | 5 ug/mL |
| | | | | | | | 2-Nitrophenol | 5 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 5 ug/mL |
| | | | | | | | 3-Nitroaniline | 5 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 10 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 5 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 5 ug/mL |
| | | | | | | | 4-Chloroaniline | 5 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 5 ug/mL |
| | | | | | | | 4-Nitroaniline | 5 ug/mL |
| | | | | | | | 4-Nitrophenol | 10 ug/mL |
| | | | | | | | Acenaphthene | 5 ug/mL |
| | | | | | | | Acenaphthylene | 5 ug/mL |
| | | | | | | | Acetophenone | 5 ug/mL |
| | | | | | | | Aniline | 5 ug/mL |
| | | | | | | | Anthracene | 5 ug/mL |
| | | | | | | | Azobenzene | 5 ug/mL |
| | | | | | | | Benzo[a]anthracene | 5 ug/mL |
| | | | | | | | Benzo[a]pyrene | 5 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 5 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 5 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 5 ug/mL |
| | | | | | | | Benzyl alcohol | 5 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 5 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 5 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 5 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 5 ug/mL |
| | | | | | | | Carbazole | 5 ug/mL |
| | | | | | | | Chrysene | 5 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 5 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 5 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 5 ug/mL |
| | | | | | | | Dibenzofuran | 5 ug/mL |
| | | | | | | | Diethyl phthalate | 5 ug/mL |
| | | | | | | | Dimethyl phthalate | 5 ug/mL |
| | | | | | | | Fluoranthene | 5 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Fluorene | 5 ug/mL |
| | | | | | | | Hexachlorobenzene | 5 ug/mL |
| | | | | | | | Hexachlorobutadiene | 5 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 5 ug/mL |
| | | | | | | | Hexachloroethane | 5 ug/mL |
| | | | | | | | Hexadecane | 5 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 5 ug/mL |
| | | | | | | | Isophorone | 5 ug/mL |
| | | | | | | | n-Decane | 5 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 5 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 5 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 10 ug/mL |
| | | | | | | | n-Octadecane | 5 ug/mL |
| | | | | | | | Naphthalene | 5 ug/mL |
| | | | | | | | Nitrobenzene | 5 ug/mL |
| | | | | | | | Pentachlorophenol | 10 ug/mL |
| | | | | | | | Phenanthrene | 5 ug/mL |
| | | | | | | | Phenol | 5 ug/mL |
| | | | | | | | Pyrene | 5 ug/mL |
| | | | | | | | Pyridine | 5 ug/mL |
| | | | | | | | Benzoic acid | 10 ug/mL |
| | | | | | | | Indene | 10 ug/mL |
| | | | | | | | Atrazine | 10 ug/mL |
| | | | | | | | Benzaldehyde | 10 ug/mL |
| | | | | | | | Caprolactam | 10 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 10 ug/mL |
| | | | | | | | Benzidine | 10 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 5 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | Restek, Lot A0101020 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L6 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 200 uL | 1,1'-Biphenyl | 10 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 10 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,2,4-Trichlorobenzene | 10 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 10 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 10 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 10 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 10 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 10 ug/mL |
| | | | | | | | 1,4-Dioxane | 10 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 10 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 10 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 10 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 10 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 10 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 10 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 10 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 20 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 10 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 10 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 10 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 10 ug/mL |
| | | | | | | | 2-Chlorophenol | 10 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 10 ug/mL |
| | | | | | | | 2-Methylphenol | 10 ug/mL |
| | | | | | | | 2-Nitroaniline | 10 ug/mL |
| | | | | | | | 2-Nitrophenol | 10 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 10 ug/mL |
| | | | | | | | 3-Nitroaniline | 10 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 20 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 10 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 10 ug/mL |
| | | | | | | | 4-Chloroaniline | 10 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 10 ug/mL |
| | | | | | | | 4-Nitroaniline | 10 ug/mL |
| | | | | | | | 4-Nitrophenol | 20 ug/mL |
| | | | | | | | Acenaphthene | 10 ug/mL |
| | | | | | | | Acenaphthylene | 10 ug/mL |
| | | | | | | | Acetophenone | 10 ug/mL |
| | | | | | | | Aniline | 10 ug/mL |
| | | | | | | | Anthracene | 10 ug/mL |
| | | | | | | | Azobenzene | 10 ug/mL |
| | | | | | | | Benzo[a]anthracene | 10 ug/mL |
| | | | | | | | Benzo[a]pyrene | 10 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 10 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 10 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 10 ug/mL |
| | | | | | | | Benzyl alcohol | 10 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 10 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 10 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 10 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Butyl benzyl phthalate | 10 ug/mL |
| | | | | | | | Carbazole | 10 ug/mL |
| | | | | | | | Chrysene | 10 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 10 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 10 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 10 ug/mL |
| | | | | | | | Dibenzofuran | 10 ug/mL |
| | | | | | | | Diethyl phthalate | 10 ug/mL |
| | | | | | | | Dimethyl phthalate | 10 ug/mL |
| | | | | | | | Fluoranthene | 10 ug/mL |
| | | | | | | | Fluorene | 10 ug/mL |
| | | | | | | | Hexachlorobenzene | 10 ug/mL |
| | | | | | | | Hexachlorobutadiene | 10 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 10 ug/mL |
| | | | | | | | Hexachloroethane | 10 ug/mL |
| | | | | | | | Hexadecane | 10 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 10 ug/mL |
| | | | | | | | Isophorone | 10 ug/mL |
| | | | | | | | n-Decane | 10 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 10 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 10 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 20 ug/mL |
| | | | | | | | n-Octadecane | 10 ug/mL |
| | | | | | | | Naphthalene | 10 ug/mL |
| | | | | | | | Nitrobenzene | 10 ug/mL |
| | | | | | | | Pentachlorophenol | 20 ug/mL |
| | | | | | | | Phenanthrene | 10 ug/mL |
| | | | | | | | Phenol | 10 ug/mL |
| | | | | | | | Pyrene | 10 ug/mL |
| | | | | | | | Pyridine | 10 ug/mL |
| | | | | | | | Benzoic acid | 20 ug/mL |
| | | | | | | | Indene | 20 ug/mL |
| | | | | | | | Atrazine | 20 ug/mL |
| | | | | | | | Benzaldehyde | 20 ug/mL |
| | | | | | | | Caprolactam | 20 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 20 ug/mL |
| | | | | | | | Benzidine | 20 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 10 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 10 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 10 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 10 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 10 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 10 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L7 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 300 uL | 1,1'-Biphenyl | 15 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 15 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 15 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 15 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 15 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 15 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 15 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 15 ug/mL |
| | | | | | | | 1,4-Dioxane | 15 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 15 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 15 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 15 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 15 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 15 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 15 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 15 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 30 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 15 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 15 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 15 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 15 ug/mL |
| | | | | | | | 2-Chlorophenol | 15 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 15 ug/mL |
| | | | | | | | 2-Methylphenol | 15 ug/mL |
| | | | | | | | 2-Nitroaniline | 15 ug/mL |
| | | | | | | | 2-Nitrophenol | 15 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 15 ug/mL |
| | | | | | | | 3-Nitroaniline | 15 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 30 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 15 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 15 ug/mL |
| | | | | | | | 4-Chloroaniline | 15 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 15 ug/mL |
| | | | | | | | 4-Nitroaniline | 15 ug/mL |
| | | | | | | | 4-Nitrophenol | 30 ug/mL |
| | | | | | | | Acenaphthene | 15 ug/mL |
| | | | | | | | Acenaphthylene | 15 ug/mL |
| | | | | | | | Acetophenone | 15 ug/mL |
| | | | | | | | Aniline | 15 ug/mL |
| | | | | | | | Anthracene | 15 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Azobenzene | 15 ug/mL |
| | | | | | | | Benzo[a]anthracene | 15 ug/mL |
| | | | | | | | Benzo[a]pyrene | 15 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 15 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 15 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 15 ug/mL |
| | | | | | | | Benzyl alcohol | 15 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 15 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 15 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 15 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 15 ug/mL |
| | | | | | | | Carbazole | 15 ug/mL |
| | | | | | | | Chrysene | 15 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 15 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 15 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 15 ug/mL |
| | | | | | | | Dibenzofuran | 15 ug/mL |
| | | | | | | | Diethyl phthalate | 15 ug/mL |
| | | | | | | | Dimethyl phthalate | 15 ug/mL |
| | | | | | | | Fluoranthene | 15 ug/mL |
| | | | | | | | Fluorene | 15 ug/mL |
| | | | | | | | Hexachlorobenzene | 15 ug/mL |
| | | | | | | | Hexachlorobutadiene | 15 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 15 ug/mL |
| | | | | | | | Hexachloroethane | 15 ug/mL |
| | | | | | | | Hexadecane | 15 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 15 ug/mL |
| | | | | | | | Isophorone | 15 ug/mL |
| | | | | | | | n-Decane | 15 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 15 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 15 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 30 ug/mL |
| | | | | | | | n-Octadecane | 15 ug/mL |
| | | | | | | | Naphthalene | 15 ug/mL |
| | | | | | | | Nitrobenzene | 15 ug/mL |
| | | | | | | | Pentachlorophenol | 30 ug/mL |
| | | | | | | | Phenanthrene | 15 ug/mL |
| | | | | | | | Phenol | 15 ug/mL |
| | | | | | | | Pyrene | 15 ug/mL |
| | | | | | | | Pyridine | 15 ug/mL |
| | | | | | | | Benzoic acid | 30 ug/mL |
| | | | | | | | Indene | 30 ug/mL |
| | | | | | | | Atrazine | 30 ug/mL |
| | | | | | | | Benzaldehyde | 30 ug/mL |
| | | | | | | | Caprolactam | 30 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 30 ug/mL |
| | | | | | | | Benzidine | 30 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 15 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 15 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 15 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 15 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 15 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 15 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | Restek, Lot A0101020 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | Restek, Lot A0107943 | | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L8 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 400 uL | 1,1'-Biphenyl | 20 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 20 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 20 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 20 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 20 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 20 ug/mL |
| | | | | | | | 1,4-Dioxane | 20 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 20 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 20 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 20 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 20 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 20 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 20 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 20 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 40 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 20 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 20 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 20 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 20 ug/mL |
| | | | | | | | 2-Chlorophenol | 20 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 20 ug/mL |
| | | | | | | | 2-Methylphenol | 20 ug/mL |
| | | | | | | | 2-Nitroaniline | 20 ug/mL |
| | | | | | | | 2-Nitrophenol | 20 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 20 ug/mL |
| | | | | | | | 3-Nitroaniline | 20 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 40 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 20 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4-Chloro-3-methylphenol | 20 ug/mL |
| | | | | | | | 4-Chloroaniline | 20 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 20 ug/mL |
| | | | | | | | 4-Nitroaniline | 20 ug/mL |
| | | | | | | | 4-Nitrophenol | 40 ug/mL |
| | | | | | | | Acenaphthene | 20 ug/mL |
| | | | | | | | Acenaphthylene | 20 ug/mL |
| | | | | | | | Acetophenone | 20 ug/mL |
| | | | | | | | Aniline | 20 ug/mL |
| | | | | | | | Anthracene | 20 ug/mL |
| | | | | | | | Azobenzene | 20 ug/mL |
| | | | | | | | Benzo[a]anthracene | 20 ug/mL |
| | | | | | | | Benzo[a]pyrene | 20 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 20 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 20 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 20 ug/mL |
| | | | | | | | Benzyl alcohol | 20 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 20 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 20 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 20 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 20 ug/mL |
| | | | | | | | Carbazole | 20 ug/mL |
| | | | | | | | Chrysene | 20 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 20 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 20 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 20 ug/mL |
| | | | | | | | Dibenzofuran | 20 ug/mL |
| | | | | | | | Diethyl phthalate | 20 ug/mL |
| | | | | | | | Dimethyl phthalate | 20 ug/mL |
| | | | | | | | Fluoranthene | 20 ug/mL |
| | | | | | | | Fluorene | 20 ug/mL |
| | | | | | | | Hexachlorobenzene | 20 ug/mL |
| | | | | | | | Hexachlorobutadiene | 20 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 20 ug/mL |
| | | | | | | | Hexachloroethane | 20 ug/mL |
| | | | | | | | Hexadecane | 20 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 20 ug/mL |
| | | | | | | | Isophorone | 20 ug/mL |
| | | | | | | | n-Decane | 20 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 20 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 20 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 40 ug/mL |
| | | | | | | | n-Octadecane | 20 ug/mL |
| | | | | | | | Naphthalene | 20 ug/mL |
| | | | | | | | Nitrobenzene | 20 ug/mL |
| | | | | | | | Pentachlorophenol | 40 ug/mL |
| | | | | | | | Phenanthrene | 20 ug/mL |
| | | | | | | | Phenol | 20 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Pyrene | 20 ug/mL |
| | | | | | | | Pyridine | 20 ug/mL |
| | | | | | | | Benzoic acid | 40 ug/mL |
| | | | | | | | Indene | 40 ug/mL |
| | | | | | | | Atrazine | 40 ug/mL |
| | | | | | | | Benzaldehyde | 40 ug/mL |
| | | | | | | | Caprolactam | 40 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 40 ug/mL |
| | | | | | | | Benzidine | 40 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 20 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 20 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 20 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 20 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 20 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 20 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | Restek, Lot A0101020 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 L9 W_00005** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMIS80PPMW_00011 | 100 uL | 1,4-Dichlorobenzene-d4 | 4 ug/mL |
| | | | | | | | Acenaphthene-d10 | 4 ug/mL |
| | | | | | | | Chrysene-d12 | 4 ug/mL |
| | | | | | | | Naphthalene-d8 | 4 ug/mL |
| | | | | | | | Perylene-d12 | 4 ug/mL |
| | | | | | | | Phenanthrene-d10 | 4 ug/mL |
| | | | | | SMLIST1 STOCK_00005 | 500 uL | 1,1'-Biphenyl | 25 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 25 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 25 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 25 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 25 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 25 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 25 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 25 ug/mL |
| | | | | | | | 1,4-Dioxane | 25 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 25 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 25 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 25 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 25 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 25 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 25 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 25 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 50 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 25 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 25 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 25 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Chloronaphthalene | 25 ug/mL |
| | | | | | | | 2-Chlorophenol | 25 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 25 ug/mL |
| | | | | | | | 2-Methylphenol | 25 ug/mL |
| | | | | | | | 2-Nitroaniline | 25 ug/mL |
| | | | | | | | 2-Nitrophenol | 25 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 25 ug/mL |
| | | | | | | | 3-Nitroaniline | 25 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 50 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 25 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 25 ug/mL |
| | | | | | | | 4-Chloroaniline | 25 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 25 ug/mL |
| | | | | | | | 4-Nitroaniline | 25 ug/mL |
| | | | | | | | 4-Nitrophenol | 50 ug/mL |
| | | | | | | | Acenaphthene | 25 ug/mL |
| | | | | | | | Acenaphthylene | 25 ug/mL |
| | | | | | | | Acetophenone | 25 ug/mL |
| | | | | | | | Aniline | 25 ug/mL |
| | | | | | | | Anthracene | 25 ug/mL |
| | | | | | | | Azobenzene | 25 ug/mL |
| | | | | | | | Benzo[a]anthracene | 25 ug/mL |
| | | | | | | | Benzo[a]pyrene | 25 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 25 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 25 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 25 ug/mL |
| | | | | | | | Benzyl alcohol | 25 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 25 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 25 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 25 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 25 ug/mL |
| | | | | | | | Carbazole | 25 ug/mL |
| | | | | | | | Chrysene | 25 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 25 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 25 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 25 ug/mL |
| | | | | | | | Dibenzofuran | 25 ug/mL |
| | | | | | | | Diethyl phthalate | 25 ug/mL |
| | | | | | | | Dimethyl phthalate | 25 ug/mL |
| | | | | | | | Fluoranthene | 25 ug/mL |
| | | | | | | | Fluorene | 25 ug/mL |
| | | | | | | | Hexachlorobenzene | 25 ug/mL |
| | | | | | | | Hexachlorobutadiene | 25 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 25 ug/mL |
| | | | | | | | Hexachloroethane | 25 ug/mL |
| | | | | | | | Hexadecane | 25 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 25 ug/mL |
| | | | | | | | Isophorone | 25 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | n-Decane | 25 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 25 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 25 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 50 ug/mL |
| | | | | | | | n-Octadecane | 25 ug/mL |
| | | | | | | | Naphthalene | 25 ug/mL |
| | | | | | | | Nitrobenzene | 25 ug/mL |
| | | | | | | | Pentachlorophenol | 50 ug/mL |
| | | | | | | | Phenanthrene | 25 ug/mL |
| | | | | | | | Phenol | 25 ug/mL |
| | | | | | | | Pyrene | 25 ug/mL |
| | | | | | | | Pyridine | 25 ug/mL |
| | | | | | | | Benzoic acid | 50 ug/mL |
| | | | | | | | Indene | 50 ug/mL |
| | | | | | | | Atrazine | 50 ug/mL |
| | | | | | | | Benzaldehyde | 50 ug/mL |
| | | | | | | | Caprolactam | 50 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 50 ug/mL |
| | | | | | | | Benzidine | 50 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 25 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 25 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 25 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 25 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 25 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 25 ug/mL |
| .SMIS80PPMW_00011 | 08/31/15 | 08/14/14 | MECL2, Lot 0000073814 | 25 mL | SMIS R_00005 | 1 mL | 1,4-Dichlorobenzene-d4 | 80 ug/mL |
| | | | | | | | Acenaphthene-d10 | 80 ug/mL |
| | | | | | | | Chrysene-d12 | 80 ug/mL |
| | | | | | | | Naphthalene-d8 | 80 ug/mL |
| | | | | | | | Perylene-d12 | 80 ug/mL |
| | | | | | | | Phenanthrene-d10 | 80 ug/mL |
| ..SMIS R_00005 | 01/31/19 | | Restek, Lot A0101020 | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2000 ug/mL |
| | | | | | | | Acenaphthene-d10 | 2000 ug/mL |
| | | | | | | | Chrysene-d12 | 2000 ug/mL |
| | | | | | | | Naphthalene-d8 | 2000 ug/mL |
| | | | | | | | Perylene-d12 | 2000 ug/mL |
| | | | | | | | Phenanthrene-d10 | 2000 ug/mL |
| .SMLIST1 STOCK_00005 | 05/31/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 S1_00005 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 100 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 100 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Aniline | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Azobenzene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Benzyl alcohol | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Hexadecane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | n-Decane | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | n-Octadecane | 100 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | | | Pyridine | 100 ug/mL |
| | | | | | SMLIST1 S10_00001 | 1 mL | Benzoic acid | 200 ug/mL |
| | | | | | | | Indene | 200 ug/mL |
| | | | | | SMLIST1 S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1 S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | | | Benzidine | 200 ug/mL |
| | | | | | SMLIST1 SURR_00003 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 S1_00005 | 05/31/16 | | Restek, Lot A0107399 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,2,4,5-Tetrachlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,2-Diphenylhydrazine | 1000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,3-Dinitrobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 1-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,3,4,6-Tetrachlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Aniline | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Azobenzene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzyl alcohol | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Hexadecane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | n-Decane | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | n-Octadecane | 1000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |
| | | | | | | | Pyrene | 1000 ug/mL |
| | | | | | | | Pyridine | 1000 ug/mL |
| ..SMLIST1 S10_00001 | 06/30/16 | | Restek, Lot A0107943 | | (Purchased Reagent) | | Benzoic acid | 2000 ug/mL |
| | | | | | | | Indene | 2000 ug/mL |
| ..SMLIST1 S11_00001 | 06/30/16 | | Restek, Lot A0108035 | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1 S9_00001 | 07/31/16 | | Restek, Lot A0108174 | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| | | | | | | | Benzidine | 2000 ug/mL |
| ..SMLIST1 SURR_00003 | 02/22/18 | | Restek, Lot A093638 | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **SMLIST1 SS W_00004** | 08/31/15 | 01/26/15 | MECL2, Lot 0000093871 | 2 mL | SMLIST1 SS ST_00004 | 200 uL | 1,1'-Biphenyl | 10 ug/mL |
| | | | | | | | 1,4-Dioxane | 10 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 10 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 10 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 10 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 10 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 10 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 20 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 10 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 10 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 10 ug/mL |
| | | | | | | | 2-Chlorophenol | 10 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 10 ug/mL |
| | | | | | | | 2-Methylphenol | 10 ug/mL |
| | | | | | | | 2-Nitroaniline | 10 ug/mL |
| | | | | | | | 2-Nitrophenol | 10 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 3 & 4 Methylphenol | 10 ug/mL |
| | | | | | | | 3-Nitroaniline | 10 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 20 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 10 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 10 ug/mL |
| | | | | | | | 4-Chloroaniline | 10 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 10 ug/mL |
| | | | | | | | 4-Nitroaniline | 10 ug/mL |
| | | | | | | | 4-Nitrophenol | 20 ug/mL |
| | | | | | | | Acenaphthene | 10 ug/mL |
| | | | | | | | Acenaphthylene | 10 ug/mL |
| | | | | | | | Acetophenone | 10 ug/mL |
| | | | | | | | Anthracene | 10 ug/mL |
| | | | | | | | Benzo[a]anthracene | 10 ug/mL |
| | | | | | | | Benzo[a]pyrene | 10 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 10 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 10 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 10 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 10 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 10 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 10 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 10 ug/mL |
| | | | | | | | Carbazole | 10 ug/mL |
| | | | | | | | Chrysene | 10 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 10 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 10 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 10 ug/mL |
| | | | | | | | Dibenzofuran | 10 ug/mL |
| | | | | | | | Diethyl phthalate | 10 ug/mL |
| | | | | | | | Dimethyl phthalate | 10 ug/mL |
| | | | | | | | Fluoranthene | 10 ug/mL |
| | | | | | | | Fluorene | 10 ug/mL |
| | | | | | | | Hexachlorobenzene | 10 ug/mL |
| | | | | | | | Hexachlorobutadiene | 10 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 10 ug/mL |
| | | | | | | | Hexachloroethane | 10 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 10 ug/mL |
| | | | | | | | Isophorone | 10 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 10 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 10 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 20 ug/mL |
| | | | | | | | Naphthalene | 10 ug/mL |
| | | | | | | | Nitrobenzene | 10 ug/mL |
| | | | | | | | Pentachlorophenol | 20 ug/mL |
| | | | | | | | Phenanthrene | 10 ug/mL |
| | | | | | | | Phenol | 10 ug/mL |
| | | | | | | | Pyrene | 10 ug/mL |
| | | | | | | | 3,3'-Dichlorobenzidine | 20 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Atrazine | 20 ug/mL |
| | | | | | | | Benzaldehyde | 20 ug/mL |
| | | | | | | | Caprolactam | 20 ug/mL |
| | | | | | | | 2,4,6-Tribromophenol (Surr) | 10 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 10 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 10 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 10 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 10 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 10 ug/mL |
| .SMLIST1 SS ST_00004 | 06/30/16 | 01/26/15 | MECL2, Lot 0000093871 | 10 mL | SMLIST1 SS S1_00004 | 1 mL | 1,1'-Biphenyl | 100 ug/mL |
| | | | | | | | 1,4-Dioxane | 100 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 100 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 100 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 100 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 200 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 100 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 100 ug/mL |
| | | | | | | | 2-Chlorophenol | 100 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 2-Methylphenol | 100 ug/mL |
| | | | | | | | 2-Nitroaniline | 100 ug/mL |
| | | | | | | | 2-Nitrophenol | 100 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 100 ug/mL |
| | | | | | | | 3-Nitroaniline | 100 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 200 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 100 ug/mL |
| | | | | | | | 4-Chloroaniline | 100 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 100 ug/mL |
| | | | | | | | 4-Nitroaniline | 100 ug/mL |
| | | | | | | | 4-Nitrophenol | 200 ug/mL |
| | | | | | | | Acenaphthene | 100 ug/mL |
| | | | | | | | Acenaphthylene | 100 ug/mL |
| | | | | | | | Acetophenone | 100 ug/mL |
| | | | | | | | Anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]anthracene | 100 ug/mL |
| | | | | | | | Benzo[a]pyrene | 100 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 100 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 100 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 100 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 100 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 100 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 100 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 100 ug/mL |
| | | | | | | | Carbazole | 100 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Chrysene | 100 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 100 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 100 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 100 ug/mL |
| | | | | | | | Dibenzofuran | 100 ug/mL |
| | | | | | | | Diethyl phthalate | 100 ug/mL |
| | | | | | | | Dimethyl phthalate | 100 ug/mL |
| | | | | | | | Fluoranthene | 100 ug/mL |
| | | | | | | | Fluorene | 100 ug/mL |
| | | | | | | | Hexachlorobenzene | 100 ug/mL |
| | | | | | | | Hexachlorobutadiene | 100 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 100 ug/mL |
| | | | | | | | Hexachloroethane | 100 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 100 ug/mL |
| | | | | | | | Isophorone | 100 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 100 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 200 ug/mL |
| | | | | | | | Naphthalene | 100 ug/mL |
| | | | | | | | Nitrobenzene | 100 ug/mL |
| | | | | | | | Pentachlorophenol | 200 ug/mL |
| | | | | | | | Phenanthrene | 100 ug/mL |
| | | | | | | | Phenol | 100 ug/mL |
| | | | | | | | Pyrene | 100 ug/mL |
| | | | | | SMLIST1 SS S9_00001 | 1 mL | 3,3'-Dichlorobenzidine | 200 ug/mL |
| | | | | | SMLIST1SS S11_00001 | 1 mL | Atrazine | 200 ug/mL |
| | | | | | | | Benzaldehyde | 200 ug/mL |
| | | | | | | | Caprolactam | 200 ug/mL |
| | | | | | SMLIST1SS SUR_00002 | 200 uL | 2,4,6-Tribromophenol (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 100 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 100 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 100 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 100 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 100 ug/mL |
| ..SMLIST1 SS S1_00004 | 06/30/16 | | Restek, Lot A0107697 | | (Purchased Reagent) | | 1,1'-Biphenyl | 1000 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 2,2'-oxybis[1-chloropropane] | 1000 ug/mL |
| | | | | | | | 2,4,5-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4,6-Trichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dichlorophenol | 1000 ug/mL |
| | | | | | | | 2,4-Dimethylphenol | 1000 ug/mL |
| | | | | | | | 2,4-Dinitrophenol | 2000 ug/mL |
| | | | | | | | 2,4-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2,6-Dinitrotoluene | 1000 ug/mL |
| | | | | | | | 2-Chloronaphthalene | 1000 ug/mL |
| | | | | | | | 2-Chlorophenol | 1000 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 1000 ug/mL |
| | | | | | | | 2-Methylphenol | 1000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Nitroaniline | 1000 ug/mL |
| | | | | | | | 2-Nitrophenol | 1000 ug/mL |
| | | | | | | | 3 & 4 Methylphenol | 1000 ug/mL |
| | | | | | | | 3-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4,6-Dinitro-2-methylphenol | 2000 ug/mL |
| | | | | | | | 4-Bromophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Chloro-3-methylphenol | 1000 ug/mL |
| | | | | | | | 4-Chloroaniline | 1000 ug/mL |
| | | | | | | | 4-Chlorophenyl phenyl ether | 1000 ug/mL |
| | | | | | | | 4-Nitroaniline | 1000 ug/mL |
| | | | | | | | 4-Nitrophenol | 2000 ug/mL |
| | | | | | | | Acenaphthene | 1000 ug/mL |
| | | | | | | | Acenaphthylene | 1000 ug/mL |
| | | | | | | | Acetophenone | 1000 ug/mL |
| | | | | | | | Anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]anthracene | 1000 ug/mL |
| | | | | | | | Benzo[a]pyrene | 1000 ug/mL |
| | | | | | | | Benzo[b]fluoranthene | 1000 ug/mL |
| | | | | | | | Benzo[g,h,i]perylene | 1000 ug/mL |
| | | | | | | | Benzo[k]fluoranthene | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethoxy)methane | 1000 ug/mL |
| | | | | | | | Bis(2-chloroethyl)ether | 1000 ug/mL |
| | | | | | | | Bis(2-ethylhexyl) phthalate | 1000 ug/mL |
| | | | | | | | Butyl benzyl phthalate | 1000 ug/mL |
| | | | | | | | Carbazole | 1000 ug/mL |
| | | | | | | | Chrysene | 1000 ug/mL |
| | | | | | | | Di-n-butyl phthalate | 1000 ug/mL |
| | | | | | | | Di-n-octyl phthalate | 1000 ug/mL |
| | | | | | | | Dibenz(a,h)anthracene | 1000 ug/mL |
| | | | | | | | Dibenzofuran | 1000 ug/mL |
| | | | | | | | Diethyl phthalate | 1000 ug/mL |
| | | | | | | | Dimethyl phthalate | 1000 ug/mL |
| | | | | | | | Fluoranthene | 1000 ug/mL |
| | | | | | | | Fluorene | 1000 ug/mL |
| | | | | | | | Hexachlorobenzene | 1000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 1000 ug/mL |
| | | | | | | | Hexachlorocyclopentadiene | 1000 ug/mL |
| | | | | | | | Hexachloroethane | 1000 ug/mL |
| | | | | | | | Indeno[1,2,3-cd]pyrene | 1000 ug/mL |
| | | | | | | | Isophorone | 1000 ug/mL |
| | | | | | | | N-Nitrosodi-n-propylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodimethylamine | 1000 ug/mL |
| | | | | | | | N-Nitrosodiphenylamine | 2000 ug/mL |
| | | | | | | | Naphthalene | 1000 ug/mL |
| | | | | | | | Nitrobenzene | 1000 ug/mL |
| | | | | | | | Pentachlorophenol | 2000 ug/mL |
| | | | | | | | Phenanthrene | 1000 ug/mL |
| | | | | | | | Phenol | 1000 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Pyrene | 1000 ug/mL |
| ..SMLIST1 SS S9_00001 | 07/31/16 | Restek, Lot A0108170 | | | (Purchased Reagent) | | 3,3'-Dichlorobenzidine | 2000 ug/mL |
| ..SMLIST1SS S11_00001 | 06/30/16 | Restek, Lot A0108042 | | | (Purchased Reagent) | | Atrazine | 2000 ug/mL |
| | | | | | | | Benzaldehyde | 2000 ug/mL |
| | | | | | | | Caprolactam | 2000 ug/mL |
| ..SMLIST1SS SUR_00002 | 09/30/18 | Restek, Lot A092712 | | | (Purchased Reagent) | | 2,4,6-Tribromophenol (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorobiphenyl (Surr) | 5000 ug/mL |
| | | | | | | | 2-Fluorophenol (Surr) | 5000 ug/mL |
| | | | | | | | Nitrobenzene-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Phenol-d5 (Surr) | 5000 ug/mL |
| | | | | | | | Terphenyl-d14 (Surr) | 5000 ug/mL |
| **VGGASCALNEW_00013** | 06/22/15 | 03/16/15 | MEOH, Lot 62345 | 25 mL | VGGASSTOCKNEW_00003 | 1 mL | C6-C12 | 100 ug/mL |
| | | | | | | | Gasoline Range Organics [C6 - C10] | 100 ug/mL |
| .VGGASSTOCKNEW_00003 | 01/31/20 | RESTEK, Lot A092645 | | | (Purchased Reagent) | | C6-C12 | 2500 ug/mL |
| | | | | | | | Gasoline Range Organics [C6 - C10] | 2500 ug/mL |
| **VGGASCHK_00059** | 05/06/15 | 03/09/15 | MEOH, Lot 49909 | 50 mL | VGGASCHKSTK_00030 | 1 mL | Gasoline Range Organics [C6 - C10] | 100 ug/mL |
| .VGGASCHKSTK_00030 | 05/06/15 | ACCU STANDARD, Lot B5040009 | | | (Purchased Reagent) | | Gasoline Range Organics [C6 - C10] | 5 mg/mL |
| **VGGASURROGATE_00029** | 06/03/15 | 03/03/15 | MEOH, Lot 49909 | 50 mL | VGSURRSTKGAS_00019 | 1.25 mL | Trifluorotoluene (Surr) | 50 ug/mL |
| .VGSURRSTKGAS_00019 | 08/31/16 | ULTRA SCIENTIFIC, Lot CE-1903A | | | (Purchased Reagent) | | Trifluorotoluene (Surr) | 2000 ug/mL |
| **VM250-IS_00021** | 03/12/15 | 09/12/14 | MEOH, Lot 134079 | 100 mL | vmcus8126_00008 | 1 mL | 1,4-Dichlorobenzene-d4 | 250 ug/mL |
| | | | | | | | Chlorobenzene-d5 | 250 ug/mL |
| | | | | | | | Fluorobenzene | 250 ug/mL |
| .vmcus8126_00008 | 09/30/16 | Ultra Scientific, Lot CL-3192 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 25000 ug/mL |
| | | | | | | | Chlorobenzene-d5 | 25000 ug/mL |
| | | | | | | | Fluorobenzene | 25000 ug/mL |
| **VM50IS_00048** | 08/06/15 | 02/05/15 | MEOH, Lot 85233 | 100 mL | vm30241_00001 | 2 mL | 1,4-Dichlorobenzene-d4 | 50 ug/mL |
| | | | | | | | Chlorobenzene-d5 | 50 ug/mL |
| | | | | | | | Fluorobenzene | 50 ug/mL |
| .vm30241_00001 | 01/31/18 | restek, Lot A093261 | | | (Purchased Reagent) | | 1,4-Dichlorobenzene-d4 | 2500 ug/mL |
| | | | | | | | Chlorobenzene-d5 | 2500 ug/mL |
| | | | | | | | Fluorobenzene | 2500 ug/mL |
| **vm50ss_00192** | 03/07/15 | 02/28/15 | MEOH, Lot na | 2 mL | vm50ss_stk_00063 | 2 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| .vm50ss_stk_00063 | 06/08/15 | 12/08/14 | MEOH, Lot 0000085233 | 200 mL | VM567650_00021 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| ..VM567650_00021 | 04/30/19 | Restek, Lot A0102817 | | | (Purchased Reagent) | | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 2500 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 2500 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Toluene-d8 (Surr) | 2500 ug/mL |
| **vm50ss_00196** | 04/08/15 | 04/01/15 | MEOH, Lot na | 2 mL | vm50ss_stk_00065 | 2 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| .vm50ss_stk_00065 | 09/08/15 | 03/08/15 | MEOH, Lot 0000085233 | 200 mL | VM567650_00021 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| ..VM567650_00021 | 04/30/19 | | Restek, Lot A0102817 | | (Purchased Reagent) | | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 2500 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 2500 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 2500 ug/mL |
| **vm50ss_stk_00063** | 06/08/15 | 12/08/14 | MEOH, Lot 0000085233 | 200 mL | VM567650_00021 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| .VM567650_00021 | 04/30/19 | | Restek, Lot A0102817 | | (Purchased Reagent) | | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 2500 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 2500 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 2500 ug/mL |
| **vm50ss_stk_00065** | 09/08/15 | 03/08/15 | MEOH, Lot 0000085233 | 200 mL | VM567650_00021 | 4 mL | 1,2-Dichloroethane-d4 (Surr) | 50 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 50 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 50 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 50 ug/mL |
| .VM567650_00021 | 04/30/19 | | Restek, Lot A0102817 | | (Purchased Reagent) | | 1,2-Dichloroethane-d4 (Surr) | 2500 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 2500 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 2500 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 2500 ug/mL |
| **VMAROLISTDW_00090** | 03/07/15 | 02/28/15 | MEOH, Lot na | 3 mL | VMACROLSTD_00023 | 3 mL | Acrolein | 250 ug/mL |
| .VMACROLSTD_00023 | 03/31/15 | 02/28/15 | MEOH, Lot 0000085233 | 20 mL | VM568720_00005 | 0.25 mL | Acrolein | 250 ug/mL |
| ..VM568720_00005 | 03/31/15 | | restek, Lot A0107338 | | (Purchased Reagent) | | Acrolein | 20000 ug/mL |
| **VMAROLISTDW_00095** | 04/14/15 | 04/07/15 | MEOH, Lot na | 3 mL | VMACROLSTD_00024 | 3 mL | Acrolein | 250 ug/mL |
| .VMACROLSTD_00024 | 04/30/15 | 03/31/15 | MEOH, Lot 0000085233 | 20 mL | VM568720_00006 | 0.25 mL | Acrolein | 250 ug/mL |
| ..VM568720_00006 | 05/31/15 | | restek, Lot A0108734 | | (Purchased Reagent) | | Acrolein | 20000 ug/mL |
| **VMFASA9W_00052** | 04/13/15 | 04/06/15 | MEOH, Lot NA | 2 mL | VMFASA9_00004 | 2 mL | 1,2,3-Trimethylbenzene | 50 ug/mL |
| | | | | | | | Diisopropyl ether | 50 ug/mL |
| | | | | | | | Ethyl t-butyl ether | 50 ug/mL |
| | | | | | | | Tert-amyl methyl ether | 50 ug/mL |
| .VMFASA9_00004 | 06/30/15 | 02/06/15 | MEOH, Lot 0000085233 | 100 mL | vm568722S_00002 | 2.5 mL | 1,2,3-Trimethylbenzene | 50 ug/mL |
| | | | | | VM568723S_00001 | 2.5 mL | Diisopropyl ether | 50 ug/mL |
| | | | | | | | Ethyl t-butyl ether | 50 ug/mL |
| | | | | | | | Tert-amyl methyl ether | 50 ug/mL |
| ..vm568722S_00002 | 06/30/15 | | restek, Lot A0100258 | | (Purchased Reagent) | | 1,2,3-Trimethylbenzene | 2000 ug/mL |
| ..VM568723S_00001 | 04/30/16 | | restek, Lot A0102749 | | (Purchased Reagent) | | Diisopropyl ether | 2000 ug/mL |
| | | | | | | | Ethyl t-butyl ether | 2000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Tert-amyl methyl ether | 2000 ug/mL |
| **VMFASGW_00084** | 03/07/15 | 02/28/15 | MEOH, Lot NA | 2 mL | VMFASG_00026 | 2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .VMFASG_00026 | 03/12/15 | 02/12/15 | MEOH, Lot +161620000085233JB | 50 mL | VM567645S_00017 | 1.25 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| ..VM567645S_00017 | 11/30/15 | Restek, Lot A099261 | | | (Purchased Reagent) | | Bromomethane | 2000 ug/mL |
| | | | | | | | Chloroethane | 2000 ug/mL |
| | | | | | | | Chloromethane | 2000 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 2000 ug/mL |
| | | | | | | | Trichlorofluoromethane | 2000 ug/mL |
| | | | | | | | Vinyl chloride | 2000 ug/mL |
| **VMFASGW_00089** | 04/13/15 | 04/07/15 | MEOH, Lot NA | 2 mL | VMFASG_00027 | 2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .VMFASG_00027 | 04/13/15 | 03/13/15 | MEOH, Lot 0000085233 | 50 mL | VM567645S_00017 | 1.25 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| ..VM567645S_00017 | 11/30/15 | Restek, Lot A099261 | | | (Purchased Reagent) | | Bromomethane | 2000 ug/mL |
| | | | | | | | Chloroethane | 2000 ug/mL |
| | | | | | | | Chloromethane | 2000 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 2000 ug/mL |
| | | | | | | | Trichlorofluoromethane | 2000 ug/mL |
| | | | | | | | Vinyl chloride | 2000 ug/mL |
| **VMFASPW_00087** | 03/04/15 | 02/25/15 | MEOH, Lot n/a | 2 mL | VMRFASP_00018 | 2 mL | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dibromoethane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromochloromethane | 50 ug/mL |
| | | | | | | | Bromodichloromethane | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Dibromochloromethane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | p-Isopropyltoluene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butyl alcohol (TBA) | 500 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 2-Chloroethyl vinyl ether | 60 ug/mL |
| | | | | | | | Vinyl acetate | 50 ug/mL |
| .VMRFASP_00018 | 03/12/15 | 02/12/15 | MEOH, Lot +161620000085233JB | 100 mL | VM567641S_00006 | 2.5 mL | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dibromoethane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromochloromethane | 50 ug/mL |
| | | | | | | | Bromodichloromethane | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Dibromochloromethane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | p-Isopropyltoluene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butyl alcohol (TBA) | 500 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| | | | | | VM567642S_00003 | 1 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM567643S_00012 | 3 mL | 2-Chloroethyl vinyl ether | 60 ug/mL |
| | | | | | VM567646S_00009 | 1.25 mL | Vinyl acetate | 50 ug/mL |
| ..VM567641S_00006 | 02/29/16 | | Restek, Lot A093733 | | (Purchased Reagent) | | 1,1,1,2-Tetrachloroethane | 2000 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 2000 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2000 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2000 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2000 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2000 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 2000 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 2000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 2000 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2000 ug/mL |
| | | | | | | | 1,2-Dibromoethane | 2000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2000 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 2000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 2000 ug/mL |
| | | | | | | | 2-Chlorotoluene | 2000 ug/mL |
| | | | | | | | 4-Chlorotoluene | 2000 ug/mL |
| | | | | | | | Benzene | 2000 ug/mL |
| | | | | | | | Bromobenzene | 2000 ug/mL |
| | | | | | | | Bromochloromethane | 2000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Bromodichloromethane | 2000 ug/mL |
| | | | | | | | Bromoform | 2000 ug/mL |
| | | | | | | | Carbon disulfide | 2000 ug/mL |
| | | | | | | | Carbon tetrachloride | 2000 ug/mL |
| | | | | | | | Chlorobenzene | 2000 ug/mL |
| | | | | | | | Chloroform | 2000 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2000 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2000 ug/mL |
| | | | | | | | Dibromochloromethane | 2000 ug/mL |
| | | | | | | | Dibromomethane | 2000 ug/mL |
| | | | | | | | Ethylbenzene | 2000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 2000 ug/mL |
| | | | | | | | Isopropylbenzene | 2000 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2000 ug/mL |
| | | | | | | | Methylene Chloride | 2000 ug/mL |
| | | | | | | | n-Butylbenzene | 2000 ug/mL |
| | | | | | | | N-Propylbenzene | 2000 ug/mL |
| | | | | | | | Naphthalene | 2000 ug/mL |
| | | | | | | | o-Xylene | 2000 ug/mL |
| | | | | | | | p-Isopropyltoluene | 2000 ug/mL |
| | | | | | | | sec-Butylbenzene | 2000 ug/mL |
| | | | | | | | Styrene | 2000 ug/mL |
| | | | | | | | tert-Butyl alcohol (TBA) | 20000 ug/mL |
| | | | | | | | tert-Butylbenzene | 2000 ug/mL |
| | | | | | | | Tetrachloroethene | 2000 ug/mL |
| | | | | | | | Toluene | 2000 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2000 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2000 ug/mL |
| | | | | | | | Trichloroethene | 2000 ug/mL |
| | | | | | | | Xylenes, Total | 4000 ug/mL |
| ..VM567642S_00003 | 02/29/16 | | Restek, Lot A093472 | | (Purchased Reagent) | | 2-Butanone (MEK) | 10000 ug/mL |
| | | | | | | | 2-Hexanone | 10000 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 10000 ug/mL |
| | | | | | | | Acetone | 10000 ug/mL |
| ..VM567643S_00012 | 07/31/17 | | Restek, Lot A0104963 | | (Purchased Reagent) | | 2-Chloroethyl vinyl ether | 2000 ug/mL |
| ..VM567646S_00009 | 05/31/15 | | Restek, Lot A0107040 | | (Purchased Reagent) | | Vinyl acetate | 4000 ug/mL |
| **VMFASPW_00093** | 04/11/15 | 04/07/15 | MEOH, Lot n/a | 2 mL | VMRFASP_00019 | 2 mL | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dibromoethane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromochloromethane | 50 ug/mL |
| | | | | | | | Bromodichloromethane | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Dibromochloromethane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | p-Isopropyltoluene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butyl alcohol (TBA) | 500 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| | | | | | | | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 2-Chloroethyl vinyl ether | 60 ug/mL |
| | | | | | | | Vinyl acetate | 50 ug/mL |
| .VMRFASP_00019 | 04/11/15 | 03/11/15 | MEOH, Lot +161620000085233JB | 100 mL | VM567641S_00006 | 2.5 mL | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dibromoethane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromochloromethane | 50 ug/mL |
| | | | | | | | Bromodichloromethane | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Dibromochloromethane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | p-Isopropyltoluene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butyl alcohol (TBA) | 500 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | Xylenes, Total | 100 ug/mL |
| | | | | | VM567642S_00005 | 1 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM567643S_00012 | 3 mL | 2-Chloroethyl vinyl ether | 60 ug/mL |
| | | | | | VM567646S_00009 | 1.25 mL | Vinyl acetate | 50 ug/mL |
| ..VM567641S_00006 | 02/29/16 | | Restek, Lot A093733 | | (Purchased Reagent) | | 1,1,1,2-Tetrachloroethane | 2000 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 2000 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2000 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2000 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2000 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2000 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 2000 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 2000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 2000 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2000 ug/mL |
| | | | | | | | 1,2-Dibromoethane | 2000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2000 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 2000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 2000 ug/mL |
| | | | | | | | 2-Chlorotoluene | 2000 ug/mL |
| | | | | | | | 4-Chlorotoluene | 2000 ug/mL |
| | | | | | | | Benzene | 2000 ug/mL |
| | | | | | | | Bromobenzene | 2000 ug/mL |
| | | | | | | | Bromochloromethane | 2000 ug/mL |
| | | | | | | | Bromodichloromethane | 2000 ug/mL |
| | | | | | | | Bromoform | 2000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Carbon disulfide | 2000 ug/mL |
| | | | | | | | Carbon tetrachloride | 2000 ug/mL |
| | | | | | | | Chlorobenzene | 2000 ug/mL |
| | | | | | | | Chloroform | 2000 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2000 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2000 ug/mL |
| | | | | | | | Dibromochloromethane | 2000 ug/mL |
| | | | | | | | Dibromomethane | 2000 ug/mL |
| | | | | | | | Ethylbenzene | 2000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 2000 ug/mL |
| | | | | | | | Isopropylbenzene | 2000 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2000 ug/mL |
| | | | | | | | Methylene Chloride | 2000 ug/mL |
| | | | | | | | n-Butylbenzene | 2000 ug/mL |
| | | | | | | | N-Propylbenzene | 2000 ug/mL |
| | | | | | | | Naphthalene | 2000 ug/mL |
| | | | | | | | o-Xylene | 2000 ug/mL |
| | | | | | | | p-Isopropyltoluene | 2000 ug/mL |
| | | | | | | | sec-Butylbenzene | 2000 ug/mL |
| | | | | | | | Styrene | 2000 ug/mL |
| | | | | | | | tert-Butyl alcohol (TBA) | 20000 ug/mL |
| | | | | | | | tert-Butylbenzene | 2000 ug/mL |
| | | | | | | | Tetrachloroethene | 2000 ug/mL |
| | | | | | | | Toluene | 2000 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2000 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2000 ug/mL |
| | | | | | | | Trichloroethene | 2000 ug/mL |
| | | | | | | | Xylenes, Total | 4000 ug/mL |
| ..VM567642S_00005 | 02/29/16 | | Restek, Lot A093472 | | (Purchased Reagent) | | 2-Butanone (MEK) | 10000 ug/mL |
| | | | | | | | 2-Hexanone | 10000 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 10000 ug/mL |
| | | | | | | | Acetone | 10000 ug/mL |
| ..VM567643S_00012 | 07/31/17 | | Restek, Lot A0104963 | | (Purchased Reagent) | | 2-Chloroethyl vinyl ether | 2000 ug/mL |
| ..VM567646S_00009 | 05/31/15 | | Restek, Lot A0107040 | | (Purchased Reagent) | | Vinyl acetate | 4000 ug/mL |
| **VMRA9W_00090** | 01/21/15 | 01/14/15 | MEOH, Lot NA | 1 mL | VMRA9_00011 | 1 mL | Cyclohexanone | 500 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | 1,2,3-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3,5-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1-Chlorohexane | 50 ug/mL |
| | | | | | | | 2-Chloro-1,3-butadiene | 50 ug/mL |
| | | | | | | | 2-Nitropropane | 100 ug/mL |
| | | | | | | | Ethyl acetate | 100 ug/mL |
| | | | | | | | Ethyl acrylate | 50 ug/mL |
| | | | | | | | Methacrylonitrile | 500 ug/mL |
| | | | | | | | Methyl methacrylate | 100 ug/mL |
| | | | | | | | n-Butanol | 1250 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Acetonitrile | 500 ug/mL |
| | | | | | | | Diisopropyl ether | 50 ug/mL |
| | | | | | | | Ethyl t-butyl ether | 50 ug/mL |
| | | | | | | | Propionitrile | 500 ug/mL |
| | | | | | | | Tert-amyl methyl ether | 50 ug/mL |
| .VMRA9_00011 | 02/28/15 | 10/29/14 | MEOH, Lot 0000085233 | 50 mL | VM567648_00014 | 1.25 mL | Cyclohexanone | 500 ug/mL |
| | | | | | vm567719_00020 | 2.5 mL | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | vm568722_00002 | 1.25 mL | 1,2,3-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3,5-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1-Chlorohexane | 50 ug/mL |
| | | | | | | | 2-Chloro-1,3-butadiene | 50 ug/mL |
| | | | | | | | 2-Nitropropane | 100 ug/mL |
| | | | | | | | Ethyl acetate | 100 ug/mL |
| | | | | | | | Ethyl acrylate | 50 ug/mL |
| | | | | | | | Methacrylonitrile | 500 ug/mL |
| | | | | | | | Methyl methacrylate | 100 ug/mL |
| | | | | | | | n-Butanol | 1250 ug/mL |
| | | | | | VM568723_00001 | 1.25 mL | Acetonitrile | 500 ug/mL |
| | | | | | | | Diisopropyl ether | 50 ug/mL |
| | | | | | | | Ethyl t-butyl ether | 50 ug/mL |
| | | | | | | | Propionitrile | 500 ug/mL |
| | | | | | | | Tert-amyl methyl ether | 50 ug/mL |
| ..VM567648_00014 | 02/29/16 | | Restek, Lot A093361 | | (Purchased Reagent) | | Cyclohexanone | 20000 ug/mL |
| ..vm567719_00020 | 02/28/15 | | Restek, Lot A093359 | | (Purchased Reagent) | | 2-Methylnaphthalene | 2000 ug/mL |
| ..vm568722_00002 | 06/30/15 | | restek, Lot A0100262 | | (Purchased Reagent) | | 1,2,3-Trimethylbenzene | 2000 ug/mL |
| | | | | | | | 1,3,5-Trichlorobenzene | 2000 ug/mL |
| | | | | | | | 1-Chlorohexane | 2000 ug/mL |
| | | | | | | | 2-Chloro-1,3-butadiene | 2000 ug/mL |
| | | | | | | | 2-Nitropropane | 4000 ug/mL |
| | | | | | | | Ethyl acetate | 4000 ug/mL |
| | | | | | | | Ethyl acrylate | 2000 ug/mL |
| | | | | | | | Methacrylonitrile | 20000 ug/mL |
| | | | | | | | Methyl methacrylate | 4000 ug/mL |
| | | | | | | | n-Butanol | 50000 ug/mL |
| ..VM568723_00001 | 12/31/15 | | restek, Lot A099930 | | (Purchased Reagent) | | Acetonitrile | 20000 ug/mL |
| | | | | | | | Diisopropyl ether | 2000 ug/mL |
| | | | | | | | Ethyl t-butyl ether | 2000 ug/mL |
| | | | | | | | Propionitrile | 20000 ug/mL |
| | | | | | | | Tert-amyl methyl ether | 2000 ug/mL |
| **VMRA9W_00100** | 04/08/15 | 04/01/15 | MEOH, Lot NA | 1 mL | VMRA9_00012 | 1 mL | Cyclohexanone | 500 ug/mL |
| | | | | | | | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | Pentachloroethane | 100 ug/mL |
| | | | | | | | 1,2,3-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3,5-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1-Chlorohexane | 50 ug/mL |
| | | | | | | | 2-Chloro-1,3-butadiene | 50 ug/mL |
| | | | | | | | 2-Nitropropane | 100 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Benzyl chloride | 50 ug/mL |
| | | | | | | | Ethyl acetate | 100 ug/mL |
| | | | | | | | Ethyl acrylate | 50 ug/mL |
| | | | | | | | Methacrylonitrile | 500 ug/mL |
| | | | | | | | Methyl methacrylate | 100 ug/mL |
| | | | | | | | n-Butanol | 1250 ug/mL |
| | | | | | | | n-Butyl acetate | 50 ug/mL |
| | | | | | | | Acetonitrile | 500 ug/mL |
| | | | | | | | Diisopropyl ether | 50 ug/mL |
| | | | | | | | Ethyl t-butyl ether | 50 ug/mL |
| | | | | | | | Propionitrile | 500 ug/mL |
| | | | | | | | Tert-amyl methyl ether | 50 ug/mL |
| .VMRA9_00012 | 06/30/15 | 02/28/15 | MEOH, Lot 0000085233 | 50 mL | VM567648_00014 | 1.25 mL | Cyclohexanone | 500 ug/mL |
| | | | | | vm567719_00021 | 2.5 mL | 2-Methylnaphthalene | 100 ug/mL |
| | | | | | | | Pentachloroethane | 100 ug/mL |
| | | | | | vm568722_00002 | 1.25 mL | 1,2,3-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3,5-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1-Chlorohexane | 50 ug/mL |
| | | | | | | | 2-Chloro-1,3-butadiene | 50 ug/mL |
| | | | | | | | 2-Nitropropane | 100 ug/mL |
| | | | | | | | Benzyl chloride | 50 ug/mL |
| | | | | | | | Ethyl acetate | 100 ug/mL |
| | | | | | | | Ethyl acrylate | 50 ug/mL |
| | | | | | | | Methacrylonitrile | 500 ug/mL |
| | | | | | | | Methyl methacrylate | 100 ug/mL |
| | | | | | | | n-Butanol | 1250 ug/mL |
| | | | | | | | n-Butyl acetate | 50 ug/mL |
| | | | | | VM568723_00001 | 1.25 mL | Acetonitrile | 500 ug/mL |
| | | | | | | | Diisopropyl ether | 50 ug/mL |
| | | | | | | | Ethyl t-butyl ether | 50 ug/mL |
| | | | | | | | Propionitrile | 500 ug/mL |
| | | | | | | | Tert-amyl methyl ether | 50 ug/mL |
| ..VM567648_00014 | 02/29/16 | Restek, Lot A093361 | | | (Purchased Reagent) | | Cyclohexanone | 20000 ug/mL |
| ..vm567719_00021 | 01/31/16 | Restek, Lot A0100744 | | | (Purchased Reagent) | | 2-Methylnaphthalene | 2000 ug/mL |
| | | | | | | | Pentachloroethane | 2000 ug/mL |
| ..vm568722_00002 | 06/30/15 | restek, Lot A0100262 | | | (Purchased Reagent) | | 1,2,3-Trimethylbenzene | 2000 ug/mL |
| | | | | | | | 1,3,5-Trichlorobenzene | 2000 ug/mL |
| | | | | | | | 1-Chlorohexane | 2000 ug/mL |
| | | | | | | | 2-Chloro-1,3-butadiene | 2000 ug/mL |
| | | | | | | | 2-Nitropropane | 4000 ug/mL |
| | | | | | | | Benzyl chloride | 2000 ug/mL |
| | | | | | | | Ethyl acetate | 4000 ug/mL |
| | | | | | | | Ethyl acrylate | 2000 ug/mL |
| | | | | | | | Methacrylonitrile | 20000 ug/mL |
| | | | | | | | Methyl methacrylate | 4000 ug/mL |
| | | | | | | | n-Butanol | 50000 ug/mL |
| | | | | | | | n-Butyl acetate | 2000 ug/mL |
| ..VM568723_00001 | 12/31/15 | restek, Lot A099930 | | | (Purchased Reagent) | | Acetonitrile | 20000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Diisopropyl ether | 2000 ug/mL |
| | | | | | | | Ethyl t-butyl ether | 2000 ug/mL |
| | | | | | | | Propionitrile | 20000 ug/mL |
| | | | | | | | Tert-amyl methyl ether | 2000 ug/mL |
| **VMRA9W_00101** | 04/16/15 | 04/09/15 | MEOH, Lot NA | 1 mL | VMRA9_00012 | 1 mL | 1,2,3-Trimethylbenzene | 50 ug/mL |
| | | | | | | | Diisopropyl ether | 50 ug/mL |
| | | | | | | | Ethyl t-butyl ether | 50 ug/mL |
| | | | | | | | Tert-amyl methyl ether | 50 ug/mL |
| .VMRA9_00012 | 06/30/15 | 02/28/15 | MEOH, Lot 0000085233 | 50 mL | vm568722_00002 | 1.25 mL | 1,2,3-Trimethylbenzene | 50 ug/mL |
| | | | | | VM568723_00001 | 1.25 mL | Diisopropyl ether | 50 ug/mL |
| | | | | | | | Ethyl t-butyl ether | 50 ug/mL |
| | | | | | | | Tert-amyl methyl ether | 50 ug/mL |
| ..vm568722_00002 | 06/30/15 | | restek, Lot A0100262 | | (Purchased Reagent) | | 1,2,3-Trimethylbenzene | 2000 ug/mL |
| ..VM568723_00001 | 12/31/15 | | restek, Lot A099930 | | (Purchased Reagent) | | Diisopropyl ether | 2000 ug/mL |
| | | | | | | | Ethyl t-butyl ether | 2000 ug/mL |
| | | | | | | | Tert-amyl methyl ether | 2000 ug/mL |
| **VMRGAS_00092** | 03/07/15 | 02/28/15 | MEOH, Lot 0000085233 | 10 mL | vm569722_00001 | 0.2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Dichlorofluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .vm569722_00001 | 01/31/18 | | Restek, Lot A0108198 | | (Purchased Reagent) | | Bromomethane | 2500 ug/mL |
| | | | | | | | Chloroethane | 2500 ug/mL |
| | | | | | | | Chloromethane | 2500 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 2500 ug/mL |
| | | | | | | | Dichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Trichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Vinyl chloride | 2500 ug/mL |
| **VMRGAS_00097** | 04/14/15 | 04/07/15 | MEOH, Lot 0000085233 | 10 mL | vm569722_00001 | 0.2 mL | Bromomethane | 50 ug/mL |
| | | | | | | | Butadiene | 50 ug/mL |
| | | | | | | | Chloroethane | 50 ug/mL |
| | | | | | | | Chloromethane | 50 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 50 ug/mL |
| | | | | | | | Dichlorofluoromethane | 50 ug/mL |
| | | | | | | | Trichlorofluoromethane | 50 ug/mL |
| | | | | | | | Vinyl chloride | 50 ug/mL |
| .vm569722_00001 | 01/31/18 | | Restek, Lot A0108198 | | (Purchased Reagent) | | Bromomethane | 2500 ug/mL |
| | | | | | | | Butadiene | 2500 ug/mL |
| | | | | | | | Chloroethane | 2500 ug/mL |
| | | | | | | | Chloromethane | 2500 ug/mL |
| | | | | | | | Dichlorodifluoromethane | 2500 ug/mL |
| | | | | | | | Dichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Trichlorofluoromethane | 2500 ug/mL |
| | | | | | | | Vinyl chloride | 2500 ug/mL |

# REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| **VMRPRIMW_00114** | 03/07/15 | 02/28/15 | MEOH, Lot NA | 1 mL | VMRPRIM_00010 | 1 mL | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dibromoethane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | Acrylonitrile | 500 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromochloromethane | 50 ug/mL |
| | | | | | | | Bromodichloromethane | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dibromochloromethane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Ethyl ether | 50 ug/mL |
| | | | | | | | Ethyl methacrylate | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Hexane | 50 ug/mL |
| | | | | | | | Iodomethane | 50 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Isobutyl alcohol | 1250 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 250 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | n-Heptane | 50 ug/mL |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | p-Isopropyltoluene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butyl alcohol (TBA) | 500 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Tetrahydrofuran | 100 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 2-Chloroethyl vinyl ether | 100 ug/mL |
| | | | | | | | Vinyl acetate | 48 ug/mL |
| .VMRPRIM_00010 | 05/31/15 | 12/10/14 | MEOH, Lot +161620000085233JB | 50 mL | VM567641_00012 | 1.25 mL | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dibromoethane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | Acrylonitrile | 500 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromochloromethane | 50 ug/mL |
| | | | | | | | Bromodichloromethane | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dibromochloromethane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Ethyl ether | 50 ug/mL |
| | | | | | | | Ethyl methacrylate | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Hexane | 50 ug/mL |
| | | | | | | | Iodomethane | 50 ug/mL |
| | | | | | | | Isobutyl alcohol | 1250 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 250 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | n-Heptane | 50 ug/mL |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | p-Isopropyltoluene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butyl alcohol (TBA) | 500 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Tetrahydrofuran | 100 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | VM567642_00014 | 0.5 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM567643_00020 | 2.5 mL | 2-Chloroethyl vinyl ether | 100 ug/mL |
| | | | | | VM567646_00016 | 0.6 mL | Vinyl acetate | 48 ug/mL |
| ..VM567641_00012 | 02/29/16 | | restek, Lot A093581 | | (Purchased Reagent) | | 1,1,1,2-Tetrachloroethane | 2000 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 2000 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2000 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2000 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 2000 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2000 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2000 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 2000 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 2000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 2000 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2000 ug/mL |
| | | | | | | | 1,2-Dibromoethane | 2000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2000 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2000 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 2000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 2000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,4-Dioxane | 40000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 2000 ug/mL |
| | | | | | | | 2-Chlorotoluene | 2000 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 2000 ug/mL |
| | | | | | | | 4-Chlorotoluene | 2000 ug/mL |
| | | | | | | | Acrylonitrile | 20000 ug/mL |
| | | | | | | | Benzene | 2000 ug/mL |
| | | | | | | | Bromobenzene | 2000 ug/mL |
| | | | | | | | Bromochloromethane | 2000 ug/mL |
| | | | | | | | Bromodichloromethane | 2000 ug/mL |
| | | | | | | | Bromoform | 2000 ug/mL |
| | | | | | | | Carbon disulfide | 2000 ug/mL |
| | | | | | | | Carbon tetrachloride | 2000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | Chlorobenzene | 2000 ug/mL |
| | | | | | | | Chloroform | 2000 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2000 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2000 ug/mL |
| | | | | | | | Cyclohexane | 2000 ug/mL |
| | | | | | | | Dibromochloromethane | 2000 ug/mL |
| | | | | | | | Dibromomethane | 2000 ug/mL |
| | | | | | | | Ethyl ether | 2000 ug/mL |
| | | | | | | | Ethyl methacrylate | 2000 ug/mL |
| | | | | | | | Ethylbenzene | 2000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 2000 ug/mL |
| | | | | | | | Hexane | 2000 ug/mL |
| | | | | | | | Iodomethane | 2000 ug/mL |
| | | | | | | | Isobutyl alcohol | 50000 ug/mL |
| | | | | | | | Isopropylbenzene | 2000 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2000 ug/mL |
| | | | | | | | Methyl acetate | 10000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2000 ug/mL |
| | | | | | | | Methylcyclohexane | 2000 ug/mL |
| | | | | | | | Methylene Chloride | 2000 ug/mL |
| | | | | | | | n-Butylbenzene | 2000 ug/mL |
| | | | | | | | n-Heptane | 2000 ug/mL |
| | | | | | | | N-Propylbenzene | 2000 ug/mL |
| | | | | | | | Naphthalene | 2000 ug/mL |
| | | | | | | | o-Xylene | 2000 ug/mL |
| | | | | | | | p-Isopropyltoluene | 2000 ug/mL |
| | | | | | | | sec-Butylbenzene | 2000 ug/mL |
| | | | | | | | Styrene | 2000 ug/mL |
| | | | | | | | tert-Butyl alcohol (TBA) | 20000 ug/mL |
| | | | | | | | tert-Butylbenzene | 2000 ug/mL |
| | | | | | | | Tetrachloroethene | 2000 ug/mL |
| | | | | | | | Tetrahydrofuran | 4000 ug/mL |
| | | | | | | | Toluene | 2000 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2000 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2000 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 2000 ug/mL |
| | | | | | | | Trichloroethene | 2000 ug/mL |
| ..VM567642_00014 | 02/29/16 | | Restek, Lot A093365 | | (Purchased Reagent) | | 2-Butanone (MEK) | 10000 ug/mL |
| | | | | | | | 2-Hexanone | 10000 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 10000 ug/mL |
| | | | | | | | Acetone | 10000 ug/mL |
| ..VM567643_00020 | 02/29/16 | | restek, Lot A093368 | | (Purchased Reagent) | | 2-Chloroethyl vinyl ether | 2000 ug/mL |
| ..VM567646_00016 | 05/31/15 | | Restek, Lot A0107309 | | (Purchased Reagent) | | Vinyl acetate | 4000 ug/mL |
| **VMRPRIMW_00120** | 04/14/15 | 04/07/15 | MEOH, Lot NA | 1 mL | VMRPRIM_00010 | 1 mL | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dibromoethane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | Acrylonitrile | 500 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromochloromethane | 50 ug/mL |
| | | | | | | | Bromodichloromethane | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dibromochloromethane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Ethyl ether | 50 ug/mL |
| | | | | | | | Ethyl methacrylate | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Hexane | 50 ug/mL |
| | | | | | | | Iodomethane | 50 ug/mL |
| | | | | | | | Isobutyl alcohol | 1250 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 250 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | n-Heptane | 50 ug/mL |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | p-Isopropyltoluene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butyl alcohol (TBA) | 500 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Tetrahydrofuran | 100 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | | | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | | | 2-Chloroethyl vinyl ether | 100 ug/mL |
| | | | | | | | Vinyl acetate | 48 ug/mL |
| .VMRPRIM_00010 | 05/31/15 | 12/10/14 | MEOH, Lot +161620000085233JB | 50 mL | VM567641_00012 | 1.25 mL | 1,1,1,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 50 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 50 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 50 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 50 ug/mL |
| | | | | | | | 1,2-Dibromoethane | 50 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 50 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 50 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 50 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 50 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | 1,4-Dioxane | 1000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 50 ug/mL |
| | | | | | | | 2-Chlorotoluene | 50 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 50 ug/mL |
| | | | | | | | 4-Chlorotoluene | 50 ug/mL |
| | | | | | | | Acrylonitrile | 500 ug/mL |
| | | | | | | | Benzene | 50 ug/mL |
| | | | | | | | Bromobenzene | 50 ug/mL |
| | | | | | | | Bromochloromethane | 50 ug/mL |
| | | | | | | | Bromodichloromethane | 50 ug/mL |
| | | | | | | | Bromoform | 50 ug/mL |
| | | | | | | | Carbon disulfide | 50 ug/mL |
| | | | | | | | Carbon tetrachloride | 50 ug/mL |
| | | | | | | | Chlorobenzene | 50 ug/mL |
| | | | | | | | Chloroform | 50 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 50 ug/mL |
| | | | | | | | Cyclohexane | 50 ug/mL |
| | | | | | | | Dibromochloromethane | 50 ug/mL |
| | | | | | | | Dibromomethane | 50 ug/mL |
| | | | | | | | Ethyl ether | 50 ug/mL |
| | | | | | | | Ethyl methacrylate | 50 ug/mL |
| | | | | | | | Ethylbenzene | 50 ug/mL |
| | | | | | | | Hexachlorobutadiene | 50 ug/mL |
| | | | | | | | Hexane | 50 ug/mL |
| | | | | | | | Iodomethane | 50 ug/mL |
| | | | | | | | Isobutyl alcohol | 1250 ug/mL |
| | | | | | | | Isopropylbenzene | 50 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 50 ug/mL |
| | | | | | | | Methyl acetate | 250 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 50 ug/mL |
| | | | | | | | Methylcyclohexane | 50 ug/mL |
| | | | | | | | Methylene Chloride | 50 ug/mL |
| | | | | | | | n-Butylbenzene | 50 ug/mL |
| | | | | | | | n-Heptane | 50 ug/mL |
| | | | | | | | N-Propylbenzene | 50 ug/mL |
| | | | | | | | Naphthalene | 50 ug/mL |
| | | | | | | | o-Xylene | 50 ug/mL |
| | | | | | | | p-Isopropyltoluene | 50 ug/mL |
| | | | | | | | sec-Butylbenzene | 50 ug/mL |
| | | | | | | | Styrene | 50 ug/mL |
| | | | | | | | tert-Butyl alcohol (TBA) | 500 ug/mL |
| | | | | | | | tert-Butylbenzene | 50 ug/mL |
| | | | | | | | Tetrachloroethene | 50 ug/mL |
| | | | | | | | Tetrahydrofuran | 100 ug/mL |
| | | | | | | | Toluene | 50 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 50 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 50 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | trans-1,4-Dichloro-2-butene | 50 ug/mL |
| | | | | | | | Trichloroethene | 50 ug/mL |
| | | | | | VM567642_00014 | 0.5 mL | 2-Butanone (MEK) | 100 ug/mL |
| | | | | | | | 2-Hexanone | 100 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 100 ug/mL |
| | | | | | | | Acetone | 100 ug/mL |
| | | | | | VM567643_00020 | 2.5 mL | 2-Chloroethyl vinyl ether | 100 ug/mL |
| | | | | | VM567646_00016 | 0.6 mL | Vinyl acetate | 48 ug/mL |
| ..VM567641_00012 | 02/29/16 | | restek, Lot A093581 | | (Purchased Reagent) | | 1,1,1,2-Tetrachloroethane | 2000 ug/mL |
| | | | | | | | 1,1,1-Trichloroethane | 2000 ug/mL |
| | | | | | | | 1,1,2,2-Tetrachloroethane | 2000 ug/mL |
| | | | | | | | 1,1,2-Trichloro-1,2,2-trifluoroethane | 2000 ug/mL |
| | | | | | | | 1,1,2-Trichloroethane | 2000 ug/mL |
| | | | | | | | 1,1-Dichloroethane | 2000 ug/mL |
| | | | | | | | 1,1-Dichloroethene | 2000 ug/mL |
| | | | | | | | 1,1-Dichloropropene | 2000 ug/mL |
| | | | | | | | 1,2,3-Trichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,2,3-Trichloropropane | 2000 ug/mL |
| | | | | | | | 1,2,4-Trichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,2,4-Trimethylbenzene | 2000 ug/mL |
| | | | | | | | 1,2-Dibromo-3-Chloropropane | 2000 ug/mL |
| | | | | | | | 1,2-Dibromoethane | 2000 ug/mL |
| | | | | | | | 1,2-Dichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,2-Dichloroethane | 2000 ug/mL |
| | | | | | | | 1,2-Dichloropropane | 2000 ug/mL |
| | | | | | | | 1,3,5-Trimethylbenzene | 2000 ug/mL |
| | | | | | | | 1,3-Dichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,3-Dichloropropane | 2000 ug/mL |
| | | | | | | | 1,4-Dichlorobenzene | 2000 ug/mL |
| | | | | | | | 1,4-Dioxane | 40000 ug/mL |
| | | | | | | | 2,2-Dichloropropane | 2000 ug/mL |
| | | | | | | | 2-Chlorotoluene | 2000 ug/mL |
| | | | | | | | 3-Chloro-1-propene | 2000 ug/mL |
| | | | | | | | 4-Chlorotoluene | 2000 ug/mL |
| | | | | | | | Acrylonitrile | 20000 ug/mL |
| | | | | | | | Benzene | 2000 ug/mL |
| | | | | | | | Bromobenzene | 2000 ug/mL |
| | | | | | | | Bromochloromethane | 2000 ug/mL |
| | | | | | | | Bromodichloromethane | 2000 ug/mL |
| | | | | | | | Bromoform | 2000 ug/mL |
| | | | | | | | Carbon disulfide | 2000 ug/mL |
| | | | | | | | Carbon tetrachloride | 2000 ug/mL |
| | | | | | | | Chlorobenzene | 2000 ug/mL |
| | | | | | | | Chloroform | 2000 ug/mL |
| | | | | | | | cis-1,2-Dichloroethene | 2000 ug/mL |
| | | | | | | | cis-1,3-Dichloropropene | 2000 ug/mL |
| | | | | | | | Cyclohexane | 2000 ug/mL |

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Dibromochloromethane | 2000 ug/mL |
| | | | | | | | Dibromomethane | 2000 ug/mL |
| | | | | | | | Ethyl ether | 2000 ug/mL |
| | | | | | | | Ethyl methacrylate | 2000 ug/mL |
| | | | | | | | Ethylbenzene | 2000 ug/mL |
| | | | | | | | Hexachlorobutadiene | 2000 ug/mL |
| | | | | | | | Hexane | 2000 ug/mL |
| | | | | | | | Iodomethane | 2000 ug/mL |
| | | | | | | | Isobutyl alcohol | 50000 ug/mL |
| | | | | | | | Isopropylbenzene | 2000 ug/mL |
| | | | | | | | m-Xylene & p-Xylene | 2000 ug/mL |
| | | | | | | | Methyl acetate | 10000 ug/mL |
| | | | | | | | Methyl tert-butyl ether | 2000 ug/mL |
| | | | | | | | Methylcyclohexane | 2000 ug/mL |
| | | | | | | | Methylene Chloride | 2000 ug/mL |
| | | | | | | | n-Butylbenzene | 2000 ug/mL |
| | | | | | | | n-Heptane | 2000 ug/mL |
| | | | | | | | N-Propylbenzene | 2000 ug/mL |
| | | | | | | | Naphthalene | 2000 ug/mL |
| | | | | | | | o-Xylene | 2000 ug/mL |
| | | | | | | | p-Isopropyltoluene | 2000 ug/mL |
| | | | | | | | sec-Butylbenzene | 2000 ug/mL |
| | | | | | | | Styrene | 2000 ug/mL |
| | | | | | | | tert-Butyl alcohol (TBA) | 20000 ug/mL |
| | | | | | | | tert-Butylbenzene | 2000 ug/mL |
| | | | | | | | Tetrachloroethene | 2000 ug/mL |
| | | | | | | | Tetrahydrofuran | 4000 ug/mL |
| | | | | | | | Toluene | 2000 ug/mL |
| | | | | | | | trans-1,2-Dichloroethene | 2000 ug/mL |
| | | | | | | | trans-1,3-Dichloropropene | 2000 ug/mL |
| | | | | | | | trans-1,4-Dichloro-2-butene | 2000 ug/mL |
| | | | | | | | Trichloroethene | 2000 ug/mL |
| ..VM567642_00014 | 02/29/16 | | Restek, Lot A093365 | | (Purchased Reagent) | | 2-Butanone (MEK) | 10000 ug/mL |
| | | | | | | | 2-Hexanone | 10000 ug/mL |
| | | | | | | | 4-Methyl-2-pentanone (MIBK) | 10000 ug/mL |
| | | | | | | | Acetone | 10000 ug/mL |
| ..VM567643_00020 | 02/29/16 | | restek, Lot A093368 | | (Purchased Reagent) | | 2-Chloroethyl vinyl ether | 2000 ug/mL |
| ..VM567646_00016 | 05/31/15 | | Restek, Lot A0107309 | | (Purchased Reagent) | | Vinyl acetate | 4000 ug/mL |
| **VMRPRIMW_00120** | 04/14/15 | 04/07/15 | MEOH, Lot NA | 1 mL | VMRPRIM_00010 | 1 mL | Xylenes, Total | 100 ug/mL |
| .VMRPRIM_00010 | 05/31/15 | 12/10/14 | MEOH, Lot +161620000085233JB | 50 mL | VM567641_00012 | 1.25 mL | Xylenes, Total | 100 ug/mL |
| ..VM567641_00012 | 02/29/16 | | restek, Lot A093581 | | (Purchased Reagent) | | Xylenes, Total | 4000 ug/mL |
| **VMUX8SS_00017** | 04/27/15 | 01/27/15 | MEOH, Lot 0000085233 | 100 mL | VMCUS8125_00009 | 866 uL | 1,2-Dichloroethane-d4 (Surr) | 216.5 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 216.5 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 216.5 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 216.5 ug/mL |
| .VMCUS8125_00009 | 09/30/16 | | Ultra Scientific, Lot CJ-3208 | | (Purchased Reagent) | | 1,2-Dichloroethane-d4 (Surr) | 25000 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 25000 ug/mL |

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

| Reagent ID | Exp Date | Prep Date | Dilutant Used | Reagent Final Volume | Parent Reagent | | Analyte | Concentration |
|---|---|---|---|---|---|---|---|---|
| | | | | | Reagent ID | Volume Added | | |
| | | | | | | | Dibromofluoromethane (Surr) | 25000 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 25000 ug/mL |
| **VMUX8SS_00018** | 06/18/15 | 03/18/15 | MEOH, Lot 0000085233 | 100 mL | VMCUS8125_00009 | 866 uL | 1,2-Dichloroethane-d4 (Surr) | 216.5 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 216.5 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 216.5 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 216.5 ug/mL |
| .VMCUS8125_00009 | 09/30/16 | Ultra Scientific, Lot CJ-3208 | | | (Purchased Reagent) | | 1,2-Dichloroethane-d4 (Surr) | 25000 ug/mL |
| | | | | | | | 4-Bromofluorobenzene (Surr) | 25000 ug/mL |
| | | | | | | | Dibromofluoromethane (Surr) | 25000 ug/mL |
| | | | | | | | Toluene-d8 (Surr) | 25000 ug/mL |

# Certification Summary

Client: Tetra Tech, Inc. TestAmerica Job ID: 240-49010-1
Project/Site: MRC-Middle River

| Laboratory | Authority | Program | EPA Region | Certification ID |
|---|---|---|---|---|
| TestAmerica Canton | California | State Program | 9 | 2927 |
| TestAmerica Canton | Connecticut | State Program | 1 | PH-0590 |
| TestAmerica Canton | Florida | NELAP | 4 | E87225 |
| TestAmerica Canton | Georgia | State Program | 4 | N/A |
| TestAmerica Canton | Illinois | NELAP | 5 | 200004 |
| TestAmerica Canton | Kansas | NELAP | 7 | E-10336 |
| TestAmerica Canton | Kentucky (UST) | State Program | 4 | 58 |
| TestAmerica Canton | Kentucky (WW) | State Program | 4 | 98016 |
| TestAmerica Canton | L-A-B | DoD ELAP | | L2315 |
| TestAmerica Canton | Minnesota | NELAP | 5 | 039-999-348 |
| TestAmerica Canton | Nevada | State Program | 9 | OH-000482008A |
| TestAmerica Canton | New Jersey | NELAP | 2 | OH001 |
| TestAmerica Canton | New York | NELAP | 2 | 10975 |
| TestAmerica Canton | Ohio VAP | State Program | 5 | CL0024 |
| TestAmerica Canton | Oregon | NELAP | 10 | 4062 |
| TestAmerica Canton | Pennsylvania | NELAP | 3 | 68-00340 |
| TestAmerica Canton | Texas | NELAP | 6 | |
| TestAmerica Canton | USDA | Federal | | P330-13-00319 |
| TestAmerica Canton | Virginia | NELAP | 3 | 460175 |
| TestAmerica Canton | Washington | State Program | 10 | C971 |
| TestAmerica Canton | West Virginia DEP | State Program | 3 | 210 |
| TestAmerica Canton | Wisconsin | State Program | 5 | 999518190 |

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

# Method 8260B

## Volatile Organic Compounds (GC/MS) by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

| Client Sample ID | Lab Sample ID | DBFM # | DCA # | TOL # | BFB # |
|---|---|---|---|---|---|
| TB-040615 | 240-49010-2 | 92 | 95 | 94 | 100 |
| | MB 240-175730/6 | 93 | 94 | 96 | 98 |
| | LCS 240-175730/4 | 94 | 93 | 96 | 98 |
| | 240-49022-A-1 MS | 92 | 93 | 95 | 99 |
| | 240-49022-D-1 MSD | 94 | 92 | 97 | 101 |

| | QC LIMITS |
|---|---|
| DBFM = Dibromofluoromethane (Surr) | 75-121 |
| DCA = 1,2-Dichloroethane-d4 (Surr) | 63-129 |
| TOL = Toluene-d8 (Surr) | 74-120 |
| BFB = 4-Bromofluorobenzene (Surr) | 66-120 |

# Column to be used to flag recovery values

FORM II 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7083.D

Lab ID: LCS 240-175730/4 Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 10.0 | 10.1 | 101 | 72-120 | |
| 1,1,1-Trichloroethane | 10.0 | 10.4 | 104 | 74-120 | |
| 1,1,2,2-Tetrachloroethane | 10.0 | 9.71 | 97 | 68-120 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.0 | 11.0 | 110 | 74-151 | |
| 1,1-Dichloroethane | 10.0 | 10.5 | 105 | 80-120 | |
| 1,1-Dichloroethene | 10.0 | 10.7 | 107 | 78-131 | |
| 1,1-Dichloropropene | 10.0 | 10.8 | 108 | 80-120 | |
| 1,2,3-Trichlorobenzene | 10.0 | 9.59 | 96 | 54-126 | |
| 1,2,3-Trichloropropane | 10.0 | 10.2 | 102 | 73-129 | |
| 1,2,4-Trichlorobenzene | 10.0 | 9.73 | 97 | 48-135 | |
| 1,2,4-Trimethylbenzene | 10.0 | 9.75 | 97 | 76-120 | |
| 1,2-Dibromo-3-Chloropropane | 10.0 | 10.2 | 102 | 42-136 | |
| 1,2-Dichlorobenzene | 10.0 | 9.77 | 98 | 80-120 | |
| 1,2-Dichloroethane | 10.0 | 10.4 | 104 | 71-127 | |
| 1,2-Dichloropropane | 10.0 | 10.1 | 101 | 80-120 | |
| 1,3-Dichlorobenzene | 10.0 | 9.82 | 98 | 80-120 | |
| 1,3-Dichloropropane | 10.0 | 9.62 | 96 | 79-120 | |
| 1,4-Dichlorobenzene | 10.0 | 9.90 | 99 | 80-120 | |
| 2,2-Dichloropropane | 10.0 | 10.2 | 102 | 50-129 | |
| 2-Chloroethyl vinyl ether | 12.0 | 12.4 | 103 | 52-131 | |
| 2-Chlorotoluene | 10.0 | 10.1 | 101 | 76-120 | |
| 2-Hexanone | 20.0 | 19.2 | 96 | 55-133 | |
| Bromobenzene | 10.0 | 10.1 | 101 | 76-120 | |
| Bromochloromethane | 10.0 | 9.90 | 99 | 77-120 | |
| 4-Chlorotoluene | 10.0 | 9.62 | 96 | 77-120 | |
| p-Isopropyltoluene | 10.0 | 9.88 | 99 | 74-120 | |
| Acetone | 20.0 | 17.4 | 87 | 43-136 | |
| Benzene | 10.0 | 10.1 | 101 | 80-120 | |
| Bromoform | 10.0 | 9.74 | 97 | 40-131 | |
| Bromomethane | 10.0 | 8.58 | 86 | 11-185 | |
| Carbon disulfide | 10.0 | 10.9 | 109 | 62-142 | |
| Carbon tetrachloride | 10.0 | 10.8 | 108 | 66-128 | |
| Chlorobenzene | 10.0 | 9.79 | 98 | 80-120 | |
| Chloroethane | 10.0 | 8.70 | 87 | 25-153 | |
| Chloroform | 10.0 | 10.1 | 101 | 79-120 | |
| Chloromethane | 10.0 | 8.18 | 82 | 44-126 | |
| cis-1,2-Dichloroethene | 10.0 | 10.1 | 101 | 80-120 | |
| cis-1,3-Dichloropropene | 10.0 | 10.5 | 105 | 61-120 | |
| Hexachlorobutadiene | 10.0 | 9.48 | 95 | 36-134 | |
| Dibromomethane | 10.0 | 10.2 | 102 | 80-120 | |
| Bromodichloromethane | 10.0 | 9.81 | 98 | 72-121 | |

# Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7083.D

Lab ID: LCS 240-175730/4 Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | LCS CONCENTRATION (ug/L) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 10.0 | 7.10 | 71 | 19-129 | |
| Ethylbenzene | 10.0 | 10.1 | 101 | 80-120 | |
| 1,2-Dibromoethane | 10.0 | 10.0 | 100 | 79-120 | |
| Naphthalene | 10.0 | 9.44 | 94 | 32-141 | |
| m-Xylene & p-Xylene | 10.0 | 9.83 | 98 | 80-120 | |
| n-Butylbenzene | 10.0 | 9.90 | 99 | 66-125 | |
| Isopropylbenzene | 10.0 | 9.91 | 99 | 75-120 | |
| N-Propylbenzene | 10.0 | 10.3 | 103 | 74-121 | |
| 2-Butanone (MEK) | 20.0 | 19.9 | 100 | 60-126 | |
| 4-Methyl-2-pentanone (MIBK) | 20.0 | 20.1 | 100 | 63-128 | |
| sec-Butylbenzene | 10.0 | 9.99 | 100 | 70-120 | |
| Methyl tert-butyl ether | 10.0 | 10.3 | 103 | 52-144 | |
| Methylene Chloride | 10.0 | 10.5 | 105 | 66-131 | |
| o-Xylene | 10.0 | 10.1 | 101 | 80-120 | |
| Styrene | 10.0 | 9.36 | 94 | 79-120 | |
| tert-Butylbenzene | 10.0 | 10.1 | 101 | 71-120 | |
| Tetrachloroethene | 10.0 | 10.1 | 101 | 79-120 | |
| Toluene | 10.0 | 10.0 | 100 | 80-120 | |
| trans-1,2-Dichloroethene | 10.0 | 10.6 | 106 | 80-120 | |
| trans-1,3-Dichloropropene | 10.0 | 10.8 | 108 | 58-120 | |
| Trichloroethene | 10.0 | 10.4 | 104 | 76-120 | |
| Trichlorofluoromethane | 10.0 | 10.0 | 100 | 49-157 | |
| Vinyl acetate | 10.0 | 7.85 | 78 | 46-161 | |
| Vinyl chloride | 10.0 | 8.68 | 87 | 53-127 | |
| tert-Butyl alcohol (TBA) | 100 | 95.3 | 95 | 70-130 | |
| Xylenes, Total | 20.0 | 19.9 | 100 | 80-120 | |
| Dibromochloromethane | 10.0 | 10.0 | 100 | 64-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7106.D

Lab ID: 240-49022-A-1 MS Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 10.0 | 0.44 U | 9.52 | 95 | 68-121 | |
| 1,1,2,2-Tetrachloroethane | 10.0 | 0.22 U | 9.34 | 93 | 63-122 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.0 | 0.45 U | 9.50 | 95 | 70-152 | |
| 1,1-Dichloroethane | 10.0 | 0.30 U | 9.95 | 99 | 79-120 | |
| 1,1-Dichloroethene | 10.0 | 0.45 U | 9.80 | 98 | 74-135 | |
| 1,2,4-Trichlorobenzene | 10.0 | 0.32 U | 7.42 | 74 | 38-138 | |
| 1,2-Dibromo-3-Chloropropane | 10.0 | 0.82 U | 9.35 | 93 | 32-139 | |
| 1,2-Dichlorobenzene | 10.0 | 0.25 U | 8.31 | 83 | 75-120 | |
| 1,2-Dichloroethane | 10.0 | 0.23 U | 9.78 | 98 | 68-129 | |
| 1,2-Dichloropropane | 10.0 | 0.25 U | 9.42 | 94 | 78-120 | |
| 1,3-Dichlorobenzene | 10.0 | 0.19 U | 7.90 | 79 | 73-120 | |
| 1,4-Dichlorobenzene | 10.0 | 0.27 U | 7.99 | 80 | 75-120 | |
| 2-Hexanone | 20.0 | 0.48 U | 18.8 | 94 | 47-139 | |
| Acetone | 20.0 | 1.8 J | 16.6 | 74 | 33-145 | |
| Benzene | 10.0 | 0.35 U | 9.51 | 95 | 72-121 | |
| Bromoform | 10.0 | 0.56 U | 8.57 | 86 | 32-128 | |
| Bromomethane | 10.0 | 0.44 U | 8.15 | 82 | 10-186 | |
| Carbon disulfide | 10.0 | 0.38 U | 9.72 | 97 | 57-147 | |
| Carbon tetrachloride | 10.0 | 0.43 U | 9.81 | 98 | 59-129 | |
| Chlorobenzene | 10.0 | 0.25 U | 8.56 | 86 | 80-120 | |
| Chloroethane | 10.0 | 0.32 U | 8.31 | 83 | 21-165 | |
| Chloroform | 10.0 | 0.25 U | 9.50 | 95 | 76-120 | |
| Chloromethane | 10.0 | 0.44 U | 8.01 | 80 | 33-132 | |
| cis-1,2-Dichloroethene | 10.0 | 0.26 U | 9.51 | 95 | 70-120 | |
| cis-1,3-Dichloropropene | 10.0 | 0.46 U | 9.20 | 92 | 51-120 | |
| Bromodichloromethane | 10.0 | 0.29 U | 9.04 | 90 | 67-120 | |
| Dichlorodifluoromethane | 10.0 | 0.32 U | 6.26 | 63 | 17-128 | |
| Ethylbenzene | 10.0 | 0.25 U | 8.69 | 87 | 75-120 | |
| 1,2-Dibromoethane | 10.0 | 0.32 U | 9.49 | 95 | 74-120 | |
| m-Xylene & p-Xylene | 10.0 | 0.24 U | 8.48 | 85 | 75-120 | |
| Isopropylbenzene | 10.0 | 0.35 U | 8.31 | 83 | 68-120 | |
| 2-Butanone (MEK) | 20.0 | 0.53 U | 18.6 | 93 | 54-129 | |
| 4-Methyl-2-pentanone (MIBK) | 20.0 | 0.99 U | 20.6 | 103 | 56-131 | |
| Methyl tert-butyl ether | 10.0 | 0.20 U | 10.1 | 101 | 46-144 | |
| Methylene Chloride | 10.0 | 0.33 U | 9.26 | 93 | 63-128 | |
| o-Xylene | 10.0 | 0.25 U | 8.84 | 88 | 76-120 | |
| Styrene | 10.0 | 0.45 U | 7.49 | 75 | 71-120 | |
| Tetrachloroethene | 10.0 | 0.31 U | 8.67 | 87 | 70-120 | |
| Toluene | 10.0 | 0.23 U | 9.03 | 90 | 78-120 | |
| trans-1,2-Dichloroethene | 10.0 | 0.30 U | 9.38 | 94 | 80-120 | |
| trans-1,3-Dichloropropene | 10.0 | 0.56 U | 9.63 | 96 | 46-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7106.D

Lab ID: 240-49022-A-1 MS Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | SAMPLE CONCENTRATION (ug/L) | MS CONCENTRATION (ug/L) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Trichloroethene | 10.0 | 0.22 U | 9.24 | 92 | 66-120 | |
| Trichlorofluoromethane | 10.0 | 0.49 U | 8.96 | 90 | 46-157 | |
| Vinyl chloride | 10.0 | 0.29 U | 8.04 | 80 | 49-130 | |
| Xylenes, Total | 20.0 | 0.52 U | 17.3 | 87 | 76-120 | |
| Dibromochloromethane | 10.0 | 0.43 U | 9.03 | 90 | 56-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7107.D

Lab ID: 240-49022-D-1 MSD Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 10.0 | 9.46 | 95 | 1 | 30 | 68-121 | |
| 1,1,2,2-Tetrachloroethane | 10.0 | 9.21 | 92 | 1 | 30 | 63-122 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.0 | 10.3 | 103 | 8 | 30 | 70-152 | |
| 1,1-Dichloroethane | 10.0 | 10.0 | 100 | 1 | 30 | 79-120 | |
| 1,1-Dichloroethene | 10.0 | 9.82 | 98 | 0 | 30 | 74-135 | |
| 1,2,4-Trichlorobenzene | 10.0 | 8.11 | 81 | 9 | 30 | 38-138 | |
| 1,2-Dibromo-3-Chloropropane | 10.0 | 9.10 | 91 | 3 | 30 | 32-139 | |
| 1,2-Dichlorobenzene | 10.0 | 8.43 | 84 | 2 | 30 | 75-120 | |
| 1,2-Dichloroethane | 10.0 | 9.68 | 97 | 1 | 30 | 68-129 | |
| 1,2-Dichloropropane | 10.0 | 9.38 | 94 | 0 | 30 | 78-120 | |
| 1,3-Dichlorobenzene | 10.0 | 8.32 | 83 | 5 | 30 | 73-120 | |
| 1,4-Dichlorobenzene | 10.0 | 8.34 | 83 | 4 | 30 | 75-120 | |
| 2-Hexanone | 20.0 | 19.9 | 99 | 6 | 30 | 47-139 | |
| Acetone | 20.0 | 17.0 | 76 | 3 | 30 | 33-145 | |
| Benzene | 10.0 | 9.43 | 94 | 1 | 30 | 72-121 | |
| Bromoform | 10.0 | 8.66 | 87 | 1 | 30 | 32-128 | |
| Bromomethane | 10.0 | 9.27 | 93 | 13 | 30 | 10-186 | |
| Carbon disulfide | 10.0 | 10.1 | 101 | 4 | 30 | 57-147 | |
| Carbon tetrachloride | 10.0 | 10.1 | 101 | 3 | 30 | 59-129 | |
| Chlorobenzene | 10.0 | 8.68 | 87 | 1 | 30 | 80-120 | |
| Chloroethane | 10.0 | 8.58 | 86 | 3 | 30 | 21-165 | |
| Chloroform | 10.0 | 9.36 | 94 | 1 | 30 | 76-120 | |
| Chloromethane | 10.0 | 8.20 | 82 | 2 | 30 | 33-132 | |
| cis-1,2-Dichloroethene | 10.0 | 9.63 | 96 | 1 | 30 | 70-120 | |
| cis-1,3-Dichloropropene | 10.0 | 9.25 | 92 | 1 | 30 | 51-120 | |
| Bromodichloromethane | 10.0 | 9.20 | 92 | 2 | 30 | 67-120 | |
| Dichlorodifluoromethane | 10.0 | 6.65 | 67 | 6 | 30 | 17-128 | |
| Ethylbenzene | 10.0 | 8.98 | 90 | 3 | 30 | 75-120 | |
| 1,2-Dibromoethane | 10.0 | 9.57 | 96 | 1 | 30 | 74-120 | |
| m-Xylene & p-Xylene | 10.0 | 8.80 | 88 | 4 | 30 | 75-120 | |
| Isopropylbenzene | 10.0 | 8.78 | 88 | 5 | 30 | 68-120 | |
| 2-Butanone (MEK) | 20.0 | 18.7 | 93 | 0 | 30 | 54-129 | |
| 4-Methyl-2-pentanone (MIBK) | 20.0 | 20.3 | 102 | 1 | 30 | 56-131 | |
| Methyl tert-butyl ether | 10.0 | 9.86 | 99 | 2 | 30 | 46-144 | |
| Methylene Chloride | 10.0 | 9.21 | 92 | 1 | 30 | 63-128 | |
| o-Xylene | 10.0 | 9.13 | 91 | 3 | 30 | 76-120 | |
| Styrene | 10.0 | 7.62 | 76 | 2 | 30 | 71-120 | |
| Tetrachloroethene | 10.0 | 8.92 | 89 | 3 | 30 | 70-120 | |
| Toluene | 10.0 | 9.17 | 92 | 1 | 30 | 78-120 | |
| trans-1,2-Dichloroethene | 10.0 | 9.71 | 97 | 3 | 30 | 80-120 | |
| trans-1,3-Dichloropropene | 10.0 | 9.77 | 98 | 1 | 30 | 46-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM7107.D

Lab ID: 240-49022-D-1 MSD Client ID:

| COMPOUND | SPIKE ADDED (ug/L) | MSD CONCENTRATION (ug/L) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Trichloroethene | 10.0 | 9.44 | 94 | 2 | 30 | 66-120 | |
| Trichlorofluoromethane | 10.0 | 9.75 | 97 | 8 | 30 | 46-157 | |
| Vinyl chloride | 10.0 | 7.97 | 80 | 1 | 30 | 49-130 | |
| Xylenes, Total | 20.0 | 17.9 | 90 | 3 | 30 | 76-120 | |
| Dibromochloromethane | 10.0 | 8.96 | 90 | 1 | 30 | 56-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8260B

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab File ID: UXM7085.D Lab Sample ID: MB 240-175730/6

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX16 Date Analyzed: 04/09/2015 12:06

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| | LCS 240-175730/4 | UXM7083.D | 04/09/2015 11:20 |
| TB-040615 | 240-49010-2 | UXM7102.D | 04/09/2015 18:34 |
| | 240-49022-A-1 MS | UXM7106.D | 04/09/2015 20:05 |
| | 240-49022-D-1 MSD | UXM7107.D | 04/09/2015 20:28 |

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab File ID: BFB4271.D BFB Injection Date: 04/08/2015

Instrument ID: A3UX16 BFB Injection Time: 12:22

Analysis Batch No.: 175603

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0 % of mass 95 | 15.2 | |
| 75 | 30.0 - 60.0 % of mass 95 | 43.6 | |
| 95 | Base Peak, 100% relative abundance | 100.0 | |
| 96 | 5.0 - 9.0 % of mass 95 | 6.3 | |
| 173 | Less than 2.0 % of mass 174 | 0.6 | (0.7)1 |
| 174 | 50.0 - 120.00 % of mass 95 | 89.8 | |
| 175 | 5.0 - 9.0 % of mass 174 | 5.9 | (6.6)1 |
| 176 | 95.0 - 101.0 % of mass 174 | 87.4 | (97.3)1 |
| 177 | 5.0 - 9.0 % of mass 176 | 5.5 | (6.2)2 |

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | STD8260 240-175603/2 | UXM7066.D | 04/08/2015 | 12:59 |
| | STD8260 240-175603/3 | UXM7067.D | 04/08/2015 | 13:22 |
| | STD8260 240-175603/4 | UXM7068.D | 04/08/2015 | 13:44 |
| | STD8260 240-175603/5 | UXM7069.D | 04/08/2015 | 14:07 |
| | STD8260 240-175603/6 | UXM7070.D | 04/08/2015 | 14:30 |
| | STD8260 240-175603/7 | UXM7071.D | 04/08/2015 | 14:53 |
| | ICV 240-175603/8 | UXM7072.D | 04/08/2015 | 15:15 |
| | STDA9 240-175603/9 | UXM7073.D | 04/08/2015 | 15:38 |
| | STDA9 240-175603/10 | UXM7074.D | 04/08/2015 | 16:01 |
| | STDA9 240-175603/11 | UXM7075.D | 04/08/2015 | 16:24 |
| | STDA9 240-175603/12 | UXM7076.D | 04/08/2015 | 16:46 |
| | STDA9 240-175603/13 | UXM7077.D | 04/08/2015 | 17:09 |
| | STDA9 240-175603/14 | UXM7078.D | 04/08/2015 | 17:32 |
| | ICV 240-175603/15 | UXM7079.D | 04/08/2015 | 17:55 |

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab File ID: BFB4272.D BFB Injection Date: 04/09/2015

Instrument ID: A3UX16 BFB Injection Time: 09:53

Analysis Batch No.: 175730

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0 % of mass 95 | 15.6 | |
| 75 | 30.0 - 60.0 % of mass 95 | 44.3 | |
| 95 | Base Peak, 100% relative abundance | 100.0 | |
| 96 | 5.0 - 9.0 % of mass 95 | 6.1 | |
| 173 | Less than 2.0 % of mass 174 | 0.7 | (0.7)1 |
| 174 | 50.0 - 120.00 % of mass 95 | 89.6 | |
| 175 | 5.0 - 9.0 % of mass 174 | 5.9 | (6.6)1 |
| 176 | 95.0 - 101.0 % of mass 174 | 86.2 | (96.2)1 |
| 177 | 5.0 - 9.0 % of mass 176 | 5.5 | (6.4)2 |

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | CCVIS 240-175730/2 | UXM7081.D | 04/09/2015 | 10:35 |
| | CCV 240-175730/3 | UXM7082.D | 04/09/2015 | 10:57 |
| | LCS 240-175730/4 | UXM7083.D | 04/09/2015 | 11:20 |
| | MB 240-175730/6 | UXM7085.D | 04/09/2015 | 12:06 |
| TB-040615 | 240-49010-2 | UXM7102.D | 04/09/2015 | 18:34 |
| | 240-49022-A-1 MS | UXM7106.D | 04/09/2015 | 20:05 |
| | 240-49022-D-1 MSD | UXM7107.D | 04/09/2015 | 20:28 |

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Sample No.: STD8260 240-175603/4 Date Analyzed: 04/08/2015 13:44

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM7068.D Heated Purge: (Y/N) N

Calibration ID: 27787

| | | FB | | CBZ | | DCB | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 1548065 | 5.59 | 1098353 | 8.28 | 639037 | 10.51 |
| UPPER LIMIT | | 3096130 | 6.09 | 2196706 | 8.78 | 1278074 | 11.01 |
| LOWER LIMIT | | 774033 | 5.09 | 549177 | 7.78 | 319519 | 10.01 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 240-175603/8 | | 1626133 | 5.59 | 1148226 | 8.28 | 645335 | 10.51 |
| ICV 240-175603/15 | | 1567926 | 5.59 | 1133432 | 8.28 | 599695 | 10.51 |
| CCVIS 240-175730/2 | | 1619605 | 5.59 | 1165506 | 8.28 | 663916 | 10.51 |

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8260B

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Sample No.: CCVIS 240-175730/2 Date Analyzed: 04/09/2015 10:35

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM7081.D Heated Purge: (Y/N) N

Calibration ID: 27790

| | | FB | | CBZ | | DCB | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 1619605 | 5.59 | 1165506 | 8.28 | 663916 | 10.51 |
| UPPER LIMIT | | 3239210 | 6.09 | 2331012 | 8.78 | 1327832 | 11.01 |
| LOWER LIMIT | | 809803 | 5.09 | 582753 | 7.78 | 331958 | 10.01 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| CCV 240-175730/3 | | 1607368 | 5.59 | 1138317 | 8.28 | 629349 | 10.51 |
| LCS 240-175730/4 | | 1619676 | 5.59 | 1168877 | 8.28 | 648310 | 10.51 |
| MB 240-175730/6 | | 1561297 | 5.59 | 1133994 | 8.28 | 583466 | 10.51 |
| 240-49010-2 | TB-040615 | 1505110 | 5.59 | 1081015 | 8.28 | 583866 | 10.51 |
| 240-49022-A-1 MS | | 1539715 | 5.59 | 1107286 | 8.28 | 617415 | 10.51 |
| 240-49022-D-1 MSD | | 1529772 | 5.59 | 1081252 | 8.28 | 612420 | 10.51 |

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8260B

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: TB-040615 | Lab Sample ID: 240-49010-2

Matrix: Water | Lab File ID: UXM7102.D

Analysis Method: 8260B | Date Collected: 04/06/2015 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 04/09/2015 18:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175730 | Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.28 | U | 1.0 | 0.28 |
| 71-55-6 | 1,1,1-Trichloroethane | 0.44 | U | 1.0 | 0.44 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.22 | U | 1.0 | 0.22 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.45 | U | 1.0 | 0.45 |
| 75-34-3 | 1,1-Dichloroethane | 0.30 | U | 1.0 | 0.30 |
| 75-35-4 | 1,1-Dichloroethene | 0.45 | U | 1.0 | 0.45 |
| 563-58-6 | 1,1-Dichloropropene | 0.42 | U | 1.0 | 0.42 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.37 | U | 1.0 | 0.37 |
| 96-18-4 | 1,2,3-Trichloropropane | 0.44 | U | 1.0 | 0.44 |
| 526-73-8 | 1,2,3-Trimethylbenzene | 0.47 | U | 5.0 | 0.47 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.32 | U | 1.0 | 0.32 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.41 | U | 1.0 | 0.41 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.82 | U | 2.0 | 0.82 |
| 95-50-1 | 1,2-Dichlorobenzene | 0.25 | U | 1.0 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | 0.23 | U | 1.0 | 0.23 |
| 78-87-5 | 1,2-Dichloropropane | 0.25 | U | 1.0 | 0.25 |
| 541-73-1 | 1,3-Dichlorobenzene | 0.19 | U | 1.0 | 0.19 |
| 142-28-9 | 1,3-Dichloropropane | 0.19 | U | 1.0 | 0.19 |
| 106-46-7 | 1,4-Dichlorobenzene | 0.27 | U | 1.0 | 0.27 |
| 594-20-7 | 2,2-Dichloropropane | 0.26 | U | 1.0 | 0.26 |
| 110-75-8 | 2-Chloroethyl vinyl ether | 0.59 | U | 10 | 0.59 |
| 95-49-8 | 2-Chlorotoluene | 0.40 | U | 1.0 | 0.40 |
| 591-78-6 | 2-Hexanone | 0.48 | U | 10 | 0.48 |
| 108-86-1 | Bromobenzene | 0.35 | U | 1.0 | 0.35 |
| 74-97-5 | Bromochloromethane | 0.50 | U | 1.0 | 0.50 |
| 106-43-4 | 4-Chlorotoluene | 0.29 | U | 1.0 | 0.29 |
| 99-87-6 | p-Isopropyltoluene | 0.43 | U | 1.0 | 0.43 |
| 67-64-1 | Acetone | 0.94 | U | 10 | 0.94 |
| 71-43-2 | Benzene | 0.35 | U | 1.0 | 0.35 |
| 75-25-2 | Bromoform | 0.56 | U | 1.0 | 0.56 |
| 74-83-9 | Bromomethane | 0.44 | U | 1.0 | 0.44 |
| 75-15-0 | Carbon disulfide | 0.38 | U | 1.0 | 0.38 |
| 56-23-5 | Carbon tetrachloride | 0.43 | U | 1.0 | 0.43 |
| 108-90-7 | Chlorobenzene | 0.25 | U | 1.0 | 0.25 |
| 75-00-3 | Chloroethane | 0.32 | U | 1.0 | 0.32 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: TB-040615 | Lab Sample ID: 240-49010-2

Matrix: Water | Lab File ID: UXM7102.D

Analysis Method: 8260B | Date Collected: 04/06/2015 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 04/09/2015 18:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175730 | Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 67-66-3 | Chloroform | 0.25 | U | 1.0 | 0.25 |
| 74-87-3 | Chloromethane | 0.44 | U | 1.0 | 0.44 |
| 156-59-2 | cis-1,2-Dichloroethene | 0.26 | U | 1.0 | 0.26 |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.46 | U | 1.0 | 0.46 |
| 87-68-3 | Hexachlorobutadiene | 0.35 | U | 1.0 | 0.35 |
| 74-95-3 | Dibromomethane | 0.42 | U | 1.0 | 0.42 |
| 75-27-4 | Bromodichloromethane | 0.29 | U | 1.0 | 0.29 |
| 75-71-8 | Dichlorodifluoromethane | 0.32 | U | 1.0 | 0.32 |
| 100-41-4 | Ethylbenzene | 0.25 | U | 1.0 | 0.25 |
| 106-93-4 | 1,2-Dibromoethane | 0.32 | U | 1.0 | 0.32 |
| 108-20-3 | Diisopropyl ether | 0.50 | U | 10 | 0.50 |
| 91-20-3 | Naphthalene | 0.45 | U | 1.0 | 0.45 |
| 179601-23-1 | m-Xylene & p-Xylene | 0.24 | U | 2.0 | 0.24 |
| 104-51-8 | n-Butylbenzene | 0.31 | U | 1.0 | 0.31 |
| 98-82-8 | Isopropylbenzene | 0.35 | U | 1.0 | 0.35 |
| 103-65-1 | N-Propylbenzene | 0.40 | U | 1.0 | 0.40 |
| 78-93-3 | 2-Butanone (MEK) | 0.53 | U | 10 | 0.53 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 0.99 | U | 10 | 0.99 |
| 135-98-8 | sec-Butylbenzene | 0.48 | U | 1.0 | 0.48 |
| 1634-04-4 | Methyl tert-butyl ether | 0.20 | U | 1.0 | 0.20 |
| 994-05-8 | Tert-amyl methyl ether | 0.30 | U | 5.0 | 0.30 |
| 75-09-2 | Methylene Chloride | 0.33 | U | 1.0 | 0.33 |
| 95-47-6 | o-Xylene | 0.25 | U | 1.0 | 0.25 |
| 100-42-5 | Styrene | 0.45 | U | 1.0 | 0.45 |
| 637-92-3 | Ethyl t-butyl ether | 0.23 | U | 5.0 | 0.23 |
| 98-06-6 | tert-Butylbenzene | 0.41 | U | 1.0 | 0.41 |
| 127-18-4 | Tetrachloroethene | 0.31 | U | 1.0 | 0.31 |
| 108-88-3 | Toluene | 0.23 | U | 1.0 | 0.23 |
| 156-60-5 | trans-1,2-Dichloroethene | 0.30 | U | 1.0 | 0.30 |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.56 | U | 1.0 | 0.56 |
| 79-01-6 | Trichloroethene | 0.22 | U | 1.0 | 0.22 |
| 75-69-4 | Trichlorofluoromethane | 0.49 | U | 1.0 | 0.49 |
| 108-05-4 | Vinyl acetate | 0.41 | U | 2.0 | 0.41 |
| 75-01-4 | Vinyl chloride | 0.29 | U | 1.0 | 0.29 |
| 75-65-0 | tert-Butyl alcohol (TBA) | 4.9 | U | 50 | 4.9 |
| 1330-20-7 | Xylenes, Total | 0.52 | U | 2.0 | 0.52 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: TB-040615 | Lab Sample ID: 240-49010-2

Matrix: Water | Lab File ID: UXM7102.D

Analysis Method: 8260B | Date Collected: 04/06/2015 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 04/09/2015 18:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175730 | Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | 0.43 | U | 1.0 | 0.43 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 95 | | 63-129 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 100 | | 66-120 |
| 2037-26-5 | Toluene-d8 (Surr) | 94 | | 74-120 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 92 | | 75-121 |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27787

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-175603/7 | UXM7071.D |
| Level 2 | STD8260 240-175603/6 | UXM7070.D |
| Level 3 | STD8260 240-175603/5 | UXM7069.D |
| Level 4 | STD8260 240-175603/4 | UXM7068.D |
| Level 5 | STD8260 240-175603/3 | UXM7067.D |
| Level 6 | STD8260 240-175603/2 | UXM7066.D |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Dichlorodifluoromethane | 0.1833<br>0.2041 | 0.1781 | 0.1744 | 0.1568 | 0.2090 | Ave | | 0.1843 | | | | 10.6 | | 15.0 | | | |
| Chloromethane | 0.2517<br>0.2544 | 0.2624 | 0.2546 | 0.2508 | 0.2480 | Ave | | 0.2536 | | | 0.1000 | 1.9 | | 15.0 | | | |
| Vinyl chloride | 0.2837<br>0.2921 | 0.2803 | 0.2773 | 0.2582 | 0.2802 | Ave | | 0.2786 | | | | 4.0 | | 15.0 | | | |
| Butadiene | 0.2508<br>0.2658 | 0.2588 | 0.2486 | 0.2172 | 0.2639 | Ave | | 0.2509 | | | | 7.1 | | 15.0 | | | |
| Bromomethane | 0.1508<br>0.1269 | 0.1380 | 0.1275 | 0.1338 | 0.1289 | Ave | | 0.1343 | | | | 6.8 | | 15.0 | | | |
| Chloroethane | 0.1685<br>0.1630 | 0.1697 | 0.1592 | 0.1588 | 0.1615 | Ave | | 0.1634 | | | | 2.8 | | 15.0 | | | |
| Dichlorofluoromethane | 0.3803<br>0.3626 | 0.3786 | 0.3496 | 0.3636 | 0.3596 | Ave | | 0.3657 | | | | 3.2 | | 15.0 | | | |
| Trichlorofluoromethane | 0.2373<br>0.2626 | 0.2504 | 0.2297 | 0.2163 | 0.2607 | Ave | | 0.2428 | | | | 7.5 | | 15.0 | | | |
| Ethyl ether | 0.1803<br>0.1824 | 0.1847 | 0.1741 | 0.1841 | 0.1760 | Ave | | 0.1803 | | | | 2.4 | | 15.0 | | | |
| Acrolein | 0.0215<br>0.0247 | 0.0233 | 0.0240 | 0.0216 | 0.0247 | Ave | | 0.0233 | | | | 6.2 | | 15.0 | | | |
| 1,1-Dichloroethene | 0.2005<br>0.2123 | 0.1917 | 0.1993 | 0.2051 | 0.2048 | Ave | | 0.2023 | | | | 3.4 | | 15.0 | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.1546<br>0.1634 | 0.1426 | 0.1497 | 0.1644 | 0.1685 | Ave | | 0.1572 | | | | 6.3 | | 15.0 | | | |
| Acetone | 0.0710<br>0.0550 | 0.0645 | 0.0573 | 0.0573 | 0.0576 | Ave | | 0.0604 | | | | 10.1 | | 15.0 | | | |
| Iodomethane | 0.3228<br>0.3200 | 0.3186 | 0.3109 | 0.3321 | 0.3049 | Ave | | 0.3182 | | | | 3.0 | | 15.0 | | | |
| Carbon disulfide | 0.6144<br>0.6473 | 0.6200 | 0.6167 | 0.6180 | 0.6164 | Ave | | 0.6221 | | | | 2.0 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27787

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 3-Chloro-1-propene | 0.1334<br>0.1427 | 0.1387 | 0.1342 | 0.1426 | 0.1349 | Ave | | 0.1377 | | | | 3.1 | | 15.0 | | | |
| Methyl acetate | 0.1300<br>0.1383 | 0.1321 | 0.1294 | 0.1357 | 0.1337 | Ave | | 0.1332 | | | | 2.6 | | 15.0 | | | |
| Methylene Chloride | 0.3536<br>0.2403 | 0.2921 | 0.2540 | 0.2585 | 0.2339 | Lin1 | 0.1164 | 0.2357 | | | | | | | 0.9990 | | 0.9900 |
| tert-Butyl alcohol (TBA) | 0.0132<br>0.0125 | 0.0133 | 0.0123 | 0.0127 | 0.0127 | Ave | | 0.0128 | | | | 3.0 | | 15.0 | | | |
| Acrylonitrile | 0.0675<br>0.0726 | 0.0660 | 0.0653 | 0.0723 | 0.0711 | Ave | | 0.0691 | | | | 4.8 | | 15.0 | | | |
| trans-1,2-Dichloroethene | 0.2473<br>0.2416 | 0.2540 | 0.2379 | 0.2443 | 0.2312 | Ave | | 0.2427 | | | | 3.2 | | 15.0 | | | |
| Methyl tert-butyl ether | 0.5747<br>0.6168 | 0.5772 | 0.5867 | 0.6059 | 0.5892 | Ave | | 0.5917 | | | | 2.8 | | 15.0 | | | |
| Hexane | 0.0550<br>0.0638 | 0.0504 | 0.0570 | 0.0601 | 0.0649 | Ave | | 0.0585 | | | | 9.4 | | 15.0 | | | |
| 1,1-Dichloroethane | 0.4018<br>0.4100 | 0.3831 | 0.3874 | 0.4100 | 0.3890 | Ave | | 0.3969 | | | 0.1000 | 3.0 | | 15.0 | | | |
| Vinyl acetate | 0.1646<br>0.1765 | 0.1621 | 0.1610 | 0.1725 | 0.1681 | Ave | | 0.1675 | | | | 3.6 | | 15.0 | | | |
| 2-Butanone (MEK) | 0.0747<br>0.0760 | 0.0750 | 0.0727 | 0.0760 | 0.0766 | Ave | | 0.0752 | | | | 1.9 | | 15.0 | | | |
| cis-1,2-Dichloroethene | 0.2507<br>0.2661 | 0.2645 | 0.2547 | 0.2694 | 0.2488 | Ave | | 0.2590 | | | | 3.4 | | 15.0 | | | |
| 2,2-Dichloropropane | 0.2655<br>0.2497 | 0.2482 | 0.2589 | 0.2602 | 0.2434 | Ave | | 0.2543 | | | | 3.3 | | 15.0 | | | |
| Bromochloromethane | 0.1265<br>0.1238 | 0.1168 | 0.1176 | 0.1275 | 0.1170 | Ave | | 0.1215 | | | | 4.1 | | 15.0 | | | |
| Tetrahydrofuran | 0.0510<br>0.0477 | 0.0502 | 0.0452 | 0.0467 | 0.0464 | Ave | | 0.0479 | | | | 4.8 | | 15.0 | | | |
| Chloroform | 0.3796<br>0.3964 | 0.3849 | 0.3953 | 0.4052 | 0.3705 | Ave | | 0.3887 | | | | 3.3 | | 15.0 | | | |
| 1,1,1-Trichloroethane | 0.2899<br>0.3024 | 0.2855 | 0.2972 | 0.3084 | 0.2910 | Ave | | 0.2957 | | | | 2.9 | | 15.0 | | | |
| Cyclohexane | 0.3496<br>0.3871 | 0.3268 | 0.3615 | 0.3732 | 0.3956 | Ave | | 0.3656 | | | | 6.9 | | 15.0 | | | |
| 1,1-Dichloropropene | 0.2946<br>0.3099 | 0.3016 | 0.2962 | 0.2984 | 0.2972 | Ave | | 0.2996 | | | | 1.8 | | 15.0 | | | |
| Carbon tetrachloride | 0.2280<br>0.2579 | 0.2402 | 0.2379 | 0.2447 | 0.2479 | Ave | | 0.2428 | | | | 4.2 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27787

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Isobutyl alcohol | 0.0045<br>0.0044 | 0.0046 | 0.0043 | 0.0044 | 0.0044 | Ave | | 0.0044 | | | | 2.4 | | 15.0 | | | |
| 1,2-Dichloroethane | 0.2488<br>0.2792 | 0.2747 | 0.2705 | 0.2842 | 0.2650 | Ave | | 0.2704 | | | | 4.6 | | 15.0 | | | |
| Benzene | 0.9963<br>1.0421 | 0.9831 | 0.9902 | 1.0340 | 0.9655 | Ave | | 1.0019 | | | | 3.0 | | 15.0 | | | |
| n-Heptane | 0.4108<br>0.1539 | 0.2574 | 0.1957 | 0.1662 | 0.1711 | Lin1 | 0.2434 | 0.1498 | | | | | | | 0.9980 | | 0.9900 |
| Trichloroethene | 0.2482<br>0.2624 | 0.2520 | 0.2554 | 0.2625 | 0.2472 | Ave | | 0.2546 | | | | 2.6 | | 15.0 | | | |
| Methylcyclohexane | 0.3760<br>0.4084 | 0.3601 | 0.3743 | 0.3879 | 0.4198 | Ave | | 0.3877 | | | | 5.8 | | 15.0 | | | |
| 1,2-Dichloropropane | 0.2116<br>0.2377 | 0.2235 | 0.2308 | 0.2357 | 0.2207 | Ave | | 0.2267 | | | | 4.4 | | 15.0 | | | |
| Dibromomethane | 0.1112<br>0.1252 | 0.1202 | 0.1186 | 0.1268 | 0.1197 | Ave | | 0.1203 | | | | 4.6 | | 15.0 | | | |
| 1,4-Dioxane | 0.0014<br>0.0017 | 0.0017 | 0.0017 | 0.0017 | 0.0017 | Ave | | 0.0017 | | | | 7.0 | | 15.0 | | | |
| Bromodichloromethane | 0.2601<br>0.2993 | 0.2722 | 0.2736 | 0.2929 | 0.2728 | Ave | | 0.2785 | | | | 5.3 | | 15.0 | | | |
| 2-Chloroethyl vinyl ether | 0.1069<br>0.1290 | 0.1150 | 0.1168 | 0.1249 | 0.1236 | Ave | | 0.1194 | | | | 6.7 | | 15.0 | | | |
| cis-1,3-Dichloropropene | 0.2996<br>0.3589 | 0.3198 | 0.3178 | 0.3421 | 0.3297 | Ave | | 0.3280 | | | | 6.3 | | 15.0 | | | |
| 4-Methyl-2-pentanone (MIBK) | 0.1423<br>0.1538 | 0.1486 | 0.1430 | 0.1525 | 0.1512 | Ave | | 0.1486 | | | | 3.3 | | 15.0 | | | |
| Toluene | 1.4247<br>1.5718 | 1.4555 | 1.4684 | 1.5094 | 1.4540 | Ave | | 1.4806 | | | | 3.5 | | 15.0 | | | |
| trans-1,3-Dichloropropene | 0.3439<br>0.4051 | 0.3727 | 0.3697 | 0.3854 | 0.3793 | Ave | | 0.3760 | | | | 5.4 | | 15.0 | | | |
| Ethyl methacrylate | 0.2923<br>0.3233 | 0.2909 | 0.2973 | 0.3095 | 0.3102 | Ave | | 0.3039 | | | | 4.2 | | 15.0 | | | |
| 1,1,2-Trichloroethane | 0.2707<br>0.2654 | 0.2634 | 0.2612 | 0.2725 | 0.2605 | Ave | | 0.2656 | | | | 1.9 | | 15.0 | | | |
| 1,3-Dichloropropane | 0.4657<br>0.4872 | 0.4534 | 0.4672 | 0.4845 | 0.4670 | Ave | | 0.4708 | | | | 2.7 | | 15.0 | | | |
| Tetrachloroethene | 0.2854<br>0.2886 | 0.2689 | 0.2748 | 0.2870 | 0.2778 | Ave | | 0.2804 | | | | 2.8 | | 15.0 | | | |
| 2-Hexanone | 0.1440<br>0.1445 | 0.1434 | 0.1447 | 0.1443 | 0.1474 | Ave | | 0.1447 | | | | 1.0 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27787

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Dibromochloromethane | 0.2611<br>0.3026 | 0.2588 | 0.2617 | 0.2728 | 0.2748 | Ave | | 0.2720 | | | | 6.0 | | 15.0 | | | |
| 1,2-Dibromoethane | 0.2394<br>0.2611 | 0.2528 | 0.2444 | 0.2649 | 0.2503 | Ave | | 0.2521 | | | | 3.8 | | 15.0 | | | |
| Chlorobenzene | 0.9603<br>0.9689 | 0.9350 | 0.9438 | 0.9738 | 0.9128 | Ave | | 0.9491 | | | 0.3000 | 2.4 | | 15.0 | | | |
| 1,1,1,2-Tetrachloroethane | 0.2861<br>0.3202 | 0.2998 | 0.2980 | 0.3138 | 0.2947 | Ave | | 0.3021 | | | | 4.2 | | 15.0 | | | |
| Ethylbenzene | 0.4672<br>0.5352 | 0.5035 | 0.5112 | 0.5240 | 0.5046 | Ave | | 0.5076 | | | | 4.6 | | 15.0 | | | |
| m-Xylene & p-Xylene | 0.5783<br>0.6653 | 0.6454 | 0.6325 | 0.6657 | 0.6261 | Ave | | 0.6356 | | | | 5.1 | | 15.0 | | | |
| o-Xylene | 0.5843<br>0.6555 | 0.5765 | 0.6126 | 0.6501 | 0.6056 | Ave | | 0.6141 | | | | 5.3 | | 15.0 | | | |
| Styrene | 0.9252<br>1.0625 | 0.9554 | 0.9576 | 1.0266 | 0.9787 | Ave | | 0.9843 | | | | 5.2 | | 15.0 | | | |
| Bromoform | 0.1498<br>0.1896 | 0.1497 | 0.1590 | 0.1714 | 0.1748 | Ave | | 0.1657 | | | 0.1000 | 9.5 | | 15.0 | | | |
| Isopropylbenzene | 1.5435<br>1.7660 | 1.5369 | 1.5930 | 1.6826 | 1.6262 | Ave | | 1.6247 | | | | 5.4 | | 15.0 | | | |
| 1,1,2,2-Tetrachloroethane | 0.6061<br>0.5908 | 0.5888 | 0.5615 | 0.5956 | 0.5777 | Ave | | 0.5868 | | | 0.3000 | 2.6 | | 15.0 | | | |
| Bromobenzene | 0.7526<br>0.7383 | 0.7366 | 0.7011 | 0.7216 | 0.6869 | Ave | | 0.7228 | | | | 3.4 | | 15.0 | | | |
| 1,2,3-Trichloropropane | 0.1800<br>0.1810 | 0.1968 | 0.1757 | 0.1820 | 0.1785 | Ave | | 0.1823 | | | | 4.1 | | 15.0 | | | |
| trans-1,4-Dichloro-2-butene | 0.1513<br>0.1508 | 0.1307 | 0.1391 | 0.1422 | 0.1464 | Ave | | 0.1434 | | | | 5.5 | | 15.0 | | | |
| N-Propylbenzene | 0.7824<br>0.8278 | 0.7676 | 0.7975 | 0.7939 | 0.7805 | Ave | | 0.7916 | | | | 2.6 | | 15.0 | | | |
| 2-Chlorotoluene | 0.7373<br>0.6951 | 0.6650 | 0.6740 | 0.6840 | 0.6452 | Ave | | 0.6834 | | | | 4.6 | | 15.0 | | | |
| 1,3,5-Trimethylbenzene | 2.3143<br>2.5771 | 2.3696 | 2.3861 | 2.4000 | 2.3390 | Ave | | 2.3977 | | | | 3.9 | | 15.0 | | | |
| 4-Chlorotoluene | 0.7520<br>0.7364 | 0.7207 | 0.7475 | 0.7196 | 0.6860 | Ave | | 0.7270 | | | | 3.3 | | 15.0 | | | |
| tert-Butylbenzene | 2.0967<br>2.2264 | 1.9952 | 2.0926 | 2.0850 | 2.0441 | Ave | | 2.0900 | | | | 3.7 | | 15.0 | | | |
| 1,2,4-Trimethylbenzene | 2.4434<br>2.6940 | 2.4789 | 2.4417 | 2.5599 | 2.4309 | Ave | | 2.5081 | | | | 4.1 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27787

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| sec-Butylbenzene | 3.0228<br>3.2181 | 2.8658 | 2.9969 | 3.0086 | 2.9700 | Ave | | 3.0137 | | | | 3.8 | | 15.0 | | | |
| 1,3-Dichlorobenzene | 1.4178<br>1.4588 | 1.4468 | 1.4062 | 1.4177 | 1.3387 | Ave | | 1.4143 | | | | 3.0 | | 15.0 | | | |
| p-Isopropyltoluene | 2.6290<br>2.8568 | 2.5110 | 2.5616 | 2.6250 | 2.5941 | Ave | | 2.6296 | | | | 4.6 | | 15.0 | | | |
| 1,4-Dichlorobenzene | 1.5483<br>1.4920 | 1.4035 | 1.4295 | 1.4519 | 1.3664 | Ave | | 1.4486 | | | | 4.5 | | 15.0 | | | |
| n-Butylbenzene | 2.0632<br>2.3894 | 2.1608 | 2.1481 | 2.2375 | 2.1731 | Ave | | 2.1953 | | | | 5.0 | | 15.0 | | | |
| 1,2-Dichlorobenzene | 1.3829<br>1.3600 | 1.3509 | 1.3013 | 1.3534 | 1.2795 | Ave | | 1.3380 | | | | 2.9 | | 15.0 | | | |
| 1,2-Dibromo-3-Chloropropane | 0.0879<br>0.1062 | 0.0925 | 0.0937 | 0.1035 | 0.1059 | Ave | | 0.0983 | | | | 8.0 | | 15.0 | | | |
| 1,2,4-Trichlorobenzene | 0.8049<br>0.8643 | 0.8367 | 0.8059 | 0.8563 | 0.8197 | Ave | | 0.8313 | | | | 3.1 | | 15.0 | | | |
| Hexachlorobutadiene | 0.3756<br>0.3321 | 0.3394 | 0.3346 | 0.3519 | 0.3344 | Ave | | 0.3447 | | | | 4.9 | | 15.0 | | | |
| Naphthalene | 1.7275<br>1.8957 | 1.7546 | 1.7541 | 1.8123 | 1.8417 | Ave | | 1.7977 | | | | 3.6 | | 15.0 | | | |
| 1,2,3-Trichlorobenzene | 0.7772<br>0.7381 | 0.7117 | 0.7428 | 0.7603 | 0.7300 | Ave | | 0.7434 | | | | 3.1 | | 15.0 | | | |
| Dibromofluoromethane (Surr) | 0.2071<br>0.2051 | 0.2005 | 0.1961 | 0.1941 | 0.1965 | Ave | | 0.1999 | | | | 2.6 | | 15.0 | | | |
| 1,2-Dichloroethane-d4 (Surr) | 0.2362<br>0.2240 | 0.2190 | 0.2141 | 0.2115 | 0.2138 | Ave | | 0.2198 | | | | 4.2 | | 15.0 | | | |
| Toluene-d8 (Surr) | 1.1963<br>1.2683 | 1.1869 | 1.1733 | 1.1439 | 1.1943 | Ave | | 1.1938 | | | | 3.5 | | 15.0 | | | |
| 4-Bromofluorobenzene (Surr) | 0.4380<br>0.4362 | 0.4242 | 0.4298 | 0.4207 | 0.4229 | Ave | | 0.4286 | | | | 1.7 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27787

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-175603/7 | UXM7071.D |
| Level 2 | STD8260 240-175603/6 | UXM7070.D |
| Level 3 | STD8260 240-175603/5 | UXM7069.D |
| Level 4 | STD8260 240-175603/4 | UXM7068.D |
| Level 5 | STD8260 240-175603/3 | UXM7067.D |
| Level 6 | STD8260 240-175603/2 | UXM7066.D |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| Dichlorodifluoromethane | FB | Ave | 28917<br>1337941 | 55676 | 140857 | 242698 | 654342 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Chloromethane | FB | Ave | 39695<br>1668028 | 82030 | 205715 | 388184 | 776582 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Vinyl chloride | FB | Ave | 44743<br>1914766 | 87630 | 223994 | 399722 | 877355 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Butadiene | FB | Ave | 39558<br>1742621 | 80915 | 200871 | 336247 | 826213 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Bromomethane | FB | Ave | 23786<br>832148 | 43161 | 103009 | 207068 | 403753 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Chloroethane | FB | Ave | 26576<br>1068302 | 53063 | 128633 | 245799 | 505635 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Dichlorofluoromethane | FB | Ave | 59976<br>2377077 | 118360 | 282460 | 562834 | 1126131 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Trichlorofluoromethane | FB | Ave | 37426<br>1721199 | 78305 | 185528 | 334848 | 816184 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Ethyl ether | FB | Ave | 28439<br>1195543 | 57764 | 140678 | 285000 | 551195 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Acrolein | FB | Ave | 16994<br>810121 | 36457 | 96810 | 166842 | 387150 | 5.00<br>200 | 10.0 | 25.0 | 50.0 | 100 |
| 1,1-Dichloroethene | FB | Ave | 31625<br>1391709 | 59936 | 161038 | 317431 | 641262 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroetha ne | FB | Ave | 24378<br>1071088 | 44591 | 120932 | 254560 | 527554 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Acetone | FB | Ave | 22402<br>720650 | 40303 | 92528 | 177442 | 360826 | 2.00<br>80.0 | 4.00 | 10.0 | 20.0 | 40.0 |
| Iodomethane | FB | Ave | 50914<br>2097802 | 99607 | 251156 | 514079 | 954782 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Carbon disulfide | FB | Ave | 96908<br>4243718 | 193845 | 498244 | 956729 | 1930056 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 3-Chloro-1-propene | FB | Ave | 21041<br>935602 | 43357 | 108379 | 220761 | 422434 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27787

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| Methyl acetate | FB | Ave | 102515<br>4532585 | 206540 | 522740 | 1050530 | 2092779 | 5.00<br>200 | 10.0 | 25.0 | 50.0 | 100 |
| Methylene Chloride | FB | Lin1 | 55764<br>1575545 | 91345 | 205234 | 400235 | 732381 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| tert-Butyl alcohol (TBA) | FB | Ave | 20864<br>821282 | 41529 | 99599 | 196624 | 398073 | 10.0<br>400 | 20.0 | 50.0 | 100 | 200 |
| Acrylonitrile | FB | Ave | 106416<br>4762499 | 206234 | 527388 | 1119754 | 2227630 | 10.0<br>400 | 20.0 | 50.0 | 100 | 200 |
| trans-1,2-Dichloroethene | FB | Ave | 39000<br>1584112 | 79405 | 192169 | 378226 | 724105 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Methyl tert-butyl ether | FB | Ave | 90640<br>4043206 | 180473 | 473972 | 937984 | 1844898 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Hexane | FB | Ave | 8682<br>418195 | 15768 | 46020 | 93096 | 203111 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,1-Dichloroethane | FB | Ave | 63377<br>2687459 | 119780 | 312956 | 634661 | 1218029 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Vinyl acetate | FB | Ave | 24926<br>1110740 | 48645 | 124883 | 256374 | 505225 | 0.960<br>38.4 | 1.92 | 4.80 | 9.60 | 19.2 |
| 2-Butanone (MEK) | FB | Ave | 23553<br>995821 | 46903 | 117472 | 235342 | 479775 | 2.00<br>80.0 | 4.00 | 10.0 | 20.0 | 40.0 |
| cis-1,2-Dichloroethene | FB | Ave | 39548<br>1744211 | 82689 | 205785 | 417073 | 779088 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 2,2-Dichloropropane | FB | Ave | 41868<br>1637169 | 77591 | 209114 | 402860 | 762113 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Bromochloromethane | FB | Ave | 19945<br>811318 | 36532 | 95005 | 197438 | 366316 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Tetrahydrofuran | FB | Ave | 16100<br>625734 | 31410 | 73033 | 144627 | 290335 | 2.00<br>80.0 | 4.00 | 10.0 | 20.0 | 40.0 |
| Chloroform | FB | Ave | 59879<br>2598769 | 120340 | 319367 | 627339 | 1160076 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,1,1-Trichloroethane | FB | Ave | 45727<br>1982397 | 89274 | 240082 | 477408 | 911244 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Cyclohexane | FB | Ave | 55140<br>2537686 | 102189 | 292014 | 577795 | 1238714 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,1-Dichloropropene | FB | Ave | 46457<br>2031242 | 94286 | 239308 | 461974 | 930586 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Carbon tetrachloride | FB | Ave | 35954<br>1690925 | 75098 | 192165 | 378785 | 776323 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Isobutyl alcohol | FB | Ave | 17879<br>728819 | 35877 | 86934 | 168927 | 345672 | 25.0<br>1000 | 50.0 | 125 | 250 | 500 |
| 1,2-Dichloroethane | FB | Ave | 39243<br>1830226 | 85876 | 218533 | 439901 | 829916 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27787

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| Benzene | FB | Ave | 157136<br>6831596 | 307377 | 799946 | 1600731 | 3023331 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| n-Heptane | FB | Lin1 | 64799<br>1008824 | 80485 | 158070 | 257320 | 535664 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Trichloroethene | FB | Ave | 39145<br>1720443 | 78784 | 206338 | 406306 | 774022 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Methylcyclohexane | FB | Ave | 59299<br>2677033 | 112582 | 302407 | 600527 | 1314375 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,2-Dichloropropane | FB | Ave | 33374<br>1558233 | 69884 | 186424 | 364937 | 691031 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Dibromomethane | FB | Ave | 17545<br>820681 | 37594 | 95833 | 196259 | 374840 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,4-Dioxane | FB | Ave | 4528<br>216590 | 10888 | 27293 | 53729 | 107755 | 20.0<br>800 | 40.0 | 100 | 200 | 400 |
| Bromodichloromethane | FB | Ave | 41017<br>1962005 | 85112 | 220994 | 453434 | 854238 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 2-Chloroethyl vinyl ether | FB | Ave | 33706<br>1691518 | 71924 | 188701 | 386667 | 774211 | 2.00<br>80.0 | 4.00 | 10.0 | 20.0 | 40.0 |
| cis-1,3-Dichloropropene | FB | Ave | 47246<br>2352543 | 99996 | 256701 | 529653 | 1032269 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 4-Methyl-2-pentanone (MIBK) | FB | Ave | 44881<br>2016114 | 92946 | 231016 | 472020 | 947026 | 2.00<br>80.0 | 4.00 | 10.0 | 20.0 | 40.0 |
| Toluene | CBZ | Ave | 158809<br>7321596 | 327977 | 836157 | 1657841 | 3233786 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| trans-1,3-Dichloropropene | CBZ | Ave | 38332<br>1886900 | 83980 | 210531 | 423296 | 843701 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Ethyl methacrylate | CBZ | Ave | 32579<br>1506095 | 65551 | 169293 | 339950 | 689972 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,1,2-Trichloroethane | CBZ | Ave | 30179<br>1236313 | 59363 | 148725 | 299335 | 579355 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,3-Dichloropropane | CBZ | Ave | 51904<br>2269203 | 102163 | 266053 | 532175 | 1038725 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Tetrachloroethene | CBZ | Ave | 31809<br>1344334 | 60595 | 156477 | 315179 | 617820 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 2-Hexanone | CBZ | Ave | 32101<br>1345845 | 64637 | 164796 | 316954 | 655516 | 2.00<br>80.0 | 4.00 | 10.0 | 20.0 | 40.0 |
| Dibromochloromethane | CBZ | Ave | 29103<br>1409447 | 58315 | 149029 | 299624 | 611228 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,2-Dibromoethane | CBZ | Ave | 26687<br>1216021 | 56955 | 139164 | 290915 | 556631 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Chlorobenzene | CBZ | Ave | 107038<br>4513086 | 210696 | 537400 | 1069581 | 2030052 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27787

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| 1,1,1,2-Tetrachloroethane | CBZ | Ave | 31888<br>1491712 | 67561 | 169683 | 344706 | 655526 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Ethylbenzene | CBZ | Ave | 52078<br>2492722 | 113464 | 291113 | 575507 | 1122373 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| m-Xylene & p-Xylene | CBZ | Ave | 64465<br>3099024 | 145431 | 360143 | 731190 | 1392483 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| o-Xylene | CBZ | Ave | 65124<br>3053079 | 129904 | 348841 | 714012 | 1346892 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Styrene | CBZ | Ave | 103130<br>4949000 | 215294 | 545252 | 1127566 | 2176702 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Bromoform | CBZ | Ave | 16692<br>882996 | 33744 | 90533 | 188261 | 388875 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Isopropylbenzene | CBZ | Ave | 172044<br>8225855 | 346325 | 907101 | 1848075 | 3616868 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,1,2,2-Tetrachloroethane | DCB | Ave | 36065<br>1553377 | 71837 | 179157 | 380619 | 739115 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Bromobenzene | DCB | Ave | 44780<br>1941323 | 89860 | 223701 | 461127 | 878811 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,2,3-Trichloropropane | DCB | Ave | 10712<br>476037 | 24014 | 56075 | 116273 | 228346 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| trans-1,4-Dichloro-2-butene | DCB | Ave | 9003<br>396411 | 15946 | 44369 | 90862 | 187283 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| N-Propylbenzene | DCB | Ave | 46555<br>2176692 | 93650 | 254462 | 507345 | 998554 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 2-Chlorotoluene | DCB | Ave | 43871<br>1827779 | 81124 | 215043 | 437074 | 825480 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,3,5-Trimethylbenzene | DCB | Ave | 137702<br>6776517 | 289090 | 761323 | 1533706 | 2992535 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 4-Chlorotoluene | DCB | Ave | 44743<br>1936347 | 87928 | 238520 | 459872 | 877636 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| tert-Butylbenzene | DCB | Ave | 124757<br>5854333 | 243411 | 667699 | 1332376 | 2615271 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,2,4-Trimethylbenzene | DCB | Ave | 145383<br>7083933 | 302427 | 779068 | 1635840 | 3110140 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| sec-Butylbenzene | DCB | Ave | 179857<br>8462061 | 349623 | 956212 | 1922604 | 3799898 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,3-Dichlorobenzene | DCB | Ave | 84359<br>3835946 | 176506 | 448685 | 905984 | 1712753 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| p-Isopropyltoluene | DCB | Ave | 156428<br>7511918 | 306339 | 817341 | 1677489 | 3318892 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,4-Dichlorobenzene | DCB | Ave | 92128<br>3923201 | 171223 | 456122 | 927811 | 1748229 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 12:59 Calibration End Date: 04/08/2015 14:53 Calibration ID: 27787

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| n-Butylbenzene | DCB | Ave | 122761<br>6282819 | 263622 | 685404 | 1429823 | 2780296 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,2-Dichlorobenzene | DCB | Ave | 82283<br>3576090 | 164804 | 415221 | 864865 | 1637059 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,2-Dibromo-3-Chloropropane | DCB | Ave | 5233<br>279200 | 11289 | 29908 | 66116 | 135520 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,2,4-Trichlorobenzene | DCB | Ave | 47895<br>2272778 | 102074 | 257150 | 547207 | 1048708 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Hexachlorobutadiene | DCB | Ave | 22350<br>873236 | 41409 | 106764 | 224846 | 427869 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Naphthalene | DCB | Ave | 102789<br>4984706 | 214063 | 559666 | 1158120 | 2356360 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,2,3-Trichlorobenzene | DCB | Ave | 46243<br>1940882 | 86828 | 237020 | 485845 | 933941 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Dibromofluoromethane (Surr) | FB | Ave | 32663<br>1344293 | 62674 | 158433 | 300503 | 615314 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,2-Dichloroethane-d4 (Surr) | FB | Ave | 37257<br>1468188 | 68480 | 172978 | 327407 | 669473 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Toluene-d8 (Surr) | CBZ | Ave | 133342<br>5907752 | 267445 | 668083 | 1256422 | 2656188 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 4-Bromofluorobenzene (Surr) | CBZ | Ave | 48826<br>2031763 | 95592 | 244718 | 462107 | 940483 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |

Curve Type Legend:

| |
|---|
| Ave = Average ISTD |
| Lin1 = Linear 1/conc ISTD |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 15:38 Calibration End Date: 04/08/2015 17:32 Calibration ID: 27790

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STDA9 240-175603/14 | UXM7078.D |
| Level 2 | STDA9 240-175603/13 | UXM7077.D |
| Level 3 | STDA9 240-175603/12 | UXM7076.D |
| Level 4 | STDA9 240-175603/11 | UXM7075.D |
| Level 5 | STDA9 240-175603/10 | UXM7074.D |
| Level 6 | STDA9 240-175603/9 | UXM7073.D |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1 LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Acetonitrile | 0.0201 0.0202 | 0.0206 | 0.0213 | 0.0192 | 0.0208 | Ave | | 0.0204 | | | | 3.6 | | 15.0 | | | |
| Diisopropyl ether | 0.2070 0.2135 | 0.2081 | 0.2062 | 0.2076 | 0.2129 | Ave | | 0.2092 | | | | 1.5 | | 15.0 | | | |
| 2-Chloro-1,3-butadiene | 0.3249 0.3458 | 0.3198 | 0.3356 | 0.3307 | 0.3541 | Ave | | 0.3352 | | | | 3.8 | | 15.0 | | | |
| Ethyl t-butyl ether | 0.6375 0.6867 | 0.6252 | 0.6588 | 0.6611 | 0.6812 | Ave | | 0.6584 | | | | 3.6 | | 15.0 | | | |
| Propionitrile | 0.0225 0.0248 | 0.0230 | 0.0242 | 0.0244 | 0.0244 | Ave | | 0.0239 | | | | 3.9 | | 15.0 | | | |
| Ethyl acetate | 0.0379 0.0349 | 0.0359 | 0.0347 | 0.0360 | 0.0339 | Ave | | 0.0356 | | | | 3.9 | | 15.0 | | | |
| Methacrylonitrile | 0.1003 0.1146 | 0.1059 | 0.1089 | 0.1094 | 0.1118 | Ave | | 0.1085 | | | | 4.6 | | 15.0 | | | |
| Tert-amyl methyl ether | 0.5768 0.6345 | 0.5743 | 0.6007 | 0.6004 | 0.6276 | Ave | | 0.6024 | | | | 4.1 | | 15.0 | | | |
| n-Butanol | 0.0034 0.0036 | 0.0036 | 0.0034 | 0.0037 | 0.0037 | Ave | | 0.0036 | | | | 3.9 | | 15.0 | | | |
| Ethyl acrylate | 0.1909 0.2007 | 0.1960 | 0.2030 | 0.1974 | 0.1923 | Ave | | 0.1967 | | | | 2.4 | | 15.0 | | | |
| Methyl methacrylate | 0.1250 0.1436 | 0.1315 | 0.1382 | 0.1422 | 0.1389 | Ave | | 0.1366 | | | | 5.2 | | 15.0 | | | |
| 2-Nitropropane | 0.0340 0.0352 | 0.0329 | 0.0331 | 0.0323 | 0.0333 | Ave | | 0.0335 | | | | 3.0 | | 15.0 | | | |
| n-Butyl acetate | 0.0799 0.0697 | 0.0726 | 0.0725 | 0.0708 | 0.0684 | Ave | | 0.0723 | | | | 5.6 | | 15.0 | | | |
| 1-Chlorohexane | 0.4038 0.4002 | 0.3988 | 0.3908 | 0.3894 | 0.4260 | Ave | | 0.4015 | | | | 3.3 | | 15.0 | | | |
| Cyclohexanone | 0.0116 0.0113 | 0.0101 | 0.0116 | 0.0110 | 0.0112 | Ave | | 0.0111 | | | | 5.0 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 15:38 Calibration End Date: 04/08/2015 17:32 Calibration ID: 27790

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Pentachloroethane | 0.0723<br>+++++ | 0.1519 | 0.1793 | 0.1681 | 0.1579 | Lin1 | -0.125 | 0.1691 | | | | | | | 0.9920 | | 0.9900 |
| 1,2,3-Trimethylbenzene | 2.3318<br>2.5694 | 2.3251 | 2.3451 | 2.3936 | 2.5896 | Ave | | 2.4258 | | | | 5.0 | | 15.0 | | | |
| Benzyl chloride | 0.1301<br>0.2048 | 0.1395 | 0.1455 | 0.1590 | 0.1847 | Lin1 | -0.114 | 0.1961 | | | | | | | 0.9920 | | 0.9900 |
| 1,3,5-Trichlorobenzene | 0.9395<br>0.9590 | 0.9539 | 0.9519 | 0.9302 | 1.0065 | Ave | | 0.9568 | | | | 2.8 | | 15.0 | | | |
| 2-Methylnaphthalene | 0.7465<br>1.0413 | 0.8751 | 0.9278 | 0.9442 | 1.0796 | Ave | | 0.9358 | | | | 12.8 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 15:38 Calibration End Date: 04/08/2015 17:32 Calibration ID: 27790

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STDA9 240-175603/14 | UXM7078.D |
| Level 2 | STDA9 240-175603/13 | UXM7077.D |
| Level 3 | STDA9 240-175603/12 | UXM7076.D |
| Level 4 | STDA9 240-175603/11 | UXM7075.D |
| Level 5 | STDA9 240-175603/10 | UXM7074.D |
| Level 6 | STDA9 240-175603/9 | UXM7073.D |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| Acetonitrile | FB | Ave | 31329<br>1294437 | 63371 | 162888 | 298995 | 652804 | 10.0<br>400 | 20.0 | 50.0 | 100 | 200 |
| Diisopropyl ether | FB | Ave | 32317<br>1369357 | 63881 | 157639 | 323560 | 667241 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 2-Chloro-1,3-butadiene | FB | Ave | 50735<br>2217558 | 98161 | 256551 | 515421 | 1109809 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Ethyl t-butyl ether | FB | Ave | 99536<br>4404282 | 191887 | 503531 | 1030325 | 2135024 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Propionitrile | FB | Ave | 35090<br>1588548 | 70589 | 185269 | 380909 | 764544 | 10.0<br>400 | 20.0 | 50.0 | 100 | 200 |
| Ethyl acetate | FB | Ave | 11840<br>448178 | 22023 | 53078 | 112265 | 212735 | 2.00<br>80.0 | 4.00 | 10.0 | 20.0 | 40.0 |
| Methacrylonitrile | FB | Ave | 156628<br>7351496 | 325013 | 832510 | 1704360 | 3503202 | 10.0<br>400 | 20.0 | 50.0 | 100 | 200 |
| Tert-amyl methyl ether | FB | Ave | 90060<br>4069339 | 176260 | 459181 | 935660 | 1966775 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| n-Butanol | FB | Ave | 13220<br>582085 | 27394 | 65229 | 143800 | 291344 | 25.0<br>1000 | 50.0 | 125 | 250 | 500 |
| Ethyl acrylate | FB | Ave | 29811<br>1286845 | 60147 | 155171 | 307621 | 602720 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Methyl methacrylate | FB | Ave | 39033<br>1842391 | 80696 | 211284 | 443334 | 870343 | 2.00<br>80.0 | 4.00 | 10.0 | 20.0 | 40.0 |
| 2-Nitropropane | FB | Ave | 10602<br>451111 | 20214 | 50586 | 100635 | 208843 | 2.00<br>80.0 | 4.00 | 10.0 | 20.0 | 40.0 |
| n-Butyl acetate | FB | Ave | 12475<br>446986 | 22294 | 55387 | 110386 | 214210 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1-Chlorohexane | CBZ | Ave | 45448<br>1852425 | 87190 | 215498 | 440633 | 938391 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Cyclohexanone | DCB | Ave | 6736<br>281653 | 11853 | 34666 | 65966 | 137173 | 10.0<br>400 | 20.0 | 50.0 | 100 | 200 |
| Pentachloroethane | CBZ | Lin1 | 16273<br>+++++ | 66422 | 197797 | 380443 | 695761 | 2.00<br>+++++ | 4.00 | 10.0 | 20.0 | 40.0 |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 175603

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2015 15:38 Calibration End Date: 04/08/2015 17:32 Calibration ID: 27790

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| 1,2,3-Trimethylbenzene | DCB | Ave | 135829<br>6395259 | 273876 | 702961 | 1431403 | 3163670 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| Benzyl chloride | DCB | Lin1 | 7576<br>509662 | 16429 | 43617 | 95070 | 225686 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 1,3,5-Trichlorobenzene | DCB | Ave | 54726<br>2386927 | 112358 | 285343 | 556287 | 1229612 | 1.00<br>40.0 | 2.00 | 5.00 | 10.0 | 20.0 |
| 2-Methylnaphthalene | DCB | Ave | 86971<br>5183589 | 206168 | 556244 | 1129317 | 2637867 | 2.00<br>80.0 | 4.00 | 10.0 | 20.0 | 40.0 |

Curve Type Legend:

| |
|---|
| Ave = Average ISTD |
| Lin1 = Linear 1/conc ISTD |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-175603/8 Calibration Date: 04/08/2015 15:15

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 12:59

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 14:53

Lab File ID: UXM7072.D Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | Ave | 0.1843 | 0.1350 | | 0.00732 | 0.0100 | -26.8 | 50.0 |
| Chloromethane | Ave | 0.2536 | 0.2176 | 0.1000 | 0.00858 | 0.0100 | -14.2 | 50.0 |
| Vinyl chloride | Ave | 0.2786 | 0.2390 | | 0.00858 | 0.0100 | -14.2 | 20.0 |
| Butadiene | Ave | 0.2509 | 0.2177 | | 0.00868 | 0.0100 | -13.2 | 50.0 |
| Bromomethane | Ave | 0.1343 | 0.1103 | | 0.00821 | 0.0100 | -17.9 | 50.0 |
| Chloroethane | Ave | 0.1634 | 0.1452 | | 0.00888 | 0.0100 | -11.2 | 50.0 |
| Dichlorofluoromethane | Ave | 0.3657 | 0.3367 | | 0.00921 | 0.0100 | -7.9 | 50.0 |
| Trichlorofluoromethane | Ave | 0.2428 | 0.2383 | | 0.00981 | 0.0100 | -1.9 | 50.0 |
| Ethyl ether | Ave | 0.1803 | 0.1843 | | 0.0102 | 0.0100 | 2.2 | 50.0 |
| Acrolein | Ave | 0.0233 | 0.0234 | | 0.0502 | 0.0500 | 0.4 | 50.0 |
| 1,1-Dichloroethene | Ave | 0.2023 | 0.2097 | | 0.0104 | 0.0100 | 3.7 | 20.0 |
| 1,1,2-Trichloro-1,2,2-triflu oroethane | Ave | 0.1572 | 0.1622 | | 0.0103 | 0.0100 | 3.2 | 50.0 |
| Acetone | Ave | 0.0604 | 0.0585 | | 0.0194 | 0.0200 | -3.2 | 50.0 |
| Iodomethane | Ave | 0.3182 | 0.3423 | | 0.0108 | 0.0100 | 7.6 | 50.0 |
| Carbon disulfide | Ave | 0.6221 | 0.6706 | | 0.0108 | 0.0100 | 7.8 | 50.0 |
| 3-Chloro-1-propene | Ave | 0.1377 | 0.1290 | | 0.00937 | 0.0100 | -6.3 | 50.0 |
| Methyl acetate | Ave | 0.1332 | 0.1374 | | 0.0516 | 0.0500 | 3.2 | 50.0 |
| Methylene Chloride | Lin1 | | 0.2585 | | 0.0105 | 0.0100 | 4.7 | 50.0 |
| tert-Butyl alcohol (TBA) | Ave | 0.0128 | 0.0123 | | 0.0964 | 0.100 | -3.6 | 50.0 |
| Acrylonitrile | Ave | 0.0691 | 0.0686 | | 0.0993 | 0.100 | -0.7 | 50.0 |
| Methyl tert-butyl ether | Ave | 0.5917 | 0.6062 | | 0.0102 | 0.0100 | 2.4 | 50.0 |
| trans-1,2-Dichloroethene | Ave | 0.2427 | 0.2420 | | 0.00997 | 0.0100 | -0.3 | 50.0 |
| Hexane | Ave | 0.0585 | 0.0671 | | 0.0115 | 0.0100 | 14.6 | 20.0 |
| 1,1-Dichloroethane | Ave | 0.3969 | 0.4158 | 0.1000 | 0.0105 | 0.0100 | 4.8 | 50.0 |
| Vinyl acetate | Ave | 0.1675 | 0.1183 | | 0.00706 | 0.0100 | -29.4 | 50.0 |
| 2-Butanone (MEK) | Ave | 0.0752 | 0.0759 | | 0.0202 | 0.0200 | 0.9 | 50.0 |
| cis-1,2-Dichloroethene | Ave | 0.2590 | 0.2616 | | 0.0101 | 0.0100 | 1.0 | 50.0 |
| 2,2-Dichloropropane | Ave | 0.2543 | 0.2481 | | 0.00976 | 0.0100 | -2.4 | 50.0 |
| Bromochloromethane | Ave | 0.1215 | 0.1212 | | 0.00998 | 0.0100 | -0.2 | 50.0 |
| Tetrahydrofuran | Ave | 0.0479 | 0.0448 | | 0.0187 | 0.0200 | -6.5 | 50.0 |
| Chloroform | Ave | 0.3887 | 0.3881 | | 0.00999 | 0.0100 | -0.1 | 20.0 |
| 1,1,1-Trichloroethane | Ave | 0.2957 | 0.3004 | | 0.0102 | 0.0100 | 1.6 | 50.0 |
| Cyclohexane | Ave | 0.3656 | 0.3762 | | 0.0103 | 0.0100 | 2.9 | 50.0 |
| 1,1-Dichloropropene | Ave | 0.2996 | 0.3204 | | 0.0107 | 0.0100 | 6.9 | 50.0 |
| Carbon tetrachloride | Ave | 0.2428 | 0.2510 | | 0.0103 | 0.0100 | 3.4 | 50.0 |
| Isobutyl alcohol | Ave | 0.0044 | 0.0040 | | 0.223 | 0.250 | -10.9 | 50.0 |
| 1,2-Dichloroethane | Ave | 0.2704 | 0.2706 | | 0.0100 | 0.0100 | 0.0 | 50.0 |
| Benzene | Ave | 1.002 | 0.9932 | | 0.00991 | 0.0100 | -0.9 | 50.0 |
| n-Heptane | Lin1 | | 0.1733 | | 0.00994 | 0.0100 | -0.6 | 50.0 |
| Trichloroethene | Ave | 0.2546 | 0.2585 | | 0.0102 | 0.0100 | 1.5 | 50.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-175603/8 Calibration Date: 04/08/2015 15:15

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 12:59

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 14:53

Lab File ID: UXM7072.D Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methylcyclohexane | Ave | 0.3877 | 0.3879 | | 0.0100 | 0.0100 | 0.0 | 50.0 |
| 1,2-Dichloropropane | Ave | 0.2267 | 0.2249 | | 0.00992 | 0.0100 | -0.8 | 20.0 |
| Dibromomethane | Ave | 0.1203 | 0.1212 | | 0.0101 | 0.0100 | 0.7 | 50.0 |
| 1,4-Dioxane | Ave | 0.0017 | 0.0016 | | 0.193 | 0.200 | -3.3 | 50.0 |
| Bromodichloromethane | Ave | 0.2785 | 0.2746 | | 0.00986 | 0.0100 | -1.4 | 50.0 |
| 2-Chloroethyl vinyl ether | Ave | 0.1194 | 0.1182 | | 0.0119 | 0.0120 | -1.0 | 50.0 |
| cis-1,3-Dichloropropene | Ave | 0.3280 | 0.3388 | | 0.0103 | 0.0100 | 3.3 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | Ave | 0.1486 | 0.1470 | | 0.0198 | 0.0200 | -1.0 | 50.0 |
| Toluene | Ave | 1.481 | 1.477 | | 0.00998 | 0.0100 | -0.2 | 20.0 |
| trans-1,3-Dichloropropene | Ave | 0.3760 | 0.4124 | | 0.0110 | 0.0100 | 9.7 | 50.0 |
| Ethyl methacrylate | Ave | 0.3039 | 0.3135 | | 0.0103 | 0.0100 | 3.1 | 50.0 |
| 1,1,2-Trichloroethane | Ave | 0.2656 | 0.2559 | | 0.00964 | 0.0100 | -3.6 | 50.0 |
| 1,3-Dichloropropane | Ave | 0.4708 | 0.4586 | | 0.00974 | 0.0100 | -2.6 | 50.0 |
| Tetrachloroethene | Ave | 0.2804 | 0.2884 | | 0.0103 | 0.0100 | 2.8 | 50.0 |
| 2-Hexanone | Ave | 0.1447 | 0.1415 | | 0.0196 | 0.0200 | -2.2 | 50.0 |
| Dibromochloromethane | Ave | 0.2720 | 0.2725 | | 0.0100 | 0.0100 | 0.2 | 50.0 |
| 1,2-Dibromoethane | Ave | 0.2521 | 0.2526 | | 0.0100 | 0.0100 | 0.2 | 50.0 |
| Chlorobenzene | Ave | 0.9491 | 0.9260 | 0.3000 | 0.00976 | 0.0100 | -2.4 | 50.0 |
| 1,1,1,2-Tetrachloroethane | Ave | 0.3021 | 0.2978 | | 0.00986 | 0.0100 | -1.4 | 50.0 |
| Ethylbenzene | Ave | 0.5076 | 0.5078 | | 0.0100 | 0.0100 | 0.0 | 20.0 |
| m-Xylene & p-Xylene | Ave | 0.6356 | 0.6337 | | 0.00997 | 0.0100 | -0.3 | 50.0 |
| o-Xylene | Ave | 0.6141 | 0.6176 | | 0.0101 | 0.0100 | 0.6 | 50.0 |
| Styrene | Ave | 0.9843 | 0.9112 | | 0.00926 | 0.0100 | -7.4 | 50.0 |
| Bromoform | Ave | 0.1657 | 0.1625 | 0.1000 | 0.00980 | 0.0100 | -2.0 | 50.0 |
| Isopropylbenzene | Ave | 1.625 | 1.596 | | 0.00982 | 0.0100 | -1.8 | 50.0 |
| 1,1,2,2-Tetrachloroethane | Ave | 0.5868 | 0.5613 | 0.3000 | 0.00957 | 0.0100 | -4.3 | 50.0 |
| Bromobenzene | Ave | 0.7228 | 0.7188 | | 0.00994 | 0.0100 | -0.6 | 50.0 |
| 1,2,3-Trichloropropane | Ave | 0.1823 | 0.1767 | | 0.00969 | 0.0100 | -3.1 | 50.0 |
| trans-1,4-Dichloro-2-butene | Ave | 0.1434 | 0.1424 | | 0.00993 | 0.0100 | -0.7 | 50.0 |
| N-Propylbenzene | Ave | 0.7916 | 0.7835 | | 0.00990 | 0.0100 | -1.0 | 50.0 |
| 2-Chlorotoluene | Ave | 0.6834 | 0.6608 | | 0.00967 | 0.0100 | -3.3 | 50.0 |
| 1,3,5-Trimethylbenzene | Ave | 2.398 | 2.370 | | 0.00988 | 0.0100 | -1.2 | 50.0 |
| 4-Chlorotoluene | Ave | 0.7270 | 0.7015 | | 0.00965 | 0.0100 | -3.5 | 50.0 |
| tert-Butylbenzene | Ave | 2.090 | 2.047 | | 0.00979 | 0.0100 | -2.1 | 50.0 |
| 1,2,4-Trimethylbenzene | Ave | 2.508 | 2.394 | | 0.00955 | 0.0100 | -4.5 | 50.0 |
| sec-Butylbenzene | Ave | 3.014 | 2.877 | | 0.00955 | 0.0100 | -4.5 | 50.0 |
| 1,3-Dichlorobenzene | Ave | 1.414 | 1.377 | | 0.00973 | 0.0100 | -2.7 | 50.0 |
| p-Isopropyltoluene | Ave | 2.630 | 2.507 | | 0.00953 | 0.0100 | -4.7 | 50.0 |
| 1,4-Dichlorobenzene | Ave | 1.449 | 1.383 | | 0.00955 | 0.0100 | -4.5 | 50.0 |
| n-Butylbenzene | Ave | 2.195 | 2.110 | | 0.00961 | 0.0100 | -3.9 | 50.0 |
| 1,2-Dichlorobenzene | Ave | 1.338 | 1.298 | | 0.00970 | 0.0100 | -3.0 | 50.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-175603/8 Calibration Date: 04/08/2015 15:15

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 12:59

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 14:53

Lab File ID: UXM7072.D Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | Ave | 0.0983 | 0.0971 | | 0.00988 | 0.0100 | -1.2 | 50.0 |
| 1,2,4-Trichlorobenzene | Ave | 0.8313 | 0.7795 | | 0.00938 | 0.0100 | -6.2 | 50.0 |
| Hexachlorobutadiene | Ave | 0.3447 | 0.3112 | | 0.00903 | 0.0100 | -9.7 | 50.0 |
| Naphthalene | Ave | 1.798 | 1.712 | | 0.00952 | 0.0100 | -4.8 | 50.0 |
| 1,2,3-Trichlorobenzene | Ave | 0.7434 | 0.6967 | | 0.00937 | 0.0100 | -6.3 | 50.0 |
| Dibromofluoromethane (Surr) | Ave | 0.1999 | 0.1881 | | 0.0107 | 0.0114 | -5.9 | 50.0 |
| 1,2-Dichloroethane-d4 (Surr) | Ave | 0.2198 | 0.2021 | | 0.0105 | 0.0114 | -8.0 | 50.0 |
| Toluene-d8 (Surr) | Ave | 1.194 | 1.143 | | 0.0109 | 0.0114 | -4.2 | 50.0 |
| 4-Bromofluorobenzene (Surr) | Ave | 0.4286 | 0.4226 | | 0.0112 | 0.0114 | -1.4 | 50.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-175603/15 Calibration Date: 04/08/2015 17:55

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 15:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 17:32

Lab File ID: UXM7079.D Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Acetonitrile | Ave | 0.0204 | 0.0215 | | 0.106 | 0.100 | 5.6 | 50.0 |
| Diisopropyl ether | Ave | 0.2092 | 0.2219 | | 0.0106 | 0.0100 | 6.1 | 50.0 |
| 2-Chloro-1,3-butadiene | Ave | 0.3352 | 0.3507 | | 0.0105 | 0.0100 | 4.6 | 50.0 |
| Ethyl t-butyl ether | Ave | 0.6584 | 0.6808 | | 0.0103 | 0.0100 | 3.4 | 50.0 |
| Propionitrile | Ave | 0.0239 | 0.0258 | | 0.108 | 0.100 | 8.0 | 50.0 |
| Ethyl acetate | Ave | 0.0356 | 0.0814 | | 0.0458 | 0.0200 | 128.9* | 50.0 |
| Methacrylonitrile | Ave | 0.1085 | 0.1159 | | 0.107 | 0.100 | 6.8 | 50.0 |
| Tert-amyl methyl ether | Ave | 0.6024 | 0.6284 | | 0.0104 | 0.0100 | 4.3 | 50.0 |
| n-Butanol | Ave | 0.0036 | 0.0040 | | 0.282 | 0.250 | 12.7 | 50.0 |
| Ethyl acrylate | Ave | 0.1967 | 0.2111 | | 0.0107 | 0.0100 | 7.3 | 50.0 |
| Methyl methacrylate | Ave | 0.1366 | 0.1463 | | 0.0214 | 0.0200 | 7.1 | 50.0 |
| 2-Nitropropane | Ave | 0.0335 | 0.0326 | | 0.0195 | 0.0200 | -2.6 | 50.0 |
| n-Butyl acetate | Ave | 0.0723 | 0.1294 | | 1.00 | 0.0100 | 78.9* | 50.0 |
| 1-Chlorohexane | Ave | 0.4015 | 0.4114 | | 0.0102 | 0.0100 | 2.5 | 50.0 |
| Cyclohexanone | Ave | 0.0111 | 0.0116 | | 0.104 | 0.100 | 4.3 | 50.0 |
| Pentachloroethane | Lin1 | | 0.0721 | | 0.00927 | 0.0200 | -53.7* | 50.0 |
| 1,2,3-Trimethylbenzene | Ave | 2.426 | 2.501 | | 0.0103 | 0.0100 | 3.1 | 50.0 |
| Benzyl chloride | Lin1 | | 0.1514 | | 0.00830 | 0.0100 | -17.0 | 50.0 |
| 1,3,5-Trichlorobenzene | Ave | 0.9568 | 0.9508 | | 0.00994 | 0.0100 | -0.6 | 50.0 |
| 2-Methylnaphthalene | Ave | 0.9358 | 0.9242 | | 0.0198 | 0.0200 | -1.2 | 50.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCVIS 240-175730/2 Calibration Date: 04/09/2015 10:35

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 12:59

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 14:53

Lab File ID: UXM7081.D Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | Ave | 0.1843 | 0.2112 | | 0.0115 | 0.0100 | 14.6 | 50.0 |
| Chloromethane | Ave | 0.2536 | 0.2626 | 0.1000 | 0.0104 | 0.0100 | 3.5 | 50.0 |
| Vinyl chloride | Ave | 0.2786 | 0.2895 | | 0.0104 | 0.0100 | 3.9 | 20.0 |
| Butadiene | Ave | 0.2509 | 0.2678 | | 0.0107 | 0.0100 | 6.7 | 50.0 |
| Bromomethane | Ave | 0.1343 | 0.1424 | | 0.0106 | 0.0100 | 6.0 | 50.0 |
| Chloroethane | Ave | 0.1634 | 0.1715 | | 0.0105 | 0.0100 | 4.9 | 50.0 |
| Dichlorofluoromethane | Ave | 0.3657 | 0.3834 | | 0.0105 | 0.0100 | 4.8 | 50.0 |
| Trichlorofluoromethane | Ave | 0.2428 | 0.2797 | | 0.0115 | 0.0100 | 15.2 | 50.0 |
| Ethyl ether | Ave | 0.1803 | 0.1805 | | 0.0100 | 0.0100 | 0.1 | 50.0 |
| Acrolein | Ave | 0.0233 | 0.0230 | | 0.0492 | 0.0500 | -1.5 | 50.0 |
| 1,1-Dichloroethene | Ave | 0.2023 | 0.2099 | | 0.0104 | 0.0100 | 3.8 | 20.0 |
| 1,1,2-Trichloro-1,2,2-triflu oroethane | Ave | 0.1572 | 0.1775 | | 0.0113 | 0.0100 | 12.9 | 50.0 |
| Acetone | Ave | 0.0604 | 0.0567 | | 0.0188 | 0.0200 | -6.1 | 50.0 |
| Iodomethane | Ave | 0.3182 | 0.3232 | | 0.0102 | 0.0100 | 1.6 | 50.0 |
| Carbon disulfide | Ave | 0.6221 | 0.6142 | | 0.00987 | 0.0100 | -1.3 | 50.0 |
| 3-Chloro-1-propene | Ave | 0.1377 | 0.1413 | | 0.0103 | 0.0100 | 2.6 | 50.0 |
| Methyl acetate | Ave | 0.1332 | 0.1352 | | 0.0508 | 0.0500 | 1.5 | 50.0 |
| Methylene Chloride | Lin1 | | 0.2525 | | 0.0102 | 0.0100 | 2.2 | 50.0 |
| tert-Butyl alcohol (TBA) | Ave | 0.0128 | 0.0134 | | 0.105 | 0.100 | 4.5 | 50.0 |
| Acrylonitrile | Ave | 0.0691 | 0.0699 | | 0.101 | 0.100 | 1.1 | 50.0 |
| Methyl tert-butyl ether | Ave | 0.5917 | 0.6070 | | 0.0103 | 0.0100 | 2.6 | 50.0 |
| trans-1,2-Dichloroethene | Ave | 0.2427 | 0.2441 | | 0.0101 | 0.0100 | 0.6 | 50.0 |
| Hexane | Ave | 0.0585 | 0.0639 | | 0.0109 | 0.0100 | 9.1 | 20.0 |
| 1,1-Dichloroethane | Ave | 0.3969 | 0.4110 | 0.1000 | 0.0104 | 0.0100 | 3.5 | 50.0 |
| Vinyl acetate | Ave | 0.1675 | 0.1633 | | 0.00936 | 0.00960 | -2.5 | 50.0 |
| 2,2-Dichloropropane | Ave | 0.2543 | 0.2688 | | 0.0106 | 0.0100 | 5.7 | 50.0 |
| 2-Butanone (MEK) | Ave | 0.0752 | 0.0742 | | 0.0197 | 0.0200 | -1.3 | 50.0 |
| cis-1,2-Dichloroethene | Ave | 0.2590 | 0.2641 | | 0.0102 | 0.0100 | 2.0 | 50.0 |
| Bromochloromethane | Ave | 0.1215 | 0.1239 | | 0.0102 | 0.0100 | 2.0 | 50.0 |
| Tetrahydrofuran | Ave | 0.0479 | 0.0472 | | 0.0197 | 0.0200 | -1.3 | 50.0 |
| Chloroform | Ave | 0.3887 | 0.3974 | | 0.0102 | 0.0100 | 2.2 | 20.0 |
| 1,1,1-Trichloroethane | Ave | 0.2957 | 0.3095 | | 0.0105 | 0.0100 | 4.6 | 50.0 |
| Cyclohexane | Ave | 0.3656 | 0.3956 | | 0.0108 | 0.0100 | 8.2 | 50.0 |
| 1,1-Dichloropropene | Ave | 0.2996 | 0.3171 | | 0.0106 | 0.0100 | 5.8 | 50.0 |
| Carbon tetrachloride | Ave | 0.2428 | 0.2629 | | 0.0108 | 0.0100 | 8.3 | 50.0 |
| Isobutyl alcohol | Ave | 0.0044 | 0.0042 | | 0.237 | 0.250 | -5.0 | 50.0 |
| 1,2-Dichloroethane | Ave | 0.2704 | 0.2764 | | 0.0102 | 0.0100 | 2.2 | 50.0 |
| Benzene | Ave | 1.002 | 0.997 | | 0.00995 | 0.0100 | -0.5 | 50.0 |
| n-Heptane | Lin1 | | 0.1782 | | 0.0103 | 0.0100 | 2.7 | 50.0 |
| Trichloroethene | Ave | 0.2546 | 0.2663 | | 0.0105 | 0.0100 | 4.6 | 50.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCVIS 240-175730/2 Calibration Date: 04/09/2015 10:35

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 12:59

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 14:53

Lab File ID: UXM7081.D Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methylcyclohexane | Ave | 0.3877 | 0.4096 | | 0.0106 | 0.0100 | 5.6 | 50.0 |
| 1,2-Dichloropropane | Ave | 0.2267 | 0.2312 | | 0.0102 | 0.0100 | 2.0 | 20.0 |
| Dibromomethane | Ave | 0.1203 | 0.1227 | | 0.0102 | 0.0100 | 2.0 | 50.0 |
| 1,4-Dioxane | Ave | 0.0017 | 0.0017 | | 0.206 | 0.200 | 3.0 | 50.0 |
| Bromodichloromethane | Ave | 0.2785 | 0.2888 | | 0.0104 | 0.0100 | 3.7 | 50.0 |
| 2-Chloroethyl vinyl ether | Ave | 0.1194 | 0.1225 | | 0.0205 | 0.0200 | 2.6 | 50.0 |
| cis-1,3-Dichloropropene | Ave | 0.3280 | 0.3398 | | 0.0104 | 0.0100 | 3.6 | 50.0 |
| 4-Methyl-2-pentanone (MIBK) | Ave | 0.1486 | 0.1553 | | 0.0209 | 0.0200 | 4.5 | 50.0 |
| Toluene | Ave | 1.481 | 1.495 | | 0.0101 | 0.0100 | 1.0 | 20.0 |
| trans-1,3-Dichloropropene | Ave | 0.3760 | 0.3855 | | 0.0103 | 0.0100 | 2.5 | 50.0 |
| Ethyl methacrylate | Ave | 0.3039 | 0.3097 | | 0.0102 | 0.0100 | 1.9 | 50.0 |
| 1,1,2-Trichloroethane | Ave | 0.2656 | 0.2650 | | 0.00997 | 0.0100 | -0.3 | 50.0 |
| 1,3-Dichloropropane | Ave | 0.4708 | 0.4686 | | 0.00995 | 0.0100 | -0.5 | 50.0 |
| Tetrachloroethene | Ave | 0.2804 | 0.3012 | | 0.0107 | 0.0100 | 7.4 | 50.0 |
| 2-Hexanone | Ave | 0.1447 | 0.1442 | | 0.0199 | 0.0200 | -0.4 | 50.0 |
| Dibromochloromethane | Ave | 0.2720 | 0.2814 | | 0.0103 | 0.0100 | 3.5 | 50.0 |
| 1,2-Dibromoethane | Ave | 0.2521 | 0.2574 | | 0.0102 | 0.0100 | 2.1 | 50.0 |
| Chlorobenzene | Ave | 0.9491 | 0.9572 | 0.3000 | 0.0101 | 0.0100 | 0.9 | 50.0 |
| 1,1,1,2-Tetrachloroethane | Ave | 0.3021 | 0.3137 | | 0.0104 | 0.0100 | 3.8 | 50.0 |
| Ethylbenzene | Ave | 0.5076 | 0.5328 | | 0.0105 | 0.0100 | 5.0 | 20.0 |
| m-Xylene & p-Xylene | Ave | 0.6356 | 0.6420 | | 0.0101 | 0.0100 | 1.0 | 50.0 |
| o-Xylene | Ave | 0.6141 | 0.6456 | | 0.0105 | 0.0100 | 5.1 | 50.0 |
| Styrene | Ave | 0.9843 | 1.002 | | 0.0102 | 0.0100 | 1.8 | 50.0 |
| Bromoform | Ave | 0.1657 | 0.1715 | 0.1000 | 0.0103 | 0.0100 | 3.5 | 50.0 |
| Isopropylbenzene | Ave | 1.625 | 1.660 | | 0.0102 | 0.0100 | 2.2 | 50.0 |
| 1,1,2,2-Tetrachloroethane | Ave | 0.5868 | 0.5612 | 0.3000 | 0.00956 | 0.0100 | -4.4 | 50.0 |
| Bromobenzene | Ave | 0.7228 | 0.7150 | | 0.00989 | 0.0100 | -1.1 | 50.0 |
| 1,2,3-Trichloropropane | Ave | 0.1823 | 0.1821 | | 0.00999 | 0.0100 | -0.1 | 50.0 |
| trans-1,4-Dichloro-2-butene | Ave | 0.1434 | 0.1426 | | 0.00995 | 0.0100 | -0.5 | 50.0 |
| N-Propylbenzene | Ave | 0.7916 | 0.8255 | | 0.0104 | 0.0100 | 4.3 | 50.0 |
| 2-Chlorotoluene | Ave | 0.6834 | 0.6865 | | 0.0100 | 0.0100 | 0.4 | 50.0 |
| 1,3,5-Trimethylbenzene | Ave | 2.398 | 2.433 | | 0.0101 | 0.0100 | 1.5 | 50.0 |
| 4-Chlorotoluene | Ave | 0.7270 | 0.7362 | | 0.0101 | 0.0100 | 1.3 | 50.0 |
| tert-Butylbenzene | Ave | 2.090 | 2.147 | | 0.0103 | 0.0100 | 2.7 | 50.0 |
| 1,2,4-Trimethylbenzene | Ave | 2.508 | 2.522 | | 0.0101 | 0.0100 | 0.6 | 50.0 |
| sec-Butylbenzene | Ave | 3.014 | 3.042 | | 0.0101 | 0.0100 | 0.9 | 50.0 |
| 1,3-Dichlorobenzene | Ave | 1.414 | 1.410 | | 0.00997 | 0.0100 | -0.3 | 50.0 |
| p-Isopropyltoluene | Ave | 2.630 | 2.678 | | 0.0102 | 0.0100 | 1.8 | 50.0 |
| 1,4-Dichlorobenzene | Ave | 1.449 | 1.436 | | 0.00992 | 0.0100 | -0.8 | 50.0 |
| n-Butylbenzene | Ave | 2.195 | 2.231 | | 0.0102 | 0.0100 | 1.6 | 50.0 |
| 1,2-Dichlorobenzene | Ave | 1.338 | 1.329 | | 0.00993 | 0.0100 | -0.7 | 50.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCVIS 240-175730/2 Calibration Date: 04/09/2015 10:35

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 12:59

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 14:53

Lab File ID: UXM7081.D Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dibromo-3-Chloropropane | Ave | 0.0983 | 0.1020 | | 0.0104 | 0.0100 | 3.8 | 50.0 |
| 1,2,4-Trichlorobenzene | Ave | 0.8313 | 0.8303 | | 0.00999 | 0.0100 | -0.1 | 50.0 |
| Hexachlorobutadiene | Ave | 0.3447 | 0.3461 | | 0.0100 | 0.0100 | 0.4 | 50.0 |
| Naphthalene | Ave | 1.798 | 1.737 | | 0.00966 | 0.0100 | -3.4 | 50.0 |
| 1,2,3-Trichlorobenzene | Ave | 0.7434 | 0.7265 | | 0.00977 | 0.0100 | -2.3 | 50.0 |
| Dibromofluoromethane (Surr) | Ave | 0.1999 | 0.1914 | | 0.0109 | 0.0114 | -4.3 | 50.0 |
| 1,2-Dichloroethane-d4 (Surr) | Ave | 0.2198 | 0.2072 | | 0.0107 | 0.0114 | -5.7 | 50.0 |
| Toluene-d8 (Surr) | Ave | 1.194 | 1.151 | | 0.0110 | 0.0114 | -3.6 | 50.0 |
| 4-Bromofluorobenzene (Surr) | Ave | 0.4286 | 0.4295 | | 0.0114 | 0.0114 | 0.2 | 50.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175730/3 Calibration Date: 04/09/2015 10:57

Instrument ID: A3UX16 Calib Start Date: 04/08/2015 15:38

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 04/08/2015 17:32

Lab File ID: UXM7082.D Conc. Units: ng/uL Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Acetonitrile | Ave | 0.0204 | 0.0198 | | 0.0974 | 0.100 | -2.6 | 50.0 |
| Diisopropyl ether | Ave | 0.2092 | 0.2109 | | 0.0101 | 0.0100 | 0.8 | 50.0 |
| 2-Chloro-1,3-butadiene | Ave | 0.3352 | 0.3545 | | 0.0106 | 0.0100 | 5.8 | 50.0 |
| Ethyl t-butyl ether | Ave | 0.6584 | 0.6717 | | 0.0102 | 0.0100 | 2.0 | 50.0 |
| Propionitrile | Ave | 0.0239 | 0.0246 | | 0.103 | 0.100 | 3.0 | 50.0 |
| Ethyl acetate | Ave | 0.0356 | 0.0357 | | 0.0201 | 0.0200 | 0.3 | 50.0 |
| Methacrylonitrile | Ave | 0.1085 | 0.1098 | | 0.101 | 0.100 | 1.2 | 50.0 |
| Tert-amyl methyl ether | Ave | 0.6024 | 0.6211 | | 0.0103 | 0.0100 | 3.1 | 50.0 |
| n-Butanol | Ave | 0.0036 | 0.0035 | | 0.246 | 0.250 | -1.7 | 50.0 |
| Ethyl acrylate | Ave | 0.1967 | 0.1895 | | 0.00963 | 0.0100 | -3.7 | 50.0 |
| Methyl methacrylate | Ave | 0.1366 | 0.1416 | | 0.0207 | 0.0200 | 3.7 | 50.0 |
| 2-Nitropropane | Ave | 0.0335 | 0.0325 | | 0.0194 | 0.0200 | -2.9 | 50.0 |
| n-Butyl acetate | Ave | 0.0723 | 0.0702 | | 1.00 | 0.0100 | -2.9 | 50.0 |
| 1-Chlorohexane | Ave | 0.4015 | 0.4288 | | 0.0107 | 0.0100 | 6.8 | 50.0 |
| Cyclohexanone | Ave | 0.0111 | 0.0104 | | 0.0936 | 0.100 | -6.4 | 50.0 |
| Pentachloroethane | Lin1 | | 0.2066 | | 0.0252 | 0.0200 | 25.9 | 50.0 |
| 1,2,3-Trimethylbenzene | Ave | 2.426 | 2.464 | | 0.0102 | 0.0100 | 1.6 | 50.0 |
| Benzyl chloride | Lin1 | | 0.1803 | | 0.00977 | 0.0100 | -2.3 | 50.0 |
| 1,3,5-Trichlorobenzene | Ave | 0.9568 | 0.9569 | | 0.0100 | 0.0100 | 0.0 | 50.0 |
| 2-Methylnaphthalene | Ave | 0.9358 | 0.8195 | | 0.0175 | 0.0200 | -12.4 | 50.0 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-175730/6

Matrix: Water | Lab File ID: UXM7085.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/09/2015 12:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175730 | Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.28 | U | 1.0 | 0.28 |
| 71-55-6 | 1,1,1-Trichloroethane | 0.44 | U | 1.0 | 0.44 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.22 | U | 1.0 | 0.22 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.45 | U | 1.0 | 0.45 |
| 75-34-3 | 1,1-Dichloroethane | 0.30 | U | 1.0 | 0.30 |
| 75-35-4 | 1,1-Dichloroethene | 0.45 | U | 1.0 | 0.45 |
| 563-58-6 | 1,1-Dichloropropene | 0.42 | U | 1.0 | 0.42 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.37 | U | 1.0 | 0.37 |
| 96-18-4 | 1,2,3-Trichloropropane | 0.44 | U | 1.0 | 0.44 |
| 526-73-8 | 1,2,3-Trimethylbenzene | 0.47 | U | 5.0 | 0.47 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.32 | U | 1.0 | 0.32 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.41 | U | 1.0 | 0.41 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 0.82 | U | 2.0 | 0.82 |
| 95-50-1 | 1,2-Dichlorobenzene | 0.25 | U | 1.0 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | 0.23 | U | 1.0 | 0.23 |
| 78-87-5 | 1,2-Dichloropropane | 0.25 | U | 1.0 | 0.25 |
| 541-73-1 | 1,3-Dichlorobenzene | 0.19 | U | 1.0 | 0.19 |
| 142-28-9 | 1,3-Dichloropropane | 0.19 | U | 1.0 | 0.19 |
| 106-46-7 | 1,4-Dichlorobenzene | 0.27 | U | 1.0 | 0.27 |
| 594-20-7 | 2,2-Dichloropropane | 0.26 | U | 1.0 | 0.26 |
| 110-75-8 | 2-Chloroethyl vinyl ether | 0.59 | U | 10 | 0.59 |
| 95-49-8 | 2-Chlorotoluene | 0.40 | U | 1.0 | 0.40 |
| 591-78-6 | 2-Hexanone | 0.48 | U | 10 | 0.48 |
| 108-86-1 | Bromobenzene | 0.35 | U | 1.0 | 0.35 |
| 74-97-5 | Bromochloromethane | 0.50 | U | 1.0 | 0.50 |
| 106-43-4 | 4-Chlorotoluene | 0.29 | U | 1.0 | 0.29 |
| 99-87-6 | p-Isopropyltoluene | 0.43 | U | 1.0 | 0.43 |
| 67-64-1 | Acetone | 1.64 | J | 10 | 0.94 |
| 71-43-2 | Benzene | 0.35 | U | 1.0 | 0.35 |
| 75-25-2 | Bromoform | 0.56 | U | 1.0 | 0.56 |
| 74-83-9 | Bromomethane | 0.44 | U | 1.0 | 0.44 |
| 75-15-0 | Carbon disulfide | 0.38 | U | 1.0 | 0.38 |
| 56-23-5 | Carbon tetrachloride | 0.43 | U | 1.0 | 0.43 |
| 108-90-7 | Chlorobenzene | 0.25 | U | 1.0 | 0.25 |
| 75-00-3 | Chloroethane | 0.32 | U | 1.0 | 0.32 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-175730/6

Matrix: Water | Lab File ID: UXM7085.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/09/2015 12:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175730 | Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 67-66-3 | Chloroform | 0.25 | U | 1.0 | 0.25 |
| 74-87-3 | Chloromethane | 0.44 | U | 1.0 | 0.44 |
| 156-59-2 | cis-1,2-Dichloroethene | 0.26 | U | 1.0 | 0.26 |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.46 | U | 1.0 | 0.46 |
| 87-68-3 | Hexachlorobutadiene | 0.35 | U | 1.0 | 0.35 |
| 74-95-3 | Dibromomethane | 0.42 | U | 1.0 | 0.42 |
| 75-27-4 | Bromodichloromethane | 0.29 | U | 1.0 | 0.29 |
| 75-71-8 | Dichlorodifluoromethane | 0.32 | U | 1.0 | 0.32 |
| 100-41-4 | Ethylbenzene | 0.25 | U | 1.0 | 0.25 |
| 106-93-4 | 1,2-Dibromoethane | 0.32 | U | 1.0 | 0.32 |
| 108-20-3 | Diisopropyl ether | 0.50 | U | 10 | 0.50 |
| 91-20-3 | Naphthalene | 0.45 | U | 1.0 | 0.45 |
| 179601-23-1 | m-Xylene & p-Xylene | 0.24 | U | 2.0 | 0.24 |
| 104-51-8 | n-Butylbenzene | 0.31 | U | 1.0 | 0.31 |
| 98-82-8 | Isopropylbenzene | 0.35 | U | 1.0 | 0.35 |
| 103-65-1 | N-Propylbenzene | 0.40 | U | 1.0 | 0.40 |
| 78-93-3 | 2-Butanone (MEK) | 0.53 | U | 10 | 0.53 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 0.99 | U | 10 | 0.99 |
| 135-98-8 | sec-Butylbenzene | 0.48 | U | 1.0 | 0.48 |
| 1634-04-4 | Methyl tert-butyl ether | 0.20 | U | 1.0 | 0.20 |
| 994-05-8 | Tert-amyl methyl ether | 0.30 | U | 5.0 | 0.30 |
| 75-09-2 | Methylene Chloride | 0.33 | U | 1.0 | 0.33 |
| 95-47-6 | o-Xylene | 0.25 | U | 1.0 | 0.25 |
| 100-42-5 | Styrene | 0.45 | U | 1.0 | 0.45 |
| 637-92-3 | Ethyl t-butyl ether | 0.23 | U | 5.0 | 0.23 |
| 98-06-6 | tert-Butylbenzene | 0.41 | U | 1.0 | 0.41 |
| 127-18-4 | Tetrachloroethene | 0.31 | U | 1.0 | 0.31 |
| 108-88-3 | Toluene | 0.23 | U | 1.0 | 0.23 |
| 156-60-5 | trans-1,2-Dichloroethene | 0.30 | U | 1.0 | 0.30 |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.56 | U | 1.0 | 0.56 |
| 79-01-6 | Trichloroethene | 0.22 | U | 1.0 | 0.22 |
| 75-69-4 | Trichlorofluoromethane | 0.49 | U | 1.0 | 0.49 |
| 108-05-4 | Vinyl acetate | 0.41 | U | 2.0 | 0.41 |
| 75-01-4 | Vinyl chloride | 0.29 | U | 1.0 | 0.29 |
| 75-65-0 | tert-Butyl alcohol (TBA) | 4.9 | U | 50 | 4.9 |
| 1330-20-7 | Xylenes, Total | 0.52 | U | 2.0 | 0.52 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-175730/6

Matrix: Water Lab File ID: UXM7085.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/09/2015 12:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 175730 Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | 0.43 | U | 1.0 | 0.43 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 94 | | 63-129 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 98 | | 66-120 |
| 2037-26-5 | Toluene-d8 (Surr) | 96 | | 74-120 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 93 | | 75-121 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-175730/4

Matrix: Water Lab File ID: UXM7083.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/09/2015 11:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 175730 Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 10.1 | | 1.0 | 0.28 |
| 71-55-6 | 1,1,1-Trichloroethane | 10.4 | | 1.0 | 0.44 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 9.71 | | 1.0 | 0.22 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 11.0 | | 1.0 | 0.45 |
| 75-34-3 | 1,1-Dichloroethane | 10.5 | | 1.0 | 0.30 |
| 75-35-4 | 1,1-Dichloroethene | 10.7 | | 1.0 | 0.45 |
| 563-58-6 | 1,1-Dichloropropene | 10.8 | | 1.0 | 0.42 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 9.59 | | 1.0 | 0.37 |
| 96-18-4 | 1,2,3-Trichloropropane | 10.2 | | 1.0 | 0.44 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 9.73 | | 1.0 | 0.32 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 9.75 | | 1.0 | 0.41 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 10.2 | | 2.0 | 0.82 |
| 95-50-1 | 1,2-Dichlorobenzene | 9.77 | | 1.0 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | 10.4 | | 1.0 | 0.23 |
| 78-87-5 | 1,2-Dichloropropane | 10.1 | | 1.0 | 0.25 |
| 541-73-1 | 1,3-Dichlorobenzene | 9.82 | | 1.0 | 0.19 |
| 142-28-9 | 1,3-Dichloropropane | 9.62 | | 1.0 | 0.19 |
| 106-46-7 | 1,4-Dichlorobenzene | 9.90 | | 1.0 | 0.27 |
| 594-20-7 | 2,2-Dichloropropane | 10.2 | | 1.0 | 0.26 |
| 110-75-8 | 2-Chloroethyl vinyl ether | 12.4 | | 10 | 0.59 |
| 95-49-8 | 2-Chlorotoluene | 10.1 | | 1.0 | 0.40 |
| 591-78-6 | 2-Hexanone | 19.2 | | 10 | 0.48 |
| 108-86-1 | Bromobenzene | 10.1 | | 1.0 | 0.35 |
| 74-97-5 | Bromochloromethane | 9.90 | | 1.0 | 0.50 |
| 106-43-4 | 4-Chlorotoluene | 9.62 | | 1.0 | 0.29 |
| 99-87-6 | p-Isopropyltoluene | 9.88 | | 1.0 | 0.43 |
| 67-64-1 | Acetone | 17.4 | | 10 | 0.94 |
| 71-43-2 | Benzene | 10.1 | | 1.0 | 0.35 |
| 75-25-2 | Bromoform | 9.74 | | 1.0 | 0.56 |
| 74-83-9 | Bromomethane | 8.58 | | 1.0 | 0.44 |
| 75-15-0 | Carbon disulfide | 10.9 | | 1.0 | 0.38 |
| 56-23-5 | Carbon tetrachloride | 10.8 | | 1.0 | 0.43 |
| 108-90-7 | Chlorobenzene | 9.79 | | 1.0 | 0.25 |
| 75-00-3 | Chloroethane | 8.70 | | 1.0 | 0.32 |
| 67-66-3 | Chloroform | 10.1 | | 1.0 | 0.25 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-175730/4

Matrix: Water | Lab File ID: UXM7083.D

Analysis Method: 8260B | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 04/09/2015 11:20

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175730 | Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | 8.18 | | 1.0 | 0.44 |
| 156-59-2 | cis-1,2-Dichloroethene | 10.1 | | 1.0 | 0.26 |
| 10061-01-5 | cis-1,3-Dichloropropene | 10.5 | | 1.0 | 0.46 |
| 87-68-3 | Hexachlorobutadiene | 9.48 | | 1.0 | 0.35 |
| 74-95-3 | Dibromomethane | 10.2 | | 1.0 | 0.42 |
| 75-27-4 | Bromodichloromethane | 9.81 | | 1.0 | 0.29 |
| 75-71-8 | Dichlorodifluoromethane | 7.10 | | 1.0 | 0.32 |
| 100-41-4 | Ethylbenzene | 10.1 | | 1.0 | 0.25 |
| 106-93-4 | 1,2-Dibromoethane | 10.0 | | 1.0 | 0.32 |
| 91-20-3 | Naphthalene | 9.44 | | 1.0 | 0.45 |
| 179601-23-1 | m-Xylene & p-Xylene | 9.83 | | 2.0 | 0.24 |
| 104-51-8 | n-Butylbenzene | 9.90 | | 1.0 | 0.31 |
| 98-82-8 | Isopropylbenzene | 9.91 | | 1.0 | 0.35 |
| 103-65-1 | N-Propylbenzene | 10.3 | | 1.0 | 0.40 |
| 78-93-3 | 2-Butanone (MEK) | 19.9 | | 10 | 0.53 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 20.1 | | 10 | 0.99 |
| 135-98-8 | sec-Butylbenzene | 9.99 | | 1.0 | 0.48 |
| 1634-04-4 | Methyl tert-butyl ether | 10.3 | | 1.0 | 0.20 |
| 75-09-2 | Methylene Chloride | 10.5 | | 1.0 | 0.33 |
| 95-47-6 | o-Xylene | 10.1 | | 1.0 | 0.25 |
| 100-42-5 | Styrene | 9.36 | | 1.0 | 0.45 |
| 98-06-6 | tert-Butylbenzene | 10.1 | | 1.0 | 0.41 |
| 127-18-4 | Tetrachloroethene | 10.1 | | 1.0 | 0.31 |
| 108-88-3 | Toluene | 10.0 | | 1.0 | 0.23 |
| 156-60-5 | trans-1,2-Dichloroethene | 10.6 | | 1.0 | 0.30 |
| 10061-02-6 | trans-1,3-Dichloropropene | 10.8 | | 1.0 | 0.56 |
| 79-01-6 | Trichloroethene | 10.4 | | 1.0 | 0.22 |
| 75-69-4 | Trichlorofluoromethane | 10.0 | | 1.0 | 0.49 |
| 108-05-4 | Vinyl acetate | 7.85 | | 2.0 | 0.41 |
| 75-01-4 | Vinyl chloride | 8.68 | | 1.0 | 0.29 |
| 75-65-0 | tert-Butyl alcohol (TBA) | 95.3 | | 50 | 4.9 |
| 1330-20-7 | Xylenes, Total | 19.9 | | 2.0 | 0.52 |
| 124-48-1 | Dibromochloromethane | 10.0 | | 1.0 | 0.43 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-175730/4

Matrix: Water Lab File ID: UXM7083.D

Analysis Method: 8260B Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 04/09/2015 11:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 175730 Units: ug/L

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 93 | | 63-129 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 98 | | 66-120 |
| 2037-26-5 | Toluene-d8 (Surr) | 96 | | 74-120 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 94 | | 75-121 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: 240-49022-A-1 MS

Matrix: Water | Lab File ID: UXM7106.D

Analysis Method: 8260B | Date Collected: 04/06/2015 12:30

Sample wt/vol: 5(mL) | Date Analyzed: 04/09/2015 20:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175730 | Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 9.52 | | 1.0 | 0.44 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 9.34 | | 1.0 | 0.22 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 9.50 | | 1.0 | 0.45 |
| 75-34-3 | 1,1-Dichloroethane | 9.95 | | 1.0 | 0.30 |
| 75-35-4 | 1,1-Dichloroethene | 9.80 | | 1.0 | 0.45 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 7.42 | | 1.0 | 0.32 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 9.35 | | 2.0 | 0.82 |
| 95-50-1 | 1,2-Dichlorobenzene | 8.31 | | 1.0 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | 9.78 | | 1.0 | 0.23 |
| 78-87-5 | 1,2-Dichloropropane | 9.42 | | 1.0 | 0.25 |
| 541-73-1 | 1,3-Dichlorobenzene | 7.90 | | 1.0 | 0.19 |
| 106-46-7 | 1,4-Dichlorobenzene | 7.99 | | 1.0 | 0.27 |
| 591-78-6 | 2-Hexanone | 18.8 | | 10 | 0.48 |
| 67-64-1 | Acetone | 16.6 | | 10 | 0.94 |
| 71-43-2 | Benzene | 9.51 | | 1.0 | 0.35 |
| 75-25-2 | Bromoform | 8.57 | | 1.0 | 0.56 |
| 74-83-9 | Bromomethane | 8.15 | | 1.0 | 0.44 |
| 75-15-0 | Carbon disulfide | 9.72 | | 1.0 | 0.38 |
| 56-23-5 | Carbon tetrachloride | 9.81 | | 1.0 | 0.43 |
| 108-90-7 | Chlorobenzene | 8.56 | | 1.0 | 0.25 |
| 75-00-3 | Chloroethane | 8.31 | | 1.0 | 0.32 |
| 67-66-3 | Chloroform | 9.50 | | 1.0 | 0.25 |
| 74-87-3 | Chloromethane | 8.01 | | 1.0 | 0.44 |
| 156-59-2 | cis-1,2-Dichloroethene | 9.51 | | 1.0 | 0.26 |
| 10061-01-5 | cis-1,3-Dichloropropene | 9.20 | | 1.0 | 0.46 |
| 75-27-4 | Bromodichloromethane | 9.04 | | 1.0 | 0.29 |
| 75-71-8 | Dichlorodifluoromethane | 6.26 | | 1.0 | 0.32 |
| 100-41-4 | Ethylbenzene | 8.69 | | 1.0 | 0.25 |
| 106-93-4 | 1,2-Dibromoethane | 9.49 | | 1.0 | 0.32 |
| 179601-23-1 | m-Xylene & p-Xylene | 8.48 | | 2.0 | 0.24 |
| 98-82-8 | Isopropylbenzene | 8.31 | | 1.0 | 0.35 |
| 78-93-3 | 2-Butanone (MEK) | 18.6 | | 10 | 0.53 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 20.6 | | 10 | 0.99 |
| 1634-04-4 | Methyl tert-butyl ether | 10.1 | | 1.0 | 0.20 |
| 75-09-2 | Methylene Chloride | 9.26 | | 1.0 | 0.33 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: 240-49022-A-1 MS

Matrix: Water | Lab File ID: UXM7106.D

Analysis Method: 8260B | Date Collected: 04/06/2015 12:30

Sample wt/vol: 5(mL) | Date Analyzed: 04/09/2015 20:05

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175730 | Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 8.84 | | 1.0 | 0.25 |
| 100-42-5 | Styrene | 7.49 | | 1.0 | 0.45 |
| 127-18-4 | Tetrachloroethene | 8.67 | | 1.0 | 0.31 |
| 108-88-3 | Toluene | 9.03 | | 1.0 | 0.23 |
| 156-60-5 | trans-1,2-Dichloroethene | 9.38 | | 1.0 | 0.30 |
| 10061-02-6 | trans-1,3-Dichloropropene | 9.63 | | 1.0 | 0.56 |
| 79-01-6 | Trichloroethene | 9.24 | | 1.0 | 0.22 |
| 75-69-4 | Trichlorofluoromethane | 8.96 | | 1.0 | 0.49 |
| 75-01-4 | Vinyl chloride | 8.04 | | 1.0 | 0.29 |
| 1330-20-7 | Xylenes, Total | 17.3 | | 2.0 | 0.52 |
| 124-48-1 | Dibromochloromethane | 9.03 | | 1.0 | 0.43 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 93 | | 63-129 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 99 | | 66-120 |
| 2037-26-5 | Toluene-d8 (Surr) | 95 | | 74-120 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 92 | | 75-121 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: 240-49022-D-1 MSD

Matrix: Water | Lab File ID: UXM7107.D

Analysis Method: 8260B | Date Collected: 04/06/2015 12:30

Sample wt/vol: 5(mL) | Date Analyzed: 04/09/2015 20:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175730 | Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 71-55-6 | 1,1,1-Trichloroethane | 9.46 | | 1.0 | 0.44 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 9.21 | | 1.0 | 0.22 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.3 | | 1.0 | 0.45 |
| 75-34-3 | 1,1-Dichloroethane | 10.0 | | 1.0 | 0.30 |
| 75-35-4 | 1,1-Dichloroethene | 9.82 | | 1.0 | 0.45 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 8.11 | | 1.0 | 0.32 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 9.10 | | 2.0 | 0.82 |
| 95-50-1 | 1,2-Dichlorobenzene | 8.43 | | 1.0 | 0.25 |
| 107-06-2 | 1,2-Dichloroethane | 9.68 | | 1.0 | 0.23 |
| 78-87-5 | 1,2-Dichloropropane | 9.38 | | 1.0 | 0.25 |
| 541-73-1 | 1,3-Dichlorobenzene | 8.32 | | 1.0 | 0.19 |
| 106-46-7 | 1,4-Dichlorobenzene | 8.34 | | 1.0 | 0.27 |
| 591-78-6 | 2-Hexanone | 19.9 | | 10 | 0.48 |
| 67-64-1 | Acetone | 17.0 | | 10 | 0.94 |
| 71-43-2 | Benzene | 9.43 | | 1.0 | 0.35 |
| 75-25-2 | Bromoform | 8.66 | | 1.0 | 0.56 |
| 74-83-9 | Bromomethane | 9.27 | | 1.0 | 0.44 |
| 75-15-0 | Carbon disulfide | 10.1 | | 1.0 | 0.38 |
| 56-23-5 | Carbon tetrachloride | 10.1 | | 1.0 | 0.43 |
| 108-90-7 | Chlorobenzene | 8.68 | | 1.0 | 0.25 |
| 75-00-3 | Chloroethane | 8.58 | | 1.0 | 0.32 |
| 67-66-3 | Chloroform | 9.36 | | 1.0 | 0.25 |
| 74-87-3 | Chloromethane | 8.20 | | 1.0 | 0.44 |
| 156-59-2 | cis-1,2-Dichloroethene | 9.63 | | 1.0 | 0.26 |
| 10061-01-5 | cis-1,3-Dichloropropene | 9.25 | | 1.0 | 0.46 |
| 75-27-4 | Bromodichloromethane | 9.20 | | 1.0 | 0.29 |
| 75-71-8 | Dichlorodifluoromethane | 6.65 | | 1.0 | 0.32 |
| 100-41-4 | Ethylbenzene | 8.98 | | 1.0 | 0.25 |
| 106-93-4 | 1,2-Dibromoethane | 9.57 | | 1.0 | 0.32 |
| 179601-23-1 | m-Xylene & p-Xylene | 8.80 | | 2.0 | 0.24 |
| 98-82-8 | Isopropylbenzene | 8.78 | | 1.0 | 0.35 |
| 78-93-3 | 2-Butanone (MEK) | 18.7 | | 10 | 0.53 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 20.3 | | 10 | 0.99 |
| 1634-04-4 | Methyl tert-butyl ether | 9.86 | | 1.0 | 0.20 |
| 75-09-2 | Methylene Chloride | 9.21 | | 1.0 | 0.33 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: 240-49022-D-1 MSD

Matrix: Water | Lab File ID: UXM7107.D

Analysis Method: 8260B | Date Collected: 04/06/2015 12:30

Sample wt/vol: 5(mL) | Date Analyzed: 04/09/2015 20:28

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175730 | Units: ug/L

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 95-47-6 | o-Xylene | 9.13 | | 1.0 | 0.25 |
| 100-42-5 | Styrene | 7.62 | | 1.0 | 0.45 |
| 127-18-4 | Tetrachloroethene | 8.92 | | 1.0 | 0.31 |
| 108-88-3 | Toluene | 9.17 | | 1.0 | 0.23 |
| 156-60-5 | trans-1,2-Dichloroethene | 9.71 | | 1.0 | 0.30 |
| 10061-02-6 | trans-1,3-Dichloropropene | 9.77 | | 1.0 | 0.56 |
| 79-01-6 | Trichloroethene | 9.44 | | 1.0 | 0.22 |
| 75-69-4 | Trichlorofluoromethane | 9.75 | | 1.0 | 0.49 |
| 75-01-4 | Vinyl chloride | 7.97 | | 1.0 | 0.29 |
| 1330-20-7 | Xylenes, Total | 17.9 | | 2.0 | 0.52 |
| 124-48-1 | Dibromochloromethane | 8.96 | | 1.0 | 0.43 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 92 | | 63-129 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 101 | | 66-120 |
| 2037-26-5 | Toluene-d8 (Surr) | 97 | | 74-120 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 94 | | 75-121 |

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A3UX16 Start Date: 04/08/2015 12:22

Analysis Batch Number: 175603 End Date: 04/08/2015 17:55

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| BFB 240-175603/1 | | 04/08/2015 12:22 | 1 | BFB4271.D | DB-624 0.18(mm) |
| STD8260 240-175603/2 IC | | 04/08/2015 12:59 | 1 | UXM7066.D | DB-624 0.18(mm) |
| STD8260 240-175603/3 IC | | 04/08/2015 13:22 | 1 | UXM7067.D | DB-624 0.18(mm) |
| STD8260 240-175603/4 ICIS | | 04/08/2015 13:44 | 1 | UXM7068.D | DB-624 0.18(mm) |
| STD8260 240-175603/5 IC | | 04/08/2015 14:07 | 1 | UXM7069.D | DB-624 0.18(mm) |
| STD8260 240-175603/6 IC | | 04/08/2015 14:30 | 1 | UXM7070.D | DB-624 0.18(mm) |
| STD8260 240-175603/7 IC | | 04/08/2015 14:53 | 1 | UXM7071.D | DB-624 0.18(mm) |
| ICV 240-175603/8 | | 04/08/2015 15:15 | 1 | UXM7072.D | DB-624 0.18(mm) |
| STDA9 240-175603/9 IC | | 04/08/2015 15:38 | 1 | UXM7073.D | DB-624 0.18(mm) |
| STDA9 240-175603/10 IC | | 04/08/2015 16:01 | 1 | UXM7074.D | DB-624 0.18(mm) |
| STDA9 240-175603/11 IC | | 04/08/2015 16:24 | 1 | UXM7075.D | DB-624 0.18(mm) |
| STDA9 240-175603/12 IC | | 04/08/2015 16:46 | 1 | UXM7076.D | DB-624 0.18(mm) |
| STDA9 240-175603/13 IC | | 04/08/2015 17:09 | 1 | UXM7077.D | DB-624 0.18(mm) |
| STDA9 240-175603/14 IC | | 04/08/2015 17:32 | 1 | UXM7078.D | DB-624 0.18(mm) |
| ICV 240-175603/15 | | 04/08/2015 17:55 | 1 | UXM7079.D | DB-624 0.18(mm) |

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A3UX16 Start Date: 04/09/2015 09:53

Analysis Batch Number: 175730 End Date: 04/09/2015 21:13

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| BFB 240-175730/1 | | 04/09/2015 09:53 | 1 | BFB4272.D | DB-624 0.18(mm) |
| CCVIS 240-175730/2 | | 04/09/2015 10:35 | 1 | UXM7081.D | DB-624 0.18(mm) |
| CCV 240-175730/3 | | 04/09/2015 10:57 | 1 | UXM7082.D | DB-624 0.18(mm) |
| LCS 240-175730/4 | | 04/09/2015 11:20 | 1 | UXM7083.D | DB-624 0.18(mm) |
| ZZZZZ | | 04/09/2015 11:43 | 1 | | DB-624 0.18(mm) |
| MB 240-175730/6 | | 04/09/2015 12:06 | 1 | UXM7085.D | DB-624 0.18(mm) |
| ZZZZZ | | 04/09/2015 16:17 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/09/2015 16:40 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/09/2015 17:02 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/09/2015 17:25 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/09/2015 17:48 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/09/2015 18:11 | 1 | | DB-624 0.18(mm) |
| 240-49010-2 | TB-040615 | 04/09/2015 18:34 | 1 | UXM7102.D | DB-624 0.18(mm) |
| ZZZZZ | | 04/09/2015 18:57 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/09/2015 19:19 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/09/2015 19:42 | 1 | | DB-624 0.18(mm) |
| 240-49022-A-1 MS | | 04/09/2015 20:05 | 1 | UXM7106.D | DB-624 0.18(mm) |
| 240-49022-D-1 MSD | | 04/09/2015 20:28 | 1 | UXM7107.D | DB-624 0.18(mm) |
| ZZZZZ | | 04/09/2015 20:51 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/09/2015 21:13 | 1 | | DB-624 0.18(mm) |

# Method 8260C

## Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): DB-624 ID: 0.18 (mm)

| Client Sample ID | Lab Sample ID | DBFM # | DCA # | TOL # | BFB # |
|---|---|---|---|---|---|
| FILL-001 | 240-49010-1 | 89 | 82 | 98 | 88 |
| | MB 240-175483/8 | 94 | 91 | 98 | 90 |
| | LCS 240-175483/6 | 97 | 90 | 100 | 97 |
| FILL-001 MS | 240-49010-1 MS | 97 | 88 | 106 | 98 |
| FILL-001 MSD | 240-49010-1 MSD | 93 | 86 | 98 | 91 |

| | QC LIMITS |
|---|---|
| DBFM = Dibromofluoromethane (Surr) | 37-132 |
| DCA = 1,2-Dichloroethane-d4 (Surr) | 58-123 |
| TOL = Toluene-d8 (Surr) | 67-125 |
| BFB = 4-Bromofluorobenzene (Surr) | 52-136 |

# Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX86842.D

Lab ID: LCS 240-175483/6 Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | LCS CONCENTRATION (ug/Kg) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 50.0 | 51.1 | 102 | 80-120 | |
| 1,1,1-Trichloroethane | 50.0 | 47.9 | 96 | 77-126 | |
| 1,1,2,2-Tetrachloroethane | 50.0 | 53.4 | 107 | 77-123 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 50.0 | 48.0 | 96 | 80-138 | |
| 1,1-Dichloroethane | 50.0 | 47.0 | 94 | 76-120 | |
| 1,1-Dichloroethene | 50.0 | 46.9 | 94 | 75-135 | |
| 1,1-Dichloropropene | 50.0 | 52.6 | 105 | 80-120 | |
| 1,2,3-Trichlorobenzene | 50.0 | 43.9 | 88 | 61-121 | |
| 1,2,3-Trichloropropane | 50.0 | 55.7 | 111 | 80-126 | |
| 1,2,4-Trichlorobenzene | 50.0 | 47.3 | 95 | 64-124 | |
| 1,2,4-Trimethylbenzene | 50.0 | 50.9 | 102 | 80-129 | |
| 1,2-Dibromo-3-Chloropropane | 50.0 | 58.8 | 118 | 61-132 | |
| 1,2-Dichlorobenzene | 50.0 | 47.5 | 95 | 76-120 | |
| 1,2-Dichloroethane | 50.0 | 44.7 | 89 | 72-120 | |
| 1,2-Dichloropropane | 50.0 | 47.8 | 96 | 80-120 | |
| 1,3-Dichlorobenzene | 50.0 | 48.1 | 96 | 78-120 | |
| 1,3-Dichloropropane | 50.0 | 49.9 | 100 | 80-120 | |
| 1,4-Dichlorobenzene | 50.0 | 46.4 | 93 | 75-120 | |
| 2,2-Dichloropropane | 50.0 | 44.0 | 88 | 69-135 | |
| 2-Chloroethyl vinyl ether | 60.0 | 79.2 | 132 | 28-173 | |
| 2-Chlorotoluene | 50.0 | 51.1 | 102 | 78-120 | |
| 2-Hexanone | 100 | 114 | 114 | 64-136 | |
| Bromobenzene | 50.0 | 50.3 | 101 | 80-120 | |
| Bromochloromethane | 50.0 | 48.7 | 97 | 79-120 | |
| 4-Chlorotoluene | 50.0 | 50.8 | 102 | 79-120 | |
| p-Isopropyltoluene | 50.0 | 51.8 | 104 | 77-131 | |
| Acetone | 100 | 104 | 104 | 41-137 | |
| Benzene | 50.0 | 47.9 | 96 | 79-120 | |
| Bromoform | 50.0 | 49.5 | 99 | 62-133 | |
| Bromomethane | 50.0 | 50.1 | 100 | 42-136 | |
| Carbon disulfide | 50.0 | 51.2 | 102 | 62-146 | |
| Carbon tetrachloride | 50.0 | 49.9 | 100 | 71-129 | |
| Chlorobenzene | 50.0 | 47.4 | 95 | 78-120 | |
| Chloroethane | 50.0 | 48.0 | 96 | 58-120 | |
| Chloroform | 50.0 | 46.3 | 93 | 77-120 | |
| Chloromethane | 50.0 | 37.9 | 76 | 50-120 | |
| cis-1,2-Dichloroethene | 50.0 | 50.0 | 100 | 76-120 | |
| cis-1,3-Dichloropropene | 50.0 | 54.0 | 108 | 74-128 | |
| Hexachlorobutadiene | 50.0 | 45.0 | 90 | 54-131 | |
| Dibromomethane | 50.0 | 49.6 | 99 | 80-120 | |
| Bromodichloromethane | 50.0 | 51.3 | 103 | 80-122 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX86842.D

Lab ID: LCS 240-175483/6 Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | LCS CONCENTRATION (ug/Kg) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 50.0 | 31.9 | 64 | 26-120 | |
| Ethylbenzene | 50.0 | 49.2 | 98 | 79-120 | |
| 1,2-Dibromoethane | 50.0 | 53.3 | 107 | 80-120 | |
| Naphthalene | 50.0 | 52.1 | 104 | 65-123 | |
| m-Xylene & p-Xylene | 50.0 | 50.8 | 102 | 80-120 | |
| n-Butylbenzene | 50.0 | 51.8 | 104 | 68-135 | |
| Isopropylbenzene | 50.0 | 52.6 | 105 | 76-122 | |
| N-Propylbenzene | 50.0 | 54.6 | 109 | 80-129 | |
| 2-Butanone (MEK) | 100 | 101 | 101 | 52-131 | |
| 4-Methyl-2-pentanone (MIBK) | 100 | 114 | 114 | 67-135 | |
| sec-Butylbenzene | 50.0 | 52.5 | 105 | 74-129 | |
| Methyl tert-butyl ether | 50.0 | 49.5 | 99 | 49-165 | |
| Methylene Chloride | 50.0 | 50.2 | 100 | 75-120 | |
| o-Xylene | 50.0 | 51.6 | 103 | 80-120 | |
| Styrene | 50.0 | 51.2 | 102 | 80-120 | |
| tert-Butylbenzene | 50.0 | 58.2 | 116 | 76-126 | |
| Tetrachloroethene | 50.0 | 47.1 | 94 | 79-120 | |
| Toluene | 50.0 | 47.8 | 96 | 75-120 | |
| trans-1,2-Dichloroethene | 50.0 | 50.5 | 101 | 78-120 | |
| trans-1,3-Dichloropropene | 50.0 | 56.2 | 112 | 73-131 | |
| Trichloroethene | 50.0 | 49.9 | 100 | 79-120 | |
| Trichlorofluoromethane | 50.0 | 46.8 | 94 | 57-146 | |
| Vinyl acetate | 50.0 | 36.8 | 74 | 70-130 | |
| Vinyl chloride | 50.0 | 41.4 | 83 | 57-120 | |
| tert-Butyl alcohol (TBA) | 500 | 571 | 114 | 60-125 | |
| Xylenes, Total | 100 | 102 | 102 | 80-120 | |
| Dibromochloromethane | 50.0 | 53.7 | 107 | 72-127 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX86866.D

Lab ID: 240-49010-1 MS Client ID: FILL-001 MS

| COMPOUND | SPIKE ADDED (ug/Kg) | SAMPLE CONCENTRATION (ug/Kg) | MS CONCENTRATION (ug/Kg) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 26.6 | 0.65 U | 24.9 | 94 | 34-135 | |
| 1,1,1-Trichloroethane | 26.6 | 0.59 U | 22.7 | 85 | 51-128 | |
| 1,1,2,2-Tetrachloroethane | 26.6 | 0.36 U | 24.5 | 92 | 16-179 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 26.6 | 1.4 U | 22.5 | 85 | 50-147 | |
| 1,1-Dichloroethane | 26.6 | 0.38 U | 23.7 | 89 | 54-122 | |
| 1,1-Dichloroethene | 26.6 | 0.55 U | 23.2 | 87 | 49-157 | |
| 1,1-Dichloropropene | 26.6 | 0.32 U | 24.6 | 92 | 50-122 | |
| 1,2,3-Trichlorobenzene | 26.6 | 0.40 U | 16.8 | 63 | 10-120 | |
| 1,2,3-Trichloropropane | 26.6 | 0.95 U | 25.4 | 95 | 32-174 | |
| 1,2,4-Trichlorobenzene | 26.6 | 0.28 U | 18.6 | 70 | 10-120 | |
| 1,2,4-Trimethylbenzene | 26.6 | 0.68 U | 23.0 | 86 | 10-173 | |
| 1,2-Dibromo-3-Chloropropane | 26.6 | 1.4 U | 23.6 | 89 | 10-153 | |
| 1,2-Dichlorobenzene | 26.6 | 0.38 U | 22.0 | 83 | 17-122 | |
| 1,2-Dichloroethane | 26.6 | 0.36 U | 21.6 | 81 | 49-123 | |
| 1,2-Dichloropropane | 26.6 | 0.72 U | 23.4 | 88 | 61-120 | |
| 1,3-Dichlorobenzene | 26.6 | 0.37 U | 21.7 | 82 | 16-126 | |
| 1,3-Dichloropropane | 26.6 | 0.36 U | 24.3 | 91 | 54-128 | |
| 1,4-Dichlorobenzene | 26.6 | 0.69 U | 21.0 | 79 | 15-121 | |
| 2,2-Dichloropropane | 26.6 | 0.99 U | 21.4 | 81 | 49-132 | |
| 2-Chloroethyl vinyl ether | 31.9 | 1.5 U | 44.8 J | 140 | 10-162 | |
| 2-Chlorotoluene | 26.6 | 0.42 U | 24.6 | 93 | 11-162 | |
| 2-Hexanone | 53.1 | 0.66 U | 44.9 | 84 | 37-147 | |
| Bromobenzene | 26.6 | 0.35 U | 24.7 | 93 | 24-144 | |
| Bromochloromethane | 26.6 | 0.75 U | 24.0 | 90 | 53-120 | |
| 4-Chlorotoluene | 26.6 | 0.43 U | 23.7 | 89 | 15-149 | |
| p-Isopropyltoluene | 26.6 | 0.22 U | 22.2 | 84 | 10-165 | |
| Acetone | 53.1 | 6.6 U | 37.8 | 71 | 24-140 | |
| Benzene | 26.6 | 0.24 U | 23.6 | 89 | 53-120 | |
| Bromoform | 26.6 | 0.35 U | 20.4 | 77 | 18-129 | |
| Bromomethane | 26.6 | 0.57 U | 24.6 | 93 | 33-130 | |
| Carbon disulfide | 26.6 | 0.46 U | 23.4 | 88 | 20-151 | |
| Carbon tetrachloride | 26.6 | 0.39 U | 22.3 | 84 | 32-137 | |
| Chlorobenzene | 26.6 | 0.35 U | 23.7 | 89 | 37-120 | |
| Chloroethane | 26.6 | 0.90 U | 23.3 | 88 | 45-120 | |
| Chloroform | 26.6 | 0.30 U | 23.5 | 88 | 53-120 | |
| Chloromethane | 26.6 | 0.43 U | 19.4 | 73 | 34-120 | |
| cis-1,2-Dichloroethene | 26.6 | 0.38 U | 25.1 | 95 | 50-120 | |
| cis-1,3-Dichloropropene | 26.6 | 0.36 U | 24.5 | 92 | 27-133 | |
| Hexachlorobutadiene | 26.6 | 1.3 U | 17.1 | 64 | 10-131 | |
| Dibromomethane | 26.6 | 0.66 U | 24.5 | 92 | 52-123 | |
| Bromodichloromethane | 26.6 | 0.29 U | 23.7 | 89 | 35-132 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Matrix: Solid  Level: Low  Lab File ID: UX86866.D

Lab ID: 240-49010-1 MS  Client ID: FILL-001 MS

| COMPOUND | SPIKE ADDED (ug/Kg) | SAMPLE CONCENTRATION (ug/Kg) | MS CONCENTRATION (ug/Kg) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 26.6 | 0.53 U | 14.7 | 55 | 17-120 | |
| Ethylbenzene | 26.6 | 0.27 U | 23.6 | 89 | 30-131 | |
| 1,2-Dibromoethane | 26.6 | 0.53 U | 25.8 | 97 | 45-127 | |
| Naphthalene | 26.6 | 0.20 U | 20.8 | 78 | 10-124 | |
| m-Xylene & p-Xylene | 26.6 | 1.3 U | 23.9 | 90 | 29-131 | |
| n-Butylbenzene | 26.6 | 0.24 U | 20.9 | 79 | 10-148 | |
| Isopropylbenzene | 26.6 | 0.17 U | 24.6 | 93 | 21-134 | |
| N-Propylbenzene | 26.6 | 0.42 U | 24.7 | 93 | 10-178 | |
| 2-Butanone (MEK) | 53.1 | 1.5 U | 44.2 | 83 | 30-143 | |
| 4-Methyl-2-pentanone (MIBK) | 53.1 | 0.57 U | 47.2 | 89 | 43-147 | |
| sec-Butylbenzene | 26.6 | 0.19 U | 23.6 | 89 | 10-172 | |
| Methyl tert-butyl ether | 26.6 | 0.45 U | 24.0 | 90 | 51-157 | |
| Methylene Chloride | 26.6 | 0.70 U | 26.4 | 99 | 54-120 | |
| o-Xylene | 26.6 | 0.37 U | 25.7 | 97 | 29-134 | |
| Styrene | 26.6 | 0.16 U | 24.0 | 90 | 27-127 | |
| tert-Butylbenzene | 26.6 | 0.30 U | 27.5 | 104 | 10-163 | |
| Tetrachloroethene | 26.6 | 0.55 U | 22.9 | 86 | 31-135 | |
| Toluene | 26.6 | 0.28 U | 24.2 | 91 | 39-129 | |
| trans-1,2-Dichloroethene | 26.6 | 0.43 U | 24.4 | 92 | 50-123 | |
| trans-1,3-Dichloropropene | 26.6 | 0.57 U | 24.4 | 92 | 28-137 | |
| Trichloroethene | 26.6 | 0.44 U | 24.0 | 90 | 10-177 | |
| Trichlorofluoromethane | 26.6 | 0.36 U | 22.4 | 84 | 36-142 | |
| Vinyl acetate | 26.6 | 0.26 U | 0.970 J | 4 | 70-130 | F1 |
| Vinyl chloride | 26.6 | 0.41 U | 20.6 | 77 | 42-120 | |
| tert-Butyl alcohol (TBA) | 266 | 8.0 U | 228 | 86 | 60-125 | |
| Xylenes, Total | 53.1 | 0.37 U | 49.6 | 93 | 30-131 | |
| Dibromochloromethane | 26.6 | 0.58 U | 24.9 | 94 | 29-135 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: UX86867.D

Lab ID: 240-49010-1 MSD Client ID: FILL-001 MSD

| COMPOUND | SPIKE ADDED (ug/Kg) | MSD CONCENTRATION (ug/Kg) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| 1,1,1,2-Tetrachloroethane | 25.9 | 22.1 | 85 | 12 | 30 | 34-135 | |
| 1,1,1-Trichloroethane | 25.9 | 20.8 | 80 | 9 | 30 | 51-128 | |
| 1,1,2,2-Tetrachloroethane | 25.9 | 22.1 | 85 | 10 | 30 | 16-179 | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 25.9 | 20.8 | 80 | 8 | 30 | 50-147 | |
| 1,1-Dichloroethane | 25.9 | 21.3 | 82 | 10 | 30 | 54-122 | |
| 1,1-Dichloroethene | 25.9 | 21.2 | 82 | 9 | 30 | 49-157 | |
| 1,1-Dichloropropene | 25.9 | 22.5 | 87 | 9 | 30 | 50-122 | |
| 1,2,3-Trichlorobenzene | 25.9 | 14.2 | 55 | 16 | 30 | 10-120 | |
| 1,2,3-Trichloropropane | 25.9 | 23.7 | 91 | 7 | 30 | 32-174 | |
| 1,2,4-Trichlorobenzene | 25.9 | 15.6 | 60 | 18 | 30 | 10-120 | |
| 1,2,4-Trimethylbenzene | 25.9 | 19.4 | 75 | 17 | 30 | 10-173 | |
| 1,2-Dibromo-3-Chloropropane | 25.9 | 21.5 | 83 | 9 | 30 | 10-153 | |
| 1,2-Dichlorobenzene | 25.9 | 19.0 | 73 | 15 | 30 | 17-122 | |
| 1,2-Dichloroethane | 25.9 | 20.1 | 78 | 7 | 30 | 49-123 | |
| 1,2-Dichloropropane | 25.9 | 21.2 | 82 | 10 | 30 | 61-120 | |
| 1,3-Dichlorobenzene | 25.9 | 19.1 | 74 | 13 | 30 | 16-126 | |
| 1,3-Dichloropropane | 25.9 | 22.4 | 86 | 8 | 30 | 54-128 | |
| 1,4-Dichlorobenzene | 25.9 | 18.3 | 70 | 14 | 30 | 15-121 | |
| 2,2-Dichloropropane | 25.9 | 17.9 | 69 | 18 | 30 | 49-132 | |
| 2-Chloroethyl vinyl ether | 31.1 | 41.8 J | 135 | 7 | 30 | 10-162 | |
| 2-Chlorotoluene | 25.9 | 21.4 | 83 | 14 | 30 | 11-162 | |
| 2-Hexanone | 51.8 | 43.3 | 83 | 4 | 30 | 37-147 | |
| Bromobenzene | 25.9 | 21.0 | 81 | 16 | 30 | 24-144 | |
| Bromochloromethane | 25.9 | 22.4 | 86 | 7 | 30 | 53-120 | |
| 4-Chlorotoluene | 25.9 | 20.9 | 81 | 12 | 30 | 15-149 | |
| p-Isopropyltoluene | 25.9 | 18.7 | 72 | 17 | 30 | 10-165 | |
| Acetone | 51.8 | 39.3 | 76 | 4 | 30 | 24-140 | |
| Benzene | 25.9 | 21.4 | 83 | 9 | 30 | 53-120 | |
| Bromoform | 25.9 | 18.3 | 70 | 11 | 30 | 18-129 | |
| Bromomethane | 25.9 | 20.3 | 78 | 19 | 30 | 33-130 | |
| Carbon disulfide | 25.9 | 21.5 | 83 | 8 | 30 | 20-151 | |
| Carbon tetrachloride | 25.9 | 20.8 | 80 | 7 | 30 | 32-137 | |
| Chlorobenzene | 25.9 | 21.1 | 82 | 11 | 30 | 37-120 | |
| Chloroethane | 25.9 | 19.4 | 75 | 18 | 30 | 45-120 | |
| Chloroform | 25.9 | 20.9 | 80 | 12 | 30 | 53-120 | |
| Chloromethane | 25.9 | 16.7 | 64 | 15 | 30 | 34-120 | |
| cis-1,2-Dichloroethene | 25.9 | 22.3 | 86 | 12 | 30 | 50-120 | |
| cis-1,3-Dichloropropene | 25.9 | 21.9 | 85 | 11 | 30 | 27-133 | |
| Hexachlorobutadiene | 25.9 | 13.2 | 51 | 26 | 30 | 10-131 | |
| Dibromomethane | 25.9 | 21.8 | 84 | 12 | 30 | 52-123 | |
| Bromodichloromethane | 25.9 | 21.9 | 85 | 8 | 30 | 35-132 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Matrix: Solid  Level: Low  Lab File ID: UX86867.D

Lab ID: 240-49010-1 MSD  Client ID: FILL-001 MSD

| COMPOUND | SPIKE ADDED (ug/Kg) | MSD CONCENTRATION (ug/Kg) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | 25.9 | 12.8 | 49 | 14 | 30 | 17-120 | |
| Ethylbenzene | 25.9 | 20.9 | 81 | 12 | 30 | 30-131 | |
| 1,2-Dibromoethane | 25.9 | 23.6 | 91 | 9 | 30 | 45-127 | |
| Naphthalene | 25.9 | 18.8 | 73 | 10 | 30 | 10-124 | |
| m-Xylene & p-Xylene | 25.9 | 21.3 | 82 | 11 | 30 | 29-131 | |
| n-Butylbenzene | 25.9 | 16.8 | 65 | 22 | 30 | 10-148 | |
| Isopropylbenzene | 25.9 | 21.4 | 83 | 14 | 30 | 21-134 | |
| N-Propylbenzene | 25.9 | 21.4 | 82 | 14 | 30 | 10-178 | |
| 2-Butanone (MEK) | 51.8 | 42.7 | 82 | 4 | 30 | 30-143 | |
| 4-Methyl-2-pentanone (MIBK) | 51.8 | 45.8 | 88 | 3 | 30 | 43-147 | |
| sec-Butylbenzene | 25.9 | 19.6 | 76 | 18 | 30 | 10-172 | |
| Methyl tert-butyl ether | 25.9 | 21.8 | 84 | 10 | 30 | 51-157 | |
| Methylene Chloride | 25.9 | 23.0 | 89 | 14 | 30 | 54-120 | |
| o-Xylene | 25.9 | 21.7 | 84 | 17 | 30 | 29-134 | |
| Styrene | 25.9 | 20.8 | 80 | 14 | 30 | 27-127 | |
| tert-Butylbenzene | 25.9 | 21.1 | 82 | 26 | 30 | 10-163 | |
| Tetrachloroethene | 25.9 | 19.6 | 76 | 15 | 30 | 31-135 | |
| Toluene | 25.9 | 21.4 | 83 | 12 | 30 | 39-129 | |
| trans-1,2-Dichloroethene | 25.9 | 22.4 | 87 | 8 | 30 | 50-123 | |
| trans-1,3-Dichloropropene | 25.9 | 21.9 | 85 | 11 | 30 | 28-137 | |
| Trichloroethene | 25.9 | 21.9 | 85 | 9 | 30 | 10-177 | |
| Trichlorofluoromethane | 25.9 | 19.6 | 76 | 13 | 30 | 36-142 | |
| Vinyl acetate | 25.9 | 0.300 J | 1 | 106 | 30 | 70-130 | F1 F2 |
| Vinyl chloride | 25.9 | 18.3 | 71 | 12 | 30 | 42-120 | |
| tert-Butyl alcohol (TBA) | 259 | 233 | 90 | 2 | 30 | 60-125 | |
| Xylenes, Total | 51.8 | 43.0 | 83 | 14 | 30 | 30-131 | |
| Dibromochloromethane | 25.9 | 21.2 | 82 | 16 | 30 | 29-135 | |

# Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab File ID: UX86844.D Lab Sample ID: MB 240-175483/8

Matrix: Solid Heated Purge:(Y/N) Y

Instrument ID: A3UX8 Date Analyzed: 04/08/2015 03:14

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| | LCS 240-175483/6 | UX86842.D | 04/08/2015 02:31 |
| FILL-001 | 240-49010-1 | UX86865.D | 04/08/2015 11:06 |
| FILL-001 MS | 240-49010-1 MS | UX86866.D | 04/08/2015 11:27 |
| FILL-001 MSD | 240-49010-1 MSD | UX86867.D | 04/08/2015 11:48 |

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab File ID: BFB8726.D BFB Injection Date: 01/20/2015

Instrument ID: A3UX8 BFB Injection Time: 02:25

Analysis Batch No.: 164619

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0 % of mass 95 | 21.4 | |
| 75 | 30.0 - 60.0 % of mass 95 | 48.3 | |
| 95 | Base Peak, 100% relative abundance | 100.0 | |
| 96 | 5.0 - 9.0 % of mass 95 | 6.6 | |
| 173 | Less than 2.0 % of mass 174 | 0.0 | (0.0)1 |
| 174 | 50.0 - 120.00 % of mass 95 | 83.8 | |
| 175 | 5.0 - 9.0 % of mass 174 | 6.2 | (7.4)1 |
| 176 | 95.0 - 101.0 % of mass 174 | 81.5 | (97.3)1 |
| 177 | 5.0 - 9.0 % of mass 176 | 5.3 | (6.4)2 |

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | STDA9 240-164619/5 | UX85491.D | 01/20/2015 | 03:27 |
| | STDA9 240-164619/6 | UX85492.D | 01/20/2015 | 04:21 |
| | STDA9 240-164619/7 | UX85493.D | 01/20/2015 | 04:49 |
| | STDA9 240-164619/8 | UX85494.D | 01/20/2015 | 05:10 |
| | STDA9 240-164619/9 | UX85495.D | 01/20/2015 | 05:32 |
| | STDA9 240-164619/10 | UX85496.D | 01/20/2015 | 05:53 |

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab File ID: BFB8752.D BFB Injection Date: 03/02/2015

Instrument ID: A3UX8 BFB Injection Time: 23:39

Analysis Batch No.: 170352

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0 % of mass 95 | 19.3 | |
| 75 | 30.0 - 60.0 % of mass 95 | 46.0 | |
| 95 | Base Peak, 100% relative abundance | 100.0 | |
| 96 | 5.0 - 9.0 % of mass 95 | 6.9 | |
| 173 | Less than 2.0 % of mass 174 | 0.3 | (0.3)1 |
| 174 | 50.0 - 120.00 % of mass 95 | 86.6 | |
| 175 | 5.0 - 9.0 % of mass 174 | 6.1 | (7.0)1 |
| 176 | 95.0 - 101.0 % of mass 174 | 83.8 | (96.8)1 |
| 177 | 5.0 - 9.0 % of mass 176 | 5.6 | (6.7)2 |

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | STD8260 240-170352/3 | UX86154.D | 03/03/2015 | 00:12 |
| | STD8260 240-170352/4 | UX86155.D | 03/03/2015 | 00:34 |
| | STD8260 240-170352/5 | UX86156.D | 03/03/2015 | 00:55 |
| | ICIS 240-170352/6 | UX86157.D | 03/03/2015 | 01:34 |
| | STD8260 240-170352/7 | UX86158.D | 03/03/2015 | 01:56 |
| | STD8260 240-170352/8 | UX86159.D | 03/03/2015 | 02:17 |
| | STD8260 240-170352/9 | UX86160.D | 03/03/2015 | 02:38 |
| | STD8260 240-170352/10 | UX86161.D | 03/03/2015 | 03:00 |
| | ICV 240-170352/11 | UX86162.D | 03/03/2015 | 03:21 |

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab File ID: BFB8781.D BFB Injection Date: 04/08/2015

Instrument ID: A3UX8 BFB Injection Time: 01:17

Analysis Batch No.: 175483

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 50 | 15.0 - 40.0 % of mass 95 | 16.6 | |
| 75 | 30.0 - 60.0 % of mass 95 | 42.3 | |
| 95 | Base Peak, 100% relative abundance | 100.0 | |
| 96 | 5.0 - 9.0 % of mass 95 | 6.6 | |
| 173 | Less than 2.0 % of mass 174 | 0.6 | (0.7)1 |
| 174 | 50.0 - 120.00 % of mass 95 | 87.4 | |
| 175 | 5.0 - 9.0 % of mass 174 | 6.5 | (7.5)1 |
| 176 | 95.0 - 101.0 % of mass 174 | 86.4 | (98.9)1 |
| 177 | 5.0 - 9.0 % of mass 176 | 5.9 | (6.8)2 |

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | CCVIS 240-175483/4 | UX86840.D | 04/08/2015 | 01:48 |
| | CCV 240-175483/5 | UX86841.D | 04/08/2015 | 02:10 |
| | LCS 240-175483/6 | UX86842.D | 04/08/2015 | 02:31 |
| | MB 240-175483/8 | UX86844.D | 04/08/2015 | 03:14 |
| FILL-001 | 240-49010-1 | UX86865.D | 04/08/2015 | 11:06 |
| FILL-001 MS | 240-49010-1 MS | UX86866.D | 04/08/2015 | 11:27 |
| FILL-001 MSD | 240-49010-1 MSD | UX86867.D | 04/08/2015 | 11:48 |

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Sample No.: ICIS 240-170352/6 Date Analyzed: 03/03/2015 01:34

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX86157.D Heated Purge: (Y/N) Y

Calibration ID: 27146

| | | FB | | CBZ | | DCB | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 1259665 | 5.16 | 916655 | 7.69 | 494963 | 9.88 |
| UPPER LIMIT | | 2519330 | 5.66 | 1833310 | 8.19 | 989926 | 10.38 |
| LOWER LIMIT | | 629833 | 4.66 | 458328 | 7.19 | 247482 | 9.38 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 240-170352/11 | | 1272907 | 5.16 | 926219 | 7.69 | 502598 | 9.88 |
| CCVIS 240-175483/4 | | 1394117 | 5.16 | 1014357 | 7.68 | 515237 | 9.88 |

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Sample No.: CCVIS 240-175483/4 Date Analyzed: 04/08/2015 01:48

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UX86840.D Heated Purge: (Y/N) Y

Calibration ID: 27146

| | | FB | | CBZ | | DCB | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 1394117 | 5.16 | 1014357 | 7.68 | 515237 | 9.88 |
| UPPER LIMIT | | 2788234 | 5.66 | 2028714 | 8.18 | 1030474 | 10.38 |
| LOWER LIMIT | | 697059 | 4.66 | 507179 | 7.18 | 257619 | 9.38 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| CCV 240-175483/5 | | 1320869 | 5.16 | 999503 | 7.69 | 501009 | 9.88 |
| LCS 240-175483/6 | | 1292574 | 5.16 | 984859 | 7.69 | 512963 | 9.88 |
| MB 240-175483/8 | | 1203955 | 5.16 | 908134 | 7.68 | 465584 | 9.88 |
| 240-49010-1 | FILL-001 | 1298003 | 5.16 | 961950 | 7.68 | 486415 | 9.88 |
| 240-49010-1 MS | FILL-001 MS | 1319810 | 5.16 | 966647 | 7.69 | 497060 | 9.88 |
| 240-49010-1 MSD | FILL-001 MSD | 1273194 | 5.16 | 947007 | 7.69 | 492979 | 9.88 |

FB = Fluorobenzene
CBZ = Chlorobenzene-d5
DCB = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 | Lab Sample ID: 240-49010-1

Matrix: Solid | Lab File ID: UX86865.D

Analysis Method: 8260C | Date Collected: 04/06/2015 15:00

Sample wt/vol: 5.14(g) | Date Analyzed: 04/08/2015 11:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 7.4 | Level: (low/med) Low

Analysis Batch No.: 175483 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.65 | U | 5.3 | 0.65 |
| 71-55-6 | 1,1,1-Trichloroethane | 0.59 | U | 5.3 | 0.59 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.36 | U | 5.3 | 0.36 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1.4 | U | 5.3 | 1.4 |
| 75-34-3 | 1,1-Dichloroethane | 0.38 | U | 5.3 | 0.38 |
| 75-35-4 | 1,1-Dichloroethene | 0.55 | U | 5.3 | 0.55 |
| 563-58-6 | 1,1-Dichloropropene | 0.32 | U | 5.3 | 0.32 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.40 | U | 5.3 | 0.40 |
| 96-18-4 | 1,2,3-Trichloropropane | 0.95 | U | 5.3 | 0.95 |
| 526-73-8 | 1,2,3-Trimethylbenzene | 0.18 | U | 5.3 | 0.18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.28 | U | 5.3 | 0.28 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.68 | U | 5.3 | 0.68 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 1.4 | U | 11 | 1.4 |
| 95-50-1 | 1,2-Dichlorobenzene | 0.38 | U | 5.3 | 0.38 |
| 107-06-2 | 1,2-Dichloroethane | 0.36 | U | 5.3 | 0.36 |
| 78-87-5 | 1,2-Dichloropropane | 0.72 | U | 5.3 | 0.72 |
| 541-73-1 | 1,3-Dichlorobenzene | 0.37 | U | 5.3 | 0.37 |
| 142-28-9 | 1,3-Dichloropropane | 0.36 | U | 5.3 | 0.36 |
| 106-46-7 | 1,4-Dichlorobenzene | 0.69 | U | 5.3 | 0.69 |
| 594-20-7 | 2,2-Dichloropropane | 0.99 | U | 5.3 | 0.99 |
| 110-75-8 | 2-Chloroethyl vinyl ether | 1.5 | U | 53 | 1.5 |
| 95-49-8 | 2-Chlorotoluene | 0.42 | U | 5.3 | 0.42 |
| 591-78-6 | 2-Hexanone | 0.66 | U | 21 | 0.66 |
| 108-86-1 | Bromobenzene | 0.35 | U | 5.3 | 0.35 |
| 74-97-5 | Bromochloromethane | 0.75 | U | 5.3 | 0.75 |
| 106-43-4 | 4-Chlorotoluene | 0.43 | U | 5.3 | 0.43 |
| 99-87-6 | p-Isopropyltoluene | 0.22 | U | 5.3 | 0.22 |
| 67-64-1 | Acetone | 6.6 | U | 21 | 6.6 |
| 71-43-2 | Benzene | 0.24 | U | 5.3 | 0.24 |
| 75-25-2 | Bromoform | 0.35 | U | 5.3 | 0.35 |
| 74-83-9 | Bromomethane | 0.57 | U | 5.3 | 0.57 |
| 75-15-0 | Carbon disulfide | 0.46 | U | 5.3 | 0.46 |
| 56-23-5 | Carbon tetrachloride | 0.39 | U | 5.3 | 0.39 |
| 108-90-7 | Chlorobenzene | 0.35 | U | 5.3 | 0.35 |
| 75-00-3 | Chloroethane | 0.90 | U | 5.3 | 0.90 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 | Lab Sample ID: 240-49010-1

Matrix: Solid | Lab File ID: UX86865.D

Analysis Method: 8260C | Date Collected: 04/06/2015 15:00

Sample wt/vol: 5.14(g) | Date Analyzed: 04/08/2015 11:06

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 7.4 | Level: (low/med) Low

Analysis Batch No.: 175483 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 67-66-3 | Chloroform | 0.30 | U | 5.3 | 0.30 |
| 74-87-3 | Chloromethane | 0.43 | U | 5.3 | 0.43 |
| 156-59-2 | cis-1,2-Dichloroethene | 0.38 | U | 5.3 | 0.38 |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.36 | U | 5.3 | 0.36 |
| 87-68-3 | Hexachlorobutadiene | 1.3 | U | 5.3 | 1.3 |
| 74-95-3 | Dibromomethane | 0.66 | U | 5.3 | 0.66 |
| 75-27-4 | Bromodichloromethane | 0.29 | U | 5.3 | 0.29 |
| 75-71-8 | Dichlorodifluoromethane | 0.53 | U | 5.3 | 0.53 |
| 100-41-4 | Ethylbenzene | 0.27 | U | 5.3 | 0.27 |
| 106-93-4 | 1,2-Dibromoethane | 0.53 | U | 5.3 | 0.53 |
| 108-20-3 | Diisopropyl ether | 1.6 | U | 11 | 1.6 |
| 91-20-3 | Naphthalene | 0.20 | U | 5.3 | 0.20 |
| 179601-23-1 | m-Xylene & p-Xylene | 1.3 | U | 11 | 1.3 |
| 104-51-8 | n-Butylbenzene | 0.24 | U | 5.3 | 0.24 |
| 98-82-8 | Isopropylbenzene | 0.17 | U | 5.3 | 0.17 |
| 103-65-1 | N-Propylbenzene | 0.42 | U | 5.3 | 0.42 |
| 78-93-3 | 2-Butanone (MEK) | 1.5 | U | 21 | 1.5 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 0.57 | U | 21 | 0.57 |
| 135-98-8 | sec-Butylbenzene | 0.19 | U | 5.3 | 0.19 |
| 1634-04-4 | Methyl tert-butyl ether | 0.45 | U | 5.3 | 0.45 |
| 994-05-8 | Tert-amyl methyl ether | 0.39 | U | 5.3 | 0.39 |
| 75-09-2 | Methylene Chloride | 0.70 | U | 5.3 | 0.70 |
| 95-47-6 | o-Xylene | 0.37 | U | 5.3 | 0.37 |
| 100-42-5 | Styrene | 0.16 | U | 5.3 | 0.16 |
| 637-92-3 | Ethyl-t-butyl ether (ETBE) | 0.23 | U | 5.3 | 0.23 |
| 98-06-6 | tert-Butylbenzene | 0.30 | U | 5.3 | 0.30 |
| 127-18-4 | Tetrachloroethene | 0.55 | U | 5.3 | 0.55 |
| 108-88-3 | Toluene | 0.28 | U | 5.3 | 0.28 |
| 156-60-5 | trans-1,2-Dichloroethene | 0.43 | U | 5.3 | 0.43 |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.57 | U | 5.3 | 0.57 |
| 79-01-6 | Trichloroethene | 0.44 | U | 5.3 | 0.44 |
| 75-69-4 | Trichlorofluoromethane | 0.36 | U | 5.3 | 0.36 |
| 108-05-4 | Vinyl acetate | 0.26 | U F1 F2 | 11 | 0.26 |
| 75-01-4 | Vinyl chloride | 0.41 | U | 5.3 | 0.41 |
| 75-65-0 | tert-Butyl alcohol (TBA) | 8.0 | U | 210 | 8.0 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 Lab Sample ID: 240-49010-1

Matrix: Solid Lab File ID: UX86865.D

Analysis Method: 8260C Date Collected: 04/06/2015 15:00

Sample wt/vol: 5.14(g) Date Analyzed: 04/08/2015 11:06

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 7.4 Level: (low/med) Low

Analysis Batch No.: 175483 Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 1330-20-7 | Xylenes, Total | 0.37 | U | 11 | 0.37 |
| 124-48-1 | Dibromochloromethane | 0.58 | U | 5.3 | 0.58 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 82 | | 58-123 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 88 | | 52-136 |
| 2037-26-5 | Toluene-d8 (Surr) | 98 | | 67-125 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 89 | | 37-132 |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 164619

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 01/20/2015 03:27 Calibration End Date: 01/20/2015 05:53 Calibration ID: 26299

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STDA9 240-164619/10 | UX85496.D |
| Level 2 | STDA9 240-164619/9 | UX85495.D |
| Level 3 | STDA9 240-164619/8 | UX85494.D |
| Level 4 | STDA9 240-164619/7 | UX85493.D |
| Level 5 | STDA9 240-164619/6 | UX85492.D |
| Level 6 | STDA9 240-164619/5 | UX85491.D |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Acetonitrile | 0.0445<br>0.0382 | 0.0435 | 0.0384 | 0.0498 | 0.0402 | Ave | | 0.0424 | | | | 11.0 | | 15.0 | | | |
| Diisopropyl ether | 0.1962<br>0.1982 | 0.1983 | 0.1929 | 0.1976 | 0.2006 | Ave | | 0.1973 | | | | 1.3 | | 15.0 | | | |
| 2-Chloro-1,3-butadiene | 0.3347<br>0.3779 | 0.3434 | 0.3276 | 0.3267 | 0.3982 | Ave | | 0.3514 | | | | 8.5 | | 15.0 | | | |
| Ethyl-t-butyl ether (ETBE) | 0.7031<br>0.7391 | 0.7020 | 0.6803 | 0.7375 | 0.7299 | Ave | | 0.7153 | | | | 3.3 | | 15.0 | | | |
| Ethyl acetate | 0.0857<br>0.0758 | 0.0860 | 0.0880 | 0.0937 | 0.0833 | Ave | | 0.0854 | | | | 6.9 | | 15.0 | | | |
| Propionitrile | 0.0465<br>0.0394 | 0.0442 | 0.0430 | 0.0516 | 0.0429 | Ave | | 0.0446 | | | | 9.3 | | 15.0 | | | |
| Methacrylonitrile | 0.1872<br>0.1719 | 0.1838 | 0.1864 | 0.2056 | 0.1821 | Ave | | 0.1862 | | | | 5.9 | | 15.0 | | | |
| Tert-amyl methyl ether | 0.5793<br>0.6073 | 0.6098 | 0.5853 | 0.6358 | 0.5992 | Ave | | 0.6028 | | | | 3.3 | | 15.0 | | | |
| n-Butanol | 0.0104<br>0.0079 | 0.0097 | 0.0093 | 0.0109 | 0.0092 | Ave | | 0.0096 | | | | 11.0 | | 15.0 | | | |
| Ethyl acrylate | 0.2697<br>0.2685 | 0.2746 | 0.3025 | 0.3165 | 0.2938 | Ave | | 0.2876 | | | | 6.9 | | 15.0 | | | |
| Methyl methacrylate | 0.2331<br>0.2114 | 0.2160 | 0.2400 | 0.2491 | 0.2283 | Ave | | 0.2297 | | | | 6.2 | | 15.0 | | | |
| 2-Nitropropane | 0.0393<br>0.0575 | 0.0397 | 0.0471 | 0.0595 | 0.0591 | Lin1 | -0.270 | 0.0590 | | | | | | | 0.9980 | | 0.9900 |
| 1-Chlorohexane | 0.3015<br>0.3452 | 0.3019 | 0.3127 | 0.2801 | 0.3826 | Ave | | 0.3206 | | | | 12.0 | | 15.0 | | | |
| Cyclohexanone | 0.0166<br>0.0118 | 0.0153 | 0.0137 | 0.0157 | 0.0141 | Ave | | 0.0145 | | | | 12.0 | | 15.0 | | | |
| 1,2,3-Trimethylbenzene | 2.3887<br>2.3514 | 2.4070 | 2.3363 | 2.2081 | 2.4505 | Ave | | 2.3570 | | | | 3.5 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 164619

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 01/20/2015 03:27 Calibration End Date: 01/20/2015 05:53 Calibration ID: 26299

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 1,3,5-Trichlorobenzene | 1.0897<br>0.9404 | 1.0188 | 0.9529 | 0.8801 | 1.0387 | Ave | | 0.9868 | | | | 7.7 | | 15.0 | | | |
| 2-Methylnaphthalene | 1.4411<br>+++++ | 1.6564 | 1.6821 | 1.6906 | 1.5173 | Ave | | 1.5975 | | | | 7.0 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 164619

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 01/20/2015 03:27 Calibration End Date: 01/20/2015 05:53 Calibration ID: 26299

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STDA9 240-164619/10 | UX85496.D |
| Level 2 | STDA9 240-164619/9 | UX85495.D |
| Level 3 | STDA9 240-164619/8 | UX85494.D |
| Level 4 | STDA9 240-164619/7 | UX85493.D |
| Level 5 | STDA9 240-164619/6 | UX85492.D |
| Level 6 | STDA9 240-164619/5 | UX85491.D |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| Acetonitrile | FB | Ave | 58774<br>2192485 | 113045 | 218282 | 628675 | 1157500 | 50.0<br>2000 | 100 | 200 | 500 | 1000 |
| Diisopropyl ether | FB | Ave | 25882<br>1137618 | 51556 | 109591 | 249256 | 578323 | 5.00<br>200 | 10.0 | 20.0 | 50.0 | 100 |
| 2-Chloro-1,3-butadiene | FB | Ave | 44159<br>2169223 | 89287 | 186130 | 412010 | 1147963 | 5.00<br>200 | 10.0 | 20.0 | 50.0 | 100 |
| Ethyl-t-butyl ether (ETBE) | FB | Ave | 92769<br>4243098 | 182537 | 386528 | 930109 | 2104258 | 5.00<br>200 | 10.0 | 20.0 | 50.0 | 100 |
| Ethyl acetate | FB | Ave | 22603<br>870817 | 44719 | 99997 | 236306 | 480365 | 10.0<br>400 | 20.0 | 40.0 | 100 | 200 |
| Propionitrile | FB | Ave | 61354<br>2261333 | 115036 | 244581 | 651222 | 1236047 | 50.0<br>2000 | 100 | 200 | 500 | 1000 |
| Methacrylonitrile | FB | Ave | 247046<br>9866507 | 478011 | 1058808 | 2593148 | 5250813 | 50.0<br>2000 | 100 | 200 | 500 | 1000 |
| Tert-amyl methyl ether | FB | Ave | 76433<br>3486226 | 158569 | 332516 | 801841 | 1727490 | 5.00<br>200 | 10.0 | 20.0 | 50.0 | 100 |
| n-Butanol | FB | Ave | 34195<br>1133332 | 63302 | 131707 | 344469 | 660771 | 125<br>5000 | 250 | 500 | 1250 | 2500 |
| Ethyl acrylate | FB | Ave | 35580<br>1541429 | 71416 | 171874 | 399212 | 846936 | 5.00<br>200 | 10.0 | 20.0 | 50.0 | 100 |
| Methyl methacrylate | FB | Ave | 61502<br>2427195 | 112341 | 272744 | 628403 | 1316510 | 10.0<br>400 | 20.0 | 40.0 | 100 | 200 |
| 2-Nitropropane | FB | Lin1 | 10370<br>659846 | 20665 | 53519 | 149962 | 340915 | 10.0<br>400 | 20.0 | 40.0 | 100 | 200 |
| 1-Chlorohexane | CBZ | Ave | 29209<br>1447995 | 57996 | 134742 | 265880 | 805604 | 5.00<br>200 | 10.0 | 20.0 | 50.0 | 100 |
| Cyclohexanone | CBZ | Ave | 16055<br>494045 | 29360 | 59067 | 149319 | 296624 | 50.0<br>2000 | 100 | 200 | 500 | 1000 |
| 1,2,3-Trimethylbenzene | DCB | Ave | 123283<br>5456187 | 250592 | 525878 | 1139830 | 2843845 | 5.00<br>200 | 10.0 | 20.0 | 50.0 | 100 |
| 1,3,5-Trichlorobenzene | DCB | Ave | 56241<br>2182004 | 106067 | 214482 | 454324 | 1205423 | 5.00<br>200 | 10.0 | 20.0 | 50.0 | 100 |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 164619

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 01/20/2015 03:27 Calibration End Date: 01/20/2015 05:53 Calibration ID: 26299

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1 LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1 LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| 2-Methylnaphthalene | DCB | Ave | 148754 +++++ | 344886 | 757263 | 1745361 | 3521753 | 10.0 +++++ | 20.0 | 40.0 | 100 | 200 |

Curve Type Legend:

| |
|---|
| Ave = Average ISTD |
| Lin1 = Linear 1/conc ISTD |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-170352/10 | UX86161.D |
| Level 2 | STD8260 240-170352/9 | UX86160.D |
| Level 3 | STD8260 240-170352/8 | UX86159.D |
| Level 4 | STD8260 240-170352/7 | UX86158.D |
| Level 5 | ICIS 240-170352/6 | UX86157.D |
| Level 6 | STD8260 240-170352/5 | UX86156.D |
| Level 7 | STD8260 240-170352/4 | UX86155.D |
| Level 8 | STD8260 240-170352/3 | UX86154.D |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1 LVL 6 | LVL 2 LVL 7 | LVL 3 LVL 8 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Dichlorodifluoromethane | 0.1564 0.1887 | 0.1715 0.1985 | 0.1946 0.1840 | 0.2066 | 0.1844 | Ave | | 0.1856 | | | 0.1000 | 8.5 | | 15.0 | | | |
| Chloromethane | 0.2048 0.2108 | 0.2277 0.2314 | 0.2332 0.2083 | 0.2289 | 0.2224 | Ave | | 0.2209 | | | 0.1000 | 5.1 | | 15.0 | | | |
| Vinyl chloride | 0.1478 0.1529 | 0.1775 0.1608 | 0.1676 0.1598 | 0.1858 | 0.1579 | Ave | | 0.1638 | | | 0.1000 | 7.7 | | 15.0 | | | |
| Bromomethane | 0.1071 0.0870 | 0.1172 0.0823 | 0.1087 0.0632 | 0.1164 | 0.1042 | Qua | 0.0723 | 0.0985 | -0.000178 | | 0.0500 | | | | 0.9990 | | 0.9900 |
| Chloroethane | 0.0677 0.0859 | 0.1085 0.0784 | 0.0892 0.0635 | 0.1049 | 0.0947 | Qua | 0.0366 | 0.0931 | -0.000149 | | | | | | 1.0000 | | 0.9900 |
| Dichlorofluoromethane | 0.2675 0.2181 | 0.2484 0.2099 | 0.2416 0.1876 | 0.2554 | 0.2243 | Ave | | 0.2316 | | | | 11.0 | | 15.0 | | | |
| Trichlorofluoromethane | 0.2037 0.2306 | 0.2326 0.2296 | 0.2172 0.2186 | 0.2673 | 0.2282 | Ave | | 0.2285 | | | 0.1000 | 8.1 | | 15.0 | | | |
| Ethyl ether | 0.1660 0.1384 | 0.1777 0.1319 | 0.1977 +++++ | 0.1719 | 0.1542 | Ave | | 0.1626 | | | | 14.0 | | 15.0 | | | |
| Acrolein | 0.0213 0.0206 | 0.0151 0.0140 | 0.0232 +++++ | 0.0183 | 0.0235 | Qua | -0.142 | 0.0274 | -0.000026 | | | | | | 0.9980 | | 0.9900 |
| 1,1-Dichloroethene | 0.2008 0.1872 | 0.2042 0.1866 | 0.1934 0.1887 | 0.2099 | 0.1852 | Ave | | 0.1945 | | | 0.1000 | 4.8 | | 15.0 | | | |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 0.1515 0.1533 | 0.1628 0.1608 | 0.1474 0.1591 | 0.1717 | 0.1560 | Ave | | 0.1578 | | | 0.0500 | 4.8 | | 15.0 | | | |
| Acetone | +++++ 0.1117 | +++++ 0.1056 | 0.2169 0.1031 | 0.1870 | 0.1504 | Lin1 | 1.4323 | 0.0998 | | | 0.0500 | | | | 0.9960 | | 0.9900 |
| Iodomethane | 0.3112 0.2885 | 0.3326 0.2930 | 0.3051 0.2905 | 0.3366 | 0.3051 | Ave | | 0.3078 | | | | 6.0 | | 15.0 | | | |
| Carbon disulfide | 0.4014 0.4962 | 0.4691 0.4971 | 0.4438 0.5321 | 0.5063 | 0.4630 | Ave | | 0.4761 | | | 0.1000 | 8.6 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton  Job No.: 240-49010-1  Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8  GC Column: DB-624  ID: 0.18(mm)  Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12  Calibration End Date: 03/03/2015 03:00  Calibration ID: 27146

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 3-Chloro-1-propene | 0.0859<br>0.1143 | 0.0895<br>0.1221 | 0.1120<br>0.1204 | 0.1260 | 0.1087 | Ave | | 0.1099 | | | | 13.0 | | 15.0 | | | |
| Methyl acetate | 0.2446<br>0.2166 | 0.2639<br>0.2196 | 0.2292<br>0.2261 | 0.2710 | 0.2518 | Ave | | 0.2404 | | | 0.1000 | 8.6 | | 15.0 | | | |
| Methylene Chloride | +++++<br>0.2450 | +++++<br>0.2289 | 0.4507<br>0.2254 | 0.3697 | 0.2764 | Lin1 | 1.2590 | 0.2186 | | | 0.1000 | | | | 0.9990 | | 0.9900 |
| tert-Butyl alcohol (TBA) | 0.0285<br>0.0267 | 0.0281<br>0.0266 | 0.0250<br>0.0225 | 0.0338 | 0.0317 | Ave | | 0.0279 | | | | 13.0 | | 15.0 | | | |
| Acrylonitrile | 0.1012<br>0.0969 | 0.1135<br>0.0993 | 0.1008<br>0.1003 | 0.1193 | 0.1142 | Ave | | 0.1057 | | | | 8.1 | | 15.0 | | | |
| trans-1,2-Dichloroethene | 0.2147<br>0.2207 | 0.2330<br>0.2250 | 0.2405<br>0.2218 | 0.2511 | 0.2239 | Ave | | 0.2288 | | | 0.1000 | 5.2 | | 15.0 | | | |
| Methyl tert-butyl ether | 0.6090<br>0.6371 | 0.6468<br>0.6656 | 0.6354<br>0.6511 | 0.7315 | 0.6943 | Ave | | 0.6588 | | | 0.1000 | 5.8 | | 15.0 | | | |
| Hexane | +++++<br>0.0614 | 0.0794<br>0.0634 | 0.0619<br>0.0638 | 0.0736 | 0.0616 | Ave | | 0.0664 | | | | 11.0 | | 15.0 | | | |
| 1,1-Dichloroethane | 0.4224<br>0.3785 | 0.4175<br>0.3912 | 0.4092<br>0.3924 | 0.4268 | 0.3936 | Ave | | 0.4039 | | | 0.1000 | 4.3 | | 15.0 | | | |
| Vinyl acetate | 0.1670<br>0.2195 | 0.2206<br>0.2393 | 0.2019<br>0.2328 | 0.2502 | 0.1999 | Ave | | 0.2164 | | | | 12.0 | | 15.0 | | | |
| 2-Butanone (MEK) | 0.1518<br>0.1445 | 0.1768<br>0.1439 | 0.1565<br>0.1456 | 0.1728 | 0.1660 | Ave | | 0.1572 | | | 0.0500 | 8.4 | | 15.0 | | | |
| cis-1,2-Dichloroethene | 0.2505<br>0.2426 | 0.2480<br>0.2522 | 0.2567<br>0.2488 | 0.2701 | 0.2482 | Ave | | 0.2521 | | | 0.1000 | 3.3 | | 15.0 | | | |
| 2,2-Dichloropropane | 0.1554<br>0.1793 | 0.1789<br>0.1767 | 0.1701<br>0.1769 | 0.2059 | 0.1842 | Ave | | 0.1784 | | | | 7.9 | | 15.0 | | | |
| Bromochloromethane | 0.1366<br>0.1248 | 0.1300<br>0.1264 | 0.1287<br>0.1235 | 0.1390 | 0.1297 | Ave | | 0.1298 | | | | 4.2 | | 15.0 | | | |
| Tetrahydrofuran | 0.0816<br>0.0826 | 0.0850<br>0.0863 | 0.0810<br>0.0874 | 0.1003 | 0.0954 | Ave | | 0.0875 | | | | 7.9 | | 15.0 | | | |
| Chloroform | 0.4094<br>0.3690 | 0.4017<br>0.3769 | 0.3941<br>0.3749 | 0.4321 | 0.3758 | Ave | | 0.3917 | | | | 5.6 | | 15.0 | | | |
| 1,1,1-Trichloroethane | 0.2959<br>0.2905 | 0.2873<br>0.2980 | 0.2658<br>0.3051 | 0.3166 | 0.2863 | Ave | | 0.2932 | | | 0.1000 | 5.1 | | 15.0 | | | |
| Cyclohexane | 0.3382<br>0.3707 | 0.3551<br>0.3851 | 0.3558<br>0.3847 | 0.4097 | 0.3533 | Ave | | 0.3691 | | | 0.1000 | 6.3 | | 15.0 | | | |
| 1,1-Dichloropropene | 0.2465<br>0.2685 | 0.2764<br>0.2786 | 0.2655<br>0.2814 | 0.3186 | 0.2646 | Ave | | 0.2750 | | | | 7.5 | | 15.0 | | | |
| Carbon tetrachloride | 0.2529<br>0.2573 | 0.2426<br>0.2725 | 0.2477<br>0.2777 | 0.2759 | 0.2408 | Ave | | 0.2584 | | | 0.1000 | 5.8 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Isobutyl alcohol | 0.0093<br>0.0105 | 0.0112<br>0.0105 | 0.0097<br>0.0095 | 0.0131 | 0.0125 | Ave | | 0.0108 | | | | 13.0 | | 15.0 | | | |
| 1,2-Dichloroethane | 0.3413<br>0.2892 | 0.3330<br>0.2958 | 0.3000<br>0.2915 | 0.3319 | 0.3090 | Ave | | 0.3115 | | | 0.1000 | 6.7 | | 15.0 | | | |
| Benzene | 1.0042<br>0.8984 | 1.0032<br>0.9154 | 0.9905<br>0.9081 | 1.0272 | 0.9139 | Ave | | 0.9576 | | | 0.5000 | 5.6 | | 15.0 | | | |
| n-Heptane | +++++<br>0.0743 | +++++<br>0.0751 | 0.0621<br>0.0737 | 0.0809 | 0.0653 | Ave | | 0.0719 | | | | 9.6 | | 15.0 | | | |
| Trichloroethene | 0.2681<br>0.2394 | 0.2722<br>0.2475 | 0.2549<br>0.2488 | 0.2651 | 0.2436 | Ave | | 0.2549 | | | 0.2000 | 4.8 | | 15.0 | | | |
| Methylcyclohexane | 0.3826<br>0.3806 | 0.3958<br>0.4000 | 0.3591<br>0.3963 | 0.4190 | 0.3572 | Ave | | 0.3863 | | | 0.1000 | 5.4 | | 15.0 | | | |
| 1,2-Dichloropropane | 0.2552<br>0.2259 | 0.2388<br>0.2293 | 0.2398<br>0.2232 | 0.2595 | 0.2265 | Ave | | 0.2373 | | | 0.1000 | 5.8 | | 15.0 | | | |
| Dibromomethane | 0.1129<br>0.1303 | 0.1394<br>0.1332 | 0.1280<br>0.1304 | 0.1392 | 0.1366 | Ave | | 0.1313 | | | | 6.5 | | 15.0 | | | |
| 1,4-Dioxane | 0.0022<br>0.0027 | 0.0024<br>0.0027 | 0.0027<br>0.0023 | 0.0031 | 0.0026 | Ave | | 0.0026 | | | | 12.0 | | 15.0 | | | |
| Bromodichloromethane | 0.2118<br>0.2683 | 0.2067<br>0.2871 | 0.2387<br>0.2911 | 0.2752 | 0.2615 | Ave | | 0.2550 | | | 0.1000 | 13.0 | | 15.0 | | | |
| 2-Chloroethyl vinyl ether | +++++<br>0.0627 | 0.0453<br>0.0687 | 0.0519<br>0.0720 | 0.0630 | 0.0582 | Ave | | 0.0602 | | | | 15.0 | | 15.0 | | | |
| cis-1,3-Dichloropropene | 0.2725<br>0.3244 | 0.2489<br>0.3408 | 0.2812<br>0.3442 | 0.3185 | 0.2979 | Ave | | 0.3036 | | | 0.1500 | 11.0 | | 15.0 | | | |
| 4-Methyl-2-pentanone (MIBK) | 0.2116<br>0.2763 | 0.2360<br>0.2727 | 0.2505<br>0.2660 | 0.3110 | 0.2950 | Ave | | 0.2649 | | | 0.0500 | 12.0 | | 15.0 | | | |
| Toluene | 1.5016<br>1.3090 | 1.3867<br>1.3149 | 1.3331<br>1.3637 | 1.4933 | 1.2962 | Ave | | 1.3748 | | | 0.4000 | 5.9 | | 15.0 | | | |
| trans-1,3-Dichloropropene | +++++<br>0.3745 | +++++<br>0.3889 | 0.2799<br>0.4051 | 0.3532 | 0.3449 | Ave | | 0.3577 | | | 0.1000 | 12.0 | | 15.0 | | | |
| Ethyl methacrylate | +++++<br>0.3622 | +++++<br>0.3569 | 0.2914<br>0.3580 | 0.3688 | 0.3393 | Ave | | 0.3461 | | | | 8.2 | | 15.0 | | | |
| 1,1,2-Trichloroethane | 0.3165<br>0.2733 | 0.2634<br>0.2727 | 0.2937<br>0.2737 | 0.3218 | 0.2861 | Ave | | 0.2876 | | | 0.1000 | 7.5 | | 15.0 | | | |
| 1,3-Dichloropropane | 0.4280<br>0.4647 | 0.4777<br>0.4619 | 0.4706<br>0.4652 | 0.5353 | 0.4831 | Ave | | 0.4733 | | | | 6.3 | | 15.0 | | | |
| Tetrachloroethene | 0.3196<br>0.2649 | 0.2761<br>0.2667 | 0.2789<br>0.2676 | 0.3047 | 0.2514 | Ave | | 0.2787 | | | 0.2000 | 8.1 | | 15.0 | | | |
| 2-Hexanone | 0.2071<br>0.2821 | 0.2420<br>0.2674 | 0.2326<br>0.2623 | 0.3130 | 0.3017 | Ave | | 0.2635 | | | 0.0500 | 14.0 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Dibromochloromethane | +++++<br>0.2826 | 0.2036<br>0.2943 | 0.2150<br>0.3076 | 0.2825 | 0.2662 | Ave | | 0.2645 | | | | 15.0 | | 15.0 | | | |
| 1,2-Dibromoethane | 0.1884<br>0.2744 | 0.2663<br>0.2766 | 0.2766<br>0.2800 | 0.3094 | 0.2845 | Ave | | 0.2695 | | | | 13.0 | | 15.0 | | | |
| Chlorobenzene | 1.0023<br>0.8672 | 1.0131<br>0.8677 | 0.9540<br>0.8681 | 1.0006 | 0.8633 | Ave | | 0.9295 | | | 0.3000 | 7.5 | | 15.0 | | | |
| 1,1,1,2-Tetrachloroethane | 0.2505<br>0.2923 | 0.2554<br>0.2984 | 0.2586<br>0.2987 | 0.3077 | 0.2886 | Ave | | 0.2813 | | | | 8.1 | | 15.0 | | | |
| Ethylbenzene | 0.4861<br>0.4758 | 0.4876<br>0.4697 | 0.4995<br>0.4743 | 0.5263 | 0.4493 | Ave | | 0.4836 | | | | 4.7 | | 15.0 | | | |
| m-Xylene & p-Xylene | 0.5350<br>0.5855 | 0.5527<br>0.5688 | 0.5611<br>0.5772 | 0.6437 | 0.5453 | Ave | | 0.5712 | | | | 5.9 | | 15.0 | | | |
| o-Xylene | 0.4441<br>0.5555 | 0.5400<br>0.5551 | 0.5386<br>0.5392 | 0.6420 | 0.5451 | Ave | | 0.5449 | | | | 9.8 | | 15.0 | | | |
| Styrene | 0.6563<br>0.8992 | 0.7699<br>0.8849 | 0.7727<br>0.8775 | 0.9203 | 0.8455 | Ave | | 0.8283 | | | 0.3000 | 11.0 | | 15.0 | | | |
| Bromoform | 0.0978<br>0.1834 | 0.1087<br>0.1955 | 0.1259<br>0.2033 | 0.1815 | 0.1651 | Lin1 | -0.171 | 0.1980 | | | 0.1000 | | | | 0.9970 | | 0.9900 |
| Isopropylbenzene | 1.1423<br>1.4570 | 1.2214<br>1.4715 | 1.3005<br>1.4586 | 1.5782 | 1.3734 | Ave | | 1.3754 | | | 0.1000 | 11.0 | | 15.0 | | | |
| 1,1,2,2-Tetrachloroethane | 0.6849<br>0.6624 | 0.6570<br>0.6478 | 0.6045<br>0.6699 | 0.7985 | 0.6677 | Ave | | 0.6741 | | | 0.3000 | 8.2 | | 15.0 | | | |
| Bromobenzene | 0.7446<br>0.7282 | 0.7583<br>0.7219 | 0.7710<br>0.7557 | 0.8237 | 0.7144 | Ave | | 0.7522 | | | | 4.6 | | 15.0 | | | |
| 1,2,3-Trichloropropane | 0.2166<br>0.2311 | 0.2015<br>0.2201 | 0.2340<br>0.2294 | 0.2953 | 0.2506 | Ave | | 0.2348 | | | | 12.0 | | 15.0 | | | |
| trans-1,4-Dichloro-2-butene | +++++<br>0.1980 | 0.1779<br>0.1957 | 0.1692<br>0.2079 | 0.2194 | 0.1827 | Ave | | 0.1930 | | | | 9.1 | | 15.0 | | | |
| N-Propylbenzene | 0.5689<br>0.7854 | 0.6155<br>0.7815 | 0.7408<br>0.8242 | 0.8723 | 0.7534 | Ave | | 0.7428 | | | | 14.0 | | 15.0 | | | |
| 2-Chlorotoluene | 0.5605<br>0.6624 | 0.5827<br>0.6594 | 0.6479<br>0.6853 | 0.7511 | 0.6358 | Ave | | 0.6481 | | | | 9.1 | | 15.0 | | | |
| 1,3,5-Trimethylbenzene | 1.7342<br>2.3076 | 1.8431<br>2.3386 | 2.1033<br>2.3921 | 2.5729 | 2.2024 | Ave | | 2.1868 | | | | 13.0 | | 15.0 | | | |
| 4-Chlorotoluene | 0.6127<br>0.6995 | 0.5976<br>0.6874 | 0.7120<br>0.7121 | 0.8098 | 0.6558 | Ave | | 0.6858 | | | | 9.7 | | 15.0 | | | |
| tert-Butylbenzene | 1.4839<br>2.1301 | 1.5955<br>2.1216 | 1.8968<br>2.1512 | 2.2751 | 1.9777 | Ave | | 1.9540 | | | | 14.0 | | 15.0 | | | |
| 1,2,4-Trimethylbenzene | 1.6814<br>2.4192 | 1.9856<br>2.4299 | 2.2754<br>2.4626 | 2.7038 | 2.3309 | Ave | | 2.2861 | | | | 14.0 | | 15.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| sec-Butylbenzene | 2.1401<br>2.9860 | 2.4933<br>3.0191 | 2.7669<br>3.0336 | 3.2898 | 2.7551 | Ave | | 2.8105 | | | | 13.0 | | 15.0 | | | |
| 1,3-Dichlorobenzene | 1.4762<br>1.3178 | 1.4205<br>1.3120 | 1.4191<br>1.3227 | 1.5883 | 1.3029 | Ave | | 1.3950 | | | 0.6000 | 7.3 | | 15.0 | | | |
| p-Isopropyltoluene | +++++<br>2.5570 | 1.9978<br>2.6136 | 2.3109<br>2.5603 | 2.8183 | 2.4325 | Ave | | 2.4701 | | | | 11.0 | | 15.0 | | | |
| 1,4-Dichlorobenzene | 1.7621<br>1.3405 | 1.4395<br>1.3468 | 1.4811<br>1.3356 | 1.6724 | 1.3655 | Ave | | 1.4679 | | | 0.5000 | 11.0 | | 15.0 | | | |
| n-Butylbenzene | 1.6923<br>2.1625 | 1.8200<br>2.2637 | 1.9844<br>2.1701 | 2.3153 | 2.0127 | Ave | | 2.0526 | | | | 11.0 | | 15.0 | | | |
| 1,2-Dichlorobenzene | 1.3078<br>1.2586 | 1.3936<br>1.2752 | 1.3975<br>1.2501 | 1.5545 | 1.3505 | Ave | | 1.3485 | | | 0.4000 | 7.5 | | 15.0 | | | |
| 1,2-Dibromo-3-Chloropropane | +++++<br>0.1225 | 0.1046<br>0.1324 | 0.0995<br>0.1435 | 0.1349 | 0.1290 | Ave | | 0.1238 | | | 0.0500 | 13.0 | | 15.0 | | | |
| 1,2,4-Trichlorobenzene | 0.8421<br>0.8460 | 0.8580<br>0.9119 | 0.8112<br>0.9023 | 0.9203 | 0.8693 | Ave | | 0.8701 | | | 0.2000 | 4.4 | | 15.0 | | | |
| Hexachlorobutadiene | 0.5622<br>0.4780 | 0.5048<br>0.4922 | 0.5020<br>0.4698 | 0.5370 | 0.4832 | Ave | | 0.5037 | | | | 6.2 | | 15.0 | | | |
| Naphthalene | 1.7179<br>2.2787 | 1.7202<br>2.4240 | 1.7775<br>2.2957 | 2.2933 | 2.4185 | Ave | | 2.1157 | | | | 15.0 | | 15.0 | | | |
| 1,2,3-Trichlorobenzene | 0.9801<br>0.8666 | 0.8402<br>0.8988 | 0.8278<br>0.8671 | 0.9583 | 0.9289 | Ave | | 0.8960 | | | | 6.2 | | 15.0 | | | |
| Dibromofluoromethane (Surr) | +++++<br>0.2035 | 0.4464<br>0.2004 | 0.3310<br>0.2063 | 0.2530 | 0.2172 | Qua | 0.6302 | 0.1857 | 0.0000869 | | | | | | 1.0000 | | 0.9900 |
| 1,2-Dichloroethane-d4 (Surr) | +++++<br>0.2225 | 0.5122<br>0.2286 | 0.3979<br>0.2346 | 0.3140 | 0.2615 | Qua | 0.8698 | 0.2061 | 0.0001210 | | | | | | 1.0000 | | 0.9900 |
| Toluene-d8 (Surr) | +++++<br>1.1257 | 2.3212<br>1.0783 | 1.7853<br>1.1326 | 1.4062 | 1.1310 | Qua | 3.5028 | 0.9923 | 0.0006103 | | | | | | 1.0000 | | 0.9900 |
| 4-Bromofluorobenzene (Surr) | +++++<br>0.3991 | 0.8616<br>0.3791 | 0.7120<br>0.3856 | 0.5259 | 0.4489 | Qua | 1.5846 | 0.3557 | 0.0001081 | | | | | | 1.0000 | | 0.9900 |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD8260 240-170352/10 | UX86161.D |
| Level 2 | STD8260 240-170352/9 | UX86160.D |
| Level 3 | STD8260 240-170352/8 | UX86159.D |
| Level 4 | STD8260 240-170352/7 | UX86158.D |
| Level 5 | ICIS 240-170352/6 | UX86157.D |
| Level 6 | STD8260 240-170352/5 | UX86156.D |
| Level 7 | STD8260 240-170352/4 | UX86155.D |
| Level 8 | STD8260 240-170352/3 | UX86154.D |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Dichlorodifluoromethane | FB | Ave | 3746<br>251176 | 8380<br>517858 | 24299<br>1020234 | 53676 | 92925 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Chloromethane | FB | Ave | 4906<br>280520 | 11129<br>603678 | 29111<br>1154899 | 59456 | 112051 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Vinyl chloride | FB | Ave | 3539<br>203524 | 8672<br>419593 | 20932<br>885989 | 48274 | 79560 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Bromomethane | FB | Qua | 2565<br>115756 | 5728<br>214835 | 13568<br>350225 | 30236 | 52522 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Chloroethane | FB | Qua | 1622<br>114370 | 5300<br>204568 | 11139<br>352207 | 27259 | 47704 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Dichlorofluoromethane | FB | Ave | 6406<br>290246 | 12140<br>547578 | 30165<br>1040128 | 66340 | 113019 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Trichlorofluoromethane | FB | Ave | 4878<br>306873 | 11366<br>598951 | 27122<br>1211923 | 69444 | 114969 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Ethyl ether | FB | Ave | 3977<br>184187 | 8685<br>344253 | 24685<br>+++++ | 44665 | 77718 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>+++++ | 10.0 | 20.0 |
| Acrolein | FB | Qua | 2547<br>136786 | 3701<br>182187 | 14486<br>+++++ | 23740 | 59121 | 5.00<br>250 | 10.0<br>500 | 25.0<br>+++++ | 50.0 | 100 |
| 1,1-Dichloroethene | FB | Ave | 4809<br>249125 | 9981<br>486715 | 24153<br>1046029 | 54544 | 93300 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,1,2-Trichloro-1,2,2-trifluoroetha ne | FB | Ave | 3629<br>204040 | 7958<br>419537 | 18407<br>882110 | 44606 | 78620 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Acetone | FB | Lin1 | +++++<br>297225 | +++++<br>551021 | 54156<br>1143323 | 97186 | 151525 | +++++<br>100 | +++++<br>200 | 10.0<br>400 | 20.0 | 40.0 |
| Iodomethane | FB | Ave | 7454<br>383908 | 16254<br>764539 | 38096<br>1610175 | 87446 | 153743 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Carbon disulfide | FB | Ave | 9614<br>660358 | 22924<br>1296823 | 55412<br>2949804 | 131522 | 233266 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 3-Chloro-1-propene | FB | Ave | 2058<br>152087 | 4374<br>318618 | 13990<br>667293 | 32727 | 54777 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Methyl acetate | FB | Ave | 29290<br>1441376 | 64483<br>2864669 | 143103<br>6267592 | 351963 | 634426 | 5.00<br>250 | 10.0<br>500 | 25.0<br>1000 | 50.0 | 100 |
| Methylene Chloride | FB | Lin1 | +++++<br>326073 | +++++<br>597190 | 56270<br>1249548 | 96035 | 139281 | +++++<br>50.0 | +++++<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| tert-Butyl alcohol (TBA) | FB | Ave | 6829<br>354737 | 13746<br>693436 | 31227<br>1249970 | 87810 | 159599 | 10.0<br>500 | 20.0<br>1000 | 50.0<br>2000 | 100 | 200 |
| Acrylonitrile | FB | Ave | 24230<br>1290141 | 55473<br>2590093 | 125851<br>5558383 | 309930 | 575627 | 10.0<br>500 | 20.0<br>1000 | 50.0<br>2000 | 100 | 200 |
| trans-1,2-Dichloroethene | FB | Ave | 5142<br>293680 | 11386<br>587054 | 30023<br>1229351 | 65242 | 112801 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Methyl tert-butyl ether | FB | Ave | 14586<br>847838 | 31610<br>1736457 | 79334<br>3609743 | 190039 | 349825 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Hexane | FB | Ave | +++++<br>81731 | 3878<br>165346 | 7730<br>353867 | 19127 | 31019 | +++++<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,1-Dichloroethane | FB | Ave | 10117<br>503677 | 20404<br>1020526 | 51089<br>2175083 | 110888 | 198329 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Vinyl acetate | FB | Ave | 3840<br>280423 | 10348<br>599318 | 24206<br>1238845 | 62399 | 96712 | 0.960<br>48.0 | 1.92<br>96.0 | 4.80<br>192 | 9.60 | 19.2 |
| 2-Butanone (MEK) | FB | Ave | 7271<br>384576 | 17279<br>751029 | 39075<br>1614052 | 89778 | 167280 | 2.00<br>100 | 4.00<br>200 | 10.0<br>400 | 20.0 | 40.0 |
| cis-1,2-Dichloroethene | FB | Ave | 6001<br>322878 | 12117<br>658097 | 32045<br>1379260 | 70161 | 125068 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 2,2-Dichloropropane | FB | Ave | 3723<br>238612 | 8742<br>461098 | 21235<br>980520 | 53498 | 92793 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Bromochloromethane | FB | Ave | 3273<br>166100 | 6354<br>329901 | 16071<br>684756 | 36102 | 65334 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Tetrahydrofuran | FB | Ave | 3911<br>219923 | 8304<br>450196 | 20234<br>968949 | 52097 | 96186 | 2.00<br>100 | 4.00<br>200 | 10.0<br>400 | 20.0 | 40.0 |
| Chloroform | FB | Ave | 9806<br>491055 | 19629<br>983425 | 49212<br>2078203 | 112262 | 189353 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,1,1-Trichloroethane | FB | Ave | 7087<br>386625 | 14040<br>777558 | 33182<br>1691624 | 82250 | 144266 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Cyclohexane | FB | Ave | 8101<br>493376 | 17352<br>1004781 | 44419<br>2132781 | 106448 | 177991 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,1-Dichloropropene | FB | Ave | 5904<br>357342 | 13507<br>726728 | 33148<br>1559996 | 82766 | 133306 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Carbon tetrachloride | FB | Ave | 6057<br>342366 | 11856<br>711068 | 30921<br>1539751 | 71679 | 121316 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Isobutyl alcohol | FB | Ave | 5552<br>349039 | 13740<br>686607 | 30197<br>1315780 | 85297 | 157253 | 25.0<br>1250 | 50.0<br>2500 | 125<br>5000 | 250 | 500 |
| 1,2-Dichloroethane | FB | Ave | 8174<br>384931 | 16273<br>771811 | 37460<br>1615877 | 86219 | 155694 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| Benzene | FB | Ave | 24052<br>1195591 | 49022<br>2388128 | 123667<br>5034065 | 266853 | 460470 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| n-Heptane | FB | Ave | +++++<br>98860 | +++++<br>195852 | 7757<br>408337 | 21007 | 32908 | +++++<br>50.0 | +++++<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Trichloroethene | FB | Ave | 6422<br>318617 | 13302<br>645797 | 31821<br>1379289 | 68861 | 122742 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Methylcyclohexane | FB | Ave | 9163<br>506560 | 19343<br>1043572 | 44839<br>2197216 | 108864 | 179971 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,2-Dichloropropane | FB | Ave | 6113<br>300609 | 11668<br>598258 | 29941<br>1237377 | 67411 | 114127 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Dibromomethane | FB | Ave | 2704<br>173472 | 6813<br>347497 | 15977<br>722879 | 36171 | 68832 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,4-Dioxane | FB | Ave | 1039<br>71356 | 2366<br>138705 | 6709<br>249826 | 16226 | 25764 | 20.0<br>1000 | 40.0<br>2000 | 100<br>4000 | 200 | 400 |
| Bromodichloromethane | FB | Ave | 5074<br>357066 | 10100<br>749091 | 29804<br>1613750 | 71483 | 131750 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 2-Chloroethyl vinyl ether | FB | Ave | +++++<br>166921 | 4424<br>358320 | 12955<br>798679 | 32721 | 58651 | +++++<br>100 | 4.00<br>200 | 10.0<br>400 | 20.0 | 40.0 |
| cis-1,3-Dichloropropene | FB | Ave | 6528<br>431708 | 12162<br>889075 | 35106<br>1908395 | 82755 | 150110 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 4-Methyl-2-pentanone (MIBK) | FB | Ave | 10136<br>735321 | 23065<br>1423106 | 62565<br>2949618 | 161600 | 297246 | 2.00<br>100 | 4.00<br>200 | 10.0<br>400 | 20.0 | 40.0 |
| Toluene | CBZ | Ave | 27355<br>1308073 | 49880<br>2576332 | 127552<br>5486100 | 285792 | 475267 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| trans-1,3-Dichloropropene | CBZ | Ave | +++++<br>374192 | +++++<br>761895 | 26778<br>1629786 | 67587 | 126474 | +++++<br>50.0 | +++++<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Ethyl methacrylate | CBZ | Ave | +++++<br>361900 | +++++<br>699196 | 27885<br>1440405 | 70584 | 124396 | +++++<br>50.0 | +++++<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,1,2-Trichloroethane | CBZ | Ave | 5765<br>273156 | 9473<br>534345 | 28098<br>1101257 | 61579 | 104901 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,3-Dichloropropane | CBZ | Ave | 7797<br>464404 | 17184<br>905097 | 45024<br>1871486 | 102438 | 177129 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Tetrachloroethene | CBZ | Ave | 5823<br>264679 | 9932<br>522567 | 26683<br>1076734 | 58307 | 92185 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 2-Hexanone | CBZ | Ave | 7544<br>563853 | 17412<br>1047707 | 44518<br>2110114 | 119786 | 221209 | 2.00<br>100 | 4.00<br>200 | 10.0<br>400 | 20.0 | 40.0 |
| Dibromochloromethane | CBZ | Ave | +++++<br>282358 | 7324<br>576635 | 20567<br>1237345 | 54058 | 97600 | +++++<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,2-Dibromoethane | CBZ | Ave | 3432<br>274176 | 9579<br>541854 | 26465<br>1126380 | 59216 | 104303 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Chlorobenzene | CBZ | Ave | 18260<br>866581 | 36441<br>1700017 | 91278<br>3492453 | 191499 | 316530 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| 1,1,1,2-Tetrachloroethane | CBZ | Ave | 4564<br>292141 | 9186<br>584652 | 24739<br>1201872 | 58895 | 105818 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Ethylbenzene | CBZ | Ave | 8855<br>475437 | 17538<br>920210 | 47792<br>1908298 | 100716 | 164729 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| m-Xylene & p-Xylene | CBZ | Ave | 9747<br>585132 | 19881<br>1114505 | 53687<br>2322017 | 123182 | 199947 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| o-Xylene | CBZ | Ave | 8090<br>555144 | 19423<br>1087583 | 51532<br>2169346 | 122871 | 199864 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Styrene | CBZ | Ave | 11956<br>898542 | 27695<br>1733825 | 73930<br>3530126 | 176122 | 310009 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Bromoform | CBZ | Lin1 | 1782<br>183227 | 3909<br>383004 | 12042<br>817999 | 34743 | 60546 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Isopropylbenzene | CBZ | Ave | 20810<br>1455954 | 43935<br>2883103 | 124437<br>5868112 | 302032 | 503589 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,1,2,2-Tetrachloroethane | DCB | Ave | 6343<br>349496 | 12906<br>669844 | 30022<br>1292627 | 79455 | 132203 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Bromobenzene | DCB | Ave | 6896<br>384175 | 14897<br>746407 | 38290<br>1458021 | 81970 | 141435 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,2,3-Trichloropropane | DCB | Ave | 2006<br>121923 | 3959<br>227615 | 11621<br>442560 | 29387 | 49607 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| trans-1,4-Dichloro-2-butene | DCB | Ave | +++++<br>104469 | 3495<br>202370 | 8402<br>401124 | 21836 | 36170 | +++++<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| N-Propylbenzene | DCB | Ave | 5269<br>414360 | 12091<br>808016 | 36791<br>1590300 | 86803 | 149165 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 2-Chlorotoluene | DCB | Ave | 5191<br>349499 | 11448<br>681848 | 32177<br>1322168 | 74740 | 125870 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,3,5-Trimethylbenzene | DCB | Ave | 16061<br>1217483 | 36207<br>2418136 | 104451<br>4615532 | 256025 | 436033 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 4-Chlorotoluene | DCB | Ave | 5674<br>369059 | 11739<br>710767 | 35359<br>1373931 | 80579 | 129830 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| tert-Butylbenzene | DCB | Ave | 13743<br>1123842 | 31344<br>2193722 | 94194<br>4150735 | 226398 | 391546 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,2,4-Trimethylbenzene | DCB | Ave | 15572<br>1276363 | 39008<br>2512530 | 112999<br>4751419 | 269052 | 461481 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| sec-Butylbenzene | DCB | Ave | 19820<br>1575428 | 48980<br>3121718 | 137408<br>5853186 | 327363 | 545467 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,3-Dichlorobenzene | DCB | Ave | 13671<br>695292 | 27906<br>1356626 | 70475<br>2552180 | 158051 | 257960 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| p-Isopropyltoluene | DCB | Ave | +++++<br>1349059 | 39247<br>2702403 | 114762<br>4939926 | 280450 | 481597 | +++++<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,4-Dichlorobenzene | DCB | Ave | 16319<br>707247 | 28279<br>1392577 | 73552<br>2576899 | 166416 | 270341 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |

FORM VI
GC/MS VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 170352

SDG No.:

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) Y

Calibration Start Date: 03/03/2015 00:12 Calibration End Date: 03/03/2015 03:00 Calibration ID: 27146

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4 | LVL 5 |
| n-Butylbenzene | DCB | Ave | 15673<br>1140954 | 35753<br>2340628 | 98548<br>4187048 | 230396 | 398476 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,2-Dichlorobenzene | DCB | Ave | 12112<br>664029 | 27378<br>1318513 | 69400<br>2411969 | 154686 | 267385 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,2-Dibromo-3-Chloropropane | DCB | Ave | +++++<br>64629 | 2055<br>136941 | 4939<br>276967 | 13425 | 25539 | +++++<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,2,4-Trichlorobenzene | DCB | Ave | 7799<br>446327 | 16856<br>942856 | 40283<br>1740875 | 91574 | 172104 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Hexachlorobutadiene | DCB | Ave | 5207<br>252184 | 9916<br>508970 | 24928<br>906512 | 53441 | 95659 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Naphthalene | DCB | Ave | 15910<br>1202261 | 33793<br>2506363 | 88270<br>4429380 | 228207 | 478826 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,2,3-Trichlorobenzene | DCB | Ave | 9077<br>457239 | 16505<br>929396 | 41110<br>1672935 | 95362 | 183899 | 1.00<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Dibromofluoromethane (Surr) | FB | Qua | +++++<br>270863 | 21813<br>522896 | 41323<br>1143596 | 65724 | 109442 | +++++<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 1,2-Dichloroethane-d4 (Surr) | FB | Qua | +++++<br>296150 | 25032<br>596321 | 49683<br>1300516 | 81568 | 131736 | +++++<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| Toluene-d8 (Surr) | CBZ | Qua | +++++<br>1124932 | 83495<br>2112751 | 170823<br>4556666 | 269121 | 414688 | +++++<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |
| 4-Bromofluorobenzene (Surr) | CBZ | Qua | +++++<br>398794 | 30993<br>742681 | 68128<br>1551254 | 100638 | 164587 | +++++<br>50.0 | 2.00<br>100 | 5.00<br>200 | 10.0 | 20.0 |

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-170352/11 Calibration Date: 03/03/2015 03:21

Instrument ID: A3UX8 Calib Start Date: 03/03/2015 00:12

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 03:00

Lab File ID: UX86162.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | Ave | 0.1856 | 0.2072 | 0.1000 | 0.0279 | 0.0250 | 11.7 | 20.0 |
| Chloromethane | Ave | 0.2209 | 0.2193 | 0.1000 | 0.0248 | 0.0250 | -0.7 | 20.0 |
| Vinyl chloride | Ave | 0.1638 | 0.1679 | 0.1000 | 0.0256 | 0.0250 | 2.5 | 20.0 |
| Bromomethane | Qua | | 0.1008 | 0.0500 | 0.0261 | 0.0250 | 4.3 | 20.0 |
| Chloroethane | Qua | | 0.0953 | 0.0500 | 0.0263 | 0.0250 | 5.3 | 20.0 |
| Dichlorofluoromethane | Ave | 0.2316 | 0.2353 | | 0.0254 | 0.0250 | 1.6 | 20.0 |
| Trichlorofluoromethane | Ave | 0.2285 | 0.2412 | 0.1000 | 0.0264 | 0.0250 | 5.6 | 20.0 |
| Ethyl ether | Ave | 0.1626 | 0.1622 | | 0.0249 | 0.0250 | -0.3 | 20.0 |
| Acrolein | Qua | | 0.0167 | | 0.0886 | 0.125 | -29.1* | 20.0 |
| 1,1-Dichloroethene | Ave | 0.1945 | 0.1861 | 0.1000 | 0.0239 | 0.0250 | -4.3 | 20.0 |
| 1,1,2-Trichloro-1,2,2-triflu oroethane | Ave | 0.1578 | 0.1608 | 0.0500 | 0.0255 | 0.0250 | 1.9 | 20.0 |
| Acetone | Lin1 | 0.1458 | 0.1130 | 0.0500 | 0.0423 | 0.0500 | -15.5 | 20.0 |
| Iodomethane | Ave | 0.3078 | 0.3406 | | 0.0277 | 0.0250 | 10.6 | 20.0 |
| Carbon disulfide | Ave | 0.4761 | 0.5415 | 0.1000 | 0.0284 | 0.0250 | 13.7 | 20.0 |
| 3-Chloro-1-propene | Ave | 0.1099 | 0.1141 | | 0.0260 | 0.0250 | 3.8 | 20.0 |
| Methyl acetate | Ave | 0.2404 | 0.2314 | 0.1000 | 0.120 | 0.125 | -3.7 | 20.0 |
| Methylene Chloride | Lin1 | 0.2993 | 0.2795 | 0.1000 | 0.0262 | 0.0250 | 4.8 | 20.0 |
| tert-Butyl alcohol (TBA) | Ave | 0.0279 | 0.0277 | | 0.248 | 0.250 | -0.7 | 20.0 |
| Acrylonitrile | Ave | 0.1057 | 0.1076 | | 0.255 | 0.250 | 1.8 | 20.0 |
| Methyl tert-butyl ether | Ave | 0.6588 | 0.6725 | 0.1000 | 0.0255 | 0.0250 | 2.1 | 20.0 |
| trans-1,2-Dichloroethene | Ave | 0.2288 | 0.2391 | 0.1000 | 0.0261 | 0.0250 | 4.5 | 20.0 |
| Hexane | Ave | 0.0664 | 0.0669 | | 0.0252 | 0.0250 | 0.6 | 20.0 |
| 1,1-Dichloroethane | Ave | 0.4039 | 0.4126 | 0.1000 | 0.0255 | 0.0250 | 2.1 | 20.0 |
| Vinyl acetate | Ave | 0.2164 | 0.3626 | | 0.0419 | 0.0250 | 67.5* | 20.0 |
| 2-Butanone (MEK) | Ave | 0.1572 | 0.1462 | 0.0500 | 0.0465 | 0.0500 | -7.0 | 20.0 |
| 2,2-Dichloropropane | Ave | 0.1784 | 0.1859 | | 0.0261 | 0.0250 | 4.2 | 20.0 |
| cis-1,2-Dichloroethene | Ave | 0.2521 | 0.2621 | 0.1000 | 0.0260 | 0.0250 | 4.0 | 20.0 |
| Bromochloromethane | Ave | 0.1298 | 0.1325 | | 0.0255 | 0.0250 | 2.0 | 20.0 |
| Tetrahydrofuran | Ave | 0.0875 | 0.0890 | | 0.0509 | 0.0500 | 1.7 | 20.0 |
| Chloroform | Ave | 0.3917 | 0.3916 | 0.2000 | 0.0250 | 0.0250 | -0.0 | 20.0 |
| 1,1,1-Trichloroethane | Ave | 0.2932 | 0.3042 | 0.1000 | 0.0259 | 0.0250 | 3.8 | 20.0 |
| Cyclohexane | Ave | 0.3691 | 0.3878 | 0.1000 | 0.0263 | 0.0250 | 5.1 | 20.0 |
| 1,1-Dichloropropene | Ave | 0.2750 | 0.2997 | | 0.0272 | 0.0250 | 9.0 | 20.0 |
| Carbon tetrachloride | Ave | 0.2584 | 0.2681 | 0.1000 | 0.0259 | 0.0250 | 3.8 | 20.0 |
| Isobutyl alcohol | Ave | 0.0108 | 0.0112 | | 0.649 | 0.625 | 3.8 | 20.0 |
| 1,2-Dichloroethane | Ave | 0.3115 | 0.3129 | 0.1000 | 0.0251 | 0.0250 | 0.5 | 20.0 |
| Benzene | Ave | 0.9576 | 0.9522 | 0.5000 | 0.0249 | 0.0250 | -0.6 | 20.0 |
| n-Heptane | Ave | 0.0719 | 0.0717 | | 0.0249 | 0.0250 | -0.2 | 20.0 |
| Trichloroethene | Ave | 0.2549 | 0.2501 | 0.2000 | 0.0245 | 0.0250 | -1.9 | 20.0 |
| 1,2-Dichloropropane | Ave | 0.2373 | 0.2421 | 0.1000 | 0.0255 | 0.0250 | 2.0 | 20.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-170352/11 Calibration Date: 03/03/2015 03:21

Instrument ID: A3UX8 Calib Start Date: 03/03/2015 00:12

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 03:00

Lab File ID: UX86162.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Methylcyclohexane | Ave | 0.3863 | 0.3877 | 0.1000 | 0.0251 | 0.0250 | 0.3 | 20.0 |
| 1,4-Dioxane | Ave | 0.0026 | 0.0027 | | 0.528 | 0.500 | 5.5 | 20.0 |
| Dibromomethane | Ave | 0.1313 | 0.1373 | | 0.0261 | 0.0250 | 4.6 | 20.0 |
| Bromodichloromethane | Ave | 0.2550 | 0.2727 | 0.1000 | 0.0267 | 0.0250 | 6.9 | 20.0 |
| 2-Chloroethyl vinyl ether | Ave | 0.0602 | 0.0595 | | 0.0296 | 0.0300 | -1.2 | 20.0 |
| cis-1,3-Dichloropropene | Ave | 0.3036 | 0.3344 | 0.1500 | 0.0275 | 0.0250 | 10.2 | 20.0 |
| 4-Methyl-2-pentanone (MIBK) | Ave | 0.2649 | 0.2868 | 0.0500 | 0.0541 | 0.0500 | 8.3 | 20.0 |
| Toluene | Ave | 1.375 | 1.408 | 0.4000 | 0.0256 | 0.0250 | 2.4 | 20.0 |
| trans-1,3-Dichloropropene | Ave | 0.3577 | 0.4100 | 0.1000 | 0.0287 | 0.0250 | 14.6 | 20.0 |
| Ethyl methacrylate | Ave | 0.3461 | 0.4060 | | 0.0293 | 0.0250 | 17.3 | 20.0 |
| 1,1,2-Trichloroethane | Ave | 0.2876 | 0.2998 | 0.1000 | 0.0261 | 0.0250 | 4.2 | 20.0 |
| 1,3-Dichloropropane | Ave | 0.4733 | 0.4994 | | 0.0264 | 0.0250 | 5.5 | 20.0 |
| Tetrachloroethene | Ave | 0.2787 | 0.2715 | 0.2000 | 0.0244 | 0.0250 | -2.6 | 20.0 |
| 2-Hexanone | Ave | 0.2635 | 0.2678 | 0.0500 | 0.0508 | 0.0500 | 1.6 | 20.0 |
| Dibromochloromethane | Ave | 0.2645 | 0.2919 | | 0.0276 | 0.0250 | 10.3 | 20.0 |
| 1,2-Dibromoethane | Ave | 0.2695 | 0.2939 | | 0.0273 | 0.0250 | 9.1 | 20.0 |
| Chlorobenzene | Ave | 0.9295 | 0.9385 | 0.3000 | 0.0252 | 0.0250 | 1.0 | 20.0 |
| 1,1,1,2-Tetrachloroethane | Ave | 0.2813 | 0.3071 | | 0.0273 | 0.0250 | 9.2 | 20.0 |
| Ethylbenzene | Ave | 0.4836 | 0.5001 | | 0.0259 | 0.0250 | 3.4 | 20.0 |
| m-Xylene & p-Xylene | Ave | 0.5712 | 0.6002 | | 0.0263 | 0.0250 | 5.1 | 20.0 |
| o-Xylene | Ave | 0.5449 | 0.5927 | | 0.0272 | 0.0250 | 8.8 | 20.0 |
| Styrene | Ave | 0.8283 | 0.9497 | 0.3000 | 0.0287 | 0.0250 | 14.7 | 20.0 |
| Bromoform | Lin1 | | 0.1822 | 0.1000 | 0.0239 | 0.0250 | -4.5 | 20.0 |
| Isopropylbenzene | Ave | 1.375 | 1.498 | 0.1000 | 0.0272 | 0.0250 | 8.9 | 20.0 |
| 1,1,2,2-Tetrachloroethane | Ave | 0.6741 | 0.6990 | 0.3000 | 0.0259 | 0.0250 | 3.7 | 20.0 |
| Bromobenzene | Ave | 0.7522 | 0.7540 | | 0.0251 | 0.0250 | 0.2 | 20.0 |
| 1,2,3-Trichloropropane | Ave | 0.2348 | 0.2548 | | 0.0271 | 0.0250 | 8.5 | 20.0 |
| trans-1,4-Dichloro-2-butene | Ave | 0.1930 | 0.2048 | | 0.0265 | 0.0250 | 6.1 | 20.0 |
| N-Propylbenzene | Ave | 0.7428 | 0.7761 | | 0.0261 | 0.0250 | 4.5 | 20.0 |
| 2-Chlorotoluene | Ave | 0.6481 | 0.6750 | | 0.0260 | 0.0250 | 4.1 | 20.0 |
| 1,3,5-Trimethylbenzene | Ave | 2.187 | 2.288 | | 0.0262 | 0.0250 | 4.6 | 20.0 |
| 4-Chlorotoluene | Ave | 0.6858 | 0.7109 | | 0.0259 | 0.0250 | 3.7 | 20.0 |
| tert-Butylbenzene | Ave | 1.954 | 2.037 | | 0.0261 | 0.0250 | 4.3 | 20.0 |
| 1,2,4-Trimethylbenzene | Ave | 2.286 | 2.319 | | 0.0254 | 0.0250 | 1.4 | 20.0 |
| sec-Butylbenzene | Ave | 2.810 | 2.884 | | 0.0257 | 0.0250 | 2.6 | 20.0 |
| 1,3-Dichlorobenzene | Ave | 1.395 | 1.365 | 0.6000 | 0.0245 | 0.0250 | -2.1 | 20.0 |
| p-Isopropyltoluene | Ave | 2.470 | 2.461 | | 0.0249 | 0.0250 | -0.3 | 20.0 |
| 1,4-Dichlorobenzene | Ave | 1.468 | 1.385 | 0.5000 | 0.0236 | 0.0250 | -5.7 | 20.0 |
| n-Butylbenzene | Ave | 2.053 | 2.041 | | 0.0249 | 0.0250 | -0.6 | 20.0 |
| 1,2-Dichlorobenzene | Ave | 1.348 | 1.335 | 0.4000 | 0.0247 | 0.0250 | -1.0 | 20.0 |
| 1,2-Dibromo-3-Chloropropane | Ave | 0.1238 | 0.1184 | 0.0500 | 0.0239 | 0.0250 | -4.4 | 20.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-170352/11 Calibration Date: 03/03/2015 03:21

Instrument ID: A3UX8 Calib Start Date: 03/03/2015 00:12

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 03:00

Lab File ID: UX86162.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | Ave | 0.8701 | 0.7720 | 0.2000 | 0.0222 | 0.0250 | -11.3 | 20.0 |
| Hexachlorobutadiene | Ave | 0.5037 | 0.4355 | | 0.0216 | 0.0250 | -13.5 | 20.0 |
| Naphthalene | Ave | 2.116 | 1.933 | | 0.0228 | 0.0250 | -8.6 | 20.0 |
| 1,2,3-Trichlorobenzene | Ave | 0.8960 | 0.7646 | | 0.0213 | 0.0250 | -14.7 | 20.0 |
| Dibromofluoromethane (Surr) | Qua | 0.2654 | 0.2135 | | 0.0528 | 0.0500 | 5.6 | 20.0 |
| 1,2-Dichloroethane-d4 (Surr) | Qua | 0.3102 | 0.2338 | | 0.0510 | 0.0500 | 1.9 | 20.0 |
| Toluene-d8 (Surr) | Qua | 1.426 | 1.185 | | 0.0544 | 0.0500 | 8.8 | 20.0 |
| 4-Bromofluorobenzene (Surr) | Qua | 0.5303 | 0.4019 | | 0.0512 | 0.0500 | 2.5 | 20.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCVIS 240-175483/4 Calibration Date: 04/08/2015 01:48

Instrument ID: A3UX8 Calib Start Date: 03/03/2015 00:12

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 03:00

Lab File ID: UX86840.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Dichlorodifluoromethane | Ave | 0.1856 | 0.1672 | 0.1000 | 0.0180 | 0.0200 | -9.9 | 20.0 |
| Chloromethane | Ave | 0.2209 | 0.1989 | 0.1000 | 0.0180 | 0.0200 | -10.0 | 20.0 |
| Vinyl chloride | Ave | 0.1638 | 0.1610 | 0.1000 | 0.0197 | 0.0200 | -1.7 | 20.0 |
| Bromomethane | Qua | | 0.1063 | 0.0500 | 0.0217 | 0.0200 | 8.4 | 20.0 |
| Chloroethane | Qua | | 0.0887 | 0.0500 | 0.0193 | 0.0200 | -3.7 | 20.0 |
| Dichlorofluoromethane | Ave | 0.2316 | 0.2226 | | 0.0192 | 0.0200 | -3.9 | 20.0 |
| Trichlorofluoromethane | Ave | 0.2285 | 0.2274 | 0.1000 | 0.0199 | 0.0200 | -0.5 | 20.0 |
| Ethyl ether | Ave | 0.1626 | 0.1550 | | 0.0191 | 0.0200 | -4.7 | 20.0 |
| Acrolein | Qua | | 0.0350 | | 0.156 | 0.100 | 56.0* | 20.0 |
| 1,1-Dichloroethene | Ave | 0.1945 | 0.1832 | 0.1000 | 0.0188 | 0.0200 | -5.8 | 20.0 |
| 1,1,2-Trichloro-1,2,2-triflu oroethane | Ave | 0.1578 | 0.1461 | 0.0500 | 0.0185 | 0.0200 | -7.5 | 20.0 |
| Acetone | Lin1 | 0.1458 | 0.1264 | 0.0500 | 0.0363 | 0.0400 | -9.2 | 20.0 |
| Iodomethane | Ave | 0.3078 | 0.2796 | | 0.0182 | 0.0200 | -9.2 | 20.0 |
| Carbon disulfide | Ave | 0.4761 | 0.4429 | 0.1000 | 0.0186 | 0.0200 | -7.0 | 20.0 |
| 3-Chloro-1-propene | Ave | 0.1099 | 0.1120 | | 0.0204 | 0.0200 | 2.0 | 20.0 |
| Methyl acetate | Ave | 0.2404 | 0.2283 | 0.1000 | 0.0950 | 0.100 | -5.0 | 20.0 |
| Methylene Chloride | Lin1 | 0.2993 | 0.2752 | 0.1000 | 0.0194 | 0.0200 | -2.9 | 20.0 |
| tert-Butyl alcohol (TBA) | Ave | 0.0279 | 0.0299 | | 0.214 | 0.200 | 7.2 | 20.0 |
| Acrylonitrile | Ave | 0.1057 | 0.1065 | | 0.202 | 0.200 | 0.8 | 20.0 |
| Methyl tert-butyl ether | Ave | 0.6588 | 0.6267 | 0.1000 | 0.0190 | 0.0200 | -4.9 | 20.0 |
| trans-1,2-Dichloroethene | Ave | 0.2288 | 0.2284 | 0.1000 | 0.0200 | 0.0200 | -0.2 | 20.0 |
| Hexane | Ave | 0.0664 | 0.0632 | | 0.0190 | 0.0200 | -4.8 | 20.0 |
| 1,1-Dichloroethane | Ave | 0.4039 | 0.3732 | 0.1000 | 0.0185 | 0.0200 | -7.6 | 20.0 |
| Vinyl acetate | Ave | 0.2164 | 0.2271 | | 0.0201 | 0.0192 | 4.9 | 20.0 |
| 2-Butanone (MEK) | Ave | 0.1572 | 0.1548 | 0.0500 | 0.0394 | 0.0400 | -1.5 | 20.0 |
| cis-1,2-Dichloroethene | Ave | 0.2521 | 0.2590 | 0.1000 | 0.0205 | 0.0200 | 2.7 | 20.0 |
| 2,2-Dichloropropane | Ave | 0.1784 | 0.1716 | | 0.0192 | 0.0200 | -3.8 | 20.0 |
| Bromochloromethane | Ave | 0.1298 | 0.1327 | | 0.0204 | 0.0200 | 2.2 | 20.0 |
| Tetrahydrofuran | Ave | 0.0875 | 0.0893 | | 0.0408 | 0.0400 | 2.0 | 20.0 |
| Chloroform | Ave | 0.3917 | 0.3723 | 0.2000 | 0.0190 | 0.0200 | -5.0 | 20.0 |
| 1,1,1-Trichloroethane | Ave | 0.2932 | 0.2769 | 0.1000 | 0.0189 | 0.0200 | -5.6 | 20.0 |
| Cyclohexane | Ave | 0.3691 | 0.3504 | 0.1000 | 0.0190 | 0.0200 | -5.1 | 20.0 |
| 1,1-Dichloropropene | Ave | 0.2750 | 0.2715 | | 0.0197 | 0.0200 | -1.3 | 20.0 |
| Carbon tetrachloride | Ave | 0.2584 | 0.2410 | 0.1000 | 0.0186 | 0.0200 | -6.8 | 20.0 |
| Isobutyl alcohol | Ave | 0.0108 | 0.0112 | | 0.521 | 0.500 | 4.1 | 20.0 |
| 1,2-Dichloroethane | Ave | 0.3115 | 0.2774 | 0.1000 | 0.0178 | 0.0200 | -10.9 | 20.0 |
| Benzene | Ave | 0.9576 | 0.9351 | 0.5000 | 0.0195 | 0.0200 | -2.3 | 20.0 |
| n-Heptane | Ave | 0.0719 | 0.0728 | | 0.0202 | 0.0200 | 1.2 | 20.0 |
| Trichloroethene | Ave | 0.2549 | 0.2514 | 0.2000 | 0.0197 | 0.0200 | -1.4 | 20.0 |
| Methylcyclohexane | Ave | 0.3863 | 0.3813 | 0.1000 | 0.0197 | 0.0200 | -1.3 | 20.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCVIS 240-175483/4 Calibration Date: 04/08/2015 01:48

Instrument ID: A3UX8 Calib Start Date: 03/03/2015 00:12

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 03:00

Lab File ID: UX86840.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,2-Dichloropropane | Ave | 0.2373 | 0.2225 | 0.1000 | 0.0188 | 0.0200 | -6.2 | 20.0 |
| 1,4-Dioxane | Ave | 0.0026 | 0.0030 | | 0.474 | 0.400 | 18.4 | 20.0 |
| Dibromomethane | Ave | 0.1313 | 0.1310 | | 0.0200 | 0.0200 | -0.2 | 20.0 |
| Bromodichloromethane | Ave | 0.2550 | 0.2587 | 0.1000 | 0.0203 | 0.0200 | 1.4 | 20.0 |
| 2-Chloroethyl vinyl ether | Ave | 0.0602 | 0.0695 | | 0.0461 | 0.0400 | 15.3 | 20.0 |
| cis-1,3-Dichloropropene | Ave | 0.3036 | 0.3036 | 0.1500 | 0.0200 | 0.0200 | 0.0 | 20.0 |
| 4-Methyl-2-pentanone (MIBK) | Ave | 0.2649 | 0.2813 | 0.0500 | 0.0425 | 0.0400 | 6.2 | 20.0 |
| Toluene | Ave | 1.375 | 1.386 | 0.4000 | 0.0202 | 0.0200 | 0.8 | 20.0 |
| trans-1,3-Dichloropropene | Ave | 0.3577 | 0.3552 | 0.1000 | 0.0199 | 0.0200 | -0.7 | 20.0 |
| Ethyl methacrylate | Ave | 0.3461 | 0.3669 | | 0.0212 | 0.0200 | 6.0 | 20.0 |
| 1,1,2-Trichloroethane | Ave | 0.2876 | 0.2894 | 0.1000 | 0.0201 | 0.0200 | 0.6 | 20.0 |
| 1,3-Dichloropropane | Ave | 0.4733 | 0.4741 | | 0.0200 | 0.0200 | 0.2 | 20.0 |
| Tetrachloroethene | Ave | 0.2787 | 0.2794 | 0.2000 | 0.0200 | 0.0200 | 0.2 | 20.0 |
| 2-Hexanone | Ave | 0.2635 | 0.2906 | 0.0500 | 0.0441 | 0.0400 | 10.3 | 20.0 |
| Dibromochloromethane | Ave | 0.2645 | 0.2688 | | 0.0203 | 0.0200 | 1.6 | 20.0 |
| 1,2-Dibromoethane | Ave | 0.2695 | 0.2883 | | 0.0214 | 0.0200 | 7.0 | 20.0 |
| Chlorobenzene | Ave | 0.9295 | 0.9244 | 0.3000 | 0.0199 | 0.0200 | -0.6 | 20.0 |
| 1,1,1,2-Tetrachloroethane | Ave | 0.2813 | 0.2879 | | 0.0205 | 0.0200 | 2.4 | 20.0 |
| Ethylbenzene | Ave | 0.4836 | 0.5008 | | 0.0207 | 0.0200 | 3.6 | 20.0 |
| m-Xylene & p-Xylene | Ave | 0.5712 | 0.6012 | | 0.0211 | 0.0200 | 5.3 | 20.0 |
| o-Xylene | Ave | 0.5449 | 0.5807 | | 0.0213 | 0.0200 | 6.6 | 20.0 |
| Styrene | Ave | 0.8283 | 0.9111 | 0.3000 | 0.0220 | 0.0200 | 10.0 | 20.0 |
| Bromoform | Lin1 | | 0.1774 | 0.1000 | 0.0188 | 0.0200 | -6.1 | 20.0 |
| Isopropylbenzene | Ave | 1.375 | 1.473 | 0.1000 | 0.0214 | 0.0200 | 7.1 | 20.0 |
| 1,1,2,2-Tetrachloroethane | Ave | 0.6741 | 0.7327 | 0.3000 | 0.0217 | 0.0200 | 8.7 | 20.0 |
| Bromobenzene | Ave | 0.7522 | 0.7920 | | 0.0211 | 0.0200 | 5.3 | 20.0 |
| 1,2,3-Trichloropropane | Ave | 0.2348 | 0.2646 | | 0.0225 | 0.0200 | 12.7 | 20.0 |
| trans-1,4-Dichloro-2-butene | Ave | 0.1930 | 0.1857 | | 0.0192 | 0.0200 | -3.8 | 20.0 |
| N-Propylbenzene | Ave | 0.7428 | 0.8527 | | 0.0230 | 0.0200 | 14.8 | 20.0 |
| 2-Chlorotoluene | Ave | 0.6481 | 0.7024 | | 0.0217 | 0.0200 | 8.4 | 20.0 |
| 1,3,5-Trimethylbenzene | Ave | 2.187 | 2.385 | | 0.0218 | 0.0200 | 9.0 | 20.0 |
| 4-Chlorotoluene | Ave | 0.6858 | 0.7503 | | 0.0219 | 0.0200 | 9.4 | 20.0 |
| tert-Butylbenzene | Ave | 1.954 | 2.198 | | 0.0225 | 0.0200 | 12.5 | 20.0 |
| 1,2,4-Trimethylbenzene | Ave | 2.286 | 2.475 | | 0.0217 | 0.0200 | 8.3 | 20.0 |
| sec-Butylbenzene | Ave | 2.810 | 3.097 | | 0.0220 | 0.0200 | 10.2 | 20.0 |
| 1,3-Dichlorobenzene | Ave | 1.395 | 1.425 | 0.6000 | 0.0204 | 0.0200 | 2.1 | 20.0 |
| p-Isopropyltoluene | Ave | 2.470 | 2.664 | | 0.0216 | 0.0200 | 7.9 | 20.0 |
| 1,4-Dichlorobenzene | Ave | 1.468 | 1.435 | 0.5000 | 0.0195 | 0.0200 | -2.3 | 20.0 |
| n-Butylbenzene | Ave | 2.053 | 2.236 | | 0.0218 | 0.0200 | 8.9 | 20.0 |
| 1,2-Dichlorobenzene | Ave | 1.348 | 1.358 | 0.4000 | 0.0201 | 0.0200 | 0.7 | 20.0 |
| 1,2-Dibromo-3-Chloropropane | Ave | 0.1238 | 0.1159 | 0.0500 | 0.0187 | 0.0200 | -6.4 | 20.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCVIS 240-175483/4 Calibration Date: 04/08/2015 01:48

Instrument ID: A3UX8 Calib Start Date: 03/03/2015 00:12

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 03/03/2015 03:00

Lab File ID: UX86840.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | Ave | 0.8701 | 0.8211 | 0.2000 | 0.0189 | 0.0200 | -5.6 | 20.0 |
| Hexachlorobutadiene | Ave | 0.5037 | 0.4710 | | 0.0187 | 0.0200 | -6.5 | 20.0 |
| Naphthalene | Ave | 2.116 | 2.003 | | 0.0189 | 0.0200 | -5.3 | 20.0 |
| 1,2,3-Trichlorobenzene | Ave | 0.8960 | 0.7876 | | 0.0176 | 0.0200 | -12.1 | 20.0 |
| Dibromofluoromethane (Surr) | Qua | 0.2654 | 0.1778 | | 0.0436 | 0.0500 | -12.8 | 20.0 |
| 1,2-Dichloroethane-d4 (Surr) | Qua | 0.3102 | 0.1858 | | 0.0399 | 0.0500 | -20.2* | 20.0 |
| Toluene-d8 (Surr) | Qua | 1.426 | 1.025 | | 0.0468 | 0.0500 | -6.5 | 20.0 |
| 4-Bromofluorobenzene (Surr) | Qua | 0.5303 | 0.3369 | | 0.0424 | 0.0500 | -15.3 | 20.0 |

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175483/5 Calibration Date: 04/08/2015 02:10

Instrument ID: A3UX8 Calib Start Date: 01/20/2015 03:27

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 01/20/2015 05:53

Lab File ID: UX86841.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Acetonitrile | Ave | 0.0424 | 0.0380 | | 0.179 | 0.200 | -10.4 | 20.0 |
| Diisopropyl ether | Ave | 0.1973 | 0.2057 | | 0.0209 | 0.0200 | 4.3 | 20.0 |
| 2-Chloro-1,3-butadiene | Ave | 0.3514 | 0.3273 | | 0.0186 | 0.0200 | -6.8 | 20.0 |
| Ethyl-t-butyl ether (ETBE) | Ave | 0.7153 | 0.6672 | | 0.0187 | 0.0200 | -6.7 | 20.0 |
| Ethyl acetate | Ave | 0.0854 | 0.0704 | | 0.0330 | 0.0400 | -17.5 | 20.0 |
| Propionitrile | Ave | 0.0446 | 0.0431 | | 0.193 | 0.200 | -3.3 | 20.0 |
| Methacrylonitrile | Ave | 0.1862 | 0.1799 | | 0.193 | 0.200 | -3.4 | 20.0 |
| Tert-amyl methyl ether | Ave | 0.6028 | 0.6130 | | 0.0203 | 0.0200 | 1.7 | 20.0 |
| n-Butanol | Ave | 0.0096 | 0.0088 | | 0.457 | 0.500 | -8.5 | 20.0 |
| Ethyl acrylate | Ave | 0.2876 | 0.3327 | | 0.0231 | 0.0200 | 15.7 | 20.0 |
| Methyl methacrylate | Ave | 0.2297 | 0.2375 | | 0.0414 | 0.0400 | 3.4 | 20.0 |
| 2-Nitropropane | Lin1 | | 0.0425 | | 0.0334 | 0.0400 | -16.6 | 20.0 |
| 1-Chlorohexane | Ave | 0.3206 | 0.3871 | | 0.0241 | 0.0200 | 20.7* | 20.0 |
| Cyclohexanone | Ave | 0.0145 | 0.0117 | | 0.161 | 0.200 | -19.6 | 20.0 |
| 1,2,3-Trimethylbenzene | Ave | 2.357 | 2.507 | | 0.0213 | 0.0200 | 6.4 | 20.0 |
| 1,3,5-Trichlorobenzene | Ave | 0.9868 | 1.010 | | 0.0205 | 0.0200 | 2.4 | 20.0 |
| 2-Methylnaphthalene | Ave | 1.598 | 1.004 | | 0.0251 | 0.0400 | -37.2* | 20.0 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-175483/8

Matrix: Solid Lab File ID: UX86844.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/08/2015 03:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 175483 Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 0.62 | U | 5.0 | 0.62 |
| 71-55-6 | 1,1,1-Trichloroethane | 0.56 | U | 5.0 | 0.56 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.34 | U | 5.0 | 0.34 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 1.3 | U | 5.0 | 1.3 |
| 75-34-3 | 1,1-Dichloroethane | 0.36 | U | 5.0 | 0.36 |
| 75-35-4 | 1,1-Dichloroethene | 0.52 | U | 5.0 | 0.52 |
| 563-58-6 | 1,1-Dichloropropene | 0.30 | U | 5.0 | 0.30 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 0.38 | U | 5.0 | 0.38 |
| 96-18-4 | 1,2,3-Trichloropropane | 0.90 | U | 5.0 | 0.90 |
| 526-73-8 | 1,2,3-Trimethylbenzene | 0.17 | U | 5.0 | 0.17 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.27 | U | 5.0 | 0.27 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 0.65 | U | 5.0 | 0.65 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 1.3 | U | 10 | 1.3 |
| 95-50-1 | 1,2-Dichlorobenzene | 0.36 | U | 5.0 | 0.36 |
| 107-06-2 | 1,2-Dichloroethane | 0.34 | U | 5.0 | 0.34 |
| 78-87-5 | 1,2-Dichloropropane | 0.69 | U | 5.0 | 0.69 |
| 541-73-1 | 1,3-Dichlorobenzene | 0.35 | U | 5.0 | 0.35 |
| 142-28-9 | 1,3-Dichloropropane | 0.34 | U | 5.0 | 0.34 |
| 106-46-7 | 1,4-Dichlorobenzene | 0.66 | U | 5.0 | 0.66 |
| 594-20-7 | 2,2-Dichloropropane | 0.94 | U | 5.0 | 0.94 |
| 110-75-8 | 2-Chloroethyl vinyl ether | 1.4 | U | 50 | 1.4 |
| 95-49-8 | 2-Chlorotoluene | 0.40 | U | 5.0 | 0.40 |
| 591-78-6 | 2-Hexanone | 0.63 | U | 20 | 0.63 |
| 108-86-1 | Bromobenzene | 0.33 | U | 5.0 | 0.33 |
| 74-97-5 | Bromochloromethane | 0.71 | U | 5.0 | 0.71 |
| 106-43-4 | 4-Chlorotoluene | 0.41 | U | 5.0 | 0.41 |
| 99-87-6 | p-Isopropyltoluene | 0.21 | U | 5.0 | 0.21 |
| 67-64-1 | Acetone | 6.3 | U | 20 | 6.3 |
| 71-43-2 | Benzene | 0.23 | U | 5.0 | 0.23 |
| 75-25-2 | Bromoform | 0.33 | U | 5.0 | 0.33 |
| 74-83-9 | Bromomethane | 0.54 | U | 5.0 | 0.54 |
| 75-15-0 | Carbon disulfide | 0.44 | U | 5.0 | 0.44 |
| 56-23-5 | Carbon tetrachloride | 0.37 | U | 5.0 | 0.37 |
| 108-90-7 | Chlorobenzene | 0.33 | U | 5.0 | 0.33 |
| 75-00-3 | Chloroethane | 0.86 | U | 5.0 | 0.86 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-175483/8

Matrix: Solid | Lab File ID: UX86844.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/08/2015 03:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175483 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 67-66-3 | Chloroform | 0.29 | U | 5.0 | 0.29 |
| 74-87-3 | Chloromethane | 0.41 | U | 5.0 | 0.41 |
| 156-59-2 | cis-1,2-Dichloroethene | 0.36 | U | 5.0 | 0.36 |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.34 | U | 5.0 | 0.34 |
| 87-68-3 | Hexachlorobutadiene | 1.2 | U | 5.0 | 1.2 |
| 74-95-3 | Dibromomethane | 0.63 | U | 5.0 | 0.63 |
| 75-27-4 | Bromodichloromethane | 0.28 | U | 5.0 | 0.28 |
| 75-71-8 | Dichlorodifluoromethane | 0.50 | U | 5.0 | 0.50 |
| 100-41-4 | Ethylbenzene | 0.26 | U | 5.0 | 0.26 |
| 106-93-4 | 1,2-Dibromoethane | 0.50 | U | 5.0 | 0.50 |
| 108-20-3 | Diisopropyl ether | 1.5 | U | 10 | 1.5 |
| 91-20-3 | Naphthalene | 0.412 | J | 5.0 | 0.19 |
| 179601-23-1 | m-Xylene & p-Xylene | 1.2 | U | 10 | 1.2 |
| 104-51-8 | n-Butylbenzene | 0.23 | U | 5.0 | 0.23 |
| 98-82-8 | Isopropylbenzene | 0.16 | U | 5.0 | 0.16 |
| 103-65-1 | N-Propylbenzene | 0.40 | U | 5.0 | 0.40 |
| 78-93-3 | 2-Butanone (MEK) | 1.4 | U | 20 | 1.4 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 0.54 | U | 20 | 0.54 |
| 135-98-8 | sec-Butylbenzene | 0.18 | U | 5.0 | 0.18 |
| 1634-04-4 | Methyl tert-butyl ether | 0.43 | U | 5.0 | 0.43 |
| 994-05-8 | Tert-amyl methyl ether | 0.37 | U | 5.0 | 0.37 |
| 75-09-2 | Methylene Chloride | 0.696 | J | 5.0 | 0.67 |
| 95-47-6 | o-Xylene | 0.35 | U | 5.0 | 0.35 |
| 100-42-5 | Styrene | 0.15 | U | 5.0 | 0.15 |
| 637-92-3 | Ethyl-t-butyl ether (ETBE) | 0.22 | U | 5.0 | 0.22 |
| 98-06-6 | tert-Butylbenzene | 0.29 | U | 5.0 | 0.29 |
| 127-18-4 | Tetrachloroethene | 0.52 | U | 5.0 | 0.52 |
| 108-88-3 | Toluene | 0.27 | U | 5.0 | 0.27 |
| 156-60-5 | trans-1,2-Dichloroethene | 0.41 | U | 5.0 | 0.41 |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.54 | U | 5.0 | 0.54 |
| 79-01-6 | Trichloroethene | 0.42 | U | 5.0 | 0.42 |
| 75-69-4 | Trichlorofluoromethane | 0.34 | U | 5.0 | 0.34 |
| 108-05-4 | Vinyl acetate | 0.25 | U | 10 | 0.25 |
| 75-01-4 | Vinyl chloride | 0.39 | U | 5.0 | 0.39 |
| 75-65-0 | tert-Butyl alcohol (TBA) | 7.6 | U | 200 | 7.6 |
| 1330-20-7 | Xylenes, Total | 0.35 | U | 10 | 0.35 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-175483/8

Matrix: Solid | Lab File ID: UX86844.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/08/2015 03:14

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175483 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | 0.55 | U | 5.0 | 0.55 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 91 | | 58-123 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 90 | | 52-136 |
| 2037-26-5 | Toluene-d8 (Surr) | 98 | | 67-125 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 94 | | 37-132 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-175483/6

Matrix: Solid Lab File ID: UX86842.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/08/2015 02:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 175483 Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 51.1 | | 5.0 | 0.62 |
| 71-55-6 | 1,1,1-Trichloroethane | 47.9 | | 5.0 | 0.56 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 53.4 | | 5.0 | 0.34 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 48.0 | | 5.0 | 1.3 |
| 75-34-3 | 1,1-Dichloroethane | 47.0 | | 5.0 | 0.36 |
| 75-35-4 | 1,1-Dichloroethene | 46.9 | | 5.0 | 0.52 |
| 563-58-6 | 1,1-Dichloropropene | 52.6 | | 5.0 | 0.30 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 43.9 | | 5.0 | 0.38 |
| 96-18-4 | 1,2,3-Trichloropropane | 55.7 | | 5.0 | 0.90 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 47.3 | | 5.0 | 0.27 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 50.9 | | 5.0 | 0.65 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 58.8 | | 10 | 1.3 |
| 95-50-1 | 1,2-Dichlorobenzene | 47.5 | | 5.0 | 0.36 |
| 107-06-2 | 1,2-Dichloroethane | 44.7 | | 5.0 | 0.34 |
| 78-87-5 | 1,2-Dichloropropane | 47.8 | | 5.0 | 0.69 |
| 541-73-1 | 1,3-Dichlorobenzene | 48.1 | | 5.0 | 0.35 |
| 142-28-9 | 1,3-Dichloropropane | 49.9 | | 5.0 | 0.34 |
| 106-46-7 | 1,4-Dichlorobenzene | 46.4 | | 5.0 | 0.66 |
| 594-20-7 | 2,2-Dichloropropane | 44.0 | | 5.0 | 0.94 |
| 110-75-8 | 2-Chloroethyl vinyl ether | 79.2 | | 50 | 1.4 |
| 95-49-8 | 2-Chlorotoluene | 51.1 | | 5.0 | 0.40 |
| 591-78-6 | 2-Hexanone | 114 | | 20 | 0.63 |
| 108-86-1 | Bromobenzene | 50.3 | | 5.0 | 0.33 |
| 74-97-5 | Bromochloromethane | 48.7 | | 5.0 | 0.71 |
| 106-43-4 | 4-Chlorotoluene | 50.8 | | 5.0 | 0.41 |
| 99-87-6 | p-Isopropyltoluene | 51.8 | | 5.0 | 0.21 |
| 67-64-1 | Acetone | 104 | | 20 | 6.3 |
| 71-43-2 | Benzene | 47.9 | | 5.0 | 0.23 |
| 75-25-2 | Bromoform | 49.5 | | 5.0 | 0.33 |
| 74-83-9 | Bromomethane | 50.1 | | 5.0 | 0.54 |
| 75-15-0 | Carbon disulfide | 51.2 | | 5.0 | 0.44 |
| 56-23-5 | Carbon tetrachloride | 49.9 | | 5.0 | 0.37 |
| 108-90-7 | Chlorobenzene | 47.4 | | 5.0 | 0.33 |
| 75-00-3 | Chloroethane | 48.0 | | 5.0 | 0.86 |
| 67-66-3 | Chloroform | 46.3 | | 5.0 | 0.29 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-175483/6

Matrix: Solid | Lab File ID: UX86842.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 04/08/2015 02:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 175483 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 74-87-3 | Chloromethane | 37.9 | | 5.0 | 0.41 |
| 156-59-2 | cis-1,2-Dichloroethene | 50.0 | | 5.0 | 0.36 |
| 10061-01-5 | cis-1,3-Dichloropropene | 54.0 | | 5.0 | 0.34 |
| 87-68-3 | Hexachlorobutadiene | 45.0 | | 5.0 | 1.2 |
| 74-95-3 | Dibromomethane | 49.6 | | 5.0 | 0.63 |
| 75-27-4 | Bromodichloromethane | 51.3 | | 5.0 | 0.28 |
| 75-71-8 | Dichlorodifluoromethane | 31.9 | | 5.0 | 0.50 |
| 100-41-4 | Ethylbenzene | 49.2 | | 5.0 | 0.26 |
| 106-93-4 | 1,2-Dibromoethane | 53.3 | | 5.0 | 0.50 |
| 91-20-3 | Naphthalene | 52.1 | | 5.0 | 0.19 |
| 179601-23-1 | m-Xylene & p-Xylene | 50.8 | | 10 | 1.2 |
| 104-51-8 | n-Butylbenzene | 51.8 | | 5.0 | 0.23 |
| 98-82-8 | Isopropylbenzene | 52.6 | | 5.0 | 0.16 |
| 103-65-1 | N-Propylbenzene | 54.6 | | 5.0 | 0.40 |
| 78-93-3 | 2-Butanone (MEK) | 101 | | 20 | 1.4 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 114 | | 20 | 0.54 |
| 135-98-8 | sec-Butylbenzene | 52.5 | | 5.0 | 0.18 |
| 1634-04-4 | Methyl tert-butyl ether | 49.5 | | 5.0 | 0.43 |
| 75-09-2 | Methylene Chloride | 50.2 | | 5.0 | 0.67 |
| 95-47-6 | o-Xylene | 51.6 | | 5.0 | 0.35 |
| 100-42-5 | Styrene | 51.2 | | 5.0 | 0.15 |
| 98-06-6 | tert-Butylbenzene | 58.2 | | 5.0 | 0.29 |
| 127-18-4 | Tetrachloroethene | 47.1 | | 5.0 | 0.52 |
| 108-88-3 | Toluene | 47.8 | | 5.0 | 0.27 |
| 156-60-5 | trans-1,2-Dichloroethene | 50.5 | | 5.0 | 0.41 |
| 10061-02-6 | trans-1,3-Dichloropropene | 56.2 | | 5.0 | 0.54 |
| 79-01-6 | Trichloroethene | 49.9 | | 5.0 | 0.42 |
| 75-69-4 | Trichlorofluoromethane | 46.8 | | 5.0 | 0.34 |
| 108-05-4 | Vinyl acetate | 36.8 | | 10 | 0.25 |
| 75-01-4 | Vinyl chloride | 41.4 | | 5.0 | 0.39 |
| 75-65-0 | tert-Butyl alcohol (TBA) | 571 | | 200 | 7.6 |
| 1330-20-7 | Xylenes, Total | 102 | | 10 | 0.35 |
| 124-48-1 | Dibromochloromethane | 53.7 | | 5.0 | 0.55 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-175483/6

Matrix: Solid Lab File ID: UX86842.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/08/2015 02:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 175483 Units: ug/Kg

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 90 | | 58-123 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 97 | | 52-136 |
| 2037-26-5 | Toluene-d8 (Surr) | 100 | | 67-125 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 97 | | 37-132 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 MS | Lab Sample ID: 240-49010-1 MS

Matrix: Solid | Lab File ID: UX86866.D

Analysis Method: 8260C | Date Collected: 04/06/2015 15:00

Sample wt/vol: 5.08(g) | Date Analyzed: 04/08/2015 11:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 7.4 | Level: (low/med) Low

Analysis Batch No.: 175483 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 24.9 | | 5.3 | 0.66 |
| 71-55-6 | 1,1,1-Trichloroethane | 22.7 | | 5.3 | 0.60 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 24.5 | | 5.3 | 0.36 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 22.5 | | 5.3 | 1.4 |
| 75-34-3 | 1,1-Dichloroethane | 23.7 | | 5.3 | 0.38 |
| 75-35-4 | 1,1-Dichloroethene | 23.2 | | 5.3 | 0.55 |
| 563-58-6 | 1,1-Dichloropropene | 24.6 | | 5.3 | 0.32 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 16.8 | | 5.3 | 0.40 |
| 96-18-4 | 1,2,3-Trichloropropane | 25.4 | | 5.3 | 0.96 |
| 526-73-8 | 1,2,3-Trimethylbenzene | 0.18 | U | 5.3 | 0.18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 18.6 | | 5.3 | 0.29 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 23.0 | | 5.3 | 0.69 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 23.6 | | 11 | 1.4 |
| 95-50-1 | 1,2-Dichlorobenzene | 22.0 | | 5.3 | 0.38 |
| 107-06-2 | 1,2-Dichloroethane | 21.6 | | 5.3 | 0.36 |
| 78-87-5 | 1,2-Dichloropropane | 23.4 | | 5.3 | 0.73 |
| 541-73-1 | 1,3-Dichlorobenzene | 21.7 | | 5.3 | 0.37 |
| 142-28-9 | 1,3-Dichloropropane | 24.3 | | 5.3 | 0.36 |
| 106-46-7 | 1,4-Dichlorobenzene | 21.0 | | 5.3 | 0.70 |
| 594-20-7 | 2,2-Dichloropropane | 21.4 | | 5.3 | 1.0 |
| 110-75-8 | 2-Chloroethyl vinyl ether | 44.8 | J | 53 | 1.5 |
| 95-49-8 | 2-Chlorotoluene | 24.6 | | 5.3 | 0.43 |
| 591-78-6 | 2-Hexanone | 44.9 | | 21 | 0.67 |
| 108-86-1 | Bromobenzene | 24.7 | | 5.3 | 0.35 |
| 74-97-5 | Bromochloromethane | 24.0 | | 5.3 | 0.75 |
| 106-43-4 | 4-Chlorotoluene | 23.7 | | 5.3 | 0.44 |
| 99-87-6 | p-Isopropyltoluene | 22.2 | | 5.3 | 0.22 |
| 67-64-1 | Acetone | 37.8 | | 21 | 6.7 |
| 71-43-2 | Benzene | 23.6 | | 5.3 | 0.24 |
| 75-25-2 | Bromoform | 20.4 | | 5.3 | 0.35 |
| 74-83-9 | Bromomethane | 24.6 | | 5.3 | 0.57 |
| 75-15-0 | Carbon disulfide | 23.4 | | 5.3 | 0.47 |
| 56-23-5 | Carbon tetrachloride | 22.3 | | 5.3 | 0.39 |
| 108-90-7 | Chlorobenzene | 23.7 | | 5.3 | 0.35 |
| 75-00-3 | Chloroethane | 23.3 | | 5.3 | 0.91 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 MS | Lab Sample ID: 240-49010-1 MS

Matrix: Solid | Lab File ID: UX86866.D

Analysis Method: 8260C | Date Collected: 04/06/2015 15:00

Sample wt/vol: 5.08(g) | Date Analyzed: 04/08/2015 11:27

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 7.4 | Level: (low/med) Low

Analysis Batch No.: 175483 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 67-66-3 | Chloroform | 23.5 | | 5.3 | 0.31 |
| 74-87-3 | Chloromethane | 19.4 | | 5.3 | 0.44 |
| 156-59-2 | cis-1,2-Dichloroethene | 25.1 | | 5.3 | 0.38 |
| 10061-01-5 | cis-1,3-Dichloropropene | 24.5 | | 5.3 | 0.36 |
| 87-68-3 | Hexachlorobutadiene | 17.1 | | 5.3 | 1.3 |
| 74-95-3 | Dibromomethane | 24.5 | | 5.3 | 0.67 |
| 75-27-4 | Bromodichloromethane | 23.7 | | 5.3 | 0.30 |
| 75-71-8 | Dichlorodifluoromethane | 14.7 | | 5.3 | 0.53 |
| 100-41-4 | Ethylbenzene | 23.6 | | 5.3 | 0.28 |
| 106-93-4 | 1,2-Dibromoethane | 25.8 | | 5.3 | 0.53 |
| 108-20-3 | Diisopropyl ether | 1.6 | U | 11 | 1.6 |
| 91-20-3 | Naphthalene | 20.8 | | 5.3 | 0.20 |
| 179601-23-1 | m-Xylene & p-Xylene | 23.9 | | 11 | 1.3 |
| 104-51-8 | n-Butylbenzene | 20.9 | | 5.3 | 0.24 |
| 98-82-8 | Isopropylbenzene | 24.6 | | 5.3 | 0.17 |
| 103-65-1 | N-Propylbenzene | 24.7 | | 5.3 | 0.43 |
| 78-93-3 | 2-Butanone (MEK) | 44.2 | | 21 | 1.5 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 47.2 | | 21 | 0.57 |
| 135-98-8 | sec-Butylbenzene | 23.6 | | 5.3 | 0.19 |
| 1634-04-4 | Methyl tert-butyl ether | 24.0 | | 5.3 | 0.46 |
| 994-05-8 | Tert-amyl methyl ether | 0.39 | U | 5.3 | 0.39 |
| 75-09-2 | Methylene Chloride | 26.4 | | 5.3 | 0.71 |
| 95-47-6 | o-Xylene | 25.7 | | 5.3 | 0.37 |
| 100-42-5 | Styrene | 24.0 | | 5.3 | 0.16 |
| 637-92-3 | Ethyl-t-butyl ether (ETBE) | 0.23 | U | 5.3 | 0.23 |
| 98-06-6 | tert-Butylbenzene | 27.5 | | 5.3 | 0.31 |
| 127-18-4 | Tetrachloroethene | 22.9 | | 5.3 | 0.55 |
| 108-88-3 | Toluene | 24.2 | | 5.3 | 0.29 |
| 156-60-5 | trans-1,2-Dichloroethene | 24.4 | | 5.3 | 0.44 |
| 10061-02-6 | trans-1,3-Dichloropropene | 24.4 | | 5.3 | 0.57 |
| 79-01-6 | Trichloroethene | 24.0 | | 5.3 | 0.45 |
| 75-69-4 | Trichlorofluoromethane | 22.4 | | 5.3 | 0.36 |
| 108-05-4 | Vinyl acetate | 0.970 | J | 11 | 0.27 |
| 75-01-4 | Vinyl chloride | 20.6 | | 5.3 | 0.41 |
| 75-65-0 | tert-Butyl alcohol (TBA) | 228 | | 210 | 8.1 |
| 1330-20-7 | Xylenes, Total | 49.6 | | 11 | 0.37 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 MS Lab Sample ID: 240-49010-1 MS

Matrix: Solid Lab File ID: UX86866.D

Analysis Method: 8260C Date Collected: 04/06/2015 15:00

Sample wt/vol: 5.08(g) Date Analyzed: 04/08/2015 11:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 7.4 Level: (low/med) Low

Analysis Batch No.: 175483 Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | 24.9 | | 5.3 | 0.58 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 88 | | 58-123 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 98 | | 52-136 |
| 2037-26-5 | Toluene-d8 (Surr) | 106 | | 67-125 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 97 | | 37-132 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 MSD | Lab Sample ID: 240-49010-1 MSD

Matrix: Solid | Lab File ID: UX86867.D

Analysis Method: 8260C | Date Collected: 04/06/2015 15:00

Sample wt/vol: 5.21(g) | Date Analyzed: 04/08/2015 11:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 7.4 | Level: (low/med) Low

Analysis Batch No.: 175483 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 630-20-6 | 1,1,1,2-Tetrachloroethane | 22.1 | | 5.2 | 0.64 |
| 71-55-6 | 1,1,1-Trichloroethane | 20.8 | | 5.2 | 0.58 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 22.1 | | 5.2 | 0.35 |
| 76-13-1 | 1,1,2-Trichloro-1,2,2-trifluoroethane | 20.8 | | 5.2 | 1.3 |
| 75-34-3 | 1,1-Dichloroethane | 21.3 | | 5.2 | 0.37 |
| 75-35-4 | 1,1-Dichloroethene | 21.2 | | 5.2 | 0.54 |
| 563-58-6 | 1,1-Dichloropropene | 22.5 | | 5.2 | 0.31 |
| 87-61-6 | 1,2,3-Trichlorobenzene | 14.2 | | 5.2 | 0.39 |
| 96-18-4 | 1,2,3-Trichloropropane | 23.7 | | 5.2 | 0.93 |
| 526-73-8 | 1,2,3-Trimethylbenzene | 0.18 | U | 5.2 | 0.18 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 15.6 | | 5.2 | 0.28 |
| 95-63-6 | 1,2,4-Trimethylbenzene | 19.4 | | 5.2 | 0.67 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | 21.5 | | 10 | 1.3 |
| 95-50-1 | 1,2-Dichlorobenzene | 19.0 | | 5.2 | 0.37 |
| 107-06-2 | 1,2-Dichloroethane | 20.1 | | 5.2 | 0.35 |
| 78-87-5 | 1,2-Dichloropropane | 21.2 | | 5.2 | 0.72 |
| 541-73-1 | 1,3-Dichlorobenzene | 19.1 | | 5.2 | 0.36 |
| 142-28-9 | 1,3-Dichloropropane | 22.4 | | 5.2 | 0.35 |
| 106-46-7 | 1,4-Dichlorobenzene | 18.3 | | 5.2 | 0.68 |
| 594-20-7 | 2,2-Dichloropropane | 17.9 | | 5.2 | 0.97 |
| 110-75-8 | 2-Chloroethyl vinyl ether | 41.8 | J | 52 | 1.5 |
| 95-49-8 | 2-Chlorotoluene | 21.4 | | 5.2 | 0.41 |
| 591-78-6 | 2-Hexanone | 43.3 | | 21 | 0.65 |
| 108-86-1 | Bromobenzene | 21.0 | | 5.2 | 0.34 |
| 74-97-5 | Bromochloromethane | 22.4 | | 5.2 | 0.74 |
| 106-43-4 | 4-Chlorotoluene | 20.9 | | 5.2 | 0.42 |
| 99-87-6 | p-Isopropyltoluene | 18.7 | | 5.2 | 0.22 |
| 67-64-1 | Acetone | 39.3 | | 21 | 6.5 |
| 71-43-2 | Benzene | 21.4 | | 5.2 | 0.24 |
| 75-25-2 | Bromoform | 18.3 | | 5.2 | 0.34 |
| 74-83-9 | Bromomethane | 20.3 | | 5.2 | 0.56 |
| 75-15-0 | Carbon disulfide | 21.5 | | 5.2 | 0.46 |
| 56-23-5 | Carbon tetrachloride | 20.8 | | 5.2 | 0.38 |
| 108-90-7 | Chlorobenzene | 21.1 | | 5.2 | 0.34 |
| 75-00-3 | Chloroethane | 19.4 | | 5.2 | 0.89 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 MSD | Lab Sample ID: 240-49010-1 MSD

Matrix: Solid | Lab File ID: UX86867.D

Analysis Method: 8260C | Date Collected: 04/06/2015 15:00

Sample wt/vol: 5.21(g) | Date Analyzed: 04/08/2015 11:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: 7.4 | Level: (low/med) Low

Analysis Batch No.: 175483 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 67-66-3 | Chloroform | 20.9 | | 5.2 | 0.30 |
| 74-87-3 | Chloromethane | 16.7 | | 5.2 | 0.42 |
| 156-59-2 | cis-1,2-Dichloroethene | 22.3 | | 5.2 | 0.37 |
| 10061-01-5 | cis-1,3-Dichloropropene | 21.9 | | 5.2 | 0.35 |
| 87-68-3 | Hexachlorobutadiene | 13.2 | | 5.2 | 1.2 |
| 74-95-3 | Dibromomethane | 21.8 | | 5.2 | 0.65 |
| 75-27-4 | Bromodichloromethane | 21.9 | | 5.2 | 0.29 |
| 75-71-8 | Dichlorodifluoromethane | 12.8 | | 5.2 | 0.52 |
| 100-41-4 | Ethylbenzene | 20.9 | | 5.2 | 0.27 |
| 106-93-4 | 1,2-Dibromoethane | 23.6 | | 5.2 | 0.52 |
| 108-20-3 | Diisopropyl ether | 1.6 | U | 10 | 1.6 |
| 91-20-3 | Naphthalene | 18.8 | | 5.2 | 0.20 |
| 179601-23-1 | m-Xylene & p-Xylene | 21.3 | | 10 | 1.2 |
| 104-51-8 | n-Butylbenzene | 16.8 | | 5.2 | 0.24 |
| 98-82-8 | Isopropylbenzene | 21.4 | | 5.2 | 0.17 |
| 103-65-1 | N-Propylbenzene | 21.4 | | 5.2 | 0.41 |
| 78-93-3 | 2-Butanone (MEK) | 42.7 | | 21 | 1.5 |
| 108-10-1 | 4-Methyl-2-pentanone (MIBK) | 45.8 | | 21 | 0.56 |
| 135-98-8 | sec-Butylbenzene | 19.6 | | 5.2 | 0.19 |
| 1634-04-4 | Methyl tert-butyl ether | 21.8 | | 5.2 | 0.45 |
| 994-05-8 | Tert-amyl methyl ether | 0.38 | U | 5.2 | 0.38 |
| 75-09-2 | Methylene Chloride | 23.0 | | 5.2 | 0.69 |
| 95-47-6 | o-Xylene | 21.7 | | 5.2 | 0.36 |
| 100-42-5 | Styrene | 20.8 | | 5.2 | 0.16 |
| 637-92-3 | Ethyl-t-butyl ether (ETBE) | 0.23 | U | 5.2 | 0.23 |
| 98-06-6 | tert-Butylbenzene | 21.1 | | 5.2 | 0.30 |
| 127-18-4 | Tetrachloroethene | 19.6 | | 5.2 | 0.54 |
| 108-88-3 | Toluene | 21.4 | | 5.2 | 0.28 |
| 156-60-5 | trans-1,2-Dichloroethene | 22.4 | | 5.2 | 0.42 |
| 10061-02-6 | trans-1,3-Dichloropropene | 21.9 | | 5.2 | 0.56 |
| 79-01-6 | Trichloroethene | 21.9 | | 5.2 | 0.44 |
| 75-69-4 | Trichlorofluoromethane | 19.6 | | 5.2 | 0.35 |
| 108-05-4 | Vinyl acetate | 0.300 | J | 10 | 0.26 |
| 75-01-4 | Vinyl chloride | 18.3 | | 5.2 | 0.40 |
| 75-65-0 | tert-Butyl alcohol (TBA) | 233 | | 210 | 7.9 |
| 1330-20-7 | Xylenes, Total | 43.0 | | 10 | 0.36 |

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 MSD Lab Sample ID: 240-49010-1 MSD

Matrix: Solid Lab File ID: UX86867.D

Analysis Method: 8260C Date Collected: 04/06/2015 15:00

Sample wt/vol: 5.21(g) Date Analyzed: 04/08/2015 11:48

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: DB-624 ID: 0.18(mm)

% Moisture: 7.4 Level: (low/med) Low

Analysis Batch No.: 175483 Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 124-48-1 | Dibromochloromethane | 21.2 | | 5.2 | 0.57 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 17060-07-0 | 1,2-Dichloroethane-d4 (Surr) | 86 | | 58-123 |
| 460-00-4 | 4-Bromofluorobenzene (Surr) | 91 | | 52-136 |
| 2037-26-5 | Toluene-d8 (Surr) | 98 | | 67-125 |
| 1868-53-7 | Dibromofluoromethane (Surr) | 93 | | 37-132 |

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A3UX8 Start Date: 01/20/2015 02:25

Analysis Batch Number: 164619 End Date: 01/20/2015 06:36

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| BFB 240-164619/1 | | 01/20/2015 02:25 | 1 | BFB8726.D | DB-624 0.18(mm) |
| STDA9 240-164619/5 IC | | 01/20/2015 03:27 | 1 | UX85491.D | DB-624 0.18(mm) |
| STDA9 240-164619/6 IC | | 01/20/2015 04:21 | 1 | UX85492.D | DB-624 0.18(mm) |
| STDA9 240-164619/7 IC | | 01/20/2015 04:49 | 1 | UX85493.D | DB-624 0.18(mm) |
| STDA9 240-164619/8 IC | | 01/20/2015 05:10 | 1 | UX85494.D | DB-624 0.18(mm) |
| STDA9 240-164619/9 IC | | 01/20/2015 05:32 | 1 | UX85495.D | DB-624 0.18(mm) |
| STDA9 240-164619/10 IC | | 01/20/2015 05:53 | 1 | UX85496.D | DB-624 0.18(mm) |
| ICV 240-164619/11 | | 01/20/2015 06:14 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 01/20/2015 06:36 | 1 | | DB-624 0.18(mm) |

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A3UX8 Start Date: 03/02/2015 23:39

Analysis Batch Number: 170352 End Date: 03/03/2015 04:25

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| BFB 240-170352/1 | | 03/02/2015 23:39 | 1 | BFB8752.D | DB-624 0.18(mm) |
| STD8260 240-170352/3 IC | | 03/03/2015 00:12 | 1 | UX86154.D | DB-624 0.18(mm) |
| STD8260 240-170352/4 IC | | 03/03/2015 00:34 | 1 | UX86155.D | DB-624 0.18(mm) |
| STD8260 240-170352/5 IC | | 03/03/2015 00:55 | 1 | UX86156.D | DB-624 0.18(mm) |
| ICIS 240-170352/6 | | 03/03/2015 01:34 | 1 | UX86157.D | DB-624 0.18(mm) |
| STD8260 240-170352/7 IC | | 03/03/2015 01:56 | 1 | UX86158.D | DB-624 0.18(mm) |
| STD8260 240-170352/8 IC | | 03/03/2015 02:17 | 1 | UX86159.D | DB-624 0.18(mm) |
| STD8260 240-170352/9 IC | | 03/03/2015 02:38 | 1 | UX86160.D | DB-624 0.18(mm) |
| STD8260 240-170352/10 IC | | 03/03/2015 03:00 | 1 | UX86161.D | DB-624 0.18(mm) |
| ICV 240-170352/11 | | 03/03/2015 03:21 | 1 | UX86162.D | DB-624 0.18(mm) |
| ZZZZZ | | 03/03/2015 03:43 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 03/03/2015 04:04 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 03/03/2015 04:25 | 1 | | DB-624 0.18(mm) |

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A3UX8 Start Date: 04/08/2015 01:17

Analysis Batch Number: 175483 End Date: 04/08/2015 11:48

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| BFB 240-175483/1 | | 04/08/2015 01:17 | 1 | BFB8781.D | DB-624 0.18(mm) |
| CCVIS 240-175483/4 | | 04/08/2015 01:48 | 1 | UX86840.D | DB-624 0.18(mm) |
| CCV 240-175483/5 | | 04/08/2015 02:10 | 1 | UX86841.D | DB-624 0.18(mm) |
| LCS 240-175483/6 | | 04/08/2015 02:31 | 1 | UX86842.D | DB-624 0.18(mm) |
| ZZZZZ | | 04/08/2015 02:52 | 1 | | DB-624 0.18(mm) |
| MB 240-175483/8 | | 04/08/2015 03:14 | 1 | UX86844.D | DB-624 0.18(mm) |
| ZZZZZ | | 04/08/2015 03:35 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/08/2015 03:56 | 1 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/08/2015 05:02 | 4 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/08/2015 05:23 | 4 | | DB-624 0.18(mm) |
| ZZZZZ | | 04/08/2015 05:45 | 4 | | DB-624 0.18(mm) |
| 240-49010-1 | FILL-001 | 04/08/2015 11:06 | 1 | UX86865.D | DB-624 0.18(mm) |
| 240-49010-1 MS | FILL-001 MS | 04/08/2015 11:27 | 1 | UX86866.D | DB-624 0.18(mm) |
| 240-49010-1 MSD | FILL-001 MSD | 04/08/2015 11:48 | 1 | UX86867.D | DB-624 0.18(mm) |

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Batch Number: 175488 Batch Start Date: 04/08/15 05:23 Batch Analyst: Lata, Todd

Batch Method: 5030C Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 240-49010-B-1 | FILL-001 | 5030C, 8260C | T | 5.14 g | 5 mL | | | | |
| 240-49010-B-1 MS | FILL-001 | 5030C, 8260C | T | 5.08 g | 5 mL | | | | |
| 240-49010-B-1 MSD | FILL-001 | 5030C, 8260C | T | 5.21 g | 5 mL | | | | |

| Batch Notes | |
|---|---|
| | |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Method 8270D

## Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5SILMS ID: 0.45 (mm)

| Client Sample ID | Lab Sample ID | 2FP # | PHL # | NBZ # | FBP # | TBP # | TPH # |
|---|---|---|---|---|---|---|---|
| FILL-001 | 240-49010-1 | 66 | 73 | 63 | 77 | 36 | 77 |
| | MB 240-175545/18-A | 77 | 81 | 75 | 82 | 42 | 78 |
| | LCS 240-175545/19-A | 83 | 85 | 83 | 82 | 72 | 76 |

| | QC LIMITS |
|---|---|
| 2FP = 2-Fluorophenol (Surr) | 24-110 |
| PHL = Phenol-d5 (Surr) | 26-110 |
| NBZ = Nitrobenzene-d5 (Surr) | 20-110 |
| FBP = 2-Fluorobiphenyl (Surr) | 24-110 |
| TBP = 2,4,6-Tribromophenol (Surr) | 10-110 |
| TPH = Terphenyl-d14 (Surr) | 36-110 |

# Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50410006.D

Lab ID: LCS 240-175545/19-A Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | LCS CONCENTRATION (ug/Kg) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| 1,1'-Biphenyl | 667 | 532 | 80 | 35-110 | |
| 1,4-Dioxane | 667 | 336 | 50 | 10-110 | |
| 2,4,6-Trichlorophenol | 667 | 491 | 74 | 12-110 | |
| 2,4,5-Trichlorophenol | 667 | 479 | 72 | 25-110 | |
| 2,4-Dichlorophenol | 667 | 557 | 83 | 39-110 | |
| 2,4-Dimethylphenol | 667 | 427 | 64 | 29-110 | |
| 2,4-Dinitrophenol | 1330 | 577 | 43 | 10-110 | |
| 2,4-Dinitrotoluene | 667 | 584 | 88 | 48-110 | |
| 2-Chloronaphthalene | 667 | 551 | 83 | 32-110 | |
| 2-Chlorophenol | 667 | 546 | 82 | 37-110 | |
| 2-Methylnaphthalene | 667 | 539 | 81 | 36-110 | |
| 2-Methylphenol | 667 | 515 | 77 | 41-110 | |
| 2-Nitroaniline | 667 | 560 | 84 | 45-110 | |
| 2-Nitrophenol | 667 | 570 | 85 | 34-110 | |
| 3 & 4 Methylphenol | 667 | 544 | 82 | 40-110 | |
| 3,3'-Dichlorobenzidine | 1330 | 1040 | 78 | 28-110 | |
| 3-Nitroaniline | 667 | 563 | 84 | 44-110 | |
| 4,6-Dinitro-2-methylphenol | 1330 | 811 | 61 | 10-110 | |
| 4-Bromophenyl phenyl ether | 667 | 566 | 85 | 39-110 | |
| 4-Chloro-3-methylphenol | 667 | 552 | 83 | 48-110 | |
| 4-Chloroaniline | 667 | 489 | 73 | 30-110 | |
| 4-Chlorophenyl phenyl ether | 667 | 541 | 81 | 40-110 | |
| 4-Nitroaniline | 667 | 560 | 84 | 48-110 | |
| Acenaphthene | 667 | 529 | 79 | 38-110 | |
| Acenaphthylene | 667 | 509 | 76 | 40-110 | |
| Acetophenone | 667 | 545 | 82 | 40-110 | |
| Anthracene | 667 | 525 | 79 | 48-110 | |
| Atrazine | 1330 | 1060 | 80 | 66-127 | |
| Benzaldehyde | 1330 | 1290 | 97 | 32-110 | |
| Benzo[a]anthracene | 667 | 527 | 79 | 50-110 | |
| Benzo[a]pyrene | 667 | 533 | 80 | 44-110 | |
| Benzo[b]fluoranthene | 667 | 521 | 78 | 43-110 | |
| Benzo[g,h,i]perylene | 667 | 625 | 94 | 51-110 | |
| Benzo[k]fluoranthene | 667 | 573 | 86 | 38-105 | |
| Bis(2-chloroethoxy)methane | 667 | 557 | 83 | 32-110 | |
| Bis(2-chloroethyl)ether | 667 | 540 | 81 | 34-110 | |
| Bis(2-ethylhexyl) phthalate | 667 | 576 | 86 | 50-110 | |
| Butyl benzyl phthalate | 667 | 524 | 79 | 51-110 | |
| Caprolactam | 1330 | 1230 | 92 | 44-114 | |
| Carbazole | 667 | 549 | 82 | 50-110 | |
| Chrysene | 667 | 568 | 85 | 50-110 | |
| Di-n-butyl phthalate | 667 | 584 | 88 | 51-110 | |

# Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: 50410006.D

Lab ID: LCS 240-175545/19-A Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | LCS CONCENTRATION (ug/Kg) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Di-n-octyl phthalate | 667 | 524 | 79 | 48-110 | |
| Dibenz(a,h)anthracene | 667 | 593 | 89 | 51-110 | |
| Dibenzofuran | 667 | 540 | 81 | 43-110 | |
| Diethyl phthalate | 667 | 543 | 81 | 52-110 | |
| Dimethyl phthalate | 667 | 557 | 84 | 50-110 | |
| Fluoranthene | 667 | 561 | 84 | 51-110 | |
| Fluorene | 667 | 512 | 77 | 46-110 | |
| Hexachlorobenzene | 667 | 535 | 80 | 43-110 | |
| Hexachlorobutadiene | 667 | 580 | 87 | 29-110 | |
| Hexachlorocyclopentadiene | 667 | 379 | 57 | 12-110 | |
| Hexachloroethane | 667 | 533 | 80 | 30-110 | |
| Indeno[1,2,3-cd]pyrene | 667 | 602 | 90 | 50-110 | |
| Isophorone | 667 | 545 | 82 | 36-110 | |
| N-Nitrosodi-n-propylamine | 667 | 563 | 84 | 38-110 | |
| N-Nitrosodimethylamine | 667 | 536 | 80 | 31-110 | |
| N-Nitrosodiphenylamine | 1330 | 1000 | 75 | 46-110 | |
| Naphthalene | 667 | 527 | 79 | 36-110 | |
| Nitrobenzene | 667 | 560 | 84 | 32-110 | |
| Pentachlorophenol | 1330 | 755 | 57 | 10-110 | |
| Phenanthrene | 667 | 522 | 78 | 49-110 | |
| Phenol | 667 | 559 | 84 | 38-110 | |
| Pyrene | 667 | 549 | 82 | 49-110 | |
| 2,2'-oxybis[1-chloropropane] | 667 | 491 | 74 | 29-110 | |
| 2,6-Dinitrotoluene | 667 | 584 | 88 | 45-110 | |
| 4-Nitrophenol | 1330 | 1140 | 86 | 28-110 | |

# Column to be used to flag recovery and RPD values

FORM III 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab File ID: 50410005.D Lab Sample ID: MB 240-175545/18-A

Matrix: Solid Date Extracted: 04/08/2015 09:16

Instrument ID: A4HP9 Date Analyzed: 04/10/2015 09:27

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED |
|---|---|---|---|
| | LCS 240-175545/19-A | 50410006.D | 04/10/2015 09:52 |
| FILL-001 | 240-49010-1 | 50410023.D | 04/10/2015 16:57 |

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab File ID: 50325001.D DFTPP Injection Date: 03/25/2015

Instrument ID: A4HP9 DFTPP Injection Time: 09:02

Analysis Batch No.: 173591

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30.0- 80.0% of mass 198 | 45.9 | |
| 68 | Less than 2.0% of mass 69 | 0.0 | (0.0)1 |
| 69 | Mass 69 relative abundance | 70.0 | |
| 70 | Less than 2.0% of mass 69 | 0.3 | (0.4)1 |
| 127 | 25.0 - 75.0% of mass 198 | 54.7 | |
| 197 | Less than 1.0% of mass 198 | 0.0 | |
| 198 | Base Peak, 100% relative abundance | 100.0 | |
| 199 | 5.0 to 9.0% of mass 198 | 6.1 | |
| 275 | 10.0- 30.0% of mass 198 | 21.6 | |
| 365 | Greater than 0.75% of mass 198 | 2.5 | |
| 441 | Present, but less than mass 443 | 8.9 | |
| 442 | 40.0 - 110.0% of mass 198 | 54.8 | |
| 443 | 15.0 - 24.0% of mass 442 | 10.1 | (18.4)2 |

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | STD5 240-173591/2 | 50325002.D | 03/25/2015 | 09:23 |
| | STD4 240-173591/3 | 50325003.D | 03/25/2015 | 09:48 |
| | STD3 240-173591/4 | 50325004.D | 03/25/2015 | 10:13 |
| | STD2 240-173591/5 | 50325005.D | 03/25/2015 | 10:38 |
| | STD1 240-173591/6 | 50325006.D | 03/25/2015 | 11:04 |
| | STD9 240-173591/7 | 50325007.D | 03/25/2015 | 11:29 |
| | STD8 240-173591/8 | 50325008.D | 03/25/2015 | 11:54 |
| | STD7 240-173591/9 | 50325009.D | 03/25/2015 | 12:20 |
| | STD6 240-173591/10 | 50325010.D | 03/25/2015 | 12:45 |
| | ICV 240-173591/11 | 50325011.D | 03/25/2015 | 14:02 |

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab File ID: 50410001.D DFTPP Injection Date: 04/10/2015

Instrument ID: A4HP9 DFTPP Injection Time: 07:50

Analysis Batch No.: 175891

| M/E | ION ABUNDANCE CRITERIA | % RELATIVE ABUNDANCE | |
|---|---|---|---|
| 51 | 30.0- 80.0% of mass 198 | 42.1 | |
| 68 | Less than 2.0% of mass 69 | 0.0 | (0.0)1 |
| 69 | Mass 69 relative abundance | 65.3 | |
| 70 | Less than 2.0% of mass 69 | 0.3 | (0.4)1 |
| 127 | 25.0 - 75.0% of mass 198 | 51.0 | |
| 197 | Less than 1.0% of mass 198 | 0.0 | |
| 198 | Base Peak, 100% relative abundance | 100.0 | |
| 199 | 5.0 to 9.0% of mass 198 | 6.5 | |
| 275 | 10.0- 30.0% of mass 198 | 22.4 | |
| 365 | Greater than 0.75% of mass 198 | 2.9 | |
| 441 | Present, but less than mass 443 | 8.8 | |
| 442 | 40.0 - 110.0% of mass 198 | 53.0 | |
| 443 | 15.0 - 24.0% of mass 442 | 9.8 | (18.4)2 |

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

| CLIENT SAMPLE ID | LAB SAMPLE ID | LAB FILE ID | DATE ANALYZED | TIME ANALYZED |
|---|---|---|---|---|
| | CCV 240-175891/2 | 50410002.D | 04/10/2015 | 08:11 |
| | MB 240-175545/18-A | 50410005.D | 04/10/2015 | 09:27 |
| | LCS 240-175545/19-A | 50410006.D | 04/10/2015 | 09:52 |
| FILL-001 | 240-49010-1 | 50410023.D | 04/10/2015 | 16:57 |

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Sample No.: STD6 240-173591/10 Date Analyzed: 03/25/2015 12:45

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50325010.D Heated Purge: (Y/N) N

Calibration ID: 27496

| | | DCB | | NPT | | ANT | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 214653 | 6.48 | 812085 | 7.60 | 471347 | 9.10 |
| UPPER LIMIT | | 429306 | 6.98 | 1624170 | 8.10 | 942694 | 9.60 |
| LOWER LIMIT | | 107327 | 5.98 | 406043 | 7.10 | 235674 | 8.60 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 240-173591/11 | | 173392 | 6.48 | 640286 | 7.60 | 379871 | 9.10 |
| CCV 240-175891/2 CCVIS | | 150990 | 6.37 | 572668 | 7.49 | 345984 | 8.99 |

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Sample No.: STD6 240-173591/10 Date Analyzed: 03/25/2015 12:45

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50325010.D Heated Purge: (Y/N) N

Calibration ID: 27496

| | | PHN | | CRY | | PRY | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| INITIAL CALIBRATION MID-POINT | | 753131 | 10.38 | 942919 | 12.71 | 762370 | 14.58 |
| UPPER LIMIT | | 1506262 | 10.88 | 1885838 | 13.21 | 1524740 | 15.08 |
| LOWER LIMIT | | 376566 | 9.88 | 471460 | 12.21 | 381185 | 14.08 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| ICV 240-173591/11 | | 604730 | 10.38 | 738629 | 12.71 | 615553 | 14.58 |
| CCV 240-175891/2 CCVIS | | 623411 | 10.25 | 732503 | 12.53 | 640863 | 14.30 |

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Sample No.: CCV 240-175891/2 Date Analyzed: 04/10/2015 08:11

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50410002.D Heated Purge: (Y/N) N

Calibration ID: 27562

| | | DCB | | NPT | | ANT | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 150990 | 6.37 | 572668 | 7.49 | 345984 | 8.99 |
| UPPER LIMIT | | 301980 | 6.87 | 1145336 | 7.99 | 691968 | 9.49 |
| LOWER LIMIT | | 75495 | 5.87 | 286334 | 6.99 | 172992 | 8.49 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| MB 240-175545/18-A | | 123307 | 6.37 | 484945 | 7.48 | 294731 | 8.98 |
| LCS 240-175545/19-A | | 124540 | 6.37 | 486138 | 7.48 | 291523 | 8.99 |
| 240-49010-1 | FILL-001 | 132995 | 6.37 | 497933 | 7.48 | 299404 | 8.98 |

DCB = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Sample No.: CCV 240-175891/2 Date Analyzed: 04/10/2015 08:11

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm)

Lab File ID (Standard): 50410002.D Heated Purge: (Y/N) N

Calibration ID: 27562

| | | PHN | | CRY | | PRY | |
|---|---|---|---|---|---|---|---|
| | | AREA # | RT # | AREA # | RT # | AREA # | RT # |
| 12/24 HOUR STD | | 623411 | 10.25 | 732503 | 12.53 | 640863 | 14.30 |
| UPPER LIMIT | | 1246822 | 10.75 | 1465006 | 13.03 | 1281726 | 14.80 |
| LOWER LIMIT | | 311706 | 9.75 | 366252 | 12.03 | 320432 | 13.80 |
| LAB SAMPLE ID | CLIENT SAMPLE ID | | | | | | |
| MB 240-175545/18-A | | 554973 | 10.25 | 658933 | 12.53 | 544686 | 14.30 |
| LCS 240-175545/19-A | | 546035 | 10.25 | 644599 | 12.53 | 565614 | 14.30 |
| 240-49010-1 | FILL-001 | 561591 | 10.25 | 668046 | 12.53 | 555550 | 14.29 |

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

# Column used to flag values outside QC limits

FORM VIII 8270D

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 | Lab Sample ID: 240-49010-1

Matrix: Solid | Lab File ID: 50410023.D

Analysis Method: 8270D | Date Collected: 04/06/2015 15:00

Extract. Method: 3540C | Date Extracted: 04/08/2015 09:16

Sample wt/vol: 29.69(g) | Date Analyzed: 04/10/2015 16:57

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 7.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175891 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 92-52-4 | 1,1'-Biphenyl | 3.8 | U | 55 | 3.8 |
| 123-91-1 | 1,4-Dioxane | 24 | U | 110 | 24 |
| 88-06-2 | 2,4,6-Trichlorophenol | 9.7 | U | 160 | 9.7 |
| 95-95-4 | 2,4,5-Trichlorophenol | 27 | U | 160 | 27 |
| 120-83-2 | 2,4-Dichlorophenol | 22 | U | 160 | 22 |
| 105-67-9 | 2,4-Dimethylphenol | 22 | U | 160 | 22 |
| 51-28-5 | 2,4-Dinitrophenol | 23 | U | 360 | 23 |
| 121-14-2 | 2,4-Dinitrotoluene | 19 | U | 220 | 19 |
| 91-58-7 | 2-Chloronaphthalene | 0.49 | U | 55 | 0.49 |
| 95-57-8 | 2-Chlorophenol | 8.9 | U | 55 | 8.9 |
| 91-57-6 | 2-Methylnaphthalene | 0.55 | U | 7.3 | 0.55 |
| 95-48-7 | 2-Methylphenol | 12 | U | 220 | 12 |
| 88-74-4 | 2-Nitroaniline | 9.9 | U | 220 | 9.9 |
| 88-75-5 | 2-Nitrophenol | 9.1 | U | 55 | 9.1 |
| 15831-10-4 | 3 & 4 Methylphenol | 22 | U | 440 | 22 |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20 | U | 110 | 20 |
| 99-09-2 | 3-Nitroaniline | 17 | U | 220 | 17 |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 10 | U | 160 | 10 |
| 101-55-3 | 4-Bromophenyl phenyl ether | 14 | U | 55 | 14 |
| 59-50-7 | 4-Chloro-3-methylphenol | 23 | U | 160 | 23 |
| 106-47-8 | 4-Chloroaniline | 19 | U | 160 | 19 |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | 14 | U | 55 | 14 |
| 100-01-6 | 4-Nitroaniline | 28 | U | 220 | 28 |
| 83-32-9 | Acenaphthene | 0.83 | U | 7.3 | 0.83 |
| 208-96-8 | Acenaphthylene | 0.38 | U | 7.3 | 0.38 |
| 98-86-2 | Acetophenone | 10 | U | 110 | 10 |
| 120-12-7 | Anthracene | 3.9 | J | 7.3 | 0.85 |
| 1912-24-9 | Atrazine | 9.9 | U | 220 | 9.9 |
| 100-52-7 | Benzaldehyde | 13 | U | 110 | 13 |
| 56-55-3 | Benzo[a]anthracene | 8.0 | | 7.3 | 0.69 |
| 50-32-8 | Benzo[a]pyrene | 7.7 | | 7.3 | 0.70 |
| 205-99-2 | Benzo[b]fluoranthene | 8.9 | | 7.3 | 0.64 |
| 191-24-2 | Benzo[g,h,i]perylene | 0.38 | U | 7.3 | 0.38 |
| 207-08-9 | Benzo[k]fluoranthene | 4.2 | J | 7.3 | 0.74 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 | Lab Sample ID: 240-49010-1

Matrix: Solid | Lab File ID: 50410023.D

Analysis Method: 8270D | Date Collected: 04/06/2015 15:00

Extract. Method: 3540C | Date Extracted: 04/08/2015 09:16

Sample wt/vol: 29.69(g) | Date Analyzed: 04/10/2015 16:57

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 7.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175891 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 111-91-1 | Bis(2-chloroethoxy)methane | 24 | U | 110 | 24 |
| 111-44-4 | Bis(2-chloroethyl)ether | 2.2 | U | 110 | 2.2 |
| 117-81-7 | Bis(2-ethylhexyl) phthalate | 24 | J B | 76 | 21 |
| 85-68-7 | Butyl benzyl phthalate | 11 | U | 76 | 11 |
| 105-60-2 | Caprolactam | 40 | U | 360 | 40 |
| 86-74-8 | Carbazole | 29 | U | 55 | 29 |
| 218-01-9 | Chrysene | 9.3 | | 7.3 | 1.2 |
| 84-74-2 | Di-n-butyl phthalate | 16 | U | 76 | 16 |
| 117-84-0 | Di-n-octyl phthalate | 8.6 | U | 76 | 8.6 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.72 | U | 7.3 | 0.72 |
| 132-64-9 | Dibenzofuran | 0.72 | U | 55 | 0.72 |
| 84-66-2 | Diethyl phthalate | 17 | U | 76 | 17 |
| 131-11-3 | Dimethyl phthalate | 19 | U | 76 | 19 |
| 206-44-0 | Fluoranthene | 16 | | 7.3 | 0.60 |
| 86-73-7 | Fluorene | 0.58 | U | 7.3 | 0.58 |
| 118-74-1 | Hexachlorobenzene | 2.3 | U | 7.3 | 2.3 |
| 87-68-3 | Hexachlorobutadiene | 6.1 | U | 55 | 6.1 |
| 77-47-4 | Hexachlorocyclopentadiene | 8.8 | U | 360 | 8.8 |
| 67-72-1 | Hexachloroethane | 9.8 | U | 55 | 9.8 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 0.38 | U | 7.3 | 0.38 |
| 78-59-1 | Isophorone | 14 | U | 55 | 14 |
| 621-64-7 | N-Nitrosodi-n-propylamine | 6.9 | U | 55 | 6.9 |
| 62-75-9 | N-Nitrosodimethylamine | 17 | U | 110 | 17 |
| 86-30-6 | N-Nitrosodiphenylamine | 23 | U | 55 | 23 |
| 91-20-3 | Naphthalene | 0.89 | U | 7.3 | 0.89 |
| 98-95-3 | Nitrobenzene | 2.4 | U | 110 | 2.4 |
| 87-86-5 | Pentachlorophenol | 9.9 | U | 160 | 9.9 |
| 85-01-8 | Phenanthrene | 11 | | 7.3 | 0.80 |
| 108-95-2 | Phenol | 8.0 | U | 55 | 8.0 |
| 129-00-0 | Pyrene | 15 | | 7.3 | 0.48 |
| 108-60-1 | 2,2'-oxybis[1-chloropropane] | 10 | U | 110 | 10 |
| 606-20-2 | 2,6-Dinitrotoluene | 23 | U | 220 | 23 |
| 100-02-7 | 4-Nitrophenol | 19 | U | 360 | 19 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 | Lab Sample ID: 240-49010-1

Matrix: Solid | Lab File ID: 50410023.D

Analysis Method: 8270D | Date Collected: 04/06/2015 15:00

Extract. Method: 3540C | Date Extracted: 04/08/2015 09:16

Sample wt/vol: 29.69(g) | Date Analyzed: 04/10/2015 16:57

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: 7.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175891 | Units: ug/Kg

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 77 | | 36-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 73 | | 26-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 63 | | 20-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 66 | | 24-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 77 | | 24-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 36 | | 10-110 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 173591

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 09:23 Calibration End Date: 03/25/2015 12:45 Calibration ID: 27496

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-173591/6 | 50325006.D |
| Level 2 | STD2 240-173591/5 | 50325005.D |
| Level 3 | STD3 240-173591/4 | 50325004.D |
| Level 4 | STD4 240-173591/3 | 50325003.D |
| Level 5 | STD5 240-173591/2 | 50325002.D |
| Level 6 | STD6 240-173591/10 | 50325010.D |
| Level 7 | STD7 240-173591/9 | 50325009.D |
| Level 8 | STD8 240-173591/8 | 50325008.D |
| Level 9 | STD9 240-173591/7 | 50325007.D |

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 1,4-Dioxane | 0.7805 | 0.6294<br>0.8001 | 0.7589<br>0.7987 | 0.7869<br>0.8453 | 0.8329 | Ave | | 0.7791 | | | | 8.5 | | 20.0 | | | |
| N-Nitrosodimethylamine | 1.3439 | 1.3034<br>1.3956 | 1.3219<br>1.3941 | 1.3416<br>1.4398 | 1.4638 | Ave | | 1.3755 | | | | 4.2 | | 20.0 | | | |
| Pyridine | 2.2675 | 2.0308<br>2.3390 | 2.0098<br>2.2991 | 2.0028<br>2.3548 | 2.2331 | Ave | | 2.1921 | | | | 6.9 | | 20.0 | | | |
| Benzaldehyde | 1.4007 | 1.7348<br>1.6062 | 1.8516<br>1.5025 | 1.7824<br>1.4172 | 1.7220 | Ave | | 1.6272 | | | 0.0100 | 10.6 | | 20.0 | | | |
| Phenol | 2.3776 | 2.5038<br>2.4406 | 2.5241<br>2.4239 | 2.4379<br>2.4089 | 2.5132 | Ave | | 2.4538 | | | 0.8000 | 2.2 | | 20.0 | | | |
| Aniline | 2.9590 | 2.9553<br>3.0367 | 3.0996<br>3.0210 | 2.9196<br>3.0266 | 3.0466 | Ave | | 3.0080 | | | | 2.0 | | 20.0 | | | |
| Bis(2-chloroethyl)ether | 2.0543 | 1.9710<br>2.0471 | 2.0882<br>2.0361 | 2.0202<br>2.0442 | 2.0901 | Ave | | 2.0439 | | | 0.7000 | 1.9 | | 20.0 | | | |
| 2-Chlorophenol | 1.3709 | 1.3176<br>1.3879 | 1.4011<br>1.3957 | 1.3547<br>1.4028 | 1.4086 | Ave | | 1.3799 | | | 0.8000 | 2.2 | | 20.0 | | | |
| n-Decane | 1.8424 | 1.8138<br>1.8600 | 1.8510<br>1.8425 | 1.8204<br>1.8567 | 1.9218 | Ave | | 1.8511 | | | | 1.8 | | 20.0 | | | |
| 1,3-Dichlorobenzene | 1.4810 | 1.4773<br>1.4839 | 1.5487<br>1.4882 | 1.4895<br>1.4927 | 1.4969 | Ave | | 1.4948 | | | | 1.5 | | 20.0 | | | |
| 1,4-Dichlorobenzene | 1.5024 | 1.6042<br>1.5292 | 1.5803<br>1.5178 | 1.4972<br>1.5101 | 1.5249 | Ave | | 1.5333 | | | | 2.5 | | 20.0 | | | |
| Benzyl alcohol | 1.1126 | 1.1537<br>1.1564 | 1.1265<br>1.1366 | 1.1182<br>1.1549 | 1.1526 | Ave | | 1.1389 | | | | 1.6 | | 20.0 | | | |
| 1,2-Dichlorobenzene | 1.4199 | 1.4578<br>1.4383 | 1.4475<br>1.4405 | 1.4475<br>1.4374 | 1.4335 | Ave | | 1.4403 | | | | 0.8 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 173591

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 09:23 Calibration End Date: 03/25/2015 12:45 Calibration ID: 27496

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 2-Methylphenol | 1.5800 | 1.7296<br>1.6157 | 1.6763<br>1.6136 | 1.6254<br>1.6129 | 1.6415 | Ave | | 1.6369 | | | 0.7000 | 2.8 | | 20.0 | | | |
| 2,2'-oxybis[1-chloropropane] | 1.7134 | 1.7861<br>1.7674 | 1.8110<br>1.7558 | 1.7744<br>1.7682 | 1.7888 | Ave | | 1.7706 | | | | 1.6 | | 20.0 | | | |
| Indene | 2.8219 | 2.9147<br>2.8375 | 2.9763<br>2.7425 | 2.8318<br>2.6784 | 2.9697 | Ave | | 2.8466 | | | | 3.7 | | 20.0 | | | |
| 3 & 4 Methylphenol | 1.6573 | 1.6346<br>1.7185 | 1.7268<br>1.6889 | 1.7230<br>1.7085 | 1.7058 | Ave | | 1.6954 | | | | 2.0 | | 20.0 | | | |
| N-Nitrosodi-n-propylamine | 1.6844 | 1.7217<br>1.7656 | 1.8290<br>1.7285 | 1.7039<br>1.7252 | 1.8174 | Ave | | 1.7469 | | | 0.5000 | 3.0 | | 20.0 | | | |
| Acetophenone | 2.4163 | 2.6693<br>2.4746 | 2.5953<br>2.4462 | 2.4614<br>2.4569 | 2.4655 | Ave | | 2.4982 | | | 0.0100 | 3.5 | | 20.0 | | | |
| Hexachloroethane | 0.7374 | 0.7846<br>0.7474 | 0.7616<br>0.7411 | 0.7141<br>0.7461 | 0.7629 | Ave | | 0.7494 | | | 0.3000 | 2.8 | | 20.0 | | | |
| Nitrobenzene | 0.6344 | 0.6627<br>0.6560 | 0.7068<br>0.6387 | 0.6191<br>0.6442 | 0.6813 | Ave | | 0.6554 | | | 0.2000 | 4.3 | | 20.0 | | | |
| Isophorone | 1.1237 | 1.1222<br>1.1533 | 1.1937<br>1.1121 | 1.0834<br>1.1051 | 1.2021 | Ave | | 1.1370 | | | 0.4000 | 3.7 | | 20.0 | | | |
| 2-Nitrophenol | 0.1799 | 0.1534<br>0.1808 | 0.1773<br>0.1792 | 0.1703<br>0.1797 | 0.1817 | Ave | | 0.1753 | | | 0.1000 | 5.4 | | 20.0 | | | |
| 2,4-Dimethylphenol | 0.4718 | 0.5016<br>0.4793 | 0.5263<br>0.4634 | 0.4869<br>0.4614 | 0.5160 | Ave | | 0.4883 | | | 0.2000 | 4.9 | | 20.0 | | | |
| Benzoic acid | 0.1873 | +++++<br>0.2092 | 0.0836<br>0.2125 | 0.1136<br>0.2158 | 0.1630 | Lin1 | -0.348 | 0.2179 | | | | | | | 0.9970 | | 0.9900 |
| Bis(2-chloroethoxy)methane | 0.5737 | 0.6218<br>0.5934 | 0.6142<br>0.5797 | 0.5811<br>0.5790 | 0.6108 | Ave | | 0.5942 | | | 0.3000 | 3.2 | | 20.0 | | | |
| 2,4-Dichlorophenol | 0.2812 | 0.2827<br>0.2952 | 0.2902<br>0.2886 | 0.2756<br>0.2846 | 0.2956 | Ave | | 0.2867 | | | 0.2000 | 2.4 | | 20.0 | | | |
| 1,2,4-Trichlorobenzene | 0.3031 | 0.3302<br>0.3126 | 0.3152<br>0.3023 | 0.3052<br>0.3104 | 0.3073 | Ave | | 0.3108 | | | | 2.9 | | 20.0 | | | |
| Naphthalene | 1.1045<br>1.0381 | 1.1417<br>1.0815 | 1.1219<br>1.0221 | 1.0393<br>1.0129 | 1.0903 | Ave | | 1.0725 | | | 0.7000 | 4.3 | | 20.0 | | | |
| 4-Chloroaniline | 0.4595 | 0.4833<br>0.4985 | 0.4946<br>0.4787 | 0.4399<br>0.4639 | 0.4780 | Ave | | 0.4745 | | | 0.0100 | 4.1 | | 20.0 | | | |
| 2,6-Dichlorophenol | 0.2764 | 0.2810<br>0.2881 | 0.2957<br>0.2793 | 0.2815<br>0.2817 | 0.2894 | Ave | | 0.2841 | | | | 2.2 | | 20.0 | | | |
| Hexachlorobutadiene | 0.1992 | 0.2171<br>0.2053 | 0.2168<br>0.1951 | 0.1986<br>0.1992 | 0.2103 | Ave | | 0.2052 | | | 0.0100 | 4.2 | | 20.0 | | | |
| Caprolactam | 0.1261 | 0.1148<br>0.1327 | 0.1316<br>0.1295 | 0.1220<br>0.1266 | 0.1235 | Ave | | 0.1258 | | | 0.0100 | 4.6 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 173591

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 09:23 Calibration End Date: 03/25/2015 12:45 Calibration ID: 27496

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 4-Chloro-3-methylphenol | 0.4088 | 0.4144<br>0.4266 | 0.4347<br>0.4115 | 0.3999<br>0.4151 | 0.4331 | Ave | | 0.4180 | | | 0.2000 | 2.9 | | 20.0 | | | |
| 2-Methylnaphthalene | 0.7215<br>0.6534 | 0.6850<br>0.6766 | 0.6982<br>0.6604 | 0.6448<br>0.6671 | 0.6648 | Ave | | 0.6746 | | | 0.4000 | 3.5 | | 20.0 | | | |
| 1-Methylnaphthalene | 0.6040<br>0.5666 | 0.6166<br>0.5884 | 0.5927<br>0.5748 | 0.5603<br>0.5840 | 0.5918 | Ave | | 0.5866 | | | | 3.0 | | 20.0 | | | |
| Hexachlorocyclopentadiene | 0.3345 | 0.2905<br>0.3498 | 0.3400<br>0.3606 | 0.3033<br>0.3689 | 0.3550 | Ave | | 0.3378 | | | 0.0500 | 8.2 | | 20.0 | | | |
| 1,2,4,5-Tetrachlorobenzene | 0.5400 | 0.5734<br>0.5405 | 0.6059<br>0.5314 | 0.5246<br>0.5402 | 0.5633 | Ave | | 0.5524 | | | 0.0100 | 4.9 | | 20.0 | | | |
| 2,4,6-Trichlorophenol | 0.3659 | 0.3810<br>0.3749 | 0.3732<br>0.3679 | 0.3686<br>0.3754 | 0.3500 | Ave | | 0.3696 | | | 0.2000 | 2.5 | | 20.0 | | | |
| 2,4,5-Trichlorophenol | 0.3849 | 0.3770<br>0.3789 | 0.4194<br>0.3830 | 0.3792<br>0.3825 | 0.3800 | Ave | | 0.3856 | | | 0.2000 | 3.6 | | 20.0 | | | |
| 1,1'-Biphenyl | 1.5057<br>1.3654 | 1.4208<br>1.3589 | 1.4463<br>1.3420 | 1.3367<br>1.3720 | 1.3613 | Ave | | 1.3899 | | | 0.0100 | 4.1 | | 20.0 | | | |
| 2-Chloronaphthalene | 1.1730<br>1.0665 | 1.0915<br>1.0686 | 1.1210<br>1.0737 | 1.0538<br>1.0766 | 1.0678 | Ave | | 1.0880 | | | 0.8000 | 3.4 | | 20.0 | | | |
| 2-Nitroaniline | 0.5781 | 0.5716<br>0.5739 | 0.5644<br>0.5765 | 0.5608<br>0.5804 | 0.6212 | Ave | | 0.5784 | | | 0.0100 | 3.2 | | 20.0 | | | |
| Dimethyl phthalate | 1.2330 | 1.3456<br>1.1993 | 1.3187<br>1.1780 | 1.2122<br>1.1904 | 1.2491 | Ave | | 1.2408 | | | 0.0100 | 4.9 | | 20.0 | | | |
| 1,3-Dinitrobenzene | 0.2021 | 0.1612<br>0.2004 | 0.1863<br>0.2021 | 0.1891<br>0.2075 | 0.2103 | Ave | | 0.1949 | | | | 8.2 | | 20.0 | | | |
| 2,6-Dinitrotoluene | 0.2886 | 0.2387<br>0.2819 | 0.2990<br>0.2733 | 0.2777<br>0.2797 | 0.2918 | Ave | | 0.2788 | | | | 6.5 | | 20.0 | | | |
| Acenaphthylene | 1.7423<br>1.7175 | 1.7738<br>1.7320 | 1.8142<br>1.7247 | 1.6815<br>1.7196 | 1.7220 | Ave | | 1.7364 | | | 0.9000 | 2.2 | | 20.0 | | | |
| 3-Nitroaniline | 0.2845 | 0.2970<br>0.2927 | 0.3018<br>0.2975 | 0.3054<br>0.3011 | 0.3126 | Ave | | 0.2991 | | | 0.0100 | 2.8 | | 20.0 | | | |
| 2,4-Dinitrophenol | 0.1405 | +++++<br>0.1645 | 0.0628<br>0.1786 | 0.0838<br>0.1859 | 0.1395 | Lin1 | -0.321 | 0.1813 | | | 0.0100 | | | | 0.9930 | | 0.9900 |
| Acenaphthene | 1.2875<br>1.0727 | 1.1517<br>1.0619 | 1.2026<br>1.0744 | 1.0628<br>1.0760 | 1.1036 | Ave | | 1.1215 | | | 0.9000 | 7.0 | | 20.0 | | | |
| 4-Nitrophenol | 0.2625 | 0.2314<br>0.2654 | 0.2412<br>0.2622 | 0.2316<br>0.2590 | 0.2618 | Ave | | 0.2519 | | | | 5.8 | | 20.0 | | | |
| 2,4-Dinitrotoluene | 0.3706 | 0.3467<br>0.3822 | 0.3914<br>0.3917 | 0.3480<br>0.3935 | 0.3831 | Ave | | 0.3759 | | | 0.2000 | 5.1 | | 20.0 | | | |
| Dibenzofuran | 1.6451<br>1.4924 | 1.5271<br>1.5036 | 1.6204<br>1.4999 | 1.4625<br>1.4807 | 1.5291 | Ave | | 1.5290 | | | 0.8000 | 4.1 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton  Job No.: 240-49010-1  Analy Batch No.: 173591

SDG No.:

Instrument ID: A4HP9  GC Column: RXI-5SILMS  ID: 0.45(mm)  Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 09:23  Calibration End Date: 03/25/2015 12:45  Calibration ID: 27496

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| 2,3,4,6-Tetrachlorophenol | 0.3036 | 0.2726<br>0.2974 | 0.2942<br>0.3053 | 0.2950<br>0.3083 | 0.3094 | Ave | | 0.2982 | | | 0.0100 | 4.0 | | 20.0 | | | |
| Hexadecane | 0.9446 | 1.0619<br>0.9432 | 1.0501<br>0.9135 | 0.9692<br>0.9015 | 1.0239 | Ave | | 0.9760 | | | | 6.3 | | 20.0 | | | |
| Diethyl phthalate | 1.1119 | 1.4219<br>1.1477 | 1.3690<br>1.1823 | 1.2620<br>1.2079 | 1.2303 | Ave | | 1.2416 | | | 0.0100 | 8.6 | | 20.0 | | | |
| 4-Chlorophenyl phenyl ether | 0.6220 | 0.6678<br>0.6158 | 0.6648<br>0.6111 | 0.6223<br>0.6033 | 0.6354 | Ave | | 0.6303 | | | 0.4000 | 3.8 | | 20.0 | | | |
| 4-Nitroaniline | 0.3078 | 0.3021<br>0.3109 | 0.3165<br>0.2972 | 0.2524<br>0.2949 | 0.2668 | Ave | | 0.2936 | | | 0.0100 | 7.6 | | 20.0 | | | |
| Fluorene | 1.2920<br>1.2542 | 1.4036<br>1.2420 | 1.3739<br>1.2367 | 1.2716<br>1.2143 | 1.2800 | Ave | | 1.2854 | | | 0.9000 | 4.9 | | 20.0 | | | |
| 4,6-Dinitro-2-methylphenol | 0.1312 | +++++<br>0.1387 | 0.0763<br>0.1329 | 0.0757<br>0.1343 | 0.1207 | Lin1 | -0.164 | 0.1387 | | | 0.0100 | | | | 0.9980 | | 0.9900 |
| N-Nitrosodiphenylamine | 0.5551 | 0.5365<br>0.5227 | 0.6119<br>0.5074 | 0.5348<br>0.5030 | 0.6198 | Ave | | 0.5489 | | | 0.0100 | 8.1 | | 20.0 | | | |
| 1,2-Diphenylhydrazine(as Azobenzene) | 1.3371 | 1.1963<br>1.2380 | 1.2442<br>1.1024 | 1.1401<br>1.0599 | 1.4318 | Ave | | 1.2181 | | | | 10.1 | | 20.0 | | | |
| Azobenzene | 1.3357 | 1.1983<br>1.2380 | 1.2374<br>1.1023 | 1.1413<br>1.0597 | 1.4318 | Ave | | 1.2181 | | | | 10.1 | | 20.0 | | | |
| 4-Bromophenyl phenyl ether | 0.2099 | 0.1953<br>0.1895 | 0.2235<br>0.1762 | 0.1839<br>0.1761 | 0.2146 | Ave | | 0.1961 | | | 0.1000 | 9.2 | | 20.0 | | | |
| Atrazine | 0.2105 | 0.2161<br>0.1956 | 0.2032<br>0.1910 | 0.1856<br>0.1902 | 0.2282 | Ave | | 0.2026 | | | 0.0100 | 7.3 | | 20.0 | | | |
| Hexachlorobenzene | 0.2053<br>0.1884 | 0.1878<br>0.1779 | 0.1926<br>0.1694 | 0.1746<br>0.1680 | 0.1981 | Ave | | 0.1847 | | | 0.1000 | 7.0 | | 20.0 | | | |
| n-Octadecane | 0.5572 | 0.5797<br>0.5119 | 0.5944<br>0.4629 | 0.5358<br>0.4476 | 0.6588 | Ave | | 0.5436 | | | | 12.8 | | 20.0 | | | |
| Pentachlorophenol | 0.1304 | 0.0830<br>0.1380 | 0.0976<br>0.1319 | 0.1023<br>0.1306 | 0.1269 | Ave | | 0.1176 | | | 0.0500 | 17.2 | | 20.0 | | | |
| Phenanthrene | 1.1900<br>1.0388 | 1.0771<br>1.0411 | 1.0986<br>1.0034 | 0.9831<br>0.9981 | 1.0454 | Ave | | 1.0528 | | | 0.7000 | 6.0 | | 20.0 | | | |
| Anthracene | 1.2224<br>1.0494 | 1.0566<br>1.0680 | 1.1180<br>1.0297 | 0.9905<br>1.0208 | 1.0802 | Ave | | 1.0706 | | | 0.7000 | 6.3 | | 20.0 | | | |
| Carbazole | 1.0362 | 0.9995<br>0.9730 | 0.9420<br>0.8938 | 0.8433<br>0.8774 | 0.9437 | Ave | | 0.9386 | | | 0.0100 | 6.9 | | 20.0 | | | |
| Di-n-butyl phthalate | 1.2681 | 1.0246<br>1.2254 | 1.0082<br>1.1624 | 0.9763<br>1.1315 | 1.2701 | Ave | | 1.1333 | | | 0.0100 | 10.5 | | 20.0 | | | |
| Fluoranthene | 1.3222<br>1.2807 | 1.1568<br>1.2300 | 1.0583<br>1.1557 | 0.9906<br>1.1257 | 1.1983 | Ave | | 1.1687 | | | 0.6000 | 8.9 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 173591

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 09:23 Calibration End Date: 03/25/2015 12:45 Calibration ID: 27496

| ANALYTE | RRF | | | | | CURVE TYPE | COEFFICIENT | | | # | MIN RRF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | | B | M1 | M2 | | | | | | | | |
| Benzidine | 0.5409 | 0.3084<br>0.6022 | 0.4344<br>0.5758 | 0.3739<br>0.5633 | 0.5008 | Lin1 | -0.364 | 0.5775 | | | | | | | 0.9970 | | 0.9900 |
| Pyrene | 1.2363<br>1.0607 | 1.0684<br>1.0603 | 0.9828<br>1.0731 | 0.9649<br>1.0779 | 0.9924 | Ave | | 1.0574 | | | 0.6000 | 7.6 | | 20.0 | | | |
| Butyl benzyl phthalate | 0.4891 | 0.5133<br>0.5006 | 0.5209<br>0.4999 | 0.4911<br>0.5078 | 0.4592 | Ave | | 0.4977 | | | 0.0100 | 3.8 | | 20.0 | | | |
| Bis(2-ethylhexyl) phthalate | 0.6722 | 0.6862<br>0.6732 | 0.7174<br>0.6752 | 0.6735<br>0.6754 | 0.7161 | Ave | | 0.6862 | | | 0.0100 | 2.8 | | 20.0 | | | |
| 3,3'-Dichlorobenzidine | 0.3360 | 0.3143<br>0.3531 | 0.3540<br>0.3548 | 0.3176<br>0.3563 | 0.3525 | Ave | | 0.3423 | | | 0.0100 | 5.1 | | 20.0 | | | |
| Benzo[a]anthracene | 1.3161<br>1.0674 | 1.0833<br>1.0853 | 1.1325<br>1.0916 | 1.0241<br>1.0824 | 1.1052 | Ave | | 1.1098 | | | 0.8000 | 7.4 | | 20.0 | | | |
| Chrysene | 1.1606<br>1.0078 | 1.0111<br>1.0048 | 1.0303<br>0.9987 | 0.9478<br>1.0061 | 1.0145 | Ave | | 1.0202 | | | 0.7000 | 5.6 | | 20.0 | | | |
| Di-n-octyl phthalate | 1.4554 | 1.2160<br>1.4975 | 1.4784<br>1.4537 | 1.4434<br>1.4961 | 1.4530 | Ave | | 1.4367 | | | 0.0100 | 6.4 | | 20.0 | | | |
| Benzo[b]fluoranthene | 1.2945<br>1.1603 | 1.0734<br>1.2071 | 1.1573<br>1.2178 | 1.0933<br>1.1884 | 1.1742 | Ave | | 1.1740 | | | 0.7000 | 5.6 | | 20.0 | | | |
| Benzo[k]fluoranthene | 1.2491<br>1.2357 | 1.2284<br>1.2477 | 1.2293<br>1.1697 | 1.1563<br>1.2858 | 1.1543 | Ave | | 1.2174 | | | 0.7000 | 3.8 | | 20.0 | | | |
| Benzo[a]pyrene | 1.2007<br>1.1408 | 1.0756<br>1.1803 | 1.1035<br>1.1398 | 1.0604<br>1.1751 | 1.1401 | Ave | | 1.1351 | | | 0.7000 | 4.2 | | 20.0 | | | |
| Indeno[1,2,3-cd]pyrene | 0.9678<br>1.0562 | 0.9557<br>1.0488 | 1.0322<br>1.0249 | 1.0265<br>1.0351 | 1.0540 | Ave | | 1.0224 | | | 0.5000 | 3.6 | | 20.0 | | | |
| Dibenz(a,h)anthracene | 0.8425<br>0.8750 | 0.7726<br>0.8750 | 0.8246<br>0.8442 | 0.8036<br>0.8612 | 0.8414 | Ave | | 0.8378 | | | 0.4000 | 4.0 | | 20.0 | | | |
| Benzo[g,h,i]perylene | 0.8549<br>0.8452 | 0.8266<br>0.8158 | 0.8609<br>0.7978 | 0.8728<br>0.7990 | 0.8442 | Ave | | 0.8352 | | | 0.5000 | 3.2 | | 20.0 | | | |
| 2-Fluorophenol (Surr) | 1.5377 | 1.5976<br>1.5438 | 1.5570<br>1.5531 | 1.4857<br>1.5729 | 1.5534 | Ave | | 1.5502 | | | | 2.1 | | 20.0 | | | |
| Phenol-d5 (Surr) | 2.1673 | 2.1559<br>2.2351 | 2.3028<br>2.2101 | 2.0965<br>2.2101 | 2.2920 | Ave | | 2.2087 | | | | 3.1 | | 20.0 | | | |
| Nitrobenzene-d5 (Surr) | 0.8063<br>0.6914 | 0.6859<br>0.7119 | 0.7197<br>0.6858 | 0.6679<br>0.6945 | 0.7537 | Ave | | 0.7130 | | | | 6.0 | | 20.0 | | | |
| 2-Fluorobiphenyl (Surr) | 1.5041<br>1.2837 | 1.3070<br>1.2887 | 1.4180<br>1.2798 | 1.2512<br>1.2763 | 1.2917 | Ave | | 1.3223 | | | | 6.3 | | 20.0 | | | |
| 2,4,6-Tribromophenol (Surr) | 0.1327 | 0.1302<br>0.1342 | 0.1549<br>0.1423 | 0.1303<br>0.1439 | 0.1356 | Ave | | 0.1380 | | | | 6.2 | | 20.0 | | | |
| Terphenyl-d14 (Surr) | 1.0120<br>0.7699 | 0.7733<br>0.7785 | 0.8082<br>0.7849 | 0.7685<br>0.7922 | 0.7229 | Ave | | 0.8012 | | | | 10.3 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 173591

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 09:23 Calibration End Date: 03/25/2015 12:45 Calibration ID: 27496

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-173591/6 | 50325006.D |
| Level 2 | STD2 240-173591/5 | 50325005.D |
| Level 3 | STD3 240-173591/4 | 50325004.D |
| Level 4 | STD4 240-173591/3 | 50325003.D |
| Level 5 | STD5 240-173591/2 | 50325002.D |
| Level 6 | STD6 240-173591/10 | 50325010.D |
| Level 7 | STD7 240-173591/9 | 50325009.D |
| Level 8 | STD8 240-173591/8 | 50325008.D |
| Level 9 | STD9 240-173591/7 | 50325007.D |

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 1,4-Dioxane | DCB | Ave | 418824 | 14747<br>640794 | 33723<br>853106 | 62426<br>1071216 | 147431 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| N-Nitrosodimethylamine | DCB | Ave | 721156 | 30538<br>1117831 | 58740<br>1489104 | 106440<br>1824745 | 259107 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Pyridine | DCB | Ave | 1216826 | 47581<br>1873385 | 89308<br>2455735 | 158891<br>2984242 | 395275 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzaldehyde | DCB | Ave | 1503322 | 81291<br>2573008 | 164554<br>3209630 | 282820<br>3592104 | 609614 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Phenol | DCB | Ave | 1275905 | 58664<br>1954769 | 112159<br>2589003 | 193413<br>3052838 | 444861 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Aniline | DCB | Ave | 1587871 | 69242<br>2432181 | 137732<br>3226757 | 231629<br>3835744 | 539268 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Bis(2-chloroethyl)ether | DCB | Ave | 1102407 | 46181<br>1639639 | 92788<br>2174802 | 160274<br>2590656 | 369970 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Chlorophenol | DCB | Ave | 735657 | 30871<br>1111642 | 62260<br>1490797 | 107479<br>1777808 | 249330 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| n-Decane | DCB | Ave | 988665 | 42496<br>1489781 | 82251<br>1968001 | 144425<br>2353015 | 340178 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,3-Dichlorobenzene | DCB | Ave | 794771 | 34612<br>1188516 | 68816<br>1589560 | 118172<br>1891797 | 264971 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,4-Dichlorobenzene | DCB | Ave | 806252 | 37586<br>1224833 | 70222<br>1621202 | 118782<br>1913803 | 269915 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzyl alcohol | DCB | Ave | 597050 | 27032<br>926181 | 50055<br>1213992 | 88709<br>1463611 | 204021 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,2-Dichlorobenzene | DCB | Ave | 761944 | 34156<br>1151993 | 64318<br>1538649 | 114838<br>1821706 | 253747 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Methylphenol | DCB | Ave | 847888 | 40525<br>1294070 | 74488<br>1723492 | 128948<br>2044006 | 290556 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 173591

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 09:23 Calibration End Date: 03/25/2015 12:45 Calibration ID: 27496

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 2,2'-oxybis[1-chloropropane] | DCB | Ave | 919455 | 41849<br>1415613 | 80472<br>1875443 | 140770<br>2240843 | 316638 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Indene | DCB | Ave | 3028677 | 136583<br>4545396 | 264507<br>5858582 | 449319<br>6788708 | 1051322 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| 3 & 4 Methylphenol | DCB | Ave | 889352 | 38299<br>1376412 | 76732<br>1803911 | 136697<br>2165230 | 301946 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| N-Nitrosodi-n-propylamine | DCB | Ave | 903905 | 40339<br>1414106 | 81272<br>1846232 | 135177<br>2186362 | 321697 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Acetophenone | DCB | Ave | 1296653 | 62542<br>1981970 | 115323<br>2612875 | 195279<br>3113638 | 436416 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexachloroethane | DCB | Ave | 395723 | 18382<br>598584 | 33842<br>791597 | 56656<br>945581 | 135045 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Nitrobenzene | NPT | Ave | 1287917 | 58385<br>1996604 | 117600<br>2644634 | 191109<br>3147448 | 450352 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Isophorone | NPT | Ave | 2281437 | 98865<br>3510341 | 198624<br>4605211 | 334417<br>5399478 | 794654 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Nitrophenol | NPT | Ave | 365297 | 13512<br>550276 | 29499<br>742073 | 52574<br>877990 | 120132 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4-Dimethylphenol | NPT | Ave | 957779 | 44192<br>1458742 | 87573<br>1919028 | 150296<br>2254526 | 341091 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzoic acid | NPT | Lin1 | 760391 | +++++<br>1273201 | 27824<br>1759597 | 70119<br>2108821 | 215508 | 20.0 | +++++<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Bis(2-chloroethoxy)methane | NPT | Ave | 1164695 | 54779<br>1806164 | 102193<br>2400643 | 179371<br>2829071 | 403794 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4-Dichlorophenol | NPT | Ave | 570976 | 24903<br>898631 | 48286<br>1195145 | 85086<br>1390764 | 195415 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,2,4-Trichlorobenzene | NPT | Ave | 615410 | 29086<br>951440 | 52439<br>1251750 | 94221<br>1516469 | 203120 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Naphthalene | NPT | Ave | 19717<br>2107585 | 100577<br>3291872 | 186662<br>4232597 | 320807<br>4949248 | 720724 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4-Chloroaniline | NPT | Ave | 932817 | 42580<br>1517270 | 82292<br>1982125 | 135798<br>2266506 | 315982 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,6-Dichlorophenol | NPT | Ave | 561247 | 24759<br>876818 | 49204<br>1156556 | 86880<br>1376346 | 191308 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexachlorobutadiene | NPT | Ave | 404500 | 19124<br>624754 | 36065<br>807762 | 61317<br>973383 | 139014 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Caprolactam | NPT | Ave | 512132 | 20222<br>807781 | 43779<br>1072275 | 75329<br>1237244 | 163251 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| 4-Chloro-3-methylphenol | NPT | Ave | 829926 | 36508<br>1298350 | 72328<br>1704008 | 123428<br>2028301 | 286288 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Methylnaphthalene | NPT | Ave | 12880<br>1326539 | 60345<br>2059372 | 116166<br>2734651 | 199029<br>3259681 | 439474 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

FORM VI
GC/MS SEMI VOA INITIAL CALIBRATION DATA
INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 173591

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 09:23 Calibration End Date: 03/25/2015 12:45 Calibration ID: 27496

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 1-Methylnaphthalene | NPT | Ave | 10783<br>1150306 | 54317<br>1791014 | 98621<br>2380263 | 172962<br>2853448 | 391189 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexachlorocyclopentadiene | ANT | Ave | <br>394191 | 14853<br>642030 | 32995<br>882202 | 54350<br>1063952 | 138635 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,2,4,5-Tetrachlorobenzene | ANT | Ave | <br>636365 | 29318<br>991961 | 58800<br>1300105 | 94014<br>1558023 | 220001 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4,6-Trichlorophenol | ANT | Ave | <br>431209 | 19479<br>688156 | 36214<br>900045 | 66049<br>1082604 | 136687 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4,5-Trichlorophenol | ANT | Ave | <br>453519 | 19275<br>695467 | 40699<br>937076 | 67964<br>1103049 | 148392 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,1'-Biphenyl | ANT | Ave | 15417<br>1608905 | 72647<br>2494139 | 140354<br>3283358 | 239539<br>3957105 | 531623 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Chloronaphthalene | ANT | Ave | 12010<br>1256724 | 55808<br>1961177 | 108779<br>2626903 | 188848<br>3105106 | 416984 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Nitroaniline | ANT | Ave | <br>681193 | 29224<br>1053324 | 54767<br>1410534 | 100496<br>1674021 | 242594 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Dimethyl phthalate | ANT | Ave | <br>1452881 | 68801<br>2201166 | 127969<br>2881970 | 217239<br>3433309 | 487812 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 1,3-Dinitrobenzene | ANT | Ave | <br>238175 | 8243<br>367810 | 18082<br>494497 | 33888<br>598460 | 82135 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,6-Dinitrotoluene | ANT | Ave | <br>340027 | 12206<br>517459 | 29011<br>668719 | 49757<br>806648 | 113945 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Acenaphthylene | ANT | Ave | 17839<br>2023808 | 90696<br>3178757 | 176052<br>4219484 | 301330<br>4959532 | 672483 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 3-Nitroaniline | ANT | Ave | <br>335286 | 15188<br>537200 | 29287<br>727912 | 54733<br>868377 | 122067 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4-Dinitrophenol | ANT | Lin1 | <br>331046 | +++++<br>603959 | 12183<br>874141 | 30051<br>1072248 | 108944 | <br>20.0 | +++++<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Acenaphthene | ANT | Ave | 13183<br>1264080 | 58887<br>1948990 | 116703<br>2628589 | 190462<br>3103296 | 430966 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4-Nitrophenol | ANT | Ave | <br>618749 | 23663<br>974301 | 46808<br>1283077 | 83019<br>1493766 | 204470 | <br>20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| 2,4-Dinitrotoluene | ANT | Ave | <br>436677 | 17725<br>701434 | 37982<br>958274 | 62362<br>1134806 | 149592 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Dibenzofuran | ANT | Ave | 16844<br>1758613 | 78081<br>2759685 | 157245<br>3669697 | 262085<br>4270503 | 597159 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,3,4,6-Tetrachlorophenol | ANT | Ave | <br>357723 | 13939<br>545856 | 28546<br>746918 | 52862<br>889273 | 120825 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Hexadecane | ANT | Ave | <br>1113097 | 54293<br>1731128 | 101899<br>2234817 | 173687<br>2600074 | 399866 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Diethyl phthalate | ANT | Ave | <br>1310191 | 72701<br>2106396 | 132851<br>2892647 | 226164<br>3483688 | 480462 | <br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 173591

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 09:23 Calibration End Date: 03/25/2015 12:45 Calibration ID: 27496

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 4-Chlorophenyl phenyl ether | ANT | Ave | 732971 | 34147<br>1130205 | 64517<br>1495024 | 111522<br>1739925 | 248128 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4-Nitroaniline | ANT | Ave | 362733 | 15447<br>570601 | 30715<br>727143 | 45239<br>850612 | 104190 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Fluorene | ANT | Ave | 13229<br>1477952 | 71766<br>2279491 | 133320<br>3025598 | 227886<br>3502165 | 499889 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4,6-Dinitro-2-methylphenol | PHN | Lin1 | 494016 | +++++<br>846043 | 26878<br>1143975 | 49750<br>1385681 | 148558 | 20.0 | +++++<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| N-Nitrosodiphenylamine | PHN | Ave | 2090270 | 101458<br>3187599 | 215572<br>4366843 | 351267<br>5188286 | 763042 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| 1,2-Diphenylhydrazine(as Azobenzene) | PHN | Ave | 2517457 | 113109<br>3774907 | 219164<br>4744020 | 374451<br>5466241 | 881361 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Azobenzene | PHN | Ave | 2514941 | 113303<br>3775040 | 217961<br>4743833 | 374838<br>5464979 | 881361 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 4-Bromophenyl phenyl ether | PHN | Ave | 395180 | 18463<br>577878 | 39363<br>758384 | 60407<br>907940 | 132091 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Atrazine | PHN | Ave | 792659 | 40870<br>1193007 | 71587<br>1644212 | 121944<br>1961579 | 280937 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Hexachlorobenzene | PHN | Ave | 3769<br>354770 | 17753<br>542471 | 33922<br>728922 | 57343<br>866567 | 121972 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| n-Octadecane | PHN | Ave | 1049169 | 54812<br>1561041 | 104703<br>1992182 | 175994<br>2308533 | 405542 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Pentachlorophenol | PHN | Ave | 491190 | 15692<br>841813 | 34394<br>1135147 | 67228<br>1346584 | 156292 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Phenanthrene | PHN | Ave | 21846<br>1955838 | 101846<br>3174700 | 193517<br>4318113 | 322892<br>5147388 | 643515 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Anthracene | PHN | Ave | 22442<br>1975840 | 99901<br>3256432 | 196940<br>4431385 | 325318<br>5264157 | 664972 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Carbazole | PHN | Ave | 1951048 | 94505<br>2966866 | 165926<br>3846373 | 276985<br>4524774 | 580926 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Di-n-butyl phthalate | PHN | Ave | 2387585 | 96877<br>3736564 | 177591<br>5002493 | 320654<br>5835264 | 781837 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Fluoranthene | PHN | Ave | 24273<br>2411424 | 109382<br>3750644 | 186413<br>4973492 | 325358<br>5805154 | 737650 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzidine | CRY | Lin1 | 2549984 | 62984<br>4447865 | 170591<br>5641293 | 266175<br>6425819 | 793768 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Pyrene | CRY | Ave | 24371<br>2500434 | 109099<br>3916018 | 192969<br>5256740 | 343439<br>6147965 | 786493 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Butyl benzyl phthalate | CRY | Ave | 1152886 | 52413<br>1848920 | 102274<br>2449007 | 174789<br>2896417 | 363889 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Bis(2-ethylhexyl) phthalate | CRY | Ave | 1584665 | 70077<br>2486497 | 140858<br>3307750 | 239696<br>3852294 | 567470 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

FORM VI

GC/MS SEMI VOA INITIAL CALIBRATION DATA

INTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 173591

SDG No.:

Instrument ID: A4HP9 GC Column: RXI-5SILMS ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/25/2015 09:23 Calibration End Date: 03/25/2015 12:45 Calibration ID: 27496

| ANALYTE | IS REF | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | LVL 1<br>LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 | LVL 6 | LVL 2<br>LVL 7 | LVL 3<br>LVL 8 | LVL 4<br>LVL 9 | LVL 5 |
| 3,3'-Dichlorobenzidine | CRY | Ave | 1584006 | 64183<br>2607968 | 139026<br>3476315 | 226102<br>4064997 | 558667 | 20.0 | 1.00<br>30.0 | 2.00<br>40.0 | 4.00<br>50.0 | 10.0 |
| Benzo[a]anthracene | CRY | Ave | 25944<br>2516204 | 110629<br>4008361 | 222344<br>5347276 | 364506<br>6173682 | 875899 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Chrysene | CRY | Ave | 22879<br>2375668 | 103249<br>3711169 | 202284<br>4892331 | 337327<br>5738911 | 803981 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Di-n-octyl phthalate | PRY | Ave | 2773878 | 103525<br>4371636 | 232035<br>5807438 | 416978<br>6822185 | 974419 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzo[b]fluoranthene | PRY | Ave | 21775<br>2211382 | 91386<br>3523718 | 181643<br>4865188 | 315841<br>5419384 | 787474 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzo[k]fluoranthene | PRY | Ave | 21011<br>2355240 | 104581<br>3642356 | 192933<br>4673075 | 334051<br>5863314 | 774146 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzo[a]pyrene | PRY | Ave | 20197<br>2174194 | 91574<br>3445498 | 173192<br>4553736 | 306330<br>5358483 | 764608 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Indeno[1,2,3-cd]pyrene | PRY | Ave | 16280<br>2013031 | 81365<br>3061634 | 161999<br>4094446 | 296546<br>4720195 | 706871 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Dibenz(a,h)anthracene | PRY | Ave | 14171<br>1667623 | 65772<br>2554252 | 129416<br>3372548 | 232161<br>3927015 | 564286 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Benzo[g,h,i]perylene | PRY | Ave | 14381<br>1610927 | 70371<br>2381457 | 135121<br>3187411 | 252141<br>3643427 | 566130 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Fluorophenol (Surr) | DCB | Ave | 825182 | 37432<br>1236514 | 69187<br>1658914 | 117867<br>1993326 | 274968 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Phenol-d5 (Surr) | DCB | Ave | 1163020 | 50512<br>1790202 | 102326<br>2360672 | 166329<br>2800864 | 405709 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Nitrobenzene-d5 (Surr) | NPT | Ave | 14394<br>1403750 | 60427<br>2166780 | 119748<br>2839846 | 206156<br>3393569 | 498205 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2-Fluorobiphenyl (Surr) | ANT | Ave | 15400<br>1512696 | 66829<br>2365186 | 137600<br>3131020 | 224222<br>3680934 | 504429 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| 2,4,6-Tribromophenol (Surr) | ANT | Ave | 156373 | 6655<br>246374 | 15027<br>348168 | 23355<br>415080 | 52973 | 10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |
| Terphenyl-d14 (Surr) | CRY | Ave | 19950<br>1814990 | 78971<br>2875308 | 158687<br>3844858 | 273509<br>4518791 | 572890 | 0.100<br>10.0 | 0.500<br>15.0 | 1.00<br>20.0 | 2.00<br>25.0 | 5.00 |

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID (1): CCV 240-175891/2 CCVIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 04/10/2015 08:11

| ANALYTE | RT | RESOLUTION (%) |
|---|---|---|
| 1,4-Dioxane | 2.66 | 100.0 |
| N-Nitrosodimethylamine | 3.30 | 100.0 |
| 2-Fluorophenol (Surr) | 5.12 | 100.0 |
| Benzaldehyde | 5.97 | 100.0 |
| Phenol-d5 (Surr) | 6.00 | 100.0 |
| Phenol | 6.02 | 100.0 |
| Bis(2-chloroethyl)ether | 6.10 | 100.0 |
| 2-Chlorophenol | 6.18 | 100.0 |
| 2-Methylphenol | 6.56 | 100.0 |
| 2,2'-oxybis[1-chloropropane] | 6.59 | 100.0 |
| 3 & 4 Methylphenol | 6.69 | 100.0 |
| N-Nitrosodi-n-propylamine | 6.70 | 100.0 |
| Acetophenone | 6.71 | 100.0 |
| Hexachloroethane | 6.83 | 100.0 |
| Nitrobenzene-d5 (Surr) | 6.85 | 100.0 |
| Nitrobenzene | 6.86 | 100.0 |
| Isophorone | 7.06 | 100.0 |
| 2-Nitrophenol | 7.14 | 100.0 |
| 2,4-Dimethylphenol | 7.15 | 100.0 |
| Bis(2-chloroethoxy)methane | 7.23 | 100.0 |
| 2,4-Dichlorophenol | 7.35 | 100.0 |
| Naphthalene | 7.50 | 100.0 |
| 4-Chloroaniline | 7.52 | 100.0 |
| Hexachlorobutadiene | 7.61 | 100.0 |
| Caprolactam | 7.81 | 100.0 |
| 4-Chloro-3-methylphenol | 7.92 | 100.0 |
| 2-Methylnaphthalene | 8.09 | 100.0 |
| Hexachlorocyclopentadiene | 8.23 | 100.0 |
| 2,4,6-Trichlorophenol | 8.32 | 100.0 |
| 2,4,5-Trichlorophenol | 8.36 | 100.0 |
| 2-Fluorobiphenyl (Surr) | 8.38 | 100.0 |
| 1,1'-Biphenyl | 8.48 | 100.0 |
| 2-Chloronaphthalene | 8.51 | 100.0 |
| 2-Nitroaniline | 8.57 | 100.0 |
| Dimethyl phthalate | 8.70 | 100.0 |
| 2,6-Dinitrotoluene | 8.76 | 100.0 |
| Acenaphthylene | 8.87 | 100.0 |
| 3-Nitroaniline | 8.91 | 100.0 |
| 2,4-Dinitrophenol | 9.00 | 100.0 |
| Acenaphthene | 9.01 | 100.0 |
| 4-Nitrophenol | 9.03 | 100.0 |
| 2,4-Dinitrotoluene | 9.11 | 100.0 |
| Dibenzofuran | 9.16 | 100.0 |
| Diethyl phthalate | 9.29 | 100.0 |
| 4-Chlorophenyl phenyl ether | 9.42 | 100.0 |

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID (1): CCV 240-175891/2 CCVIS Instrument ID (1): A4HP9

GC Column (1): RXI-5SILMS ID: 0.45(mm) Date Analyzed (1): 04/10/2015 08:11

| ANALYTE | RT | RESOLUTION (%) |
|---|---|---|
| 4-Nitroaniline | 9.43 | 100.0 |
| Fluorene | 9.45 | 100.0 |
| 4,6-Dinitro-2-methylphenol | 9.46 | 100.0 |
| N-Nitrosodiphenylamine | 9.51 | 100.0 |
| 2,4,6-Tribromophenol (Surr) | 9.65 | 100.0 |
| 4-Bromophenyl phenyl ether | 9.84 | 100.0 |
| Hexachlorobenzene | 9.93 | 100.0 |
| Atrazine | 9.94 | 100.0 |
| Pentachlorophenol | 10.08 | 100.0 |
| Phenanthrene | 10.27 | 100.0 |
| Anthracene | 10.32 | 100.0 |
| Carbazole | 10.43 | 100.0 |
| Di-n-butyl phthalate | 10.66 | 100.0 |
| Fluoranthene | 11.29 | 100.0 |
| Pyrene | 11.49 | 100.0 |
| Terphenyl-d14 (Surr) | 11.57 | 100.0 |
| Butyl benzyl phthalate | 11.94 | 100.0 |
| Bis(2-ethylhexyl) phthalate | 12.42 | 100.0 |
| 3,3'-Dichlorobenzidine | 12.46 | 100.0 |
| Benzo[a]anthracene | 12.53 | 100.0 |
| Chrysene | 12.56 | 100.0 |
| Di-n-octyl phthalate | 13.07 | 100.0 |
| Benzo[b]fluoranthene | 13.75 | 34.90 |
| Benzo[k]fluoranthene | 13.78 | 100.0 |
| Benzo[a]pyrene | 14.22 | 100.0 |
| Indeno[1,2,3-cd]pyrene | 16.23 | 100.0 |
| Dibenz(a,h)anthracene | 16.24 | 100.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-173591/11 Calibration Date: 03/25/2015 14:02

Instrument ID: A4HP9 Calib Start Date: 03/25/2015 09:23

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 03/25/2015 12:45

Lab File ID: 50325011.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | Ave | 0.7791 | 0.7815 | | 10.0 | 10.0 | 0.3 | 30.0 |
| N-Nitrosodimethylamine | Ave | 1.376 | 1.156 | | 8.40 | 10.0 | -16.0 | 30.0 |
| Pyridine | Ave | 2.192 | 2.189 | | 9.99 | 10.0 | -0.1 | 30.0 |
| Benzaldehyde | Ave | 1.627 | 1.538 | 0.0100 | 18.9 | 20.0 | -5.5 | 30.0 |
| Phenol | Ave | 2.454 | 2.376 | 0.8000 | 9.68 | 10.0 | -3.2 | 30.0 |
| Aniline | Ave | 3.008 | 2.825 | | 9.39 | 10.0 | -6.1 | 30.0 |
| Bis(2-chloroethyl)ether | Ave | 2.044 | 1.993 | 0.7000 | 9.75 | 10.0 | -2.5 | 30.0 |
| 2-Chlorophenol | Ave | 1.380 | 1.327 | 0.8000 | 9.62 | 10.0 | -3.8 | 30.0 |
| n-Decane | Ave | 1.851 | 1.807 | | 9.76 | 10.0 | -2.4 | 30.0 |
| 1,3-Dichlorobenzene | Ave | 1.495 | 1.445 | | 9.66 | 10.0 | -3.4 | 30.0 |
| 1,4-Dichlorobenzene | Ave | 1.533 | 1.475 | | 9.62 | 10.0 | -3.8 | 30.0 |
| Benzyl alcohol | Ave | 1.139 | 1.074 | | 9.43 | 10.0 | -5.7 | 30.0 |
| 1,2-Dichlorobenzene | Ave | 1.440 | 1.389 | | 9.65 | 10.0 | -3.5 | 30.0 |
| 2-Methylphenol | Ave | 1.637 | 1.577 | 0.7000 | 9.63 | 10.0 | -3.7 | 30.0 |
| 2,2'-oxybis[1-chloropropane] | Ave | 1.771 | 1.642 | | 9.27 | 10.0 | -7.3 | 30.0 |
| Indene | Ave | 2.847 | 2.677 | | 18.8 | 20.0 | -5.9 | 30.0 |
| 3 & 4 Methylphenol | Ave | 1.695 | 1.613 | | 9.52 | 10.0 | -4.8 | 30.0 |
| N-Nitrosodi-n-propylamine | Ave | 1.747 | 1.635 | 0.5000 | 9.36 | 10.0 | -6.4 | 30.0 |
| Acetophenone | Ave | 2.498 | 2.347 | 0.0100 | 9.39 | 10.0 | -6.1 | 30.0 |
| Hexachloroethane | Ave | 0.7494 | 0.7227 | 0.3000 | 9.64 | 10.0 | -3.6 | 30.0 |
| Nitrobenzene | Ave | 0.6554 | 0.6358 | 0.2000 | 9.70 | 10.0 | -3.0 | 30.0 |
| Isophorone | Ave | 1.137 | 1.134 | 0.4000 | 9.97 | 10.0 | -0.3 | 30.0 |
| 2,4-Dimethylphenol | Ave | 0.4883 | 0.4635 | 0.2000 | 9.49 | 10.0 | -5.1 | 30.0 |
| 2-Nitrophenol | Ave | 0.1753 | 0.1767 | 0.1000 | 10.1 | 10.0 | 0.8 | 30.0 |
| Benzoic acid | Lin1 | | 0.1698 | | 17.2 | 20.0 | -14.1 | 30.0 |
| Bis(2-chloroethoxy)methane | Ave | 0.5942 | 0.5837 | 0.3000 | 9.82 | 10.0 | -1.8 | 30.0 |
| 2,4-Dichlorophenol | Ave | 0.2867 | 0.2852 | 0.2000 | 9.95 | 10.0 | -0.5 | 30.0 |
| 1,2,4-Trichlorobenzene | Ave | 0.3108 | 0.3065 | | 9.86 | 10.0 | -1.4 | 30.0 |
| Naphthalene | Ave | 1.072 | 1.058 | 0.7000 | 9.87 | 10.0 | -1.3 | 30.0 |
| 4-Chloroaniline | Ave | 0.4745 | 0.4582 | 0.0100 | 9.66 | 10.0 | -3.4 | 30.0 |
| 2,6-Dichlorophenol | Ave | 0.2841 | 0.2813 | | 9.90 | 10.0 | -1.0 | 30.0 |
| Hexachlorobutadiene | Ave | 0.2052 | 0.1995 | 0.0100 | 9.72 | 10.0 | -2.8 | 30.0 |
| Caprolactam | Ave | 0.1258 | 0.1253 | 0.0100 | 19.9 | 20.0 | -0.4 | 30.0 |
| 4-Chloro-3-methylphenol | Ave | 0.4180 | 0.4112 | 0.2000 | 9.84 | 10.0 | -1.6 | 30.0 |
| 2-Methylnaphthalene | Ave | 0.6746 | 0.6292 | 0.4000 | 9.33 | 10.0 | -6.7 | 30.0 |
| 1-Methylnaphthalene | Ave | 0.5866 | 0.5984 | | 10.2 | 10.0 | 2.0 | 30.0 |
| Hexachlorocyclopentadiene | Ave | 0.3378 | 0.3266 | 0.0500 | 9.67 | 10.0 | -3.3 | 30.0 |
| 1,2,4,5-Tetrachlorobenzene | Ave | 0.5524 | 0.5441 | 0.0100 | 9.85 | 10.0 | -1.5 | 30.0 |
| 2,4,6-Trichlorophenol | Ave | 0.3696 | 0.3678 | 0.2000 | 9.95 | 10.0 | -0.5 | 30.0 |
| 2,4,5-Trichlorophenol | Ave | 0.3856 | 0.3906 | 0.2000 | 10.1 | 10.0 | 1.3 | 30.0 |
| 1,1'-Biphenyl | Ave | 1.390 | 1.332 | 0.0100 | 9.58 | 10.0 | -4.2 | 30.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-173591/11 Calibration Date: 03/25/2015 14:02

Instrument ID: A4HP9 Calib Start Date: 03/25/2015 09:23

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 03/25/2015 12:45

Lab File ID: 50325011.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 2-Chloronaphthalene | Ave | 1.088 | 1.048 | 0.8000 | 9.63 | 10.0 | -3.7 | 30.0 |
| 2-Nitroaniline | Ave | 0.5784 | 0.5758 | 0.0100 | 9.96 | 10.0 | -0.4 | 30.0 |
| Dimethyl phthalate | Ave | 1.241 | 1.215 | 0.0100 | 9.79 | 10.0 | -2.1 | 30.0 |
| 1,3-Dinitrobenzene | Ave | 0.1949 | 0.1975 | | 10.1 | 10.0 | 1.4 | 30.0 |
| 2,6-Dinitrotoluene | Ave | 0.2788 | 0.2822 | | 10.1 | 10.0 | 1.2 | 30.0 |
| Acenaphthylene | Ave | 1.736 | 1.653 | 0.9000 | 9.52 | 10.0 | -4.8 | 30.0 |
| 3-Nitroaniline | Ave | 0.2991 | 0.2809 | 0.0100 | 9.39 | 10.0 | -6.1 | 30.0 |
| 2,4-Dinitrophenol | Lin1 | | 0.1299 | 0.0100 | 16.1 | 20.0 | -19.5 | 30.0 |
| Acenaphthene | Ave | 1.121 | 1.057 | 0.9000 | 9.43 | 10.0 | -5.7 | 30.0 |
| 4-Nitrophenol | Ave | 0.2519 | 0.2538 | | 20.1 | 20.0 | 0.7 | 30.0 |
| 2,4-Dinitrotoluene | Ave | 0.3759 | 0.3587 | 0.2000 | 9.54 | 10.0 | -4.6 | 30.0 |
| Dibenzofuran | Ave | 1.529 | 1.449 | 0.8000 | 9.48 | 10.0 | -5.2 | 30.0 |
| 2,3,4,6-Tetrachlorophenol | Ave | 0.2982 | 0.3102 | 0.0100 | 10.4 | 10.0 | 4.0 | 30.0 |
| Diethyl phthalate | Ave | 1.242 | 1.101 | 0.0100 | 8.87 | 10.0 | -11.3 | 30.0 |
| Hexadecane | Ave | 0.9760 | 0.9552 | | 9.79 | 10.0 | -2.1 | 30.0 |
| 4-Chlorophenyl phenyl ether | Ave | 0.6303 | 0.6048 | 0.4000 | 9.59 | 10.0 | -4.1 | 30.0 |
| 4-Nitroaniline | Ave | 0.2936 | 0.2878 | 0.0100 | 9.80 | 10.0 | -2.0 | 30.0 |
| Fluorene | Ave | 1.285 | 1.233 | 0.9000 | 9.59 | 10.0 | -4.1 | 30.0 |
| 4,6-Dinitro-2-methylphenol | Lin1 | | 0.1233 | 0.0100 | 19.0 | 20.0 | -5.1 | 30.0 |
| N-Nitrosodiphenylamine | Ave | 0.5489 | 0.5659 | 0.0100 | 20.6 | 20.0 | 3.1 | 30.0 |
| 1,2-Diphenylhydrazine(as Azobenzene) | Ave | 1.219 | 1.384 | | 11.4 | 10.0 | 13.5 | 30.0 |
| Azobenzene | Ave | 1.218 | 1.384 | | 11.4 | 10.0 | 13.6 | 30.0 |
| 4-Bromophenyl phenyl ether | Ave | 0.1961 | 0.2162 | 0.1000 | 11.0 | 10.0 | 10.2 | 30.0 |
| Atrazine | Ave | 0.2026 | 0.2105 | 0.0100 | 20.8 | 20.0 | 3.9 | 30.0 |
| Hexachlorobenzene | Ave | 0.1847 | 0.1936 | 0.1000 | 10.5 | 10.0 | 4.8 | 30.0 |
| n-Octadecane | Ave | 0.5436 | 0.5550 | | 10.2 | 10.0 | 2.1 | 30.0 |
| Pentachlorophenol | Ave | 0.1176 | 0.1329 | 0.0500 | 22.6 | 20.0 | 13.0 | 30.0 |
| Phenanthrene | Ave | 1.053 | 1.009 | 0.7000 | 9.59 | 10.0 | -4.1 | 30.0 |
| Anthracene | Ave | 1.071 | 1.043 | 0.7000 | 9.74 | 10.0 | -2.6 | 30.0 |
| Carbazole | Ave | 0.9386 | 0.9925 | 0.0100 | 10.6 | 10.0 | 5.7 | 30.0 |
| Di-n-butyl phthalate | Ave | 1.133 | 1.322 | 0.0100 | 11.7 | 10.0 | 16.7 | 30.0 |
| Fluoranthene | Ave | 1.169 | 1.280 | 0.6000 | 10.9 | 10.0 | 9.5 | 30.0 |
| Benzidine | Lin1 | | 0.5487 | | 19.6 | 20.0 | -1.8 | 30.0 |
| Pyrene | Ave | 1.057 | 1.070 | 0.6000 | 10.1 | 10.0 | 1.2 | 30.0 |
| Butyl benzyl phthalate | Ave | 0.4977 | 0.5158 | 0.0100 | 10.4 | 10.0 | 3.6 | 30.0 |
| Bis(2-ethylhexyl) phthalate | Ave | 0.6862 | 0.6766 | 0.0100 | 9.86 | 10.0 | -1.4 | 30.0 |
| 3,3'-Dichlorobenzidine | Ave | 0.3423 | 0.3509 | 0.0100 | 20.5 | 20.0 | 2.5 | 30.0 |
| Benzo[a]anthracene | Ave | 1.110 | 1.103 | 0.8000 | 9.94 | 10.0 | -0.6 | 30.0 |
| Chrysene | Ave | 1.020 | 1.041 | 0.7000 | 10.2 | 10.0 | 2.0 | 30.0 |
| Di-n-octyl phthalate | Ave | 1.437 | 1.442 | 0.0100 | 10.0 | 10.0 | 0.3 | 30.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-173591/11  Calibration Date: 03/25/2015 14:02

Instrument ID: A4HP9  Calib Start Date: 03/25/2015 09:23

GC Column: RXI-5SILMS  ID: 0.45(mm)  Calib End Date: 03/25/2015 12:45

Lab File ID: 50325011.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Benzo[b]fluoranthene | Ave | 1.174 | 1.144 | 0.7000 | 9.74 | 10.0 | -2.6 | 30.0 |
| Benzo[k]fluoranthene | Ave | 1.217 | 1.222 | 0.7000 | 10.0 | 10.0 | 0.4 | 30.0 |
| Benzo[a]pyrene | Ave | 1.135 | 1.095 | 0.7000 | 9.65 | 10.0 | -3.5 | 30.0 |
| Indeno[1,2,3-cd]pyrene | Ave | 1.022 | 1.023 | 0.5000 | 10.0 | 10.0 | 0.0 | 30.0 |
| Dibenz(a,h)anthracene | Ave | 0.8378 | 0.8516 | 0.4000 | 10.2 | 10.0 | 1.7 | 30.0 |
| Benzo[g,h,i]perylene | Ave | 0.8352 | 0.8350 | 0.5000 | 10.0 | 10.0 | -0.0 | 30.0 |
| 2-Fluorophenol (Surr) | Ave | 1.550 | 1.648 | | 10.6 | 10.0 | 6.3 | 30.0 |
| Phenol-d5 (Surr) | Ave | 2.209 | 2.326 | | 10.5 | 10.0 | 5.3 | 30.0 |
| Nitrobenzene-d5 (Surr) | Ave | 0.7130 | 0.7421 | | 10.4 | 10.0 | 4.1 | 30.0 |
| 2-Fluorobiphenyl (Surr) | Ave | 1.322 | 1.381 | | 10.4 | 10.0 | 4.4 | 30.0 |
| 2,4,6-Tribromophenol (Surr) | Ave | 0.1380 | 0.1467 | | 10.6 | 10.0 | 6.3 | 30.0 |
| Terphenyl-d14 (Surr) | Ave | 0.8012 | 0.8337 | | 10.4 | 10.0 | 4.1 | 30.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175891/2 Calibration Date: 04/10/2015 08:11

Instrument ID: A4HP9 Calib Start Date: 03/25/2015 09:23

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 03/25/2015 12:45

Lab File ID: 50410002.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 1,4-Dioxane | Ave | 0.7791 | 0.8179 | | 10.5 | 10.0 | 5.0 | 20.0 |
| N-Nitrosodimethylamine | Ave | 1.376 | 1.359 | | 9.88 | 10.0 | -1.2 | 20.0 |
| Pyridine | Ave | 2.192 | 2.267 | | 10.3 | 10.0 | 3.4 | 20.0 |
| Benzaldehyde | Ave | 1.627 | 1.421 | 0.0100 | 17.5 | 20.0 | -12.7 | 20.0 |
| Phenol | Ave | 2.454 | 2.399 | 0.8000 | 9.78 | 10.0 | -2.2 | 20.0 |
| Aniline | Ave | 3.008 | 2.947 | | 9.80 | 10.0 | -2.0 | 20.0 |
| Bis(2-chloroethyl)ether | Ave | 2.044 | 2.104 | 0.7000 | 10.3 | 10.0 | 2.9 | 20.0 |
| 2-Chlorophenol | Ave | 1.380 | 1.405 | 0.8000 | 10.2 | 10.0 | 1.8 | 20.0 |
| n-Decane | Ave | 1.851 | 1.765 | | 9.54 | 10.0 | -4.6 | 20.0 |
| 1,3-Dichlorobenzene | Ave | 1.495 | 1.523 | | 10.2 | 10.0 | 1.9 | 20.0 |
| 1,4-Dichlorobenzene | Ave | 1.533 | 1.525 | | 9.95 | 10.0 | -0.5 | 20.0 |
| Benzyl alcohol | Ave | 1.139 | 1.070 | | 9.39 | 10.0 | -6.1 | 20.0 |
| 1,2-Dichlorobenzene | Ave | 1.440 | 1.446 | | 10.0 | 10.0 | 0.4 | 20.0 |
| 2-Methylphenol | Ave | 1.637 | 1.587 | 0.7000 | 9.69 | 10.0 | -3.1 | 20.0 |
| 2,2'-oxybis[1-chloropropane] | Ave | 1.771 | 1.481 | | 8.36 | 10.0 | -16.4 | 20.0 |
| Indene | Ave | 2.847 | 2.792 | | 19.6 | 20.0 | -1.9 | 20.0 |
| 3 & 4 Methylphenol | Ave | 1.695 | 1.636 | | 9.65 | 10.0 | -3.5 | 20.0 |
| N-Nitrosodi-n-propylamine | Ave | 1.747 | 1.723 | 0.5000 | 9.86 | 10.0 | -1.4 | 20.0 |
| Acetophenone | Ave | 2.498 | 2.437 | 0.0100 | 9.76 | 10.0 | -2.4 | 20.0 |
| Hexachloroethane | Ave | 0.7494 | 0.7630 | 0.3000 | 10.2 | 10.0 | 1.8 | 20.0 |
| Nitrobenzene | Ave | 0.6554 | 0.6609 | 0.2000 | 10.1 | 10.0 | 0.8 | 20.0 |
| Isophorone | Ave | 1.137 | 1.120 | 0.4000 | 9.85 | 10.0 | -1.5 | 20.0 |
| 2-Nitrophenol | Ave | 0.1753 | 0.1790 | 0.1000 | 10.2 | 10.0 | 2.1 | 20.0 |
| 2,4-Dimethylphenol | Ave | 0.4883 | 0.5014 | 0.2000 | 10.3 | 10.0 | 2.7 | 20.0 |
| Benzoic acid | Lin1 | | 0.1837 | | 18.5 | 20.0 | -7.7 | 20.0 |
| Bis(2-chloroethoxy)methane | Ave | 0.5942 | 0.5710 | 0.3000 | 9.61 | 10.0 | -3.9 | 20.0 |
| 2,4-Dichlorophenol | Ave | 0.2867 | 0.2937 | 0.2000 | 10.2 | 10.0 | 2.4 | 20.0 |
| 1,2,4-Trichlorobenzene | Ave | 0.3108 | 0.3189 | | 10.3 | 10.0 | 2.6 | 20.0 |
| Naphthalene | Ave | 1.072 | 1.034 | 0.7000 | 9.64 | 10.0 | -3.6 | 20.0 |
| 4-Chloroaniline | Ave | 0.4745 | 0.4686 | 0.0100 | 9.87 | 10.0 | -1.3 | 20.0 |
| 2,6-Dichlorophenol | Ave | 0.2841 | 0.2882 | | 10.1 | 10.0 | 1.4 | 20.0 |
| Hexachlorobutadiene | Ave | 0.2052 | 0.2150 | 0.0100 | 10.5 | 10.0 | 4.8 | 20.0 |
| Caprolactam | Ave | 0.1258 | 0.1287 | 0.0100 | 20.5 | 20.0 | 2.3 | 20.0 |
| 4-Chloro-3-methylphenol | Ave | 0.4180 | 0.4197 | 0.2000 | 10.0 | 10.0 | 0.4 | 20.0 |
| 2-Methylnaphthalene | Ave | 0.6746 | 0.6499 | 0.4000 | 9.63 | 10.0 | -3.7 | 20.0 |
| 1-Methylnaphthalene | Ave | 0.5866 | 0.5647 | | 9.63 | 10.0 | -3.7 | 20.0 |
| Hexachlorocyclopentadiene | Ave | 0.3378 | 0.3390 | 0.0500 | 10.0 | 10.0 | 0.3 | 20.0 |
| 1,2,4,5-Tetrachlorobenzene | Ave | 0.5524 | 0.5419 | 0.0100 | 9.81 | 10.0 | -1.9 | 20.0 |
| 2,4,6-Trichlorophenol | Ave | 0.3696 | 0.3732 | 0.2000 | 10.1 | 10.0 | 1.0 | 20.0 |
| 2,4,5-Trichlorophenol | Ave | 0.3856 | 0.3797 | 0.2000 | 9.85 | 10.0 | -1.5 | 20.0 |
| 1,1'-Biphenyl | Ave | 1.390 | 1.302 | 0.0100 | 9.37 | 10.0 | -6.3 | 20.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175891/2 Calibration Date: 04/10/2015 08:11

Instrument ID: A4HP9 Calib Start Date: 03/25/2015 09:23

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 03/25/2015 12:45

Lab File ID: 50410002.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| 2-Chloronaphthalene | Ave | 1.088 | 1.049 | 0.8000 | 9.64 | 10.0 | -3.6 | 20.0 |
| 2-Nitroaniline | Ave | 0.5784 | 0.5649 | 0.0100 | 9.77 | 10.0 | -2.3 | 20.0 |
| Dimethyl phthalate | Ave | 1.241 | 1.188 | 0.0100 | 9.57 | 10.0 | -4.3 | 20.0 |
| 1,3-Dinitrobenzene | Ave | 0.1949 | 0.2069 | | 10.6 | 10.0 | 6.2 | 20.0 |
| 2,6-Dinitrotoluene | Ave | 0.2788 | 0.2797 | | 10.0 | 10.0 | 0.3 | 20.0 |
| Acenaphthylene | Ave | 1.736 | 1.649 | 0.9000 | 9.50 | 10.0 | -5.0 | 20.0 |
| 3-Nitroaniline | Ave | 0.2991 | 0.2979 | 0.0100 | 9.96 | 10.0 | -0.4 | 20.0 |
| 2,4-Dinitrophenol | Lin1 | | 0.1549 | 0.0100 | 18.9 | 20.0 | -5.7 | 20.0 |
| Acenaphthene | Ave | 1.121 | 1.039 | 0.9000 | 9.26 | 10.0 | -7.4 | 20.0 |
| 4-Nitrophenol | Ave | 0.2519 | 0.2766 | | 22.0 | 20.0 | 9.8 | 20.0 |
| 2,4-Dinitrotoluene | Ave | 0.3759 | 0.3856 | 0.2000 | 10.3 | 10.0 | 2.6 | 20.0 |
| Dibenzofuran | Ave | 1.529 | 1.424 | 0.8000 | 9.31 | 10.0 | -6.9 | 20.0 |
| 2,3,4,6-Tetrachlorophenol | Ave | 0.2982 | 0.3162 | 0.0100 | 10.6 | 10.0 | 6.0 | 20.0 |
| Diethyl phthalate | Ave | 1.242 | 1.159 | 0.0100 | 9.33 | 10.0 | -6.7 | 20.0 |
| Hexadecane | Ave | 0.9760 | 0.8376 | | 8.58 | 10.0 | -14.2 | 20.0 |
| 4-Chlorophenyl phenyl ether | Ave | 0.6303 | 0.6148 | 0.4000 | 9.75 | 10.0 | -2.5 | 20.0 |
| 4-Nitroaniline | Ave | 0.2936 | 0.3114 | 0.0100 | 10.6 | 10.0 | 6.0 | 20.0 |
| Fluorene | Ave | 1.285 | 1.177 | 0.9000 | 9.16 | 10.0 | -8.4 | 20.0 |
| 4,6-Dinitro-2-methylphenol | Lin1 | | 0.1209 | 0.0100 | 18.6 | 20.0 | -6.9 | 20.0 |
| N-Nitrosodiphenylamine | Ave | 0.5489 | 0.5099 | 0.0100 | 18.6 | 20.0 | -7.1 | 20.0 |
| 1,2-Diphenylhydrazine(as Azobenzene) | Ave | 1.219 | 1.110 | | 9.11 | 10.0 | -8.9 | 20.0 |
| Azobenzene | Ave | 1.218 | 1.110 | | 9.11 | 10.0 | -8.9 | 20.0 |
| 4-Bromophenyl phenyl ether | Ave | 0.1961 | 0.1954 | 0.1000 | 9.97 | 10.0 | -0.3 | 20.0 |
| Hexachlorobenzene | Ave | 0.1847 | 0.1750 | 0.1000 | 9.48 | 10.0 | -5.2 | 20.0 |
| Atrazine | Ave | 0.2026 | 0.2103 | 0.0100 | 20.8 | 20.0 | 3.8 | 20.0 |
| n-Octadecane | Ave | 0.5436 | 0.5075 | | 9.34 | 10.0 | -6.6 | 20.0 |
| Pentachlorophenol | Ave | 0.1176 | 0.1179 | 0.0500 | 20.0 | 20.0 | 0.2 | 20.0 |
| Phenanthrene | Ave | 1.053 | 1.017 | 0.7000 | 9.66 | 10.0 | -3.4 | 20.0 |
| Anthracene | Ave | 1.071 | 1.031 | 0.7000 | 9.63 | 10.0 | -3.7 | 20.0 |
| Carbazole | Ave | 0.9386 | 0.9263 | 0.0100 | 9.87 | 10.0 | -1.3 | 20.0 |
| Di-n-butyl phthalate | Ave | 1.133 | 1.196 | 0.0100 | 10.6 | 10.0 | 5.5 | 20.0 |
| Fluoranthene | Ave | 1.169 | 1.199 | 0.6000 | 10.3 | 10.0 | 2.6 | 20.0 |
| Benzidine | Lin1 | | 0.5370 | | 19.2 | 20.0 | -3.9 | 20.0 |
| Pyrene | Ave | 1.057 | 1.063 | 0.6000 | 10.1 | 10.0 | 0.5 | 20.0 |
| Butyl benzyl phthalate | Ave | 0.4977 | 0.4927 | 0.0100 | 9.90 | 10.0 | -1.0 | 20.0 |
| Bis(2-ethylhexyl) phthalate | Ave | 0.6862 | 0.6923 | 0.0100 | 10.1 | 10.0 | 0.9 | 20.0 |
| 3,3'-Dichlorobenzidine | Ave | 0.3423 | 0.3638 | 0.0100 | 21.3 | 20.0 | 6.3 | 20.0 |
| Benzo[a]anthracene | Ave | 1.110 | 1.089 | 0.8000 | 9.81 | 10.0 | -1.9 | 20.0 |
| Chrysene | Ave | 1.020 | 1.021 | 0.7000 | 10.0 | 10.0 | 0.1 | 20.0 |
| Di-n-octyl phthalate | Ave | 1.437 | 1.396 | 0.0100 | 9.71 | 10.0 | -2.9 | 20.0 |

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175891/2 Calibration Date: 04/10/2015 08:11

Instrument ID: A4HP9 Calib Start Date: 03/25/2015 09:23

GC Column: RXI-5SILMS ID: 0.45(mm) Calib End Date: 03/25/2015 12:45

Lab File ID: 50410002.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE RRF | RRF | MIN RRF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Benzo[b]fluoranthene | Ave | 1.174 | 1.160 | 0.7000 | 9.88 | 10.0 | -1.2 | 20.0 |
| Benzo[k]fluoranthene | Ave | 1.217 | 1.211 | 0.7000 | 9.95 | 10.0 | -0.5 | 20.0 |
| Benzo[a]pyrene | Ave | 1.135 | 1.138 | 0.7000 | 10.0 | 10.0 | 0.3 | 20.0 |
| Indeno[1,2,3-cd]pyrene | Ave | 1.022 | 1.149 | 0.5000 | 11.2 | 10.0 | 12.4 | 20.0 |
| Dibenz(a,h)anthracene | Ave | 0.8378 | 0.9493 | 0.4000 | 11.3 | 10.0 | 13.3 | 20.0 |
| Benzo[g,h,i]perylene | Ave | 0.8352 | 0.9698 | 0.5000 | 11.6 | 10.0 | 16.1 | 20.0 |
| 2-Fluorophenol (Surr) | Ave | 1.550 | 1.559 | | 10.1 | 10.0 | 0.6 | 20.0 |
| Phenol-d5 (Surr) | Ave | 2.209 | 2.203 | | 9.97 | 10.0 | -0.3 | 20.0 |
| Nitrobenzene-d5 (Surr) | Ave | 0.7130 | 0.6987 | | 9.80 | 10.0 | -2.0 | 20.0 |
| 2-Fluorobiphenyl (Surr) | Ave | 1.322 | 1.254 | | 9.48 | 10.0 | -5.2 | 20.0 |
| 2,4,6-Tribromophenol (Surr) | Ave | 0.1380 | 0.1486 | | 10.8 | 10.0 | 7.7 | 20.0 |
| Terphenyl-d14 (Surr) | Ave | 0.8012 | 0.7662 | | 9.56 | 10.0 | -4.4 | 20.0 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-175545/18-A

Matrix: Solid | Lab File ID: 50410005.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 04/08/2015 09:16

Sample wt/vol: 30(g) | Date Analyzed: 04/10/2015 09:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175891 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 92-52-4 | 1,1'-Biphenyl | 3.5 | U | 50 | 3.5 |
| 123-91-1 | 1,4-Dioxane | 22 | U | 100 | 22 |
| 88-06-2 | 2,4,6-Trichlorophenol | 8.9 | U | 150 | 8.9 |
| 95-95-4 | 2,4,5-Trichlorophenol | 25 | U | 150 | 25 |
| 120-83-2 | 2,4-Dichlorophenol | 20 | U | 150 | 20 |
| 105-67-9 | 2,4-Dimethylphenol | 20 | U | 150 | 20 |
| 51-28-5 | 2,4-Dinitrophenol | 21 | U | 330 | 21 |
| 121-14-2 | 2,4-Dinitrotoluene | 17 | U | 200 | 17 |
| 91-58-7 | 2-Chloronaphthalene | 0.45 | U | 50 | 0.45 |
| 95-57-8 | 2-Chlorophenol | 8.2 | U | 50 | 8.2 |
| 91-57-6 | 2-Methylnaphthalene | 0.50 | U | 6.7 | 0.50 |
| 95-48-7 | 2-Methylphenol | 11 | U | 200 | 11 |
| 88-74-4 | 2-Nitroaniline | 9.1 | U | 200 | 9.1 |
| 88-75-5 | 2-Nitrophenol | 8.3 | U | 50 | 8.3 |
| 15831-10-4 | 3 & 4 Methylphenol | 20 | U | 400 | 20 |
| 91-94-1 | 3,3'-Dichlorobenzidine | 18 | U | 100 | 18 |
| 99-09-2 | 3-Nitroaniline | 16 | U | 200 | 16 |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 9.2 | U | 150 | 9.2 |
| 101-55-3 | 4-Bromophenyl phenyl ether | 13 | U | 50 | 13 |
| 59-50-7 | 4-Chloro-3-methylphenol | 21 | U | 150 | 21 |
| 106-47-8 | 4-Chloroaniline | 17 | U | 150 | 17 |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | 13 | U | 50 | 13 |
| 100-01-6 | 4-Nitroaniline | 26 | U | 200 | 26 |
| 83-32-9 | Acenaphthene | 0.76 | U | 6.7 | 0.76 |
| 208-96-8 | Acenaphthylene | 0.35 | U | 6.7 | 0.35 |
| 98-86-2 | Acetophenone | 9.2 | U | 100 | 9.2 |
| 120-12-7 | Anthracene | 0.78 | U | 6.7 | 0.78 |
| 1912-24-9 | Atrazine | 9.1 | U | 200 | 9.1 |
| 100-52-7 | Benzaldehyde | 12 | U | 100 | 12 |
| 56-55-3 | Benzo[a]anthracene | 0.63 | U | 6.7 | 0.63 |
| 50-32-8 | Benzo[a]pyrene | 0.64 | U | 6.7 | 0.64 |
| 205-99-2 | Benzo[b]fluoranthene | 0.59 | U | 6.7 | 0.59 |
| 191-24-2 | Benzo[g,h,i]perylene | 0.35 | U | 6.7 | 0.35 |
| 207-08-9 | Benzo[k]fluoranthene | 0.68 | U | 6.7 | 0.68 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-175545/18-A

Matrix: Solid | Lab File ID: 50410005.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 04/08/2015 09:16

Sample wt/vol: 30(g) | Date Analyzed: 04/10/2015 09:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175891 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 111-91-1 | Bis(2-chloroethoxy)methane | 22 | U | 100 | 22 |
| 111-44-4 | Bis(2-chloroethyl)ether | 2.0 | U | 100 | 2.0 |
| 117-81-7 | Bis(2-ethylhexyl) phthalate | 91.6 | | 70 | 19 |
| 85-68-7 | Butyl benzyl phthalate | 10 | U | 70 | 10 |
| 105-60-2 | Caprolactam | 37 | U | 330 | 37 |
| 86-74-8 | Carbazole | 27 | U | 50 | 27 |
| 218-01-9 | Chrysene | 1.1 | U | 6.7 | 1.1 |
| 84-74-2 | Di-n-butyl phthalate | 15 | U | 70 | 15 |
| 117-84-0 | Di-n-octyl phthalate | 7.9 | U | 70 | 7.9 |
| 53-70-3 | Dibenz(a,h)anthracene | 0.66 | U | 6.7 | 0.66 |
| 132-64-9 | Dibenzofuran | 0.66 | U | 50 | 0.66 |
| 84-66-2 | Diethyl phthalate | 16 | U | 70 | 16 |
| 131-11-3 | Dimethyl phthalate | 17 | U | 70 | 17 |
| 206-44-0 | Fluoranthene | 0.55 | U | 6.7 | 0.55 |
| 86-73-7 | Fluorene | 0.53 | U | 6.7 | 0.53 |
| 118-74-1 | Hexachlorobenzene | 2.1 | U | 6.7 | 2.1 |
| 87-68-3 | Hexachlorobutadiene | 5.6 | U | 50 | 5.6 |
| 77-47-4 | Hexachlorocyclopentadiene | 8.1 | U | 330 | 8.1 |
| 67-72-1 | Hexachloroethane | 9.0 | U | 50 | 9.0 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 0.35 | U | 6.7 | 0.35 |
| 78-59-1 | Isophorone | 13 | U | 50 | 13 |
| 621-64-7 | N-Nitrosodi-n-propylamine | 6.3 | U | 50 | 6.3 |
| 62-75-9 | N-Nitrosodimethylamine | 16 | U | 100 | 16 |
| 86-30-6 | N-Nitrosodiphenylamine | 21 | U | 50 | 21 |
| 91-20-3 | Naphthalene | 0.82 | U | 6.7 | 0.82 |
| 98-95-3 | Nitrobenzene | 2.2 | U | 100 | 2.2 |
| 87-86-5 | Pentachlorophenol | 9.1 | U | 150 | 9.1 |
| 85-01-8 | Phenanthrene | 0.73 | U | 6.7 | 0.73 |
| 108-95-2 | Phenol | 7.3 | U | 50 | 7.3 |
| 129-00-0 | Pyrene | 0.44 | U | 6.7 | 0.44 |
| 108-60-1 | 2,2'-oxybis[1-chloropropane] | 9.5 | U | 100 | 9.5 |
| 606-20-2 | 2,6-Dinitrotoluene | 21 | U | 200 | 21 |
| 100-02-7 | 4-Nitrophenol | 17 | U | 330 | 17 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-175545/18-A

Matrix: Solid | Lab File ID: 50410005.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 04/08/2015 09:16

Sample wt/vol: 30(g) | Date Analyzed: 04/10/2015 09:27

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175891 | Units: ug/Kg

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 78 | | 36-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 81 | | 26-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 75 | | 20-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 77 | | 24-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 82 | | 24-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 42 | | 10-110 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-175545/19-A

Matrix: Solid | Lab File ID: 50410006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 04/08/2015 09:16

Sample wt/vol: 30(g) | Date Analyzed: 04/10/2015 09:52

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175891 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 92-52-4 | 1,1'-Biphenyl | 532 | | 50 | 3.5 |
| 123-91-1 | 1,4-Dioxane | 336 | | 100 | 22 |
| 88-06-2 | 2,4,6-Trichlorophenol | 491 | | 150 | 8.9 |
| 95-95-4 | 2,4,5-Trichlorophenol | 479 | | 150 | 25 |
| 120-83-2 | 2,4-Dichlorophenol | 557 | | 150 | 20 |
| 105-67-9 | 2,4-Dimethylphenol | 427 | | 150 | 20 |
| 51-28-5 | 2,4-Dinitrophenol | 577 | | 330 | 21 |
| 121-14-2 | 2,4-Dinitrotoluene | 584 | | 200 | 17 |
| 91-58-7 | 2-Chloronaphthalene | 551 | | 50 | 0.45 |
| 95-57-8 | 2-Chlorophenol | 546 | | 50 | 8.2 |
| 91-57-6 | 2-Methylnaphthalene | 539 | | 6.7 | 0.50 |
| 95-48-7 | 2-Methylphenol | 515 | | 200 | 11 |
| 88-74-4 | 2-Nitroaniline | 560 | | 200 | 9.1 |
| 88-75-5 | 2-Nitrophenol | 570 | | 50 | 8.3 |
| 15831-10-4 | 3 & 4 Methylphenol | 544 | | 400 | 20 |
| 91-94-1 | 3,3'-Dichlorobenzidine | 1040 | | 100 | 18 |
| 99-09-2 | 3-Nitroaniline | 563 | | 200 | 16 |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 811 | | 150 | 9.2 |
| 101-55-3 | 4-Bromophenyl phenyl ether | 566 | | 50 | 13 |
| 59-50-7 | 4-Chloro-3-methylphenol | 552 | | 150 | 21 |
| 106-47-8 | 4-Chloroaniline | 489 | | 150 | 17 |
| 7005-72-3 | 4-Chlorophenyl phenyl ether | 541 | | 50 | 13 |
| 100-01-6 | 4-Nitroaniline | 560 | | 200 | 26 |
| 83-32-9 | Acenaphthene | 529 | | 6.7 | 0.76 |
| 208-96-8 | Acenaphthylene | 509 | | 6.7 | 0.35 |
| 98-86-2 | Acetophenone | 545 | | 100 | 9.2 |
| 120-12-7 | Anthracene | 525 | | 6.7 | 0.78 |
| 1912-24-9 | Atrazine | 1060 | | 200 | 9.1 |
| 100-52-7 | Benzaldehyde | 1290 | | 100 | 12 |
| 56-55-3 | Benzo[a]anthracene | 527 | | 6.7 | 0.63 |
| 50-32-8 | Benzo[a]pyrene | 533 | | 6.7 | 0.64 |
| 205-99-2 | Benzo[b]fluoranthene | 521 | | 6.7 | 0.59 |
| 191-24-2 | Benzo[g,h,i]perylene | 625 | | 6.7 | 0.35 |
| 207-08-9 | Benzo[k]fluoranthene | 573 | | 6.7 | 0.68 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-175545/19-A

Matrix: Solid | Lab File ID: 50410006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 04/08/2015 09:16

Sample wt/vol: 30(g) | Date Analyzed: 04/10/2015 09:52

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175891 | Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 111-91-1 | Bis(2-chloroethoxy)methane | 557 | | 100 | 22 |
| 111-44-4 | Bis(2-chloroethyl)ether | 540 | | 100 | 2.0 |
| 117-81-7 | Bis(2-ethylhexyl) phthalate | 576 | | 70 | 19 |
| 85-68-7 | Butyl benzyl phthalate | 524 | | 70 | 10 |
| 105-60-2 | Caprolactam | 1230 | | 330 | 37 |
| 86-74-8 | Carbazole | 549 | | 50 | 27 |
| 218-01-9 | Chrysene | 568 | | 6.7 | 1.1 |
| 84-74-2 | Di-n-butyl phthalate | 584 | | 70 | 15 |
| 117-84-0 | Di-n-octyl phthalate | 524 | | 70 | 7.9 |
| 53-70-3 | Dibenz(a,h)anthracene | 593 | | 6.7 | 0.66 |
| 132-64-9 | Dibenzofuran | 540 | | 50 | 0.66 |
| 84-66-2 | Diethyl phthalate | 543 | | 70 | 16 |
| 131-11-3 | Dimethyl phthalate | 557 | | 70 | 17 |
| 206-44-0 | Fluoranthene | 561 | | 6.7 | 0.55 |
| 86-73-7 | Fluorene | 512 | | 6.7 | 0.53 |
| 118-74-1 | Hexachlorobenzene | 535 | | 6.7 | 2.1 |
| 87-68-3 | Hexachlorobutadiene | 580 | | 50 | 5.6 |
| 77-47-4 | Hexachlorocyclopentadiene | 379 | | 330 | 8.1 |
| 67-72-1 | Hexachloroethane | 533 | | 50 | 9.0 |
| 193-39-5 | Indeno[1,2,3-cd]pyrene | 602 | | 6.7 | 0.35 |
| 78-59-1 | Isophorone | 545 | | 50 | 13 |
| 621-64-7 | N-Nitrosodi-n-propylamine | 563 | | 50 | 6.3 |
| 62-75-9 | N-Nitrosodimethylamine | 536 | | 100 | 16 |
| 86-30-6 | N-Nitrosodiphenylamine | 1000 | | 50 | 21 |
| 91-20-3 | Naphthalene | 527 | | 6.7 | 0.82 |
| 98-95-3 | Nitrobenzene | 560 | | 100 | 2.2 |
| 87-86-5 | Pentachlorophenol | 755 | | 150 | 9.1 |
| 85-01-8 | Phenanthrene | 522 | | 6.7 | 0.73 |
| 108-95-2 | Phenol | 559 | | 50 | 7.3 |
| 129-00-0 | Pyrene | 549 | | 6.7 | 0.44 |
| 108-60-1 | 2,2'-oxybis[1-chloropropane] | 491 | | 100 | 9.5 |
| 606-20-2 | 2,6-Dinitrotoluene | 584 | | 200 | 21 |
| 100-02-7 | 4-Nitrophenol | 1140 | | 330 | 17 |

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 240-175545/19-A

Matrix: Solid | Lab File ID: 50410006.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3540C | Date Extracted: 04/08/2015 09:16

Sample wt/vol: 30(g) | Date Analyzed: 04/10/2015 09:52

Con. Extract Vol.: 2(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175891 | Units: ug/Kg

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 1718-51-0 | Terphenyl-d14 (Surr) | 76 | | 36-110 |
| 4165-62-2 | Phenol-d5 (Surr) | 85 | | 26-110 |
| 4165-60-0 | Nitrobenzene-d5 (Surr) | 83 | | 20-110 |
| 367-12-4 | 2-Fluorophenol (Surr) | 83 | | 24-110 |
| 321-60-8 | 2-Fluorobiphenyl (Surr) | 82 | | 24-110 |
| 118-79-6 | 2,4,6-Tribromophenol (Surr) | 72 | | 10-110 |

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A4HP9 Start Date: 03/25/2015 09:02

Analysis Batch Number: 173591 End Date: 03/25/2015 18:15

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| DFTPP 240-173591/1 | | 03/25/2015 09:02 | 1 | 50325001.D | RXI-5SILMS 0.45(mm) |
| STD5 240-173591/2 IC | | 03/25/2015 09:23 | 1 | 50325002.D | RXI-5SILMS 0.45(mm) |
| STD4 240-173591/3 IC | | 03/25/2015 09:48 | 1 | 50325003.D | RXI-5SILMS 0.45(mm) |
| STD3 240-173591/4 IC | | 03/25/2015 10:13 | 1 | 50325004.D | RXI-5SILMS 0.45(mm) |
| STD2 240-173591/5 IC | | 03/25/2015 10:38 | 1 | 50325005.D | RXI-5SILMS 0.45(mm) |
| STD1 240-173591/6 IC | | 03/25/2015 11:04 | 1 | 50325006.D | RXI-5SILMS 0.45(mm) |
| STD9 240-173591/7 IC | | 03/25/2015 11:29 | 1 | 50325007.D | RXI-5SILMS 0.45(mm) |
| STD8 240-173591/8 IC | | 03/25/2015 11:54 | 1 | 50325008.D | RXI-5SILMS 0.45(mm) |
| STD7 240-173591/9 IC | | 03/25/2015 12:20 | 1 | 50325009.D | RXI-5SILMS 0.45(mm) |
| STD6 240-173591/10 ICIS | | 03/25/2015 12:45 | 1 | 50325010.D | RXI-5SILMS 0.45(mm) |
| ICV 240-173591/11 | | 03/25/2015 14:02 | 1 | 50325011.D | RXI-5SILMS 0.45(mm) |
| STD5 240-173591/12 IC | | 03/25/2015 14:53 | 1 | | RXI-5SILMS 0.45(mm) |
| STD4 240-173591/13 IC | | 03/25/2015 15:18 | 1 | | RXI-5SILMS 0.45(mm) |
| STD3 240-173591/14 IC | | 03/25/2015 15:43 | 1 | | RXI-5SILMS 0.45(mm) |
| STD2 240-173591/15 IC | | 03/25/2015 16:08 | 1 | | RXI-5SILMS 0.45(mm) |
| STD6 240-173591/16 IC | | 03/25/2015 16:33 | 1 | | RXI-5SILMS 0.45(mm) |
| STD7 240-173591/17 IC | | 03/25/2015 16:58 | 1 | | RXI-5SILMS 0.45(mm) |
| STD8 240-173591/18 IC | | 03/25/2015 17:24 | 1 | | RXI-5SILMS 0.45(mm) |
| STD9 240-173591/19 IC | | 03/25/2015 17:50 | 1 | | RXI-5SILMS 0.45(mm) |
| ICV 240-173591/20 | | 03/25/2015 18:15 | 1 | | RXI-5SILMS 0.45(mm) |

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A4HP9 Start Date: 04/10/2015 07:50

Analysis Batch Number: 175891 End Date: 04/10/2015 16:57

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| DFTPP 240-175891/1 | | 04/10/2015 07:50 | 1 | 50410001.D | RXI-5SILMS 0.45(mm) |
| CCV 240-175891/2 CCVIS | | 04/10/2015 08:11 | 1 | 50410002.D | RXI-5SILMS 0.45(mm) |
| MB 240-175545/18-A | | 04/10/2015 09:27 | 1 | 50410005.D | RXI-5SILMS 0.45(mm) |
| LCS 240-175545/19-A | | 04/10/2015 09:52 | 1 | 50410006.D | RXI-5SILMS 0.45(mm) |
| 240-49010-1 | FILL-001 | 04/10/2015 16:57 | 1 | 50410023.D | RXI-5SILMS 0.45(mm) |

# GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Batch Number: 175545  Batch Start Date: 04/08/15 11:15  Batch Analyst: Earle, Steve

Batch Method: 3540C  Batch End Date: 04/09/15 03:15

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | EXBenzaldehyd 00019 | EXBNASPIKE 00038 | EXBNASURR W 00021 | |
|---|---|---|---|---|---|---|---|---|---|
| 240-49010-E-1 | FILL-001 | 3540C, 8270D | T | 29.69 g | 2 mL | | | 1 mL | |
| MB 240-175545/18 | | 3540C, 8270D | | 30 g | 2 mL | | | 1 mL | |
| LCS 240-175545/19 | | 3540C, 8270D | | 30 g | 2 mL | 1 mL | 1 mL | 1 mL | |

| Batch Notes | |
|---|---|
| Balance ID | b037 |
| Na2SO4 Lot Number | 1942694 |
| Prep Solvent Lot # | 1937120 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Method 8015C - GRO

## Nonhalogenated Organics using GC/FID - Modified (Gasoline Range Organics) by Method 8015C

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RTX-VRX ID: 0.45 (mm)

| Client Sample ID | Lab Sample ID | TFT1 # |
|---|---|---|
| FILL-001 | 240-49010-1 | 86 |
| | MB 240-175570/1-A | 81 |
| | LCS 240-175570/2-A | 100 |
| | 180-42592-G-10-C MS | 81 |
| | 180-42592-G-10-D MSD | 90 |

| | QC LIMITS |
|---|---|
| TFT = Trifluorotoluene (Surr) | 40-139 |

# Column to be used to flag recovery values

FORM II 8015C

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Y0040826.D

Lab ID: LCS 240-175570/2-A Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | LCS CONCENTRATION (ug/Kg) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | 800 | 769 | 96 | 74-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Y0040828.D

Lab ID: 180-42592-G-10-C MS Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | SAMPLE CONCENTRATION (ug/Kg) | MS CONCENTRATION (ug/Kg) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | 928 | 54 U | 587 | 63 | 10-136 | |

# Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Y0040829.D

Lab ID: 180-42592-G-10-D MSD Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | MSD CONCENTRATION (ug/Kg) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | 930 | 624 | 67 | 6 | 40 | 10-136 | |

# Column to be used to flag recovery and RPD values

FORM III 8015C

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Lab Sample ID: MB 240-175570/1-A

Matrix: Solid  Date Extracted: 04/08/2015 11:04

Lab File ID:(1) Y0040825.D  Lab File ID:(2)

Date Analyzed:(1) 04/09/2015 01:56  Date Analyzed:(2)

Instrument ID:(1) YPID  Instrument ID:(2)

GC Column:(1) RTX-VRX  ID: 0.45(mm)  GC Column:(2)  ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | DATE ANALYZED 1 | DATE ANALYZED 2 |
|---|---|---|---|
| | LCS 240-175570/2-A | 04/09/2015 02:31 | |
| | 180-42592-G-10-C MS | 04/09/2015 03:40 | |
| | 180-42592-G-10-D MSD | 04/09/2015 04:14 | |
| FILL-001 | 240-49010-1 | 04/09/2015 06:34 | |

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Sample No.: CCVRT 240-175575/4  Date Analyzed: 04/08/2015 13:42

Instrument ID: YPID  GC Column: RTX-VRX  ID: 0.45(mm)

Lab File ID (Standard): Y0040804.D  Heated Purge: (Y/N) N

Calibration ID: 27484

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

| | | | | TFT | | |
|---|---|---|---|---|---|---|
| | | | | RT # | | |
| CONTINUING CALIBRATION SURROGATE | | | | 9.70 | | |
| UPPER LIMIT | | | | 9.80 | | |
| LOWER LIMIT | | | | 9.60 | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | LAB FILE ID | | | |
| CCVRT 240-175575/4 | | 04/08/2015 13:42 | Y0040804.D | 9.70 | | |
| CCV 240-175575/16 | | 04/08/2015 20:42 | Y0040816.D | 9.70 | | |
| CCV 240-175575/19 | | 04/08/2015 22:27 | Y0040819.D | 9.70 | | |
| CCV 240-175575/24 | | 04/09/2015 01:22 | Y0040824.D | 9.70 | | |
| MB 240-175570/1-A | | 04/09/2015 01:56 | Y0040825.D | 9.70 | | |
| LCS 240-175570/2-A | | 04/09/2015 02:31 | Y0040826.D | 9.70 | | |
| 180-42592-G-10-C MS | | 04/09/2015 03:40 | Y0040828.D | 9.70 | | |
| 180-42592-G-10-D MSD | | 04/09/2015 04:14 | Y0040829.D | 9.70 | | |
| 240-49010-1 | FILL-001 | 04/09/2015 06:34 | Y0040833.D | 9.69 | | |
| CCV 240-175575/34 | | 04/09/2015 07:10 | Y0040834.D | 9.70 | | |

TFT = Trifluorotoluene (Surr)

TFT RT Limit = ± 0.1 minutes of surrogate RT

# Column used to flag values outside QC limits

FORM VIII 8015C

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 Lab Sample ID: 240-49010-1

Matrix: Solid Lab File ID: Y0040833.D

Analysis Method: 8015C Date Collected: 04/06/2015 15:00

Sample wt/vol: 5.01(g) Date Analyzed: 04/09/2015 06:34

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 7.4 Level: (low/med) Low

Analysis Batch No.: 175575 Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics [C6 - C10] | 50 | U | 110 | 50 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 98-08-8 | Trifluorotoluene (Surr) | 86 | | 40-139 |

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 173250

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2015 18:47 Calibration End Date: 03/23/2015 21:37 Calibration ID: 27484

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-173250/10 | Y0032310.D |
| Level 2 | STD2 240-173250/11 | Y0032311.D |
| Level 3 | STD3 240-173250/12 | Y0032312.D |
| Level 4 | STD4 240-173250/13 | Y0032313.D |
| Level 5 | STD5 240-173250/14 | Y0032314.D |
| Level 6 | STD6 240-173250/15 | Y0032315.D |

| ANALYTE | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 | | | | | RT WINDOW | AVG RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | 11.827 | 11.827 | 11.827 | 11.827 | 11.827 | 11.827 | | | | | 4.796 - 18.770 | 11.827 |
| C6-C12 | 13.373 | 13.373 | 13.373 | 13.373 | 13.373 | 13.373 | | | | | 4.796 - 21.951 | 13.373 |
| Trifluorotoluene (Surr) | 9.684 | 9.683 | 9.683 | 9.684 | 9.686 | 9.686 | | | | | 9.428 - 9.928 | 9.684 |

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 173250

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2015 18:47 Calibration End Date: 03/23/2015 21:37 Calibration ID: 27484

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-173250/10 | Y0032310.D |
| Level 2 | STD2 240-173250/11 | Y0032311.D |
| Level 3 | STD3 240-173250/12 | Y0032312.D |
| Level 4 | STD4 240-173250/13 | Y0032313.D |
| Level 5 | STD5 240-173250/14 | Y0032314.D |
| Level 6 | STD6 240-173250/15 | Y0032315.D |

| ANALYTE | CF | | | | CURVE TYPE | COEFFICIENT | | | # | MIN CF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 5 | LVL 2<br>LVL 6 | LVL 3 | LVL 4 | | B | M1 | M2 | | | | | | | | |
| Gasoline Range Organics [C6 - C10] | 203039<br>175002 | 170499<br>172061 | 173004 | 178192 | Ave | | 178632.950 | | | | 6.9 | | 20.0 | | | |
| C6-C12 | 236409<br>188809 | 184468<br>185735 | 185973 | 192735 | Ave | | 195688.116 | | | | 10.3 | | 20.0 | | | |
| Trifluorotoluene (Surr) | 259469<br>156749 | 179692<br>154231 | 159082 | 155856 | Lin | 59087.1617 | 153009.625 | | | | | | | 1.0000 | | 0.9900 |

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 173250

SDG No.:

Instrument ID: YPID GC Column: RTX-VRX ID: 0.45(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/23/2015 18:47 Calibration End Date: 03/23/2015 21:37 Calibration ID: 27484

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-173250/10 | Y0032310.D |
| Level 2 | STD2 240-173250/11 | Y0032311.D |
| Level 3 | STD3 240-173250/12 | Y0032312.D |
| Level 4 | STD4 240-173250/13 | Y0032313.D |
| Level 5 | STD5 240-173250/14 | Y0032314.D |
| Level 6 | STD6 240-173250/15 | Y0032315.D |

| ANALYTE | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (UG/L) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| Gasoline Range Organics [C6 - C10] | Ave | 20303903<br>275298222 | 34099766 | 69201482 | 142553985 | 210002721 | 100<br>1600 | 200 | 400 | 800 | 1200 |
| C6-C12 | Ave | 23640917<br>297175327 | 36893595 | 74389047 | 154188281 | 226570801 | 100<br>1600 | 200 | 400 | 800 | 1200 |
| Trifluorotoluene (Surr) | Lin | 259469<br>7711566 | 359383 | 795412 | 1558556 | 3134984 | 1.00<br>50.0 | 2.00 | 5.00 | 10.0 | 20.0 |

Curve Type Legend:

Ave = Average
Lin = Linear

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-173250/16 Calibration Date: 03/23/2015 22:10

Instrument ID: YPID Calib Start Date: 03/23/2015 18:47

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/23/2015 21:37

Lab File ID: Y0032316.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | Ave | 178633 | 152372 | | 682 | 800 | -14.7 | 20.0 |
| C6-C12 | Ave | 195688 | 166099 | | 679 | 800 | -15.1 | 20.0 |
| Trifluorotoluene (Surr) | Lin | | 160783 | | 10.1 | 10.0 | 1.2 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-173250/16 Calibration Date: 03/23/2015 22:10

Instrument ID: YPID Calib Start Date: 03/23/2015 18:47

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/23/2015 21:37

Lab File ID: Y0032316.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Gasoline Range Organics [C6 - C10] | 12.03 | 4.80 | 18.77 |
| C6-C12 | 13.62 | 4.80 | 21.95 |
| Trifluorotoluene (Surr) | 9.69 | 9.43 | 9.93 |

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCVRT 240-175575/4 Calibration Date: 04/08/2015 13:42

Instrument ID: YPID Calib Start Date: 03/23/2015 18:47

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/23/2015 21:37

Lab File ID: Y0040804.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | Ave | 178633 | 175185 | | 843 | 800 | -1.9 | 20.0 |
| C6-C12 | Ave | 195688 | 192193 | | 838 | 800 | -1.8 | 20.0 |
| Trifluorotoluene (Surr) | Lin | | 152845 | | 9.60 | 10.0 | -4.0 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCVRT 240-175575/4 Calibration Date: 04/08/2015 13:42

Instrument ID: YPID Calib Start Date: 03/23/2015 18:47

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/23/2015 21:37

Lab File ID: Y0040804.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Gasoline Range Organics [C6 - C10] | 11.80 | 4.82 | 18.77 |
| C6-C12 | 13.39 | 4.82 | 21.96 |
| Trifluorotoluene (Surr) | 9.70 | 9.45 | 9.95 |

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175575/16 Calibration Date: 04/08/2015 20:42

Instrument ID: YPID Calib Start Date: 03/23/2015 18:47

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/23/2015 21:37

Lab File ID: Y0040816.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | Ave | 178633 | 172144 | | 829 | 800 | -3.6 | 20.0 |
| C6-C12 | Ave | 195688 | 189985 | | 828 | 800 | -2.9 | 20.0 |
| Trifluorotoluene (Surr) | Lin | | 153146 | | 9.62 | 10.0 | -3.8 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175575/16 Calibration Date: 04/08/2015 20:42

Instrument ID: YPID Calib Start Date: 03/23/2015 18:47

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/23/2015 21:37

Lab File ID: Y0040816.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Gasoline Range Organics [C6 - C10] | 11.80 | 4.82 | 18.77 |
| C6-C12 | 13.39 | 4.82 | 21.96 |
| Trifluorotoluene (Surr) | 9.70 | 9.45 | 9.95 |

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175575/19 Calibration Date: 04/08/2015 22:27

Instrument ID: YPID Calib Start Date: 03/23/2015 18:47

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/23/2015 21:37

Lab File ID: Y0040819.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | Ave | 178633 | 175830 | | 846 | 800 | -1.6 | 20.0 |
| C6-C12 | Ave | 195688 | 191517 | | 835 | 800 | -2.1 | 20.0 |
| Trifluorotoluene (Surr) | Lin | | 144947 | | 9.09 | 10.0 | -9.1 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175575/19 Calibration Date: 04/08/2015 22:27

Instrument ID: YPID Calib Start Date: 03/23/2015 18:47

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/23/2015 21:37

Lab File ID: Y0040819.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Gasoline Range Organics [C6 - C10] | 11.80 | 4.82 | 18.77 |
| C6-C12 | 13.39 | 4.82 | 21.96 |
| Trifluorotoluene (Surr) | 9.70 | 9.45 | 9.95 |

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175575/24 Calibration Date: 04/09/2015 01:22

Instrument ID: YPID Calib Start Date: 03/23/2015 18:47

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/23/2015 21:37

Lab File ID: Y0040824.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | Ave | 178633 | 165050 | | 795 | 800 | -7.6 | 20.0 |
| C6-C12 | Ave | 195688 | 185942 | | 810 | 800 | -5.0 | 20.0 |
| Trifluorotoluene (Surr) | Lin | | 139018 | | 8.70 | 10.0 | -13.0 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175575/24 Calibration Date: 04/09/2015 01:22

Instrument ID: YPID Calib Start Date: 03/23/2015 18:47

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/23/2015 21:37

Lab File ID: Y0040824.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Gasoline Range Organics [C6 - C10] | 11.80 | 4.82 | 18.77 |
| C6-C12 | 13.39 | 4.82 | 21.96 |
| Trifluorotoluene (Surr) | 9.70 | 9.45 | 9.95 |

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175575/34 Calibration Date: 04/09/2015 07:10

Instrument ID: YPID Calib Start Date: 03/23/2015 18:47

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/23/2015 21:37

Lab File ID: Y0040834.D Conc. Units: ug/L Heated Purge: (Y/N) N

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Gasoline Range Organics [C6 - C10] | Ave | 178633 | 168193 | | 810 | 800 | -5.8 | 20.0 |
| C6-C12 | Ave | 195688 | 189132 | | 824 | 800 | -3.4 | 20.0 |
| Trifluorotoluene (Surr) | Lin | | 146192 | | 9.17 | 10.0 | -8.3 | 20.0 |

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175575/34 Calibration Date: 04/09/2015 07:10

Instrument ID: YPID Calib Start Date: 03/23/2015 18:47

GC Column: RTX-VRX ID: 0.45(mm) Calib End Date: 03/23/2015 21:37

Lab File ID: Y0040834.D Heated Purge: (Y/N) N

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Gasoline Range Organics [C6 - C10] | 11.80 | 4.82 | 18.77 |
| C6-C12 | 13.39 | 4.82 | 21.96 |
| Trifluorotoluene (Surr) | 9.70 | 9.45 | 9.95 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-175570/1-A

Matrix: Solid Lab File ID: Y0040825.D

Analysis Method: 8015C Date Collected:

Sample wt/vol: 5(g) Date Analyzed: 04/09/2015 01:56

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 175575 Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics [C6 - C10] | 46 | U | 100 | 46 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 98-08-8 | Trifluorotoluene (Surr) | 81 | | 40-139 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 240-175570/2-A

Matrix: Solid  Lab File ID: Y0040826.D

Analysis Method: 8015C  Date Collected:

Sample wt/vol: 5(g)  Date Analyzed: 04/09/2015 02:31

Soil Aliquot Vol:  Dilution Factor: 1

Soil Extract Vol.:  GC Column: RTX-VRX  ID: 0.45(mm)

% Moisture:  Level: (low/med) Low

Analysis Batch No.: 175575  Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics [C6 - C10] | 769 | | 100 | 46 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 98-08-8 | Trifluorotoluene (Surr) | 100 | | 40-139 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: Lab Sample ID: 180-42592-G-10-C MS

Matrix: Solid Lab File ID: Y0040828.D

Analysis Method: 8015C Date Collected: 03/31/2015 10:25

Sample wt/vol: 5.05(g) Date Analyzed: 04/09/2015 03:40

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 14.6 Level: (low/med) Low

Analysis Batch No.: 175575 Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics [C6 - C10] | 587 | | 120 | 53 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 98-08-8 | Trifluorotoluene (Surr) | 81 | | 40-139 |

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: Lab Sample ID: 180-42592-G-10-D MSD

Matrix: Solid Lab File ID: Y0040829.D

Analysis Method: 8015C Date Collected: 03/31/2015 10:25

Sample wt/vol: 5.04(g) Date Analyzed: 04/09/2015 04:14

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: RTX-VRX ID: 0.45(mm)

% Moisture: 14.6 Level: (low/med) Low

Analysis Batch No.: 175575 Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 8006-61-9 | Gasoline Range Organics [C6 - C10] | 624 | | 120 | 53 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 98-08-8 | Trifluorotoluene (Surr) | 90 | | 40-139 |

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: YPID Start Date: 03/23/2015 13:44

Analysis Batch Number: 173250 End Date: 03/23/2015 22:10

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| STD1 240-173250/1 IC | | 03/23/2015 13:44 | 1 | | RTX-VRX 0.45(mm) |
| STD2 240-173250/2 IC | | 03/23/2015 14:18 | 1 | | RTX-VRX 0.45(mm) |
| STD3 240-173250/3 IC | | 03/23/2015 14:52 | 1 | | RTX-VRX 0.45(mm) |
| STD4 240-173250/4 ICRT | | 03/23/2015 15:25 | 1 | | RTX-VRX 0.45(mm) |
| STD5 240-173250/5 IC | | 03/23/2015 15:58 | 1 | | RTX-VRX 0.45(mm) |
| STD6 240-173250/6 IC | | 03/23/2015 16:32 | 1 | | RTX-VRX 0.45(mm) |
| STD1 240-173250/10 IC | | 03/23/2015 18:47 | 1 | Y0032310.D | RTX-VRX 0.45(mm) |
| STD2 240-173250/11 IC | | 03/23/2015 19:21 | 1 | Y0032311.D | RTX-VRX 0.45(mm) |
| STD3 240-173250/12 IC | | 03/23/2015 19:54 | 1 | Y0032312.D | RTX-VRX 0.45(mm) |
| STD4 240-173250/13 IC | | 03/23/2015 20:28 | 1 | Y0032313.D | RTX-VRX 0.45(mm) |
| STD5 240-173250/14 IC | | 03/23/2015 21:01 | 1 | Y0032314.D | RTX-VRX 0.45(mm) |
| STD6 240-173250/15 IC | | 03/23/2015 21:37 | 1 | Y0032315.D | RTX-VRX 0.45(mm) |
| ICV 240-173250/16 | | 03/23/2015 22:10 | 1 | Y0032316.D | RTX-VRX 0.45(mm) |

GC VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: YPID Start Date: 04/08/2015 13:42

Analysis Batch Number: 175575 End Date: 04/09/2015 07:10

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| CCVRT 240-175575/4 | | 04/08/2015 13:42 | 1 | Y0040804.D | RTX-VRX 0.45(mm) |
| ZZZZZ | | 04/08/2015 14:18 | 1 | | RTX-VRX 0.45(mm) |
| ZZZZZ | | 04/08/2015 14:52 | 1 | | RTX-VRX 0.45(mm) |
| ZZZZZ | | 04/08/2015 16:39 | 1 | | RTX-VRX 0.45(mm) |
| CCV 240-175575/16 | | 04/08/2015 20:42 | 1 | Y0040816.D | RTX-VRX 0.45(mm) |
| CCV 240-175575/19 | | 04/08/2015 22:27 | 1 | Y0040819.D | RTX-VRX 0.45(mm) |
| CCV 240-175575/24 | | 04/09/2015 01:22 | 1 | Y0040824.D | RTX-VRX 0.45(mm) |
| MB 240-175570/1-A | | 04/09/2015 01:56 | 1 | Y0040825.D | RTX-VRX 0.45(mm) |
| LCS 240-175570/2-A | | 04/09/2015 02:31 | 1 | Y0040826.D | RTX-VRX 0.45(mm) |
| ZZZZZ | | 04/09/2015 03:05 | 1 | | RTX-VRX 0.45(mm) |
| 180-42592-G-10-C MS | | 04/09/2015 03:40 | 1 | Y0040828.D | RTX-VRX 0.45(mm) |
| 180-42592-G-10-D MSD | | 04/09/2015 04:14 | 1 | Y0040829.D | RTX-VRX 0.45(mm) |
| 240-49010-1 | FILL-001 | 04/09/2015 06:34 | 1 | Y0040833.D | RTX-VRX 0.45(mm) |
| CCV 240-175575/34 | | 04/09/2015 07:10 | 1 | Y0040834.D | RTX-VRX 0.45(mm) |

# GC VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Batch Number: 175570  Batch Start Date: 04/08/15 11:04  Batch Analyst: Reed, Rachel T

Batch Method: 5030A  Batch End Date:

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 240-175570/1 | | 5030A, 8015C | | 5 g | 5 mL | | | | |
| LCS 240-175570/2 | | 5030A, 8015C | | 5 g | 5 mL | | | | |
| 180-42592-G-10 MS | | 5030A, 8015C | T | 5.05 g | 5 mL | | | | |
| 180-42592-G-10 MSD | | 5030A, 8015C | T | 5.04 g | 5 mL | | | | |
| 240-49010-C-1 | FILL-001 | 5030A, 8015C | T | 5.01 g | 5 mL | | | | |

| Batch Notes | |
|---|---|
| Balance ID | B045 |
| Blank Soil Lot Number | 1757979 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Method 8015C - DRO

## Nonhalogenated Organics using GC/FID - Modified (Diesel Range Organics) by Method 8015C

FORM II
DIESEL RANGE ORGANICS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): ID:

| Client Sample ID | Lab Sample ID | OTPH1 # |
|---|---|---|
| FILL-001 | 240-49010-1 | 100 |
| | MB 240-175550/7-A | 92 |
| | LCS 240-175550/8-A | 87 |
| FILL-001 MS | 240-49010-1 MS | 93 |
| FILL-001 MSD | 240-49010-1 MSD | 87 |

| | QC LIMITS |
|---|---|
| OTPH = o-Terphenyl (Surr) | 40-160 |

# Column to be used to flag recovery values

FORM II 8015C

FORM III
DIESEL RANGE ORGANICS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5F40917.D

Lab ID: LCS 240-175550/8-A Client ID:

| COMPOUND | SPIKE ADDED (mg/Kg) | LCS CONCENTRATION (mg/Kg) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Diesel | 83.3 | 70.4 | 85 | 52-120 | |

# Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5F40921.D

Lab ID: 240-49010-1 MS Client ID: FILL-001 MS

| COMPOUND | SPIKE ADDED (mg/Kg) | SAMPLE CONCENTRATION (mg/Kg) | MS CONCENTRATION (mg/Kg) | MS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|---|
| Diesel | 88.9 | 9.1 J | 74.4 | 73 | 10-124 | |

# Column to be used to flag recovery and RPD values

FORM III 8015C

FORM III
DIESEL RANGE ORGANICS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P5F40922.D

Lab ID: 240-49010-1 MSD Client ID: FILL-001 MSD

| COMPOUND | SPIKE ADDED (mg/Kg) | MSD CONCENTRATION (mg/Kg) | MSD % REC | % RPD | QC LIMITS RPD | QC LIMITS REC | # |
|---|---|---|---|---|---|---|---|
| Diesel | 89.1 | 68.3 | 66 | 9 | 40 | 10-124 | |

# Column to be used to flag recovery and RPD values

FORM III 8015C

FORM IV
DIESEL RANGE ORGANICS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: MB 240-175550/7-A

Matrix: Solid Date Extracted: 04/08/2015 09:35

Lab File ID:(1) P5F40916.D Lab File ID:(2)

Date Analyzed:(1) 04/09/2015 22:23 Date Analyzed:(2)

Instrument ID:(1) A2HP5F Instrument ID:(2)

GC Column:(1) ID: GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | DATE ANALYZED 1 | DATE ANALYZED 2 |
|---|---|---|---|
| | LCS 240-175550/8-A | 04/09/2015 22:53 | |
| FILL-001 | 240-49010-1 | 04/10/2015 00:24 | |
| FILL-001 MS | 240-49010-1 MS | 04/10/2015 00:55 | |
| FILL-001 MSD | 240-49010-1 MSD | 04/10/2015 01:25 | |

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Sample No.: STD3 240-172821/9 Date Analyzed: 03/19/2015 16:13

Instrument ID: A2HP5F GC Column: ID: ()

Lab File ID (Standard): P5F31909.D Heated Purge: (Y/N) N

Calibration ID: 27446

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

| | | | | OTPH | | |
|---|---|---|---|---|---|---|
| | | | | RT # | | |
| INITIAL CALIBRATION SURROGATE | | | | 9.63 | | |
| UPPER LIMIT | | | | 9.73 | | |
| LOWER LIMIT | | | | 9.53 | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | LAB FILE ID | | | |
| STD3 240-172821/9 ICRT | | 03/19/2015 16:13 | P5F31909.D | 9.63 | | |

# Column used to flag values outside QC limits

FORM VIII
DIESEL RANGE ORGANICS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Sample No.: CCV 240-175823/7 Date Analyzed: 04/09/2015 17:50

Instrument ID: A2HP5F GC Column: ID: ()

Lab File ID (Standard): P5F40907.D Heated Purge: (Y/N) N

Calibration ID: 27446

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

| | | | | OTPH | | |
|---|---|---|---|---|---|---|
| | | | | RT # | | |
| CONTINUING CALIBRATION SURROGATE | | | | 9.63 | | |
| UPPER LIMIT | | | | 9.73 | | |
| LOWER LIMIT | | | | 9.53 | | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | LAB FILE ID | | | |
| CCV 240-175823/7 CCVRT | | 04/09/2015 17:50 | P5F40907.D | 9.63 | | |
| CCV 240-175823/15 | | 04/09/2015 21:53 | P5F40915.D | 9.63 | | |
| MB 240-175550/7-A | | 04/09/2015 22:23 | P5F40916.D | 9.63 | | |
| LCS 240-175550/8-A | | 04/09/2015 22:53 | P5F40917.D | 9.63 | | |
| 240-49010-1 | FILL-001 | 04/10/2015 00:24 | P5F40920.D | 9.63 | | |
| 240-49010-1 MS | FILL-001 MS | 04/10/2015 00:55 | P5F40921.D | 9.63 | | |
| 240-49010-1 MSD | FILL-001 MSD | 04/10/2015 01:25 | P5F40922.D | 9.63 | | |
| CCV 240-175823/24 | | 04/10/2015 02:25 | P5F40924.D | 9.63 | | |

OTPH = o-Terphenyl

OTPH RT Limit = ± 0.1 minutes of surrogate RT

# Column used to flag values outside QC limits

FORM VIII 8015C

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 | Lab Sample ID: 240-49010-1

Matrix: Solid | Lab File ID: P5F40920.D

Analysis Method: 8015C | Date Collected: 04/06/2015 15:00

Extraction Method: 3540C | Date Extracted: 04/08/2015 09:35

Sample wt/vol: 30.15(g) | Date Analyzed: 04/10/2015 00:24

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: | ID:

% Moisture: 7.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175823 | Units: mg/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| STL00141 | Total Petroleum Hydrocarbons (C10-C32) | 18 | | 18 | 4.4 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl (Surr) | 100 | | 40-160 |

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 172821

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 03/19/2015 15:12 Calibration End Date: 03/19/2015 17:14 Calibration ID: 27446

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-172821/7 | P5F31907.D |
| Level 2 | STD2 240-172821/8 | P5F31908.D |
| Level 3 | STD3 240-172821/9 | P5F31909.D |
| Level 4 | STD4 240-172821/10 | P5F31910.D |
| Level 5 | STD5 240-172821/11 | P5F31911.D |

| ANALYTE | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | | | | | | RT WINDOW | AVG RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10 - C28] | 9.083 | 9.083 | 9.083 | 9.083 | 9.083 | | | | | | 4.821 - 13.346 | 9.083 |
| o-Terphenyl (Surr) | 9.628 | 9.627 | 9.629 | 9.629 | 9.632 | | | | | | 9.528 - 9.728 | 9.629 |

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 172821

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 03/19/2015 15:12 Calibration End Date: 03/19/2015 17:14 Calibration ID: 27446

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-172821/7 | P5F31907.D |
| Level 2 | STD2 240-172821/8 | P5F31908.D |
| Level 3 | STD3 240-172821/9 | P5F31909.D |
| Level 4 | STD4 240-172821/10 | P5F31910.D |
| Level 5 | STD5 240-172821/11 | P5F31911.D |

| ANALYTE | CF | | | | CURVE TYPE | COEFFICIENT | | | # | MIN CF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1 LVL 5 | LVL 2 | LVL 3 | LVL 4 | | B | M1 | M2 | | | | | | | | |
| Diesel Range Organics [C10 - C28] | 200489 180936 | 168876 | 178835 | 174683 | Ave | | 180763.985 | | | | 6.6 | | 20.0 | | | |
| o-Terphenyl (Surr) | 209643 203361 | 196532 | 195628 | 193881 | Ave | | 199808.935 | | | | 3.3 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
DIESEL RANGE ORGANICS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 172821

SDG No.:

Instrument ID: A2HP5F GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 03/19/2015 15:12 Calibration End Date: 03/19/2015 17:14 Calibration ID: 27446

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD1 240-172821/7 | P5F31907.D |
| Level 2 | STD2 240-172821/8 | P5F31908.D |
| Level 3 | STD3 240-172821/9 | P5F31909.D |
| Level 4 | STD4 240-172821/10 | P5F31910.D |
| Level 5 | STD5 240-172821/11 | P5F31911.D |

| ANALYTE | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| Diesel Range Organics [C10 - C28] | Ave | 20053866 | 33783672 | 89439711 | 174726263 | 361962738 | 100 | 200 | 500 | 1000 | 2000 |
| o-Terphenyl (Surr) | Ave | 1677144 | 3144512 | 7825122 | 15510468 | 32537724 | 8.00 | 16.0 | 40.0 | 80.0 | 160 |

Curve Type Legend:
Ave = Average

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-172821/12 Calibration Date: 03/19/2015 17:44

Instrument ID: A2HP5F Calib Start Date: 03/19/2015 15:12

GC Column: ID: Calib End Date: 03/19/2015 17:14

Lab File ID: P5F31912.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10 - C28] | Ave | 180764 | 190352 | | 528 | 501 | 5.3 | 20.0 |

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-172821/12 Calibration Date: 03/19/2015 17:44

Instrument ID: A2HP5F Calib Start Date: 03/19/2015 15:12

GC Column: ID: Calib End Date: 03/19/2015 17:14

Lab File ID: P5F31912.D

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Diesel Range Organics [C10 - C28] | 9.08 | 4.82 | 13.35 |

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175823/7 Calibration Date: 04/09/2015 17:50

Instrument ID: A2HP5F Calib Start Date: 03/19/2015 15:12

GC Column: ID: Calib End Date: 03/19/2015 17:14

Lab File ID: P5F40907.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10 - C28] | Ave | 180764 | 186581 | | 516 | 500 | 3.2 | 20.0 |
| o-Terphenyl (Surr) | Ave | 199809 | 235931 | | 47.2 | 40.0 | 18.1 | 20.0 |

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175823/7 Calibration Date: 04/09/2015 17:50

Instrument ID: A2HP5F Calib Start Date: 03/19/2015 15:12

GC Column: ID: Calib End Date: 03/19/2015 17:14

Lab File ID: P5F40907.D

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Diesel Range Organics [C10 - C28] | 9.09 | 4.83 | 13.35 |
| o-Terphenyl (Surr) | 9.63 | 9.53 | 9.73 |

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175823/15 Calibration Date: 04/09/2015 21:53

Instrument ID: A2HP5F Calib Start Date: 03/19/2015 15:12

GC Column: ID: Calib End Date: 03/19/2015 17:14

Lab File ID: P5F40915.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10 - C28] | Ave | 180764 | 205783 | | 569 | 500 | 13.8 | 20.0 |
| o-Terphenyl (Surr) | Ave | 199809 | 260828 | | 52.2 | 40.0 | 30.5* | 20.0 |

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175823/15 Calibration Date: 04/09/2015 21:53

Instrument ID: A2HP5F Calib Start Date: 03/19/2015 15:12

GC Column: ID: Calib End Date: 03/19/2015 17:14

Lab File ID: P5F40915.D

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Diesel Range Organics [C10 - C28] | 9.09 | 4.83 | 13.35 |
| o-Terphenyl (Surr) | 9.63 | 9.53 | 9.73 |

FORM VII
DIESEL RANGE ORGANICS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175823/24 Calibration Date: 04/10/2015 02:25

Instrument ID: A2HP5F Calib Start Date: 03/19/2015 15:12

GC Column: ID: Calib End Date: 03/19/2015 17:14

Lab File ID: P5F40924.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| Diesel Range Organics [C10 - C28] | Ave | 180764 | 196664 | | 544 | 500 | 8.8 | 20.0 |
| o-Terphenyl (Surr) | Ave | 199809 | 255621 | | 51.2 | 40.0 | 27.9* | 20.0 |

FORM VII

DIESEL RANGE ORGANICS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175823/24 Calibration Date: 04/10/2015 02:25

Instrument ID: A2HP5F Calib Start Date: 03/19/2015 15:12

GC Column: ID: Calib End Date: 03/19/2015 17:14

Lab File ID: P5F40924.D

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| Diesel Range Organics [C10 - C28] | 9.09 | 4.83 | 13.35 |
| o-Terphenyl (Surr) | 9.63 | 9.53 | 9.73 |

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-175550/7-A

Matrix: Solid | Lab File ID: P5F40916.D

Analysis Method: 8015C | Date Collected:

Extraction Method: 3540C | Date Extracted: 04/08/2015 09:35

Sample wt/vol: 30(g) | Date Analyzed: 04/09/2015 22:23

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: | ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175823 | Units: mg/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| STL00141 | Total Petroleum Hydrocarbons (C10-C32) | 4.1 | U | 17 | 4.1 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl (Surr) | 92 | | 40-160 |

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-175550/8-A

Matrix: Solid Lab File ID: P5F40917.D

Analysis Method: 8015C Date Collected:

Extraction Method: 3540C Date Extracted: 04/08/2015 09:35

Sample wt/vol: 30(g) Date Analyzed: 04/09/2015 22:53

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 1(uL) GC Column: ID:

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 175823 Units: mg/Kg

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl (Surr) | 87 | | 40-160 |

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 MS | Lab Sample ID: 240-49010-1 MS

Matrix: Solid | Lab File ID: P5F40921.D

Analysis Method: 8015C | Date Collected: 04/06/2015 15:00

Extraction Method: 3540C | Date Extracted: 04/08/2015 09:35

Sample wt/vol: 30.38(g) | Date Analyzed: 04/10/2015 00:55

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: | ID:

% Moisture: 7.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175823 | Units: mg/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| STL00141 | Total Petroleum Hydrocarbons (C10-C32) | 77.9 | | 18 | 4.4 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl (Surr) | 93 | | 40-160 |

FORM I
DIESEL RANGE ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001 MSD | Lab Sample ID: 240-49010-1 MSD

Matrix: Solid | Lab File ID: P5F40922.D

Analysis Method: 8015C | Date Collected: 04/06/2015 15:00

Extraction Method: 3540C | Date Extracted: 04/08/2015 09:35

Sample wt/vol: 30.29(g) | Date Analyzed: 04/10/2015 01:25

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: | ID:

% Moisture: 7.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 175823 | Units: mg/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| STL00141 | Total Petroleum Hydrocarbons (C10-C32) | 71.5 | | 18 | 4.4 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 84-15-1 | o-Terphenyl (Surr) | 87 | | 40-160 |

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A2HP5F Start Date: 03/19/2015 15:12

Analysis Batch Number: 172821 End Date: 03/20/2015 12:27

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| STD1 240-172821/7 IC | | 03/19/2015 15:12 | 1 | P5F31907.D | |
| STD2 240-172821/8 IC | | 03/19/2015 15:43 | 1 | P5F31908.D | |
| STD3 240-172821/9 ICRT | | 03/19/2015 16:13 | 1 | P5F31909.D | |
| STD4 240-172821/10 IC | | 03/19/2015 16:44 | 1 | P5F31910.D | |
| STD5 240-172821/11 IC | | 03/19/2015 17:14 | 1 | P5F31911.D | |
| ICV 240-172821/12 | | 03/19/2015 17:44 | 1 | P5F31912.D | |
| ZZZZZ | | 03/19/2015 18:15 | 1 | | |
| ZZZZZ | | 03/19/2015 18:45 | 1 | | |
| ZZZZZ | | 03/19/2015 19:16 | 1 | | |
| CCV 240-172821/16 | | 03/19/2015 19:46 | 1 | | |
| ZZZZZ | | 03/19/2015 20:16 | 1 | | |
| ZZZZZ | | 03/19/2015 20:47 | 1 | | |
| ZZZZZ | | 03/19/2015 21:17 | 1 | | |
| ZZZZZ | | 03/19/2015 21:47 | 5 | | |
| ZZZZZ | | 03/19/2015 22:17 | 5 | | |
| ZZZZZ | | 03/19/2015 22:48 | 5 | | |
| ZZZZZ | | 03/19/2015 23:18 | 5 | | |
| ZZZZZ | | 03/19/2015 23:48 | 5 | | |
| ZZZZZ | | 03/20/2015 00:18 | 5 | | |
| ZZZZZ | | 03/20/2015 00:49 | 5 | | |
| CCV 240-172821/27 | | 03/20/2015 01:19 | 1 | | |
| ZZZZZ | | 03/20/2015 01:49 | 5 | | |
| ZZZZZ | | 03/20/2015 02:19 | 5 | | |
| ZZZZZ | | 03/20/2015 02:49 | 5 | | |
| CCV 240-172821/31 | | 03/20/2015 03:19 | 1 | | |
| ZZZZZ | | 03/20/2015 03:49 | 1 | | |
| ZZZZZ | | 03/20/2015 04:19 | 1 | | |
| ZZZZZ | | 03/20/2015 04:49 | 1 | | |
| CCV 240-172821/35 | | 03/20/2015 05:18 | 1 | | |
| CCV 240-172821/37 | | 03/20/2015 11:27 | 1 | | |
| ZZZZZ | | 03/20/2015 11:57 | 10 | | |
| CCV 240-172821/39 | | 03/20/2015 12:27 | 1 | | |

DIESEL RANGE ORGANICS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A2HP5F Start Date: 04/09/2015 17:50

Analysis Batch Number: 175823 End Date: 04/10/2015 02:25

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| CCV 240-175823/7 CCVRT | | 04/09/2015 17:50 | 1 | P5F40907.D | |
| ZZZZZ | | 04/09/2015 18:21 | 1 | | |
| ZZZZZ | | 04/09/2015 18:51 | 1 | | |
| ZZZZZ | | 04/09/2015 19:21 | 1 | | |
| ZZZZZ | | 04/09/2015 19:52 | 1 | | |
| ZZZZZ | | 04/09/2015 20:22 | 1 | | |
| CCV 240-175823/15 | | 04/09/2015 21:53 | 1 | P5F40915.D | |
| MB 240-175550/7-A | | 04/09/2015 22:23 | 1 | P5F40916.D | |
| LCS 240-175550/8-A | | 04/09/2015 22:53 | 1 | P5F40917.D | |
| 240-49010-1 | FILL-001 | 04/10/2015 00:24 | 1 | P5F40920.D | |
| 240-49010-1 MS | FILL-001 MS | 04/10/2015 00:55 | 1 | P5F40921.D | |
| 240-49010-1 MSD | FILL-001 MSD | 04/10/2015 01:25 | 1 | P5F40922.D | |
| CCV 240-175823/24 | | 04/10/2015 02:25 | 1 | P5F40924.D | |

# DIESEL RANGE ORGANICS BATCH WORKSHEET

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Batch Number: 175550  Batch Start Date: 04/08/15 12:45  Batch Analyst: Earle, Steve

Batch Method: 3540C  Batch End Date: 04/09/15 04:45

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | EXDIESELSPKW 00062 | EXOTPSURRW 00001 | | |
|---|---|---|---|---|---|---|---|---|---|
| 240-49010-E-1 | FILL-001 | 3540C, 8015C | T | 30.15 g | 5 mL | | 1 mL | | |
| 240-49010-E-1 MS | FILL-001 | 3540C, 8015C | T | 30.38 g | 5 mL | 1 mL | 1 mL | | |
| 240-49010-E-1 MSD | FILL-001 | 3540C, 8015C | T | 30.29 g | 5 mL | 1 mL | 1 mL | | |
| MB 240-175550/7 | | 3540C, 8015C | | 30 g | 5 mL | | 1 mL | | |
| LCS 240-175550/8 | | 3540C, 8015C | | 30 g | 5 mL | 1 mL | 1 mL | | |

| Batch Notes | |
|---|---|
| Balance ID | b037 |
| Na2SO4 Lot Number | 1942694 |
| Prep Solvent Lot # | 1937120 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# Method 8082A

## Polychlorinated Biphenyls (PCBs) (GC) by Method 8082A

FORM II
PCBS SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): CLP-2 ID: 0.53 (mm)

| Client Sample ID | Lab Sample ID | TCX1 # | DCB1 # |
|---|---|---|---|
| FILL-001 | 240-49010-1 | 88 | 104 |
| | MB 240-175553/17-A | 61 | 95 |
| | LCS 240-175553/18-A | 64 | 101 |

| | QC LIMITS |
|---|---|
| TCX = Tetrachloro-m-xylene | 29-151 |
| DCB = DCB Decachlorobiphenyl | 14-163 |

# Column to be used to flag recovery values

FORM II 8082A

FORM III
PCBS LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: P4000009.D

Lab ID: LCS 240-175553/18-A Client ID:

| COMPOUND | SPIKE ADDED (ug/Kg) | LCS CONCENTRATION (ug/Kg) | LCS % REC | QC LIMITS REC | # |
|---|---|---|---|---|---|
| Aroclor-1016 | 333 | 252 | 76 | 62-120 | |
| Aroclor-1260 | 333 | 311 | 93 | 56-122 | |

# Column to be used to flag recovery and RPD values

FORM III 8082A

FORM IV
PCBS METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: MB 240-175553/17-A

Matrix: Solid Date Extracted: 04/08/2015 09:49

Lab File ID:(1) P4000008.D Lab File ID:(2)

Date Analyzed:(1) 04/10/2015 12:19 Date Analyzed:(2)

Instrument ID:(1) A2HP4 Instrument ID:(2)

GC Column:(1) CLP-2 ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

| CLIENT SAMPLE ID | LAB SAMPLE ID | DATE ANALYZED 1 | DATE ANALYZED 2 |
|---|---|---|---|
| | LCS 240-175553/18-A | 04/10/2015 12:35 | |
| FILL-001 | 240-49010-1 | 04/10/2015 15:27 | |

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Sample No.: STD05 240-174472/31 Date Analyzed: 04/01/2015 01:09

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm)

Lab File ID (Standard): P4000031.D Heated Purge: (Y/N) N

Calibration ID: 27599

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

| | | | | TCX | DCB | |
|---|---|---|---|---|---|---|
| | | | | RT # | RT # | |
| INITIAL CALIBRATION SURROGATE | | | | 1.74 | 7.96 | |
| UPPER LIMIT | | | | 1.84 | 8.06 | |
| LOWER LIMIT | | | | 1.64 | 7.86 | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | LAB FILE ID | | | |
| STD05 240-174472/31 ICRT | | 04/01/2015 01:09 | P4000031.D | 1.74 | 7.96 | |

# Column used to flag values outside QC limits

FORM VIII 8082A

FORM VIII
PCBS ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Sample No.: CCV 240-175923/3  Date Analyzed: 04/10/2015 11:01

Instrument ID: A2HP4  GC Column: CLP-2  ID: 0.53(mm)

Lab File ID (Standard): P4000003.D  Heated Purge: (Y/N) N

Calibration ID: 27599

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

| | | | | TCX | DCB | |
|---|---|---|---|---|---|---|
| | | | | RT # | RT # | |
| CONTINUING CALIBRATION SURROGATE | | | | 1.75 | 7.97 | |
| UPPER LIMIT | | | | 1.85 | 8.07 | |
| LOWER LIMIT | | | | 1.65 | 7.87 | |
| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | LAB FILE ID | | | |
| CCV 240-175923/3 CCVRT | | 04/10/2015 11:01 | P4000003.D | 1.75 | 7.97 | |
| MB 240-175553/17-A | | 04/10/2015 12:19 | P4000008.D | 1.75 | 7.97 | |
| LCS 240-175553/18-A | | 04/10/2015 12:35 | P4000009.D | 1.75 | 7.97 | |
| CCV 240-175923/10 | | 04/10/2015 12:50 | P4000010.D | 1.75 | 7.97 | |
| 240-49010-1 | FILL-001 | 04/10/2015 15:27 | P4000020.D | 1.75 | 7.97 | |
| CCV 240-175923/25 | | 04/10/2015 16:46 | P4000025.D | 1.75 | 7.97 | |

TCX = Tetrachloro-m-xylene
DCB = DCB Decachlorobiphenyl

TCX RT Limit = ± 0 minutes of surrogate RT
DCB RT Limit = ± 0 minutes of surrogate RT

# Column used to flag values outside QC limits

FORM VIII 8082A

FORM X
IDENTIFICATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-175553/18-A

Instrument ID (1): A2HP4 Instrument ID (2):

Date Analyzed (1): 04/10/2015 12:35 Date Analyzed (2):

GC Column (1): CLP-2 ID: 0.53(mm) GC Column (2): ID:

| ANALYTE | COL | PEAK | RT | RT WINDOW | | CONCENTRATION | | |
|---|---|---|---|---|---|---|---|---|
| | | | | FROM | TO | PEAK | MEAN | |
| Aroclor-1016 | 2 | 1 | 2.22 | 2.12 | 2.32 | 207 | 252 | |
| | | 2 | 2.62 | 2.52 | 2.72 | 242 | | |
| | | 3 | 3.08 | 2.98 | 3.18 | 281 | | |
| | | 4 | 3.22 | 3.12 | 3.32 | 260 | | |
| | | 5 | 3.71 | 3.61 | 3.81 | 271 | | |
| Aroclor-1260 | 2 | 1 | 5.05 | 4.95 | 5.15 | 309 | 311 | |
| | | 2 | 5.28 | 5.18 | 5.38 | 314 | | |
| | | 3 | 5.65 | 5.55 | 5.75 | 344 | | |
| | | 4 | 6.34 | 6.24 | 6.44 | 297 | | |
| | | 5 | 6.72 | 6.62 | 6.82 | 293 | | |

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Client Sample ID: FILL-001  Lab Sample ID: 240-49010-1

Matrix: Solid  Lab File ID: P4000020.D

Analysis Method: 8082A  Date Collected: 04/06/2015 15:00

Extraction Method: 3540C  Date Extracted: 04/08/2015 09:49

Sample wt/vol: 30.00(g)  Date Analyzed: 04/10/2015 15:27

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 1(uL)  GC Column: CLP-2  ID: 0.53(mm)

% Moisture: 7.4  GPC Cleanup:(Y/N) N

Analysis Batch No.: 175923  Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 12674-11-2 | Aroclor-1016 | 13 | U | 36 | 13 |
| 11104-28-2 | Aroclor-1221 | 17 | U | 36 | 17 |
| 11141-16-5 | Aroclor-1232 | 22 | U | 36 | 22 |
| 53469-21-9 | Aroclor-1242 | 12 | U | 36 | 12 |
| 12672-29-6 | Aroclor-1248 | 8.6 | U | 36 | 8.6 |
| 11097-69-1 | Aroclor-1254 | 15 | U | 36 | 15 |
| 11096-82-5 | Aroclor-1260 | 9.7 | U | 36 | 9.7 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 88 | | 29-151 |
| 2051-24-3 | DCB Decachlorobiphenyl | 104 | | 14-163 |

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 18:06 Calibration End Date: 03/31/2015 19:25 Calibration ID: 27605

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/4 | P4000004.D |
| Level 2 | STD01 240-174472/5 | P4000005.D |
| Level 3 | STD02 240-174472/6 | P4000006.D |
| Level 4 | STD05 240-174472/7 | P4000007.D |
| Level 5 | STD1 240-174472/8 | P4000008.D |
| Level 6 | STD2 240-174472/9 | P4000009.D |

| ANALYTE | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 | | | | | RT WINDOW | AVG RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1232 Peak 1 | 2.201 | 2.201 | 2.201 | 2.201 | 2.201 | 2.200 | | | | | 2.101 - 2.301 | 2.201 |
| PCB-1232 Peak 2 | 2.602 | 2.602 | 2.603 | 2.603 | 2.603 | 2.603 | | | | | 2.502 - 2.702 | 2.603 |
| PCB-1232 Peak 3 | 3.060 | 3.059 | 3.059 | 3.059 | 3.059 | 3.061 | | | | | 2.960 - 3.160 | 3.060 |
| PCB-1232 Peak 4 | 3.199 | 3.199 | 3.200 | 3.199 | 3.200 | 3.200 | | | | | 3.099 - 3.299 | 3.200 |
| PCB-1232 Peak 5 | 3.689 | 3.687 | 3.688 | 3.689 | 3.689 | 3.690 | | | | | 3.589 - 3.789 | 3.689 |
| PCB-1262 Peak 1 | 5.259 | 5.261 | 5.260 | 5.260 | 5.261 | 5.261 | | | | | 5.159 - 5.359 | 5.260 |
| PCB-1262 Peak 2 | 5.735 | 5.735 | 5.735 | 5.734 | 5.735 | 5.736 | | | | | 5.635 - 5.835 | 5.735 |
| PCB-1262 Peak 3 | 6.045 | 6.045 | 6.045 | 6.045 | 6.045 | 6.046 | | | | | 5.945 - 6.145 | 6.045 |
| PCB-1262 Peak 4 | 6.321 | 6.321 | 6.320 | 6.320 | 6.321 | 6.321 | | | | | 6.221 - 6.421 | 6.321 |
| PCB-1262 Peak 5 | 6.704 | 6.704 | 6.704 | 6.704 | 6.704 | 6.704 | | | | | 6.604 - 6.804 | 6.704 |

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 18:06 Calibration End Date: 03/31/2015 19:25 Calibration ID: 27605

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/4 | P4000004.D |
| Level 2 | STD01 240-174472/5 | P4000005.D |
| Level 3 | STD02 240-174472/6 | P4000006.D |
| Level 4 | STD05 240-174472/7 | P4000007.D |
| Level 5 | STD1 240-174472/8 | P4000008.D |
| Level 6 | STD2 240-174472/9 | P4000009.D |

| ANALYTE | CF | | | | CURVE TYPE | COEFFICIENT | | | # | MIN CF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 5 | LVL 2<br>LVL 6 | LVL 3 | LVL 4 | | B | M1 | M2 | | | | | | | | |
| PCB-1232 Peak 1 | 43380380<br>35151360 | 41844350<br>33384862 | 40540745 | 38193710 | Ave | | 38749234.4 | | | | 10.1 | | 20.0 | | | |
| PCB-1232 Peak 2 | 33261200<br>27959946 | 32644680<br>26701516 | 32061870 | 30336136 | Ave | | 30494224.7 | | | | 8.7 | | 20.0 | | | |
| PCB-1232 Peak 3 | 64580780<br>57679623 | 62615070<br>56876846 | 62527660 | 60965842 | Ave | | 60874303.5 | | | | 5.0 | | 20.0 | | | |
| PCB-1232 Peak 4 | 29245160<br>24934532 | 28564110<br>24398450 | 27931935 | 26784928 | Ave | | 26976519.2 | | | | 7.3 | | 20.0 | | | |
| PCB-1232 Peak 5 | 24455080<br>17664146 | 27521400<br>17124375 | 22493405 | 19781644 | Ave | | 21506675.0 | | | | 18.9 | | 20.0 | | | |
| PCB-1262 Peak 1 | 83662760<br>71272101 | 78062280<br>69780509 | 78398440 | 76151736 | Ave | | 76221304.3 | | | | 6.7 | | 20.0 | | | |
| PCB-1262 Peak 2 | 122504380<br>109333332 | 118144980<br>107434673 | 121152275 | 116811236 | Ave | | 115896813 | | | | 5.3 | | 20.0 | | | |
| PCB-1262 Peak 3 | 106772800<br>95793326 | 102569450<br>94354877 | 105158035 | 101969998 | Ave | | 101103081 | | | | 4.9 | | 20.0 | | | |
| PCB-1262 Peak 4 | 229863640<br>211079207 | 220883150<br>208817079 | 230463800 | 225234222 | Ave | | 221056850 | | | | 4.2 | | 20.0 | | | |
| PCB-1262 Peak 5 | 180347180<br>150692099 | 165826480<br>148913571 | 166940780 | 162081666 | Ave | | 162466963 | | | | 7.1 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 18:06 Calibration End Date: 03/31/2015 19:25 Calibration ID: 27605

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/4 | P4000004.D |
| Level 2 | STD01 240-174472/5 | P4000005.D |
| Level 3 | STD02 240-174472/6 | P4000006.D |
| Level 4 | STD05 240-174472/7 | P4000007.D |
| Level 5 | STD1 240-174472/8 | P4000008.D |
| Level 6 | STD2 240-174472/9 | P4000009.D |

| ANALYTE | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| PCB-1232 Peak 1 | Ave | 2169019<br>66769723 | 4184435 | 8108149 | 19096855 | 35151360 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1232 Peak 2 | Ave | 1663060<br>53403032 | 3264468 | 6412374 | 15168068 | 27959946 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1232 Peak 3 | Ave | 3229039<br>113753692 | 6261507 | 12505532 | 30482921 | 57679623 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1232 Peak 4 | Ave | 1462258<br>48796900 | 2856411 | 5586387 | 13392464 | 24934532 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1232 Peak 5 | Ave | 1222754<br>34248750 | 2752140 | 4498681 | 9890822 | 17664146 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1262 Peak 1 | Ave | 4183138<br>139561017 | 7806228 | 15679688 | 38075868 | 71272101 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1262 Peak 2 | Ave | 6125219<br>214869346 | 11814498 | 24230455 | 58405618 | 109333332 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1262 Peak 3 | Ave | 5338640<br>188709753 | 10256945 | 21031607 | 50984999 | 95793326 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1262 Peak 4 | Ave | 11493182<br>417634158 | 22088315 | 46092760 | 112617111 | 211079207 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1262 Peak 5 | Ave | 9017359<br>297827142 | 16582648 | 33388156 | 81040833 | 150692099 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |

Curve Type Legend:
Ave = Average

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 19:40 Calibration End Date: 03/31/2015 20:59 Calibration ID: 27611

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/10 | P4000010.D |
| Level 2 | STD01 240-174472/11 | P4000011.D |
| Level 3 | STD02 240-174472/12 | P4000012.D |
| Level 4 | STD05 240-174472/13 | P4000013.D |
| Level 5 | STD1 240-174472/14 | P4000014.D |
| Level 6 | STD2 240-174472/15 | P4000015.D |

| ANALYTE | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 | | | | | RT WINDOW | AVG RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1242 Peak 1 | 2.201 | 2.200 | 2.200 | 2.200 | 2.201 | 2.201 | | | | | 2.101 - 2.301 | 2.201 |
| PCB-1242 Peak 2 | 2.603 | 2.603 | 2.603 | 2.603 | 2.603 | 2.603 | | | | | 2.503 - 2.703 | 2.603 |
| PCB-1242 Peak 3 | 3.059 | 3.059 | 3.059 | 3.060 | 3.059 | 3.059 | | | | | 2.959 - 3.159 | 3.059 |
| PCB-1242 Peak 4 | 3.200 | 3.199 | 3.198 | 3.200 | 3.199 | 3.200 | | | | | 3.100 - 3.300 | 3.199 |
| PCB-1242 Peak 5 | 3.688 | 3.689 | 3.688 | 3.690 | 3.690 | 3.689 | | | | | 3.588 - 3.788 | 3.689 |
| PCB-1268 Peak 1 | 6.701 | 6.701 | 6.700 | 6.701 | 6.702 | 6.702 | | | | | 6.601 - 6.801 | 6.701 |
| PCB-1268 Peak 2 | 6.749 | 6.748 | 6.748 | 6.749 | 6.751 | 6.750 | | | | | 6.649 - 6.849 | 6.749 |
| PCB-1268 Peak 3 | 7.017 | 7.016 | 7.016 | 7.016 | 7.017 | 7.018 | | | | | 6.917 - 7.117 | 7.017 |
| PCB-1268 Peak 4 | 7.330 | 7.331 | 7.330 | 7.330 | 7.332 | 7.331 | | | | | 7.230 - 7.430 | 7.331 |
| PCB-1268 Peak 5 | 7.677 | 7.677 | 7.676 | 7.677 | 7.677 | 7.678 | | | | | 7.577 - 7.777 | 7.677 |

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 19:40 Calibration End Date: 03/31/2015 20:59 Calibration ID: 27611

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/10 | P4000010.D |
| Level 2 | STD01 240-174472/11 | P4000011.D |
| Level 3 | STD02 240-174472/12 | P4000012.D |
| Level 4 | STD05 240-174472/13 | P4000013.D |
| Level 5 | STD1 240-174472/14 | P4000014.D |
| Level 6 | STD2 240-174472/15 | P4000015.D |

| ANALYTE | CF | | | | CURVE TYPE | COEFFICIENT | | | # | MIN CF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 5 | LVL 2<br>LVL 6 | LVL 3 | LVL 4 | | B | M1 | M2 | | | | | | | | |
| PCB-1242 Peak 1 | 29813000<br>25080677 | 29649120<br>23714609 | 26901110 | 25707498 | Ave | | 26811002.4 | | | | 9.3 | | 20.0 | | | |
| PCB-1242 Peak 2 | 57079820<br>46551817 | 55068850<br>43934565 | 49888210 | 47567308 | Ave | | 50015094.9 | | | | 10.2 | | 20.0 | | | |
| PCB-1242 Peak 3 | 110686480<br>105456485 | 113292690<br>101708158 | 105362160 | 104193458 | Ave | | 106783239 | | | | 4.1 | | 20.0 | | | |
| PCB-1242 Peak 4 | 48423760<br>44151488 | 50083980<br>42678918 | 45457805 | 44239662 | Ave | | 45839268.8 | | | | 6.2 | | 20.0 | | | |
| PCB-1242 Peak 5 | 47338760<br>34596615 | 42275720<br>33357424 | 37753180 | 34356500 | Ave | | 38279699.8 | | | | 14.4 | | 20.0 | | | |
| PCB-1268 Peak 1 | 280099920<br>255702882 | 277817060<br>249868245 | 261948510 | 253200146 | Ave | | 263106127 | | | | 4.9 | | 20.0 | | | |
| PCB-1268 Peak 2 | 262777580<br>247054322 | 267542770<br>243936822 | 250461935 | 247290068 | Ave | | 253177249 | | | | 3.8 | | 20.0 | | | |
| PCB-1268 Peak 3 | 223632860<br>212589065 | 228070630<br>208806571 | 214609095 | 211804524 | Ave | | 216585457 | | | | 3.5 | | 20.0 | | | |
| PCB-1268 Peak 4 | 98485040<br>91299092 | 100038360<br>89583483 | 93027920 | 90816940 | Ave | | 93875139.1 | | | | 4.6 | | 20.0 | | | |
| PCB-1268 Peak 5 | 687649680<br>660479471 | 706137900<br>658910316 | 667340850 | 657264604 | Ave | | 672963804 | | | | 2.9 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 19:40 Calibration End Date: 03/31/2015 20:59 Calibration ID: 27611

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/10 | P4000010.D |
| Level 2 | STD01 240-174472/11 | P4000011.D |
| Level 3 | STD02 240-174472/12 | P4000012.D |
| Level 4 | STD05 240-174472/13 | P4000013.D |
| Level 5 | STD1 240-174472/14 | P4000014.D |
| Level 6 | STD2 240-174472/15 | P4000015.D |

| ANALYTE | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| PCB-1242 Peak 1 | Ave | 1490650<br>47429219 | 2964912 | 5380222 | 12853749 | 25080677 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1242 Peak 2 | Ave | 2853991<br>87869129 | 5506885 | 9977642 | 23783654 | 46551817 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1242 Peak 3 | Ave | 5534324<br>203416316 | 11329269 | 21072432 | 52096729 | 105456485 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1242 Peak 4 | Ave | 2421188<br>85357836 | 5008398 | 9091561 | 22119831 | 44151488 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1242 Peak 5 | Ave | 2366938<br>66714848 | 4227572 | 7550636 | 17178250 | 34596615 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1268 Peak 1 | Ave | 14004996<br>499736490 | 27781706 | 52389702 | 126600073 | 255702882 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1268 Peak 2 | Ave | 13138879<br>487873643 | 26754277 | 50092387 | 123645034 | 247054322 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1268 Peak 3 | Ave | 11181643<br>417613141 | 22807063 | 42921819 | 105902262 | 212589065 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1268 Peak 4 | Ave | 4924252<br>179166965 | 10003836 | 18605584 | 45408470 | 91299092 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1268 Peak 5 | Ave | 34382484<br>1317820632 | 70613790 | 133468170 | 328632302 | 660479471 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |

Curve Type Legend:
Ave = Average

FORM VI

PCBS INITIAL CALIBRATION DATA

EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 21:14 Calibration End Date: 03/31/2015 22:33 Calibration ID: 27617

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/16 | P4000016.D |
| Level 2 | STD01 240-174472/17 | P4000017.D |
| Level 3 | STD02 240-174472/18 | P4000018.D |
| Level 4 | STD05 240-174472/19 | P4000019.D |
| Level 5 | STD1 240-174472/20 | P4000020.D |
| Level 6 | STD2 240-174472/21 | P4000021.D |

| ANALYTE | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 | | | | | RT WINDOW | AVG RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1248 Peak 1 | 2.602 | 2.603 | 2.605 | 2.604 | 2.603 | 2.604 | | | | | 2.502 - 2.702 | 2.604 |
| PCB-1248 Peak 2 | 3.058 | 3.058 | 3.061 | 3.061 | 3.059 | 3.060 | | | | | 2.958 - 3.158 | 3.060 |
| PCB-1248 Peak 3 | 3.816 | 3.817 | 3.820 | 3.819 | 3.818 | 3.819 | | | | | 3.716 - 3.916 | 3.818 |
| PCB-1248 Peak 4 | 4.135 | 4.136 | 4.140 | 4.138 | 4.138 | 4.138 | | | | | 4.035 - 4.235 | 4.138 |
| PCB-1248 Peak 5 | 4.821 | 4.821 | 4.825 | 4.824 | 4.823 | 4.823 | | | | | 4.721 - 4.921 | 4.823 |

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 21:14 Calibration End Date: 03/31/2015 22:33 Calibration ID: 27617

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/16 | P4000016.D |
| Level 2 | STD01 240-174472/17 | P4000017.D |
| Level 3 | STD02 240-174472/18 | P4000018.D |
| Level 4 | STD05 240-174472/19 | P4000019.D |
| Level 5 | STD1 240-174472/20 | P4000020.D |
| Level 6 | STD2 240-174472/21 | P4000021.D |

| ANALYTE | CF | | | | CURVE TYPE | COEFFICIENT | | | # | MIN CF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 5 | LVL 2<br>LVL 6 | LVL 3 | LVL 4 | | B | M1 | M2 | | | | | | | | |
| PCB-1248 Peak 1 | 29027440<br>23002247 | 27019020<br>22918197 | 25511780 | 23966254 | Ave | | 25240822.9 | | | | 9.6 | | 20.0 | | | |
| PCB-1248 Peak 2 | 75075400<br>66440096 | 71554730<br>68051867 | 68705920 | 66842322 | Ave | | 69445055.8 | | | | 4.8 | | 20.0 | | | |
| PCB-1248 Peak 3 | 68400400<br>61621973 | 67142230<br>63038338 | 64434280 | 62414332 | Ave | | 64508592.2 | | | | 4.2 | | 20.0 | | | |
| PCB-1248 Peak 4 | 80263940<br>71011760 | 76098710<br>72525884 | 73467500 | 71288652 | Ave | | 74109407.6 | | | | 4.8 | | 20.0 | | | |
| PCB-1248 Peak 5 | 41852980<br>36276840 | 40017940<br>37716350 | 38342755 | 36976724 | Ave | | 38530598.1 | | | | 5.4 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 21:14 Calibration End Date: 03/31/2015 22:33 Calibration ID: 27617

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/16 | P4000016.D |
| Level 2 | STD01 240-174472/17 | P4000017.D |
| Level 3 | STD02 240-174472/18 | P4000018.D |
| Level 4 | STD05 240-174472/19 | P4000019.D |
| Level 5 | STD1 240-174472/20 | P4000020.D |
| Level 6 | STD2 240-174472/21 | P4000021.D |

| ANALYTE | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| PCB-1248 Peak 1 | Ave | 1451372<br>45836393 | 2701902 | 5102356 | 11983127 | 23002247 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1248 Peak 2 | Ave | 3753770<br>136103733 | 7155473 | 13741184 | 33421161 | 66440096 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1248 Peak 3 | Ave | 3420020<br>126076676 | 6714223 | 12886856 | 31207166 | 61621973 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1248 Peak 4 | Ave | 4013197<br>145051767 | 7609871 | 14693500 | 35644326 | 71011760 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1248 Peak 5 | Ave | 2092649<br>75432699 | 4001794 | 7668551 | 18488362 | 36276840 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |

Curve Type Legend:

Ave = Average

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 22:48 Calibration End Date: 04/01/2015 00:07 Calibration ID: 27623

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/22 | P4000022.D |
| Level 2 | STD01 240-174472/23 | P4000023.D |
| Level 3 | STD02 240-174472/24 | P4000024.D |
| Level 4 | STD05 240-174472/25 | P4000025.D |
| Level 5 | STD1 240-174472/26 | P4000026.D |
| Level 6 | STD2 240-174472/27 | P4000027.D |

| ANALYTE | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 | | | | | RT WINDOW | AVG RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1221 Peak 1 | 2.014 | 2.014 | 2.014 | 2.013 | 2.014 | 2.014 | | | | | 1.914 - 2.114 | 2.014 |
| PCB-1221 Peak 2 | 2.148 | 2.149 | 2.148 | 2.147 | 2.147 | 2.148 | | | | | 2.048 - 2.248 | 2.148 |
| PCB-1221 Peak 3 | 2.205 | 2.205 | 2.206 | 2.205 | 2.204 | 2.205 | | | | | 2.105 - 2.305 | 2.205 |
| PCB-1254 Peak 1 | 4.136 | 4.136 | 4.136 | 4.135 | 4.135 | 4.136 | | | | | 4.036 - 4.236 | 4.136 |
| PCB-1254 Peak 2 | 4.345 | 4.346 | 4.346 | 4.344 | 4.344 | 4.345 | | | | | 4.245 - 4.445 | 4.345 |
| PCB-1254 Peak 3 | 4.826 | 4.826 | 4.826 | 4.824 | 4.824 | 4.825 | | | | | 4.726 - 4.926 | 4.825 |
| PCB-1254 Peak 4 | 5.070 | 5.070 | 5.071 | 5.069 | 5.069 | 5.070 | | | | | 4.970 - 5.170 | 5.070 |
| PCB-1254 Peak 5 | 5.639 | 5.639 | 5.639 | 5.637 | 5.639 | 5.639 | | | | | 5.539 - 5.739 | 5.639 |

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton | Job No.: 240-49010-1 | Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 | GC Column: CLP-2 | ID: 0.53(mm) | Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 22:48 | Calibration End Date: 04/01/2015 00:07 | Calibration ID: 27623

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/22 | P4000022.D |
| Level 2 | STD01 240-174472/23 | P4000023.D |
| Level 3 | STD02 240-174472/24 | P4000024.D |
| Level 4 | STD05 240-174472/25 | P4000025.D |
| Level 5 | STD1 240-174472/26 | P4000026.D |
| Level 6 | STD2 240-174472/27 | P4000027.D |

| ANALYTE | CF | | | | CURVE TYPE | COEFFICIENT | | | # | MIN CF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 5 | LVL 2<br>LVL 6 | LVL 3 | LVL 4 | | B | M1 | M2 | | | | | | | | |
| PCB-1221 Peak 1 | 21439080<br>17781529 | 20492660<br>16987116 | 19040150 | 17866370 | Ave | | 18934484.2 | | | | 9.1 | | 20.0 | | | |
| PCB-1221 Peak 2 | 14277820<br>11725972 | 13632950<br>11052569 | 12956810 | 11929432 | Ave | | 12595925.4 | | | | 9.8 | | 20.0 | | | |
| PCB-1221 Peak 3 | 53158660<br>43490774 | 50669820<br>40886783 | 47318135 | 43997808 | Ave | | 46586996.7 | | | | 10.0 | | 20.0 | | | |
| PCB-1254 Peak 1 | 75112620<br>65526668 | 72270250<br>62729466 | 66963505 | 63877396 | Ave | | 67746650.8 | | | | 7.2 | | 20.0 | | | |
| PCB-1254 Peak 2 | 88085180<br>76746355 | 83898170<br>74354666 | 78396360 | 75491376 | Ave | | 79495351.2 | | | | 6.8 | | 20.0 | | | |
| PCB-1254 Peak 3 | 130998660<br>121040079 | 128404040<br>116575621 | 120396835 | 118502296 | Ave | | 122652922 | | | | 4.7 | | 20.0 | | | |
| PCB-1254 Peak 4 | 94680980<br>88943537 | 92653470<br>85135736 | 88039205 | 86174176 | Ave | | 89271183.9 | | | | 4.2 | | 20.0 | | | |
| PCB-1254 Peak 5 | 122953220<br>112252139 | 118356660<br>109244191 | 112076085 | 109859680 | Ave | | 114123662 | | | | 4.7 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 03/31/2015 22:48 Calibration End Date: 04/01/2015 00:07 Calibration ID: 27623

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/22 | P4000022.D |
| Level 2 | STD01 240-174472/23 | P4000023.D |
| Level 3 | STD02 240-174472/24 | P4000024.D |
| Level 4 | STD05 240-174472/25 | P4000025.D |
| Level 5 | STD1 240-174472/26 | P4000026.D |
| Level 6 | STD2 240-174472/27 | P4000027.D |

| ANALYTE | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| PCB-1221 Peak 1 | Ave | 1071954<br>33974232 | 2049266 | 3808030 | 8933185 | 17781529 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1221 Peak 2 | Ave | 713891<br>22105137 | 1363295 | 2591362 | 5964716 | 11725972 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1221 Peak 3 | Ave | 2657933<br>81773566 | 5066982 | 9463627 | 21998904 | 43490774 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1254 Peak 1 | Ave | 3755631<br>125458932 | 7227025 | 13392701 | 31938698 | 65526668 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1254 Peak 2 | Ave | 4404259<br>148709332 | 8389817 | 15679272 | 37745688 | 76746355 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1254 Peak 3 | Ave | 6549933<br>233151242 | 12840404 | 24079367 | 59251148 | 121040079 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1254 Peak 4 | Ave | 4734049<br>170271471 | 9265347 | 17607841 | 43087088 | 88943537 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1254 Peak 5 | Ave | 6147661<br>218488381 | 11835666 | 22415217 | 54929840 | 112252139 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |

Curve Type Legend:
Ave = Average

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2015 00:22 Calibration End Date: 04/01/2015 01:41 Calibration ID: 27599

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/28 | P4000028.D |
| Level 2 | STD01 240-174472/29 | P4000029.D |
| Level 3 | STD02 240-174472/30 | P4000030.D |
| Level 4 | STD05 240-174472/31 | P4000031.D |
| Level 5 | STD1 240-174472/32 | P4000032.D |
| Level 6 | STD2 240-174472/33 | P4000033.D |

| ANALYTE | LVL 1 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 6 | | | | | RT WINDOW | AVG RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PCB-1016 Peak 1 | 2.206 | 2.206 | 2.210 | 2.210 | 2.209 | 2.210 | | | | | 2.110 - 2.310 | 2.209 |
| PCB-1016 Peak 2 | 2.608 | 2.609 | 2.613 | 2.612 | 2.612 | 2.612 | | | | | 2.512 - 2.712 | 2.611 |
| PCB-1016 Peak 3 | 3.065 | 3.065 | 3.070 | 3.070 | 3.069 | 3.069 | | | | | 2.970 - 3.170 | 3.068 |
| PCB-1016 Peak 4 | 3.206 | 3.207 | 3.211 | 3.211 | 3.209 | 3.209 | | | | | 3.111 - 3.311 | 3.209 |
| PCB-1016 Peak 5 | 3.694 | 3.696 | 3.700 | 3.700 | 3.699 | 3.699 | | | | | 3.600 - 3.800 | 3.698 |
| PCB-1260 Peak 1 | 5.036 | 5.037 | 5.042 | 5.043 | 5.040 | 5.042 | | | | | 4.943 - 5.143 | 5.040 |
| PCB-1260 Peak 2 | 5.266 | 5.268 | 5.273 | 5.272 | 5.271 | 5.272 | | | | | 5.172 - 5.372 | 5.270 |
| PCB-1260 Peak 3 | 5.637 | 5.639 | 5.643 | 5.644 | 5.643 | 5.642 | | | | | 5.544 - 5.744 | 5.641 |
| PCB-1260 Peak 4 | 6.326 | 6.327 | 6.333 | 6.332 | 6.331 | 6.332 | | | | | 6.232 - 6.432 | 6.330 |
| PCB-1260 Peak 5 | 6.709 | 6.712 | 6.717 | 6.718 | 6.717 | 6.717 | | | | | 6.618 - 6.818 | 6.715 |
| Tetrachloro-m-xylene | 1.734 | 1.735 | 1.738 | 1.738 | 1.737 | 1.738 | | | | | 1.638 - 1.838 | 1.737 |
| DCB Decachlorobiphenyl | 7.957 | 7.958 | 7.962 | 7.962 | 7.962 | 7.962 | | | | | 7.862 - 8.062 | 7.961 |

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2015 00:22 Calibration End Date: 04/01/2015 01:41 Calibration ID: 27599

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/28 | P4000028.D |
| Level 2 | STD01 240-174472/29 | P4000029.D |
| Level 3 | STD02 240-174472/30 | P4000030.D |
| Level 4 | STD05 240-174472/31 | P4000031.D |
| Level 5 | STD1 240-174472/32 | P4000032.D |
| Level 6 | STD2 240-174472/33 | P4000033.D |

| ANALYTE | CF | | | | CURVE TYPE | COEFFICIENT | | | # | MIN CF | %RSD | # | MAX %RSD | R^2 OR COD | # | MIN R^2 OR COD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | LVL 1<br>LVL 5 | LVL 2<br>LVL 6 | LVL 3 | LVL 4 | | B | M1 | M2 | | | | | | | | |
| PCB-1016 Peak 1 | 35421180<br>31235257 | 34666360<br>28323503 | 33854925 | 33628088 | Ave | | 32854885.5 | | | | 8.0 | | 20.0 | | | |
| PCB-1016 Peak 2 | 70323160<br>59520636 | 65805870<br>53773544 | 63179250 | 64162588 | Ave | | 62794174.8 | | | | 9.0 | | 20.0 | | | |
| PCB-1016 Peak 3 | 138077340<br>136384287 | 135688710<br>125976339 | 134589945 | 143657948 | Ave | | 135729095 | | | | 4.2 | | 20.0 | | | |
| PCB-1016 Peak 4 | 61208400<br>56209416 | 58663550<br>51999695 | 57267270 | 59556568 | Ave | | 57484149.9 | | | | 5.6 | | 20.0 | | | |
| PCB-1016 Peak 5 | 51386780<br>43893582 | 46388870<br>40724418 | 46511480 | 46360498 | Ave | | 45877604.6 | | | | 7.7 | | 20.0 | | | |
| PCB-1260 Peak 1 | 90567920<br>86247081 | 87877140<br>79932110 | 86295070 | 90935286 | Ave | | 86975767.8 | | | | 4.6 | | 20.0 | | | |
| PCB-1260 Peak 2 | 105145240<br>100218877 | 102213450<br>93356554 | 100448155 | 105438440 | Ave | | 101136786 | | | | 4.4 | | 20.0 | | | |
| PCB-1260 Peak 3 | 144890100<br>143257491 | 142107580<br>133722617 | 140608170 | 151007640 | Ave | | 142598933 | | | | 4.0 | | 20.0 | | | |
| PCB-1260 Peak 4 | 201167280<br>203868698 | 199849530<br>190851819 | 198687480 | 214831730 | Ave | | 201542756 | | | | 3.9 | | 20.0 | | | |
| PCB-1260 Peak 5 | 160877380<br>143860602 | 150986780<br>134829622 | 145915650 | 153652570 | Ave | | 148353767 | | | | 6.0 | | 20.0 | | | |
| Tetrachloro-m-xylene | 1958117600<br>1889182800 | 1785868200<br>1787265840 | 1828172400 | 1971668360 | Ave | | 1870045867 | | | | 4.4 | | 20.0 | | | |
| DCB Decachlorobiphenyl | 2100482400<br>1719277360 | 1843438400<br>1593262000 | 1798961800 | 1848207760 | Ave | | 1817271620 | | | | 9.3 | | 20.0 | | | |

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
PCBS INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-49010-1 Analy Batch No.: 174472

SDG No.:

Instrument ID: A2HP4 GC Column: CLP-2 ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/01/2015 00:22 Calibration End Date: 04/01/2015 01:41 Calibration ID: 27599

Calibration Files:

| LEVEL: | LAB SAMPLE ID: | LAB FILE ID: |
|---|---|---|
| Level 1 | STD005 240-174472/28 | P4000028.D |
| Level 2 | STD01 240-174472/29 | P4000029.D |
| Level 3 | STD02 240-174472/30 | P4000030.D |
| Level 4 | STD05 240-174472/31 | P4000031.D |
| Level 5 | STD1 240-174472/32 | P4000032.D |
| Level 6 | STD2 240-174472/33 | P4000033.D |

| ANALYTE | CURVE TYPE | RESPONSE | | | | | CONCENTRATION (NG/UL) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 | LVL 1<br>LVL 6 | LVL 2 | LVL 3 | LVL 4 | LVL 5 |
| PCB-1016 Peak 1 | Ave | 1771059<br>56647006 | 3466636 | 6770985 | 16814044 | 31235257 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1016 Peak 2 | Ave | 3516158<br>107547089 | 6580587 | 12635850 | 32081294 | 59520636 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1016 Peak 3 | Ave | 6903867<br>251952679 | 13568871 | 26917989 | 71828974 | 136384287 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1016 Peak 4 | Ave | 3060420<br>103999391 | 5866355 | 11453454 | 29778284 | 56209416 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1016 Peak 5 | Ave | 2569339<br>81448835 | 4638887 | 9302296 | 23180249 | 43893582 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1260 Peak 1 | Ave | 4528396<br>159864220 | 8787714 | 17259014 | 45467643 | 86247081 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1260 Peak 2 | Ave | 5257262<br>186713108 | 10221345 | 20089631 | 52719220 | 100218877 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1260 Peak 3 | Ave | 7244505<br>267445233 | 14210758 | 28121634 | 75503820 | 143257491 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1260 Peak 4 | Ave | 10058364<br>381703637 | 19984953 | 39737496 | 107415865 | 203868698 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| PCB-1260 Peak 5 | Ave | 8043869<br>269659244 | 15098678 | 29183130 | 76826285 | 143860602 | 0.0500<br>2.00 | 0.100 | 0.200 | 0.500 | 1.00 |
| Tetrachloro-m-xylene | Ave | 4895294<br>178726584 | 8929341 | 18281724 | 49291709 | 94459140 | 0.00250<br>0.100 | 0.00500 | 0.0100 | 0.0250 | 0.0500 |
| DCB Decachlorobiphenyl | Ave | 5251206<br>159326200 | 9217192 | 17989618 | 46205194 | 85963868 | 0.00250<br>0.100 | 0.00500 | 0.0100 | 0.0250 | 0.0500 |

Curve Type Legend:
Ave = Average

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-174472/39 Calibration Date: 04/01/2015 03:15

Instrument ID: A2HP4 Calib Start Date: 04/01/2015 00:22

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 04/01/2015 01:41

Lab File ID: P4000039.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| PCB-1016 Peak 1 | Ave | 32854886 | 36094632 | | 1.10 | 1.00 | 9.9 | 20.0 |
| PCB-1016 Peak 2 | Ave | 62794175 | 72267225 | | 1.15 | 1.00 | 15.1 | 20.0 |
| PCB-1016 Peak 3 | Ave | 135729095 | 165884789 | | 1.22 | 1.00 | 22.2* | 20.0 |
| PCB-1016 Peak 4 | Ave | 57484150 | 67869746 | | 1.18 | 1.00 | 18.1 | 20.0 |
| PCB-1016 Peak 5 | Ave | 45877605 | 52198867 | | 1.14 | 1.00 | 13.8 | 20.0 |
| PCB-1260 Peak 1 | Ave | 86975768 | 103830113 | | 1.19 | 1.00 | 19.4 | 20.0 |
| PCB-1260 Peak 2 | Ave | 101136786 | 118931893 | | 1.18 | 1.00 | 17.6 | 20.0 |
| PCB-1260 Peak 3 | Ave | 142598933 | 182628853 | | 1.28 | 1.00 | 28.1* | 20.0 |
| PCB-1260 Peak 4 | Ave | 201542756 | 218099239 | | 1.08 | 1.00 | 8.2 | 20.0 |
| PCB-1260 Peak 5 | Ave | 148353767 | 157187932 | | 1.06 | 1.00 | 6.0 | 20.0 |

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICV 240-174472/39 Calibration Date: 04/01/2015 03:15

Instrument ID: A2HP4 Calib Start Date: 04/01/2015 00:22

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 04/01/2015 01:41

Lab File ID: P4000039.D

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| PCB-1016 Peak 1 | 2.21 | 2.11 | 2.31 |
| PCB-1016 Peak 2 | 2.61 | 2.51 | 2.71 |
| PCB-1016 Peak 3 | 3.07 | 2.97 | 3.17 |
| PCB-1016 Peak 4 | 3.21 | 3.11 | 3.31 |
| PCB-1016 Peak 5 | 3.70 | 3.60 | 3.80 |
| PCB-1260 Peak 1 | 5.04 | 4.94 | 5.14 |
| PCB-1260 Peak 2 | 5.27 | 5.17 | 5.37 |
| PCB-1260 Peak 3 | 5.64 | 5.54 | 5.74 |
| PCB-1260 Peak 4 | 6.33 | 6.23 | 6.43 |
| PCB-1260 Peak 5 | 6.72 | 6.62 | 6.82 |

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175923/3 Calibration Date: 04/10/2015 11:01

Instrument ID: A2HP4 Calib Start Date: 04/01/2015 00:22

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 04/01/2015 01:41

Lab File ID: P4000003.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| PCB-1016 Peak 1 | Ave | 32854886 | 32770980 | | 0.499 | 0.500 | -0.3 | 20.0 |
| PCB-1016 Peak 2 | Ave | 62794175 | 63910250 | | 0.509 | 0.500 | 1.8 | 20.0 |
| PCB-1016 Peak 3 | Ave | 135729095 | 145899314 | | 0.537 | 0.500 | 7.5 | 20.0 |
| PCB-1016 Peak 4 | Ave | 57484150 | 59477782 | | 0.517 | 0.500 | 3.5 | 20.0 |
| PCB-1016 Peak 5 | Ave | 45877605 | 47615606 | | 0.519 | 0.500 | 3.8 | 20.0 |
| PCB-1260 Peak 1 | Ave | 86975768 | 94482754 | | 0.543 | 0.500 | 8.6 | 20.0 |
| PCB-1260 Peak 2 | Ave | 101136786 | 114170856 | | 0.564 | 0.500 | 12.9 | 20.0 |
| PCB-1260 Peak 3 | Ave | 142598933 | 161417882 | | 0.566 | 0.500 | 13.2 | 20.0 |
| PCB-1260 Peak 4 | Ave | 201542756 | 231291916 | | 0.574 | 0.500 | 14.8 | 20.0 |
| PCB-1260 Peak 5 | Ave | 148353767 | 166628826 | | 0.562 | 0.500 | 12.3 | 20.0 |
| Tetrachloro-m-xylene | Ave | 1870045867 | 1981292440 | | 0.0265 | 0.0250 | 5.9 | 20.0 |
| DCB Decachlorobiphenyl | Ave | 1817271620 | 1955294920 | | 0.0269 | 0.0250 | 7.6 | 20.0 |

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175923/3 Calibration Date: 04/10/2015 11:01

Instrument ID: A2HP4 Calib Start Date: 04/01/2015 00:22

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 04/01/2015 01:41

Lab File ID: P4000003.D

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| PCB-1016 Peak 1 | 2.22 | 2.12 | 2.32 |
| PCB-1016 Peak 2 | 2.62 | 2.52 | 2.72 |
| PCB-1016 Peak 3 | 3.08 | 2.98 | 3.18 |
| PCB-1016 Peak 4 | 3.22 | 3.12 | 3.32 |
| PCB-1016 Peak 5 | 3.71 | 3.61 | 3.81 |
| PCB-1260 Peak 1 | 5.05 | 4.95 | 5.15 |
| PCB-1260 Peak 2 | 5.28 | 5.18 | 5.38 |
| PCB-1260 Peak 3 | 5.65 | 5.55 | 5.75 |
| PCB-1260 Peak 4 | 6.34 | 6.24 | 6.44 |
| PCB-1260 Peak 5 | 6.72 | 6.62 | 6.82 |
| Tetrachloro-m-xylene | 1.75 | 1.65 | 1.85 |
| DCB Decachlorobiphenyl | 7.97 | 7.87 | 8.07 |

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175923/10  Calibration Date: 04/10/2015 12:50

Instrument ID: A2HP4  Calib Start Date: 04/01/2015 00:22

GC Column: CLP-2  ID: 0.53(mm)  Calib End Date: 04/01/2015 01:41

Lab File ID: P4000010.D  Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| PCB-1016 Peak 1 | Ave | 32854886 | 31655632 | | 0.482 | 0.500 | -3.7 | 20.0 |
| PCB-1016 Peak 2 | Ave | 62794175 | 62004530 | | 0.494 | 0.500 | -1.3 | 20.0 |
| PCB-1016 Peak 3 | Ave | 135729095 | 142672772 | | 0.526 | 0.500 | 5.1 | 20.0 |
| PCB-1016 Peak 4 | Ave | 57484150 | 58174590 | | 0.506 | 0.500 | 1.2 | 20.0 |
| PCB-1016 Peak 5 | Ave | 45877605 | 46874734 | | 0.511 | 0.500 | 2.2 | 20.0 |
| PCB-1260 Peak 1 | Ave | 86975768 | 93292178 | | 0.536 | 0.500 | 7.3 | 20.0 |
| PCB-1260 Peak 2 | Ave | 101136786 | 112339922 | | 0.555 | 0.500 | 11.1 | 20.0 |
| PCB-1260 Peak 3 | Ave | 142598933 | 159807088 | | 0.560 | 0.500 | 12.1 | 20.0 |
| PCB-1260 Peak 4 | Ave | 201542756 | 230224992 | | 0.571 | 0.500 | 14.2 | 20.0 |
| PCB-1260 Peak 5 | Ave | 148353767 | 163554994 | | 0.551 | 0.500 | 10.2 | 20.0 |
| Tetrachloro-m-xylene | Ave | 1870045867 | 1950748720 | | 0.0261 | 0.0250 | 4.3 | 20.0 |
| DCB Decachlorobiphenyl | Ave | 1817271620 | 1973230440 | | 0.0271 | 0.0250 | 8.6 | 20.0 |

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175923/10 Calibration Date: 04/10/2015 12:50

Instrument ID: A2HP4 Calib Start Date: 04/01/2015 00:22

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 04/01/2015 01:41

Lab File ID: P4000010.D

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| PCB-1016 Peak 1 | 2.22 | 2.12 | 2.32 |
| PCB-1016 Peak 2 | 2.62 | 2.52 | 2.72 |
| PCB-1016 Peak 3 | 3.08 | 2.98 | 3.18 |
| PCB-1016 Peak 4 | 3.22 | 3.12 | 3.32 |
| PCB-1016 Peak 5 | 3.71 | 3.61 | 3.81 |
| PCB-1260 Peak 1 | 5.05 | 4.95 | 5.15 |
| PCB-1260 Peak 2 | 5.28 | 5.18 | 5.38 |
| PCB-1260 Peak 3 | 5.65 | 5.55 | 5.75 |
| PCB-1260 Peak 4 | 6.34 | 6.24 | 6.44 |
| PCB-1260 Peak 5 | 6.72 | 6.62 | 6.82 |
| Tetrachloro-m-xylene | 1.75 | 1.65 | 1.85 |
| DCB Decachlorobiphenyl | 7.97 | 7.87 | 8.07 |

FORM VII
PCBS CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175923/25 Calibration Date: 04/10/2015 16:46

Instrument ID: A2HP4 Calib Start Date: 04/01/2015 00:22

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 04/01/2015 01:41

Lab File ID: P4000025.D Conc. Units: ng/uL

| ANALYTE | CURVE TYPE | AVE CF | CF | MIN CF | CALC AMOUNT | SPIKE AMOUNT | %D | MAX %D |
|---|---|---|---|---|---|---|---|---|
| PCB-1016 Peak 1 | Ave | 32854886 | 32538350 | | 0.495 | 0.500 | -1.0 | 20.0 |
| PCB-1016 Peak 2 | Ave | 62794175 | 63922576 | | 0.509 | 0.500 | 1.8 | 20.0 |
| PCB-1016 Peak 3 | Ave | 135729095 | 146889914 | | 0.541 | 0.500 | 8.2 | 20.0 |
| PCB-1016 Peak 4 | Ave | 57484150 | 59653310 | | 0.519 | 0.500 | 3.8 | 20.0 |
| PCB-1016 Peak 5 | Ave | 45877605 | 47552208 | | 0.518 | 0.500 | 3.7 | 20.0 |
| PCB-1260 Peak 1 | Ave | 86975768 | 95012988 | | 0.546 | 0.500 | 9.2 | 20.0 |
| PCB-1260 Peak 2 | Ave | 101136786 | 114820910 | | 0.568 | 0.500 | 13.5 | 20.0 |
| PCB-1260 Peak 3 | Ave | 142598933 | 163193226 | | 0.572 | 0.500 | 14.4 | 20.0 |
| PCB-1260 Peak 4 | Ave | 201542756 | 234538654 | | 0.582 | 0.500 | 16.4 | 20.0 |
| PCB-1260 Peak 5 | Ave | 148353767 | 169266862 | | 0.570 | 0.500 | 14.1 | 20.0 |
| Tetrachloro-m-xylene | Ave | 1870045867 | 2017634760 | | 0.0270 | 0.0250 | 7.9 | 20.0 |
| DCB Decachlorobiphenyl | Ave | 1817271620 | 2017487560 | | 0.0278 | 0.0250 | 11.0 | 20.0 |

FORM VII
PCBS CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: CCV 240-175923/25 Calibration Date: 04/10/2015 16:46

Instrument ID: A2HP4 Calib Start Date: 04/01/2015 00:22

GC Column: CLP-2 ID: 0.53(mm) Calib End Date: 04/01/2015 01:41

Lab File ID: P4000025.D

| Analyte | RT | RT WINDOW | |
|---|---|---|---|
| | | FROM | TO |
| PCB-1016 Peak 1 | 2.22 | 2.12 | 2.32 |
| PCB-1016 Peak 2 | 2.62 | 2.52 | 2.72 |
| PCB-1016 Peak 3 | 3.08 | 2.98 | 3.18 |
| PCB-1016 Peak 4 | 3.22 | 3.12 | 3.32 |
| PCB-1016 Peak 5 | 3.71 | 3.61 | 3.81 |
| PCB-1260 Peak 1 | 5.05 | 4.95 | 5.15 |
| PCB-1260 Peak 2 | 5.28 | 5.18 | 5.38 |
| PCB-1260 Peak 3 | 5.65 | 5.55 | 5.75 |
| PCB-1260 Peak 4 | 6.34 | 6.24 | 6.44 |
| PCB-1260 Peak 5 | 6.72 | 6.62 | 6.82 |
| Tetrachloro-m-xylene | 1.75 | 1.65 | 1.85 |
| DCB Decachlorobiphenyl | 7.97 | 7.87 | 8.07 |

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Client Sample ID:  Lab Sample ID: MB 240-175553/17-A

Matrix: Solid  Lab File ID: P4000008.D

Analysis Method: 8082A  Date Collected:

Extraction Method: 3540C  Date Extracted: 04/08/2015 09:49

Sample wt/vol: 30(g)  Date Analyzed: 04/10/2015 12:19

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 1(uL)  GC Column: CLP-2  ID: 0.53(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 175923  Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 12674-11-2 | Aroclor-1016 | 12 | U | 33 | 12 |
| 11104-28-2 | Aroclor-1221 | 16 | U | 33 | 16 |
| 11141-16-5 | Aroclor-1232 | 20 | U | 33 | 20 |
| 53469-21-9 | Aroclor-1242 | 11 | U | 33 | 11 |
| 12672-29-6 | Aroclor-1248 | 8.0 | U | 33 | 8.0 |
| 11097-69-1 | Aroclor-1254 | 14 | U | 33 | 14 |
| 11096-82-5 | Aroclor-1260 | 9.0 | U | 33 | 9.0 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 61 | | 29-151 |
| 2051-24-3 | DCB Decachlorobiphenyl | 95 | | 14-163 |

FORM I
PCBS ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Client Sample ID:  Lab Sample ID: LCS 240-175553/18-A

Matrix: Solid  Lab File ID: P4000009.D

Analysis Method: 8082A  Date Collected:

Extraction Method: 3540C  Date Extracted: 04/08/2015 09:49

Sample wt/vol: 30(g)  Date Analyzed: 04/10/2015 12:35

Con. Extract Vol.: 10(mL)  Dilution Factor: 1

Injection Volume: 1(uL)  GC Column: CLP-2  ID: 0.53(mm)

% Moisture:  GPC Cleanup:(Y/N) N

Analysis Batch No.: 175923  Units: ug/Kg

| CAS NO. | COMPOUND NAME | RESULT | Q | RL | MDL |
|---|---|---|---|---|---|
| 12674-11-2 | Aroclor-1016 | 252 | | 33 | 12 |
| 11096-82-5 | Aroclor-1260 | 311 | | 33 | 9.0 |

| CAS NO. | SURROGATE | %REC | Q | LIMITS |
|---|---|---|---|---|
| 877-09-8 | Tetrachloro-m-xylene | 64 | | 29-151 |
| 2051-24-3 | DCB Decachlorobiphenyl | 101 | | 14-163 |

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A2HP4 Start Date: 03/31/2015 18:06

Analysis Batch Number: 174472 End Date: 04/01/2015 07:24

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| STD005 240-174472/4 IC | | 03/31/2015 18:06 | 1 | | CLP-1 0.53(mm) |
| STD005 240-174472/4 IC | | 03/31/2015 18:06 | 1 | P4000004.D | CLP-2 0.53(mm) |
| STD01 240-174472/5 IC | | 03/31/2015 18:22 | 1 | | CLP-1 0.53(mm) |
| STD01 240-174472/5 IC | | 03/31/2015 18:22 | 1 | P4000005.D | CLP-2 0.53(mm) |
| STD02 240-174472/6 IC | | 03/31/2015 18:38 | 1 | | CLP-1 0.53(mm) |
| STD02 240-174472/6 IC | | 03/31/2015 18:38 | 1 | P4000006.D | CLP-2 0.53(mm) |
| STD05 240-174472/7 IC | | 03/31/2015 18:53 | 1 | | CLP-1 0.53(mm) |
| STD05 240-174472/7 IC | | 03/31/2015 18:53 | 1 | P4000007.D | CLP-2 0.53(mm) |
| STD1 240-174472/8 IC | | 03/31/2015 19:09 | 1 | | CLP-1 0.53(mm) |
| STD1 240-174472/8 IC | | 03/31/2015 19:09 | 1 | P4000008.D | CLP-2 0.53(mm) |
| STD2 240-174472/9 IC | | 03/31/2015 19:25 | 1 | | CLP-1 0.53(mm) |
| STD2 240-174472/9 IC | | 03/31/2015 19:25 | 1 | P4000009.D | CLP-2 0.53(mm) |
| STD005 240-174472/10 IC | | 03/31/2015 19:40 | 1 | | CLP-1 0.53(mm) |
| STD005 240-174472/10 IC | | 03/31/2015 19:40 | 1 | P4000010.D | CLP-2 0.53(mm) |
| STD01 240-174472/11 IC | | 03/31/2015 19:56 | 1 | | CLP-1 0.53(mm) |
| STD01 240-174472/11 IC | | 03/31/2015 19:56 | 1 | P4000011.D | CLP-2 0.53(mm) |
| STD02 240-174472/12 IC | | 03/31/2015 20:12 | 1 | | CLP-1 0.53(mm) |
| STD02 240-174472/12 IC | | 03/31/2015 20:12 | 1 | P4000012.D | CLP-2 0.53(mm) |
| STD05 240-174472/13 IC | | 03/31/2015 20:27 | 1 | | CLP-1 0.53(mm) |
| STD05 240-174472/13 IC | | 03/31/2015 20:27 | 1 | P4000013.D | CLP-2 0.53(mm) |
| STD1 240-174472/14 IC | | 03/31/2015 20:43 | 1 | | CLP-1 0.53(mm) |
| STD1 240-174472/14 IC | | 03/31/2015 20:43 | 1 | P4000014.D | CLP-2 0.53(mm) |
| STD2 240-174472/15 IC | | 03/31/2015 20:59 | 1 | | CLP-1 0.53(mm) |
| STD2 240-174472/15 IC | | 03/31/2015 20:59 | 1 | P4000015.D | CLP-2 0.53(mm) |
| STD005 240-174472/16 IC | | 03/31/2015 21:14 | 1 | | CLP-1 0.53(mm) |
| STD005 240-174472/16 IC | | 03/31/2015 21:14 | 1 | P4000016.D | CLP-2 0.53(mm) |
| STD01 240-174472/17 IC | | 03/31/2015 21:30 | 1 | | CLP-1 0.53(mm) |
| STD01 240-174472/17 IC | | 03/31/2015 21:30 | 1 | P4000017.D | CLP-2 0.53(mm) |
| STD02 240-174472/18 IC | | 03/31/2015 21:46 | 1 | | CLP-1 0.53(mm) |
| STD02 240-174472/18 IC | | 03/31/2015 21:46 | 1 | P4000018.D | CLP-2 0.53(mm) |
| STD05 240-174472/19 IC | | 03/31/2015 22:01 | 1 | | CLP-1 0.53(mm) |
| STD05 240-174472/19 IC | | 03/31/2015 22:01 | 1 | P4000019.D | CLP-2 0.53(mm) |
| STD1 240-174472/20 IC | | 03/31/2015 22:17 | 1 | | CLP-1 0.53(mm) |

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A2HP4 Start Date: 03/31/2015 18:06

Analysis Batch Number: 174472 End Date: 04/01/2015 07:24

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| STD1 240-174472/20 IC | | 03/31/2015 22:17 | 1 | P4000020.D | CLP-2 0.53(mm) |
| STD2 240-174472/21 IC | | 03/31/2015 22:33 | 1 | | CLP-1 0.53(mm) |
| STD2 240-174472/21 IC | | 03/31/2015 22:33 | 1 | P4000021.D | CLP-2 0.53(mm) |
| STD005 240-174472/22 IC | | 03/31/2015 22:48 | 1 | | CLP-1 0.53(mm) |
| STD005 240-174472/22 IC | | 03/31/2015 22:48 | 1 | P4000022.D | CLP-2 0.53(mm) |
| STD01 240-174472/23 IC | | 03/31/2015 23:04 | 1 | | CLP-1 0.53(mm) |
| STD01 240-174472/23 IC | | 03/31/2015 23:04 | 1 | P4000023.D | CLP-2 0.53(mm) |
| STD02 240-174472/24 IC | | 03/31/2015 23:20 | 1 | | CLP-1 0.53(mm) |
| STD02 240-174472/24 IC | | 03/31/2015 23:20 | 1 | P4000024.D | CLP-2 0.53(mm) |
| STD05 240-174472/25 IC | | 03/31/2015 23:35 | 1 | | CLP-1 0.53(mm) |
| STD05 240-174472/25 IC | | 03/31/2015 23:35 | 1 | P4000025.D | CLP-2 0.53(mm) |
| STD1 240-174472/26 IC | | 03/31/2015 23:51 | 1 | | CLP-1 0.53(mm) |
| STD1 240-174472/26 IC | | 03/31/2015 23:51 | 1 | P4000026.D | CLP-2 0.53(mm) |
| STD2 240-174472/27 IC | | 04/01/2015 00:07 | 1 | | CLP-1 0.53(mm) |
| STD2 240-174472/27 IC | | 04/01/2015 00:07 | 1 | P4000027.D | CLP-2 0.53(mm) |
| STD005 240-174472/28 IC | | 04/01/2015 00:22 | 1 | | CLP-1 0.53(mm) |
| STD005 240-174472/28 IC | | 04/01/2015 00:22 | 1 | P4000028.D | CLP-2 0.53(mm) |
| STD01 240-174472/29 IC | | 04/01/2015 00:38 | 1 | | CLP-1 0.53(mm) |
| STD01 240-174472/29 IC | | 04/01/2015 00:38 | 1 | P4000029.D | CLP-2 0.53(mm) |
| STD02 240-174472/30 IC | | 04/01/2015 00:54 | 1 | | CLP-1 0.53(mm) |
| STD02 240-174472/30 IC | | 04/01/2015 00:54 | 1 | P4000030.D | CLP-2 0.53(mm) |
| STD05 240-174472/31 ICRT | | 04/01/2015 01:09 | 1 | | CLP-1 0.53(mm) |
| STD05 240-174472/31 ICRT | | 04/01/2015 01:09 | 1 | P4000031.D | CLP-2 0.53(mm) |
| STD1 240-174472/32 IC | | 04/01/2015 01:25 | 1 | | CLP-1 0.53(mm) |
| STD1 240-174472/32 IC | | 04/01/2015 01:25 | 1 | P4000032.D | CLP-2 0.53(mm) |
| STD2 240-174472/33 IC | | 04/01/2015 01:41 | 1 | | CLP-1 0.53(mm) |
| STD2 240-174472/33 IC | | 04/01/2015 01:41 | 1 | P4000033.D | CLP-2 0.53(mm) |
| ICV 240-174472/34 | | 04/01/2015 01:56 | 1 | | CLP-1 0.53(mm) |
| ICV 240-174472/34 | | 04/01/2015 01:56 | 1 | | CLP-2 0.53(mm) |
| ICV 240-174472/35 | | 04/01/2015 02:12 | 1 | | CLP-1 0.53(mm) |
| ICV 240-174472/35 | | 04/01/2015 02:12 | 1 | | CLP-2 0.53(mm) |
| ICV 240-174472/37 | | 04/01/2015 02:43 | 1 | | CLP-1 0.53(mm) |
| ICV 240-174472/37 | | 04/01/2015 02:43 | 1 | | CLP-2 0.53(mm) |

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A2HP4 Start Date: 03/31/2015 18:06

Analysis Batch Number: 174472 End Date: 04/01/2015 07:24

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| ICV 240-174472/38 | | 04/01/2015 02:59 | 1 | | CLP-1 0.53(mm) |
| ICV 240-174472/38 | | 04/01/2015 02:59 | 1 | | CLP-2 0.53(mm) |
| ICV 240-174472/39 | | 04/01/2015 03:15 | 1 | | CLP-1 0.53(mm) |
| ICV 240-174472/39 | | 04/01/2015 03:15 | 1 | P4000039.D | CLP-2 0.53(mm) |
| ICV 240-174472/42 | | 04/01/2015 06:53 | 1 | | CLP-1 0.53(mm) |
| ICV 240-174472/42 | | 04/01/2015 06:53 | 1 | | CLP-2 0.53(mm) |
| ICV 240-174472/43 | | 04/01/2015 07:08 | 1 | | CLP-1 0.53(mm) |
| ICV 240-174472/43 | | 04/01/2015 07:08 | 1 | | CLP-2 0.53(mm) |
| ICV 240-174472/44 | | 04/01/2015 07:24 | 1 | | CLP-1 0.53(mm) |
| ICV 240-174472/44 | | 04/01/2015 07:24 | 1 | | CLP-2 0.53(mm) |

PCBS ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: A2HP4 Start Date: 04/10/2015 11:01

Analysis Batch Number: 175923 End Date: 04/10/2015 16:46

| LAB SAMPLE ID | CLIENT SAMPLE ID | DATE ANALYZED | DILUTION FACTOR | LAB FILE ID | COLUMN ID |
|---|---|---|---|---|---|
| CCV 240-175923/3 CCVRT | | 04/10/2015 11:01 | 1 | | CLP-1 0.53(mm) |
| CCV 240-175923/3 CCVRT | | 04/10/2015 11:01 | 1 | P4000003.D | CLP-2 0.53(mm) |
| ZZZZZ | | 04/10/2015 12:19 | 1 | | CLP-1 0.53(mm) |
| MB 240-175553/17-A | | 04/10/2015 12:19 | 1 | P4000008.D | CLP-2 0.53(mm) |
| ZZZZZ | | 04/10/2015 12:35 | 1 | | CLP-1 0.53(mm) |
| LCS 240-175553/18-A | | 04/10/2015 12:35 | 1 | P4000009.D | CLP-2 0.53(mm) |
| CCV 240-175923/10 | | 04/10/2015 12:50 | 1 | | CLP-1 0.53(mm) |
| CCV 240-175923/10 | | 04/10/2015 12:50 | 1 | P4000010.D | CLP-2 0.53(mm) |
| ZZZZZ | | 04/10/2015 15:27 | 1 | | CLP-1 0.53(mm) |
| 240-49010-1 | FILL-001 | 04/10/2015 15:27 | 1 | P4000020.D | CLP-2 0.53(mm) |
| CCV 240-175923/25 | | 04/10/2015 16:46 | 1 | | CLP-1 0.53(mm) |
| CCV 240-175923/25 | | 04/10/2015 16:46 | 1 | P4000025.D | CLP-2 0.53(mm) |

PCBS BATCH WORKSHEET

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Batch Number: 175553  Batch Start Date: 04/08/15 12:45  Batch Analyst: Earle, Steve

Batch Method: 3540C  Batch End Date: 04/09/15 04:45

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | EX10PPMSPK 00015 | EX2/.2SURRW 00053 | | |
|---|---|---|---|---|---|---|---|---|---|
| 240-49010-E-1 | FILL-001 | 3540C, 8082A | T | 30.00 g | 10 mL | | 1 mL | | |
| MB 240-175553/17 | | 3540C, 8082A | | 30 g | 10 mL | | 1 mL | | |
| LCS 240-175553/18 | | 3540C, 8082A | | 30 g | 10 mL | 1 mL | 1 mL | | |

| Batch Notes | |
|---|---|
| Acid used for Clean Up Reagent | 1826627 |
| Balance ID | b037 |
| Na2SO4 Lot Number | 1942694 |
| Prep Solvent Lot # | 1928228 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-49010-1

SDG No.:

Project: MRC-Middle River

| Client Sample ID | Lab Sample ID |
|---|---|
| FILL-001 | 240-49010-1 |

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FILL-001 Lab Sample ID: 240-49010-1

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG ID.:

Matrix: Solid Date Sampled: 04/06/2015 15:00

Reporting Basis: DRY Date Received: 04/07/2015 09:15

% Solids: 92.6

| CAS No. | Analyte | Result | RL | MDL | Units | C | Q | DIL | Method |
|---|---|---|---|---|---|---|---|---|---|
| 7440-22-4 | Silver | 0.056 | 0.89 | 0.056 | mg/Kg | U | | 1 | 6010C |
| 7440-38-2 | Arsenic | 0.40 | 1.3 | 0.37 | mg/Kg | J | | 1 | 6010C |
| 7440-39-3 | Barium | 2.6 | 18 | 0.37 | mg/Kg | J | | 1 | 6010C |
| 7440-41-7 | Beryllium | 0.023 | 0.45 | 0.023 | mg/Kg | U | | 1 | 6010C |
| 7440-43-9 | Cadmium | 0.019 | 0.45 | 0.019 | mg/Kg | U | | 1 | 6010C |
| 7440-48-4 | Cobalt | 0.054 | 0.89 | 0.042 | mg/Kg | J | | 1 | 6010C |
| 7440-47-3 | Chromium | 11 | 0.89 | 0.067 | mg/Kg | | | 1 | 6010C |
| 7440-50-8 | Copper | 1.1 | 2.2 | 0.21 | mg/Kg | J | | 1 | 6010C |
| 7439-98-7 | Molybdenum | 0.13 | 3.6 | 0.053 | mg/Kg | J | | 1 | 6010C |
| 7440-02-0 | Nickel | 0.21 | 3.6 | 0.071 | mg/Kg | J | | 1 | 6010C |
| 7439-92-1 | Lead | 0.39 | 0.89 | 0.020 | mg/Kg | J | | 1 | 6010C |
| 7782-49-2 | Selenium | 0.30 | 1.8 | 0.30 | mg/Kg | U | | 1 | 6010C |
| 7440-62-2 | Vanadium | 21 | 0.89 | 0.18 | mg/Kg | | | 1 | 6010C |
| 7440-66-6 | Zinc | 1.3 | 4.5 | 0.50 | mg/Kg | J | | 1 | 6010C |
| 7440-36-0 | Antimony | 0.43 | 1.8 | 0.43 | mg/Kg | U | | 1 | 6010C |
| 7440-28-0 | Thallium | 0.12 | 1.8 | 0.12 | mg/Kg | U | | 1 | 6010C |
| 7439-97-6 | Mercury | 0.015 | 0.11 | 0.015 | mg/Kg | U | | 1 | 7471A |

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

ICV Source: MT6500ICV_00025 Concentration Units: ug/L

CCV Source: MTICPCCV_00045

| Analyte | ICV 240-175886/4 04/09/2015 08:43 | | | | CCV 240-175886/18 04/09/2015 09:42 | | | | CCV 240-175886/30 04/09/2015 10:32 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Found | C | True | %R | Found | C | True | %R | Found | C | True | %R |
| **Antimony** | 389 | | 375 | 104 | 529 | | 500 | 106 | 523 | | 500 | 105 |
| **Arsenic** | 391 | | 375 | 104 | 521 | | 500 | 104 | 521 | | 500 | 104 |
| **Barium** | 1530 | | 1500 | 102 | 2040 | | 2000 | 102 | 2050 | | 2000 | 103 |
| **Beryllium** | 1530 | | 1500 | 102 | 1980 | | 2000 | 99 | 2010 | | 2000 | 100 |
| **Cadmium** | 393 | | 375 | 105 | 527 | | 500 | 105 | 526 | | 500 | 105 |
| **Chromium** | 1500 | | 1500 | 100 | 1960 | | 2000 | 98 | 1980 | | 2000 | 99 |
| **Cobalt** | 1510 | | 1500 | 101 | 2020 | | 2000 | 101 | 2030 | | 2000 | 102 |
| **Lead** | 381 | | 375 | 101 | 494 | | 500 | 99 | 493 | | 500 | 99 |
| **Molybdenum** | 1530 | | 1500 | 102 | 2050 | | 2000 | 103 | 2060 | | 2000 | 103 |
| **Nickel** | 1550 | | 1500 | 103 | 2040 | | 2000 | 102 | 2050 | | 2000 | 102 |
| **Selenium** | 393 | | 375 | 105 | 515 | | 500 | 103 | 514 | | 500 | 103 |
| **Silver** | 758 | | 750 | 101 | 979 | | 1000 | 98 | 988 | | 1000 | 99 |
| **Thallium** | 767 | | 750 | 102 | 1010 | | 1000 | 101 | 1010 | | 1000 | 101 |
| **Vanadium** | 1570 | | 1500 | 105 | 2050 | | 2000 | 103 | 2070 | | 2000 | 103 |
| **Zinc** | 1560 | | 1500 | 104 | 2040 | | 2000 | 102 | 2060 | | 2000 | 103 |
| *Copper* | 1510 | | 1500 | 100 | 1930 | | 2000 | 97 | 1950 | | 2000 | 98 |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

ICV Source: MT6500ICV_00025 Concentration Units: ug/L

CCV Source: MTICPCCV_00045

| Analyte | ICV 240-175933/4 04/10/2015 06:39 | | | | CCV 240-175933/46 04/10/2015 09:32 | | | | CCV 240-175933/58 04/10/2015 10:21 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Found | C | True | %R | Found | C | True | %R | Found | C | True | %R |
| **Copper** | 1520 | | 1500 | 102 | 2060 | | 2000 | 103 | 2130 | | 2000 | 106 |
| *Antimony* | 385 | | 375 | 103 | 498 | | 500 | 100 | 515 | | 500 | 103 |
| *Arsenic* | 382 | | 375 | 102 | 503 | | 500 | 101 | 512 | | 500 | 102 |
| *Barium* | 1500 | | 1500 | 100 | 1970 | | 2000 | 99 | 2030 | | 2000 | 102 |
| *Beryllium* | 1520 | | 1500 | 102 | 1980 | | 2000 | 99 | 2000 | | 2000 | 100 |
| *Cadmium* | 386 | | 375 | 103 | 503 | | 500 | 101 | 517 | | 500 | 103 |
| *Chromium* | 1500 | | 1500 | 100 | 1990 | | 2000 | 100 | 2040 | | 2000 | 102 |
| *Cobalt* | 1490 | | 1500 | 99 | 1970 | | 2000 | 98 | 1990 | | 2000 | 100 |
| *Lead* | 385 | | 375 | 103 | 497 | | 500 | 99 | 503 | | 500 | 101 |
| *Molybdenum* | 1530 | | 1500 | 102 | 2030 | | 2000 | 101 | 2050 | | 2000 | 103 |
| *Nickel* | 1520 | | 1500 | 101 | 1960 | | 2000 | 98 | 1990 | | 2000 | 99 |
| *Selenium* | 393 | | 375 | 105 | 509 | | 500 | 102 | 510 | | 500 | 102 |
| *Silver* | 763 | | 750 | 102 | 1030 | | 1000 | 103 | 1060 | | 1000 | 106 |
| *Thallium* | 764 | | 750 | 102 | 1010 | | 1000 | 101 | 1020 | | 1000 | 102 |
| *Vanadium* | 1560 | | 1500 | 104 | 1990 | | 2000 | 100 | 2060 | | 2000 | 103 |
| *Zinc* | 1530 | | 1500 | 102 | 1960 | | 2000 | 98 | 1980 | | 2000 | 99 |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

ICV Source: MTHgStd_00011 Concentration Units: ug/L

CCV Source: MTHGCALW_00875

| Analyte | ICV 240-175562/7-A 04/09/2015 08:35 | | | | CCV 240-175562/11-A 04/09/2015 09:42 | | | | CCV 240-175562/11-A 04/09/2015 10:05 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Found | C | True | %R | Found | C | True | %R | Found | C | True | %R |
| **Mercury** | 5.15 | | 5.00 | 103 | 4.95 | | 5.00 | 99 | 5.09 | | 5.00 | 102 |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

ICV Source: MTHgStd_00011  Concentration Units: ug/L

CCV Source: MTHGCALW_00875

| Analyte | CCV 240-175562/11-A 04/09/2015 10:29 | | | | CCV 240-175562/11-A 04/09/2015 10:52 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Found | C | True | %R | Found | C | True | %R | Found | C | True | %R |
| **Mercury** | 5.13 | | 5.00 | 103 | 5.13 | | 5.00 | 103 | | | | |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Method: 6010C Instrument ID: I12

Lab Sample ID: CRI 240-175886/20 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00026

| Analyte | CRQL Check Standard | | | | |
|---|---|---|---|---|---|
| | True | Found | Qualifiers | %R(1) | Limits |
| Silver | 10.0 | 10.3 | | 103 | 70-130 |
| Arsenic | 15.0 | 14.8 | J | 99 | 70-130 |
| Barium | 200 | 206 | | 103 | 70-130 |
| Beryllium | 5.00 | 5.02 | | 100 | 70-130 |
| Cadmium | 5.00 | 5.29 | | 106 | 70-130 |
| Cobalt | 10.0 | 9.47 | J | 95 | 70-130 |
| Chromium | 10.0 | 10.2 | | 102 | 70-130 |
| Copper | 20.0 | 8.79 | J ^ | 44 | 70-130 |
| Molybdenum | 40.0 | 41.2 | | 103 | 70-130 |
| Nickel | 40.0 | 39.5 | J | 99 | 70-130 |
| Lead | 10.0 | 9.21 | J | 92 | 70-130 |
| Selenium | 20.0 | 19.1 | J | 96 | 70-130 |
| Vanadium | 10.0 | 12.3 | | 123 | 70-130 |
| Zinc | 50.0 | 54.8 | | 110 | 70-130 |
| Antimony | 20.0 | 22.6 | | 113 | 70-130 |
| Thallium | 20.0 | 21.8 | | 109 | 70-130 |

Lab Sample ID: CRI 240-175886/45 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00026

| Analyte | CRQL Check Standard | | | | |
|---|---|---|---|---|---|
| | True | Found | Qualifiers | %R(1) | Limits |
| Silver | 10.0 | 10.2 | | 102 | 70-130 |
| Arsenic | 15.0 | 16.6 | | 110 | 70-130 |
| Barium | 200 | 203 | | 101 | 70-130 |
| Beryllium | 5.00 | 4.93 | J | 99 | 70-130 |
| Cadmium | 5.00 | 5.19 | | 104 | 70-130 |
| Cobalt | 10.0 | 9.56 | J | 96 | 70-130 |
| Chromium | 10.0 | 10.1 | | 101 | 70-130 |
| Copper | 20.0 | 18.2 | J | 91 | 70-130 |
| Molybdenum | 40.0 | 41.0 | | 102 | 70-130 |
| Nickel | 40.0 | 39.5 | J | 99 | 70-130 |
| Lead | 10.0 | 8.62 | J | 86 | 70-130 |
| Selenium | 20.0 | 19.8 | J | 99 | 70-130 |
| Vanadium | 10.0 | 9.10 | J | 91 | 70-130 |
| Zinc | 50.0 | 54.1 | | 108 | 70-130 |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Method: 6010C Instrument ID: I12

Lab Sample ID: CRI 240-175886/45 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00026

| Analyte | CRQL Check Standard | | | | |
|---|---|---|---|---|---|
| | True | Found | Qualifiers | %R(1) | Limits |
| Antimony | 20.0 | 19.8 | J | 99 | 70-130 |
| Thallium | 20.0 | 19.8 | J | 99 | 70-130 |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-175933/52 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00026

| Analyte | CRQL Check Standard | | | | |
|---|---|---|---|---|---|
| | True | Found | Qualifiers | %R(1) | Limits |
| Silver | 10.0 | 10.1 | | 101 | 70-130 |
| Arsenic | 15.0 | 13.2 | J | 88 | 70-130 |
| Barium | 200 | 201 | | 100 | 70-130 |
| Beryllium | 5.00 | 4.91 | J | 98 | 70-130 |
| Cadmium | 5.00 | 4.96 | J | 99 | 70-130 |
| Cobalt | 10.0 | 9.96 | J | 100 | 70-130 |
| Chromium | 10.0 | 10.5 | | 105 | 70-130 |
| Copper | 20.0 | 23.5 | J | 117 | 70-130 |
| Molybdenum | 40.0 | 40.7 | | 102 | 70-130 |
| Nickel | 40.0 | 40.7 | | 102 | 70-130 |
| Lead | 10.0 | 11.9 | | 119 | 70-130 |
| Selenium | 20.0 | 21.8 | | 109 | 70-130 |
| Vanadium | 10.0 | 10.4 | | 104 | 70-130 |
| Zinc | 50.0 | 57.6 | | 115 | 70-130 |
| Antimony | 20.0 | 19.5 | J | 98 | 70-130 |
| Thallium | 20.0 | 20.1 | | 100 | 70-130 |

Lab Sample ID: CRI 240-175933/56 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00026

| Analyte | CRQL Check Standard | | | | |
|---|---|---|---|---|---|
| | True | Found | Qualifiers | %R(1) | Limits |
| Silver | 10.0 | 9.65 | J | 96 | 70-130 |
| Arsenic | 15.0 | 11.1 | J | 74 | 70-130 |
| Barium | 200 | 200 | | 100 | 70-130 |
| Beryllium | 5.00 | 4.79 | J | 96 | 70-130 |
| Cadmium | 5.00 | 5.09 | | 102 | 70-130 |
| Cobalt | 10.0 | 10.2 | | 102 | 70-130 |
| Chromium | 10.0 | 11.0 | | 110 | 70-130 |
| Copper | 20.0 | 23.2 | J | 116 | 70-130 |
| Molybdenum | 40.0 | 40.4 | | 101 | 70-130 |
| Nickel | 40.0 | 41.2 | | 103 | 70-130 |
| Lead | 10.0 | 12.3 | | 123 | 70-130 |
| Selenium | 20.0 | 21.3 | | 106 | 70-130 |
| Vanadium | 10.0 | 7.94 | J | 79 | 70-130 |
| Zinc | 50.0 | 58.0 | | 116 | 70-130 |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Method: 6010C Instrument ID: I9

Lab Sample ID: CRI 240-175933/56 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00026

| Analyte | CRQL Check Standard | | | | |
|---|---|---|---|---|---|
| | True | Found | Qualifiers | %R(1) | Limits |
| Antimony | 20.0 | 19.9 | J | 100 | 70-130 |
| Thallium | 20.0 | 21.0 | | 105 | 70-130 |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Method: 7471A Instrument ID: H4

Lab Sample ID: CRA 240-175562/9-A Concentration Units: ug/L

CRQL Check Standard Source: MTHGCALW_00875

| Analyte | CRQL Check Standard | | | | |
|---|---|---|---|---|---|
| | True | Found | Qualifiers | %R(1) | Limits |
| Mercury | 0.200 | 0.191 | J | 96 | 50-150 |

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Concentration Units: ug/L

| Analyte | RL | ICB 240-175886/5 04/09/2015 08:47 | | CCB 240-175886/19 04/09/2015 09:46 | | CCB 240-175886/31 04/09/2015 10:36 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Found | C | Found | C | Found | C | Found | C |
| **Antimony** | 20 | 2.4 | U | 2.4 | U | 2.4 | U | | |
| **Arsenic** | 15 | 2.9 | U | 2.9 | U | 2.9 | U | | |
| **Barium** | 200 | 1.0 | U | 1.0 | U | 1.0 | U | | |
| **Beryllium** | 5.0 | 0.309 | J | 0.288 | J | 0.398 | J | | |
| **Cadmium** | 5.0 | 0.14 | U | 0.14 | U | 0.205 | J | | |
| **Chromium** | 10 | 0.55 | U | 0.55 | U | 0.55 | U | | |
| **Cobalt** | 10 | 0.56 | U | 0.56 | U | 0.56 | U | | |
| **Lead** | 10 | 1.9 | U | 1.9 | U | 1.9 | U | | |
| **Molybdenum** | 40 | 1.33 | J | 1.70 | J | 1.95 | J | | |
| **Nickel** | 40 | 0.76 | U | 0.76 | U | 0.76 | U | | |
| **Selenium** | 20 | 4.0 | U | 4.0 | U | 4.0 | U | | |
| **Silver** | 10 | 0.92 | U | 0.92 | U | 0.92 | U | | |
| **Thallium** | 20 | 1.7 | U | 1.7 | U | 1.7 | U | | |
| **Vanadium** | 10 | 2.4 | U | 2.4 | U | 2.4 | U | | |
| **Zinc** | 50 | 9.6 | U | 9.6 | U | 9.6 | U | | |
| *Copper* | 25 | 1.9 | U | 1.9 | U | 1.9 | U | | |

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Concentration Units: ug/L

| Analyte | RL | ICB 240-175933/5 04/10/2015 06:43 | | CCB 240-175933/47 04/10/2015 09:36 | | CCB 240-175933/59 04/10/2015 10:25 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Found | C | Found | C | Found | C | Found | C |
| **Copper** | 25 | 1.9 | U | 1.9 | U | 1.9 | U | | |
| *Antimony* | 20 | 2.4 | U | 2.4 | U | 2.4 | U | | |
| *Arsenic* | 15 | 2.9 | U | 2.9 | U | 2.9 | U | | |
| *Barium* | 200 | 1.0 | U | 1.18 | J | 1.0 | U | | |
| *Beryllium* | 5.0 | 0.13 | U | 0.13 | U | 0.13 | U | | |
| *Cadmium* | 5.0 | 0.14 | U | 0.14 | U | 0.14 | U | | |
| *Chromium* | 10 | 0.694 | J | 0.55 | U | 0.55 | U | | |
| *Cobalt* | 10 | 0.685 | J | 0.56 | U | 0.56 | U | | |
| *Lead* | 10 | 2.10 | J | 1.9 | U | 1.90 | J | | |
| *Molybdenum* | 40 | 0.550 | J | 0.904 | J | 0.842 | J | | |
| *Nickel* | 40 | 0.942 | J | 0.76 | U | 0.76 | U | | |
| *Selenium* | 20 | 4.0 | U | 4.0 | U | 4.0 | U | | |
| *Silver* | 10 | 0.92 | U | 0.92 | U | 0.92 | U | | |
| *Thallium* | 20 | 1.7 | U | 1.7 | U | 1.7 | U | | |
| *Vanadium* | 10 | 2.4 | U | 2.4 | U | 2.4 | U | | |
| *Zinc* | 50 | 9.6 | U | 9.6 | U | 9.6 | U | | |

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Concentration Units: ug/L

| Analyte | RL | ICB 240-175562/8-A 04/09/2015 08:37 | | CCB 240-175562/10-A 04/09/2015 09:44 | | CCB 240-175562/10-A 04/09/2015 10:07 | | CCB 240-175562/10-A 04/09/2015 10:31 | |
|---|---|---|---|---|---|---|---|---|---|
| | | Found | C | Found | C | Found | C | Found | C |
| **Mercury** | 0.60 | 0.090 | U | 0.090 | U | 0.090 | U | 0.090 | U |

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Concentration Units: ug/L

| Analyte | RL | CCB 240-175562/10-A 04/09/2015 10:54 | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Found | C | Found | C | Found | C | Found | C |
| **Mercury** | 0.60 | 0.090 | U | | | | | | |

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-175558/1-A

Instrument Code: I12 Batch No.: 175886

| CAS No. | Analyte | Concentration | C | Q | Method |
|---|---|---|---|---|---|
| 7440-22-4 | Silver | 0.063 | U | | 6010C |
| 7440-38-2 | Arsenic | 0.41 | U | | 6010C |
| 7440-39-3 | Barium | 0.41 | U | | 6010C |
| 7440-41-7 | Beryllium | 0.026 | U | | 6010C |
| 7440-43-9 | Cadmium | 0.021 | U | | 6010C |
| 7440-48-4 | Cobalt | 0.047 | U | | 6010C |
| 7440-47-3 | Chromium | 0.075 | U | | 6010C |
| 7439-98-7 | Molybdenum | 0.059 | U | | 6010C |
| 7440-02-0 | Nickel | 0.080 | U | | 6010C |
| 7439-92-1 | Lead | 0.022 | U | | 6010C |
| 7782-49-2 | Selenium | 0.34 | U | | 6010C |
| 7440-62-2 | Vanadium | 0.20 | U | | 6010C |
| 7440-66-6 | Zinc | 0.56 | U | | 6010C |
| 7440-36-0 | Antimony | 0.48 | U | | 6010C |
| 7440-28-0 | Thallium | 0.13 | U | | 6010C |

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-175558/1-A

Instrument Code: I9 Batch No.: 175933

| CAS No. | Analyte | Concentration | C | Q | Method |
|---|---|---|---|---|---|
| 7440-50-8 | Copper | 0.23 | U | | 6010C |

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 240-175585/1-A

Instrument Code: H4 Batch No.: 175776

| CAS No. | Analyte | Concentration | C | Q | Method |
|---|---|---|---|---|---|
| 7439-97-6 | Mercury | 0.014 | U | | 7471A |

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICSA 240-175886/8  Instrument ID: I12

Lab File ID: I12040915A.asc  ICS Source: MTTRICSAW_00025

Concentration Units: ug/L

| Analyte | True Solution A | Found Solution A | Percent Recovery |
|---|---|---|---|
| **Antimony** | | **-1.86** | |
| **Arsenic** | | **-1.61** | |
| **Barium** | | **0.279** | |
| **Beryllium** | | **0.144** | |
| **Cadmium** | | **0.655** | |
| **Chromium** | | **2.36** | |
| **Cobalt** | | **-5.40** | |
| **Lead** | | **2.04** | |
| **Molybdenum** | | **-1.67** | |
| **Nickel** | | **2.93** | |
| **Selenium** | | **2.64** | |
| **Silver** | | **-1.33** | |
| **Thallium** | | **-3.16** | |
| **Vanadium** | | **2.42** | |
| **Zinc** | | **1.85** | |
| *Aluminum* | *500000* | *536380* | *107* |
| *Boron* | | *5.29* | |
| *Calcium* | *500000* | *481150* | *96* |
| *Copper* | | *-1.64* | |
| *Iron* | *200000* | *197370* | *99* |
| *Lithium* | | *-0.801* | |
| *Magnesium* | *500000* | *514340* | *103* |
| *Manganese* | | *0.757* | |
| *Potassium* | | *-37.6* | |
| *Silicon* | | *-8.17* | |
| *Sodium* | | *50.3* | |
| *Strontium* | | *4.17* | |
| *Tin* | | *2.84* | |
| *Titanium* | | *-1.08* | |

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICSAB 240-175886/9  Instrument ID: I12

Lab File ID: I12040915A.asc  ICS Source: MTICPICSABW_00007

Concentration Units: ug/L

| Analyte | True Solution AB | Found Solution AB | Found Percent Recovery |
|---|---|---|---|
| **Antimony** | **1000** | **1068** | **107** |
| **Arsenic** | **1000** | **1047** | **105** |
| **Barium** | **500** | **523** | **105** |
| **Beryllium** | **500** | **486** | **97** |
| **Cadmium** | **1000** | **1083** | **108** |
| **Chromium** | **500** | **481** | **96** |
| **Cobalt** | **500** | **494** | **99** |
| **Lead** | **1000** | **917** | **92** |
| **Molybdenum** | **1000** | **979** | **98** |
| **Nickel** | **1000** | **1002** | **100** |
| **Selenium** | **1000** | **1024** | **102** |
| **Silver** | **1000** | **1067** | **107** |
| **Thallium** | **1000** | **965** | **97** |
| **Vanadium** | **500** | **510** | **102** |
| **Zinc** | **1000** | **999** | **100** |
| *Aluminum* | *500000* | *542040* | *108* |
| *Boron* | *500* | *514* | *103* |
| *Calcium* | *500000* | *485090* | *97* |
| *Copper* | *500* | *524* | *105* |
| *Iron* | *200000* | *198120* | *99* |
| *Lithium* | *500* | *562* | *112* |
| *Magnesium* | *500000* | *510460* | *102* |
| *Manganese* | *500* | *469* | *94* |
| *Potassium* | *10000* | *10812* | *108* |
| *Silicon* | *10000* | *10384* | *104* |
| *Sodium* | *10000* | *10661* | *107* |
| *Strontium* | *1500* | *1466* | *98* |
| *Tin* | *500* | *502* | *100* |
| *Titanium* | *500* | *495* | *99* |

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICSA 240-175933/8  Instrument ID: I9

Lab File ID: I9041015A.asc  ICS Source: MTTRICSAW_00025

Concentration Units: ug/L

| Analyte | True Solution A | Found Solution A | Percent Recovery |
|---|---|---|---|
| **Copper** | | **1.19** | |
| *Aluminum* | *500000* | *508110* | *102* |
| *Antimony* | | *-0.893* | |
| *Arsenic* | | *-1.18* | |
| *Barium* | | *0.392* | |
| *Beryllium* | | *-0.332* | |
| *Boron* | | *-1.81* | |
| *Cadmium* | | *0.527* | |
| *Calcium* | *500000* | *493050* | *99* |
| *Chromium* | | *4.48* | |
| *Cobalt* | | *-1.24* | |
| *Iron* | *200000* | *196020* | *98* |
| *Lead* | | *4.83* | |
| *Lithium* | | *-26.5* | |
| *Magnesium* | *500000* | *502760* | *101* |
| *Manganese* | | *0.569* | |
| *Molybdenum* | | *-2.77* | |
| *Nickel* | | *2.90* | |
| *Potassium* | | *134* | |
| *Selenium* | | *-2.63* | |
| *Silicon* | | *-3.36* | |
| *Silver* | | *-0.342* | |
| *Sodium* | | *245* | |
| *Strontium* | | *6.80* | |
| *Thallium* | | *5.00* | |
| *Tin* | | *0.571* | |
| *Titanium* | | *0.202* | |
| *Vanadium* | | *-5.11* | |
| *Zinc* | | *2.17* | |

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Lab Sample ID: ICSAB 240-175933/9 Instrument ID: I9

Lab File ID: I9041015A.asc ICS Source: MTICPICSABW_00007

Concentration Units: ug/L

| Analyte | True Solution AB | Found Solution AB | Found Percent Recovery |
|---|---|---|---|
| **Copper** | **500** | **562** | **112** |
| *Aluminum* | *500000* | *511470* | *102* |
| *Antimony* | *1000* | *1036* | *104* |
| *Arsenic* | *1000* | *1039* | *104* |
| *Barium* | *500* | *503* | *101* |
| *Beryllium* | *500* | *492* | *98* |
| *Boron* | *500* | *522* | *104* |
| *Cadmium* | *1000* | *1054* | *105* |
| *Calcium* | *500000* | *499820* | *100* |
| *Chromium* | *500* | *503* | *101* |
| *Cobalt* | *500* | *490* | *98* |
| *Iron* | *200000* | *196820* | *98* |
| *Lead* | *1000* | *988* | *99* |
| *Lithium* | *500* | *497* | *99* |
| *Magnesium* | *500000* | *499320* | *100* |
| *Manganese* | *500* | *503* | *101* |
| *Molybdenum* | *1000* | *1016* | *102* |
| *Nickel* | *1000* | *975* | *97* |
| *Potassium* | *10000* | *10605* | *106* |
| *Selenium* | *1000* | *1020* | *102* |
| *Silicon* | *10000* | *10125* | *101* |
| *Silver* | *1000* | *1098* | *110* |
| *Sodium* | *10000* | *10644* | *106* |
| *Strontium* | *1500* | *1465* | *98* |
| *Thallium* | *1000* | *1010* | *101* |
| *Tin* | *500* | *496* | *99* |
| *Titanium* | *500* | *515* | *103* |
| *Vanadium* | *500* | *494* | *99* |
| *Zinc* | *1000* | *955* | *96* |

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: Lab ID: 240-49031-G-7-M MS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Matrix: Solid Concentration Units: mg/Kg

% Solids: 83.8

| Analyte | SSR | C | Sample Result (SR) | C | Spike Added (SA) | %R | Control Limit %R | Q | Method |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.231 | | 0.016 | U | 0.217 | 107 | 80-120 | | 7471A |

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: | Lab ID: 240-49031-G-7-N MSD

Lab Name: TestAmerica Canton | Job No.: 240-49010-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

% Solids: 83.8

| Analyte | (SDR) C | | Spike Added (SA) | %R | Control Limit %R | RPD | RPD Limit | Q | Method |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 0.232 | | 0.217 | 107 | 80-120 | 0 | 20 | | 7471A |

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-175558/2-A

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

Sample Matrix: Solid  LCS Source: MTAGSPIKEW_00047

| Analyte | Solid(mg/Kg) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | True | Found | C | %R | Limits | | Q | Method |
| Silver | 5.00 | 4.75 | | 95 | 80 | 120 | | 6010C |
| Arsenic | 200 | 198 | | 99 | 80 | 120 | | 6010C |
| Barium | 200 | 193 | | 97 | 80 | 120 | | 6010C |
| Beryllium | 5.00 | 4.68 | | 94 | 80 | 120 | | 6010C |
| Cadmium | 5.00 | 5.13 | | 103 | 80 | 120 | | 6010C |
| Cobalt | 50.0 | 47.7 | | 95 | 80 | 120 | | 6010C |
| Chromium | 20.0 | 19.2 | | 96 | 80 | 120 | | 6010C |
| Molybdenum | 100 | 99.9 | | 100 | 80 | 120 | | 6010C |
| Nickel | 50.0 | 48.9 | | 98 | 80 | 120 | | 6010C |
| Lead | 50.0 | 47.7 | | 95 | 80 | 120 | | 6010C |
| Selenium | 200 | 194 | | 97 | 80 | 120 | | 6010C |
| Vanadium | 50.0 | 49.1 | | 98 | 80 | 120 | | 6010C |
| Zinc | 50.0 | 48.9 | | 98 | 80 | 120 | | 6010C |
| Antimony | 50.0 | 50.8 | | 102 | 80 | 120 | | 6010C |
| Thallium | 200 | 190 | | 95 | 80 | 120 | | 6010C |

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-175558/2-A

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

Sample Matrix: Solid  LCS Source: MTICP1_00039

| Analyte | Solid(mg/Kg) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | True | Found | C | %R | Limits | | Q | Method |
| Copper | 25.0 | 24.5 | | 98 | 80 | 120 | | 6010C |

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-175585/2-A

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

Sample Matrix: Solid  LCS Source: MTHGCALW_00875

| Analyte | Solid(mg/Kg) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | True | Found | C | %R | Limits | | Q | Method |
| Mercury | 0.833 | 0.790 | | 95 | 80 | 120 | | 7471A |

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton  Job Number: 240-49010-1

SDG Number:

Matrix: Solid  Instrument ID: I12

Method: 6010C  MDL Date: 09/09/2014 14:47

Prep Method: 3050B

| Analyte | Wavelength/ Mass | RL (mg/Kg) | MDL (mg/Kg) |
|---|---|---|---|
| Antimony | 206.838 | 2 | 0.48 |
| Arsenic | 189.042 | 1.5 | 0.41 |
| Barium | 493.409 | 20 | 0.41 |
| Beryllium | 313.042 | 0.5 | 0.026 |
| Cadmium | 226.502 | 0.5 | 0.021 |
| Chromium | 267.716 | 1 | 0.075 |
| Cobalt | 228.616 | 1 | 0.047 |
| Lead | 220.353 | 1 | 0.022 |
| Molybdenum | 202.030 | 4 | 0.059 |
| Nickel | 231.604 | 4 | 0.08 |
| Selenium | 196.026 | 2 | 0.34 |
| Silver | 328.068 | 1 | 0.063 |
| Thallium | 190.864 | 2 | 0.13 |
| Vanadium | 292.402 | 1 | 0.2 |
| Zinc | 213.856 | 5 | 0.56 |

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton  Job Number: 240-49010-1

SDG Number:

Matrix: Solid  Instrument ID: I12

Method: 6010C  XMDL Date: 09/09/2014 14:47

| Analyte | Wavelength/ Mass | XRL (ug/L) | XMDL (ug/L) |
|---|---|---|---|
| Antimony | 206.838 | 20 | 2.4 |
| Arsenic | 189.042 | 15 | 2.9 |
| Barium | 493.409 | 200 | 1 |
| Beryllium | 313.042 | 5 | 0.13 |
| Cadmium | 226.502 | 5 | 0.14 |
| Chromium | 267.716 | 10 | 0.55 |
| Cobalt | 228.616 | 10 | 0.56 |
| Lead | 220.353 | 10 | 1.9 |
| Molybdenum | 202.030 | 40 | 0.53 |
| Nickel | 231.604 | 40 | 0.76 |
| Selenium | 196.026 | 20 | 4 |
| Silver | 328.068 | 10 | 0.92 |
| Thallium | 190.864 | 20 | 1.7 |
| Vanadium | 292.402 | 10 | 2.4 |
| Zinc | 213.856 | 50 | 9.6 |

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49010-1

SDG Number:

Matrix: Solid Instrument ID: I9

Method: 6010C MDL Date: 09/09/2014 14:47

Prep Method: 3050B

| Analyte | Wavelength/ Mass | RL (mg/Kg) | MDL (mg/Kg) |
|---|---|---|---|
| Copper | 324.753 | 2.5 | 0.23 |

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton  Job Number: 240-49010-1

SDG Number:

Matrix: Solid  Instrument ID: I9

Method: 6010C  XMDL Date: 09/09/2014 14:47

| Analyte | Wavelength/ Mass | XRL (ug/L) | XMDL (ug/L) |
|---|---|---|---|
| Copper | 324.753 | 25 | 1.9 |

9-IN
DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49010-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471A MDL Date: 09/17/2014 14:20

Prep Method: 7471A

| Analyte | Wavelength/ Mass | RL (mg/Kg) | MDL (mg/Kg) |
|---|---|---|---|
| Mercury | 253.7 | 0.1 | 0.014 |

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49010-1

SDG Number:

Matrix: Solid Instrument ID: H4

Method: 7471A XMDL Date: 09/17/2014 14:15

| Analyte | Wavelength/ Mass | XRL (ug/L) | XMDL (ug/L) |
|---|---|---|---|
| Mercury | 253.7 | 0.6 | 0.09 |

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49010-1

SDG No.:

ICP-AES Instrument ID: I12 Date: 01/29/2015

| Analyte | Wave Length | Al | As | Ca | Co | Cr | Cu | Fe | Mn | Mo | Ni | Si | Ti | V | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | | | | | | | | | | 0.016418 | | | | 0.048658 | |
| Antimony | | -0.000064 | | | 0.000069 | | | -0.000040 | | | | | | 0.001892 | |
| Arsenic | | 0.000010 | | | 0.000011 | 0.001772 | | | -0.000355 | 0.003923 | | | | | |
| Beryllium | | | | | | | | | | | | | | 0.000309 | |
| Cadmium | | | 0.004739 | | | | | 0.000001 | | | | | | | |
| Cobalt | | | | | | | | | | | | | 0.002135 | | |
| Copper | | | | 0.000018 | 0.000298 | | | 0.000016 | | | | | | | |
| Lead | | -0.000086 | | | | | 0.000334 | 0.000044 | | | 0.000131 | 0.000056 | | | |
| Lithium | | | | 0.000027 | | | | | | | | | | | |
| Nickel | | | | | 0.000518 | | | 0.000057 | | | | | | | |
| Selenium | | -0.000017 | | | | | | | 0.000338 | | | | | | |
| Thallium | | | | | 0.001697 | | | | 0.000571 | | | | -0.002075 | -0.007632 | |
| Vanadium | | | | | | | | 0.000045 | | | | | | | |
| Zinc | | | | | | -0.001092 | | | | | | | | | |

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Canton Job Number: 240-49010-1

SDG No.:

ICP-AES Instrument ID: I9 Date: 03/24/2015

| Analyte | Wave Length | Al | As | Ca | Co | Cr | Cu | Fe | Mn | Mo | Ni | Si | Ti | Tl | V |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | | | | | | | | | | 0.010824 | | | | | 0.075184 |
| Antimony | | -0.000071 | | | -0.000195 | | | -0.000027 | | | | | | | 0.002500 |
| Arsenic | | 0.000015 | | | -0.000057 | 0.001800 | | | -0.000355 | 0.003582 | | | | | |
| Barium | | | | | | | | | | | | | | | |
| Beryllium | | | | | | | | | | | | | | | 0.000431 |
| Boron | | | | | | | | | | | | | | | |
| Cadmium | | | 0.006473 | | | | | -0.000005 | | | | | | | |
| Calcium | | | | | | | | | | | | | | | |
| Chromium | | | | | | | | | | | | | | | |
| Cobalt | | | | | | | | | | | | | 0.002117 | | |
| Copper | | | | 0.000023 | 0.000140 | | | 0.000007 | | | | | | | |
| Iron | | | | | | | | | | | | | | | |
| Lead | | -0.000133 | | | | | 0.000315 | 0.000039 | | | 0.000066 | 0.000060 | | | |
| Lithium | | | | 0.000078 | | | | | | | | | | | |
| Magnesium | | | | | | | | | | | | | | | |
| Manganese | | | | | | | | | | | | | | | |
| Molybdenum | | | | | | | | | | | | | | | |
| Nickel | | | | | 0.000518 | | | 0.000071 | | | | | | | |
| Potassium | | | | | | | | | | | | | | | |
| Selenium | | | | | | | | | 0.000338 | | | | | | |
| Silver | | | | | | | | | | | | | | | |
| Sodium | | | | | | | | | | | | | | | |
| Strontium | | | | | | | | | | | | | | | |
| Thallium | | | | | 0.001660 | | | | 0.001238 | | | | -0.000834 | | -0.007071 |
| Tin | | | | | | | | | | | | | | | |
| Titanium | | | | | | | | | | | | | | | |
| Vanadium | | | | | | | | 0.000014 | | | | | | | |
| Zinc | | | | | | -0.000592 | | | | | | | | | |

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-49010-1

SDG No.:

Instrument ID: I12 Date: 07/15/2014 10:31

| Analyte | Integ. Time (Sec.) | Concentration (ug/L) | Method |
|---|---|---|---|
| Silver | | 2000 | 6010C |
| Arsenic | | 5000 | 6010C |
| Barium | | 25000 | 6010C |
| Beryllium | | 4000 | 6010C |
| Cadmium | | 2000 | 6010C |
| Cobalt | | 10000 | 6010C |
| Chromium | | 20000 | 6010C |
| Molybdenum | | 10000 | 6010C |
| Nickel | | 30000 | 6010C |
| Lead | | 15000 | 6010C |
| Selenium | | 10000 | 6010C |
| Vanadium | | 5000 | 6010C |
| Zinc | | 10000 | 6010C |
| Antimony | | 10000 | 6010C |
| Thallium | | 10000 | 6010C |

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-49010-1

SDG No.:

Instrument ID: I9 Date: 07/15/2014 10:31

| Analyte | Integ. Time (Sec.) | Concentration (ug/L) | Method |
|---|---|---|---|
| Copper | | 30000 | 6010C |

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-49010-1

SDG No.:

Instrument ID: H4 Date: 12/10/2013 15:55

| Analyte | Integ. Time (Sec.) | Concentration (ppb) | Method |
|---|---|---|---|
| Mercury | | 10 | 7471A |

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Prep Method: 3050B

| Lab Sample ID | Preparation Date | Prep Batch | Initial Weight (g) | Initial Volume | Final Volume (mL) |
|---|---|---|---|---|---|
| MB 240-175558/1-A | 04/08/2015 10:26 | 175558 | 1.00 | | 100 |
| LCS 240-175558/2-A | 04/08/2015 10:26 | 175558 | 1.00 | | 100 |
| 240-49010-1 | 04/08/2015 10:26 | 175558 | 1.21 | | 100 |

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Prep Method: 7471A

| Lab Sample ID | Preparation Date | Prep Batch | Initial Weight (g) | Initial Volume | Final Volume (mL) |
|---|---|---|---|---|---|
| MB 240-175585/1-A | 04/08/2015 15:00 | 175585 | 0.60 | | 100 |
| LCS 240-175585/2-A | 04/08/2015 15:00 | 175585 | 0.60 | | 100 |
| 240-49031-G-7-M MS | 04/08/2015 15:00 | 175585 | 0.55 | | 100 |
| 240-49031-G-7-N MSD | 04/08/2015 15:00 | 175585 | 0.55 | | 100 |
| 240-49010-1 | 04/08/2015 15:00 | 175585 | 0.59 | | 100 |

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: I12 Method: 6010C

Start Date: 04/09/2015 08:31 End Date: 04/09/2015 15:48

| Lab Sample ID | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ag | As | Ba | Be | Cd | Co | Cr | Mo | Ni | Pb | Sb | Se | Tl | V | Zn | | | | | |
| ICIS 240-175886/1 | 1 | | 08:31 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| CALSTD 240-175886/2 IC | | | 08:35 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| CALSTD 240-175886/3 IC | | | 08:39 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| ICV 240-175886/4 | 1 | | 08:43 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| ICB 240-175886/5 | 1 | | 08:47 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| CRI 240-175886/6 | | | 08:52 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:56 | | | | | | | | | | | | | | | | | | | | |
| ICSA 240-175886/8 | 1 | | 09:00 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| ICSAB 240-175886/9 | 1 | | 09:04 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| CCV 240-175886/10 | | | 09:08 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175886/11 | | | 09:12 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:16 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:20 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:24 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:28 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:37 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175886/18 | 1 | | 09:42 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| CCB 240-175886/19 | 1 | | 09:46 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| CRI 240-175886/20 | 1 | | 09:50 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| MB 240-175558/1-A | 1 | T | 09:56 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| LCS 240-175558/2-A | 1 | T | 10:00 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| 240-49010-1 | 1 | T | 10:04 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| ZZZZZZ | | | 10:08 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:12 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:16 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:20 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:24 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:28 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175886/30 | 1 | | 10:32 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| CCB 240-175886/31 | 1 | | 10:36 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| ZZZZZZ | | | 10:40 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:44 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:48 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:52 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:56 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:59 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:03 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:07 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:12 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:16 | | | | | | | | | | | | | | | | | | | | |

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: I12 Method: 6010C

Start Date: 04/09/2015 08:31 End Date: 04/09/2015 15:48

| Lab Sample ID | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ag | As | Ba | Be | Cd | Co | Cr | Mo | Ni | Pb | Sb | Se | Tl | V | Zn | | | | | |
| CCV 240-175886/42 | | | 11:20 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175886/43 | | | 11:24 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:28 | | | | | | | | | | | | | | | | | | | | |
| CRI 240-175886/45 | 1 | | 11:32 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | | | | | |
| ZZZZZZ | | | 11:36 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:40 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:44 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:48 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:52 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:56 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:00 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:04 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175886/54 | | | 12:08 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175886/55 | | | 12:12 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:16 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:20 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:24 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:28 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:37 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:41 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:45 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:49 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:54 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175886/66 | | | 12:58 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175886/67 | | | 13:02 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:06 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:10 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:14 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:18 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:22 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:26 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:31 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:35 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:39 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:43 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175886/78 | | | 13:47 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175886/79 | | | 13:51 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:55 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:59 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:03 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:08 | | | | | | | | | | | | | | | | | | | | |

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: I12 Method: 6010C

Start Date: 04/09/2015 08:31 End Date: 04/09/2015 15:48

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Ag | As | Ba | Be | Cd | Co | Cr | Mo | Ni | Pb | Sb | Se | Tl | V | Zn | | | | | | |
| ZZZZZZ | | | 14:12 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:16 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:20 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:24 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:28 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:32 | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175886/90 | | | 14:36 | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175886/91 | | | 14:40 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:44 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:48 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:52 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:56 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:01 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:05 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:16 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:20 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:24 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:28 | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175886/102 | | | 15:32 | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175886/103 | | | 15:36 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:40 | | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175886/105 | | | 15:44 | | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175886/106 | | | 15:48 | | | | | | | | | | | | | | | | | | | | | |

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 04/10/2015 06:27 End Date: 04/10/2015 19:08

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Cu | | | | | | | | | | | | | | | | | | | |
| ICIS 240-175933/1 | 1 | | 06:27 | X | | | | | | | | | | | | | | | | | | | |
| CALSTD 240-175933/2 IC | | | 06:31 | X | | | | | | | | | | | | | | | | | | | |
| CALSTD 240-175933/3 IC | | | 06:35 | X | | | | | | | | | | | | | | | | | | | |
| ICV 240-175933/4 | 1 | | 06:39 | X | | | | | | | | | | | | | | | | | | | |
| ICB 240-175933/5 | 1 | | 06:43 | X | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 06:48 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 06:52 | | | | | | | | | | | | | | | | | | | | |
| ICSA 240-175933/8 | 1 | | 06:56 | X | | | | | | | | | | | | | | | | | | | |
| ICSAB 240-175933/9 | 1 | | 07:00 | X | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/10 | | | 07:03 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/11 | | | 07:07 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 07:11 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 07:15 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 07:20 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 07:24 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 07:28 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 07:32 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/18 | | | 07:36 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/19 | | | 07:40 | | | | | | | | | | | | | | | | | | | | |
| CRI 240-175933/20 | | | 07:48 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 07:52 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 07:56 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:00 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:04 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:08 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:12 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:16 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:20 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:24 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/30 | | | 08:28 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/31 | | | 08:31 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:35 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:40 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:44 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:48 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:52 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 08:56 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:00 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:04 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:08 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:12 | | | | | | | | | | | | | | | | | | | | |

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 04/10/2015 06:27 End Date: 04/10/2015 19:08

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
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| CCV 240-175933/42 | | | 09:16 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/43 | | | 09:20 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:24 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:28 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/46 | 1 | | 09:32 | X | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/47 | 1 | | 09:36 | X | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:41 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:45 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:49 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:53 | | | | | | | | | | | | | | | | | | | | |
| CRI 240-175933/52 | 1 | | 09:57 | X | | | | | | | | | | | | | | | | | | | |
| MB 240-175558/1-A | 1 | T | 10:01 | X | | | | | | | | | | | | | | | | | | | |
| LCS 240-175558/2-A | 1 | T | 10:06 | X | | | | | | | | | | | | | | | | | | | |
| 240-49010-1 | 1 | T | 10:09 | X | | | | | | | | | | | | | | | | | | | |
| CRI 240-175933/56 | 1 | | 10:13 | X | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:17 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/58 | 1 | | 10:21 | X | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/59 | 1 | | 10:25 | X | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:29 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:37 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:41 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:44 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:48 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:52 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:56 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:00 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:04 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/70 | | | 11:08 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/71 | | | 11:11 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:16 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:19 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:28 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:32 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:35 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:40 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:43 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:48 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:52 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/82 | | | 11:56 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/83 | | | 11:59 | | | | | | | | | | | | | | | | | | | | |

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 04/10/2015 06:27 End Date: 04/10/2015 19:08

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
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| | | | | Cu | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:04 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:08 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:12 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:16 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:20 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:24 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:28 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:32 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:36 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:40 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/94 | | | 12:44 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/95 | | | 12:48 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:52 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:56 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 12:59 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:03 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:07 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:11 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:15 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:19 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:24 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:28 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/106 | | | 13:32 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/107 | | | 13:35 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:40 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:44 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:48 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:52 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 13:56 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:00 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:04 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:08 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:12 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:16 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/118 | | | 14:20 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/119 | | | 14:24 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:28 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:32 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:36 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:40 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:44 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:47 | | | | | | | | | | | | | | | | | | | | |

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 04/10/2015 06:27 End Date: 04/10/2015 19:08

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
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| ZZZZZZ | | | 14:51 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:55 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:59 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:03 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/130 | | | 15:07 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/131 | | | 15:11 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:15 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:19 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:27 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:31 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:35 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:39 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:43 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:47 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:51 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/142 | | | 15:55 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/143 | | | 15:59 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:03 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:07 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:11 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:15 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:19 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:27 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:31 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:35 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:39 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/154 | | | 16:43 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/155 | | | 16:47 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:51 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:55 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 16:59 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:03 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:07 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:11 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:15 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:19 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:27 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/166 | | | 17:31 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/167 | | | 17:35 | | | | | | | | | | | | | | | | | | | | |

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: I9 Method: 6010C

Start Date: 04/10/2015 06:27 End Date: 04/10/2015 19:08

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
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| | | | | Cu | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:39 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:43 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:46 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:50 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:54 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:58 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:02 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:06 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:10 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:14 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/178 | | | 18:18 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/179 | | | 18:22 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:26 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:30 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:34 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:38 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:43 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:47 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:51 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 18:55 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 19:00 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175933/189 | | | 19:04 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175933/190 | | | 19:08 | | | | | | | | | | | | | | | | | | | | |

Prep Types

T = Total/NA

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: H4 Method: 7471A

Start Date: 04/09/2015 08:22 End Date: 04/09/2015 11:25

| Lab Sample ID | D/F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
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| | | | | Hg | | | | | | | | | | | | | | | | | | | |
| IC 240-175562/1-A | | | 08:22 | X | | | | | | | | | | | | | | | | | | | |
| IC 240-175562/2-A | | | 08:25 | X | | | | | | | | | | | | | | | | | | | |
| IC 240-175562/3-A | | | 08:27 | X | | | | | | | | | | | | | | | | | | | |
| IC 240-175562/4-A | | | 08:29 | X | | | | | | | | | | | | | | | | | | | |
| IC 240-175562/5-A | | | 08:31 | X | | | | | | | | | | | | | | | | | | | |
| IC 240-175562/6-A | | | 08:33 | X | | | | | | | | | | | | | | | | | | | |
| ICV 240-175562/7-A | 1 | | 08:35 | X | | | | | | | | | | | | | | | | | | | |
| ICB 240-175562/8-A | 1 | | 08:37 | X | | | | | | | | | | | | | | | | | | | |
| CRA 240-175562/9-A | 1 | | 08:39 | X | | | | | | | | | | | | | | | | | | | |
| CCV 240-175562/11-A | 1 | | 09:42 | X | | | | | | | | | | | | | | | | | | | |
| CCB 240-175562/10-A | 1 | | 09:44 | X | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:46 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:48 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:50 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:52 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:53 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:55 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:57 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 09:59 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:01 | | | | | | | | | | | | | | | | | | | | |
| MB 240-175585/1-A | 1 | T | 10:03 | X | | | | | | | | | | | | | | | | | | | |
| CCV 240-175562/11-A | 1 | | 10:05 | X | | | | | | | | | | | | | | | | | | | |
| CCB 240-175562/10-A | 1 | | 10:07 | X | | | | | | | | | | | | | | | | | | | |
| LCS 240-175585/2-A | 1 | T | 10:08 | X | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:11 | | | | | | | | | | | | | | | | | | | | |
| 240-49031-G-7-M MS | 1 | T | 10:12 | X | | | | | | | | | | | | | | | | | | | |
| 240-49031-G-7-N MSD | 1 | T | 10:14 | X | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:17 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:19 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:21 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:23 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:24 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:26 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175562/11-A | 1 | | 10:29 | X | | | | | | | | | | | | | | | | | | | |
| CCB 240-175562/10-A | 1 | | 10:31 | X | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:33 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:35 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:37 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:39 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:41 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:42 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:44 | | | | | | | | | | | | | | | | | | | | |

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: H4 Method: 7471A

Start Date: 04/09/2015 08:22 End Date: 04/09/2015 11:25

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | |
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| | | | | Hg | | | | | | | | | | | | | | | | | | | |
| 240-49010-1 | 1 | T | 10:46 | X | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:48 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:50 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175562/11-A | 1 | | 10:52 | X | | | | | | | | | | | | | | | | | | | |
| CCB 240-175562/10-A | 1 | | 10:54 | X | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:56 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 10:59 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175562/11-A | | | 11:01 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175562/10-A | | | 11:03 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175562/11-A | | | 11:18 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175562/10-A | | | 11:20 | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 11:21 | | | | | | | | | | | | | | | | | | | | |
| CCV 240-175562/11-A | | | 11:23 | | | | | | | | | | | | | | | | | | | | |
| CCB 240-175562/10-A | | | 11:25 | | | | | | | | | | | | | | | | | | | | |

Prep Types

T = Total/NA

# METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Batch Number: 175558  Batch Start Date: 04/08/15 10:26  Batch Analyst: Elshaw, Dale

Batch Method: 3050B  Batch End Date: 04/08/15 17:00

| Lab Sample ID | Client Sample ID | Method Chain | Basis | CalcMsg | InitialAmount | FinalAmount | MT1TO1HN03 00942 | MTAGSPIKEW 00047 | MTH202 00041 |
|---|---|---|---|---|---|---|---|---|---|
| MB 240-175558/1 | | 3050B, 6010C | | CALC NOT SET TO RUN | 1.00 g | 100 mL | 10 mL | | 10 mL |
| LCS 240-175558/2 | | 3050B, 6010C | | CALC NOT SET TO RUN | 1.00 g | 100 mL | 10 mL | 2 mL | 10 mL |
| 240-49010-E-1 | FILL-001 | 3050B, 6010C | T | CALC NOT SET TO RUN | 1.21 g | 100 mL | 10 mL | | 10 mL |

| Lab Sample ID | Client Sample ID | Method Chain | Basis | MTICP1 00039 | MTICP2A 00048 | MTTMHCL 00061 | MTTMHNO3 00053 | | |
|---|---|---|---|---|---|---|---|---|---|
| MB 240-175558/1 | | 3050B, 6010C | | | | 10 mL | 5 mL | | |
| LCS 240-175558/2 | | 3050B, 6010C | | 2 mL | 2 mL | 10 mL | 5 mL | | |
| 240-49010-E-1 | FILL-001 | 3050B, 6010C | T | | | 10 mL | 5 mL | | |

| Batch Notes | |
|---|---|
| Balance ID | b039 |
| Blank Soil Lot Number | K565-4i009 |
| Filter Paper Lot Number | 9605292 |
| Hot Block ID number | a1 a2 |
| Pipette ID | 383366-66 |
| Digestion Tube/Cup Lot # | 140204 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Batch Number: 175562  Batch Start Date: 04/08/15 08:39  Batch Analyst: Walpole, Barbara

Batch Method: 7471A  Batch End Date: 04/08/15 09:09

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | MTAQUAREGIA 00988 | MTHGCALW 00875 | MTHgStd 00011 | MTKMN04W 00080 |
|---|---|---|---|---|---|---|---|---|---|
| ICV 240-175562/7 | | 7471A, 7471A | | 100 mL | 100 mL | 5 mL | | 0.5 mL | 15 mL |
| ICB 240-175562/8 | | 7471A, 7471A | | 100 mL | 100 mL | 5 mL | | | 15 mL |
| CRA 240-175562/9 | | 7471A, 7471A | | 100 mL | 100 mL | 5 mL | 0.2 mL | | 15 mL |
| CCB 240-175562/10 | | 7471A, 7471A | | 100 mL | 100 mL | 5 mL | | | 15 mL |
| CCV 240-175562/11 | | 7471A, 7471A | | 100 mL | 100 mL | 5 mL | 5 mL | | 15 mL |

| Batch Notes | |
|---|---|
| Hot Block ID number | C1 |
| Pipette ID | 383364-383366-1325009 |
| Digestion Tube/Cup Lot # | 1408268 |

| Basis | Basis Description |
|---|---|
| | |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Batch Number: 175585  Batch Start Date: 04/08/15 15:00  Batch Analyst: Elshaw, Dale

Batch Method: 7471A  Batch End Date: 04/08/15 15:30

| Lab Sample ID | Client Sample ID | Method Chain | Basis | InitialAmount | FinalAmount | MTAQUAREGIA 00987 | MTHGCALW 00875 | MTKMN04W 00080 | |
|---|---|---|---|---|---|---|---|---|---|
| MB 240-175585/1 | | 7471A, 7471A | | 0.60 g | 100 mL | 5 mL | | 15 mL | |
| LCS 240-175585/2 | | 7471A, 7471A | | 0.60 g | 100 mL | 5 mL | 5 mL | 15 mL | |
| 240-49031-G-7 MS | | 7471A, 7471A | T | 0.55 g | 100 mL | 5 mL | 1 mL | 15 mL | |
| 240-49031-G-7 MSD | | 7471A, 7471A | T | 0.55 g | 100 mL | 5 mL | 1 mL | 15 mL | |
| 240-49010-E-1 | FILL-001 | 7471A, 7471A | T | 0.59 g | 100 mL | 5 mL | | 15 mL | |

| Batch Notes | |
|---|---|
| Balance ID | b039 |
| Blank Soil Lot Number | K565-4i009 |
| Hot Block ID number | c3 |
| Pipette ID | 383364-383366-66 |
| Digestion Tube/Cup Lot # | 1408268 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

# GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49010-1

SDG No.:

Project: MRC-Middle River

| Client Sample ID | Lab Sample ID |
|---|---|
| FILL-001 | 240-49010-1 |

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49010-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture RL Date: 01/28/2010 09:24

| Analyte | Wavelength/ Mass | RL (%) | |
|---|---|---|---|
| Percent Moisture | | 0.1 | |
| Percent Solids | | 0.1 | |

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-49010-1

SDG Number:

Matrix: Solid Instrument ID: NOEQUIP

Method: Moisture XRL Date: 01/28/2010 09:24

| Analyte | Wavelength/ Mass | XRL (mg/L) | |
|---|---|---|---|
| Percent Moisture | | 10 | |
| Percent Solids | | 10 | |

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/07/2015 14:03 End Date: 04/07/2015 17:55

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | % Sol | Moist | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 14:03 | |

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-49010-1

SDG No.:

Instrument ID: NOEQUIP Method: Moisture

Start Date: 04/07/2015 14:03 End Date: 04/07/2015 17:55

| Lab Sample ID | D / F | Type | Time | Analytes | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | % Sol | Moist | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:17 | | | | | | | | | | | | | | | | | | | | | |
| 240-49010-1 DU | 1 | T | 15:17 | X | X | | | | | | | | | | | | | | | | | | | |
| 240-49010-1 | 1 | T | 15:17 | X | X | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:17 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:17 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:17 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:17 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 15:17 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:41 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:55 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:55 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:55 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:55 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:55 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:55 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:55 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:55 | | | | | | | | | | | | | | | | | | | | | |
| ZZZZZZ | | | 17:55 | | | | | | | | | | | | | | | | | | | | | |

Prep Types

T = Total/NA

# GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton  Job No.: 240-49010-1

SDG No.:

Batch Number: 175452  Batch Start Date: 04/07/15 14:03  Batch Analyst: Matheny, Sarah

Batch Method: Moisture  Batch End Date: 04/08/15 10:11

| Lab Sample ID | Client Sample ID | Method Chain | Basis | DishWeight | SampleMassWet | SampleMassDry | | | |
|---|---|---|---|---|---|---|---|---|---|
| 240-49010-A-1 DU | FILL-001 | Moisture | T | 4.2418 g | 8.3449 g | 7.8861 g | | | |
| 240-49010-A-1 | FILL-001 | Moisture | T | 4.2418 g | 9.5456 g | 9.1531 g | | | |

| Batch Notes | |
|---|---|
| Balance ID | B047 No Unit |
| Date samples were placed in the oven | 4/7/2015 |
| Oven Temp when samples are put in oven | 103.1 Degrees C |
| Time samples were place in the oven | 18:13 |
| Date samples were removed from oven | 4/8/15 |
| Oven Temp when samples removed from oven | 103.9 Degrees C |
| Time Samples were removed from oven | 6:15 |
| Oven ID | 002 |
| ID number of the thermometer | TemGuard Box-C #6 |

| Basis | Basis Description |
|---|---|
| T | Total/NA |

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

EMLab P&K
A TestAmerica Company

Report for:

**Mr. John McFadden**
**TestAmerica-Canton**
4101 Shuffel Dr. NW
North Canton, OH 44720

Regarding: Project: 240-49010-1; LM MSA Dump Road Area 2014
EML ID: 1349197

Approved by:



Approved Signatory
Noah Lazarte

Dates of Analysis:
Asbestos PLM: 04-09-2015

Service SOPs: Asbestos PLM (EPA Methods 600/R-93/116 & 600/M4-82-020, SOP EM-AS-S-1267)

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.

**EMLab P&K**
4955 Yarrow Street , Arvada, CO 80002
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: TestAmerica-Canton
C/O: Mr. John McFadden
Re: 240-49010-1; LM MSA Dump Road Area 2014

Date of Sampling: 04-06-2015
Date of Receipt: 04-08-2015
Date of Report: 04-10-2015

## ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116

| | |
|---|---|
| **Total Samples Submitted:** | 1 |
| **Total Samples Analyzed:** | 1 |
| **Total Samples with Layer Asbestos Content > 1%:** | 0 |

**Location: 240-49010-1, FILL-001**

Lab ID-Version‡: 6178442-1

| Sample Layers | Asbestos Content |
|---|---|
| Peach Soil | ND |
| **Sample Composite Homogeneity:** | Good |

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.
‡ A "Version" indicated by -"x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

# Subcontract Data

# Shipping and Receiving Documents

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

# CHAIN OF CUSTODY
# AND
# RECEIVING DOCUMENTS


240-49010 Chain of Custody



4101 Shuffel Street, N.W. North Canton, OH 44720 **tel** 330.497.9396 **fax** 330.497.0772 **www.testamericainc.com**

TestAmerica ~~Pittsburgh~~ NORTH CANTON
~~301 Alpha Drive RIDC Park~~ 4101 SHUFFEL ST. N.W.
~~Pittsburgh, PA 15238~~
~~Phone (412) 963-7058 Fax (412) 963-2468~~ NORTH CANTON, OH

# Chain of Custody Record

#24/C29

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Josh Mullis | Lab PM: Pat O'meara | Carrier Tracking No(s): | COC No: 180-23290-5596.1 |
|---|---|---|---|---|
| Client Contact: Tony Apanavage / Scott Nesbit | Phone: 410-279-2700 | E-Mail: | | Page: Page 1 of 1 |
| Company: Tetra Tech, Inc. | | Analysis Requested | | Job #: |
| Address: 20251 Century Blvd Suite 200 | Due Date Requested: | | | Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify) |
| City: Germantown | TAT Requested (days): 5 days | | | |
| State, Zip: MD, 20874 | | | | |
| Phone: | PO #: | | | Other: |
| Email: Tony.Apanavage@tetratech.com | WO #: | | | |
| Project Name: Fill Analysis. | Project #: 112IC07483.20 | | | |
| Site: MAC-Middle River | SSOW#: | | | |

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | VOCs | SVOCs, TPH Gas/Mod, PCBs | Metals | Asbestos | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | | | | |
| FILL-001 | 4/6/15 | 1500 | G | S | | | X | X | X | X | | "SELECT FILL" 166 TONS |
| TB-040615 | 4/6/15 | — | G | W | | | X | — | — | — | | |

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**Possible Hazard Identification**
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Block G exc BACKFILL MATERIAL

| Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: | | |
|---|---|---|---|---|---|
| Relinquished by: | Date/Time: 4/6/15 1500 | Company: Tetra Tech | Received by: | Date/Time: 3/6/15 1606 | Company: TestAmerica |
| Relinquished by: | Date/Time: 4/6/15 1735 | Company: TT | Received by: | Date/Time: 4-7-15 915 | Company: TA |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

**TestAmerica Canton Sample Receipt Form/Narrative** **Login # : 49010**
**Canton Facility**

Client Tetra Tech Site Name _____ Cooler unpacked by:

Cooler Received on 4-7-15 Opened on 4-7-15

FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

**Receipt After-hours:** Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box (Client Cooler) Box Other _____

Packing material used: (Bubble Wrap) Foam Plastic Bag None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

~~IR GUN# A (CF +4.0 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

IR GUN# 4 (CF +0.5 °C) Observed Cooler Temp. 2.4 °C Corrected Cooler Temp. 2.9 °C ☐ See Multiple Cooler Form

~~IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C~~

IR GUN# 8 (CF -1.2 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the sampler(s) clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC425511**
12. Were VOAs on the COC? (Yes) No
13. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
14. Was a trip blank present in the cooler(s)? Trip Blank Lot # _____ (Yes) No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

**14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES** Samples processed by:

**15. SAMPLE CONDITION**

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

**16. SAMPLE PRESERVATION**

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____